00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Ash Township

3) WATERCOURSE: Swan Creek, N. Branch Swan Creek

4) DOCUMENT TYPE: 10 yr.

00BREAK00

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

C
T1 ASH TUP. FIS HUD 2020-07 NORTH BRANCH SWAN CREEK
T2 10 YR
T3       N. BRANCH SWAN CR ASH TWP.

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.       2.        0.        0.  0.000000      0.00      0.0       0.    603.100     0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBA       CHNIM     ITRACE

     1.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    130.000   201.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

J5  LPRNT     NUMSEC                        ********REQUESTED SECTION NUMBERS********

    -10.000   -10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ET      0.300     0.000     0.000     0.000     1.410     0.000     0.000     0.000     0.000     0.000
QT      5.000  1630.000  2485.000  2800.000  2500.300  3410.000     0.000     0.000     0.000     0.000
NC      0.120     0.120     0.035     0.100     0.300     0.000     0.000     0.000     0.000     0.000

          VALLEY #35; CONFLUENCE WITH NORTH BRANCH SWAN CREEK

     X1     1.000    10.000   199.000   244.000     0.000     0.000     0.000     0.000     0.000     0.000
     GR   604.000     0.000   600.000    90.000   600.000   199.000   594.000   208.000   592.100   220.000
     GR   593.300   232.000   600.400   244.000   605.000   265.000   605.000   430.000   610.000   450.000
     QT     5.000   565.000   855.000   960.000   960.000  1170.000     0.000     0.000     0.000     0.000

          VALLEY 300' U/S OF CONFLUENCE WITH SWAN CREEK #45

     X1   300.000     8.000   280.000   320.000   300.000   300.000   300.000     0.000     0.000     0.000
     GR   606.000     0.000   600.000    90.000   600.600   280.000   596.000   292.000   594.900   300.000
     GR   595.100   308.000   599.700   320.000   606.000   500.000     0.000     0.000     0.000     0.000
     NC     0.080     0.080     0.030     0.000     0.000     0.000     0.000     0.000     0.000     0.000

          VALLEY #45-A

     X1  1020.000     7.000   381.000   422.000   650.000   720.000   720.000     0.000     0.000     0.000
     GR   606.200     0.000   600.400   381.000   596.200   390.000   595.600   400.000   596.100   410.000
     GR   603.600   422.000   606.200   480.000     0.000     0.000     0.000     0.000     0.000     0.000
     NC     0.000     0.000     0.000     0.300     0.300     0.000     0.000     0.000     0.000     0.000
     ET     0.000     7.100     0.000     9.100     9.100     9.100   275.000   370.000   175.000   650.000

          150' D/S NEWBURG RD.

     X1  2170.000    15.000   289.200   310.800  1050.000  1150.000  1150.000     0.000     0.000     0.000
     GR   607.700     0.000   605.600   100.000   605.300   200.000   602.800   279.500   598.600   289.200
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GR	5.6.600	269.300	5[illegible].700	300.000	59[illegible].700	310.700	5[illegible].700	310.800	600.700	318.500
GR	604.200	400.000	604.300	500.000	604.800	600.000	605.900	700.000	606.900	800.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000

D/S FACE NEUBURG RD. SKEWED

X1	2320.000	0.000	0.000	0.000	110.000	175.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000
X1	2321.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
BT	12.000	0.000	607.700	0.000	100.000	605.600	0.000	200.000	605.300	0.000
DT	289.200	606.400	598.600	289.300	606.400	605.000	310.700	606.400	605.000	310.800
BT	606.400	597.900	400.000	604.200	0.000	500.000	604.300	0.000	600.000	604.800
BT	0.000	700.000	605.900	0.000	800.000	606.900	0.000	0.000	0.000	0.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000
X1	2341.000	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000

U/S FACE NEUBURG RD. SKEWED

X1	2342.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

100' U/S NEUBURG RD.

X1	2442.000	8.000	301.000	341.000	130.000	40.000	100.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	65.000	603.200	301.000	590.000	311.000	597.000	320.000
GR	599.000	220.000	602.900	341.000	607.000	420.000	0.000	0.000	0.000	0.000
X1	3212.000	13.000	187.000	214.000	770.000	770.000	770.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.000	607.000	0.000
GR	612.100	0.000	607.700	100.000	607.900	181.000	604.000	187.000	604.000	187.100
GR	599.700	193.000	597.600	200.000	598.700	207.000	602.700	213.900	602.700	214.000
GR	606.700	222.000	606.700	300.000	607.800	350.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	3213.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.000	607.000	0.000
BT	10.000	0.000	612.100	0.000	100.000	607.700	0.000	181.000	607.900	0.000
BT	187.000	607.400	604.000	187.100	607.400	606.500	213.900	607.400	606.500	214.000
BT	607.400	602.700	222.000	606.700	0.000	300.000	606.700	0.000	350.000	607.800
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	3223.000	0.000	0.000	0.000	10.000	10.000	10.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.400	607.400	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.050	0.000	0.000

U/S FACE BRIDGE #47-A

X1	3224.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.400	607.400	0.000
ET	0.000	9.100	9.100	9.100	9.100	9.100	0.000	0.000	130.000	214.000

90' D/S I-275

X1	3329.000	9.000	162.000	198.000	105.000	105.000	105.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	70.000	603.200	150.000	598.300	162.000	597.800	180.000
GR	599.300	198.000	604.500	218.000	605.000	275.000	610.000	300.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE I-275

X1	3419.000	18.000	0.100	39.000	130.000	50.000	90.000	0.000	-0.800	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	639.800	639.800	0.000
GR	639.800	0.000	600.000	0.100	600.000	0.200	600.000	9.000	600.000	9.100
GR	599.200	9.900	599.200	10.000	599.200	19.000	599.200	19.100	599.500	19.900
GR	599.500	20.000	599.500	29.000	599.500	29.100	598.800	29.900	598.800	30.000
GR	598.800	30.900	598.800	39.000	639.800	39.100	0.000	0.000	0.000	0.000
SB	1.250	2.660	3.000	0.000	36.420	3.000	264.000	0.000	598.800	598.000

U/S FACE I-275

X1	3739.000	0.000	0.000	0.000	320.000	320.000	320.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.700	639.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	639.800	639.800	0.000
BT	16.000	0.000	639.800	0.000	0.100	639.800	600.000	0.200	639.800	606.700
BT	9.000	639.800	606.700	9.100	639.800	600.000	9.900	639.800	600.000	10.000
BT	639.800	606.700	19.000	639.800	606.700	19.100	639.800	599.200	19.900	639.800
BT	599.200	20.000	639.800	606.700	29.000	639.800	606.700	29.100	639.800	599.500
BT	29.900	639.800	598.800	30.000	639.800	606.700	38.900	639.800	606.700	39.000
BT	639.800	598.800	39.100	639.800	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE PENN CENTRAL R.R. SKEWED

X1	3999.000	12.000	1.000	37.000	160.000	320.000	260.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.700	614.700	0.000
GR	614.700	0.000	602.600	1.000	602.600	1.100	602.300	9.000	600.800	16.900
GR	600.800	17.000	600.800	21.000	600.800	21.100	599.000	29.000	600.100	36.900
GR	600.100	37.000	614.700	38.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.510	3.000	0.000	30.450	4.000	283.000	0.000	599.000	599.000

U/S FACE PENN CENTRAL R.R. SKEWED

X1	4037.000	0.000	0.000	0.000	33.000	38.000	38.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	609.700	614.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.700	614.700	0.000
BT	10.000	0.000	614.700	0.000	1.000	614.700	602.600	1.100	614.700	609.700
BT	16.900	614.700	609.700	17.000	614.700	600.500	21.000	614.700	600.800	21.100
BT	614.700	609.700	36.900	614.700	609.700	37.000	614.700	600.100	38.000	614.700
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	9.100	9.100	9.100	9.100	9.100	0.000	0.000	152.000	288.000

50' U/S PENN CENTRAL R.R.

X1	4037.000	9.000	215.000	245.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	135.000	602.500	215.000	599.800	225.000	599.600	230.000

G	600.100	255.000	605.400	245.000	605.000	320.000	610.000	600.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #54

X1	5267.000	10.000	379.000	418.000	1180.000	1130.000	1100.000	0.000	0.000	0.000
GR	610.000	0.000	605.300	300.000	605.300	379.000	601.500	394.000	600.300	400.000
GR	601.400	406.000	605.600	418.000	605.000	540.000	610.000	720.000	615.000	830.000
X1	6097.000	5.000	225.000	270.000	650.000	900.000	830.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	225.000	601.200	250.000	605.000	270.000	610.000	390.000

VALLEY #55

X1	6447.000	10.000	601.000	652.000	350.000	350.000	350.000	0.000	0.000	0.000
GR	615.000	0.000	610.000	460.000	607.200	601.000	602.000	605.000	601.600	610.000
GR	602.300	615.000	605.800	627.000	607.000	652.000	610.000	715.000	615.000	1050.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	9.100	9.100	9.100	9.100	0.000	0.000	158.000	268.000

150' D/S GRAFTON

X1	7677.000	9.000	187.000	233.000	1100.000	950.000	1030.000	0.000	0.000	0.000
GR	615.000	0.000	610.000	115.000	607.500	181.000	603.300	187.000	602.700	210.000
GR	603.300	233.000	607.400	248.000	610.000	300.000	613.500	340.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE GRAFTON SKEWED

X1	7627.000	11.000	147.600	102.400	175.000	100.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	610.500	610.500	0.000
GR	611.800	0.000	610.000	1.000	612.000	130.300	603.900	147.600	603.900	147.700
GR	604.000	160.000	604.300	182.500	604.300	182.400	612.000	200.000	612.000	320.000
GR	613.500	321.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.610	3.000	0.000	23.790	0.000	157.000	0.000	603.900	603.900

U/S FACE GRAFTON SKEWED

X1	7690.000	0.000	0.000	0.000	63.000	63.000	63.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	610.500	611.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.800	613.400	0.000
BT	10.000	0.000	611.600	0.000	1.000	611.800	0.000	130.300	614.000	0.000
BT	147.600	614.000	603.900	147.700	614.000	610.500	102.300	614.000	610.500	182.400
BT	614.000	604.000	200.000	613.900	0.000	320.000	613.500	0.000	321.000	613.500
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	9.100	9.100	9.100	0.000	0.000	125.000	360.000

100' U/S GRAFTON

X1	7790.000	10.000	165.000	240.000	50.000	150.000	100.000	0.000	0.000	0.000
GR	620.000	0.000	610.000	1.000	610.000	160.000	608.000	165.000	604.100	180.000
GR	604.000	195.000	604.100	210.000	608.000	240.000	610.000	360.000	615.000	490.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #58

X1	8740.000	9.000	231.000	272.000	850.000	1000.000	950.000	0.000	0.000	0.000
GR	615.000	0.000	610.000	140.000	609.200	231.000	605.000	241.000	604.500	250.000
GR	605.000	259.000	608.900	272.000	610.000	440.000	615.000	600.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	9.100	9.100	9.100	9.100	9.100	0.000	0.000	475.000	585.000

120' D/S HILL-CARLETON

X1	9580.000	9.000	476.000	520.000	840.000	840.000	840.000	0.000	0.000	0.000
GR	616.600	0.000	613.000	100.000	612.200	476.000	605.800	490.000	605.200	500.000
GR	605.400	510.000	610.000	520.000	611.000	900.000	613.000	1000.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE HILL-CARLETON

X1	9700.000	10.000	322.000	373.000	120.000	120.000	120.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.200	613.000	0.000
GR	620.000	0.000	615.000	1.000	613.000	2.000	611.800	322.000	606.900	334.500
GR	605.900	350.000	606.500	365.500	611.400	373.000	611.000	650.000	620.000	651.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

T1 ASH TWP. FIS HUD 2020-07 NORTH BRANCH SWAN CREEK
T2 50 YR
T3       N. BRANCH SWAN CR ASH TWP.

J1   ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.        3.        0.        0.  0.000000      0.00      0.0       0.    604.480     0.000

J2   NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     2.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  5C,51,52
**************************************************

T1 ASH TWP. FIS HUD2020-07 NORTH BRANCH SWAN CREEK
T2 100 YR
T3      N.BR.SWAN CREEK ASH TWP

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
       0.       4.        0.        0.  0.000000      0.00      0.0       0.   604.950     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
     3.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
**************************************************

T1 ASH TWP. FIS HUD 2020-07 NORTH BRANCH SWAN CREEK
T2 500 YR
T3      N. BRANCH SWAN CR ASH TWP.

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     S         WSEL      FQ

       0.       6.        0.        0.  0.000000      0.00      0.0       0.   605.770     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IDM       CHNIM     ITRACE

    15.000     0.000    -1.000     0.000     0.000     0.000     0.200     0.000     0.000     0.000
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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

N. BRANCH SEAM CR ASH TP

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
1.000	0.00	0.00	0.00	592.10	1630.00	603.10	0.00	603.27	4.72	3.59	893.90	750.15
1.000	0.00	0.00	0.00	592.10	2485.00	604.48	0.00	604.70	5.61	4.33	1226.54	1049.27
1.000	0.00	0.00	0.00	592.10	2800.00	604.95	0.00	605.19	5.79	4.54	1345.44	1163.26
1.000	0.00	0.00	0.00	592.10	3410.00	605.77	0.00	606.03	6.01	4.87	1686.62	1391.15
300.000	300.00	0.00	0.00	594.90	565.00	603.34	0.00	603.36	0.96	1.41	1112.93	577.36
300.000	300.00	0.00	0.00	594.90	855.00	604.79	0.00	604.81	0.83	1.50	1714.25	937.45
300.000	300.00	0.00	0.00	594.90	960.00	605.28	0.00	605.30	0.79	1.52	1937.82	1081.03
300.000	300.00	0.00	0.00	594.90	1170.00	606.12	0.00	606.14	0.74	1.57	2368.79	1359.22
1020.000	720.00	0.00	0.00	595.60	565.00	603.42	0.00	603.47	2.10	1.91	539.54	369.70
1020.000	720.00	0.00	0.00	595.60	855.00	604.85	0.00	604.90	1.67	1.96	967.40	662.27
1020.000	720.00	0.00	0.00	595.60	960.00	605.34	0.00	605.38	1.51	1.95	1152.91	782.43
1020.000	720.00	0.00	0.00	595.60	1170.00	606.18	0.00	606.21	1.29	1.93	1523.34	1028.64
2170.000	1150.00	0.00	0.00	597.70	565.00	603.76	0.00	603.89	6.18	3.39	293.17	227.34
2170.000	1150.00	0.00	0.00	597.70	855.00	605.11	0.00	605.22	4.46	3.32	690.44	464.78
2170.000	1150.00	0.00	0.00	597.70	960.00	605.57	0.00	605.65	3.84	3.12	897.60	603.35
2170.000	1150.00	0.00	0.00	597.70	1170.00	606.37	0.00	606.42	2.61	2.65	1277.62	824.61
2320.000	150.00	0.00	0.00	597.70	565.00	603.80	0.00	604.12	14.13	4.48	125.98	150.29
2320.000	150.00	0.00	0.00	597.70	855.00	605.19	0.00	605.30	6.28	3.33	590.44	341.10
2320.000	150.00	0.00	0.00	597.70	960.00	605.62	0.00	605.71	3.52	3.09	876.58	511.98
2320.000	150.00	0.00	0.00	597.70	1170.00	606.41	0.00	606.47	2.71	2.89	1186.83	710.07
2321.000	1.00	604.20	605.00	597.70	565.00	603.80	0.00	604.12	14.28	4.50	125.58	149.51
2321.000	1.00	604.20	605.00	597.70	855.00	605.10	0.00	605.40	28.38	4.76	331.93	160.48
2321.000	1.00	604.20	605.00	597.70	960.00	605.55	0.00	605.78	21.85	4.58	456.62	205.40
2321.000	1.00	604.20	605.00	597.70	1170.00	606.40	0.00	606.48	19.42	3.29	719.52	265.49
2341.000	20.00	604.20	605.00	597.70	565.00	603.84	0.00	604.15	14.08	4.48	126.17	150.58
2341.000	20.00	604.20	605.00	597.70	855.00	605.19	0.00	605.46	26.55	4.60	357.05	165.92
2341.000	20.00	604.20	605.00	597.70	960.00	605.61	0.00	605.83	20.67	4.45	475.12	211.14
2341.000	20.00	604.20	605.00	597.70	1170.00	606.44	0.00	606.52	18.48	3.23	734.65	272.18
2342.000	1.00	0.00	0.00	597.70	565.00	603.84	0.00	604.15	13.93	4.46	126.59	151.40
2342.000	1.00	0.00	0.00	597.70	855.00	605.40	0.00	605.51	4.16	3.29	666.56	419.24
2342.000	1.00	0.00	0.00	597.70	960.00	605.81	0.00	605.88	2.98	2.89	951.18	555.93
2342.000	1.00	0.00	0.00	597.70	1170.00	606.47	0.00	606.53	2.58	2.83	1213.39	728.84

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
2442.000	100.00	0.00	0.00	597.80	565.00	604.18	0.00	604.29	5.74	2.81	271.58	235.86
2442.000	100.00	0.00	0.00	597.80	855.00	605.46	0.00	605.55	4.11	2.78	629.22	421.84
2442.000	100.00	0.00	0.00	597.80	960.00	605.83	0.00	605.92	3.69	2.74	756.02	500.01
2442.000	100.00	0.00	0.00	597.80	1170.00	606.49	0.00	606.56	3.17	2.70	987.22	657.14
3212.000	770.00	0.00	0.00	597.60	565.00	604.75	0.00	605.02	13.66	4.21	134.16	152.85
3212.000	770.00	0.00	0.00	597.60	855.00	605.86	0.00	606.28	16.74	5.21	164.19	209.00
3212.000	770.00	0.00	0.00	597.60	960.00	606.18	0.00	606.65	18.06	5.56	172.70	225.87
3212.000	770.00	0.00	0.00	597.60	1170.00	606.73	0.00	607.33	20.83	6.24	187.62	256.37
3213.000	1.00	606.70	606.50	597.60	565.00	604.75	0.00	605.02	6.96	4.21	134.09	213.80
3213.000	1.00	606.70	606.50	597.60	855.00	605.86	0.00	606.28	8.56	5.21	164.06	292.19
3213.000	1.00	606.70	606.50	597.60	960.00	606.18	0.00	606.66	9.24	5.56	172.56	315.78
3213.000	1.00	606.70	606.50	597.60	1170.00	606.71	0.00	607.36	26.61	6.45	181.31	226.82
3223.000	10.00	606.70	606.50	597.60	565.00	604.76	0.00	605.03	6.94	4.21	134.36	214.47
3223.000	10.00	606.70	606.50	597.60	855.00	605.87	0.00	606.29	8.51	5.20	164.39	293.11
3223.000	10.00	606.70	606.50	597.60	960.00	606.19	0.00	606.67	9.18	5.55	172.93	316.81
3223.000	10.00	606.70	606.50	597.60	1170.00	606.73	0.00	607.38	26.62	6.45	181.31	226.76
3224.000	1.00	0.00	0.00	597.60	565.00	604.76	0.00	605.03	13.58	4.20	134.43	153.33
3224.000	1.00	0.00	0.00	597.60	855.00	605.87	0.00	606.29	16.63	5.20	164.52	209.65
3224.000	1.00	0.00	0.00	597.60	960.00	606.19	0.00	606.67	17.94	5.55	173.08	226.62
3224.000	1.00	0.00	0.00	597.60	1170.00	606.81	0.00	607.40	20.08	6.16	189.90	261.12
3329.000	105.00	0.00	0.00	597.80	565.00	605.08	0.00	605.14	1.74	2.01	388.59	427.88
3329.000	105.00	0.00	0.00	597.80	855.00	606.36	0.00	606.44	2.09	2.47	496.05	590.90
3329.000	105.00	0.00	0.00	597.80	960.00	606.75	0.00	606.84	2.22	2.62	528.25	643.91
3329.000	105.00	0.00	0.00	597.80	1170.00	607.49	0.00	607.60	2.42	2.89	591.10	752.59
3419.000	90.00	0.00	0.00	598.00	565.00	605.09	0.00	605.17	2.77	2.23	253.57	339.23
3419.000	90.00	0.00	0.00	598.00	855.00	606.36	0.00	606.49	3.64	2.82	303.11	448.37
3419.000	90.00	0.00	0.00	598.00	960.00	606.75	0.00	606.89	3.95	3.02	317.93	482.86
3419.000	90.00	0.00	0.00	598.00	1170.00	607.49	0.00	607.66	4.49	3.37	346.82	552.38
3739.000	320.00	639.80	606.70	598.00	565.00	605.10	0.00	605.18	2.76	2.22	254.05	340.22
3739.000	320.00	639.80	606.70	598.00	855.00	606.39	0.00	606.51	3.61	2.81	303.91	450.20
3739.000	320.00	639.80	606.70	598.00	960.00	607.16	0.00	607.29	3.39	2.87	334.20	521.67
3739.000	320.00	639.80	606.70	598.00	1170.00	608.15	0.00	608.30	3.60	3.14	372.39	616.28
3999.000	260.00	0.00	0.00	599.00	565.00	605.17	0.00	605.37	11.59	3.64	155.29	165.93
3999.000	260.00	0.00	0.00	599.00	855.00	606.46	0.00	606.74	11.55	4.23	201.97	251.58
3999.000	260.00	0.00	0.00	599.00	960.00	607.23	0.00	607.50	9.76	4.18	229.45	307.29
3999.000	260.00	0.00	0.00	599.00	1170.00	608.21	0.00	608.52	9.28	4.42	264.79	384.07
4037.000	38.00	614.70	609.70	599.00	565.00	605.24	0.00	605.44	11.05	3.58	157.66	169.97
4037.000	38.00	614.70	609.70	599.00	855.00	606.56	0.00	606.83	10.99	4.17	205.21	257.96
4037.000	38.00	614.70	609.70	599.00	960.00	607.32	0.00	607.59	9.34	4.13	232.71	314.16
4037.000	38.00	614.70	609.70	599.00	1170.00	608.31	0.00	608.61	8.90	4.36	268.42	392.26
4087.000	50.00	0.00	0.00	599.60	565.00	605.39	0.00	605.51	7.77	3.16	320.57	202.74
4087.000	50.00	0.00	0.00	599.60	855.00	606.61	0.00	606.91	5.24	3.12	514.41	373.50
4087.000	50.00	0.00	0.00	599.60	960.00	607.58	0.00	607.67	3.94	2.93	618.96	483.47
4087.000	50.00	0.00	0.00	599.60	1170.00	608.61	0.00	608.70	3.25	2.93	759.45	648.70

SECND	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
5267.000	1180.00	0.00	0.00	600.30	565.00	606.35	0.00	606.44	7.98	2.80	454.74	199.95
5267.000	1180.00	0.00	0.00	600.30	855.00	607.42	0.00	607.48	4.25	2.42	905.95	414.92
5267.000	1180.00	0.00	0.00	600.30	960.00	608.03	0.00	608.06	2.75	2.11	1207.19	579.06
5267.000	1180.00	0.00	0.00	600.30	1170.00	608.95	0.00	608.97	1.70	1.84	1739.93	898.01
6097.000	830.00	0.00	0.00	601.20	565.00	606.97	0.00	607.08	7.54	2.85	309.01	205.75
6097.000	830.00	0.00	0.00	601.20	855.00	607.81	0.00	607.94	7.43	3.22	483.97	313.69
6097.000	830.00	0.00	0.00	601.20	960.00	608.28	0.00	608.40	6.02	3.09	607.19	391.22
6097.000	830.00	0.00	0.00	601.20	1170.00	609.11	0.00	609.20	4.51	2.95	853.02	550.80
6447.000	350.00	0.00	0.00	601.60	565.00	607.33	0.00	607.65	38.39	4.56	125.21	91.19
6447.000	350.00	0.00	0.00	601.60	855.00	608.11	0.00	608.50	32.88	5.09	197.32	149.10
6447.000	350.00	0.00	0.00	601.60	960.00	608.50	0.00	608.86	26.87	4.97	249.39	185.20
6447.000	350.00	0.00	0.00	601.60	1170.00	609.25	0.00	609.55	18.59	4.69	380.08	271.33
7477.000	1030.00	0.00	0.00	602.70	565.00	608.35	0.00	608.42	2.68	2.13	327.82	344.98
7477.000	1030.00	0.00	0.00	602.70	855.00	609.28	0.00	609.38	3.35	2.65	430.04	466.90
7477.000	1030.00	0.00	0.00	602.70	960.00	609.61	0.00	609.72	3.50	2.80	464.87	512.81
7477.000	1030.00	0.00	0.00	602.70	1170.00	610.21	0.00	610.34	3.72	3.06	531.66	606.46
7627.000	150.00	0.00	0.00	603.90	565.00	608.34	0.00	608.59	15.48	3.96	142.79	143.62
7627.000	150.00	0.00	0.00	603.90	855.00	609.24	0.00	609.62	18.85	4.91	174.14	196.93
7627.000	150.00	0.00	0.00	603.90	960.00	609.56	0.00	609.97	19.63	5.19	185.00	216.70
7627.000	150.00	0.00	0.00	603.90	1170.00	610.13	0.00	610.63	21.13	5.71	204.89	254.51
7690.000	63.00	611.80	610.50	603.90	565.00	608.45	0.00	608.60	14.30	3.86	146.37	149.40
7690.000	63.00	611.80	610.50	603.90	855.00	609.38	0.00	609.74	17.38	4.79	178.67	205.08
7690.000	63.00	611.80	610.50	603.90	960.00	609.72	0.00	610.10	16.11	5.06	189.79	225.60
7690.000	63.00	611.80	610.50	603.90	1170.00	611.15	0.00	611.52	12.81	4.87	240.46	326.92
7790.000	100.00	0.00	0.00	604.00	565.00	608.74	0.00	608.81	4.89	2.15	278.71	255.48
7790.000	100.00	0.00	0.00	604.00	855.00	609.81	0.00	609.90	4.25	2.39	444.71	414.71
7790.000	100.00	0.00	0.00	604.00	960.00	610.18	0.00	610.27	3.95	2.43	523.76	482.79
7790.000	100.00	0.00	0.00	604.00	1170.00	611.60	0.00	611.65	2.06	2.00	856.19	814.37
8740.000	950.00	0.00	0.00	604.50	565.00	609.42	0.00	609.67	18.15	4.00	165.23	132.63
8740.000	950.00	0.00	0.00	604.50	855.00	610.38	0.00	610.59	12.96	3.99	411.44	237.51
8740.000	950.00	0.00	0.00	604.50	960.00	610.70	0.00	610.88	10.93	3.84	519.23	290.44
8740.000	950.00	0.00	0.00	604.50	1170.00	611.86	0.00	611.94	4.66	2.90	954.70	542.04
9580.000	840.00	0.00	0.00	605.20	565.00	610.66	0.00	610.85	10.92	3.40	199.72	170.98
9580.000	840.00	0.00	0.00	605.20	855.00	611.45	0.00	611.69	12.87	4.05	282.05	238.29
9580.000	840.00	0.00	0.00	605.20	960.00	611.68	0.00	611.94	13.50	4.25	307.08	261.24
9580.000	840.00	0.00	0.00	605.20	1170.00	612.37	0.00	612.62	12.01	4.32	382.14	337.63
9700.000	120.00	0.00	0.00	605.90	565.00	610.02	0.00	610.99	10.96	3.24	174.18	170.64
9700.000	120.00	0.00	0.00	605.90	855.00	611.60	0.00	611.86	14.02	4.02	212.67	228.30
9700.000	120.00	0.00	0.00	605.90	960.00	611.84	0.00	612.12	15.07	4.29	224.01	247.28
9700.000	120.00	0.00	0.00	605.90	1170.00	612.49	0.00	612.81	14.10	4.54	257.85	311.62

N. BRANCH SWAN CR ASH TH

SUMMARY PRINTOUT TABLE 150

SECNO	Q	C.SEL	DIFWSP	DIF.SX	DIFKUS	TOPWID	XLCH
1.000	1630.00	603.10	0.00	0.00	0.00	232.16	0.00
1.000	2485.00	604.48	0.00	0.00	0.00	249.96	0.00
1.000	2800.00	604.95	0.00	0.00	0.00	256.02	0.00
1.000	3410.00	605.77	0.00	0.00	0.00	431.16	0.00
300.000	565.00	603.34	0.00	0.24	0.00	384.19	300.00
300.000	855.00	604.79	0.00	0.31	0.00	447.22	300.00
300.000	960.00	605.28	0.00	0.33	0.00	468.49	300.00
300.000	1170.00	606.12	0.00	0.35	0.00	500.00	300.00
1020.000	565.00	603.42	0.00	0.06	0.00	239.03	720.00
1020.000	855.00	604.85	0.00	0.06	0.00	361.47	720.00
1020.000	960.00	605.34	0.00	0.06	0.00	404.12	720.00
1020.000	1170.00	606.18	0.00	0.06	0.00	478.02	720.00
2170.000	565.00	603.76	0.00	0.34	0.00	95.00	1150.00
2170.000	855.00	605.11	0.00	0.26	0.00	422.39	1150.00
2170.000	960.00	605.57	0.00	0.23	1.81	475.00	1150.00
2170.000	1170.00	606.37	0.00	0.19	2.61	475.00	1150.00
2320.000	565.00	603.80	0.00	0.05	0.00	21.60	150.00
2320.000	855.00	605.19	0.00	0.08	1.39	346.53	150.00
2320.000	960.00	605.62	0.00	0.06	1.82	400.00	150.00
2320.000	1170.00	606.41	0.00	0.04	2.60	400.00	150.00
2321.000	565.00	603.80	0.00	0.00	0.00	21.60	1.00
2321.000	855.00	605.10	0.00	-0.09	1.29	338.01	1.00
2321.000	960.00	605.55	0.00	-0.06	1.74	400.00	1.00
2321.000	1170.00	606.40	0.00	-0.01	2.59	400.00	1.00
2341.000	565.00	603.34	0.00	0.03	0.00	21.60	20.00
2341.000	855.00	605.19	0.00	0.09	1.35	346.40	20.00
2341.000	960.00	605.61	0.00	0.07	1.78	400.00	20.00
2341.000	1170.00	606.44	0.00	0.04	2.60	400.00	20.00
2342.000	565.00	603.84	0.00	0.00	0.00	21.60	1.00
2342.000	855.00	605.40	0.00	0.21	1.56	347.00	1.00
2342.000	960.00	605.81	0.00	0.20	1.97	400.00	1.00
2342.000	1170.00	606.47	0.00	0.03	2.63	400.00	1.00
2442.000	565.00	604.16	0.00	0.34	0.00	192.56	100.00
2442.000	855.00	605.46	0.00	0.05	1.28	331.20	100.00
2442.000	960.00	605.83	0.00	0.02	1.66	343.34	100.00
2442.000	1170.00	606.49	0.00	0.02	2.31	364.42	100.00
3212.000	565.00	604.75	0.00	0.57	0.00	27.00	770.00
3212.000	855.00	605.56	0.00	0.40	1.11	27.00	770.00
3212.000	960.00	606.18	0.00	0.34	1.43	27.00	770.00
3212.000	1170.00	606.73	0.00	0.24	1.98	27.00	770.00
3213.000	565.00	604.75	0.00	0.00	0.00	27.00	1.00
3213.000	855.00	605.86	0.00	0.00	1.11	27.00	1.00
3213.000	960.00	606.18	0.00	0.00	1.43	27.00	1.00
3213.000	1170.00	606.71	0.00	-0.02	1.96	27.00	1.00

SECNO	Q	CUSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
3223.000	565.00	604.76	0.00	0.01	0.00	27.00	10.00
3223.000	855.00	605.87	0.00	0.01	1.11	27.00	10.00
3223.000	960.00	606.19	0.00	0.01	1.43	27.00	10.00
3223.000	1170.00	606.73	0.00	0.02	1.98	27.00	10.00
3224.000	565.00	604.76	0.00	0.00	0.00	27.00	1.00
3224.000	855.00	605.87	0.00	0.00	1.11	27.00	1.00
3224.000	960.00	606.19	0.00	0.00	1.43	27.00	1.00
3224.000	1170.00	606.81	0.00	0.00	2.05	27.00	1.00
3329.000	565.00	605.02	0.00	0.32	0.00	84.00	105.00
3329.000	855.00	606.36	0.00	0.49	1.26	84.00	105.00
3329.000	960.00	606.75	0.00	0.56	1.66	84.00	105.00
3329.000	1170.00	607.49	0.00	0.68	2.41	84.00	105.00
3419.000	565.00	605.09	0.00	0.01	0.00	38.90	90.00
3419.000	855.00	606.36	0.00	0.00	1.27	38.90	90.00
3419.000	960.00	606.75	0.00	0.00	1.65	38.90	90.00
3419.000	1170.00	607.49	0.00	-0.01	2.40	38.90	90.00
3739.000	565.00	605.10	0.00	0.01	0.00	38.90	320.00
3739.000	855.00	606.39	0.00	0.02	1.28	38.90	320.00
3739.000	960.00	607.16	0.00	0.42	2.06	38.90	320.00
3739.000	1170.00	608.15	0.00	0.66	3.04	38.90	320.00
3999.000	565.00	605.17	0.00	0.07	0.00	36.00	260.00
3999.000	855.00	606.46	0.00	0.00	1.29	36.00	260.00
3999.000	960.00	607.23	0.00	0.07	2.06	36.00	260.00
3999.000	1170.00	608.21	0.00	0.07	3.04	36.00	260.00
4037.000	565.00	605.24	0.00	0.07	0.00	36.00	38.00
4037.000	855.00	606.56	0.00	0.10	1.32	36.00	38.00
4037.000	960.00	607.32	0.00	0.09	2.08	36.00	38.00
4037.000	1170.00	608.31	0.00	0.10	3.06	36.00	38.00
4087.000	565.00	605.39	0.00	0.13	0.00	136.00	50.00
4087.000	855.00	606.81	0.00	0.25	1.42	136.00	50.00
4087.000	960.00	607.58	0.00	0.26	2.19	136.00	50.00
4087.000	1170.00	608.61	0.00	0.30	3.23	136.00	50.00
5267.000	565.00	606.35	0.00	0.96	0.00	369.66	1180.00
5267.000	855.00	607.42	0.00	0.61	1.07	472.52	1180.00
5267.000	960.00	608.03	0.00	0.44	1.67	530.20	1180.00
5267.000	1170.00	608.95	0.00	0.34	2.60	619.20	1180.00
6097.000	565.00	606.97	0.00	0.62	0.00	181.30	830.00
6097.000	855.00	607.81	0.00	0.39	0.85	238.78	830.00
6097.000	960.00	608.28	0.00	0.26	1.32	272.06	830.00
6097.000	1170.00	609.11	0.00	0.16	2.14	328.55	830.00
6447.000	565.00	607.33	0.00	0.36	0.00	64.28	350.00
6447.000	855.00	608.11	0.00	0.29	0.78	120.09	350.00
6447.000	960.00	608.50	0.00	0.21	1.17	147.83	350.00
6447.000	1170.00	609.25	0.00	0.14	1.92	201.26	350.00

SECNO	Q	CHSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
7477.000	565.00	608.35	0.00	1.03	0.00	108.64	1030.00
7477.000	855.00	609.28	0.00	1.17	0.93	110.00	1030.00
7477.000	960.00	609.61	0.00	1.11	1.26	110.00	1030.00
7477.000	1170.00	610.21	0.00	0.96	1.86	110.00	1030.00
7627.000	565.00	608.34	0.00	-0.01	0.00	34.80	150.00
7627.000	855.00	609.24	0.00	-0.04	0.90	34.80	150.00
7627.000	960.00	609.56	0.00	-0.05	1.21	34.80	150.00
7627.000	1170.00	610.13	0.00	-0.08	1.78	34.80	150.00
7690.000	565.00	608.45	0.00	0.11	0.00	34.80	63.00
7690.000	855.00	609.30	0.00	0.14	0.93	34.80	63.00
7690.000	960.00	609.70	0.00	0.15	1.23	34.80	63.00
7690.000	1170.00	611.15	0.00	1.02	2.70	34.80	63.00
7790.000	565.00	608.74	0.00	0.29	0.00	121.17	100.00
7790.000	855.00	609.81	0.00	0.43	1.07	188.24	100.00
7790.000	960.00	610.18	0.00	0.48	1.44	235.00	100.00
7790.000	1170.00	611.60	0.00	0.45	2.86	235.00	100.00
8740.000	565.00	609.42	0.00	0.68	0.00	146.28	950.00
8740.000	855.00	610.38	0.00	0.57	0.96	325.01	950.00
8740.000	960.00	610.70	0.00	0.52	1.28	342.45	950.00
8740.000	1170.00	611.66	0.00	0.27	2.44	411.74	950.00
9580.000	565.00	610.63	0.00	1.26	0.00	105.67	840.00
9580.000	855.00	611.45	0.00	1.07	0.77	107.36	840.00
9580.000	960.00	611.63	0.00	0.96	1.01	107.87	840.00
9580.000	1170.00	612.37	0.00	0.51	1.69	110.00	840.00
9700.000	565.00	610.82	0.00	0.15	0.00	47.63	120.00
9700.000	855.00	611.63	0.00	0.15	0.78	50.51	120.00
9700.000	960.00	611.84	0.00	0.16	1.02	51.00	120.00
9700.000	1170.00	612.49	0.00	0.12	1.67	51.50	120.00

SUMMARY OF ERRORS

FLOOD INSURANCE ZONE DATA FOR N. BRANCH SWAN CR ASH TW

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10¢	2¢	0.2¢
1.000	0.	-1.8	-0.5	0.8
300.000	300.	-1.9	-0.5	0.8
1020.000	1020.	-1.9	-0.5	0.8
2170.000	2170.	-1.8	-0.5	0.8
2320.000	2320.	-1.8	-0.4	0.8
2321.000	2321.	-1.7	-0.4	0.8
2341.000	2341.	-1.8	-0.4	0.8
2342.000	2342.	-2.0	-0.4	0.7
2442.000	2442.	-1.7	-0.4	0.7
3212.000	3212.	-1.4	-0.3	0.6
3213.000	3213.	-1.4	-0.3	0.5
3223.000	3223.	-1.4	-0.3	0.5
3224.000	3224.	-1.4	-0.3	0.6
3329.000	3329.	-1.7	-0.4	0.7
3419.000	3419.	-1.7	-0.4	0.7
3739.000	3739.	-2.1	-0.8	1.0
3999.000	3999.	-2.1	-0.8	1.0
4037.000	4037.	-2.1	-0.8	1.0
4087.000	4087.	-2.2	-0.8	1.0
5267.000	5267.	-1.7	-0.6	0.9
6097.000	6097.	-1.3	-0.5	0.8
6447.000	6447.	-1.2	-0.4	0.7
7477.000	7477.	-1.3	-0.3	0.6
7627.000	7627.	-1.2	-0.3	0.6
7690.000	7690.	-1.3	-0.3	1.4
7790.000	7790.	-1.4	-0.4	1.4
8740.000	8740.	-1.3	-0.3	1.2
9530.000	9530.	-1.0	-0.2	0.7
9700.000	9700.	-1.0	-0.2	0.7
WEIGHTED AVG FOR REACH		-1.6	-0.5	0.9

FHF FOR THE REACH = 015 WITH 90.2% OF THE REACH WITHIN 0.5 FEET
ZONE FOR THE REACH = A 3

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
**************************************************
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*****************************************************
*                                                   *
*              E R R O R   S U M M A R Y            *
*                                                   *
*                                                   *
*     0  ERROR(S) DETECTED BY THE USER PROGRAM      *
*     0  ERROR(S) DETECTED BY THE MATHEMATICAL PACKAGE *
*     0  ERROR(S) DETECTED FOR INPUT/OUPUT STATEMENTS *
*                                                   *
*****************************************************
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Ash Township

3) WATERCOURSE: Swan Creek + N. Br. Swan Creek

4) DOCUMENT TYPE: 10 yr.

00BREAK00

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

C
T1 ASH TOWNSHIP F.I.S. HUD 2020-07 SWAN CREEK
T2 10 YR
T3      SWAN CR.ASH TWP.

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       0.         2.         0.         0.  0.000280       0.00       0.0          0.    590.000      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     1.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    150.000    201.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

J5  LPRNT     NUMSEC                        ********REQUESTED SECTION NUMBERS********

    -10.000    -10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      1.410      0.000      0.000      0.000      0.000      0.000
QT      5.000   2000.000   3070.000   3470.000   3470.000   4230.000      0.000      0.000      0.000      0.000
NC      0.100      0.100      0.035      0.300      0.500      0.000      0.000      0.000      0.000      0.000
ET      0.000      7.100      0.000      0.000      0.000      0.000    125.000    938.000      0.000      0.000

        100' D/S LABO RD.

X1      5.000     12.000    100.000    142.000      0.000      0.000      0.000      0.000      0.000      0.000
GR    595.000      0.000    590.000     50.000    585.000     60.000    584.900    100.000    580.900    107.000
GR    580.500    120.000    580.900    133.000    585.600    142.000    585.000    240.000    585.000    600.000
GR    590.000   1200.000    595.000   1350.000      0.000      0.000      0.000      0.000      0.000      0.000
ET      0.000      7.100      0.000      0.000      0.000      0.000    665.000   1465.000      0.000      0.000

        D/S FACE LABO RD.

X1      6.000     18.000    658.000    742.000    100.000    100.000    100.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    591.000    586.500      0.000
GR    595.000      0.000    593.000    100.000    591.800    600.000    589.700    643.000    586.300    658.000
GR    586.300    658.100    581.300    680.000    580.700    700.000    581.400    710.000    583.400    741.900
GR    583.400    742.000    589.000    800.000    589.000    800.000    586.500   1000.000    586.800   1100.000
GR    587.400   1200.000    590.000   1800.000    595.000   2050.000      0.000      0.000      0.000      0.000
NC      0.000      0.000      0.020      0.000      0.000      0.000      0.000      0.000      0.000      0.000
ET      0.000      7.100      0.000      0.000      0.000      0.000    665.000   1465.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      7.100      0.000    657.000   1354.000      0.000      0.000

X1      7.000      0.000      0.000      0.000      1.000      1.000      1.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    591.000    586.500      0.000
BT     12.000      0.000    595.000      0.000    600.000    591.800      0.000    658.000    591.000    586.300
BT    658.100    591.000    590.000    741.900    591.000    590.000    742.000    591.000    583.400    800.000
BT    589.000      0.000   1000.000    586.500      0.000   1100.000    586.800      0.000   1200.000    587.400
BT      0.000   1800.000    590.000      0.000   2050.000    595 000      0.000      0.000      0.000      0.000
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ET	0.000	7.100	0.000	0.000	0.000	0.000	665.000	1465.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	7.100	0.000	657.000	1375.000	0.000	0.000
X1	17.000	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	586.500	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	665.000	1465.000	0.000	0.000

U/S FACE LABO RD.

X1	18.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	586.500	0.000
ET	0.000	7.100	0.000	0.000	0.000	9.100	710.000	1570.000	578.000	1850.000

50' U/S LABO RD.

X1	68.000	11.000	770.000	812.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	645.000	585.000	715.000	584.900	770.000	580.900	777.000
GR	580.500	790.000	580.900	803.000	585.600	812.000	585.000	1050.000	590.000	1850.000
GR	595.000	2140.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.120	0.080	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #3

X1	1438.000	10.000	692.000	738.000	1200.000	1450.000	1370.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	330.000	585.000	470.000	585.300	692.000	581.200	701.000
GR	580.300	715.000	580.700	729.000	586.300	738.000	590.000	930.000	595.000	1490.000
NC	0.000	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #4

X1	2898.000	9.000	1435.000	1468.000	1200.000	1460.000	1460.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	720.000	585.000	1400.000	584.500	1435.000	581.700	1444.000
GR	581.300	1450.000	581.500	1456.000	584.000	1468.000	595.400	1498.000	0.000	0.000
NC	0.120	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #5

X1	3768.000	10.000	990.000	1032.000	350.000	950.000	870.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	825.000	587.200	990.000	582.200	1000.000	580.700	1010.000
GR	582.700	1020.000	586.500	1032.000	585.000	1250.000	590.000	1280.000	595.000	1400.000
NC	0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #6

X1	5158.000	8.000	95.000	156.000	1200.000	1390.000	1390.000	0.000	0.000	0.000
GR	595.000	0.000	595.200	95.000	584.100	114.000	582.100	125.000	583.900	136.000
GR	587.200	156.000	590.000	660.000	595.000	820.000	0.000	0.000	0.000	0.000
NC	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #7 D/S CONFLUENCE WITH GRUNDMAN DRAIN

X1	6318.000	8.000	455.000	517.000	1000.000	1160.000	1160.000	0.000	0.000	0.000

GR	595.000	0.000	590.000	85.000	587.600	455.000	583.600	463.000	581.900	480.000
GR	583.800	497.000	592.200	517.000	595.000	550.000	0.000	0.000	0.000	0.000

VALLEY *8

X1	7818.000	9.000	430.000	470.000	1300.000	1700.000	1500.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	140.000	589.400	430.000	584.500	437.000	582.600	450.000
GR	583.600	463.000	587.800	470.000	590.000	510.000	595.000	540.000	0.000	0.000
NC	0.080	0.080	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

120' D/S SIGLER

X1	8718.000	9.000	589.000	651.000	900.000	900.000	900.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	538.000	0.000	701.000	0.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	40.000	589.700	589.000	583.400	605.000	582.300	620.000
GR	583.000	635.000	589.000	651.000	590.000	700.000	595.000	1070.000	0.000	0.000
NH	8.000	0.070	53.800	0.020	70.000	0.035	78.500	1.000	92.300	0.035
NH	118.500	1.000	132.300	0.020	157.000	0.070	200.000	0.000	0.000	0.000

D/S FACE SIGLER (SKEWED)

X1	8838.000	17.000	53.800	157.000	120.000	120.000	120.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.000	596.000	0.000
GR	596.200	0.000	590.000	53.800	590.000	53.900	584.900	70.000	582.400	78.500
GR	582.400	78.600	582.400	92.200	582.400	92.300	583.000	100.000	583.400	118.500
GR	583.400	118.600	583.400	132.200	583.400	132.300	592.000	151.000	592.000	156.900
GR	592.000	157.000	597.500	200.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.070	0.070	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	8839.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.000	596.000	0.000
BT	14.000	0.000	596.200	0.000	53.800	597.300	590.000	53.900	598.800	594.800
BT	78.600	598.800	594.800	78.600	598.800	582.400	92.200	596.300	582.400	92.300
BT	598.800	594.800	118.500	598.800	594.800	118.600	598.800	583.400	132.200	598.800
BT	583.400	132.300	598.800	594.800	156.900	598.800	594.800	157.000	597.300	592.000
BT	200.000	597.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	8882.000	0.000	0.000	0.000	43.000	43.000	43.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.200	597.300	0.000
NH	8.000	0.070	53.800	0.020	70.000	0.035	78.500	1.000	92.300	0.035
NH	118.500	1.000	132.300	0.020	157.000	0.070	200.000	0.000	0.000	0.000

U/S FACE SIGLER (SKEWED)

X1	8883.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.200	597.300	0.000
NC	0.100	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

90' U/S SIGLER

X1	8973.000	10.000	369.000	431.000	80.000	100.000	90.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	259.000	0.000	542.000	0.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	40.000	590.000	280.000	589.700	369.000	584.200	385.000
GR	583.100	400.000	583.800	415.000	589.000	431.000	590.000	455.000	596.700	610.000
NC	0.120	0.080	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #11

X1	10098.000	11.000	612.000	651.000	1125.000	1125.000	1125.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	250.000	590.000	300.000	589.800	612.000	585.000	620.000
GR	584.000	630.000	584.300	640.000	591.300	651.000	590.000	695.000	595.000	725.000
GR	598.000	765.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.120	0.120	0.035	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #12 D/S CONFLUENCE WITH LITTLE SWAN CR.

X1	11118.000	11.000	733.000	768.000	1000.000	900.000	1020.000	0.000	0.000	0.000
GR	598.000	0.000	595.000	250.000	590.000	315.000	590.300	733.000	586.500	739.000
GR	585.200	750.000	585.600	761.000	590.000	768.000	590.000	810.000	595.000	970.000
GR	598.000	1070.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	1670.000	2575.000	2910.000	2910.000	3555.000	0.000	0.000	0.000	0.000

140' D/S TELEGRAPH

X1	12620.000	10.000	606.000	671.000	1500.000	1500.000	1502.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	562.250	0.000	714.750	0.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	100.000	590.000	300.000	590.700	606.000	587.800	623.000
GR	585.900	640.000	585.800	657.000	591.600	671.000	595.000	940.000	597.500	1040.000
NH	5.000	0.080	383.300	0.035	424.600	1.000	441.000	0.035	465.800	0.080
NH	755.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D/S FACE TELEGRAPH SKEWED

X1	12760.000	17.000	383.300	465.800	140.000	140.000	140.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	599.000	599.000	0.000
GR	605.000	0.000	598.100	1.000	598.200	50.000	599.000	335.500	599.300	383.300
GR	590.700	383.400	586.500	414.600	585.100	424.600	585.100	424.700	586.800	441.000
GR	586.800	441.100	592.000	465.700	599.000	465.800	599.000	503.000	599.000	542.000
GR	599.000	543.000	605.000	544.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.730	3.000	0.000	55.660	16.500	325.000	0.000	585.100	585.100
NC	0.100	0.100	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE TELEGRAPH SKEWED

X1	12817.000	0.000	0.000	0.000	57.000	57.000	57.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	593.400	598.100	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	599.300	599.300	0.000
BT	14.000	0.000	605.000	0.000	1.000	598.100	0.000	335.500	599.100	0.000
BT	383.300	599.700	590.700	383.400	601.200	593.400	424.600	601.200	593.400	424.700
BT	601.200	585.100	441.000	601.200	586.800	441.100	601.200	593.400	465.700	601.200
BT	593.400	465.800	599.700	592.000	503.000	599.300	0.000	543.000	599.000	0.000
BT	544.000	605.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.100	0.100	0.035	0.300	0.500	0.000	0.000	0.000	0.000	0.000

270' U/S TELEGRAPH

X1	13087.000	10.000	286.000	349.000	140.000	350.000	270.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	125.000	590.700	286.000	587.800	303.000	585.200	320.000
GR	585.800	337.000	587.300	346.000	591.300	349.000	595.000	570.000	600.000	650.000

100' D/S D'WAY BRIDGE #15A

X1	14167.000	9.000	335.000	367.000	1000.000	1000.000	1080.000	0.000	0.000	0.000
GR	600.000	0.000	599.600	252.000	591.300	335.000	587.000	346.000	585.800	355.000
GR	587.300	364.000	591.300	367.000	595.000	400.000	599.000	800.000	0.000	0.000

D/S FACE D'WAY BRIDGE #15A

X1	14267.000	12.000	116.000	134.000	75.000	110.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	590.700	590.700	0.000
GR	600.100	0.000	599.800	30.000	591.500	101.000	591.000	112.000	586.600	116.000
GR	586.600	116.100	586.300	125.000	586.900	133.900	586.900	134.000	591.100	138.000
GR	595.000	200.000	599.200	600.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	14268.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	590.700	590.700	0.000
BT	10.000	0.000	600.100	0.000	30.000	599.800	0.000	101.000	591.500	0.000
BT	116.000	591.000	586.600	116.100	591.000	590.300	133.900	591.000	590.300	134.000
BT	591.000	586.900	138.000	591.100	0.000	200.000	595.000	0.000	600.000	598.000
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	14231.000	0.000	0.000	0.000	13.000	13.000	13.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	591.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE D'WAY BRIDGE #15A

X1	14282.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	591.000	0.000

50' U/S D'WAY BRIDGE #15A

X1	14332.000	9.000	335.000	367.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	601.000	0.000	599.600	252.000	591.300	335.000	587.000	346.000	585.800	355.000
GR	587.300	364.000	591.300	367.000	595.000	400.000	599.200	800.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	222.000	360.000	0.000	0.000

100' D/S D'WAY BRIDGE #16

X1	15592.000	29.000	314.000	402.000	1260.000	1260.000	1260.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	1.000	595.000	30.000	591.500	80.000	591.500	200.000
GR	591.500	314.000	591.500	314.100	591.500	329.500	591.500	329.600	591.500	330.000
GR	591.500	330.100	591.500	350.500	591.500	350.600	591.500	351.000	591.500	351.100
GR	591.500	369.000	591.500	369.100	591.500	374.000	591.500	374.100	588.100	385.000
GR	586.900	390.000	587.200	395.000	591.500	402.000	591.500	402.100	595.700	409.000
GR	597.500	425.000	598.600	500.000	600.000	550.000	605.000	551.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	314.000	402.000	0.000	0.000

D/S FACE D'WAY BRIDGE #16 SKEWED

X1	15692.000	0.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.500	597.500	0.000
SB	0.000	1.600	3.000	0.000	43.500	0.000	383.000	0.000	586.900	586.900
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	314.000	402.000	0.000	0.000

U/S FACE D'WAY BRIDGE #16 SKEWED

X1	15704.000	0.000	0.000	0.000	12.000	12.000	12.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	595.700	597.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.500	597.500	0.000
BT	24.000	0.000	605.000	0.000	1.000	600.000	0.000	50.000	597.500	0.000
BT	314.000	597.500	0.000	314.100	597.500	595.700	329.500	597.500	595.700	329.600
BT	597.600	591.500	330.000	597.500	591.500	330.100	597.500	595.700	350.500	597.500
BT	595.700	350.600	597.500	591.500	351.000	597.500	591.500	351.100	597.500	595.700
BT	369.000	597.500	595.700	369.100	597.500	591.500	374.000	597.500	591.500	374.100
BT	597.500	595.700	402.000	597.500	595.700	402.100	597.500	0.000	409.000	597.500
BT	0.000	425.000	597.500	0.000	500.000	598.600	0.000	550.000	600.000	0.000
BT	551.000	605.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	222.000	410.000	0.000	0.000

50' U/S D'WAY BRIDGE #16

X1	15754.000	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
NC	0.080	0.080	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #18

X1	16374.000	8.000	1.000	47.000	750.000	600.000	620.000	0.000	0.000	0.000
GR	600.400	0.000	600.400	1.000	588.300	24.000	587.800	33.000	588.500	42.000
GR	591.300	47.000	595.000	350.000	600.000	480.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

170' D/S READY RD.

X1	17384.000	9.000	589.000	630.000	800.000	1000.000	1010.000	0.000	0.000	0.000
GR	600.200	0.000	595.000	50.000	592.900	589.000	586.800	601.000	588.000	610.000
GR	588.300	619.000	592.100	630.000	595.000	690.000	600.200	720.000	0.000	0.000
NC	0.070	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D/S FACE READY RD. SKEWED

X1	17554.000	20.000	398.600	480.800	150.000	210.000	170.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
GR	605.000	0.000	597.700	0.000	596.600	88.000	596.500	265.000	597.300	353.000
GR	595.000	391.600	589.500	398.600	589.500	398.700	588.700	430.800	588.700	430.900
GR	588.700	448.500	588.700	448.600	588.700	474.000	589.600	480.700	589.600	480.800
GR	595.000	491.400	597.500	530.000	597.500	705.000	597.500	706.000	605.000	706.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	17555.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
BT	16.000	0.000	605.000	0.000	0.000	597.700	0.000	88.000	596.600	0.000
BT	265.000	596.500	0.000	353.000	597.300	0.000	398.600	597.800	589.500	398.700
BT	597.800	595.100	430.800	597.800	595.100	430.900	597.800	588.700	448.500	597.800
BT	588.700	448.600	597.800	595.100	480.700	597.800	595.100	480.800	597.800	589.600
BT	530.000	597.500	0.000	706.000	597.400	0.000	706.000	605.000	0.000	0.000

X1	17581.000	0.000	0.000	0.000	26.000	26.000	26.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE READY RD.SKEWED

X1	17582.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
ET	0.000	0.000	0.000	0.000	7.100	0.000	139.000	867.000	0.000	0.000

50' U/S READY RD.

X1	17632.000	9.000	369.000	410.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	601.000	0.000	595.000	100.000	592.900	369.000	589.000	381.000	588.800	390.000
GR	589.000	399.000	592.100	410.000	595.000	670.000	601.000	780.000	0.000	0.000
NC	0.100	0.120	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #21

X1	19032.000	7.000	432.000	471.000	1500.000	1200.000	1400.000	0.000	0.000	0.000
X4	1.000	600.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	602.000	0.000	595.000	35.000	593.500	432.000	590.000	438.000	590.000	450.000
GR	589.900	462.000	601.000	471.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #22

X1	20462.000	11.000	316.000	347.000	1430.000	1430.000	1430.000	0.000	0.000	0.000
GR	602.000	0.000	600.000	50.000	595.000	80.000	592.600	316.000	590.800	319.000
GR	590.300	330.000	590.000	341.000	593.800	347.000	595.000	500.000	600.000	630.000
GR	601.000	635.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.080	0.080	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	75.000	392.000	0.000	0.000

200' D/S SWEITZER RD.

X1	22092.000	11.000	128.000	151.000	1630.000	1630.000	1630.000	0.000	0.000	0.000
GR	602.000	0.000	600.000	40.000	595.000	90.000	592.700	128.000	591.400	134.000
GR	590.400	140.000	591.400	146.000	593.800	151.000	595.000	320.000	600.000	440.000
GR	603.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE SWEITZER RD. SKEWED

X1	22292.000	14.000	192.000	279.000	240.000	160.000	200.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
GR	605.000	0.000	598.600	1.000	600.100	185.000	593.800	192.000	593.800	192.100
GR	593.400	220.000	591.600	225.000	591.100	250.000	591.600	278.900	591.600	279.000
GR	600.000	286.000	598.300	350.000	598.500	380.000	605.000	381.000	0.000	0.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	22293.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
BT	11.000	0.000	605.000	0.000	1.000	598.600	0.000	185.000	600.100	0.000
BT	192.000	600.100	593.800	192.100	600.100	598.100	278.900	600.100	598.100	279.000
BT	600.100	591.600	286.000	600.000	0.000	350.000	598.300	0.000	380.000	598.500
BT	0.000	381.000	605.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	22309.000	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE SWEITZER RD. SKEWED

X1	22310.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
NC	0.070	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	265.000	690.000	0.000	0.000

100' U/S SWEITZER RD.

X1	22410.000	11.000	468.000	491.000	70.000	130.000	100.000	0.000	0.000	0.000
GR	606.000	0.000	600.000	230.000	595.000	410.000	593.000	468.000	591.400	474.000
GR	591.200	480.000	591.400	486.000	594.000	491.000	595.000	650.000	600.000	710.000
GR	605.000	750.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #25

X1	23160.000	10.000	773.000	814.000	750.000	750.000	750.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	270.000	595.000	430.000	595.000	773.000	592.500	786.000
GR	591.600	795.000	592.000	804.000	595.400	814.000	600.000	845.000	603.000	1045.000
NC	0.120	0.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #26 D/S CONFLUENCE WITH MIDDLE CR.

X1	24540.000	10.000	340.000	386.000	1320.000	1360.000	1360.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	250.000	595.500	340.000	591.800	356.000	591.300	365.000
GR	592.600	376.000	596.000	396.000	595.000	550.000	600.000	820.000	603.000	1000.000
NC	0.080	0.080	0.035	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	500.000	705.000	0.000	0.000

230' D/S CARLETON-ROCKWOOD RD.

X1	26060.000	11.000	613.000	683.000	1300.000	1520.000	1520.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	30.000	595.000	170.000	595.000	210.000	596.700	613.000
GR	593.300	635.000	592.100	650.000	593.100	665.000	597.200	683.000	597.500	693.000
GR	605.600	733.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	9.000	0.080	495.600	0.025	502.000	0.035	517.700	1.000	527.400	0.035
NH	551.800	1.000	561.500	0.035	568.000	0.025	586.500	0.080	701.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	495.600	586.500	0.000	0.000

D/S FACE CARLETON-ROCKWOOD RD.

X1	26290.000	22.000	495.600	536.500	170.000	250.000	230.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.100	603.900	0.000
GR	610.000	0.000	600.000	1.000	600.000	450.000	600.000	485.000	598.500	495.600
GR	598.500	495.700	593.500	502.000	591.700	517.700	591.700	517.800	591.700	527.300
GR	591.700	527.400	591.500	536.000	591.900	551.800	591.900	551.900	591.900	561.400
GR	591.900	561.500	593.100	568.000	598.900	586.400	598.900	586.500	602.000	596.000
GR	603.200	700.000	610.000	701.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.950	1.500	3.000	0.000	78.200	19.400	606.000	0.000	591.500	591.500
NC	0.080	0.080	0.035	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	495.600	586.500	0.000	0.000

U/S FACE CARLETON-ROCKWOOD RD.

X1	26325.000	0.000	0.000	0.000	35.000	35.000	35.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	601.800	600.100	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.100	603.900	0.000
BT	19.000	0.000	610.000	0.000	1.000	600.100	0.000	450.000	603.200	0.000
BT	485.000	604.300	0.000	495.600	604.300	598.500	495.700	605.800	601.800	517.700
BT	605.800	601.800	517.800	605.800	591.700	527.300	605.800	591.700	527.400	605.800
BT	601.800	551.800	605.800	601.800	551.900	605.800	591.900	561.400	605.800	591.900
BT	561.500	605.800	601.800	586.400	605.800	601.800	586.500	604.300	598.900	596.000
BT	604.300	0.000	700.000	604.400	0.000	701.000	610.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	250.000	640.000	0.000	0.000

VALLEY #29

X1	26475.000	9.000	535.000	563.000	150.000	130.000	150.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	65.000	596.900	535.000	593.200	540.000	592.400	550.000
GR	592.900	560.000	597.000	563.000	600.000	700.000	605.000	760.000	0.000	0.000

VALLEY #30

X1	27015.000	9.000	91.000	115.000	540.000	540.000	540.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	35.000	597.300	91.000	593.400	95.000	592.400	100.000
GR	592.900	105.000	596.500	115.000	600.000	600.000	603.000	1000.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

100' D/S DETROIT,TOLEDO&IRONTON R.R.

X1	29305.000	9.000	73.000	123.000	2300.000	2290.000	2290.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	63.000	0.000	133.000	0.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	30.000	599.500	73.000	394.100	85.000	593.000	100.000
GR	594.400	115.000	597.800	123.000	600.000	240.000	611.100	260.000	0.000	0.000

D/S FACE DETROIT,TOLEDO&IRONTON R.R.

X1	29405.000	12.000	1.000	61.000	120.000	70.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
GR	611.300	0.900	595.200	1.000	595.200	1.100	593.600	15.000	594.900	29.000
GR	594.900	29.100	594.900	32.900	594.900	33.000	595.700	52.000	595.800	60.900
GR	595.800	61.000	611.300	61.100	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	29406.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
BT	10.000	0.900	611.300	0.000	1.000	611.300	595.200	1.100	611.300	605.300
BT	29.000	611.300	605.300	29.100	611.300	594.900	32.900	611.300	594.900	33.000
BT	611.300	605.300	60.900	611.300	605.300	61.000	611.300	595.800	61.100	611.300
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	29442.000	0.000	0.000	0.000	36.000	36.000	36.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE DETROIT,TOLEDO&IRONTON R.R.

X1	29443.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
NC	0.100	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

50' U/S DETROIT,TOLEDO&IRONTON R.R

X1	29493.000	8.000	27.000	77.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	1.000	0.000	132.000	0.000	0.000	0.000	0.000
GR	603.400	0.000	599.500	27.000	594.100	39.000	592.900	54.000	594.400	69.000
GR	597.800	77.000	600.000	750.000	605.000	1200.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #33

X1	30013.000	12.000	546.000	594.000	520.000	520.000	520.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	400.000	605.000	490.000	604.500	506.000	600.200	526.000
GR	598.600	546.000	594.400	552.000	593.400	570.000	595.100	588.000	599.800	594.000
GR	600.000	880.000	605.000	940.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #34

X1	30723.000	11.000	230.000	280.000	900.000	500.000	710.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	150.000	600.200	230.000	595.500	240.000	593.300	257.000
GR	593.200	274.000	599.800	280.000	600.000	330.000	600.000	360.000	600.000	450.000
GR	610.000	550.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	5.000	1630.000	2485.000	2800.000	2800.000	3410.000	0.000	0.000	0.000	0.000

VALLEY #35 D/S CONFLUENCE WITH NORTH BRANCH SWAN CREEK

X1	31223.000	10.000	199.000	244.000	500.000	500.000	500.000	0.000	0.000	0.000
GR	606.000	0.000	600.000	50.000	600.000	199.000	594.000	208.000	592.100	220.000
GR	593.300	232.000	600.400	244.000	605.000	265.000	605.000	430.000	610.000	450.000
NC	0.100	0.100	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	1060.000	1630.000	1840.000	1840.000	2240.000	0.000	0.000	0.000	0.000

100' D/S I-275

X1	32033.000	10.000	382.000	418.000	1000.000	700.000	810.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	353.000	0.000	446.000	0.000	0.000	0.000	0.000
GR	606.000	0.000	600.000	35.000	600.000	120.000	600.300	382.000	595.600	390.000
GR	593.900	400.000	595.600	410.000	601.600	418.000	600.000	1080.000	606.000	1170.000

D/S FACE I-275

X1	32133.000	18.000	0.100	43.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.000	615.000	0.000
GR	623.500	0.000	594.500	0.100	594.500	0.200	594.300	10.000	594.300	10.100
GR	594.300	10.900	594.300	11.000	594.500	21.000	594.500	21.100	594.500	21.900
GR	594.500	22.000	594.300	32.000	594.300	32.100	594.300	32.900	594.300	33.000
GR	595.600	42.900	595.600	43.000	623.500	43.100	0.000	0.000	0.000	0.000
SB	1.250	2.190	3.000	0.000	42.140	3.000	364.000	0.000	594.600	594.300

U/S FACE I-275

X1	32400.000	0.000	0.000	0.000	267.000	267.000	267.000	0.000	0.500	0.000
X2	0.000	0.000	1.000	603.900	623.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	623.500	623.500	0.000
BT	18.000	0.000	623.500	0.000	0.100	623.500	594.800	0.200	623.500	603.900
BT	10.000	623.500	603.900	10.100	623.500	594.600	10.900	623.500	594.600	11.000
BT	623.500	603.900	21.000	623.500	603.900	21.100	623.500	594.300	21.900	623.500
BT	594.800	22.000	623.500	603.900	32.000	623.500	603.900	32.100	623.500	594.600
BT	32.900	623.500	594.600	33.000	623.500	603.900	42.900	623.500	603.900	43.000
BT	623.500	595.600	43.100	623.500	0.000	0.000	0.000	0.000	0.000	0.000

50' U/S I-275

X1	32450.000	9.000	182.000	218.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	128.000	0.000	271.000	0.000	0.000	0.000	0.000
GR	620.000	0.000	602.000	50.000	600.800	182.000	597.100	190.000	597.000	200.000
GR	596.000	210.000	601.600	218.000	605.000	350.000	610.000	390.000	0.000	0.000
NC	0.120	0.120	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #40

X1	32590.000	9.000	350.000	386.000	120.000	170.000	140.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	156.000	0.000	539.000	0.000	0.000	0.000	0.000
GR	618.000	0.000	602.000	50.000	600.400	350.000	597.300	362.000	597.000	370.000
GR	597.300	378.000	600.400	386.000	600.000	470.000	610.000	540.000	0.000	0.000

VALLEY #41

X1	33520.000	9.000	599.000	630.000	930.000	930.000	930.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	100.000	601.000	599.000	597.900	602.000	597.600	610.000
GR	597.800	618.000	600.600	630.000	600.000	770.000	610.000	970.000	0.000	0.000

VALLEY #42

X1	34590.000	9.000	408.000	432.000	1070.000	1070.000	1070.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	130.000	602.700	408.000	598.600	411.000	597.200	420.000
GR	598.800	429.000	602.700	432.000	605.000	620.000	610.000	800.000	0.000	0.000
NC	0.060	0.060	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

X1	34770.000	14.000	353.000	387.000	150.000	200.000	180.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	100.000	602.700	170.000	602.300	270.000	602.400	353.000
GR	602.400	353.100	598.700	362.000	597.900	370.000	597.900	378.000	602.900	386.900
GR	602.900	387.000	602.100	470.000	605.700	570.000	610.000	780.000	0.000	0.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	34771.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	13.000	0.000	610.000	0.000	100.000	605.000	0.000	170.000	602.700	0.000
BT	270.000	602.300	0.000	353.000	604.300	602.400	353.100	604.300	602.800	362.000
BT	606.400	604.900	378.000	606.400	604.900	386.900	604.200	602.900	387.000	604.200
BT	602.900	470.000	602.100	0.000	570.000	605.700	0.000	780.000	610.000	0.000

X1	34776.000	0.000	0.000	0.000	5.000	5.000	5.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE FOOTBRIDGE #42-A

X1	34777.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000
X1	33929.000	15.000	401.000	439.000	172.000	172.000	172.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	100.000	605.000	220.000	604.300	320.000	604.200	401.000
GR	604.200	401.100	599.000	412.000	597.100	420.000	598.400	430.000	603.400	438.900
GR	603.400	439.000	604.900	520.000	605.000	620.000	605.000	680.000	610.000	800.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000
X1	34930.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	13.000	0.000	610.000	0.000	100.000	605.000	0.000	220.000	605.000	0.000
BT	320.000	604.300	0.000	401.000	605.400	604.200	401.100	605.400	604.700	420.000
BT	606.500	605.800	438.900	605.300	604.600	439.000	605.300	603.400	520.000	604.900
BT	0.000	620.000	605.000	0.000	680.000	605.000	0.000	800.000	610.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000
X1	34938.000	0.000	0.000	0.000	8.000	8.000	8.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000

U/S FACE FOOTBRIDGE #42-B

X1	34939.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000
X1	35259.000	14.000	600.000	640.000	320.000	320.000	320.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	140.000	606.400	420.000	605.800	520.000	605.000	600.000
GR	605.000	600.100	597.700	613.000	597.200	620.000	597.300	627.000	504.400	639.900
GR	604.400	640.000	602.100	720.000	607.000	820.000	610.000	930.000	0.000	0.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	35260.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	12.000	0.000	610.000	0.000	140.000	605.000	0.000	420.000	606.400	0.000
BT	520.000	605.800	0.000	600.000	605.800	605.000	600.100	605.800	605.100	620.000
BT	606.400	605.700	639.900	605.200	604.500	640.000	605.200	604.400	720.000	602.100
BT	0.000	820.000	607.000	0.000	930.000	610.000	0.000	0.000	0.000	0.000
X1	35268.000	0.000	0.000	0.000	8.000	8.000	8.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE FOOTBRIDGE #42-C

X1	35269.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000
X1	35441.000	19.000	697.000	723.000	200.000	150.000	172.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
GR	610.000	0.000	605.000	210.000	605.000	310.000	604.500	610.000	605.400	696.000
GR	602.600	697.000	602.600	697.100	598.100	704.000	596.900	709.700	596.900	709.800
GR	596.900	710.100	596.900	710.200	597.600	717.000	601.700	722.900	601.700	723.000
GR	605.400	724.000	604.800	810.000	605.400	910.000	610.000	1000.000	0.000	0.000
NC	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000
X1	35442.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
BT	17.000	0.000	610.000	0.000	210.000	605.000	0.000	510.000	605.000	0.000
BT	610.000	604.500	0.000	696.000	605.400	0.000	697.000	605.400	602.600	697.100
BT	605.400	604.200	709.700	605.600	604.400	709.800	605.600	596.900	710.100	605.600
BT	596.900	710.200	605.600	604.400	722.900	605.400	604.200	723.000	605.400	601.700
BT	724.000	605.400	0.000	810.000	604.800	0.000	910.000	605.400	0.000	1000.000
BT	610.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000
X1	35463.000	0.000	0.000	0.000	21.000	21.000	21.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000

U/S FACE FOOTBRIDGE #42-D

X1	35464.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000
X1	35759.000	20.000	856.000	904.000	295.000	295.000	295.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	700.000	605.000	856.000	605.000	856.100	602.400	860.000
GR	602.400	860.100	602.400	860.900	602.400	861.000	597.600	871.000	596.600	880.000
GR	598.300	891.000	603.200	900.000	603.200	900.100	603.200	900.900	603.200	901.000
GR	605.000	903.900	605.000	904.000	606.000	980.000	608.200	1080.000	610.000	1120.000
NC	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000
X1	35760.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.900	605.900	0.000
BT	17.000	0.000	610.000	0.000	700.000	605.000	0.000	856.000	606.100	0.000
BT	856.100	606.100	605.300	860.000	606.100	605.300	860.100	609.500	602.400	860.900
BT	609.500	602.400	861.000	609.500	603.300	900.000	609.500	603.300	900.100	609.500
BT	603.200	900.900	609.500	603.200	901.000	606.300	605.500	903.900	606.300	605.500
BT	904.000	606.300	605.000	980.000	606.000	0.000	1080.000	608.200	0.000	1120.000
BT	610.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000
X1	35767.000	0.000	0.000	0.000	7.000	7.000	7.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000

U/S FACE FOOTBRIDGE #42-E

X1	35768.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000
X1	36068.000	16.000	726.500	773.500	250.000	350.000	300.000	0.000	0.000	0.000
GR	610.000	0.000	605.100	550.000	604.300	650.000	604.600	726.500	604.600	726.600
GR	599.900	735.000	599.900	735.100	599.900	735.900	599.900	736.000	596.200	750.000
GR	599.400	763.000	605.100	773.400	605.100	773.500	604.400	850.000	607.000	950.000

GR	610.000	1000.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000
X1	36069.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	15.000	0.000	610.000	0.000	550.000	605.100	0.000	650.000	604.300	0.000
BT	726.500	605.000	604.600	726.500	605.000	604.600	735.000	606.000	605.400	735.100
BT	606.000	599.900	735.900	606.000	599.900	736.000	606.000	605.400	750.000	606.900
BT	606.300	773.400	606.000	605.400	773.500	606.000	605.100	850.000	604.400	0.000
BT	950.000	607.000	0.000	1000.000	610.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000
X1	36077.000	0.000	0.000	0.000	8.000	8.000	8.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000

U/S FACE FOOTBRIDGE #42-F

X1	36073.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	565.000	670.000	400.000	750.000

100' D/S GRAFTON RD.

X1	36298.000	9.000	615.000	661.000	160.000	240.000	240.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	520.000	603.500	615.000	599.100	635.000	597.200	645.000
GR	598.800	655.000	603.600	661.000	605.000	700.000	610.000	840.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE GRAFTON RD. (SKEW)

X1	36398.000	13.000	138.700	173.300	150.000	50.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	1.000	0.000	301.000	0.000	606.000	606.000	0.000
GR	615.000	0.000	608.500	0.000	607.000	1.000	607.000	128.000	598.200	138.700
GR	598.200	138.800	597.600	156.000	598.200	173.200	598.200	173.300	607.000	183.000
GR	607.000	312.000	608.700	313.000	615.000	313.000	0.000	0.000	0.000	0.000
SB	0.000	2.100	3.000	0.000	32.140	0.000	250.000	0.000	597.600	597.600

U/S FACE GRAFTON RD. (SKEW)

X1	36444.000	13.000	138.700	173.300	46.000	46.000	46.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.000	608.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	1.000	0.000	301.000	0.000	608.300	608.300	0.000
BT	10.000	0.000	615.000	0.000	0.000	608.500	0.000	128.000	608.400	0.000
BT	138.700	608.300	598.200	138.800	608.300	606.000	173.200	608.300	606.000	173.300
BT	608.300	598.200	183.000	608.400	0.000	313.000	608.700	0.000	313.000	615.000
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	615.000	0.000	608.500	0.000	607.700	1.000	607.700	128.000	598.200	138.700
GR	598.200	138.800	597.600	156.000	598.200	173.200	598.200	173.300	608.000	183.000
GR	608.000	312.000	608.700	313.000	615.000	313.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

T1 ASH TOWNSHIP F.I.S. HUD 2020-07 SWAN CREEK
T2 50 YR
T3      SWAN CR.ASH TWP.

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       0.        3.         0.         0.  0.000280       0.00       0.0         0.    590.000      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     2.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
**************************************************

T1 ASH TOWNSHIP F.I.S. HUD 2020-07 SWAN CREEK
T2 100 YR
T3       SWAN CR.ASH TWP.

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       0.        4.         0.         0.   0.000280       0.00       0.0         0.    590.000      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     3.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
**************************************************

T1 ASH TOWNSHIP F.I.S. HUD 2020-07 SWAN CREEK
T2 500 YR
T3       SWAN CR.ASH TWP.

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ
       0.        6.         0.         0.   0.000280       0.00       0.0         0.    590.000      0.000
J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE
     15.000     0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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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

SWAN CR,ASH TWP,

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
5.000	0.00	0.00	0.00	580.65	2000.00	589.32	0.00	589.33	2.77	1.95	3054.15	1201.16
5.000	0.00	0.00	0.00	580.50	3070.00	589.66	0.00	589.69	2.78	2.74	3950.66	1842.87
5.000	0.00	0.00	0.00	580.50	3470.00	590.00	0.00	590.04	2.79	2.83	4339.85	2076.01
5.000	0.00	0.00	0.00	580.50	4230.00	590.56	0.00	590.61	2.81	2.97	4995.34	2522.91
6.000	100.00	0.00	0.00	580.70	2000.00	589.31	0.00	589.39	2.86	2.60	1900.26	1182.43
6.000	100.00	0.00	0.00	580.70	3070.00	589.64	0.00	589.78	4.98	3.48	2332.82	1375.23
6.000	100.00	0.00	0.00	580.70	3470.00	589.99	0.00	590.12	4.90	3.55	2713.32	1567.30
6.000	100.00	0.00	0.00	580.70	4230.00	590.56	0.00	590.68	4.74	3.64	3369.33	1943.41
7.000	1.00	586.50	590.00	580.70	2000.00	589.29	0.00	589.41	1.29	3.04	1710.60	1761.50
7.000	1.00	586.50	590.00	580.70	3070.00	589.60	0.00	589.82	2.35	4.17	2103.84	2001.30
7.000	1.00	586.50	590.00	580.70	3470.00	589.94	0.00	590.17	2.42	4.34	2464.68	2231.95
7.000	1.00	586.50	590.00	580.70	4230.00	590.54	0.00	590.71	5.29	4.13	3092.12	1838.74
17.000	16.00	586.50	590.00	580.70	2000.00	589.29	0.00	589.42	1.29	3.04	1713.24	1763.44
17.000	16.00	586.50	590.00	580.70	3070.00	589.60	0.00	589.83	2.34	4.16	2110.32	2005.42
17.000	16.00	586.50	590.00	580.70	3470.00	589.94	0.00	590.18	2.41	4.34	2470.59	2235.75
17.000	16.00	586.50	590.00	580.70	4230.00	590.55	0.00	590.72	5.27	4.12	3100.37	1842.20
18.000	1.00	0.00	0.00	580.70	2000.00	589.36	0.00	589.43	2.77	2.57	1933.66	1201.58
18.000	1.00	0.00	0.00	580.70	3070.00	589.73	0.00	589.86	4.65	3.39	2429.51	1423.56
18.000	1.00	0.00	0.00	580.70	3470.00	590.09	0.00	590.21	4.53	3.44	2830.07	1630.88
18.000	1.00	0.00	0.00	580.70	4230.00	590.61	0.00	590.73	4.57	3.59	3427.94	1979.01
68.000	50.00	0.00	0.00	580.50	2000.00	589.42	0.00	589.45	1.93	2.25	3032.19	1438.56
68.000	50.00	0.00	0.00	580.50	3070.00	589.85	0.00	589.90	3.33	3.05	3740.60	1682.86
68.000	50.00	0.00	0.00	580.50	3470.00	590.20	0.00	590.25	3.24	3.10	4170.40	1928.09
68.000	50.00	0.00	0.00	580.50	4230.00	590.72	0.00	590.77	3.28	3.24	4818.58	2335.09
1438.000	1370.00	0.00	0.00	580.30	2000.00	589.73	0.00	589.80	3.28	2.97	2006.09	1105.03
1438.000	1370.00	0.00	0.00	580.30	3070.00	590.35	0.00	590.48	5.18	3.93	2385.09	1348.86
1438.000	1370.00	0.00	0.00	580.30	3470.00	590.70	0.00	590.83	5.31	4.09	2627.04	1505.66
1438.000	1370.00	0.00	0.00	580.30	4230.00	591.23	0.00	591.37	5.71	4.40	3041.07	1770.97
2898.000	1460.00	0.00	0.00	581.30	2000.00	590.16	0.00	590.21	2.79	2.75	2309.72	1196.90
2898.000	1460.00	0.00	0.00	581.30	3070.00	590.97	0.00	591.03	3.36	3.22	2995.75	1675.96
2898.000	1460.00	0.00	0.00	581.30	3470.00	591.33	0.00	591.38	3.29	3.27	3325.38	1913.98
2898.000	1460.00	0.00	0.00	581.30	4230.00	591.89	0.00	591.94	3.30	3.42	3883.84	2328.36

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
3768.000	870.00	0.00	0.00	580.70	2000.00	590.37	0.00	590.42	3.04	2.67	1702.59	1147.22
3768.000	870.00	0.00	0.00	580.70	3070.00	591.21	0.00	591.29	4.12	3.35	2210.86	1511.93
3768.000	870.00	0.00	0.00	580.70	3470.00	591.56	0.00	591.65	4.25	3.50	2459.91	1682.74
3768.000	870.00	0.00	0.00	580.70	4230.00	592.12	0.00	592.21	4.55	3.77	2907.18	1983.93
5158.000	1390.00	0.00	0.00	582.10	2000.00	590.94	0.00	591.06	7.19	3.64	1512.89	745.69
5158.000	1390.00	0.00	0.00	582.10	3070.00	591.93	0.00	592.06	7.54	4.04	2113.78	1117.99
5158.000	1390.00	0.00	0.00	582.10	3470.00	592.29	0.00	592.42	7.44	4.13	2339.50	1271.94
5158.000	1390.00	0.00	0.00	582.10	4230.00	592.88	0.00	593.02	7.48	4.31	2719.56	1546.43
6318.000	1160.00	0.00	0.00	581.90	2000.00	591.59	0.00	591.70	4.57	3.20	1474.62	935.59
6318.000	1160.00	0.00	0.00	581.90	3070.00	592.65	0.00	592.78	5.45	3.79	1967.50	1314.76
6318.000	1160.00	0.00	0.00	581.90	3470.00	593.01	0.00	593.15	5.62	3.96	2142.90	1464.00
6318.000	1160.00	0.00	0.00	581.90	4230.00	593.61	0.00	593.77	5.96	4.28	2446.05	1732.71
7818.000	1500.00	0.00	0.00	582.60	2000.00	592.33	0.00	592.50	6.40	4.09	1308.79	790.39
7818.000	1500.00	0.00	0.00	582.60	3070.00	593.49	0.00	593.68	7.00	4.68	1852.10	1160.07
7818.000	1500.00	0.00	0.00	582.60	3470.00	593.87	0.00	594.07	7.14	4.85	2040.62	1299.05
7818.000	1500.00	0.00	0.00	582.60	4230.00	594.52	0.00	594.73	7.39	5.16	2373.05	1555.66
8718.000	900.00	0.00	0.00	582.30	2000.00	592.80	0.00	592.96	4.10	3.42	831.64	987.51
8718.000	900.00	0.00	0.00	582.30	3070.00	594.02	0.00	594.27	5.58	4.37	1030.77	1299.93
8718.000	900.00	0.00	0.00	582.30	3470.00	594.42	0.00	594.70	6.06	4.68	1095.44	1409.50
8718.000	900.00	0.00	0.00	582.30	4230.00	595.09	0.00	595.44	6.95	5.24	1205.67	1605.04
8838.000	120.00	0.00	0.00	582.40	2000.00	592.93	0.00	593.02	3.73	2.48	806.03	1036.02
8838.000	120.00	0.00	0.00	582.40	3070.00	594.19	0.00	594.36	5.13	3.28	936.62	1355.66
8838.000	120.00	0.00	0.00	582.40	3470.00	594.60	0.00	594.80	5.60	3.54	978.95	1466.73
8838.000	120.00	0.00	0.00	582.40	4230.00	595.30	0.00	595.55	6.46	4.02	1051.16	1664.24
8839.000	1.00	596.20	594.80	582.40	2000.00	592.86	0.00	593.09	3.20	3.80	526.45	1117.53
8839.000	1.00	596.20	594.80	582.40	3070.00	594.00	0.00	594.47	4.46	4.96	618.99	1452.94
8839.000	1.00	596.20	594.80	582.40	3470.00	594.43	0.00	594.92	4.90	5.35	648.82	1567.78
8839.000	1.00	596.20	594.80	582.40	4230.00	595.12	0.00	595.73	12.96	6.28	673.19	1175.01
8882.000	43.00	596.20	594.80	582.40	2000.00	592.88	0.00	593.10	3.18	3.79	527.58	1121.42
8882.000	43.00	596.20	594.80	582.40	3070.00	594.11	0.00	594.49	4.43	4.95	620.53	1458.78
8882.000	43.00	596.20	594.80	582.40	3470.00	594.50	0.00	594.94	4.86	5.33	650.49	1574.28
8882.000	43.00	596.20	594.80	582.40	4230.00	595.18	0.00	595.79	12.96	6.28	673.20	1174.81
8883.000	1.00	0.00	0.00	582.40	2000.00	593.05	0.00	593.14	3.53	2.44	818.55	1065.10
8883.000	1.00	0.00	0.00	582.40	3070.00	594.39	0.00	594.55	4.74	3.21	957.38	1409.70
8883.000	1.00	0.00	0.00	582.40	3470.00	594.84	0.00	595.02	5.13	3.46	1003.09	1531.64
8883.000	1.00	0.00	0.00	582.40	4230.00	595.67	0.00	595.90	5.69	3.88	1089.30	1772.54
8973.000	90.00	0.00	0.00	583.10	2000.00	593.06	0.00	593.20	4.07	3.33	1032.69	991.74
8973.000	90.00	0.00	0.00	583.10	3070.00	594.42	0.00	594.61	4.70	3.99	1414.92	1415.47
8973.000	90.00	0.00	0.00	583.10	3470.00	594.87	0.00	595.07	4.86	4.18	1542.81	1574.70
8973.000	90.00	0.00	0.00	583.10	4230.00	595.73	0.00	595.96	4.97	4.47	1784.49	1897.48
10098.000	1125.00	0.00	0.00	584.00	2000.00	593.61	0.00	593.71	5.13	3.54	1690.57	882.95
10098.000	1125.00	0.00	0.00	584.00	3070.00	595.05	0.00	595.16	5.04	3.93	2359.36	1367.77
10098.000	1125.00	0.00	0.00	584.00	3470.00	595.52	0.00	595.64	5.00	4.05	2590.92	1551.44
10098.000	1125.00	0.00	0.00	584.00	4230.00	596.40	0.00	596.52	4.82	4.21	3061.04	1927.29

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
11118.000	1020.00	0.00	0.00	585.20	2000.00	594.09	0.00	594.15	3.62	2.97	2460.03	1051.65
11118.000	1020.00	0.00	0.00	585.20	3070.00	595.52	0.00	595.58	3.37	3.22	3488.52	1671.56
11118.000	1020.00	0.00	0.00	585.20	3470.00	595.98	0.00	596.04	3.29	3.29	3867.02	1912.22
11118.000	1020.00	0.00	0.00	585.20	4230.00	596.85	0.00	596.90	3.11	3.39	4624.12	2399.24
12620.000	1502.00	0.00	0.00	585.80	1670.00	594.65	0.00	594.80	4.57	3.28	752.95	781.26
12620.000	1502.00	0.00	0.00	585.80	2575.00	596.06	0.00	596.29	5.57	4.09	968.78	1091.27
12620.000	1502.00	0.00	0.00	585.80	2910.00	596.52	0.00	596.77	5.88	4.36	1038.15	1199.72
12620.000	1502.00	0.00	0.00	585.80	3555.00	597.35	0.00	597.66	6.37	4.81	1164.99	1408.52
12760.000	140.00	0.00	0.00	585.10	1670.00	594.75	0.00	594.89	8.61	2.99	558.02	569.09
12760.000	140.00	0.00	0.00	585.10	2575.00	596.17	0.00	596.40	10.94	3.81	675.31	778.41
12760.000	140.00	0.00	0.00	585.10	2910.00	596.63	0.00	596.89	11.72	4.08	713.15	850.16
12760.000	140.00	0.00	0.00	585.10	3555.00	597.47	0.00	597.79	13.00	4.55	782.17	985.84
12817.000	57.00	598.10	593.40	585.10	1670.00	595.34	0.00	595.46	3.36	2.75	606.78	910.80
12817.000	57.00	598.10	593.40	585.10	2575.00	597.70	0.00	597.86	3.39	3.21	801.14	1399.48
12817.000	57.00	598.10	593.40	585.10	2910.00	598.46	0.00	598.64	3.43	3.37	864.44	1571.90
12817.000	57.00	598.10	593.40	585.10	3555.00	599.19	0.00	599.42	4.16	3.85	924.28	1742.40
13087.000	270.00	0.00	0.00	585.20	1670.00	595.46	0.00	595.54	2.12	2.48	1462.73	1147.08
13087.000	270.00	0.00	0.00	585.20	2575.00	597.89	0.00	597.94	1.38	2.37	2701.82	2188.92
13087.000	270.00	0.00	0.00	585.20	2910.00	598.68	0.00	598.73	1.23	2.35	3164.75	2620.15
13087.000	270.00	0.00	0.00	585.20	3555.00	599.47	0.00	599.53	1.32	2.54	3651.25	3092.54
14167.000	1080.00	0.00	0.00	585.80	1670.00	595.73	0.00	596.19	12.80	5.76	469.41	466.76
14167.000	1080.00	0.00	0.00	585.80	2575.00	598.03	0.00	598.40	8.85	5.66	1179.27	865.39
14167.000	1080.00	0.00	0.00	585.80	2910.00	598.81	0.00	599.12	7.45	5.45	1550.28	1065.97
14167.000	1080.00	0.00	0.00	585.80	3555.00	599.62	0.00	599.91	7.03	5.55	1992.60	1340.37
14267.000	100.00	0.00	0.00	586.30	1670.00	595.79	0.00	596.40	15.27	7.32	551.96	427.39
14267.000	100.00	0.00	0.00	586.30	2575.00	598.10	0.00	598.51	9.87	6.82	1316.09	819.49
14267.000	100.00	0.00	0.00	586.30	2910.00	598.88	0.00	599.21	8.22	6.50	1694.49	1015.13
14267.000	100.00	0.00	0.00	586.30	3555.00	599.69	0.00	599.99	7.69	6.56	2152.02	1281.63
14268.000	1.00	591.00	590.30	586.30	1670.00	595.79	0.00	596.41	25.09	7.49	519.36	333.37
14268.000	1.00	591.00	590.30	586.30	2575.00	598.23	0.00	598.54	12.62	6.28	1344.95	724.91
14268.000	1.00	591.00	590.30	586.30	2910.00	598.99	0.00	599.24	10.15	5.89	1728.08	913.38
14268.000	1.00	591.00	590.30	586.30	3555.00	599.81	0.00	600.02	9.09	5.83	2190.19	1179.32
14281.000	13.00	591.00	590.30	586.30	1670.00	595.86	0.00	596.44	24.06	7.38	533.39	340.43
14281.000	13.00	591.00	590.30	586.30	2575.00	598.25	0.00	598.56	12.51	6.26	1351.54	728.09
14281.000	13.00	591.00	590.30	586.30	2910.00	599.01	0.00	599.25	10.08	5.88	1734.45	916.58
14281.000	13.00	591.00	590.30	586.30	3555.00	599.83	0.00	600.03	9.02	5.82	2196.47	1183.38
14282.000	1.00	0.00	0.00	586.30	1670.00	595.85	0.00	596.45	14.77	7.22	564.82	434.60
14282.000	1.00	0.00	0.00	586.30	2575.00	598.22	0.00	598.60	9.27	6.65	1367.75	845.88
14282.000	1.00	0.00	0.00	586.30	2910.00	598.97	0.00	599.29	7.78	6.36	1747.64	1043.07
14282.000	1.00	0.00	0.00	586.30	3555.00	599.79	0.00	600.07	7.28	6.41	2207.49	1317.62
14332.000	50.00	0.00	0.00	585.80	1670.00	596.20	0.00	596.58	10.03	5.29	562.28	527.32
14332.000	50.00	0.00	0.00	585.80	2575.00	598.34	0.00	598.66	7.58	5.34	1293.33	935.53
14332.000	50.00	0.00	0.00	585.80	2910.00	599.05	0.00	599.33	6.65	5.22	1642.93	1128.77
14332.000	50.00	0.00	0.00	585.80	3555.00	599.85	0.00	600.11	6.41	5.36	2074.86	1404.08

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
15592.000	1260.00	0.00	0.00	591.50	1670.00	597.58	0.00	597.70	7.02	3.45	839.65	630.24
15592.000	1260.00	0.00	0.00	586.90	2575.00	599.01	0.00	599.04	1.14	1.84	2898.27	2411.54
15592.000	1260.00	0.00	0.00	586.90	2910.00	599.66	0.00	599.69	1.10	1.90	3232.85	2775.57
15592.000	1260.00	0.00	0.00	586.90	3555.00	600.44	0.00	600.48	1.19	2.09	3658.71	3256.54
15692.000	100.00	0.00	0.00	586.90	1670.00	597.64	0.00	597.75	3.72	2.71	616.02	865.97
15692.000	100.00	0.00	0.00	586.90	2575.00	599.02	0.00	599.05	1.13	1.84	2904.55	2418.30
15692.000	100.00	0.00	0.00	586.90	2910.00	599.67	0.00	599.70	1.09	1.90	3239.10	2782.44
15692.000	100.00	0.00	0.00	586.90	3555.00	600.45	0.00	600.49	1.19	2.09	3665.42	3264.42
15704.000	12.00	597.50	595.70	586.90	1670.00	597.84	0.00	597.94	1.11	2.64	633.43	1583.38
15704.000	12.00	597.50	595.70	586.90	2575.00	599.11	0.00	599.16	0.56	2.28	2948.21	3438.28
15704.000	12.00	597.50	595.70	586.90	2910.00	599.74	0.00	599.79	0.55	2.37	3275.57	3918.25
15704.000	12.00	597.50	595.70	586.90	3555.00	600.51	0.00	600.58	0.61	2.63	3698.93	4559.33
15754.000	50.00	0.00	0.00	586.90	1670.00	597.92	0.00	597.97	1.63	2.01	1263.84	1308.52
15754.000	50.00	0.00	0.00	586.90	2575.00	599.15	0.00	599.18	1.07	1.81	2966.48	2485.15
15754.000	50.00	0.00	0.00	586.90	2910.00	599.78	0.00	599.81	1.05	1.87	3296.72	2845.89
15754.000	50.00	0.00	0.00	586.90	3555.00	600.56	0.00	600.60	1.14	2.06	3725.35	3335.30
16374.000	620.00	0.00	0.00	587.80	1670.00	598.05	0.00	598.07	1.64	1.98	1914.29	1303.04
16374.000	620.00	0.00	0.00	587.80	2575.00	599.23	0.00	599.27	2.03	2.35	2437.70	1806.77
16374.000	620.00	0.00	0.00	587.80	2910.00	599.86	0.00	599.90	1.91	2.34	2729.64	2107.04
16374.000	620.00	0.00	0.00	587.80	3555.00	600.65	0.00	600.69	1.97	2.49	3107.80	2534.67
17384.000	1010.00	0.00	0.00	588.00	1670.00	598.17	0.00	598.18	0.79	1.55	2980.48	1281.39
17384.000	1010.00	0.00	0.00	588.00	2575.00	599.38	0.00	599.40	0.91	1.82	3827.66	2705.19
17384.000	1010.00	0.00	0.00	588.00	2910.00	600.00	0.00	600.02	0.84	1.82	4265.93	3177.10
17384.000	1010.00	0.00	0.00	588.00	3555.00	600.79	0.00	600.81	0.86	1.93	4842.55	3838.77
17554.000	170.00	0.00	0.00	588.70	1670.00	598.17	0.00	598.21	0.97	1.85	1621.51	1691.35
17554.000	170.00	0.00	0.00	588.70	2575.00	599.33	0.00	599.43	1.13	2.16	2477.61	2426.30
17554.000	170.00	0.00	0.00	588.70	2910.00	600.00	0.00	600.05	1.03	2.14	2914.23	2874.21
17554.000	170.00	0.00	0.00	588.70	3555.00	600.79	0.00	600.84	1.02	2.24	3476.31	3516.53
17555.000	1.00	596.50	595.10	588.70	1670.00	598.13	0.00	598.24	6.59	3.04	1060.06	650.33
17555.000	1.00	596.50	595.10	588.70	2575.00	599.37	0.00	599.44	4.30	2.83	1936.35	1241.19
17555.000	1.00	596.50	595.10	588.70	2910.00	599.99	0.00	600.05	3.24	2.61	2376.74	1617.40
17555.000	1.00	596.50	595.10	588.70	3555.00	600.79	0.00	600.85	2.69	2.56	2938.82	2165.72
17581.000	26.00	596.50	595.10	588.70	1670.00	598.15	0.00	598.26	6.52	3.02	1067.12	654.14
17581.000	26.00	596.50	595.10	588.70	2575.00	599.38	0.00	599.46	4.30	2.83	1937.39	1242.01
17581.000	26.00	596.50	595.10	588.70	2910.00	600.00	0.00	600.06	3.24	2.61	2377.09	1617.71
17581.000	26.00	596.50	595.10	588.70	3555.00	600.80	0.00	600.85	2.69	2.56	2941.23	2168.23
17582.000	1.00	0.00	0.00	588.70	1670.00	598.24	0.00	598.28	0.93	1.82	1672.87	1729.51
17582.000	1.00	0.00	0.00	588.70	2575.00	599.41	0.00	599.46	1.11	2.14	2499.87	2447.83
17582.000	1.00	0.00	0.00	588.70	2910.00	600.01	0.00	600.06	1.02	2.13	2921.82	2882.40
17582.000	1.00	0.00	0.00	588.70	3555.00	600.80	0.00	600.85	1.02	2.23	3480.79	3521.93
17632.000	50.00	0.00	0.00	588.80	1670.00	598.28	0.00	598.30	0.67	1.41	2927.54	2037.67
17632.000	50.00	0.00	0.00	588.80	2575.00	599.46	0.00	599.48	0.78	1.66	3759.91	2908.66
17632.000	50.00	0.00	0.00	588.80	2910.00	600.06	0.00	600.08	0.73	1.67	4201.84	3408.69
17632.000	50.00	0.00	0.00	588.80	3555.00	600.85	0.00	600.87	0.74	1.77	4801.59	4124.16

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
19032.000	1400.00	0.00	0.00	589.90	1670.00	598.43	0.00	598.47	2.52	2.35	1972.49	1051.71
19032.000	1400.00	0.00	0.00	589.90	2575.00	599.63	0.00	599.68	2.94	2.74	2528.24	1502.34
19032.000	1400.00	0.00	0.00	589.90	2910.00	600.22	0.00	600.27	2.77	2.75	2803.71	1748.79
19032.000	1400.00	0.00	0.00	589.90	3555.00	601.01	0.00	601.06	2.85	2.91	3175.14	2106.06
20462.000	1430.00	0.00	0.00	590.00	1670.00	598.78	0.00	598.81	2.32	2.50	2319.51	1095.31
20462.000	1430.00	0.00	0.00	590.00	2575.00	600.03	0.00	600.08	2.70	2.97	3025.63	1567.26
20462.000	1430.00	0.00	0.00	590.00	2910.00	600.60	0.00	600.65	2.57	3.02	3359.68	1813.67
20462.000	1430.00	0.00	0.00	590.00	3555.00	601.40	0.00	601.45	2.63	3.22	3847.48	2191.26
22092.000	1630.00	0.00	0.00	590.40	1670.00	599.22	0.00	599.27	3.29	2.92	1441.86	920.24
22092.000	1630.00	0.00	0.00	590.40	2575.00	600.53	0.00	600.59	3.48	3.34	2015.60	1379.64
22092.000	1630.00	0.00	0.00	590.40	2910.00	601.07	0.00	601.13	3.29	3.37	2249.60	1603.82
22092.000	1630.00	0.00	0.00	590.40	3555.00	601.87	0.00	601.93	3.26	3.54	2618.27	1969.62
22292.000	200.00	0.00	0.00	591.10	1670.00	599.25	0.00	599.35	2.85	2.64	727.37	989.62
22292.000	200.00	0.00	0.00	591.10	2575.00	600.55	0.00	600.70	3.43	3.25	1164.55	1389.51
22292.000	200.00	0.00	0.00	591.10	2910.00	601.09	0.00	601.24	3.32	3.32	1368.77	1597.33
22292.000	200.00	0.00	0.00	591.10	3555.00	601.88	0.00	602.05	3.35	3.54	1672.53	1942.22
22293.000	1.00	598.30	598.10	591.10	1670.00	599.22	0.00	599.38	4.32	3.19	582.57	803.45
22293.000	1.00	598.30	598.10	591.10	2575.00	600.50	0.00	600.74	11.46	4.15	921.80	760.62
22293.000	1.00	598.30	598.10	591.10	2910.00	601.05	0.00	601.27	9.87	4.07	1130.19	926.12
22293.000	1.00	598.30	598.10	591.10	3555.00	601.86	0.00	602.07	8.66	4.10	1438.49	1207.70
22309.000	16.00	598.30	598.10	591.10	1670.00	599.23	0.00	599.39	4.32	3.19	583.33	803.57
22309.000	16.00	598.30	598.10	591.10	2575.00	600.52	0.00	600.76	11.36	4.14	926.25	763.93
22309.000	16.00	598.30	598.10	591.10	2910.00	601.07	0.00	601.29	9.80	4.06	1134.27	929.57
22309.000	16.00	598.30	598.10	591.10	3555.00	601.88	0.00	602.09	8.61	4.10	1442.11	1211.25
22310.000	1.00	0.00	0.00	591.10	1670.00	599.30	0.00	599.40	2.77	2.62	739.95	1002.60
22310.000	1.00	0.00	0.00	591.10	2575.00	600.65	0.00	600.79	3.26	3.19	1201.72	1425.80
22310.000	1.00	0.00	0.00	591.10	2910.00	601.16	0.00	601.31	3.20	3.26	1397.14	1627.79
22310.000	1.00	0.00	0.00	591.10	3555.00	601.94	0.00	602.10	3.27	3.51	1692.66	1966.51
22410.000	100.00	0.00	0.00	591.20	1670.00	599.42	0.00	599.45	2.13	2.34	1730.92	1143.70
22410.000	100.00	0.00	0.00	591.20	2575.00	600.82	0.00	600.85	2.10	2.59	2418.28	1777.85
22410.000	100.00	0.00	0.00	591.20	2910.00	601.34	0.00	601.37	1.99	2.62	2692.80	2063.25
22410.000	100.00	0.00	0.00	591.20	3555.00	602.13	0.00	602.16	1.95	2.74	3136.65	2543.78
23160.000	750.00	0.00	0.00	591.60	1670.00	599.56	0.00	599.58	1.32	1.69	2225.87	1455.80
23160.000	750.00	0.00	0.00	591.60	2575.00	600.95	0.00	600.97	1.26	1.88	3078.08	2296.25
23160.000	750.00	0.00	0.00	591.60	2910.00	601.46	0.00	601.48	1.19	1.91	3446.55	2662.98
23160.000	750.00	0.00	0.00	591.60	3555.00	602.25	0.00	602.27	1.16	2.00	4078.60	3296.59
24540.000	1380.00	0.00	0.00	591.30	1670.00	599.80	0.00	599.87	3.53	2.85	1828.51	888.71
24540.000	1380.00	0.00	0.00	591.30	2575.00	601.18	0.00	601.25	3.34	3.13	2694.60	1409.13
24540.000	1380.00	0.00	0.00	591.30	2910.00	601.68	0.00	601.75	3.17	3.17	3058.44	1633.59
24540.000	1380.00	0.00	0.00	591.30	3555.00	602.46	0.00	602.54	3.07	3.31	3685.91	2027.42
26060.000	1520.00	0.00	0.00	592.10	1670.00	600.34	0.00	600.44	3.88	2.83	929.12	847.71
26060.000	1520.00	0.00	0.00	592.10	2575.00	601.49	0.00	601.50	0.95	1.57	3700.25	2638.22
26060.000	1520.00	0.00	0.00	592.10	2910.00	601.98	0.00	601.99	0.93	1.62	4045.40	3023.62
26060.000	1520.00	0.00	0.00	592.10	3555.00	602.76	0.00	602.78	0.94	1.73	4590.74	3671.37

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
26290.000	230.00	0.00	0.00	591.50	1670.00	600.43	0.00	600.52	3.96	2.51	664.60	838.71
26290.000	230.00	0.00	0.00	591.50	2575.00	601.43	0.00	601.59	4.23	2.90	1499.33	1251.59
26290.000	230.00	0.00	0.00	591.50	2910.00	601.97	0.00	602.07	3.92	2.91	1786.30	1470.10
26290.000	230.00	0.00	0.00	591.50	3555.00	602.75	0.00	602.85	3.62	2.97	2244.62	1868.38
26325.000	35.00	600.10	601.80	591.50	1670.00	600.51	0.00	600.60	2.60	2.48	672.59	1035.09
26325.000	35.00	600.10	601.80	591.50	2575.00	601.60	0.00	601.71	2.80	2.89	1569.24	1539.55
26325.000	35.00	600.10	601.80	591.50	2910.00	602.11	0.00	602.22	2.63	2.92	1868.95	1795.13
26325.000	35.00	600.10	601.80	591.50	3555.00	602.87	0.00	602.98	2.55	3.04	2317.27	2225.70
26475.000	150.00	0.00	0.00	592.40	1670.00	600.56	0.00	600.67	6.66	3.78	1183.46	647.17
26475.000	150.00	0.00	0.00	592.40	2575.00	601.70	0.00	601.77	4.76	3.53	2233.03	1180.73
26475.000	150.00	0.00	0.00	592.40	2910.00	602.21	0.00	602.27	4.04	3.38	2583.46	1447.90
26475.000	150.00	0.00	0.00	592.40	3555.00	602.98	0.00	603.03	3.51	3.33	3122.20	1897.26
27015.000	540.00	0.00	0.00	592.40	1670.00	600.92	0.00	600.98	4.94	3.22	1648.18	751.04
27015.000	540.00	0.00	0.00	592.40	2575.00	601.96	0.00	602.01	4.36	3.32	2448.61	1232.53
27015.000	540.00	0.00	0.00	592.40	2910.00	602.44	0.00	602.48	3.77	3.21	2862.28	1498.61
27015.000	540.00	0.00	0.00	592.40	3555.00	603.18	0.00	603.22	3.21	3.13	3569.09	1983.44
29305.000	2290.00	0.00	0.00	593.00	1670.00	602.14	0.00	602.36	6.54	4.00	563.56	652.93
29305.000	2290.00	0.00	0.00	593.00	2575.00	603.22	0.00	603.59	9.32	5.24	682.40	843.58
29305.000	2290.00	0.00	0.00	593.00	2910.00	603.59	0.00	604.01	10.16	5.62	722.89	913.08
29305.000	2290.00	0.00	0.00	593.00	3555.00	604.21	0.00	604.74	11.80	6.34	791.05	1035.00
29405.000	100.00	0.00	0.00	593.60	1670.00	602.20	0.00	602.43	6.58	3.81	438.53	651.09
29405.000	100.00	0.00	0.00	593.60	2575.00	603.30	0.00	603.70	10.03	5.11	504.37	813.20
29405.000	100.00	0.00	0.00	593.60	2910.00	603.67	0.00	604.14	11.18	5.53	526.52	870.45
29405.000	100.00	0.00	0.00	593.60	3555.00	604.29	0.00	604.91	13.45	6.31	563.60	969.17
29406.000	1.00	611.30	605.30	593.60	1670.00	602.19	0.00	602.45	2.69	4.08	409.78	1017.65
29406.000	1.00	611.30	605.30	593.60	2575.00	603.27	0.00	603.74	4.14	5.46	469.92	1265.11
29406.000	1.00	611.30	605.30	593.60	2910.00	603.63	0.00	604.18	4.62	5.93	490.35	1353.28
29406.000	1.00	611.30	605.30	593.60	3555.00	604.24	0.00	604.96	5.58	6.78	524.51	1505.10
29442.000	36.00	611.30	605.30	593.60	1670.00	602.20	0.00	602.46	2.68	4.07	410.25	1019.49
29442.000	36.00	611.30	605.30	593.60	2575.00	603.29	0.00	603.75	4.10	5.46	471.33	1271.13
29442.000	36.00	611.30	605.30	593.60	2910.00	603.65	0.00	604.20	4.58	5.92	491.90	1360.04
29442.000	36.00	611.30	605.30	593.60	3555.00	604.27	0.00	604.98	5.52	6.75	526.43	1513.78
29443.000	1.00	0.00	0.00	593.60	1670.00	602.24	0.00	602.47	6.44	3.78	441.47	658.07
29443.000	1.00	0.00	0.00	593.60	2575.00	603.37	0.00	603.77	9.72	5.06	509.28	825.77
29443.000	1.00	0.00	0.00	593.60	2910.00	603.76	0.00	604.22	10.80	5.47	532.25	885.47
29443.000	1.00	0.00	0.00	593.60	3555.00	604.41	0.00	605.01	12.89	6.22	571.38	990.33
29493.000	50.00	0.00	0.00	592.90	1670.00	602.31	0.00	602.51	5.70	3.80	648.29	699.66
29493.000	50.00	0.00	0.00	592.90	2575.00	603.52	0.00	603.84	7.81	4.92	803.93	921.70
29493.000	50.00	0.00	0.00	592.90	2910.00	603.94	0.00	604.30	8.38	5.25	858.84	1005.33
29493.000	50.00	0.00	0.00	592.90	3555.00	604.67	0.00	605.11	9.42	5.86	954.63	1158.40
30013.000	520.00	0.00	0.00	593.40	1670.00	602.64	0.00	602.75	3.75	3.11	1278.53	862.66
30013.000	520.00	0.00	0.00	593.40	2575.00	604.02	0.00	604.14	3.86	3.52	1842.44	1310.05
30013.000	520.00	0.00	0.00	593.40	2910.00	604.49	0.00	604.61	3.84	3.63	2041.85	1484.70
30013.000	520.00	0.00	0.00	593.40	3555.00	605.31	0.00	605.44	3.80	3.81	2440.26	1824.32

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
30723.000	710.00	0.00	0.00	593.30	1670.00	602.90	0.00	603.02	4.36	3.27	975.01	799.39
30723.000	710.00	0.00	0.00	593.30	2575.00	604.27	0.00	604.41	4.56	3.75	1402.50	1203.52
30723.000	710.00	0.00	0.00	593.30	2910.00	604.73	0.00	604.89	4.56	3.87	1559.59	1362.74
30723.000	710.00	0.00	0.00	593.30	3555.00	605.55	0.00	605.71	4.51	4.07	1851.75	1674.59
31223.000	500.00	0.00	0.00	592.10	1630.00	603.10	0.00	603.23	3.99	3.30	894.30	815.91
31223.000	500.00	0.00	0.00	592.10	2485.00	604.48	0.00	604.65	4.48	3.87	1226.36	1173.93
31223.000	500.00	0.00	0.00	592.10	2800.00	604.95	0.00	605.12	4.56	4.03	1344.00	1310.70
31223.000	500.00	0.00	0.00	592.10	3410.00	605.77	0.00	605.95	4.59	4.25	1683.35	1591.82
32033.000	810.00	0.00	0.00	593.90	1060.00	603.47	0.00	603.68	6.79	3.82	386.69	406.64
32033.000	810.00	0.00	0.00	593.90	1630.00	604.88	0.00	605.18	8.02	4.68	517.81	575.69
32033.000	810.00	0.00	0.00	593.90	1840.00	605.35	0.00	605.68	8.34	4.95	561.27	637.23
32033.000	810.00	0.00	0.00	593.90	2240.00	606.15	0.00	606.55	8.93	5.42	636.40	749.60
32133.000	100.00	0.00	0.00	594.30	1060.00	603.63	0.00	603.75	2.78	2.71	390.59	635.89
32133.000	100.00	0.00	0.00	594.30	1630.00	605.06	0.00	605.27	4.19	3.61	452.05	796.70
32133.000	100.00	0.00	0.00	594.30	1840.00	605.53	0.00	605.77	4.67	3.90	472.12	851.55
32133.000	100.00	0.00	0.00	594.30	2240.00	606.34	0.00	606.64	5.58	4.42	506.67	948.51
32400.000	267.00	623.50	603.90	594.80	1060.00	603.65	0.00	603.78	3.29	2.87	369.83	584.19
32400.000	267.00	623.50	603.90	594.80	1630.00	605.54	0.00	605.75	4.21	3.61	451.15	794.26
32400.000	267.00	623.50	603.90	594.80	1840.00	606.17	0.00	606.40	4.49	3.85	478.09	868.08
32400.000	267.00	623.50	603.90	594.80	2240.00	607.35	0.00	607.63	4.91	4.24	528.52	1011.39
32450.000	50.00	0.00	0.00	596.00	1060.00	603.62	0.00	603.86	10.17	4.22	422.77	332.32
32450.000	50.00	0.00	0.00	596.00	1630.00	605.56	0.00	605.78	7.32	4.33	700.85	602.33
32450.000	50.00	0.00	0.00	596.00	1840.00	606.21	0.00	606.43	6.80	4.40	791.76	705.72
32450.000	50.00	0.00	0.00	596.00	2240.00	607.45	0.00	607.67	5.83	4.46	970.19	927.88
32590.000	140.00	0.00	0.00	597.00	1060.00	603.90	0.00	603.96	3.99	2.69	1150.83	530.54
32590.000	140.00	0.00	0.00	597.00	1630.00	605.81	0.00	605.86	2.66	2.66	1815.07	998.90
32590.000	140.00	0.00	0.00	597.00	1840.00	606.45	0.00	606.50	2.41	2.67	2044.57	1184.87
32590.000	140.00	0.00	0.00	597.00	2240.00	607.68	0.00	607.73	2.01	2.67	2492.78	1579.04
33520.000	930.00	0.00	0.00	597.60	1060.00	604.27	0.00	604.31	3.55	2.50	1583.34	562.49
33520.000	930.00	0.00	0.00	597.60	1630.00	606.04	0.00	606.07	1.90	2.18	2934.47	1181.96
33520.000	930.00	0.00	0.00	597.60	1840.00	606.66	0.00	606.68	1.58	2.09	3443.51	1465.73
33520.000	930.00	0.00	0.00	597.60	2240.00	607.86	0.00	607.87	1.14	1.95	4470.86	2099.59
34590.000	1070.00	0.00	0.00	597.20	1060.00	604.78	0.00	605.15	18.88	5.55	585.40	243.94
34590.000	1070.00	0.00	0.00	597.20	1630.00	606.33	0.00	606.49	9.04	4.46	1396.59	542.01
34590.000	1070.00	0.00	0.00	597.20	1840.00	606.90	0.00	607.02	7.05	4.13	1732.80	692.83
34590.000	1070.00	0.00	0.00	597.20	2240.00	608.03	0.00	608.11	4.53	3.61	2454.30	1052.69
34770.000	180.00	0.00	0.00	597.90	1060.00	605.31	0.00	605.33	2.11	1.94	1207.49	730.03
34770.000	180.00	0.00	0.00	597.90	1630.00	606.57	0.00	606.59	1.59	1.92	1838.32	1294.15
34770.000	180.00	0.00	0.00	597.90	1840.00	607.08	0.00	607.10	1.36	1.86	2126.78	1576.56
34770.000	180.00	0.00	0.00	597.90	2240.00	608.14	0.00	608.16	0.98	1.72	2779.87	2257.36
34771.000	1.00	602.10	604.90	597.90	1060.00	605.31	0.00	605.34	3.84	1.99	1052.17	541.01
34771.000	1.00	602.10	604.90	597.90	1630.00	606.57	0.00	606.59	2.91	1.45	1655.66	956.15
34771.000	1.00	602.10	604.90	597.90	1840.00	607.09	0.00	607.10	2.32	1.38	1944.29	1207.10
34771.000	1.00	602.10	604.90	597.90	2240.00	608.15	0.00	608.16	1.51	1.23	2597.11	1821.90

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
34776.000	5.00	602.10	604.90	597.90	1060.00	605.31	0.00	605.34	3.84	1.98	1052.28	541.08
34776.000	5.00	602.10	604.90	597.90	1630.00	606.58	0.00	606.59	2.88	1.45	1660.18	959.96
34776.000	5.00	602.10	604.90	597.90	1840.00	607.09	0.00	607.10	2.31	1.37	1948.53	1210.90
34776.000	5.00	602.10	604.90	597.90	2240.00	608.15	0.00	608.16	1.51	1.23	2600.78	1825.51
34777.000	1.00	0.00	0.00	597.90	1060.00	605.31	0.00	605.34	2.10	1.94	1208.51	730.85
34777.000	1.00	0.00	0.00	597.90	1630.00	606.57	0.00	606.59	1.57	1.91	1843.36	1298.99
34777.000	1.00	0.00	0.00	597.90	1840.00	607.09	0.00	607.11	1.35	1.85	2131.73	1581.51
34777.000	1.00	0.00	0.00	597.90	2240.00	608.15	0.00	608.16	0.98	1.72	2783.86	2261.67
33929.000	172.00	0.00	0.00	597.10	1060.00	605.29	0.00	605.49	9.73	3.99	533.17	339.87
33929.000	172.00	0.00	0.00	597.10	1630.00	606.59	0.00	606.66	4.20	3.01	1348.42	795.57
33929.000	172.00	0.00	0.00	597.10	1840.00	607.10	0.00	607.16	3.05	2.69	1693.81	1053.46
33929.000	172.00	0.00	0.00	597.10	2240.00	608.16	0.00	608.19	1.75	2.23	2428.84	1695.19
34930.000	1.00	604.30	605.80	597.10	1060.00	605.24	0.00	605.55	17.55	4.71	379.38	253.00
34930.000	1.00	604.30	605.80	597.10	1630.00	606.63	0.00	606.67	9.47	2.45	1220.65	529.70
34930.000	1.00	604.30	605.80	597.10	1840.00	607.13	0.00	607.16	6.08	2.06	1555.71	746.08
34930.000	1.00	604.30	605.80	597.10	2240.00	608.18	0.00	608.19	2.95	1.58	2278.01	1304.87
34938.000	8.00	604.30	605.80	597.10	1060.00	605.26	0.00	605.57	17.38	4.69	384.10	254.27
34938.000	8.00	604.30	605.80	597.10	1630.00	606.63	0.00	606.68	9.39	2.44	1224.15	531.80
34938.000	8.00	604.30	605.80	597.10	1840.00	607.14	0.00	607.17	6.05	2.06	1558.35	747.90
34938.000	8.00	604.30	605.80	597.10	2240.00	608.18	0.00	608.20	2.92	1.58	2285.21	1311.00
34939.000	1.00	0.00	0.00	597.10	1060.00	605.46	0.00	605.61	7.69	3.62	628.24	382.34
34939.000	1.00	0.00	0.00	597.10	1630.00	606.62	0.00	606.69	4.01	2.95	1374.48	813.91
34939.000	1.00	0.00	0.00	597.10	1840.00	607.13	0.00	607.18	2.98	2.67	1708.44	1065.06
34939.000	1.00	0.00	0.00	597.10	2240.00	608.17	0.00	608.20	1.73	2.22	2437.97	1703.86
35259.000	320.00	0.00	0.00	597.20	1060.00	605.73	0.00	605.83	5.28	3.01	658.49	461.49
35259.000	320.00	0.00	0.00	597.20	1630.00	606.75	0.00	606.83	4.26	3.00	1288.30	789.65
35259.000	320.00	0.00	0.00	597.20	1840.00	607.22	0.00	607.28	3.26	2.75	1636.82	1018.48
35259.000	320.00	0.00	0.00	597.20	2240.00	608.23	0.00	608.26	1.85	2.25	2432.14	1648.90
35260.000	1.00	602.10	605.70	597.20	1060.00	605.75	0.00	605.84	11.25	2.89	586.20	316.00
35260.000	1.00	602.10	605.70	597.20	1630.00	606.79	0.00	606.84	8.60	2.33	1227.97	555.94
35260.000	1.00	602.10	605.70	597.20	1840.00	607.26	0.00	607.29	5.91	2.03	1570.86	756.90
35260.000	1.00	602.10	605.70	597.20	2240.00	608.25	0.00	608.27	2.92	1.56	2340.13	1309.76
35268.000	8.00	602.10	605.70	597.20	1060.00	605.76	0.00	605.85	11.12	2.87	590.89	317.84
35268.000	8.00	602.10	605.70	597.20	1630.00	606.80	0.00	606.85	8.54	2.33	1231.16	557.63
35268.000	8.00	602.10	605.70	597.20	1840.00	607.26	0.00	607.29	5.88	2.02	1573.43	758.54
35268.000	8.00	602.10	605.70	597.20	2240.00	608.25	0.00	608.27	2.89	1.55	2349.30	1317.03
35269.000	1.00	0.00	0.00	597.20	1060.00	605.75	0.00	605.85	5.14	2.98	670.29	467.58
35269.000	1.00	0.00	0.00	597.20	1630.00	606.79	0.00	606.86	4.06	2.95	1319.98	808.78
35269.000	1.00	0.00	0.00	597.20	1840.00	607.25	0.00	607.31	3.15	2.71	1662.14	1036.54
35269.000	1.00	0.00	0.00	597.20	2240.00	608.24	0.00	608.28	1.83	2.24	2441.91	1657.37
35441.000	172.00	0.00	0.00	596.90	1060.00	605.81	0.00	606.02	8.31	4.23	614.73	367.62
35441.000	172.00	0.00	0.00	596.90	1630.00	606.87	0.00	606.93	3.74	3.11	1564.07	842.93
35441.000	172.00	0.00	0.00	596.90	1840.00	607.32	0.00	607.36	2.80	2.79	1916.18	1100.21
35441.000	172.00	0.00	0.00	596.90	2240.00	608.28	0.00	608.31	1.64	2.29	2656.85	1748.30

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
35442.000	1.00	604.50	604.40	596.90	1060.00	605.91	0.00	606.04	17.09	3.79	631.81	256.42
35442.000	1.00	604.50	604.40	596.90	1630.00	606.91	0.00	606.94	5.37	2.36	1561.38	703.69
35442.000	1.00	604.50	604.40	596.90	1840.00	607.35	0.00	607.37	3.84	2.08	1896.19	939.32
35442.000	1.00	604.50	604.40	596.90	2240.00	608.30	0.00	608.31	2.08	1.66	2623.14	1551.59
35463.000	21.00	604.50	604.40	596.90	1060.00	605.96	0.00	606.08	15.67	3.65	656.42	267.76
35463.000	21.00	604.50	604.40	596.90	1630.00	606.92	0.00	606.95	5.29	2.35	1568.52	708.39
35463.000	21.00	604.50	604.40	596.90	1840.00	607.35	0.00	607.38	3.80	2.07	1902.02	943.69
35463.000	21.00	604.50	604.40	596.90	2240.00	608.30	0.00	608.32	2.06	1.65	2631.79	1559.65
35464.000	1.00	0.00	0.00	596.90	1060.00	605.94	0.00	606.11	7.02	3.93	680.74	399.99
35464.000	1.00	0.00	0.00	596.90	1630.00	606.91	0.00	606.97	3.52	3.03	1602.61	869.38
35464.000	1.00	0.00	0.00	596.90	1840.00	607.34	0.00	607.39	2.72	2.75	1936.85	1116.39
35464.000	1.00	0.00	0.00	596.90	2240.00	608.30	0.00	608.32	1.62	2.28	2670.20	1761.23
35759.000	295.00	0.00	0.00	596.60	1060.00	606.17	0.00	606.28	4.27	2.90	624.86	512.97
35759.000	295.00	0.00	0.00	596.60	1630.00	607.00	0.00	607.11	4.55	3.24	1077.57	764.13
35759.000	295.00	0.00	0.00	596.60	1840.00	607.41	0.00	607.51	3.85	3.09	1333.72	937.20
35759.000	295.00	0.00	0.00	596.60	2240.00	608.34	0.00	608.40	2.48	2.68	1911.03	1421.30
35760.000	1.00	605.00	605.50	596.60	1060.00	606.07	0.00	606.39	28.58	4.89	342.72	198.28
35760.000	1.00	605.00	605.50	596.60	1630.00	606.97	0.00	607.15	25.40	4.49	767.36	323.43
35760.000	1.00	605.00	605.50	596.60	1840.00	607.41	0.00	607.51	17.22	3.73	1025.94	643.47
35760.000	1.00	605.00	605.50	596.60	2240.00	608.36	0.00	608.40	7.92	2.59	1571.80	796.00
35767.000	7.00	605.00	605.50	596.60	1060.00	606.09	0.00	606.41	28.31	4.86	346.37	199.23
35767.000	7.00	605.00	605.50	596.60	1630.00	606.99	0.00	607.17	24.82	4.44	776.74	327.15
35767.000	7.00	605.00	605.50	596.60	1840.00	607.42	0.00	607.53	17.12	3.72	1026.34	444.76
35767.000	7.00	605.00	605.50	596.60	2240.00	608.37	0.00	608.41	7.89	2.58	1574.06	797.68
35768.000	1.00	0.00	0.00	596.60	1060.00	606.39	0.00	606.48	3.48	2.67	707.17	568.60
35768.000	1.00	0.00	0.00	596.60	1630.00	607.08	0.00	607.19	4.20	3.14	1127.38	794.93
35768.000	1.00	0.00	0.00	596.60	1840.00	607.43	0.00	607.53	3.81	3.08	1340.99	942.56
35768.000	1.00	0.00	0.00	596.60	2240.00	608.36	0.00	608.42	2.44	2.66	1924.81	1434.22
36068.000	300.00	0.00	0.00	596.20	1060.00	606.49	0.00	606.58	3.24	2.60	658.40	589.13
36068.000	300.00	0.00	0.00	596.20	1630.00	607.23	0.00	607.30	2.97	2.67	1280.05	946.13
36068.000	300.00	0.00	0.00	596.20	1840.00	607.57	0.00	607.63	2.85	2.70	1437.03	1089.06
36068.000	300.00	0.00	0.00	596.20	2240.00	608.43	0.00	608.49	2.21	2.54	1844.15	1508.06
36069.000	1.00	604.30	606.30	596.20	1060.00	606.50	0.00	606.58	9.03	2.57	585.24	352.69
36069.000	1.00	604.30	606.30	596.20	1630.00	607.27	0.00	607.31	6.35	2.15	1214.20	647.00
36069.000	1.00	604.30	606.30	596.20	1840.00	607.60	0.00	607.64	5.72	2.10	1371.75	769.57
36069.000	1.00	604.30	606.30	596.20	2240.00	608.46	0.00	608.49	3.93	1.88	1775.54	1129.60
36077.000	8.00	604.30	606.30	596.20	1060.00	606.51	0.00	606.59	8.93	2.56	588.03	354.64
36077.000	8.00	604.30	606.30	596.20	1630.00	607.27	0.00	607.31	6.32	2.14	1216.04	648.37
36077.000	8.00	604.30	606.30	596.20	1840.00	607.61	0.00	607.65	5.70	2.10	1373.36	770.87
36077.000	8.00	604.30	606.30	596.20	2240.00	608.47	0.00	608.50	3.92	1.88	1776.80	1130.82
36078.000	1.00	0.00	0.00	596.20	1060.00	606.51	0.00	606.59	3.20	2.59	662.02	592.75
36078.000	1.00	0.00	0.00	596.20	1630.00	607.26	0.00	607.33	2.88	2.64	1296.12	960.26
36078.000	1.00	0.00	0.00	596.20	1840.00	607.60	0.00	607.66	2.78	2.67	1453.21	1104.40
36078.000	1.00	0.00	0.00	596.20	2240.00	608.46	0.00	608.51	2.16	2.52	1857.00	1522.37

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
36298.000	240.00	0.00	0.00	597.20	1060.00	606.57	0.00	606.69	4.15	2.96	466.97	520.57
36298.000	240.00	0.00	0.00	597.20	1630.00	607.32	0.00	607.41	3.73	3.02	1031.40	843.99
36298.000	240.00	0.00	0.00	597.20	1840.00	607.65	0.00	607.74	3.69	3.09	1147.10	957.93
36298.000	240.00	0.00	0.00	597.20	2240.00	608.49	0.00	608.58	3.05	3.01	1442.84	1283.44
36398.000	100.00	0.00	0.00	597.60	1060.00	606.59	0.00	606.75	3.29	3.26	382.88	584.37
36398.000	100.00	0.00	0.00	597.60	1630.00	607.27	0.00	607.56	5.88	4.57	484.10	672.16
36398.000	100.00	0.00	0.00	597.60	1840.00	607.58	0.00	607.91	6.32	4.45	579.75	731.64
36398.000	100.00	0.00	0.00	597.60	2240.00	608.43	0.00	608.73	5.79	4.91	833.03	930.78
36444.000	46.00	608.30	606.00	597.60	1060.00	607.00	0.00	607.18	4.46	3.37	314.97	501.87
36444.000	46.00	608.30	606.00	597.60	1630.00	608.34	0.00	608.56	3.98	4.04	589.85	817.29
36444.000	46.00	608.30	606.00	597.60	1840.00	608.62	0.00	608.88	4.39	4.32	676.06	878.41
36444.000	46.00	608.30	606.00	597.60	2240.00	609.13	0.00	609.42	5.00	4.76	827.01	1001.56

SWAN CR.ASH TWP.

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
5.000	2000.00	589.32	0.00	0.00	0.00	813.00	0.00
5.000	3070.00	589.66	0.00	0.00	-0.34	1107.94	0.00
5.000	3470.00	590.00	0.00	0.00	0.00	1150.00	0.00
5.000	4230.00	590.56	0.00	0.00	0.56	1172.58	0.00
6.000	2000.00	589.31	0.00	-0.00	0.00	800.00	100.00
6.000	3070.00	589.64	0.00	-0.01	0.00	1059.97	100.00
6.000	3470.00	589.99	0.00	-0.01	0.00	1139.80	100.00
6.000	4230.00	590.56	0.00	-0.01	0.00	1169.91	100.00
7.000	2000.00	589.29	0.00	-0.02	0.00	800.00	1.00
7.000	3070.00	589.60	0.00	-0.05	0.00	1049.27	1.00
7.000	3470.00	589.94	0.00	-0.05	0.00	1127.86	1.00
7.000	4230.00	590.54	0.00	-0.02	0.00	1168.84	1.00
17.000	2000.00	589.29	0.00	0.00	0.00	800.00	16.00
17.000	3070.00	589.60	0.00	0.00	0.00	1050.73	16.00
17.000	3470.00	589.94	0.00	0.00	0.00	1129.10	16.00
17.000	4230.00	590.55	0.00	0.01	0.00	1169.23	16.00
18.000	2000.00	589.36	0.00	0.06	0.00	800.00	1.00
18.000	3070.00	589.73	0.00	0.13	0.00	1080.82	1.00
18.000	3470.00	590.09	0.00	0.15	0.00	1146.63	1.00
18.000	4230.00	590.61	0.00	0.06	0.00	1172.41	1.00
68.000	2000.00	589.42	0.00	0.07	0.00	860.00	50.00
68.000	3070.00	589.85	0.00	0.11	0.00	1178.26	50.00
68.000	3470.00	590.20	0.00	0.11	0.00	1242.71	50.00
68.000	4230.00	590.72	0.00	0.11	1.29	1272.00	50.00
1438.000	2000.00	589.73	0.00	0.30	0.00	578.64	1370.00
1438.000	3070.00	590.35	0.00	0.50	0.00	662.45	1370.00
1438.000	3470.00	590.70	0.00	0.50	0.00	724.55	1370.00
1438.000	4230.00	591.23	0.00	0.51	1.50	819.98	1370.00
2898.000	2000.00	590.16	0.00	0.44	0.00	787.77	1460.00
2898.000	3070.00	590.97	0.00	0.62	0.00	906.52	1460.00
2898.000	3470.00	591.33	0.00	0.63	0.00	958.36	1460.00
2898.000	4230.00	591.89	0.00	0.66	1.72	1040.30	1460.00
3768.000	2000.00	590.37	0.00	0.20	0.00	525.83	870.00
3768.000	3070.00	591.21	0.00	0.24	0.00	684.56	870.00
3768.000	3470.00	591.56	0.00	0.23	0.00	750.17	870.00
3768.000	4230.00	592.12	0.00	0.23	1.75	855.47	870.00
5158.000	2000.00	590.94	0.00	0.57	0.00	587.67	1390.00
5158.000	3070.00	591.93	0.00	0.72	0.00	621.19	1390.00
5158.000	3470.00	592.29	0.00	0.73	0.00	633.32	1390.00
5158.000	4230.00	592.88	0.00	0.76	1.95	653.23	1390.00
6318.000	2000.00	591.59	0.00	0.66	0.00	457.66	1160.00
6318.000	3070.00	592.63	0.00	0.71	0.00	482.22	1160.00
6318.000	3470.00	593.01	0.00	0.71	0.00	492.58	1160.00
6318.000	4230.00	593.61	0.00	0.73	2.02	509.99	1160.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
7818.000	2000.00	592.33	0.00	0.73	0.00	449.10	1500.00
7818.000	3070.00	593.49	0.00	0.84	0.00	488.50	1500.00
7818.000	3470.00	593.87	0.00	0.86	0.00	501.45	1500.00
7818.000	4230.00	594.52	0.00	0.90	2.19	523.51	1500.00
8718.000	2000.00	592.80	0.00	0.47	0.00	163.00	900.00
8718.000	3070.00	594.02	0.00	0.53	0.00	163.00	900.00
8718.000	3470.00	594.42	0.00	0.55	0.00	163.00	900.00
8718.000	4230.00	595.09	0.00	0.58	2.29	163.00	900.00
8838.000	2000.00	592.93	0.00	0.13	0.00	103.20	120.00
8838.000	3070.00	594.19	0.00	0.17	0.00	103.20	120.00
8838.000	3470.00	594.60	0.00	0.19	0.00	103.20	120.00
8838.000	4230.00	595.30	0.00	0.21	2.37	103.20	120.00
8839.000	2000.00	592.86	0.00	-0.06	0.00	103.20	1.00
8839.000	3070.00	594.08	0.00	-0.11	0.00	103.20	1.00
8839.000	3470.00	594.48	0.00	-0.12	0.00	103.20	1.00
8839.000	4230.00	595.12	0.00	-0.18	2.26	103.20	1.00
8882.000	2000.00	592.88	0.00	0.01	0.00	103.20	43.00
8882.000	3070.00	594.11	0.00	0.02	0.00	103.20	43.00
8882.000	3470.00	594.50	0.00	0.02	0.00	103.20	43.00
8882.000	4230.00	595.18	0.00	0.06	2.30	103.20	43.00
8883.000	2000.00	593.05	0.00	0.17	0.00	103.20	1.00
8883.000	3070.00	594.39	0.00	0.29	0.00	103.20	1.00
8883.000	3470.00	594.84	0.00	0.33	0.00	103.20	1.00
8883.000	4230.00	595.67	0.00	0.49	2.62	103.20	1.00
8973.000	2000.00	593.06	0.00	0.01	0.00	266.74	90.00
8973.000	3070.00	594.42	0.00	0.05	0.00	283.00	90.00
8973.000	3470.00	594.87	0.00	0.04	0.00	283.00	90.00
8973.000	4230.00	595.73	0.00	0.06	2.68	283.00	90.00
10098.000	2000.00	593.61	0.00	0.55	0.00	452.73	1125.00
10098.000	3070.00	595.05	0.00	0.63	0.00	478.09	1125.00
10098.000	3470.00	595.52	0.00	0.65	0.00	507.84	1125.00
10098.000	4230.00	596.40	0.00	0.66	2.79	563.43	1125.00
11118.000	2000.00	594.09	0.00	0.48	0.00	679.09	1020.00
11118.000	3070.00	595.52	0.00	0.47	0.00	781.01	1020.00
11118.000	3470.00	595.98	0.00	0.47	0.00	835.64	1020.00
11118.000	4230.00	596.85	0.00	0.45	2.76	935.39	1020.00
12620.000	1670.00	594.65	0.00	0.55	0.00	152.50	1502.00
12620.000	2575.00	596.06	0.00	0.54	0.00	152.50	1502.00
12620.000	2910.00	596.52	0.00	0.53	0.00	152.50	1502.00
12620.000	3555.00	597.35	0.00	0.50	2.70	152.50	1502.00
12760.000	1670.00	594.75	0.00	0.10	0.00	82.39	140.00
12760.000	2575.00	596.17	0.00	0.11	0.00	82.43	140.00
12760.000	2910.00	596.63	0.00	0.11	0.00	82.44	140.00
12760.000	3555.00	597.47	0.00	0.12	2.72	82.46	140.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
12817.000	1670.00	595.34	0.00	0.59	0.00	82.40	57.00
12817.000	2575.00	597.70	0.00	1.53	0.00	82.47	57.00
12817.000	2910.00	598.46	0.00	1.83	0.00	82.49	57.00
12817.000	3555.00	599.19	0.00	1.72	3.85	82.50	57.00
13087.000	1670.00	595.46	0.00	0.13	0.00	464.02	270.00
13087.000	2575.00	597.89	0.00	0.19	0.00	562.96	270.00
13087.000	2910.00	598.68	0.00	0.21	0.00	595.72	270.00
13087.000	3555.00	599.47	0.00	0.28	4.01	628.31	270.00
14167.000	1670.00	595.73	0.00	0.26	0.00	183.05	1080.00
14167.000	2575.00	598.03	0.00	0.14	0.00	435.52	1080.00
14167.000	2910.00	598.81	0.00	0.13	0.00	520.86	1080.00
14167.000	3555.00	599.62	0.00	0.15	3.90	562.92	1080.00
14267.000	1670.00	595.79	0.00	0.06	0.00	211.85	100.00
14267.000	2575.00	598.10	0.00	0.07	0.00	451.11	100.00
14267.000	2910.00	598.88	0.00	0.07	0.00	531.09	100.00
14267.000	3555.00	599.69	0.00	0.07	3.90	569.08	100.00
14268.000	1670.00	595.79	0.00	0.00	0.00	211.04	1.00
14268.000	2575.00	598.23	0.00	0.13	0.00	464.67	1.00
14268.000	2910.00	598.99	0.00	0.12	0.00	543.56	1.00
14268.000	3555.00	599.81	0.00	0.12	4.02	571.37	1.00
14281.000	1670.00	595.86	0.00	0.06	0.00	217.83	13.00
14281.000	2575.00	598.25	0.00	0.02	0.00	466.14	13.00
14281.000	2910.00	599.01	0.00	0.02	0.00	544.77	13.00
14281.000	3555.00	599.83	0.00	0.01	3.97	572.47	13.00
14282.000	1670.00	595.85	0.00	-0.00	0.00	218.06	1.00
14282.000	2575.00	598.22	0.00	-0.04	0.00	462.85	1.00
14282.000	2910.00	598.97	0.00	-0.04	0.00	541.38	1.00
14282.000	3555.00	599.79	0.00	-0.04	3.93	569.91	1.00
14332.000	1670.00	596.20	0.00	0.34	0.00	228.15	50.00
14332.000	2575.00	598.34	0.00	0.13	0.00	453.79	50.00
14332.000	2910.00	599.05	0.00	0.08	0.00	528.69	50.00
14332.000	3555.00	599.85	0.00	0.06	3.65	590.81	50.00
15592.000	1670.00	597.58	0.00	1.39	0.00	138.00	1260.00
15592.000	2575.00	599.01	0.00	0.67	0.00	504.03	1260.00
15592.000	2910.00	599.66	0.00	0.60	0.00	533.39	1260.00
15592.000	3555.00	600.44	0.00	0.59	2.85	549.17	1260.00
15692.000	1670.00	597.64	0.00	0.05	0.00	88.00	100.00
15692.000	2575.00	599.02	0.00	0.01	0.00	504.59	100.00
15692.000	2910.00	599.67	0.00	0.01	0.00	533.92	100.00
15692.000	3555.00	600.45	0.00	0.01	2.81	549.18	100.00
15704.000	1670.00	597.84	0.00	0.20	0.00	88.00	12.00
15704.000	2575.00	599.11	0.00	0.09	0.00	508.52	12.00
15704.000	2910.00	599.74	0.00	0.07	0.00	537.02	12.00
15704.000	3555.00	600.51	0.00	0.06	2.67	549.20	12.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
15754.000	1670.00	597.92	0.00	0.08	0.00	188.00	50.00
15754.000	2575.00	599.15	0.00	0.04	0.05	510.15	50.00
15754.000	2910.00	599.78	0.00	0.04	0.00	538.61	50.00
15754.000	3555.00	600.56	0.00	0.05	2.64	549.22	50.00
16374.000	1670.00	598.05	0.00	0.13	0.00	423.73	620.00
16374.000	2575.00	599.23	0.00	0.09	0.00	456.90	620.00
16374.000	2910.00	599.86	0.00	0.09	0.00	474.39	620.00
16374.000	3555.00	600.65	0.00	0.09	2.61	480.00	620.00
17384.000	1670.00	598.17	0.00	0.12	0.00	688.72	1010.00
17384.000	2575.00	599.38	0.00	0.15	0.00	707.39	1010.00
17384.000	2910.00	600.00	0.00	0.14	0.00	716.92	1010.00
17384.000	3555.00	600.79	0.00	0.14	2.63	720.00	1010.00
17554.000	1670.00	598.17	0.00	-0.00	0.00	706.00	170.00
17554.000	2575.00	599.38	0.00	-0.00	0.00	706.00	170.00
17554.000	2910.00	600.00	0.00	-0.00	0.00	706.00	170.00
17554.000	3555.00	600.79	0.00	0.00	2.63	706.00	170.00
17555.000	1670.00	598.13	0.00	-0.03	0.00	706.00	1.00
17555.000	2575.00	599.37	0.00	-0.01	0.00	706.00	1.00
17555.000	2910.00	599.99	0.00	-0.01	0.00	706.00	1.00
17555.000	3555.00	600.79	0.00	-0.00	2.66	706.00	1.00
17581.000	1670.00	598.15	0.00	0.02	0.00	706.00	26.00
17581.000	2575.00	599.38	0.00	0.01	0.00	706.00	26.00
17581.000	2910.00	600.00	0.00	0.01	0.00	706.00	26.00
17581.000	3555.00	600.80	0.00	0.01	2.65	706.00	26.00
17582.000	1670.00	598.24	0.00	0.09	0.00	706.00	1.00
17582.000	2575.00	599.41	0.00	0.03	0.00	706.00	1.00
17582.000	2910.00	600.01	0.00	0.01	0.00	706.00	1.00
17582.000	3555.00	600.80	0.00	0.00	2.57	706.00	1.00
17632.000	1670.00	598.28	0.00	0.05	0.00	684.95	50.00
17632.000	2575.00	599.46	0.00	0.05	0.00	726.24	50.00
17632.000	2910.00	600.06	0.00	0.05	0.00	747.23	50.00
17632.000	3555.00	600.85	0.00	0.05	2.57	774.81	50.00
19032.000	1670.00	598.43	0.00	0.15	0.00	457.25	1400.00
19032.000	2575.00	599.63	0.00	0.17	0.00	466.41	1400.00
19032.000	2910.00	600.22	0.00	0.16	0.00	469.48	1400.00
19032.000	3555.00	601.01	0.00	0.16	2.58	470.51	1400.00
20462.000	1670.00	598.78	0.00	0.34	0.00	540.81	1430.00
20462.000	2575.00	600.03	0.00	0.40	0.00	581.03	1430.00
20462.000	2910.00	600.60	0.00	0.38	0.00	598.02	1430.00
20462.000	3555.00	601.40	0.00	0.39	2.63	620.03	1430.00
22092.000	1670.00	599.22	0.00	0.44	0.00	317.00	1630.00
22092.000	2575.00	600.53	0.00	0.49	0.00	421.10	1630.00
22092.000	2910.00	601.07	0.00	0.47	0.00	442.77	1630.00
22092.000	3555.00	601.87	0.00	0.47	2.66	474.91	1630.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
22292.000	1670.00	599.25	0.00	0.03	0.00	244.82	200.00
22292.000	2575.00	600.55	0.00	0.02	0.00	379.62	200.00
22292.000	2910.00	601.09	0.00	0.02	0.00	379.79	200.00
22292.000	3555.00	601.88	0.00	0.01	2.64	380.03	200.00
22293.000	1670.00	599.22	0.00	-0.03	0.00	240.81	1.00
22293.000	2575.00	600.50	0.00	-0.04	0.00	379.61	1.00
22293.000	2910.00	601.05	0.00	-0.03	0.00	379.78	1.00
22293.000	3555.00	601.86	0.00	-0.02	2.64	380.03	1.00
22309.000	1670.00	599.23	0.00	0.01	0.00	241.68	16.00
22309.000	2575.00	600.52	0.00	0.02	0.00	379.61	16.00
22309.000	2910.00	601.07	0.00	0.02	0.00	379.78	16.00
22309.000	3555.00	601.88	0.00	0.02	2.65	380.03	16.00
22310.000	1670.00	599.30	0.00	0.07	0.00	253.03	1.00
22310.000	2575.00	600.65	0.00	0.12	0.00	379.65	1.00
22310.000	2910.00	601.16	0.00	0.09	0.00	379.81	1.00
22310.000	3555.00	601.94	0.00	0.06	2.64	380.05	1.00
22410.000	1670.00	599.42	0.00	0.12	0.00	425.00	100.00
22410.000	2575.00	600.82	0.00	0.17	0.00	517.89	100.00
22410.000	2910.00	601.34	0.00	0.18	0.00	541.90	100.00
22410.000	3555.00	602.13	0.00	0.19	2.71	578.61	100.00
23160.000	1670.00	599.56	0.00	0.14	0.00	557.90	750.00
23160.000	2575.00	600.93	0.00	0.13	0.00	689.89	750.00
23160.000	2910.00	601.46	0.00	0.13	0.00	751.58	750.00
23160.000	3555.00	602.25	0.00	0.13	2.70	847.00	750.00
24540.000	1670.00	599.80	0.00	0.24	0.00	554.95	1380.00
24540.000	2575.00	601.19	0.00	0.23	0.00	700.20	1380.00
24540.000	2910.00	601.62	0.00	0.22	0.00	755.20	1380.00
24540.000	3555.00	602.46	0.00	0.21	2.66	841.64	1380.00
26060.000	1670.00	600.34	0.00	0.54	0.00	205.00	1520.00
26060.000	2575.00	601.49	0.00	0.31	0.00	691.64	1520.00
26060.000	2910.00	601.98	0.00	0.30	0.00	697.08	1520.00
26060.000	3555.00	602.76	0.00	0.30	2.42	705.58	1520.00
26290.000	1670.00	600.43	0.00	0.09	0.00	90.90	230.00
26290.000	2575.00	601.48	0.00	-0.01	0.00	585.65	230.00
26290.000	2910.00	601.97	0.00	-0.01	0.00	585.70	230.00
26290.000	3555.00	602.75	0.00	-0.01	2.32	585.77	230.00
26325.000	1670.00	600.51	0.00	0.08	0.00	90.90	35.00
26325.000	2575.00	601.60	0.00	0.12	0.00	585.66	35.00
26325.000	2910.00	602.11	0.00	0.14	0.00	585.71	35.00
26325.000	3555.00	602.87	0.00	0.12	2.37	585.79	35.00
26475.000	1670.00	600.56	0.00	0.05	0.00	390.00	150.00
26475.000	2575.00	601.70	0.00	0.10	0.00	677.43	150.00
26475.000	2910.00	602.21	0.00	0.10	0.00	690.24	150.00
26475.000	3555.00	602.98	0.00	0.11	2.42	709.48	150.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
27015.000	1670.00	600.92	0.00	0.36	0.00	694.27	540.00
27015.000	2575.00	601.96	0.00	0.27	0.00	840.63	540.00
27015.000	2910.00	602.44	0.00	0.23	0.00	907.06	540.00
27015.000	3555.00	603.18	0.00	0.20	2.26	987.24	540.00
29305.000	1670.00	602.14	0.00	1.22	0.00	110.00	2290.00
29305.000	2575.00	603.22	0.00	1.26	0.00	110.00	2290.00
29305.000	2910.00	603.59	0.00	1.15	0.00	110.00	2290.00
29305.000	3555.00	604.21	0.00	1.03	2.07	110.00	2290.00
29405.000	1670.00	602.20	0.00	0.06	0.00	60.00	100.00
29405.000	2575.00	603.30	0.00	0.08	0.00	60.00	100.00
29405.000	2910.00	603.67	0.00	0.08	0.00	60.00	100.00
29405.000	3555.00	604.29	0.00	0.08	2.09	60.00	100.00
29406.000	1670.00	602.19	0.00	-0.02	0.00	60.00	1.00
29406.000	2575.00	603.27	0.00	-0.03	0.00	60.00	1.00
29406.000	2910.00	603.63	0.00	-0.04	0.00	60.00	1.00
29406.000	3555.00	604.24	0.00	-0.05	2.06	60.00	1.00
29442.000	1670.00	602.20	0.00	0.01	0.00	60.00	36.00
29442.000	2575.00	603.29	0.00	0.02	0.00	60.00	36.00
29442.000	2910.00	603.65	0.00	0.02	0.00	60.00	36.00
29442.000	3555.00	604.27	0.00	0.03	2.07	60.00	36.00
29443.000	1670.00	602.24	0.00	0.05	0.00	60.00	1.00
29443.000	2575.00	603.37	0.00	0.09	0.00	60.00	1.00
29443.000	2910.00	603.76	0.00	0.10	0.00	60.00	1.00
29443.000	3555.00	604.41	0.00	0.14	2.17	60.00	1.00
29493.000	1670.00	602.31	0.00	0.07	0.00	124.45	50.00
29493.000	2575.00	603.52	0.00	0.15	0.00	131.00	50.00
29493.000	2910.00	603.94	0.00	0.18	0.00	131.00	50.00
29493.000	3555.00	604.67	0.00	0.26	2.36	131.00	50.00
30013.000	1670.00	602.64	0.00	0.33	0.00	396.95	520.00
30013.000	2575.00	604.02	0.00	0.49	0.00	419.94	520.00
30013.000	2910.00	604.49	0.00	0.55	0.00	427.77	520.00
30013.000	3555.00	605.31	0.00	0.64	2.67	565.06	520.00
30723.000	1670.00	602.90	0.00	0.25	0.00	293.98	710.00
30723.000	2575.00	604.27	0.00	0.25	0.00	330.49	710.00
30723.000	2910.00	604.73	0.00	0.25	0.00	342.93	710.00
30723.000	3555.00	605.55	0.00	0.24	2.66	372.19	710.00
31223.000	1630.00	603.10	0.00	0.20	0.00	232.18	500.00
31223.000	2485.00	604.48	0.00	0.21	0.00	249.95	500.00
31223.000	2800.00	604.95	0.00	0.21	0.00	255.95	500.00
31223.000	3410.00	605.77	0.00	0.21	2.66	431.07	500.00
32033.000	1060.00	603.47	0.00	0.37	0.00	93.00	810.00
32033.000	1630.00	604.88	0.00	0.40	0.00	93.00	810.00
32033.000	1840.00	605.35	0.00	0.40	0.00	93.00	810.00
32033.000	2240.00	606.15	0.00	0.39	2.68	93.00	810.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
32133.000	1060.00	603.63	0.00	0.16	0.00	42.90	100.00
32133.000	1630.00	605.06	0.00	0.18	0.00	42.90	100.00
32133.000	1840.00	605.53	0.00	0.19	0.00	42.90	100.00
32133.000	2240.00	606.34	0.00	0.18	2.71	42.90	100.00
32400.000	1060.00	603.65	0.00	0.02	0.00	42.90	267.00
32400.000	1630.00	605.54	0.00	0.48	0.00	42.90	267.00
32400.000	1840.00	606.17	0.00	0.64	0.00	42.90	267.00
32400.000	2240.00	607.35	0.00	1.01	3.70	42.90	267.00
32450.000	1060.00	603.62	0.00	-0.03	0.00	143.00	50.00
32450.000	1630.00	605.56	0.00	0.02	0.00	143.00	50.00
32450.000	1840.00	606.21	0.00	0.04	0.00	143.00	50.00
32450.000	2240.00	607.45	0.00	0.10	3.83	143.00	50.00
32590.000	1060.00	603.90	0.00	0.28	0.00	341.28	140.00
32590.000	1630.00	605.81	0.00	0.25	0.00	354.64	140.00
32590.000	1840.00	606.45	0.00	0.24	0.00	359.15	140.00
32590.000	2240.00	607.68	0.00	0.23	3.79	367.78	140.00
33520.000	1060.00	604.27	0.00	0.37	0.00	663.95	930.00
33520.000	1630.00	606.04	0.00	0.24	0.00	811.77	930.00
33520.000	1840.00	606.66	0.00	0.21	0.00	836.47	930.00
33520.000	2240.00	607.86	0.00	0.17	3.59	884.24	930.00
34590.000	1060.00	604.78	0.00	0.51	0.00	445.28	1070.00
34590.000	1630.00	606.33	0.00	0.29	0.00	572.62	1070.00
34590.000	1840.00	606.90	0.00	0.24	0.00	607.93	1070.00
34590.000	2240.00	608.03	0.00	0.17	3.25	677.53	1070.00
34770.000	1060.00	605.31	0.00	0.53	0.00	465.30	180.00
34770.000	1630.00	606.57	0.00	0.23	0.00	543.63	180.00
34770.000	1840.00	607.06	0.00	0.16	0.00	579.00	180.00
34770.000	2240.00	608.14	0.00	0.11	2.63	652.04	180.00
34771.000	1060.00	605.31	0.00	-0.00	0.00	465.35	1.00
34771.000	1630.00	606.57	0.00	0.01	0.00	543.66	1.00
34771.000	1840.00	607.09	0.00	0.01	0.00	579.05	1.00
34771.000	2240.00	608.15	0.00	0.01	2.84	652.06	1.00
34776.000	1060.00	605.31	0.00	0.00	0.00	465.36	5.00
34776.000	1630.00	606.58	0.00	0.00	0.00	544.23	5.00
34776.000	1840.00	607.09	0.00	0.00	0.00	579.56	5.00
34776.000	2240.00	608.15	0.00	0.00	2.84	652.44	5.00
34777.000	1060.00	605.31	0.00	0.00	0.00	465.41	1.00
34777.000	1630.00	606.57	0.00	-0.00	0.00	544.26	1.00
34777.000	1840.00	607.09	0.00	-0.00	0.00	579.59	1.00
34777.000	2240.00	608.15	0.00	-0.00	2.83	652.46	1.00
33929.000	1060.00	605.29	0.00	-0.02	0.00	550.00	172.00
33929.000	1630.00	606.59	0.00	0.02	0.00	649.90	172.00
33929.000	1840.00	607.10	0.00	0.02	0.00	672.88	172.00
33929.000	2240.00	608.16	0.00	0.02	2.87	719.34	172.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
34930.000	1060.00	605.24	0.00	-0.06	0.00	550.00	1.00
34930.000	1630.00	606.63	0.00	0.04	0.00	651.55	1.00
34930.000	1840.00	607.13	0.00	0.03	0.00	673.60	1.00
34930.000	2240.00	608.18	0.00	0.02	2.94	719.42	1.00
34938.000	1060.00	605.26	0.00	0.02	0.00	550.00	8.00
34938.000	1630.00	606.63	0.00	0.01	0.00	651.79	8.00
34938.000	1840.00	607.14	0.00	0.00	0.00	673.97	8.00
34938.000	2240.00	608.18	0.00	0.00	2.92	719.86	8.00
34939.000	1060.00	605.46	0.00	0.20	0.00	550.00	1.00
34939.000	1630.00	606.62	0.00	-0.01	0.00	651.66	1.00
34939.000	1840.00	607.13	0.00	-0.01	0.00	673.83	1.00
34939.000	2240.00	608.17	0.00	-0.01	2.71	719.90	1.00
35259.000	1060.00	605.73	0.00	0.27	0.00	434.54	320.00
35259.000	1630.00	606.75	0.00	0.13	0.00	723.90	320.00
35259.000	1840.00	607.22	0.00	0.10	0.00	750.45	320.00
35259.000	2240.00	608.23	0.00	0.06	2.50	816.11	320.00
35260.000	1060.00	605.75	0.00	0.02	0.00	437.18	1.00
35260.000	1630.00	606.79	0.00	0.04	0.00	726.01	1.00
35260.000	1840.00	607.26	0.00	0.03	0.00	752.69	1.00
35260.000	2240.00	608.25	0.00	0.02	2.50	816.11	1.00
35268.000	1060.00	605.76	0.00	0.01	0.00	442.11	8.00
35268.000	1630.00	606.80	0.00	0.01	0.00	726.23	8.00
35268.000	1840.00	607.26	0.00	0.00	0.00	752.91	8.00
35268.000	2240.00	608.25	0.00	0.00	2.49	816.83	8.00
35269.000	1060.00	605.75	0.00	-0.00	0.00	443.90	1.00
35269.000	1630.00	606.79	0.00	-0.01	0.00	726.01	1.00
35269.000	1840.00	607.25	0.00	-0.01	0.00	752.62	1.00
35269.000	2240.00	608.24	0.00	-0.01	2.49	816.88	1.00
35441.000	1060.00	605.81	0.00	0.06	0.00	525.00	172.00
35441.000	1630.00	606.87	0.00	0.08	1.06	770.00	172.00
35441.000	1840.00	607.32	0.00	0.07	1.51	770.00	172.00
35441.000	2240.00	608.28	0.00	0.04	2.47	770.00	172.00
35442.000	1060.00	605.91	0.00	0.10	0.00	525.00	1.00
35442.000	1630.00	606.91	0.00	0.05	1.00	770.00	1.00
35442.000	1840.00	607.35	0.00	0.03	1.44	770.00	1.00
35442.000	2240.00	608.30	0.00	0.02	2.39	770.00	1.00
35463.000	1060.00	605.96	0.00	0.05	0.00	525.00	21.00
35463.000	1630.00	606.92	0.00	0.01	0.96	770.00	21.00
35463.000	1840.00	607.35	0.00	0.01	1.39	770.00	21.00
35463.000	2240.00	608.30	0.00	0.00	2.34	770.00	21.00
35464.000	1060.00	605.94	0.00	-0.02	0.00	525.00	1.00
35464.000	1630.00	606.91	0.00	-0.01	0.97	770.00	1.00
35464.000	1840.00	607.34	0.00	-0.01	1.41	770.00	1.00
35464.000	2240.00	608.30	0.00	-0.01	2.36	770.00	1.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
35759.000	1060.00	606.17	0.00	0.23	0.00	375.00	295.00
35759.000	1630.00	607.00	0.00	0.09	0.83	599.70	295.00
35759.000	1840.00	607.41	0.00	0.07	1.24	620.00	295.00
35759.000	2240.00	608.34	0.00	0.04	2.17	620.00	295.00
35760.000	1060.00	606.07	0.00	-0.10	0.00	375.00	1.00
35760.000	1630.00	606.97	0.00	-0.03	0.90	595.39	1.00
35760.000	1840.00	607.41	0.00	-0.00	1.34	620.00	1.00
35760.000	2240.00	608.36	0.00	0.02	2.29	620.00	1.00
35767.000	1060.00	606.09	0.00	0.03	0.00	375.00	7.00
35767.000	1630.00	606.99	0.00	0.02	0.90	597.75	7.00
35767.000	1840.00	607.42	0.00	0.01	1.33	620.00	7.00
35767.000	2240.00	608.37	0.00	0.01	2.27	620.00	7.00
35768.000	1060.00	606.39	0.00	0.29	0.00	375.00	1.00
35768.000	1630.00	607.08	0.00	0.09	0.69	611.21	1.00
35768.000	1840.00	607.43	0.00	0.01	1.05	620.00	1.00
35768.000	2240.00	608.36	0.00	-0.01	1.97	620.00	1.00
36068.000	1060.00	606.49	0.00	0.11	0.00	225.00	300.00
36068.000	1630.00	607.23	0.00	0.15	0.74	470.00	300.00
36068.000	1840.00	607.57	0.00	0.13	1.07	470.00	300.00
36068.000	2240.00	608.43	0.00	0.07	1.94	470.00	300.00
36069.000	1060.00	606.50	0.00	0.01	0.00	225.00	1.00
36069.000	1630.00	607.27	0.00	0.04	0.76	470.00	1.00
36069.000	1840.00	607.60	0.00	0.04	1.10	470.00	1.00
36069.000	2240.00	608.46	0.00	0.03	1.96	470.00	1.00
36077.000	1060.00	606.51	0.00	0.01	0.00	225.00	8.00
36077.000	1630.00	607.27	0.00	0.01	0.76	470.00	8.00
36077.000	1840.00	607.61	0.00	0.00	1.10	470.00	8.00
36077.000	2240.00	608.47	0.00	0.00	1.95	470.00	8.00
36078.000	1060.00	606.51	0.00	-0.00	0.00	225.00	1.00
36078.000	1630.00	607.26	0.00	-0.01	0.75	470.00	1.00
36078.000	1840.00	607.60	0.00	-0.01	1.09	470.00	1.00
36078.000	2240.00	608.46	0.00	-0.01	1.95	470.00	1.00
36298.000	1060.00	606.57	0.00	0.06	0.00	105.00	240.00
36298.000	1630.00	607.32	0.00	0.06	0.74	350.00	240.00
36298.000	1840.00	607.65	0.00	0.05	1.07	350.00	240.00
36298.000	2240.00	608.49	0.00	0.04	1.92	350.00	240.00
36398.000	1060.00	606.59	0.00	0.02	0.00	54.08	100.00
36398.000	1630.00	607.27	0.00	-0.05	0.67	300.00	100.00
36398.000	1840.00	607.58	0.00	-0.06	0.99	300.00	100.00
36398.000	2240.00	608.43	0.00	-0.07	1.83	300.00	100.00
36444.000	1060.00	607.00	0.00	0.41	0.00	34.60	46.00
36444.000	1630.00	608.34	0.00	1.07	1.33	300.00	46.00
36444.000	1840.00	608.62	0.00	1.04	1.62	300.00	46.00
36444.000	2240.00	609.13	0.00	0.70	2.12	300.00	46.00

SUMMARY OF ERRORS

FLOOD INSURANCE ZONE DATA FOR SWAN CR.ASH TWP.

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10¢	2¢	0.2¢
5.000	0.	-0.7	-0.3	0.6
6.000	100.	-0.7	-0.3	0.6
7.000	101.	-0.6	-0.3	0.6
17.000	117.	-0.7	-0.3	0.6
18.000	118.	-0.7	-0.4	0.5
68.000	168.	-0.8	-0.4	0.5
1438.000	1538.	-1.0	-0.3	0.5
2898.000	2998.	-1.2	-0.4	0.6
3768.000	3868.	-1.2	-0.3	0.6
5158.000	5258.	-1.4	-0.4	0.6
6318.000	6418.	-1.4	-0.4	0.6
7818.000	7918.	-1.5	-0.4	0.6
8718.000	8818.	-1.6	-0.4	0.7
8838.000	8938.	-1.7	-0.4	0.7
8839.000	8939.	-1.6	-0.4	0.6
8882.000	8982.	-1.6	-0.4	0.7
8883.000	8983.	-1.8	-0.4	0.8
8973.000	9073.	-1.8	-0.5	0.9
10098.000	10198.	-1.9	-0.5	0.9
11118.000	11218.	-1.9	-0.5	0.9
12620.000	12720.	-1.9	-0.5	0.8
12760.000	12860.	-1.9	-0.5	0.8
12817.000	12917.	-3.1	-0.8	0.7
13087.000	13187.	-3.2	-0.8	0.8
14167.000	14267.	-3.1	-0.8	0.8
14267.000	14367.	-3.1	-0.8	0.8
14268.000	14368.	-3.2	-0.8	0.8
14281.000	14381.	-3.2	-0.8	0.8
14282.000	14382.	-3.1	-0.8	0.8
14332.000	14432.	-2.9	-0.7	0.8
15592.000	15692.	-2.1	-0.6	0.8
15692.000	15792.	-2.0	-0.6	0.8
15704.000	15804.	-1.9	-0.6	0.8
15754.000	15854.	-1.9	-0.6	0.8
16374.000	16474.	-1.8	-0.6	0.8
17384.000	17484.	-1.8	-0.6	0.8
17554.000	17654.	-1.8	-0.6	0.8
17555.000	17655.	-1.9	-0.6	0.8
17581.000	17681.	-1.8	-0.6	0.8
17582.000	17682.	-1.8	-0.6	0.8
17632.000	17732.	-1.8	-0.6	0.8
19032.000	19132.	-1.8	-0.6	0.8
20462.000	20562.	-1.8	-0.6	0.8
22092.000	22192.	-1.9	-0.5	0.8
22292.000	22392.	-1.8	-0.5	0.8
22293.000	22393.	-1.8	-0.5	0.8
22309.000	22409.	-1.8	-0.5	0.8
22310.000	22410.	-1.9	-0.5	0.8
22410.000	22510.	-1.9	-0.5	0.8
23160.000	23260.	-1.9	-0.5	0.8
24540.000	24640.	-1.9	-0.5	0.8
26060.000	26160.	-1.6	-0.5	0.8
26290.000	26390.	-1.5	-0.5	0.8

26325.000	26425.	-1.6	-0.5	0.8
26475.000	26575.	-1.7	-0.5	0.8
27015.000	27115.	-1.5	-0.5	0.7
29305.000	29405.	-1.4	-0.4	0.6
29405.000	29505.	-1.5	-0.4	0.6
29406.000	29506.	-1.4	-0.4	0.6
29442.000	29542.	-1.5	-0.4	0.6
29443.000	29543.	-1.5	-0.4	0.7
29493.000	29593.	-1.6	-0.4	0.7
30013.000	30113.	-1.8	-0.5	0.8
30723.000	30823.	-1.8	-0.5	0.8
31223.000	31323.	-1.8	-0.5	0.8
32033.000	32133.	-1.9	-0.5	0.8
32133.000	32233.	-1.9	-0.5	0.8
32400.000	32500.	-2.5	-0.6	1.2
32450.000	32550.	-2.6	-0.6	1.2
32590.000	32690.	-2.6	-0.6	1.2
33520.000	33620.	-2.4	-0.6	1.2
34590.000	34690.	-2.1	-0.6	1.1
34770.000	34870.	-1.8	-0.5	1.1
34771.000	34871.	-1.8	-0.5	1.1
34776.000	34876.	-1.8	-0.5	1.1
34777.000	34877.	-1.8	-0.5	1.1
33929.000	35049.	-1.8	-0.5	1.1
34930.000	35050.	-1.9	-0.5	1.0
34938.000	35058.	-1.9	-0.5	1.0
34939.000	35059.	-1.7	-0.5	1.0
35259.000	35379.	-1.5	-0.5	1.0
35260.000	35380.	-1.5	-0.5	1.0
35268.000	35388.	-1.5	-0.5	1.0
35269.000	35389.	-1.5	-0.5	1.0
35441.000	35561.	-1.5	-0.5	1.0
35442.000	35562.	-1.4	-0.4	1.0
35463.000	35583.	-1.4	-0.4	0.9
35464.000	35584.	-1.4	-0.4	1.0
35759.000	35879.	-1.2	-0.4	0.9
35760.000	35880.	-1.3	-0.4	0.9
35767.000	35887.	-1.3	-0.4	0.9
35768.000	35888.	-1.0	-0.4	0.9
36068.000	36188.	-1.1	-0.3	0.9
36069.000	36189.	-1.1	-0.3	0.9
36077.000	36197.	-1.1	-0.3	0.9
36078.000	36198.	-1.1	-0.3	0.9
36298.000	36438.	-1.1	-0.3	0.8
36398.000	36538.	-1.0	-0.3	0.8
36444.000	36584.	-1.6	-0.3	0.5
WEIGHTED AVG FOR REACH		-1.8	-0.5	0.8

FHF FOR THE REACH = 020 WITH 73.9% OF THE REACH WITHIN 0.5 FEET
ZONE FOR THE REACH = A 4

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	AVG ELEVATION DATA 10%	1%	DIFF.	WTD. AVG.	FHF	PERCENT WITHIN
	0.				SEC.	5.000	

1	100.	589.3	590.0	-0.7	-0.7	005	100.
	100.				SEC.		6.000
	101.				SEC.		7.000
	117.				SEC.		17.000
	118.				SEC.		18.000
	168.				SEC.		68.000
2	200.	589.4	590.2	-0.8	-0.7	005	100.
3	300.	589.4	590.2	-0.8	-0.7	005	100.
4	400.	589.5	590.3	-0.8	-0.8	010	100.
5	500.	589.5	590.3	-0.8	-0.8	010	100.
6	600.	589.5	590.3	-0.8	-0.8	010	100.
7	700.	589.5	590.4	-0.8	-0.8	010	100.
8	800.	589.6	590.4	-0.9	-0.8	010	100.
9	900.	589.6	590.4	-0.9	-0.8	010	100.
10	1000.	589.6	590.5	-0.9	-0.8	010	100.
11	1100.	589.6	590.5	-0.9	-0.8	010	100.
12	1200.	589.6	590.6	-0.9	-0.8	010	100.
13	1300.	589.7	590.6	-0.9	-0.8	010	100.
14	1400.	589.7	590.6	-0.9	-0.8	010	100.
15	1500.	589.7	590.7	-1.0	-0.9	010	100.
	1538.				SEC.		1438.000
16	1600.	589.7	590.7	-1.0	-0.9	010	100.
17	1700.	589.8	590.7	-1.0	-0.9	010	100.
18	1800.	589.8	590.8	-1.0	-0.9	010	100.
19	1900.	589.8	590.8	-1.0	-0.9	010	100.
20	2000.	589.9	590.9	-1.0	-0.9	010	100.
21	2100.	589.9	590.9	-1.0	-0.9	010	100.
22	2200.	589.9	591.0	-1.1	-0.9	010	100.
23	2300.	589.9	591.0	-1.1	-0.9	010	100.
24	2400.	590.0	591.0	-1.1	-0.9	010	100.
25	2500.	590.0	591.1	-1.1	-0.9	010	100.
26	2600.	590.0	591.1	-1.1	-0.9	010	100.
27	2700.	590.1	591.2	-1.1	-0.9	010	100.
28	2800.	590.1	591.2	-1.1	-0.9	010	100.
29	2900.	590.1	591.3	-1.1	-1.0	010	100.
	2994.				SEC.		2698.000
30	3000.	590.1	591.3	-1.2	-1.0	010	100.
31	3100.	590.2	591.3	-1.2	-1.0	010	100.
32	3200.	590.2	591.4	-1.2	-1.0	010	100.
33	3300.	590.2	591.4	-1.2	-1.0	010	100.
34	3400.	590.2	591.4	-1.2	-1.0	010	100.
35	3500.	590.3	591.4	-1.2	-1.0	010	100.
36	3600.	590.3	591.5	-1.2	-1.0	010	100.
37	3700.	590.3	591.5	-1.2	-1.0	010	100.
38	3800.	590.3	591.5	-1.2	-1.0	010	100.
	3868.				SEC.		3760.000
39	3900.	590.4	591.6	-1.2	-1.0	010	100.
40	4000.	590.4	591.6	-1.2	-1.0	010	100.
41	4100.	590.4	591.7	-1.2	-1.0	010	100.
42	4200.	590.5	591.7	-1.2	-1.0	010	100.
43	4300.	590.5	591.8	-1.2	-1.0	010	100.
44	4400.	590.6	591.8	-1.3	-1.0	010	100.
45	4500.	590.6	591.9	-1.3	-1.0	010	100.
46	4600.	590.6	591.9	-1.3	-1.0	010	100.
47	4700.	590.7	592.0	-1.3	-1.1	010	100.
48	4800.	590.7	592.0	-1.3	-1.1	010	100.
49	4900.	590.8	592.1	-1.3	-1.1	010	100.
50	5000.	590.8	592.1	-1.3	-1.1	010	100.
51	5100.	590.9	592.2	-1.3	-1.1	010	100.
52	5200.	590.9	592.2	-1.3	-1.1	010	100.
	5258.				SEC.		3158.000
53	5300.	590.9	592.3	-1.4	-1.1	010	100.
54	5400.	591.0	592.3	-1.4	-1.1	010	100.
55	5500.	591.0	592.4	-1.4	-1.1	010	100.

56	5600.	591.1	592.5	-1.4	-1.1	010	100.
57	5700.	591.2	592.5	-1.4	-1.1	010	100.
58	5800.	591.2	592.6	-1.4	-1.1	010	100.
59	5900.	591.3	592.7	-1.4	-1.1	010	100.
60	6000.	591.3	592.7	-1.4	-1.1	010	100.
61	6100.	591.4	592.8	-1.4	-1.1	010	100.
62	6200.	591.4	592.8	-1.4	-1.1	010	100.
63	6300.	591.5	592.9	-1.4	-1.1	010	100.
64	6400.	591.6	593.0	-1.4	-1.1	010	100.
	6418.				SEC.	6318.000	
65	6500.	591.6	593.0	-1.4	-1.1	010	100.
66	6600.	591.7	593.1	-1.4	-1.1	010	100.
67	6700.	591.7	593.1	-1.4	-1.1	010	100.
68	6800.	591.8	593.2	-1.4	-1.2	010	100.
69	6900.	591.8	593.3	-1.4	-1.2	010	100.
70	7000.	591.9	593.3	-1.5	-1.2	010	100.
71	7100.	591.9	593.4	-1.5	-1.2	010	100.
72	7200.	592.0	593.4	-1.5	-1.2	010	100.
73	7300.	592.0	593.5	-1.5	-1.2	010	100.
74	7400.	592.0	593.5	-1.5	-1.2	010	100.
75	7500.	592.1	593.6	-1.5	-1.2	010	99.
76	7600.	592.1	593.7	-1.5	-1.2	010	99.
77	7700.	592.2	593.7	-1.5	-1.2	010	99.
78	7800.	592.2	593.8	-1.5	-1.2	010	99.
79	7900.	592.3	593.0	-1.5	-1.2	010	99.
	7918.				SEC.	7818.000	
80	8000.	592.3	593.9	-1.5	-1.2	010	99.
81	8100.	592.4	593.9	-1.6	-1.2	010	99.
82	8200.	592.4	594.0	-1.6	-1.2	010	99.
83	8300.	592.5	594.1	-1.6	-1.2	010	99.
84	8400.	592.6	594.1	-1.6	-1.2	010	99.
85	8500.	592.6	594.2	-1.6	-1.2	010	99.
86	8600.	592.7	594.3	-1.6	-1.2	010	99.
87	8700.	592.7	594.3	-1.6	-1.2	010	99.
88	8800.	592.8	594.4	-1.6	-1.2	010	99.
	8818.				SEC.	8718.000	
89	8900.	592.8	594.5	-1.6	-1.2	010	99.
	8938.				SEC.	8838.000	
	8939.				SEC.	8839.000	
	8982.				SEC.	8882.000	
	8983.				SEC.	8883.000	
90	9000.	593.0	594.8	-1.8	-1.2	010	98.
	9073.				SEC.	8973.000	
91	9100.	593.1	594.9	-1.8	-1.3	015	97.
92	9200.	593.1	594.9	-1.8	-1.3	015	96.
93	9300.	593.1	595.0	-1.8	-1.3	015	95.
94	9400.	593.2	595.0	-1.8	-1.3	015	94.
95	9500.	593.2	595.1	-1.8	-1.3	015	93.
96	9600.	593.3	595.1	-1.9	-1.3	015	91.
97	9700.	593.3	595.2	-1.9	-1.3	015	90.
98	9800.	593.4	595.3	-1.9	-1.3	015	89.
99	9900.	593.4	595.3	-1.9	-1.3	015	88.
100	10000.	593.5	595.4	-1.9	-1.3	015	87.
101	10100.	593.5	595.4	-1.9	-1.3	015	86.
	10198.				SEC.	10098.000	
102	10200.	593.6	595.5	-1.9	-1.3	015	84.
103	10300.	593.6	595.5	-1.9	-1.3	015	84.
104	10400.	593.7	595.6	-1.9	-1.3	015	85.
105	10500.	593.7	595.6	-1.9	-1.3	015	83.
106	10600.	593.8	595.7	-1.9	-1.3	015	83.
107	10700.	593.8	595.7	-1.9	-1.3	015	82.
108	10800.	593.9	595.8	-1.9	-1.4	015	81.
109	10900.	593.9	595.8	-1.9	-1.4	015	82.
110	11000.	594.0	595.9	-1.9	-1.4	015	80.

111	11100.	594.0	595.9	-1.9	-1.4	015	80.
112	11200.	594.1	596.0	-1.9	-1.4	015	79.
	11218.				SEC.	11118.000	
113	11300.	594.1	596.0	-1.9	-1.4	015	79.
114	11400.	594.1	596.0	-1.9	-1.4	015	79.
115	11500.	594.2	596.1	-1.9	-1.4	015	78.
116	11600.	594.2	596.1	-1.9	-1.4	015	78.
117	11700.	594.3	596.1	-1.9	-1.4	015	81.
118	11800.	594.3	596.2	-1.9	-1.4	015	84.
119	11900.	594.3	596.2	-1.9	-1.4	015	87.
120	12000.	594.4	596.2	-1.9	-1.4	015	89.
121	12100.	594.4	596.3	-1.9	-1.4	015	91.
122	12200.	594.4	596.3	-1.9	-1.4	015	91.
123	12300.	594.5	596.3	-1.9	-1.4	015	90.
124	12400.	594.5	596.4	-1.9	-1.4	015	90.
125	12500.	594.5	596.4	-1.9	-1.4	015	90.
126	12600.	594.6	596.5	-1.9	-1.4	015	90.
127	12700.	594.6	596.5	-1.9	-1.4	015	90.
	12720.				SEC.	12620.000	
128	12800.	594.7	596.5	-1.9	-1.4	015	90.
	12860.				SEC.	12760.000	
129	12900.	594.9	597.2	-2.3	-1.4	015	89.
	12917.				SEC.	12817.000	
130	13000.	595.3	598.2	-3.0	-1.5	015	88.
131	13100.	595.4	598.6	-3.2	-1.5	015	86.
	13187.				SEC.	13087.000	
132	13200.	595.4	598.6	-3.2	-1.5	015	85.
133	13300.	595.5	598.7	-3.2	-1.5	015	83.
134	13400.	595.5	598.7	-3.2	-1.5	015	82.
135	13500.	595.5	598.7	-3.2	-1.5	015	81.
136	13600.	595.6	598.7	-3.2	-1.5	015	79.
137	13700.	595.6	598.7	-3.2	-1.5	015	78.
138	13800.	595.6	598.7	-3.1	-1.6	015	77.
139	13900.	595.6	598.8	-3.1	-1.6	015	76.
140	14000.	595.7	598.8	-3.1	-1.6	015	75.
141	14100.	595.7	598.8	-3.1	-1.6	015	74.
142	14200.	595.7	598.8	-3.1	-1.6	015	73.
	14267.				SEC.	14167.000	
143	14300.	595.7	598.8	-3.1	-1.6	015	71.
	14367.				SEC.	14267.000	
	14368.				SEC.	14268.000	
	14381.				SEC.	14281.000	
	14382.				SEC.	14282.000	
144	14400.	595.9	599.0	-3.1	-1.6	015	70.
	14432.				SEC.	14332.000	
145	14500.	596.1	599.0	-2.9	-1.6	015	70.
146	14600.	596.3	599.1	-2.8	-1.6	015	68.
147	14700.	596.4	599.2	-2.7	-1.6	015	68.
148	14800.	596.5	599.2	-2.7	-1.6	015	67.
149	14900.	596.7	599.3	-2.6	-1.7	015	66.
150	15000.	596.8	599.3	-2.5	-1.7	015	65.
151	15100.	596.9	599.4	-2.5	-1.7	015	64.
152	15200.	597.0	599.4	-2.4	-1.7	015	63.
153	15300.	597.1	599.4	-2.3	-1.7	015	62.
154	15400.	597.2	599.5	-2.3	-1.7	015	60.
155	15500.	597.3	599.5	-2.2	-1.7	015	60.
156	15600.	597.4	599.6	-2.2	-1.7	015	60.
	15692.				SEC.	15592.000	
157	15700.	597.5	599.6	-2.1	-1.7	015	59.
	15792.				SEC.	15692.000	
158	15800.	597.7	599.7	-2.0	-1.7	015	59.
	15804.				SEC.	15704.000	
	15854.				SEC.	15754.000	
159	15900.	597.9	599.8	-1.9	-1.7	015	59.

160	16000.	597.9	599.8	-1.9	-1.7	015	59.
161	16100.	598.0	599.8	-1.8	-1.7	015	60.
162	16200.	598.0	599.8	-1.8	-1.7	015	60.
163	16300.	598.0	599.8	-1.8	-1.7	015	60.
164	16400.	598.0	599.8	-1.8	-1.7	015	60.
	16474.				SEC.	16374.000	
165	16500.	598.0	599.9	-1.8	-1.7	015	60.
166	16600.	598.1	599.9	-1.8	-1.7	015	60.
167	16700.	598.1	599.9	-1.8	-1.7	015	60.
168	16800.	598.1	599.9	-1.8	-1.7	015	61.
169	16900.	598.1	599.9	-1.8	-1.7	015	61.
170	17000.	598.1	599.9	-1.8	-1.7	015	61.
171	17100.	598.1	599.9	-1.8	-1.7	015	61.
172	17200.	598.1	600.0	-1.8	-1.7	015	62.
173	17300.	598.1	600.0	-1.8	-1.7	015	62.
174	17400.	598.2	600.0	-1.8	-1.7	015	62.
	17484.				SEC.	17384.000	
175	17500.	598.2	600.0	-1.8	-1.7	015	62.
176	17600.	598.2	600.0	-1.8	-1.7	015	62.
	17654.				SEC.	17554.000	
	17655.				SEC.	17555.000	
	17681.				SEC.	17581.000	
	17682.				SEC.	17582.000	
177	17700.	598.2	600.0	-1.8	-1.7	015	62.
	17732.				SEC.	17632.000	
178	17800.	598.3	600.1	-1.8	-1.7	015	62.
179	17900.	598.3	600.1	-1.8	-1.7	015	63.
180	18000.	598.3	600.1	-1.8	-1.7	015	63.
181	18100.	598.3	600.1	-1.8	-1.7	015	63.
182	18200.	598.3	600.1	-1.8	-1.7	015	63.
183	18300.	598.3	600.1	-1.8	-1.7	015	63.
184	18400.	598.3	600.1	-1.8	-1.7	015	64.
185	18500.	598.4	600.1	-1.8	-1.7	015	64.
186	18600.	598.4	600.2	-1.8	-1.7	015	64.
187	18700.	598.4	600.2	-1.8	-1.7	015	64.
188	18800.	598.4	600.2	-1.8	-1.7	015	64.
189	18900.	598.4	600.2	-1.8	-1.7	015	65.
190	19000.	598.4	600.2	-1.8	-1.7	015	65.
191	19100.	598.4	600.2	-1.8	-1.7	015	65.
	19132.				SEC.	19032.000	
192	19200.	598.4	600.2	-1.8	-1.7	015	65.
193	19300.	598.5	600.3	-1.8	-1.7	015	65.
194	19400.	598.5	600.3	-1.8	-1.7	015	65.
195	19500.	598.5	600.3	-1.8	-1.7	015	66.
196	19600.	598.5	600.3	-1.8	-1.7	015	66.
197	19700.	598.6	600.4	-1.8	-1.7	015	66.
198	19800.	598.6	600.4	-1.8	-1.7	015	66.
199	19900.	598.6	600.4	-1.8	-1.7	015	66.
200	20000.	598.6	600.4	-1.8	-1.7	015	67.
201	20100.	598.7	600.5	-1.8	-1.7	015	67.
202	20200.	598.7	600.5	-1.8	-1.7	015	66.
203	20300.	598.7	600.5	-1.8	-1.7	015	67.
204	20400.	598.7	600.5	-1.8	-1.7	015	67.
205	20500.	598.7	600.6	-1.8	-1.7	015	67.
	20562.				SEC.	20462.000	
206	20600.	598.8	600.6	-1.8	-1.7	015	67.
207	20700.	598.8	600.6	-1.8	-1.7	015	67.
208	20800.	598.8	600.7	-1.8	-1.7	015	67.
209	20900.	598.9	600.7	-1.8	-1.7	015	67.
210	21000.	598.9	600.7	-1.8	-1.7	015	68.
211	21100.	598.9	600.7	-1.8	-1.7	015	68.
212	21200.	598.9	600.8	-1.8	-1.7	015	68.
213	21300.	599.0	600.8	-1.8	-1.7	015	68.
214	21400.	599.0	600.8	-1.8	-1.7	015	68.

215	21500.	599.0	600.9	-1.8	-1.7	015	68.
216	21600.	599.0	600.9	-1.8	-1.7	015	69.
217	21700.	599.1	600.9	-1.8	-1.7	015	69.
218	21800.	599.1	600.9	-1.8	-1.7	015	69.
219	21900.	599.1	601.0	-1.8	-1.7	015	69.
220	22000.	599.2	601.0	-1.8	-1.7	015	70.
221	22100.	599.2	601.0	-1.8	-1.7	015	70.
	22192.				SEC.	22092.000	
222	22200.	599.2	601.1	-1.9	-1.7	015	70.
223	22300.	599.2	601.1	-1.8	-1.7	015	70.
	22392.				SEC.	22292.000	
	22393.				SEC.	22293.000	
224	22400.	599.2	601.1	-1.8	-1.7	015	70.
	22409.				SEC.	22309.000	
	22410.				SEC.	22310.000	
225	22500.	599.4	601.2	-1.9	-1.7	015	70.
	22510.				SEC.	22410.000	
226	22600.	599.4	601.3	-1.9	-1.7	015	70.
227	22700.	599.4	601.4	-1.9	-1.7	015	70.
228	22800.	599.5	601.4	-1.9	-1.7	015	70.
229	22900.	599.5	601.4	-1.9	-1.7	015	70.
230	23000.	599.5	601.4	-1.9	-1.7	015	70.
231	23100.	599.5	601.4	-1.9	-1.7	015	71.
232	23200.	599.5	601.4	-1.9	-1.7	015	71.
	23260.				SEC.	23160.000	
233	23300.	599.6	601.5	-1.9	-1.7	015	71.
234	23400.	599.6	601.5	-1.9	-1.7	015	71.
235	23500.	599.6	601.5	-1.9	-1.7	015	71.
236	23600.	599.6	601.5	-1.9	-1.7	015	71.
237	23700.	599.6	601.5	-1.9	-1.7	015	71.
238	23800.	599.6	601.5	-1.9	-1.7	015	71.
239	23900.	599.7	601.6	-1.9	-1.7	015	71.
240	24000.	599.7	601.6	-1.9	-1.7	015	71.
241	24100.	599.7	601.6	-1.9	-1.7	015	71.
242	24200.	599.7	601.6	-1.9	-1.7	015	71.
243	24300.	599.7	601.6	-1.9	-1.7	015	72.
244	24400.	599.8	601.6	-1.9	-1.7	015	72.
245	24500.	599.8	601.7	-1.9	-1.7	015	72.
246	24600.	599.8	601.7	-1.9	-1.7	015	72.
	24640.				SEC.	24540.000	
247	24700.	599.8	601.7	-1.9	-1.7	015	72.
248	24800.	599.8	601.7	-1.9	-1.7	015	72.
249	24900.	599.9	601.7	-1.8	-1.7	015	72.
250	25000.	599.9	601.7	-1.8	-1.7	015	72.
251	25100.	599.9	601.8	-1.8	-1.7	015	73.
252	25200.	600.0	601.8	-1.8	-1.7	015	73.
253	25300.	600.0	601.8	-1.8	-1.7	015	73.
254	25400.	600.1	601.8	-1.8	-1.7	015	73.
255	25500.	600.1	601.8	-1.8	-1.7	015	73.
256	25600.	600.1	601.9	-1.7	-1.7	015	73.
257	25700.	600.2	601.9	-1.7	-1.7	015	73.
258	25800.	600.2	601.9	-1.7	-1.7	015	73.
259	25900.	600.2	601.9	-1.7	-1.7	015	73.
260	26000.	600.3	601.9	-1.7	-1.7	015	73.
261	26100.	600.3	602.0	-1.7	-1.7	015	74.
	26160.				SEC.	26060.000	
262	26200.	600.3	602.0	-1.6	-1.7	015	74.
263	26300.	600.4	602.0	-1.6	-1.7	015	74.
	26390.				SEC.	26290.000	
264	26400.	600.4	602.0	-1.6	-1.7	015	74.
	26425.				SEC.	26325.000	
265	26300.	600.5	602.1	-1.6	-1.7	015	74.
	26575.				SEC.	26475.000	
266	26600.	600.6	602.1	-1.6	-1.7	015	74.

267	26700.	600.6	602.2	-1.6	-1.7	015	74.
268	26800.	600.7	602.3	-1.6	-1.7	015	74.
269	26900.	600.7	602.3	-1.6	-1.7	015	74.
270	27000.	600.8	602.4	-1.6	-1.7	015	74.
271	27100.	600.9	602.4	-1.5	-1.7	015	75.
	27115.				SEC. 27015.000		
272	27200.	600.9	602.5	-1.5	-1.7	015	75.
273	27300.	601.0	602.5	-1.5	-1.7	015	75.
274	27400.	601.0	602.6	-1.5	-1.7	015	75.
275	27500.	601.1	602.6	-1.5	-1.7	015	75.
276	27600.	601.2	602.7	-1.5	-1.7	015	75.
277	27700.	601.2	602.7	-1.5	-1.7	015	75.
278	27800.	601.3	602.8	-1.5	-1.7	015	76.
279	27900.	601.3	602.8	-1.5	-1.7	015	76.
280	28000.	601.4	602.9	-1.5	-1.7	015	76.
281	28100.	601.4	602.9	-1.5	-1.7	015	76.
282	28200.	601.5	603.0	-1.5	-1.7	015	76.
283	28300.	601.5	603.0	-1.5	-1.7	015	76.
284	28400.	601.6	603.1	-1.5	-1.7	015	76.
285	28500.	601.6	603.1	-1.5	-1.7	015	76.
286	28600.	601.7	603.2	-1.5	-1.7	015	77.
287	28700.	601.7	603.2	-1.5	-1.7	015	77.
288	28800.	601.8	603.3	-1.5	-1.7	015	77.
289	28900.	601.8	603.3	-1.5	-1.7	015	77.
290	29000.	601.9	603.4	-1.5	-1.7	015	77.
291	29100.	602.0	603.4	-1.5	-1.7	015	77.
292	29200.	602.0	603.5	-1.5	-1.7	015	77.
293	29300.	602.1	603.5	-1.5	-1.7	015	77.
294	29400.	602.1	603.6	-1.4	-1.7	015	77.
	29405.				SEC. 29305.000		
295	29500.	602.2	603.6	-1.5	-1.7	015	77.
	29505.				SEC. 29405.000		
	29506.				SEC. 29606.000		
	29542.				SEC. 29442.000		
	29543.				SEC. 29443.000		
	29593.				SEC. 29493.000		
296	29600.	602.3	603.9	-1.6	-1.7	015	77.
297	29700.	602.3	604.0	-1.7	-1.7	015	77.
298	29800.	602.4	604.1	-1.7	-1.7	015	77.
299	29900.	602.5	604.2	-1.7	-1.7	015	77.
300	30000.	602.5	604.3	-1.8	-1.7	015	77.
301	30100.	602.6	604.4	-1.8	-1.7	015	77.
	30113.				SEC. 30013.000		
302	30200.	602.7	604.5	-1.8	-1.7	015	77.
303	30300.	602.7	604.5	-1.8	-1.7	015	78.
304	30400.	602.7	604.6	-1.8	-1.7	015	78.
305	30500.	602.8	604.6	-1.8	-1.7	015	78.
306	30600.	602.8	604.6	-1.8	-1.7	015	78.
307	30700.	602.8	604.7	-1.8	-1.7	015	78.
308	30800.	602.9	604.7	-1.8	-1.7	015	78.
	30823.				SEC. 30723.000		
309	30900.	602.9	604.7	-1.8	-1.7	015	78.
310	31000.	603.0	604.8	-1.8	-1.7	015	78.
311	31100.	603.0	604.8	-1.8	-1.7	015	78.
312	31200.	603.0	604.9	-1.8	-1.7	015	78.
313	31300.	603.1	604.9	-1.8	-1.7	015	78.
	31323.				SEC. 31223.000		
314	31400.	603.1	605.0	-1.8	-1.7	015	78.
315	31500.	603.2	605.0	-1.8	-1.7	015	79.
316	31600.	603.2	605.1	-1.9	-1.7	015	79.
317	31700.	603.3	605.1	-1.9	-1.7	015	79.
318	31800.	603.3	605.2	-1.9	-1.7	015	79.
319	31900.	603.3	605.2	-1.9	-1.7	015	79.
320	32000.	603.4	605.3	-1.9	-1.7	015	79.

321	32100.	603.4	605.3	-1.9	-1.7	015	79.
	32133.				SEC.	32033.000	
322	32200.	603.5	605.4	-1.9	-1.7	015	79.
	32233.				SEC.	32133.000	
323	32300.	603.6	605.6	-2.0	-1.7	015	79.
324	32400.	603.6	605.8	-2.2	-1.7	015	79.
	32500.				SEC.	32400.000	
325	32500.	603.6	606.1	-2.4	-1.7	015	79.
	32550.				SEC.	32450.000	
326	32600.	603.7	606.2	-2.5	-1.7	015	79.
	32690.				SEC.	32590.000	
327	32700.	603.8	606.4	-2.6	-1.7	015	78.
328	32800.	603.9	606.5	-2.5	-1.7	015	78.
329	32900.	604.0	606.5	-2.5	-1.7	015	78.
330	33000.	604.0	606.5	-2.5	-1.7	015	77.
331	33100.	604.0	606.5	-2.5	-1.7	015	77.
332	33200.	604.1	606.6	-2.5	-1.7	015	77.
333	33300.	604.1	606.6	-2.5	-1.7	015	77.
334	33400.	604.2	606.6	-2.4	-1.8	020	76.
335	33500.	604.2	606.6	-2.4	-1.8	020	76.
336	33600.	604.2	606.6	-2.4	-1.8	020	76.
	33620.				SEC.	33520.000	
337	33700.	604.3	606.7	-2.4	-1.8	020	75.
338	33800.	604.3	606.7	-2.4	-1.8	020	75.
339	33900.	604.4	606.7	-2.3	-1.8	020	75.
340	34000.	604.4	606.7	-2.3	-1.8	020	74.
341	34100.	604.5	606.8	-2.3	-1.8	020	74.
342	34200.	604.5	606.8	-2.3	-1.8	020	74.
343	34300.	604.6	606.8	-2.2	-1.8	020	74.
344	34400.	604.6	606.8	-2.2	-1.8	020	74.
345	34500.	604.7	606.8	-2.2	-1.8	020	74.
346	34600.	604.7	606.9	-2.2	-1.8	020	75.
	34690.				SEC.	34590.000	
347	34700.	604.8	606.9	-2.1	-1.8	020	75.
348	34800.	605.0	607.0	-2.0	-1.8	020	75.
	34870.				SEC.	34770.000	
	34871.				SEC.	34771.000	
	34876.				SEC.	34776.000	
	34877.				SEC.	34777.000	
349	34900.	605.3	607.1	-1.8	-1.8	020	75.
350	35000.	605.3	607.1	-1.8	-1.8	020	75.
	35049.				SEC.	33929.000	
	35050.				SEC.	34930.000	
	35058.				SEC.	34938.000	
	35059.				SEC.	34939.000	
351	35100.	605.5	607.1	-1.7	-1.8	020	75.
352	35200.	605.5	607.2	-1.6	-1.8	020	75.
353	35300.	605.6	607.2	-1.6	-1.8	020	75.
	35379.				SEC.	35259.000	
	35380.				SEC.	35260.000	
	35388.				SEC.	35268.000	
	35389.				SEC.	35269.000	
354	35400.	605.8	607.3	-1.5	-1.8	020	75.
355	35500.	605.8	607.3	-1.5	-1.8	020	75.
	35561.				SEC.	35441.000	
	35562.				SEC.	35442.000	
	35563.				SEC.	35463.000	
	35564.				SEC.	35464.000	
356	35600.	605.9	607.3	-1.4	-1.8	020	75.
357	35700.	606.0	607.4	-1.4	-1.8	020	75.
358	35800.	606.1	607.4	-1.3	-1.8	020	75.
	35879.				SEC.	35759.000	
	35880.				SEC.	35760.000	
	35887.				SEC.	35767.000	

	35888.				SEC.	35768.000	
359	35900.	606.4	607.4	-1.0	-1.8	020	75.
360	36000.	606.4	607.5	-1.1	-1.8	020	75.
361	36100.	606.4	607.5	-1.1	-1.8	020	75.
	36168.				SEC.	36068.000	
	36189.				SEC.	36069.000	
	36197.				SEC.	36077.000	
	36198.				SEC.	36078.000	
362	36200.	606.5	607.6	-1.1	-1.8	020	75.
363	36300.	606.5	607.6	-1.1	-1.8	020	74.
364	36400.	606.6	607.6	-1.1	-1.8	020	74.
	36438.				SEC.	36298.000	
365	36500.	606.6	607.6	-1.0	-1.8	020	74.
	36538.				SEC.	36398.000	
	36584.				SEC.	36444.000	

THIS REACH CAN BE SUBDIVIDED BY INC NO. TO MEET FIA REQUIREMENTS
INPUT 20N WHERE N IS THE NUMBER OF REACHES AND THEN INPUT THE END
OF EACH REACH BY INC NO. FOR EXAMPLE 202 135 365
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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*                                                            *
*                  E R R O R   S U M M A R Y                 *
*                                                            *
*                                                            *
*      0  ERROR(S) DETECTED BY THE USER PROGRAM              *
*      0  ERROR(S) DETECTED BY THE MATHEMATICAL PACKAGE      *
*      0  ERROR(S) DETECTED FOR INPUT/OUPUT STATEMENTS       *
*                                                            *
**************************************************************
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Ash Township

3) WATERCOURSE: Swan Creek, N. Br. Swan Creek

4) DOCUMENT TYPE: 100yr

00BREAK00

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


C
T1 ASH TWP. FIS HUD2020-07 NORTH BRANCH SWAN CREEK
T2 100 YR
T3      N.BR.SWAN CREEK ASH TWP

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.        4.        0.        0.  0.000000      0.00      0.0       0.   604.950     0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000    15.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    110.000   150.000   200.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

ET      0.000       0.000       0.000       0.000       1.410       0.000       0.000       0.000       0.000       0.000
QT      5.000    1650.000    2465.000    2800.000    2800.000    3410.000       0.000       0.000       0.000       0.000
NC      0.120       0.120       0.035       0.100       0.300       0.000       0.000       0.000       0.000       0.000

        VALLEY #35 CONFLUENCE WITH NORTH BRANCH SWAN CREEK

X1      1.000      10.000     199.000     264.000       0.000       0.000       0.000       0.000       0.000       0.000
GR    606.000       0.000     600.000      50.000     600.000     199.000     594.000     208.000     592.100     220.000
GR    593.300     232.000     600.400     264.000     605.000     265.000     605.000     430.000     610.300     450.000
QT      5.000     565.000     855.000     960.000     960.000    1170.000       0.000       0.000       0.000       0.000

        VALLEY 300' D/S OF CONFLUENCE WITH SWAN CREEK #45

X1    300.000       3.000     280.000     320.000     300.000     300.000     300.000       0.000       0.000       0.000
GR    606.000       0.000     600.000      90.000     600.600     280.000     596.000     292.000     594.900     300.000
GR    595.100     308.000     599.700     320.000     606.000     500.000       0.000       0.000       0.000       0.000
NC      0.080       0.080       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000

        VALLEY #45-A

X1   1020.000       7.000     381.000     422.000     650.000     720.000     720.000       0.000       0.000       0.000
GR    606.200       0.000     600.400     381.000     596.200     390.000     595.600     400.000     596.100     410.000
GR    603.600     422.000     606.200     680.000       0.000       0.000       0.000       0.000       0.000       0.000
NC      0.000       0.000       0.000       0.300       0.500       0.000       0.000       0.000       0.000       0.000
ET      0.000       7.100       0.000       9.100       9.100       9.100     275.000     370.000     175.000     650.000

        150' D/S NEWBURG RD.

X1   2170.000      15.000     289.200     310.800    1050.000    1150.000    1150.000       0.000       0.000       0.000
GR    607.700       0.000     605.600     100.000     605.300     200.000     602.800     279.500     598.600     289.200
GR    598.600     289.300     597.700     300.000     597.900     310.700     597.900     310.800     600.700     318.500
GR    604.200     400.000     604.300     500.000     604.800     600.000     605.900     700.000     606.900     800.000
ET      0.000       0.000       7.100       9.100       9.100       9.100     289.000     636.000     240.000     640.000
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D/S FACE NEWBURG RD. SKEWED

X1	2320.000	0.000	0.000	0.000	110.000	175.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000
X1	2321.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
BT	12.000	0.000	607.700	0.000	100.000	605.600	0.000	200.000	605.300	0.000
BT	239.200	606.400	593.600	289.300	606.400	605.000	310.700	606.400	605.000	310.800
BT	606.400	597.900	400.000	604.200	0.000	500.000	604.300	0.000	600.000	604.800
BT	0.000	700.000	605.900	0.000	800.000	606.900	0.000	0.000	0.000	0.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000
X1	2341.000	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
ET	0.000	0.000	7.100	9.100	9.100	9.100	289.000	636.000	240.000	640.000

U/S FACE NEWBURG RD. SKEWED

X1	2342.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.300	604.200	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

100' U/S NEWBURG RD.

X1	2442.000	8.000	301.000	341.000	160.000	40.000	100.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	65.000	603.200	301.300	590.000	311.000	597.800	320.000
GR	598.000	329.000	602.900	341.000	607.000	420.000	0.000	0.000	0.000	0.000
X1	3212.000	13.000	187.000	214.000	770.000	770.000	770.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.000	607.000	0.000
GR	612.100	0.000	607.700	100.000	607.900	101.000	604.000	187.000	604.000	187.100
GR	599.700	193.000	597.600	200.000	598.700	207.000	602.700	213.900	602.700	214.000
GR	606.700	222.000	606.700	300.000	607.800	350.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	3213.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.000	607.000	0.000
ET	10.000	0.000	612.100	0.000	100.000	607.700	0.000	101.000	607.900	0.000
BT	187.000	607.400	604.000	187.100	607.400	606.500	213.900	607.400	606.500	214.000
BT	607.400	602.700	222.000	606.700	0.000	300.000	606.700	0.000	350.000	607.800
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	3223.000	0.000	0.000	0.000	10.000	10.000	10.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.400	607.400	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE BRIDGE #47-A

X1	3224.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.400	607.400	0.000

ET	0.000	9.100	9.100	9.100	9.100	9.100	0.000	0.000	130.000	214.000

90' D/S I-275

X1	3329.000	9.000	162.000	198.000	105.000	105.000	105.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	70.000	603.200	150.000	598.300	162.000	597.800	180.000
GR	599.300	198.000	606.500	218.000	605.000	275.000	610.000	300.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE I-275

X1	3419.000	18.000	0.100	39.000	130.000	50.000	90.000	0.000	-0.800	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	639.800	639.800	0.000
GR	639.800	0.000	600.000	0.100	600.000	0.200	600.000	9.000	600.000	9.100
GR	599.200	9.900	599.200	10.000	599.200	19.000	599.200	19.100	599.500	19.900
GR	599.500	20.000	599.500	29.000	599.500	29.100	598.800	29.900	598.800	30.000
GR	598.900	38.900	598.800	39.000	639.800	39.100	0.000	0.000	0.000	0.000
SB	1.250	2.660	3.000	0.000	36.420	3.000	264.000	0.000	598.800	598.000

U/S FACE I-275

X1	3739.000	0.000	0.000	0.000	320.000	320.000	320.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.700	639.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	639.800	639.800	0.000
BT	18.000	0.000	639.800	0.000	0.100	639.800	600.000	0.200	639.800	606.700
BT	9.000	639.800	606.700	9.100	639.800	606.800	9.900	639.800	600.000	10.000
DT	639.800	606.700	19.000	639.800	606.700	19.100	639.800	599.200	19.900	639.800
BT	599.200	20.000	639.800	606.700	29.000	639.800	606.700	29.100	639.800	599.500
BT	29.900	639.800	598.800	30.000	639.800	606.700	38.900	639.800	606.700	39.000
BT	639.800	598.800	39.100	639.800	0.000	0.000	0.000	0.000	0.000	0.000

D/S FACE PENN CENTRAL R.R. SKEWED

X1	3999.000	12.000	1.000	37.000	160.000	320.000	260.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.700	614.700	0.000
GR	614.700	0.000	602.600	1.000	602.600	1.100	602.300	9.000	600.800	16.900
GR	600.200	17.000	600.300	21.000	600.800	21.100	599.000	29.000	600.100	36.900
GR	600.100	37.000	614.700	38.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.510	3.000	0.000	30.450	4.300	283.000	0.000	599.000	599.000

U/S FACE PENN CENTRAL R.R. SKEWED

X1	4037.000	0.700	0.000	0.000	38.000	38.000	38.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	609.700	614.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.700	614.700	0.000
BT	10.000	0.000	614.700	0.000	1.000	614.700	602.600	1.100	614.700	609.700
BT	16.900	614.700	609.700	17.000	614.700	600.800	21.000	614.700	600.800	21.100
BT	614.700	609.700	36.900	614.700	609.700	37.000	614.700	600.100	38.000	614.700
DT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	9.100	9.100	9.100	9.100	9.100	0.000	0.000	152.000	288.000

50' U/S PENN CENTRAL R.R.

X1	4787.000	9.000	215.000	245.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	610.000	0.000	603.000	135.000	602.300	215.300	599.800	225.000	599.600	230.000
GR	600.100	235.000	603.400	245.000	605.000	320.000	610.000	600.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #54

X1	5267.000	10.000	379.000	418.000	1180.000	1180.000	1180.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	390.000	605.300	379.000	601.500	394.000	600.300	400.000
GR	601.400	406.000	605.600	410.000	605.000	540.000	610.000	720.000	615.000	830.000
X1	6097.000	5.000	225.000	270.000	650.000	900.000	830.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	225.000	601.200	250.000	605.000	270.000	610.000	390.000

VALLEY #55

X1	6447.000	10.000	601.000	652.000	350.000	350.000	350.000	0.000	0.000	0.000
GR	615.000	0.000	610.000	460.000	607.200	601.000	602.000	605.000	601.600	610.000
GR	602.800	615.000	605.600	627.000	607.000	652.000	610.000	715.000	615.000	1050.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	9.100	9.100	9.100	9.100	0.000	0.000	158.000	268.000

150' D/S GRAFTON

X1	7477.000	9.000	187.000	233.000	1100.000	950.000	1030.000	0.000	0.000	0.000
GR	615.000	0.000	610.000	115.000	607.500	181.000	603.300	187.000	602.700	210.000
GR	603.300	233.000	607.400	248.000	610.000	300.000	613.300	340.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE GRAFTON SKEWED

X1	7627.000	11.000	147.600	182.400	175.000	100.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	610.500	610.500	0.000
GR	611.300	0.000	610.000	1.000	612.000	150.000	603.900	147.600	603.900	147.700
GR	604.000	160.000	604.600	182.300	604.800	182.400	612.000	200.300	612.000	320.300
GR	615.300	321.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.610	3.000	0.000	23.790	0.000	157.000	0.000	603.900	603.900

U/S FACE GRAFTON SKEWED

X1	7690.000	0.000	0.000	0.000	63.000	63.000	63.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	610.500	611.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.800	613.400	0.000
ST	10.000	0.000	611.800	0.000	1.000	611.800	0.000	130.000	614.000	0.000
ST	147.600	614.000	603.900	147.700	614.000	613.500	182.300	614.000	610.500	182.400
ST	614.000	604.200	200.300	613.900	0.000	320.000	613.500	0.000	321.000	613.500
ST	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	9.100	9.100	9.100	0.000	0.000	125.000	360.000

100' U/S GRAFTON

X1	7790.000	10.000	143.300	240.000	50.300	150.000	100.000	0.000	0.000	0.000
GR	620.000	0.000	610.300	1.000	610.000	160.000	608.000	165.000	604.100	180.000
GR	604.000	195.000	604.100	210.000	608.000	240.000	610.000	360.000	615.000	490.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #58

X1	8740.000	9.000	231.000	272.000	850.000	1000.000	950.000	0.000	0.000	0.000

GR	615.000	0.000	610.000	140.000	609.200	231.000	605.000	241.000	604.500	250.000
GR	605.000	259.000	608.900	272.000	610.000	440.000	615.000	600.000	0.000	0.000
MC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	9.100	9.100	9.100	9.100	9.100	0.000	0.000	475.000	585.000

120' D/S MILL-CARLETON

X1	9580.000	9.000	476.000	520.000	840.000	840.000	840.000	0.000	0.000	0.000
GR	616.600	0.000	613.000	100.000	612.200	476.000	605.800	490.000	605.200	500.000
GR	605.400	510.000	610.000	520.000	611.000	910.000	613.000	1000.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE MILL-CARLETON

X1	9700.000	10.000	322.000	373.000	120.000	120.000	120.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.200	613.000	0.000
GR	620.000	0.000	615.000	1.000	613.000	2.000	611.800	322.000	606.900	334.500
GR	605.900	350.000	606.500	365.500	611.400	373.000	611.000	650.000	620.000	651.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= 0.100 CEHV= 0.300
*SECNO 1.000

SECNO	DEPTH	CHSEL	CRIPS	WSELK	EG	HV	HL	FLOSS	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	IK2	ICONT	CORAR	TOPWID	ENDST

VALLEY /35; CONFLUENCE WITH NORTH BRANCH SWAN CREEK

1.00	12.85	604.95	0.00	604.95	605.19	0.24	0.00	0.00	600.00
2800.	694.	2082.	24.	840.	459.	47.	0.	0.	600.40
0.00	0.03	7.54	0.51	0.120	0.035	0.120	0.000	592.10	8.75
0.000579	0.	0.	0.	0	0	0	0.00	256.02	264.77

FLOW DISTRIBUTION FOR SECNO= 1.00 CHSEL= 604.95

STA=	9.	50.	199.	244.	265.
PER Q=	2.0	22.8	74.4	0.9	
AREA=	102.1	737.5	458.5	47.3	
VEL=	0.5	0.9	4.5	0.5	

*SECNO 300.000

VALLEY 300' U/S OF CONFLUENCE WITH SWAN CREEK /45

300.00	10.38	605.28	0.00	0.00	605.30	0.02	0.08	0.02	600.60
960.	347.	516.	97.	1154.	339.	444.	11.	2.	599.70
0.09	0.30	1.52	0.22	0.120	0.035	0.120	0.035	594.90	10.85
0.000079	350.	300.	300.	2	0	0	0.00	668.49	679.34

FLOW DISTRIBUTION FOR SECNO= 300.00 CHSEL= 605.28

STA=	11.	90.	280.	320.	479.
PER Q=	4.6	31.6	53.8	10.1	
AREA=	205.8	945.6	339.1	444.3	
VEL=	0.2	0.3	1.3	0.2	

*SECNO 1020.000

VALLEY /45-A

1020.00	9.74	605.34	0.00	0.00	605.38	0.04	0.07	0.01	600.40
960.	333.	620.	7.	801.	318.	34.	35.	9.	603.60
0.23	0.42	1.95	0.21	0.080	0.035	0.080	0.036	595.60	56.64
0.000151	650.	720.	720.	2	0	0	0.00	404.12	460.76

FLOW DISTRIBUTION FOR SECNO= 1020.00 CHSEL= 605.34

STA=	57.	381.	422.	461.
PER Q=	34.7	64.5	0.7	
AREA=	300.8	318.4	33.7	
VEL=	0.4	1.9	0.2	

CCHV= 0.300 CEHV= 0.500
*SECNO 2170.000

```
3470 ENCROACHMENT STATIONS=     175.0     650.0  TYPE=     1  TARGET=     475.000

        150' D/S NEWBURG RD.

  2170.00     7.07   605.57     0.00     0.00   605.65     0.08     0.25     0.02   598.60
     960.      102.      512.      345.      174.      164.      560.       61.       20.   597.90
     0.39     0.59     3.12     0.62    0.080    0.035    0.080    0.036   597.70   175.00
 0.000364     1050.     1150.     1150.        2        0        0     0.00   475.00   650.00

FLOW DISTRIBUTION FOR SECNO=   2170.00          CWSEL=    605.57

STA=     175.     200.     280.     289.     311.     319.     400.     500.     600.     650.
  PER Q=      0.1      5.9      4.7     53.3      5.8     20.0      5.8      3.8      0.6
   AREA=      5.7    120.6     47.2    163.9     48.3    254.0    131.7    101.7     24.6
    VEL=      0.1      0.5      1.0      3.1      1.2      0.8      0.4      0.4      0.2

*SECNO 2320.000
   SECNO     DEPTH     CWSEL     CRWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         CLOB      QCH       QROB     ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB     XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR    ITRIAL    IN2       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=     240.0     640.0  TYPE=     1  TARGET=     400.000

        D/S FACE NEWBURG RD. SKEWED

  2320.00     7.92   605.62     0.00     0.00   605.71     0.08     0.06     0.00   598.60
     960.       85.      510.      355.      135.      165.      577.       64.       22.   597.90
     0.41     0.71     3.09     0.62    0.080    0.035    0.080    0.036   597.70   240.00
 0.000352      110.      150.      175.        2        0        0     0.00   400.00   640.00

FLOW DISTRIBUTION FOR SECNO=   2320.00          CWSEL=    605.62

STA=     240.     280.     289.     311.     319.     400.     500.     600.     640.
  PER Q=      5.2      4.7     53.1      5.8     20.3      6.2      4.1      0.6
   AREA=     87.0     47.8    165.2     48.7    258.7    137.5    107.5     24.2
    VEL=      0.6      1.0      3.1      1.1      0.8      0.4      0.4      0.2

*SECNO 2321.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD=  604.20 MAX ELLC=  605.00


3470 ENCROACHMENT STATIONS=     240.0     640.0  TYPE=     1  TARGET=     400.000
  2321.00     7.55   605.55     0.00     0.00   605.78     0.24     0.00     0.08   598.60
     960.        0.      691.      269.        0.      151.      306.       64.       22.   597.90
     0.41     0.00     4.58     0.88    0.080    0.035    0.080    0.036   597.70   240.00
 0.002185        1.        1.        1.        2        0        0  -389.20   400.00   640.00

FLOW DISTRIBUTION FOR SECNO=   2321.00          CWSEL=    605.55

STA=     240.     311.     400.     500.     600.     640.
  PER Q=     72.0      3.8     14.0      9.0      1.2
   AREA=    151.0     54.9    129.8     99.8     21.1
    VEL=      4.6      0.7      1.0      0.9      0.6

*SECNO 2341.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD=  604.20 MAX ELLC=  605.00
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3470 ENCROACHMENT STATIONS=      240.0      640.0  TYPE=      1  TARGET=      400.000
  2341.00      7.91    605.61      0.00      0.00    605.83      0.22      0.04      0.01    598.60
     960.        0.       672.      283.        0.      151.       324.       65.       22.     597.90
     0.41       0.00      4.45      0.89     0.000     0.035     0.080     0.036    597.70    240.00
 0.002067        20.       20.       20.         2         0         0   -397.06    400.00    640.00

FLOW DISTRIBUTION FOR SECNO=   2341.00          CHSEL=    605.61

STA=      240.      311.      400.      500.      600.      640.
  PER Q=     70.0       4.0      14.8       9.6       1.5
   AREA=    151.0      57.6     136.4     106.4      23.7
    VEL=      4.5       0.7       1.0       0.9       0.6

*SECNO 2342.000

3470 ENCROACHMENT STATIONS=      240.0      640.0  TYPE=      1  TARGET=      400.000

        U/S FACE NEUBURG RD. SKEWED

  2342.00      8.11    605.81      0.00      0.00    605.88      0.07      0.00      0.05    598.60
     960.       97.       489.      374.      144.      169.      630.       65.       22.     597.90
     0.41       0.67      2.89      0.59     0.000     0.035     0.030     0.036    597.70    240.00
 0.000298          1.        1.        1.         2         0         0      0.00    400.00    640.00

FLOW DISTRIBUTION FOR SECNO=   2342.00          CHSEL=    605.81

STA=      240.      280.      289.      311.      319.      400.      500.      600.      640.
  PER Q=      5.5       4.6      50.9       5.6      20.5       7.0       4.9       0.9
   AREA=     94.6      49.6     169.2      50.1     273.9     156.1     126.1      31.6
    VEL=      0.6       0.9       2.9       1.1       0.7       0.4       0.4       0.3

*SECNO 2442.000

        100' U/S NEWBURG RD.

  2442.00      8.03    605.03      0.00      0.00    605.92      0.09      0.03      0.01    603.20
     960.       211.      711.       38.      413.      260.       83.       67.       23.     602.90
     0.42       0.31      2.74      0.46     0.000     0.035     0.050     0.036    597.80     54.17
 0.000369        160.      100.       40.         2         0         0      0.00    343.34    397.51

FLOW DISTRIBUTION FOR SECNO=   2442.00          CHSEL=    605.03

STA=       54.       65.      301.      341.      390.
  PER Q=      0.1      21.9      74.0       4.0
   AREA=      4.5     408.9     259.7      82.9
    VEL=      0.2       0.5       2.7       0.5

*SECNO 3212.000
   SECNO     DEPTH     CHSEL     CRIWS     WSELK     EG        KW        IL        CLOSS    BANK ELEV
   Q         ALOB      QCH       QROB      ALOB      ACH       AROB      VOL       TOA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       LTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IH2       ICONT     CORAR     TOPWID      ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      607.00 ELREA=      607.00

  3212.00      8.57    606.18      0.00      0.00    606.65      0.48      0.54      0.20    604.00
     960.        0.       960.       0.        0.      173.        0.       75.       26.     602.70
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     0.46      0.00      5.56      0.00     0.080     0.035     0.080     0.035    597.60    187.00
 0.001806       770.      770.      770.         2         0         0      0.00     27.00    214.00

FLOW DISTRIBUTION FOR SECNO=    3212.00          CWSEL=     606.10

STA=      187.      214.
  PER Q=     100.0
   AREA=     172.7
    VEL=       5.6

*SECNO 3213.000

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  606.70 MAX ELLC=  606.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      607.00 ELREA=      607.00

  3213.00      8.58    606.18      0.00      0.00    606.66      0.48      0.00      0.00    604.00
     960.         0.      960.         0.         0.       173.         0.       75.        26.     602.70
     0.46      0.00      5.56      0.00     0.080     0.025     0.080     0.035    597.60    187.00
 0.000924         1.        1.        1.         0         0         0    -12.26     27.00    214.00

FLOW DISTRIBUTION FOR SECNO=    3213.00          CWSEL=     606.18

STA=      187.      214.
  PER Q=     100.0
   AREA=     172.6
    VEL=       5.6

*SECNO 3223.000

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  606.70 MAX ELLC=  606.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      607.40 ELREA=      607.40

  3223.00      8.59    606.19      0.00      0.00    606.67      0.48      0.01      0.00    604.00
     960.         0.      960.         0.         0.       173.         0.       75.        26.     602.70
     0.46      0.00      5.55      0.00     0.080     0.025     0.080     0.035    597.60    187.00
 0.000910        10.       10.       10.         0         0         0    -12.33     27.00    214.00

FLOW DISTRIBUTION FOR SECNO=    3223.00          CWSEL=     606.19

STA=      187.      214.
  PER Q=     100.0
   AREA=     172.9
    VEL=       5.6

*SECNO 3224.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      607.40 ELREA=      607.40

        U/S FACE BRIDGE #47-A

  3224.00      8.59    606.19      0.00      0.00    606.67      0.48      0.00      0.00    604.00
     960.         0.      960.         0.         0.       173.         0.       75.        26.     602.70
     0.46      0.00      5.55      0.00     0.080     0.035     0.080     0.035    597.60    187.00
 0.001794         1.        1.        1.         0         0         0      0.00     27.00    214.00
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FLOW DISTRIBUTION FOR SECNO= 3224.00 CWSEL= 606.19

STA= 187. 214.
PER Q= 100.0
AREA= 173.1
VEL= 5.5

*SECNO 3329.000

3470 ENCROACHMENT STATIONS= 130.0 214.0 TYPE= 1 TARGET= 84.000

90' D/S I-275

3329.00	8.95	606.75	0.00	0.00	606.84	0.09	0.05	0.12	598.30
960.	100.	797.	63.	138.	304.	86.	76.	26.	599.30
0.47	0.72	2.62	0.74	0.080	0.035	0.080	0.035	597.80	130.00
0.000222	105.	105.	105.	2	0	0	0.00	84.00	214.00

FLOW DISTRIBUTION FOR SECNO= 3329.00 CWSEL= 606.75

STA= 130. 150. 162. 198. 214.
PER Q= 3.9 6.5 83.0 6.6
AREA= 66.4 71.9 304.0 85.3
VEL= 0.6 0.9 2.6 0.7

*SECNO 3419.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	XLOB	QCH	QROB	WLOB	ACH	AROB	WOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	LTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IM2	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 639.80 ELREA= 639.80

D/S FACE I-275

3419.00	8.75	606.75	0.00	0.00	606.89	0.14	0.03	0.03	599.20
960.	0.	960.	0.	0.	310.	0.	77.	26.	598.00
0.40	0.00	3.02	0.00	0.080	0.035	0.080	0.035	598.00	0.10
0.000395	130.	90.	50.	2	0	0	0.00	38.90	39.00

FLOW DISTRIBUTION FOR SECNO= 3419.00 CWSEL= 606.75

STA= 0. 39.
PER Q= 100.0
AREA= 317.9
VEL= 3.0

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BUC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	2.66	3.00	0.00	36.42	3.00	264.00	0.00	598.80	598.00

*SECNO 3739.000
PRESSURE FLOW

EGPRS	EGLOC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD

607.29	606.91	0.02	0.	960.	264.	264.	606.70	639.80	

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 639.80 ELREA= 639.80

U/S FACE I-275

3739.00	9.16	607.16	0.00	0.00	607.29	0.13	0.40	0.00	599.20
960.	0.	960.	0.	0.	334.	0.	79.	27.	598.00
0.51	0.00	2.87	0.00	0.080	0.035	0.080	0.035	598.00	0.10
0.000339	320.	320.	320.	2	0	0	0.00	38.90	39.00

FLOW DISTRIBUTION FOR SECNO= 3739.00 CHSEL= 607.16

STA= 0. 39.
PER Q= 100.0
AREA= 334.2
VEL= 2.9

*SECNO 3999.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.70 ELREA= 614.70

D/S FACE PENN CENTRAL R.R. SKEWED

3999.00	8.23	607.23	0.00	0.00	607.50	0.27	0.14	0.07	602.60
960.	0.	960.	0.	0.	229.	0.	81.	27.	600.10
0.53	0.00	4.18	0.00	0.080	0.035	0.000	0.035	599.00	1.00
0.000976	160.	260.	320.	2	0	0	0.00	36.00	37.00

FLOW DISTRIBUTION FOR SECNO= 3999.00 CHSEL= 607.23

STA= 1. 37.
PER Q= 100.0
AREA= 229.4
VEL= 4.2

SPECIAL BRIDGE

SB	XK	XKOP	COFQ	RDLEN	BUC	BLP	BAREA	SS	ELCHU	ELCHD
	1.25	1.51	3.00	0.00	30.45	4.00	283.00	0.00	599.00	599.00

*SECNO 4037.000
CLASS A LOW FLOW

3420 BRIDGE W.S.= 607.15 BRIDGE VELOCITY= 4.45 CALCULATED CHANNEL AREA= 216.

EGPRS	EGLOC	X3	PLEN	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
0.00	607.59	0.09	0.	960.	283.	283.	609.70	614.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.70 ELREA= 614.70

U/S FACE PENN CENTRAL R.R. SKEWED

4037.00	0.32	607.32	0.00	0.00	607.59	0.26	0.08	0.00	602.60
960.	0.	960.	0.	0.	233.	0.	81.	27.	600.10
0.53	0.00	4.13	0.00	0.080	0.035	0.080	0.035	599.00	1.00
0.000934	38.	38.	38.	0	0	0	0.00	36.00	37.00

FLOW DISTRIBUTION FOR SECNO= 4037.00 CWSEL= 607.32

STA= 1. 37.
PER Q= 100.0
AREA= 252.7
VEL= 4.1

*SECNO 4087.000

3470 ENCROACHMENT STATIONS= 152.0 288.0 TYPE= 1 TARGET= 136.000

501 U/S PENN CENTRAL R.R.

4087.00	7.98	607.58	0.00	0.00	607.67	0.09	0.03	0.05	602.50
960.	236.	589.	135.	258.	201.	160.	81.	27.	603.40
0.54	0.91	2.93	0.84	0.080	0.035	0.080	0.035	599.60	152.00
0.000394	50.	50.	50.	2	0	0	0.00	136.00	288.00

FLOW DISTRIBUTION FOR SECNO= 4087.00 CWSEL= 607.58

STA= 152. 215. 245. 288.
PER Q= 24.6 61.3 14.1
AREA= 250.2 200.7 160.1
VEL= 0.9 2.9 0.3

CCHV= 0.100 CEHV= 0.300

*SECNO 5267.000

SECNO	DEPTH	CWSEL	CRIWS	ELSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	ALOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IH2	ICONT	CORAR	TOPWID	ENDST

VALLEY #54

5267.00	7.73	608.03	0.00	0.00	608.06	0.03	0.39	0.01	605.30
960.	252.	441.	266.	501.	209.	497.	106.	36.	605.60
0.80	0.50	2.11	0.54	0.080	0.035	0.080	0.035	600.30	118.62
0.000275	1180.	1180.	1180.	2	0	0	0.00	530.20	648.63

FLOW DISTRIBUTION FOR SECNO= 5267.00 CWSEL= 608.03

STA= 119. 300. 379. 418. 540. 649.
PER Q= 11.6 14.7 46.0 20.8 6.9
AREA= 274.1 227.0 209.4 332.2 164.5
VEL= 0.4 0.6 2.1 0.6 0.4

*SECNO 6097.000

6097.00	7.08	608.28	0.00	0.00	608.40	0.11	0.32	0.02	605.00
960.	135.	723.	36.	264.	234.	130.	122.	43.	605.00
0.89	0.64	3.09	0.63	0.080	0.035	0.080	0.035	601.20	76.92
0.000602	650.	830.	900.	0	0	0	0.00	272.06	348.98

FLOW DISTRIBUTION FOR SECNO= 6097.00 CWSEL= 608.28

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STA=      77.      225.      270.      349.
  PER Q=     16.1      75.3       8.6
   AREA=    243.7     233.6     130.0
    VEL=      0.6       3.1       0.6

*SECNO 6447.000

        VALLEY #55

  6447.00      6.90    609.50      0.00      0.00    608.66      0.36      0.39      0.08    607.20
     960.       31.       911.       19.       42.       183.       24.       126.       45.     607.00
     0.91      0.72      4.97      0.79     0.000     0.035     0.000     0.035    601.60    535.63
 0.002687       350.      350.      350.         2         0         0      0.00    147.83    683.46


FLOW DISTRIBUTION FOR SECNO=   6447.00          CWSEL=    609.50

STA=      536.      601.      652.      683.
  PER Q=      3.2      94.9       1.9
   AREA=     42.4     183.4      23.6
    VEL=      0.7       5.0       0.8

CCHV=   0.300 CEHV=   0.500
*SECNO 7477.000

3470 ENCROACHMENT STATIONS=      158.0      268.0  TYPE=      1  TARGET=      110.000

        150' D/S GRAFTON

  7477.00      6.91    609.61      0.00      0.00    609.72      0.11      0.78      0.08    603.30
     960.       38.       849.       73.       63.       304.       90.       134.       48.     603.30
     1.02      0.60      2.80      0.75     0.080     0.035     0.080     0.035    602.70    158.00
 0.000350      1100.     1030.      950.         2         0         0      0.00    110.00    268.00


FLOW DISTRIBUTION FOR SECNO=   7477.00          CWSEL=    609.61

STA=      158.      181.      187.      233.      248.      268.
  PER Q=      1.9       2.1      80.4       5.9       1.7
   AREA=     35.3      25.2     303.6      63.8      34.0
    VEL=      0.3       0.8       2.8       0.9       0.5

*SECNO 7627.000

3695 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      610.50 ELREA=      610.50


        D/S FACE GRAFTON SKEWED

  7627.00      5.66    609.56      0.00      0.00    609.97      0.42      0.10      0.15    603.90
     960.        0.       960.        0.        0.       185.        0.       135.       48.     604.80
     1.03      0.00      5.19      0.00     0.080     0.035     0.080     0.033    603.90    147.60
 0.001963       175.      150.      100.         2         0         0      0.00     34.50    182.40


FLOW DISTRIBUTION FOR SECNO=   7627.00          CWSEL=    609.56

STA=      141.      182.
  PER Q=     100.0
   AREA=     185.0
    VEL=       5.2
```

SPECIAL BRIDGE

SS	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.61	3.20	0.00	23.79	0.00	157.00	0.00	603.90	603.90

*SECNO 7690.000

6070 LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 609.974 ELLC= 610.500 PCWSE= 609.556 ELTRD= 611.800

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	FL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	PTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

3370 NORMAL BRIDGE, NRD= 10 MIN ELTRD= 611.80 MAX ELLC= 610.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.80 ELREA= 613.40

U/S FACE GRAFTON SKEWED

7690.00	5.80	609.70	0.00	0.00	610.10	0.40	0.12	0.01	603.90
960.	0.	960.	0.	0.	190.	0.	136.	48.	604.80
1.04	0.00	5.06	0.00	0.080	0.035	0.080	0.035	603.90	147.60
0.001311	63.	63.	63.	2	0	0	29.61	34.00	102.40

FLOW DISTRIBUTION FOR SECNO= 7690.00 CWSEL= 609.70

STA= 140. 182.
PER Q= 100.0
AREA= 189.5
VEL= 5.1

*SECNO 7790.000

3470 ENCROACHMENT STATIONS= 125.0 360.0 TYPE= 1 TARGET= 235.000

100' U/S GRAFTON

7790.00	6.18	610.18	0.00	0.00	610.27	0.09	0.07	0.09	608.00
960.	3.	899.	58.	12.	370.	142.	136.	49.	608.00
1.05	0.25	2.43	0.41	0.080	0.035	0.080	0.035	604.00	125.00
0.000595	50.	100.	150.	2	0	0	0.00	235.00	360.00

FLOW DISTRIBUTION FOR SECNO= 7790.00 CWSEL= 610.18

STA= 125. 160. 165. 240. 360.
PER Q= 0.1 0.2 93.5 6.1
AREA= 6.3 5.9 369.8 141.7
VEL= 0.1 0.4 2.4 0.6

CCHV= 0.100 CEHV= 0.300
*SECNO 8740.000

VALLEY #30

8740.00	6.20	610.70	0.00	0.00	610.88	0.18	0.59	0.03	609.20
960.	68.	738.	154.	103.	192.	219.	140.	55.	608.90

```
    1.13      0.63      3.84      0.70     0.030     0.035     0.080     0.035    604.50    120.19
0.001093      850.      950.     1000.         2         0         0      0.00    342.45    462.64
```

SECTION 2

```
FLOW DISTRIBUTION FOR SECNO=   8740.00          CWSEL=    610.70

STA=     120.      140.      231.      272.      440.      465.
  PER Q=      0.2       6.9      76.9      15.7       0.3
   AREA=      7.0     100.8     192.2     211.3       8.0
    VEL=      0.3       0.7       3.8       0.7       0.3

CCHV=   0.300 CEHV=   0.500
*SECNO 9580.000

3470 ENCROACHMENT STATIONS=     475.0     585.0  TYPE=     1  TARGET=     610.000

        120' D/S HILL-CARLETON

 9580.00      6.46    611.60      0.00      0.00    611.94      0.25      1.02      0.04    612.20
    960.         0.      865.        95.        0.      203.       104.       156.        59.    610.00
    1.19      0.00      4.25      0.92     0.080     0.035     0.080     0.035    605.20    477.13
0.001350      840.      840.      840.         2         0         0      0.00    107.87    585.00

FLOW DISTRIBUTION FOR SECNO=   9580.00          CWSEL=    611.60

STA=     477.      320.      585.
  PER Q=     90.1       9.9
   AREA=    203.3     105.3
    VEL=      4.3       0.9
*SECNO 9700.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     614.20 ELREA=     613.00

        D/S FACE HILL-CARLETON

 9700.00      5.94    611.84      0.00      0.00    612.12      0.29      0.17      0.02    611.80
    960.         0.      960.        0.        0.      224.        0.       157.        59.    611.40
    1.20      0.00      4.29      0.00     0.000     0.035     0.080     0.035    605.90    322.00
0.001507      120.      120.      120.         0         0         0      0.00     51.00    373.00

FLOW DISTRIBUTION FOR SECNO=   9700.00          CWSEL=    611.84

STA=     322.      373.
  PER Q=    100.0
   AREA=    226.0
    VEL=      4.3
```

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  D1
  MODIFICATION -  50,51,52
**************************************************

T1 ASH TWP. F/S HUD 2020-07 NORTH BRANCH SWAN CREEK
T2 ENCROACHMENT RUN
T3      NORTH BRANCH SWAN CREEK ASH TWP

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
       0.       5.        0.        0.  0.000000      0.00      0.0       0.   604.950     0.000
J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBL       CHNIM     ITRACE
     15.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000    15.000
```

```
*PROF 2

CCHV=   0.100 CEHV=   0.300
*SECNO 1.000
 2800 NAT Q1=   1163.26  WSEL=    604.95  ENC Q1=   1163.26  WSEL=    605.05  RATIO=  0.0000
 NAT Q1=   1169.  RATIOS LOB,CH,ROB=  0.2512  0.7397  0.0091  WSEL=    605.05
   SECNO     DEPTH     CWSEL     CRIWS     HSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IP2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      42.8      244.0  TYPE=      4  TARGET=       0.021

       VALLEY #35; CONFLUENCE WITH NORTH BRANCH SWAN CREEK

     1.00     12.85    604.95      0.00    604.95    605.20      0.25      0.00      0.00    600.00
   2800.      704.    2096.         0.     770.      459.         0.        0.         0.    600.40
     0.00      0.91     4.57      0.00      0.120     0.035     0.120     0.000    592.10     42.84
 0.000663       0.       0.         0.        0         0         0      0.00    201.16    244.00


FLOW DISTRIBUTION FOR SECNO=      1.00          CWSEL=    604.95

STA=      43.      50.     199.     244.
  PER Q=      0.7      24.4     74.9
   AREA=     32.4     737.5    459.6
    VEL=      0.6       0.9      4.6

*SECNO 300.000
 2800 NAT Q1=   1081.03  WSEL=    605.28  ENC Q1=   1081.03  WSEL=    605.38  RATIO=  0.0000
 NAT Q1=   1112.  RATIOS LOB,CH,ROB=  0.3640  0.5333  0.1028  WSEL=    605.38

3470 ENCROACHMENT STATIONS=      64.3      387.7  TYPE=      4  TARGET=       0.028

       VALLEY 300' U/S OF CONFLUENCE WITH SWAN CREEK #45

   300.00     10.39    605.29      0.00    605.28    605.31      0.02      0.09      0.02    600.60
      960.      343.     530.        87.    1062.      340.      293.       10.         2.    599.70
     0.00      0.32     1.56      0.29      0.120     0.035     0.140     0.035    594.90     64.27
 0.000033       300.     300.      300.         2         0         0      0.00    323.40    387.67


FLOW DISTRIBUTION FOR SECNO=    300.00          CWSEL=    605.29

STA=      64.      90.     280.     320.     386.
  PER Q=      3.3      32.4     55.2      9.1
   AREA=    114.0     947.9    339.6    298.1
    VEL=      0.3       0.3      1.6      0.3

*SECNO 1020.000
 2800 NAT Q1=    702.43  WSEL=    605.34  ENC Q1=    702.43  WSEL=    605.44  RATIO=  0.0000
 NAT Q1=    839.  RATIOS LOB,CH,ROB=  0.3542  0.6376  0.0082  WSEL=    605.44

3470 ENCROACHMENT STATIONS=     228.8      422.0  TYPE=      4  TARGET=       0.033

       VALLEY #45-A

  1020.00      9.73    605.35      0.00    605.34    605.40      0.04      0.03      0.01    600.40
      960.      330.     630.         0.     579.      319.         0.       30.         6.    603.60
     0.21      0.57     1.97      0.00      0.080     0.033     0.080     0.036    595.60    228.81
 0.000163       650.     720.      720.         1         0         0      0.00    193.19    422.00
```

FLOW DISTRIBUTION FOR SECNO= 1020.00 CWSEL= 605.35

STA=	229.	301.	422.
PER Q=	34.4	65.6	
AREA=	576.7	319.4	
VEL=	0.6	2.0	

CCHV= 0.300 CEHV= 0.500
*SECNO 2170.000

3470 ENCROACHMENT STATIONS= 175.0 650.0 TYPE= 1 TARGET= 475.000

150' D/S NEWBURG RD.

2170.00	7.89	605.59	0.00	605.57	605.68	0.04	0.26	0.02	598.60
960.	103.	504.	348.	177.	165.	570.	33.	14.	597.90
0.30	0.59	3.09	0.61	0.080	0.035	0.080	0.036	397.70	175.00
0.000354	1050.	1150.	1150.	2	0	0	0.00	475.00	650.00

FLOW DISTRIBUTION FOR SECNO= 2170.00 CWSEL= 605.59

STA=	175.	200.	260.	289.	311.	319.	400.	500.	600.	650.
PER Q=	0.1	5.0	4.7	52.9	5.8	20.0	6.0	3.9	0.6	
AREA=	6.4	122.8	47.5	164.5	48.5	256.3	134.3	104.5	26.0	
VEL=	0.1	0.5	1.0	3.1	1.1	0.7	0.6	0.4	0.2	

*SECNO 2320.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IH2	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 240.0 640.0 TYPE= 1 TARGET= 400.000

D/S FACE NEWBURG RD. SKEWED

2320.00	7.95	605.65	0.00	605.62	605.73	0.08	0.05	0.00	598.60
960.	96.	506.	356.	136.	166.	582.	57.	16.	597.90
0.40	0.71	3.07	0.61	0.080	0.035	0.080	0.036	597.70	240.00
0.000347	110.	150.	175.	1	0	0	0.00	400.00	640.00

FLOW DISTRIBUTION FOR SECNO= 2320.00 CWSEL= 605.65

STA=	240.	280.	289.	311.	319.	400.	500.	600.	640.
PER Q=	5.2	4.7	52.9	5.8	20.3	6.2	4.2	0.6	
AREA=	87.7	47.9	165.5	48.8	260.0	139.1	109.1	24.8	
VEL=	0.6	0.9	3.1	1.1	0.7	0.4	0.4	0.2	

*SECNO 2321.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD= 604.20 MAX ELLC= 605.00

3470 ENCROACHMENT STATIONS= 240.0 640.0 TYPE= 1 TARGET= 400.000

2321.00	7.98	605.58	0.00	605.55	605.81	0.23	0.00	0.07	598.60
960.	0.	683.	277.	0.	151.	314.	57.	16.	597.90
0.40	0.00	4.52	0.88	0.080	0.035	0.080	0.036	597.70	240.00
0.002133	1.	1.	1.	2	0	0	-392.63	400.00	640.00

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FLOW DISTRIBUTION FOR SECNO=   2321.00          CWSEL=    605.58

STA=     240.     311.     400.     500.     600.     640.
  PER Q=    71.1      3.9     14.3      9.3      1.3
   AREA=   151.0     56.1    132.7    102.7     22.3
    VEL=     4.5      0.7      1.0      0.9      0.6

*SECNO 2341.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD=  604.20 MAX ELLC=  605.00

3470 ENCROACHMENT STATIONS=     240.0     640.0  TYPE=     1  TARGET=     400.000
  2341.00     7.94   605.64      0.00   605.61   605.83     0.21     0.04     0.01   598.60
     960.       0.      665.      295.       0.      151.      332.      57.      16.   597.90
     0.40     0.00     4.40     0.89    0.080    0.035    0.080    0.036   597.70   240.00
 0.002022       20.      20.      20.        2        0        0  -400.20   400.00   640.00

FLOW DISTRIBUTION FOR SECNO=   2341.00          CWSEL=    605.64

STA=     240.     311.     400.     500.     600.     640.
  PER Q=    69.2      4.1     15.1     10.0      1.6
   AREA=   151.0     58.7    139.0    109.0     24.8
    VEL=     4.4      0.7      1.0      0.9      0.6

*SECNO 2342.000

3470 ENCROACHMENT STATIONS=     240.0     640.0  TYPE=     1  TARGET=     400.000
        U/S FACE NEWBURG RD. SKEWED
  2342.00     8.13   605.83      0.00   605.81   605.90     0.07     0.00     0.04   598.60
     960.       97.      787.      576.      145.      170.      644.      57.      16.   597.90
     0.40     0.67     2.87     0.50    0.080    0.035    0.080    0.036   597.70   240.00
 0.000294       1.       1.       1.        2        0        0     0.00   400.00   640.00

FLOW DISTRIBUTION FOR SECNO=   2342.00          CWSEL=    605.83

STA=     240.     280.     289.     311.     319.     400.     500.     600.     640.
  PER Q=     5.5      4.6     50.7      5.6     20.5      7.1      5.0      0.9
   AREA=    95.1     49.7    169.6     50.3    275.4    157.9    127.9     32.4
    VEL=     0.6      0.9      2.9      1.1      0.7      0.4      0.4      0.3

*SECNO 2442.000
 2000 NAT Q1=     500.01  WSEL=    605.83  ENC Q1=     500.01  WSEL=    605.93  RATIO=  0.0000
 NAT Q1=     522.  RATIOS LOB,CH,ROB=  0.2316  0.7269  0.0416  WSEL=    605.93

3470 ENCROACHMENT STATIONS=     122.5     352.6  TYPE=     4  TARGET=       0.043
        100' U/S NEWBURG RD.
  2442.00     8.05   605.85      0.00   605.83   605.94     0.10     0.03     0.01   603.20
     960.      203.      738.       19.      352.      261.       31.       58.       17.   602.90
     0.41     0.58     2.83     0.62    0.080    0.035    0.080    0.036   597.80   122.55
 0.000393      160.      100.       40.        1        0        0     0.00   230.10   352.65

FLOW DISTRIBUTION FOR SECNO=   2442.00          CWSEL=    605.85

STA=     123.     301.     341.     353.
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  PER Q=      21.1      76.9       2.0
   AREA=     352.0     260.5      30.9
    VEL=       0.6       2.8       0.6

*SECNO 3212.000
 2800 NAT Q1=     225.37  WSEL=     606.18  ENC Q1=     231.32  WSEL=     606.28  RATIO= -0.0241
 NAT Q1=     231.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     606.28
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      187.0      214.0  TYPE=      4  TARGET=        0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       607.00 ELREA=       607.00

  3212.00      0.64    606.24      0.00    606.18    606.71      0.47      0.58      0.19    604.00
     960.        0.      960.        0.        0.       175.        0.       66.       19.     602.70
     0.45      0.00      5.50      0.00     0.080     0.035     0.080     0.035    597.60    187.00
 0.002025       770.      770.      770.         2         0         0      0.00     27.00    214.00


FLOW DISTRIBUTION FOR SECNO=    3212.00          CWSEL=     606.24

STA=      187.      214.
  PER Q=     100.0
   AREA=     174.3
    VEL=       5.5

*SECNO 3213.000
 2800 NAT Q1=     315.78  WSEL=     606.18  ENC Q1=     323.38  WSEL=     606.28  RATIO= -0.0241
 NAT Q1=     323.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     606.28

3370 NORMAL BRIDGE,NRD= 10  MIN ELTRD=  606.70 MAX ELLC=  606.50


3470 ENCROACHMENT STATIONS=      187.0      214.0  TYPE=      4  TARGET=        0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       607.00 ELREA=       607.00

  3213.00      9.64    606.24      0.00    606.18    606.72      0.47      0.00      0.00    604.00
     960.        0.      960.        0.        0.       174.        0.       66.       19.     602.70
     0.45      0.00      5.51      0.00     0.080     0.025     0.080     0.035    597.60    187.00
 0.001039         1.        1.        1.         0         0         0     -0.29     27.00    214.00


FLOW DISTRIBUTION FOR SECNO=    3213.00          CWSEL=     606.24

STA=      187.      214.
  PER Q=     100.0
   AREA=     174.3
    VEL=       5.5

*SECNO 3223.000
 2800 NAT Q1=     316.81  WSEL=     606.19  ENC Q1=     324.27  WSEL=     606.29  RATIO= -0.0235
 NAT Q1=     324.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     606.29

3370 NORMAL BRIDGE,NRD= 10  MIN ELTRD=  606.70 MAX ELLC=  606.50


3470 ENCROACHMENT STATIONS=      187.0      214.0  TYPE=      4  TARGET=        0.000
```

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 607.40 ELREA= 607.40

3223.00	9.66	606.26	0.00	606.19	606.73	0.47	0.01	0.00	604.00
960.	0.	960.	0.	0.	175.	0.	66.	19.	602.70
0.45	0.00	5.50	0.00	0.000	0.025	0.000	0.035	597.60	187.00
0.001033	10.	10.	10.	0	0	0	-0.29	27.00	214.00

FLOW DISTRIBUTION FOR SECNO= 3223.00 CWSEL= 606.26

STA= 187. 214.
PER Q= 100.0
AREA= 174.5
VEL= 5.5

*SECNO 3224.000
2000 NAT Q1= 226.62 WSEL= 606.19 ENC Q1= 232.14 USEL= 606.29 RATIO= -0.0243
NAT Q1= 232. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 606.29

3470 ENCROACHMENT STATIONS= 187.0 214.0 TYPE= 4 TARGET= 0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 607.40 ELREA= 607.40

U/S FACE BRIDGE #47-A

3224.00	8.66	606.26	0.00	606.19	606.73	0.47	0.00	0.00	604.00
960.	0.	960.	0.	0.	175.	0.	66.	19.	602.70
0.45	0.00	5.49	0.00	0.000	0.035	0.000	0.035	597.60	187.00
0.002013	1.	1.	1.	0	0	0	0.00	27.00	214.00

FLOW DISTRIBUTION FOR SECNO= 3224.00 CWSEL= 606.26

STA= 187. 214.
PER Q= 100.0
AREA= 174.9
VEL= 5.5

*SECNO 3329.000

3470 ENCROACHMENT STATIONS= 130.0 214.0 TYPE= 1 TARGET= 84.000

90' D/S I-275

3329.00	9.00	606.80	0.00	606.75	606.89	0.09	0.05	0.11	598.30
960.	100.	796.	63.	140.	306.	67.	67.	19.	599.30
0.46	0.72	2.60	0.73	0.000	0.035	0.000	0.035	597.80	130.00
0.000217	105.	105.	105.	2	0	0	0.00	84.00	214.00

FLOW DISTRIBUTION FOR SECNO= 3329.00 CWSEL= 606.80

STA= 130. 150. 162. 196. 214.
PER Q= 3.9 6.5 82.9 6.6
AREA= 67.6 72.7 306.2 86.8
VEL= 0.6 0.9 2.6 0.7

*SECNO 3619.000
2800 NAT Q1= 492.06 WSEL= 606.75 ENC Q1= 492.00 USEL= 606.85 RATIO= -0.0191
NAT Q1= 492. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 606.85

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	BANK ELEV
Q	CLOB	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=        0.1       39.0  TYPE=     4  TARGET=        0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      639.80 ELREA=      639.80

         D/S FACE I-275

  3419.00      8.01    606.81      0.00    606.75    606.95      0.14      0.03      0.03    599.20
     960.        0.      960.        0.        0.      320.        0.       68.       19.    598.00
     0.47      0.00      3.00      0.00     0.080     0.035     0.080     0.035    598.00      0.10
 0.000487      130.       90.       50.         2         0         0      0.00     38.90     39.00

FLOW DISTRIBUTION FOR SECNO=   3419.00           CWSEL=     606.81

STA=          0.        39.
  PER Q=     100.0
   AREA=     320.3
    VEL=       3.0

SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BLC         BWP         BAREA       SS          ELCHU       ELCHD
     1.25        2.66        3.00        0.00       36.42        3.00      264.00        0.00      598.60      598.00

*SECNO 3739.000
CLASS A LOW FLOW

3420 BRIDGE W.S.=    607.10 BRIDGE VELOCITY=       3.27      CALCULATED CHANNEL AREA=      280.

 EGPRS      EGLWC       H3        QWEIR       QPR        BAREA   TRAPEZOID       ELLC      ELTRD
                                                                   AREA
   607.35    607.39      0.02         0.      960.      264.      264.    606.70    639.80


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      639.80 ELREA=      639.80

         U/S FACE I-275

  3739.00      9.26    607.26      0.00    607.16    607.39      0.13      0.44      0.00    599.20
     960.        0.      960.        0.        0.      338.        0.       70.       20.    598.00
     0.30      0.00      2.84      0.00     0.080     0.035     0.080     0.035    598.00      0.10
 0.000327      320.      320.      320.         0         0         0      0.00     38.90     39.00

FLOW DISTRIBUTION FOR SECNO=   3739.00           CWSEL=     607.26

STA=          0.        39.
  PER Q=     100.0
   AREA=     338.1
    VEL=       2.8

*SECNO 3999.000
 2800 NAT Q1=     307.29  WSEL=     607.23  ENC Q1=     314.08  WSEL=     607.33  RATIO= -0.0247
 NAT Q1=     315.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     607.33

3470 ENCROACHMENT STATIONS=        1.0       37.0  TYPE=     4  TARGET=        0.000
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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.70 ELREA= 614.70

D/S FACE PENN CENTRAL R.R. SKEWED

3999.00	6.34	607.34	0.00	607.23	607.60	0.26	0.14	0.07	602.60
960.	0.	960.	0.	0.	233.	0.	72.	20.	600.10
0.52	0.00	4.11	0.00	0.080	0.035	0.080	0.035	599.00	1.00
0.001155	160.	260.	320.	2	0	0	0.00	36.00	37.00

FLOW DISTRIBUTION FOR SECNO= 3999.00 C.SEL= 607.34

STA= 1. 37.
PER Q= 100.0
AREA= 233.4
VEL= 4.1

SPECIAL BRIDGE

SC	XK	XKOR	COFQ	RDLEN	BYC	BUP	BAREA	SS	ELCHU	ELCID
	1.25	1.31	3.00	0.00	30.45	4.00	283.00	0.00	599.00	599.00

*SECNO 4037.000
CLASS A LOW FLOW

3420 BRIDGE W.S.= 607.26 BRIDGE VELOCITY= 4.39 CALCULATED CHANNEL AREA= 210.

EGPRS	EGLLC	H3	QWEIP	SPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
0.00	607.68	0.09	0.	960.	283.	283.	609.70	614.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.70 ELREA= 614.70

U/S FACE PENN CENTRAL R.R. SKEWED

4037.00	6.42	607.42	0.00	607.32	607.68	0.26	0.08	0.00	602.60
960.	0.	960.	0.	0.	236.	0.	72.	20.	600.10
0.52	0.00	4.06	0.00	0.080	0.035	0.080	0.035	599.00	1.00
0.000890	38.	38.	38.	0	0	0	0.00	36.00	37.00

FLOW DISTRIBUTION FOR SECNO= 4037.00 C.SEL= 607.42

STA= 1. 37.
PER Q= 100.0
AREA= 236.3
VEL= 4.1

*SECNO 4037.000

3470 ENCROACHMENT STATIONS= 152.0 288.0 TYPE= 1 TARGET= 136.000

50' U/S PENN CENTRAL R.R.

4087.00	8.07	607.68	0.00	607.53	607.76	0.08	0.03	0.05	602.50
960.	238.	586.	137.	264.	204.	164.	72.	20.	603.40
0.53	0.90	2.38	0.83	0.080	0.035	0.080	0.035	599.60	152.00
0.000372	50.	50.	50.	2	0	0	0.00	136.00	288.00

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FLOW DISTRIBUTION FOR SECNO=   4087.00          CWSEL=    607.68

STA=     152.     215.     245.     288.
  PER Q=    24.8     61.0     14.2
   AREA=   264.1    203.5    164.1
    VEL=     0.9      2.9      0.8

CCHV=   0.100 CEHV=   0.300
*SECNO 5267.000
 2800 NAT Q1=    579.06  WSEL=    608.03  ENC Q1=    579.06  WSEL=    608.13  RATIO=  0.0000
 NAT Q1=    610.  RATIOS LOB,CH,ROB=  0.2681  0.4502  0.2817  WSEL=    608.13
   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    IN2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=     233.5     570.8  TYPE=     4  TARGET=       0.051

        VALLEY #34

  5267.00      7.80    608.10      0.00    608.03    608.14      0.04      0.38      0.00    605.30
     960.      245.      456.      258.      403.      213.      425.       95.       26.     605.60
     0.70      0.61      2.15      0.61     0.080     0.035     0.080     0.035    600.30    233.51
 0.000279     1180.     1180.     1180.         2         0         0      0.00    337.33    570.85


FLOW DISTRIBUTION FOR SECNO=   5267.00          CWSEL=    608.10

STA=     234.     300.     379.     418.     540.     571.
  PER Q=    10.0     15.5     47.5     22.0      4.9
   AREA=   169.5    233.4    212.6    342.1     82.5
    VEL=     0.6      0.6      2.1      0.6      0.6

*SECNO 6097.000
 2800 NAT Q1=    391.22  WSEL=    608.28  ENC Q1=    391.22  WSEL=    608.38  RATIO=  0.0000
 NAT Q1=    408.  RATIOS LOB,CH,ROB=  0.1668  0.7443  0.0889  WSEL=    608.38

3470 ENCROACHMENT STATIONS=     160.0     298.8  TYPE=     4  TARGET=       0.040
  6097.00      7.17    608.37      0.00    608.28    608.49      0.12      0.32      0.03    605.00
     960.      147.      745.       69.      170.      237.       80.      109.       31.     605.00
     0.86      0.86      3.14      0.86     0.080     0.035     0.080     0.035    601.20    160.76
 0.000610      650.      830.      900.         2         0         0      0.00    138.06    298.82


FLOW DISTRIBUTION FOR SECNO=   6097.00          CWSEL=    608.37

STA=     161.     225.     270.     299.
  PER Q=    15.3     77.6      7.1
   AREA=   170.3    236.9     79.7
    VEL=     0.9      3.1      0.9

*SECNO 6447.000
 2800 NAT Q1=    185.20  WSEL=    608.50  ENC Q1=    185.20  WSEL=    608.60  RATIO=  0.0000
 NAT Q1=    195.  RATIOS LOB,CH,ROB=  0.0368  0.9412  0.0219  WSEL=    608.60

3470 ENCROACHMENT STATIONS=     596.4     652.0  TYPE=     4  TARGET=       0.052

        VALLEY #55

  6447.00      6.97    608.57      0.00    608.50    608.97      0.40      0.40      0.08    607.20
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     960.       6.      954.       0.       6.      187.       0.      111.      31.     607.00
     0.88     1.02      5.10     0.00    0.080    0.035    0.080    0.035   601.60    596.36
 0.002869     350.      350.     350.        2        0        0     0.00    55.64    652.00

FLOW DISTRIBUTION FOR SECNO=   6447.00          CWSEL=    608.57

STA=      596.      601.      652.
  PER Q=       0.7      99.3
   AREA=       6.2     187.1
    VEL=       1.0       5.1

CCHV=   0.300 CEHV=   0.500
*SECNO 7477.000

3470 ENCROACHMENT STATIONS=      158.0      268.0  TYPE=      1  TARGET=      110.000

        150' D/S GRAFTON

  7477.00      7.01    609.71     0.00   609.61   609.82     0.10     0.76     0.09    603.30
     960.       40.      846.      75.      66.      308.     101.     119.      33.     603.30
     0.99      0.59      2.74     0.74    0.080    0.035    0.080    0.035   602.70    158.00
 0.000330     1100.     1030.     950.        2        0        0     0.00   110.00    268.00

FLOW DISTRIBUTION FOR SECNO=   7477.00          CWSEL=    609.71

STA=      158.      181.      187.      233.      248.      268.
  PER Q=       2.0       2.1      88.1       6.0       1.8
   AREA=      40.7      25.8     308.4      65.3      36.1
    VEL=       0.5       0.8       2.7       0.9       0.5

*SECNO 7627.000
 2800 NAT Q1=     216.70  WSEL=     609.56  ENC Q1=     223.14  WSEL=     609.66  RATIO= -0.0297
 NAT Q1=     223.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     609.66

3470 ENCROACHMENT STATIONS=      147.6      182.4  TYPE=      4  TARGET=        0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       610.50 ELREA=       610.50

        D/S FACE GRAFTON SKEWED

  7627.00      5.77    609.67     0.00   609.56   610.07     0.40     0.10     0.15    603.90
     960.        0.      960.       0.       0.      189.       0.      120.      34.     604.80
     1.00      0.00      5.09     0.00    0.080    0.035    0.080    0.035   603.90    147.60
 0.002154      175.      150.     100.        2        0        0     0.00    34.80    182.40

FLOW DISTRIBUTION FOR SECNO=   7627.00          CWSEL=    609.67

STA=      148.      182.
  PER Q=     100.0
   AREA=     188.0
    VEL=       5.1

SPECIAL BRIDGE

SB  XK        XKOR       COFQ       RDLEN      BHC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00      1.61       3.00       0.00      23.79       0.00     157.00      0.00     603.90     603.90

*SECNO 7690.000
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6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 610.184 ELLC= 610.500 PCWSE= 609.666 ELTRD= 611.800
2800 NAT Q1= 225.60 WSEL= 609.70 ENC Q1= 232.20 USEL= 609.80 RATIO= -0.0293
NAT Q1= 232. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 609.80

SECNO	DEPTH	CWSEL	CRI S	WSELK	EG	I.V	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	ELTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IM2	ICONT	CORAR	TOPWID	ENDST

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD= 611.80 MAX ELLC= 610.50

3470 ENCROACHMENT STATIONS= 147.6 182.4 TYPE= 4 TARGET= 0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.30 ELREA= 613.40

U/S FACE GRAFTON SKEWED

7690.00	5.92	609.62	0.00	609.70	610.20	0.38	0.13	0.01	603.90
960.	0.	960.	0.	0.	194.	0.	121.	34.	604.30
1.01	0.00	4.96	0.00	0.000	0.035	0.000	0.035	603.90	147.60
0.001996	63.	63.	63.	2	0	0	-0.55	34.80	182.40

FLOW DISTRIBUTION FOR SECNO= 7690.00 CWSEL= 609.02

STA=	140.	182.
PER Q=	100.0	
AREA=	193.7	
VEL=	5.0	

*SECNO 7790.000

3470 ENCROACHMENT STATIONS= 125.0 360.0 TYPE= 1 TARGET= 235.000

100' U/S GRAFTON

7790.00	0.29	610.29	0.00	610.18	610.37	0.08	0.07	0.09	608.00
960.	4.	891.	65.	16.	378.	154.	122.	34.	606.00
1.02	0.25	2.36	0.42	0.080	0.035	0.000	0.035	604.00	125.00
0.000363	50.	100.	150.	2	0	0	0.00	235.00	360.00

FLOW DISTRIBUTION FOR SECNO= 7790.00 CWSEL= 610.29

STA=	125.	160.	165.	240.	360.
PER Q=	0.2	0.3	92.9	6.7	
AREA=	10.0	6.4	377.8	154.4	
VEL=	0.2	0.4	2.4	0.7	

CCHV= 0.100 CEPV= 0.300
*SECNO 8740.000
2800 NAT Q1= 290.44 WSEL= 610.70 ENC Q1= 290.44 WSEL= 610.80 RATIO= 0.0000
NAT Q1= 308. RATIOS LOB,CH,ROB= 0.0778 0.7507 0.1715 WSEL= 610.80

3470 ENCROACHMENT STATIONS= 102.8 391.6 TYPE= 4 TARGET= 0.056

VALLEY #58

8740.00	6.27	610.77	0.00	610.70	610.96	0.20	0.56	0.03	609.20

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      960.       49.      768.      143.       65.      195.      177.      133.       39.    608.90
     1.10      0.75      3.94      0.81    0.060     0.035     0.080     0.035   604.50    182.76
0.001133      350.      950.      1000.        2         0         0      0.00   208.82    391.58

FLOW DISTRIBUTION FOR SECNO=   8740.00          CWSEL=    610.77

STA=     133.      231.      272.      392.
  PER Q=     5.1      80.0      14.8
   AREA=    65.3     194.7     176.8
    VEL=     0.3       3.9       0.8

CONV=   0.300 CENV=   0.500
*SECNO 9580.000

3470 ENCROACHMENT STATIONS=     475.0     585.0  TYPE=     1  TARGET=     110.000

        120' D/S MILL-CARLETON

  9580.00      6.56   611.76      0.00   611.68   612.00      0.24      1.01      0.02   612.20
     960.         0.     860.      100.       0.      206.      108.      140.       42.    610.00
     1.16      0.00      4.17      0.92    0.080     0.035     0.080     0.035   605.20    476.98
0.001278      340.      340.      340.        2         0         0      0.00   105.02    585.00

FLOW DISTRIBUTION FOR SECNO=   9580.00          CWSEL=    611.76

STA=     477.      520.      585.
  PER Q=    89.6      10.4
   AREA=   206.4     100.4
    VEL=     4.2       0.9

*SECNO 9700.000
 2000 NAT Q1=    247.26  WSEL=    611.84  ENC Q1=    257.49  WSEL=    611.94  RATIO= -0.0413
 NAT Q1=    257.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    611.94

3470 ENCROACHMENT STATIONS=     322.0     373.0  TYPE=     4  TARGET=       0.000

3695 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     614.20 ELREA=     613.00

        D/S FACE MILL-CARLETON

  9700.00      6.00   611.90      0.00   611.84   612.18      0.28      0.16      0.02   611.80
     960.         0.     960.       0.       0.      228.       0.      141.       42.    611.40
     1.17      0.00      4.21      0.00    0.080     0.035     0.080     0.035   605.90    322.00
0.001445      120.      120.      120.        1         0         0      0.00    51.00    373.00

FLOW DISTRIBUTION FOR SECNO=   9700.00          CWSEL=    611.90

STA=     322.      373.
  PER Q=   100.0
   AREA=   228.0
    VEL=     4.2
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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

N.BR.SUAN CREEK ASH TWP

SUMMARY PRINTOUT TABLE 110

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
1.000	604.95	0.00	605.19	256.02	693.97	2082.04	23.99	0.00	0.00	199.00	244.00	0.00
1.000	604.95	0.00	605.20	201.16	703.78	2096.22	0.00	0.02	42.84	199.00	244.00	244.00
300.000	605.28	0.00	605.30	468.49	346.92	516.32	96.76	0.00	0.00	280.00	320.00	0.00
300.000	605.29	0.01	605.31	323.40	343.11	529.54	87.34	0.03	64.27	280.00	320.00	387.67
1020.000	605.34	0.00	605.38	406.12	333.37	619.65	6.98	0.00	0.00	381.00	422.00	0.00
1020.000	605.35	0.02	605.40	193.19	330.19	629.81	0.00	0.03	228.81	381.00	422.00	422.00
2170.000	605.57	0.00	605.65	475.00	102.48	512.02	345.50	475.00	175.00	289.20	310.80	650.00
2170.000	605.59	0.03	605.68	475.00	103.42	500.28	348.30	475.00	175.00	289.20	310.80	650.00
2320.000	605.62	0.00	605.71	400.00	95.48	509.84	354.68	400.00	240.00	289.20	310.80	640.00
2320.000	605.65	0.03	605.73	400.00	95.63	507.99	356.38	400.00	240.00	289.20	310.80	640.00
2321.000	605.55	0.00	605.70	400.00	0.00	690.39	269.11	400.00	240.00	289.20	310.80	640.00
2321.000	605.58	0.03	605.01	400.00	0.00	682.64	277.36	400.00	240.00	289.20	310.80	640.00
2341.000	605.61	0.00	605.83	400.00	0.00	672.08	287.92	400.00	240.00	289.20	310.80	640.00
2341.000	605.64	0.03	605.85	400.00	0.00	664.63	295.36	400.00	240.00	289.20	310.80	640.00
2342.000	605.81	0.00	605.88	400.00	97.13	488.78	374.10	400.00	240.00	289.20	310.80	640.00
2342.000	605.83	0.02	605.90	400.00	97.27	466.87	375.87	400.00	240.00	289.20	310.80	640.00
2442.000	605.83	0.00	605.92	343.34	211.29	710.59	38.11	0.00	0.00	301.00	341.00	0.00
2442.000	605.85	0.01	605.94	230.10	202.96	737.78	19.26	0.04	122.55	301.00	341.00	352.65
3212.000	606.18	0.00	606.65	27.00	0.00	960.00	0.00	0.00	0.00	187.00	214.00	0.00
3212.000	606.24	0.07	606.71	27.00	0.00	960.00	0.00	0.00	187.00	187.00	214.00	214.00
3213.000	606.18	0.00	606.66	27.00	0.00	960.00	0.00	0.00	0.00	187.00	214.00	0.00
3213.000	606.24	0.07	606.72	27.00	0.00	960.00	0.00	0.00	187.00	187.00	214.00	214.00
3223.000	606.19	0.00	606.67	27.00	0.00	960.00	0.00	0.00	0.00	187.00	214.00	0.00
3223.000	606.26	0.07	606.73	27.00	0.00	960.00	0.00	0.00	187.00	187.00	214.00	214.00
3224.000	606.19	0.00	606.67	27.00	0.00	960.00	0.00	0.00	0.00	187.00	214.00	0.00
3224.000	606.26	0.07	606.73	27.00	0.00	960.00	0.00	0.00	187.00	187.00	214.00	214.00

SECNO	CUSEL	DIFKMS	EG	TOPHID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
3329.000	606.75	0.00	606.84	84.00	99.65	797.17	63.18	84.00	130.00	162.00	198.00	214.00
3329.000	606.80	0.06	606.89	84.00	100.44	796.17	63.40	84.00	130.00	162.00	198.00	214.00
3419.000	606.75	0.00	606.89	38.90	0.00	960.00	0.00	0.00	0.00	0.10	39.00	0.00
3419.000	606.81	0.06	606.95	38.90	0.00	960.00	0.00	0.00	0.10	0.10	39.00	39.00
3739.000	607.16	0.00	607.29	38.90	0.00	960.00	0.00	0.00	0.00	0.10	39.00	0.00
3739.000	607.26	0.10	607.39	38.90	0.00	960.00	0.00	0.00	0.00	0.10	39.00	0.00
3999.000	607.23	0.00	607.50	36.00	0.00	960.00	0.00	0.00	0.00	1.00	37.00	0.00
3999.000	607.34	0.11	607.60	36.00	0.00	960.00	0.00	0.00	1.00	1.00	37.00	37.00
4037.000	607.32	0.00	607.59	36.00	0.00	960.00	0.00	0.00	0.00	1.00	37.00	0.00
4037.000	607.42	0.10	607.68	36.00	0.00	960.00	0.00	0.00	0.00	1.00	37.00	0.00
4087.000	607.58	0.00	607.67	136.00	236.04	586.37	135.09	136.00	152.00	215.00	245.00	288.00
4087.000	607.68	0.09	607.76	136.00	237.89	585.50	136.61	136.00	152.00	215.00	245.00	288.00
5267.000	608.03	0.00	608.06	530.20	252.43	441.40	266.18	0.00	0.00	379.00	418.00	0.00
5267.000	608.10	0.08	608.14	337.33	245.47	456.24	258.29	0.05	233.51	379.00	418.00	570.85
6097.000	608.21	0.00	608.40	272.06	154.76	722.73	82.51	0.00	0.00	225.00	270.00	0.00
6097.000	608.37	0.08	608.49	138.06	146.69	744.76	68.55	0.04	160.76	225.00	270.00	298.82
6447.000	608.50	0.00	608.86	147.83	30.62	910.68	18.70	0.00	0.00	601.00	652.00	0.00
6447.000	608.57	0.07	608.97	55.64	6.28	953.72	0.00	0.05	596.36	601.00	652.00	652.00
7477.000	609.61	0.00	609.72	110.00	38.05	848.93	72.99	110.00	158.00	187.00	233.00	268.00
7477.000	609.71	0.10	609.82	110.00	39.52	845.80	74.68	110.00	158.00	187.00	233.00	268.00
7627.000	609.56	0.00	609.97	34.80	0.00	960.00	0.00	0.00	0.00	147.60	182.40	0.00
7627.000	609.67	0.11	610.07	34.80	0.00	960.00	0.00	0.00	147.60	147.60	182.40	182.40
7690.000	609.72	0.00	610.10	34.80	0.00	960.00	0.00	0.00	0.00	147.60	182.40	0.00
7690.000	609.82	0.12	610.20	34.80	0.00	960.00	0.00	0.00	147.60	147.60	182.40	182.40
7790.000	610.13	0.00	610.27	235.00	3.06	698.52	50.41	235.00	125.00	165.00	240.00	360.00
7790.000	610.29	0.10	610.37	235.00	4.10	691.40	64.51	235.00	125.00	165.00	240.00	360.00
8760.000	610.70	0.00	610.86	342.45	68.59	730.02	153.59	0.00	0.00	231.00	272.00	0.00
8760.000	610.77	0.07	610.96	208.62	49.41	768.07	142.32	0.06	182.76	231.00	272.00	391.58
9580.000	611.68	0.00	611.94	107.87	0.00	864.71	95.29	110.00	475.00	476.00	520.00	585.00
9580.000	611.74	0.07	612.00	108.02	1.00	860.32	99.68	110.00	475.00	476.00	520.00	585.00
9700.000	611.84	0.00	612.12	51.00	0.00	960.00	0.00	0.00	0.00	322.00	373.00	0.00
9700.000	611.90	0.06	612.18	51.00	0.00	960.00	0.00	0.00	322.00	322.00	373.00	373.00

N.BR.SWAN CREEK ASH TWP

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
1.000	0.00	0.00	0.00	592.10	2800.00	604.95	0.00	605.19	5.79	4.54	1345.44	1163.26
1.000	0.00	0.00	0.00	592.10	2800.00	604.95	0.00	605.20	6.63	4.57	1228.47	1087.61
300.000	300.00	0.00	0.00	594.90	960.00	605.28	0.00	605.30	0.79	1.52	1937.82	1081.03
300.000	300.00	0.00	0.00	594.90	960.00	605.29	0.00	605.31	0.83	1.56	1699.57	1056.57
1020.000	720.00	0.00	0.00	595.60	960.00	605.34	0.00	605.38	1.51	1.95	1152.91	782.43
1020.000	720.00	0.00	0.00	595.60	960.00	605.35	0.00	605.40	1.63	1.97	898.04	752.58
2170.000	1150.00	0.00	0.00	597.70	960.00	605.57	0.00	605.65	3.64	3.12	897.60	503.35
2170.000	1150.00	0.00	0.00	597.70	960.00	605.59	0.00	605.68	3.54	3.09	910.93	510.19
2320.000	150.00	0.00	0.00	597.70	960.00	605.62	0.00	605.71	3.52	3.09	876.58	511.98
2320.000	150.00	0.00	0.00	597.70	960.00	605.65	0.00	605.73	3.47	3.07	882.92	515.62
2321.000	1.00	604.20	605.00	597.70	960.00	605.55	0.00	605.78	21.85	4.58	456.62	205.40
2321.000	1.00	604.20	605.00	597.70	960.00	605.58	0.00	605.81	21.33	4.52	464.70	207.88
2341.000	20.00	604.20	605.00	597.70	960.00	605.61	0.00	605.83	20.67	4.45	475.12	211.14
2341.000	20.00	604.20	605.00	597.70	960.00	605.64	0.00	605.85	20.22	4.40	482.52	213.51
2342.000	1.00	0.00	0.00	597.70	960.00	605.81	0.00	605.88	2.98	2.89	951.18	555.93
2342.000	1.00	0.00	0.00	597.70	960.00	605.83	0.00	605.90	2.94	2.87	958.22	560.19
2442.000	100.00	0.00	0.00	597.80	960.00	605.83	0.00	605.92	3.69	2.74	756.02	500.01
2442.000	100.00	0.00	0.00	597.80	960.00	605.85	0.00	605.94	3.93	2.83	643.40	484.09
3212.000	770.00	0.00	0.00	597.60	960.00	606.18	0.00	606.65	18.06	5.56	172.70	225.87
3212.000	770.00	0.00	0.00	597.60	960.00	606.24	0.00	606.71	20.25	5.50	174.59	213.34
3213.000	1.00	606.70	606.50	597.60	960.00	606.18	0.00	606.66	9.24	5.56	172.56	315.78
3213.000	1.00	606.70	606.50	597.60	960.00	606.24	0.00	606.72	10.39	5.51	174.31	297.88
3223.000	10.00	606.70	606.50	597.60	960.00	606.19	0.00	606.67	9.18	5.55	172.93	316.81
3223.000	10.00	606.70	606.30	597.60	960.00	606.26	0.00	606.73	10.35	5.50	174.54	298.45
3224.000	1.00	0.00	0.00	597.60	960.00	606.19	0.00	606.67	17.94	5.55	173.08	226.62
3224.000	1.00	0.00	0.00	597.60	960.00	606.26	0.00	606.73	20.13	5.49	174.95	213.96
3329.000	105.00	0.00	0.00	597.80	960.00	606.75	0.00	606.84	2.22	2.62	528.25	643.91
3329.000	105.00	0.00	0.01	597.80	960.00	606.80	0.00	606.89	2.17	2.60	533.27	652.35
3419.000	90.00	0.00	0.00	598.00	960.00	606.75	0.00	606.89	3.95	3.02	317.93	482.86
3419.000	90.00	0.00	0.00	598.00	960.00	606.81	0.00	606.95	4.87	3.00	320.34	435.21
3739.000	320.00	639.80	636.70	598.00	960.00	607.16	0.00	607.29	3.39	2.87	334.20	521.67
3739.000	320.00	639.80	636.70	598.00	960.00	607.26	0.00	607.39	3.27	2.84	338.09	531.07
3999.000	260.00	0.00	0.00	599.00	960.00	607.23	0.00	607.50	9.76	4.18	229.45	307.29
3999.000	260.00	0.00	0.00	599.00	960.00	607.34	0.00	607.60	11.55	4.11	233.38	282.51
4037.000	38.00	614.70	609.70	599.00	960.00	607.32	0.00	607.59	9.34	4.13	232.71	314.16
4037.000	38.00	614.70	609.70	599.00	960.00	607.42	0.00	607.68	8.90	4.06	236.32	321.79

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CUSEL	CRIUS	EG	10K*S	VCH	AREA	.01K
4087.000	50.00	0.00	0.00	599.60	960.00	607.58	0.00	607.67	3.94	2.93	618.96	483.47
4087.000	50.00	0.00	0.00	599.60	960.00	607.58	0.00	607.76	3.72	2.88	631.71	497.67
5267.000	1180.00	0.00	0.00	600.30	960.00	608.03	0.00	608.06	2.75	2.11	1207.19	579.06
5267.000	1180.00	0.00	0.00	600.30	960.00	608.10	0.00	608.14	2.79	2.15	1040.07	574.39
6097.000	830.00	0.00	0.00	601.20	960.00	608.28	0.00	608.40	6.02	3.09	607.19	391.22
6097.000	830.00	0.00	0.00	601.20	960.00	608.37	0.00	608.49	6.10	3.14	486.84	388.67
6447.000	350.00	0.00	0.00	601.60	960.00	608.50	0.00	608.86	26.87	4.97	249.39	185.20
6447.000	350.00	0.00	0.00	601.60	960.00	608.57	0.00	608.97	20.69	5.10	193.30	179.24
7477.000	1030.00	0.00	0.00	602.70	960.00	609.61	0.00	609.72	3.50	2.80	464.87	512.81
7477.000	1030.00	0.00	0.00	602.70	960.00	609.71	0.00	609.82	3.30	2.74	476.26	528.26
7627.000	150.00	0.00	0.00	603.00	960.00	609.56	0.00	609.97	19.63	5.19	185.00	216.70
7627.000	150.00	0.00	0.00	603.90	960.00	609.67	0.00	610.07	21.54	5.09	188.80	206.84
7690.000	63.00	611.80	610.50	603.90	960.00	609.70	0.00	610.10	18.11	5.06	189.79	225.60
7690.000	63.00	611.80	610.50	603.90	960.00	609.82	0.00	610.20	19.96	4.96	193.68	214.87
7790.000	100.00	0.00	0.00	604.00	960.00	610.18	0.00	610.27	3.95	2.43	523.76	482.79
7790.000	100.00	0.00	0.00	604.00	960.00	610.29	0.00	610.37	3.63	2.36	548.66	504.21
8740.000	950.00	0.00	0.00	604.50	960.00	610.70	0.00	610.88	10.93	3.84	519.23	290.44
8740.000	950.00	0.00	0.00	604.50	960.00	610.77	0.00	610.95	11.33	3.94	436.95	295.26
9580.000	840.00	0.00	0.00	605.20	960.00	611.68	0.00	611.94	13.50	4.25	307.08	261.24
9580.000	840.00	0.00	0.00	605.20	960.00	611.76	0.00	612.00	12.78	4.17	314.83	268.55
9700.000	120.00	0.00	0.00	605.90	960.00	611.84	0.00	612.12	15.07	4.29	224.01	247.28
9700.000	120.00	0.00	0.00	605.90	960.00	611.90	0.00	612.18	14.45	4.21	226.05	252.52

N.BR.SHAN CREEK ASH TYP

SUMMARY PRINTOUT TABLE 150

SECTO	Q	CHSEL	DIFXSP	DIFXSX	DIFKMS	TOPWID	XLCH
1.000	2800.00	604.95	0.00	0.00	0.00	256.02	0.00
1.000	2800.00	604.95	0.00	0.00	0.00	201.16	0.00
300.000	960.00	605.28	0.00	0.33	0.00	468.49	300.00
300.000	960.00	605.29	0.00	0.34	0.01	323.40	300.00
1020.000	960.00	605.34	0.00	0.06	0.00	404.12	720.00
1020.000	960.00	605.35	0.00	0.06	0.02	193.19	720.00
2170.000	960.00	605.57	0.00	0.23	0.00	475.00	1150.00
2170.000	960.00	605.59	0.00	0.24	0.03	475.00	1150.00
2320.000	960.00	605.62	0.00	0.06	0.00	400.00	150.00
2320.000	960.00	605.65	0.00	0.06	0.03	400.00	150.00
2321.000	960.00	605.55	0.00	-0.04	0.00	400.00	1.00
2321.000	960.00	605.58	0.00	-0.07	0.03	400.00	1.00
2341.000	960.00	605.61	0.00	0.07	0.00	400.00	20.00
2341.000	960.00	605.64	0.00	0.06	0.03	400.00	20.00
2342.000	960.00	605.81	0.00	0.20	0.00	400.00	1.00
2342.000	960.00	605.83	0.00	0.19	0.02	400.00	1.00
2442.000	960.00	605.83	0.00	0.02	0.00	343.34	100.00
2442.000	960.00	605.85	0.00	0.02	0.01	230.10	100.00
3212.000	960.00	606.18	0.00	0.54	0.00	27.00	770.00
3212.000	960.00	606.24	0.00	0.60	0.07	27.00	770.00
3213.000	960.00	606.18	0.00	0.00	0.00	27.00	1.00
3213.000	960.00	606.24	0.00	0.00	0.07	27.00	1.00
3223.000	960.00	606.19	0.00	0.01	0.00	27.00	10.00
3223.000	960.00	606.26	0.00	0.01	0.07	27.00	10.00
3224.000	960.00	606.19	0.00	0.00	0.00	27.00	1.00
3224.000	960.00	606.26	0.00	0.00	0.07	27.00	1.00
3329.000	960.00	606.75	0.00	0.56	0.00	64.00	105.00
3329.000	960.00	606.80	0.00	0.54	0.06	84.00	105.00
3419.000	960.00	606.75	0.00	0.00	0.00	38.90	90.00
3419.000	960.00	606.81	0.00	0.00	0.06	38.90	90.00
3739.000	960.00	607.16	0.00	0.42	0.00	38.90	320.00
3739.000	960.00	607.26	0.00	0.46	0.10	38.90	320.00
3999.000	960.00	607.23	0.00	0.07	0.00	36.00	260.00
3999.000	960.00	607.34	0.00	0.08	0.11	36.00	260.00
4037.000	960.00	607.32	0.00	0.09	0.00	36.00	38.00
4037.000	960.00	607.42	0.00	0.08	0.10	36.00	38.00

SECNO	Q	CWSEL	DIFUSP	DIFUSX	DIFKWS	TOPWID	XLCH
4087.000	960.00	607.58	0.00	0.26	0.00	136.00	50.00
4087.000	960.00	607.68	0.00	0.25	0.09	136.00	50.00
5267.000	960.00	609.03	0.00	0.44	0.00	530.20	1180.00
5267.000	960.00	608.10	0.00	0.43	0.08	337.33	1180.00
6097.000	960.00	608.28	0.00	0.26	0.00	272.06	830.00
6097.000	960.00	608.37	0.00	0.26	0.09	138.06	830.00
6447.000	960.00	608.50	0.00	0.21	0.00	167.63	350.00
6447.000	960.00	608.57	0.00	0.20	0.07	55.64	350.00
7477.000	960.00	609.61	0.00	1.11	0.00	110.00	1030.00
7477.000	960.00	609.71	0.00	1.14	0.10	110.00	1030.00
7627.000	960.00	609.56	0.00	-0.05	0.00	34.80	150.00
7627.000	960.00	609.67	0.00	-0.05	0.11	34.80	150.00
7690.000	960.00	609.70	0.00	0.15	0.00	34.80	63.00
7690.000	960.00	609.82	0.00	0.16	0.12	34.80	63.00
7790.000	960.00	610.18	0.00	0.48	0.00	235.00	100.00
7790.000	960.00	610.29	0.00	0.46	0.10	235.00	100.00
8740.000	960.00	610.70	0.00	0.52	0.00	342.45	950.00
8740.000	960.00	610.77	0.00	0.43	0.07	208.32	950.00
9580.000	960.00	611.68	0.00	0.98	0.00	107.87	840.00
9580.000	960.00	611.76	0.00	0.99	0.07	108.02	840.00
9700.000	960.00	611.84	0.00	0.16	0.00	51.00	120.00
9700.000	960.00	611.90	0.00	0.15	0.06	51.00	120.00

SUMMARY OF ERRORS

FLOODWAY DATA, N.BR.SWAN CREEK ASH TWP
PROFILE NO. 2

STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1.000	201.	1226.	2.3	604.9	605.0	0.0
300.000	323.	1700.	0.6	605.3	605.3	0.0
1020.000	193.	398.	1.1	605.3	605.3	0.0
2170.000	475.	911.	1.1	605.6	605.6	0.0
2320.000	400.	883.	1.1	605.6	605.6	0.0
2321.000	400.	465.	2.1	605.5	605.5	0.0
2341.000	400.	403.	2.0	605.6	605.6	0.0
2342.000	400.	558.	1.0	605.8	605.8	0.0
2442.000	230.	643.	1.5	605.8	605.8	0.0
3212.000	27.	175.	5.5	606.3	606.2	0.1
3213.000	27.	174.	5.5	606.3	606.2	0.1
3223.000	27.	175.	5.5	606.3	606.2	0.1
3224.000	27.	175.	5.5	606.3	606.2	0.1
3329.000	84.	533.	1.8	606.8	606.7	0.1
3419.000	59.	320.	3.0	606.8	606.7	0.1
3739.000	39.	338.	2.8	607.3	607.2	0.1
3999.000	56.	233.	4.1	607.3	607.2	0.1
4037.000	36.	236.	4.1	607.4	607.3	0.1
4087.000	136.	692.	1.5	607.7	607.6	0.1
5267.000	337.	1040.	0.9	608.1	608.0	0.1
6097.000	158.	487.	2.0	608.4	608.3	0.1
6447.000	56.	193.	5.0	608.6	608.5	0.1
7477.000	110.	476.	2.0	609.7	609.6	0.1
7627.000	35.	109.	5.1	609.7	609.6	0.1
7695.000	55.	194.	5.0	609.8	609.7	0.1
7790.000	235.	549.	1.7	610.3	610.2	0.1
8740.000	209.	437.	2.2	610.8	610.7	0.1
9580.000	108.	315.	3.0	611.8	611.7	0.1
9700.000	51.	228.	4.2	611.9	611.8	0.1

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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*                                                            *
*                  E R R O R   S U M M A R Y                 *
*                                                            *
*                                                            *
*      0  ERROR(S) DETECTED BY THE USER PROGRAM              *
*      0  ERROR(S) DETECTED BY THE MATHEMATICAL PACKAGE      *
*      0  ERROR(S) DETECTED FOR INPUT/OUPUT STATEMENTS       *
*                                                            *
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Ash Township

3) WATERCOURSE: Swan Creek + N. Br. Swan Creek

4) DOCUMENT TYPE: 100 yr.

00BREAK00

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  31
  MODIFICATION -  50,51,52
**************************************************


C
T1 ASH TOWNSHIP F.I.S. HUD 2020-07 SWAN CREEK
T2 100 YR
T3       SWAN CR.ASH TWP.

J1   ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       0.         4.         0.         0.   0.000280       0.00       0.0         0.     590.000      0.000

J2   NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     1.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000     15.000

J3   VARIABLE CODES FOR SUMMARY PRINTOUT

    110.000    150.000    200.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

ET       0.000        0.000        0.000        0.000        1.410        0.000        0.000        0.000        0.000        0.000
QT       5.000     2000.000     3070.000     3470.000     3470.000     4230.000        0.000        0.000        0.000        0.000
NC       0.100        0.100        0.035        0.300        0.500        0.000        0.000        0.000        0.000        0.000
ET       0.000        7.100        0.000        0.000        0.000        0.000      125.000      938.000        0.000        0.000

         100' D/S LABO RD.

X1       5.000       12.000      100.000      142.000        0.000        0.000        0.000        0.000        0.000        0.000
GR     595.000        0.000      590.000       50.000      585.000       60.000      584.900      100.000      580.900      107.000
GR     580.500      120.000      580.900      133.000      585.600      142.000      585.000      240.000      585.000      600.000
GR     590.000     1200.000      595.000     1350.000        0.000        0.000        0.000        0.000        0.000        0.000
ET       0.000        7.100        0.000        0.000        0.000        0.000      665.000     1465.000        0.000        0.000

         D/S FACE LABO RD.

X1       6.000       18.000      658.000      742.000      100.000      100.000      100.000        0.000        0.000        0.000
X3      10.000        0.000        0.000        0.000        0.000        0.000        0.000      591.000      586.500        0.000
GR     595.000        0.000      595.000      100.000      591.800      600.000      589.700      643.000      586.300      658.000
GR     586.300      651.100      581.300      680.000      580.700      700.000      581.400      710.000      583.400      741.900
GR     583.400      742.000      589.000      800.000      589.000      800.000      586.300     1000.000      586.800     1100.000
GR     587.400     1200.000      590.000     1800.000      595.000     2050.000        0.000        0.000        0.000        0.000
NC       0.000        0.000        0.020        0.000        0.000        0.000        0.000        0.000        0.000        0.000
ET       0.000        7.100        0.000        0.000        0.000        0.000      665.000     1465.000        0.000        0.000
ET       0.000        0.000        0.000        0.000        7.100        0.000      637.000     1354.000        0.000        0.000

X1       7.000        0.000        0.000        0.000        1.000        1.000        1.000        0.000        0.000        0.000
X3      10.000        0.000        0.000        0.000        0.000        0.000        0.000      591.000      586.500        0.000
BT      12.000        0.000      595.000        0.000      600.000      591.800        0.000      658.000      591.000      586.300
BT     658.100      591.000      590.000      741.900      591.000      590.000      742.000      591.000      583.400      800.000
BT     589.000        0.000     1000.000      586.300        0.000     1100.000      586.800        0.000     1200.000      587.400
BT       0.000     1800.000      590.000        0.000     2050.000      595.000        0.000        0.000        0.000        0.000
ET       0.000        7.100        0.000        0.000        0.000        0.000      665.000     1465.000        0.000        0.000
ET       0.000        0.000        0.000        0.000        7.100        0.000      657.000     1375.000        0.000        0.000
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X1	17.000	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	586.500	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	665.000	1465.000	0.000	0.000

U/S FACE LABO RD.

X1	18.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	586.500	0.000
ET	0.000	7.100	0.000	0.000	0.000	9.100	710.000	1570.000	578.000	1850.000

50' U/S LABO RD.

X1	60.000	11.000	770.000	812.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	665.000	585.000	715.000	584.900	770.000	580.900	777.000
GR	580.500	790.000	580.900	803.000	585.600	812.000	585.000	1050.000	590.000	1850.000
GR	595.000	2140.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.120	0.080	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #3

X1	1430.000	10.000	692.000	738.000	1200.000	1450.000	1370.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	330.000	585.000	470.000	585.300	692.000	581.200	701.000
GR	580.300	715.000	580.700	729.000	586.300	738.000	590.000	930.000	595.000	1490.000
NC	0.080	0.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #4

X1	2890.000	9.000	1435.000	1460.000	1200.000	1460.000	1460.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	720.000	585.000	1400.000	584.500	1435.000	581.700	1444.000
GR	581.300	1450.000	581.500	1456.000	584.000	1468.000	595.400	1498.000	0.000	0.000
NC	0.120	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #5

X1	3768.000	10.000	990.000	1032.000	350.000	950.000	870.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	825.000	587.200	990.000	582.200	1000.000	580.700	1010.000
GR	582.700	1020.000	586.500	1032.000	585.000	1250.000	590.000	1280.000	595.000	1400.000
NC	0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #6

X1	5158.000	8.000	93.000	156.000	1200.000	1390.000	1390.000	0.000	0.000	0.000
GR	595.000	0.000	595.200	95.000	584.100	114.000	582.100	125.000	583.900	136.000
GR	587.200	156.000	590.700	660.000	595.000	820.000	0.000	0.000	0.000	0.000
NC	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #7 D/S CONFLUENCE WITH GRUNDMAN DRAIN

X1	6310.000	8.000	455.000	517.000	1000.000	1160.000	1160.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	85.000	587.600	455.000	583.600	463.000	581.900	480.000
GR	583.800	497.000	592.200	517.000	595.000	550.000	0.000	0.000	0.000	0.000

VALLEY #3

X1	7818.000	9.000	430.000	470.000	1300.000	1730.000	1500.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	140.000	589.400	430.000	584.500	437.000	582.600	450.000
GR	583.600	464.000	587.800	470.000	590.000	510.000	595.000	540.000	0.000	0.000
NC	0.080	0.080	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

120' D/S SIGLER

X1	8716.000	9.000	589.000	651.000	900.000	900.000	900.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	538.000	0.000	701.000	0.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	40.000	589.700	589.000	583.400	605.000	582.300	620.000
GR	583.000	635.000	589.000	651.000	590.000	700.000	595.000	1070.000	0.000	0.000
NH	8.000	0.070	53.800	0.020	70.000	0.035	78.500	1.000	92.300	0.035
NH	118.500	1.000	132.300	0.020	157.000	0.070	200.000	0.000	0.000	0.000

D/S FACE SIGLER (SKEWED)

X1	8838.000	17.000	53.800	157.000	120.000	120.000	120.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.000	596.000	0.000
GR	596.200	0.000	590.000	53.800	590.000	53.900	584.900	70.000	582.400	78.500
GR	582.400	78.600	582.400	92.200	582.400	92.300	583.000	100.000	583.400	118.500
GR	583.400	118.600	583.400	132.200	583.400	132.300	592.000	151.000	592.000	156.900
GR	592.000	157.000	597.500	200.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.070	0.070	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	8839.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.000	596.000	0.000
BT	14.000	0.000	596.200	0.000	53.800	597.300	590.000	53.900	598.800	594.800
BT	78.500	598.800	594.800	78.600	598.800	582.400	92.200	598.800	582.400	92.300
BT	598.800	594.800	118.300	598.800	594.800	118.600	598.300	583.400	132.200	598.800
BT	593.400	132.300	598.800	594.800	156.900	598.800	594.800	157.000	597.300	592.000
BT	200.000	597.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	8882.000	0.000	0.000	0.000	43.000	43.000	43.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.200	597.300	0.000
NH	0.000	0.070	53.800	0.020	70.000	0.035	78.500	1.000	92.300	0.035
NH	118.500	1.000	132.300	0.020	157.000	0.070	200.000	0.000	0.000	0.000

U/S FACE SIGLER (SKEWED)

X1	8883.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.200	597.300	0.000
NC	0.100	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

90' U/S SIGLER

X1	8973.000	10.000	369.000	431.000	80.000	100.000	90.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	259.000	0.000	542.000	0.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	40.000	590.000	280.000	589.700	369.000	584.200	385.000
GR	583.100	400.000	583.800	415.000	589.000	431.000	590.000	455.000	596.700	610.000
NC	0.120	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #11

X1	10098.000	11.000	612.000	651.000	1125.000	1125.000	1125.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	250.000	590.000	300.000	589.800	612.000	585.000	620.000
GR	584.000	630.000	584.300	640.000	591.300	651.000	590.000	695.000	595.000	725.000
GR	598.000	765.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.120	0.120	0.035	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #12 D/S CONFLUENCE WITH LITTLE SWAN CR.

X1	11118.000	11.000	733.000	768.000	1000.000	900.000	1020.000	0.000	0.000	0.000
GR	598.000	0.000	595.000	250.000	590.000	315.000	590.300	733.000	586.500	739.000
GR	585.200	750.000	585.600	761.000	590.000	768.000	590.000	810.000	595.000	970.000
GR	598.000	1070.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	1670.000	2575.000	2910.000	2910.000	3555.000	0.000	0.000	0.000	0.000

140' D/S TELEGRAPH

X1	12620.000	10.000	606.000	671.000	1500.000	1500.000	1502.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	562.250	0.000	714.750	0.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	100.000	590.000	300.000	590.700	606.000	587.800	623.000
GR	585.900	640.000	585.800	657.000	591.600	671.000	595.000	940.000	597.500	1040.000
NH	5.000	0.080	383.300	0.035	424.600	1.000	441.000	0.035	465.800	0.080
NH	755.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D/S FACE TELEGRAPH SKEWED

X1	12760.000	17.000	383.300	465.800	140.000	140.000	140.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	599.000	599.000	0.000
GR	605.000	0.000	598.100	1.000	598.200	50.000	599.000	335.500	599.000	383.300
GR	590.700	383.400	586.500	414.600	585.100	424.600	585.100	424.700	586.800	441.000
GR	586.800	441.100	592.000	465.700	599.000	465.800	599.000	503.000	599.000	542.000
GR	599.000	543.000	605.000	544.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.730	3.000	0.000	55.660	16.500	325.000	0.000	505.100	585.100
NC	0.100	0.100	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE TELEGRAPH SKEWED

X1	12817.000	0.000	0.000	0.000	57.000	57.000	57.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	593.400	598.100	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	599.300	599.300	0.000
BT	14.000	0.000	605.000	0.000	1.000	598.100	0.000	335.500	599.100	0.000
BT	383.300	599.700	590.700	383.400	601.200	593.400	424.600	601.200	593.400	424.700
BT	601.200	585.100	441.000	601.200	586.800	441.100	601.200	593.400	465.700	601.200
BT	593.400	465.200	599.700	592.000	503.000	599.300	0.000	543.000	599.000	0.000
BT	544.000	605.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.100	0.100	0.035	0.300	0.500	0.000	0.000	0.000	0.000	0.000

270' U/S TELEGRAPH

X1	13087.000	10.000	236.000	379.000	140.000	330.000	270.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	125.000	590.700	286.000	587.800	303.000	585.200	320.000
GR	585.800	337.000	587.300	346.000	591.300	349.000	595.000	570.000	600.000	650.000

100' D/S D'WAY BRIDGE #15A

X1	14167.000	9.000	335.000	367.000	1000.000	1000.000	1080.000	0.000	0.000	0.000
GR	600.000	0.000	599.600	252.000	591.300	335.000	587.000	346.000	585.800	355.000
GR	587.300	364.000	591.300	367.000	595.000	400.000	599.000	800.000	0.000	0.000

D/S FACE D'WAY BRIDGE #15A

X1	14267.000	12.000	116.000	134.000	75.000	110.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	590.700	590.700	0.000
GR	600.100	0.000	599.600	30.000	591.500	101.000	591.000	112.000	586.600	116.000
GR	586.600	116.100	586.300	125.000	586.900	133.900	586.900	134.000	591.100	138.000
GR	595.000	200.000	599.200	600.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	14268.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	590.700	590.700	0.000
BT	10.000	0.000	600.100	0.000	30.000	599.800	0.000	101.000	591.500	0.000
BT	116.000	591.000	586.600	116.100	591.000	590.300	133.900	591.000	590.300	134.000
BT	591.000	586.900	138.000	591.100	0.000	200.000	595.000	0.000	600.000	598.000
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	14281.000	0.000	0.000	0.000	13.000	13.000	13.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	591.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE D'WAY BRIDGE #15A

X1	14282.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	591.000	591.000	0.000

50' U/S D'WAY BRIDGE #15A

X1	14332.000	9.000	335.000	367.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	601.000	0.000	599.600	252.000	591.300	335.000	587.000	346.000	585.800	355.000
GR	587.300	364.000	591.300	367.000	595.000	400.000	599.200	800.000	0.000	0.000
ET	0.000	7.100	0.000	9.100	9.100	0.000	222.000	360.000	45.000	425.000

100' D/S D'WAY BRIDGE #16

X1	15592.000	29.000	314.000	402.000	1260.000	1260.000	1260.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	1.000	595.000	50.000	591.500	80.000	591.500	200.000
GR	591.500	314.000	591.500	314.100	591.500	329.500	591.500	329.600	591.500	330.000
GR	591.500	330.100	591.500	350.500	591.500	350.600	591.500	351.000	591.500	351.100
GR	591.500	369.000	591.500	369.100	591.500	374.000	591.500	374.100	588.100	385.000
GR	586.900	390.000	587.200	395.000	591.500	402.000	591.500	402.100	595.700	409.000
GR	597.500	425.000	599.600	500.000	600.000	550.000	605.000	551.000	0.000	0.000
ET	0.000	7.100	0.000	9.100	9.100	0.000	314.000	402.000	45.000	425.000

D/S FACE D'WAY BRIDGE #16 SKEWED

X1	15692.000	0.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.500	597.500	0.000
SB	0.000	1.600	3.000	0.000	43.500	0.000	383.000	0.000	586.900	586.900
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	9.100	9.100	0.000	314.000	402.000	45.000	425.000

U/S FACE D'WAY BRIDGE #16 SKEWED

X1	15704.000	0.000	0.000	0.000	12.000	12.000	12.000	0.000	0.000	0.000

X2	0.000	0.000	1.000	595.700	597.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.500	597.500	0.000
BT	24.000	0.000	605.000	0.000	1.000	600.000	0.000	50.000	597.500	0.000
BT	314.000	597.500	0.000	314.100	597.500	595.700	329.500	597.500	595.700	329.600
BT	597.600	591.500	330.000	597.500	591.500	330.100	597.500	595.700	350.500	597.500
BT	595.700	350.600	597.500	591.500	351.000	597.500	591.500	351.100	597.500	595.700
BT	369.000	597.500	595.700	369.100	597.500	591.500	374.000	597.500	591.500	374.100
BT	597.500	595.700	402.000	597.500	595.700	402.100	597.500	0.000	409.000	597.500
BT	0.000	425.000	597.500	0.000	500.000	598.600	0.000	550.000	600.000	0.000
BT	551.000	605.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	9.100	9.100	0.000	222.000	410.000	45.000	425.000

50' U/S D'WAY BRIDGE #16

X1	15754.000	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
NC	0.020	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #18

X1	16374.000	8.000	1.000	47.000	750.000	600.000	620.000	0.000	0.000	0.000
GR	600.400	0.000	600.400	1.000	588.300	24.000	587.800	33.000	588.500	42.000
GR	591.300	47.000	595.000	350.000	600.000	480.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

170' D/S READY RD.

X1	17384.000	9.000	589.000	630.000	800.000	1000.000	1010.000	0.000	0.000	0.000
GR	600.200	0.000	595.000	50.000	592.900	589.000	588.800	601.000	588.000	610.000
GR	588.300	619.000	592.100	630.000	595.000	690.000	600.200	720.000	0.000	0.000
NC	0.070	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D/S FACE READY RD. SKEWED

X1	17554.000	20.000	398.600	480.800	150.000	210.000	170.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
GR	600.000	0.000	597.700	0.000	596.600	88.000	596.500	265.000	597.300	353.000
GR	595.000	391.600	589.500	398.600	589.500	398.700	588.700	430.800	588.700	430.900
GR	588.700	448.500	588.700	448.600	588.700	474.000	589.600	480.700	589.600	480.800
GR	595.000	491.400	597.500	530.000	597.500	705.000	597.500	706.000	605.000	706.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	17555.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
BT	16.000	0.000	605.000	0.000	0.000	597.700	0.000	88.000	596.600	0.000
BT	265.000	596.500	0.000	353.000	597.300	0.000	398.600	597.800	589.500	398.700
BT	597.800	595.100	430.800	597.800	595.100	430.900	597.800	588.700	448.500	597.800
BT	588.700	448.600	597.800	595.100	480.700	597.800	595.100	480.800	597.800	589.600
ET	530.000	597.500	0.000	706.000	597.400	0.000	706.000	605.000	0.000	0.000

X1	17581.000	0.000	0.000	0.000	26.000	26.000	26.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE READY RD.SKEWED

X1	17582.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.500	597.400	0.000
ET	0.000	0.000	0.000	0.000	7.100	0.000	139.000	867.000	0.000	0.000

50' U/S JEADY RD.

X1	17632.000	0.000	369.000	410.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	601.000	0.000	595.000	100.000	592.900	369.000	589.000	381.000	508.800	390.000
GR	589.000	399.000	592.100	410.000	595.000	670.000	601.000	780.000	0.000	0.000
NC	0.100	0.120	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #21

X1	19032.000	7.000	432.000	471.000	1500.000	1200.000	1400.000	0.000	0.000	0.000
X4	1.000	600.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	602.000	0.000	595.000	35.000	593.500	432.000	590.000	438.000	590.000	450.000
GR	589.900	462.000	601.000	471.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #22

X1	20462.000	11.000	316.000	347.000	1430.000	1430.000	1430.000	0.000	0.000	0.000
GR	602.000	0.000	600.000	50.000	595.000	80.000	592.600	316.000	590.800	319.000
GR	590.300	330.000	590.000	341.000	593.800	347.000	595.000	500.000	600.000	630.000
GR	601.000	635.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.080	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	75.000	392.000	0.000	0.000

200' D/S SHEITZER RD.

X1	22092.000	11.000	128.000	151.000	1630.000	1630.000	1630.000	0.000	0.000	0.000
GR	602.000	0.000	600.000	40.000	595.000	90.000	592.700	128.000	591.400	134.000
GR	590.400	140.000	591.400	146.000	593.800	151.000	595.000	320.000	600.000	440.000
GR	603.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE SHEITZER RD. SKEWED

X1	22292.000	14.000	192.000	279.000	240.000	160.000	200.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
GR	605.000	0.000	598.600	1.000	600.100	185.000	593.800	192.000	593.800	192.100
GR	593.400	220.000	591.600	225.000	591.100	230.000	591.600	278.900	591.600	279.000
GR	600.000	286.000	598.300	350.000	598.500	380.000	605.000	381.000	0.000	0.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	22293.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
ST	11.000	0.000	605.000	0.000	1.000	598.600	0.000	185.000	600.100	0.000
ST	192.000	600.100	593.800	192.100	600.100	598.100	278.900	600.100	598.100	279.000
ST	600.100	591.600	286.000	600.000	0.000	350.000	598.300	0.000	380.000	598.500
ST	0.000	301.000	605.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	22309.000	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000

NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE SHEITZER RD. SKEWED

X1	22310.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.600	598.300	0.000
NC	0.070	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	265.000	690.000	0.000	0.000

100' U/S SHEITZER RD.

X1	22410.000	11.000	468.000	491.000	70.000	130.000	100.000	0.000	0.000	0.000
GR	606.000	0.000	600.000	230.000	595.000	410.000	593.000	468.000	591.400	474.000
GR	591.200	480.000	591.400	486.000	594.000	491.000	595.000	650.000	600.000	710.000
GR	605.000	750.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

VALLEY #25

X1	23160.000	10.000	773.000	814.000	750.000	750.000	750.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	270.000	595.000	430.000	595.000	773.000	592.500	786.000
GR	591.600	795.000	592.000	804.000	595.400	814.000	600.000	845.000	603.000	1045.000
NC	0.120	0.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #26 D/S CONFLUENCE WITH MIDDLE CR.

X1	24540.000	10.000	340.000	386.000	1380.000	1380.000	1380.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	250.000	595.500	340.000	591.800	354.000	591.300	365.000
GR	592.600	376.000	596.000	386.000	595.000	550.000	600.000	820.000	603.000	1000.000
NC	0.000	0.000	0.035	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	500.000	703.000	0.000	0.000

230' D/S CARLETON-ROCKWOOD RD.

X1	26060.000	11.000	613.000	683.000	1300.000	1520.000	1520.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	30.000	595.000	170.000	595.000	210.000	596.700	613.000
GR	593.300	635.000	592.100	650.000	593.100	665.000	597.200	683.000	597.500	693.000
GR	605.600	733.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	9.000	0.080	495.600	0.025	502.000	0.035	517.700	1.000	527.400	0.035
NH	551.800	1.000	561.500	0.035	568.000	0.025	586.500	0.080	701.000	0.000
ET	0.000	7.100	0.000	0.000	9.100	0.000	495.600	586.500	1.000	586.000

D/S FACE CARLETON-ROCKWOOD RD.

X1	26290.000	22.000	495.600	586.500	170.000	250.000	230.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.100	603.900	0.000
GR	610.000	0.000	600.000	1.000	600.000	450.000	600.000	485.000	598.500	495.600
GR	598.500	495.700	593.500	502.000	591.700	517.700	591.700	517.800	591.700	527.300
GR	591.700	527.400	591.500	536.000	591.900	551.600	591.900	551.900	591.900	561.400
GR	591.900	561.500	593.100	568.000	598.900	586.400	598.900	586.500	602.000	596.000
GR	603.200	700.000	610.000	701.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.950	1.500	3.000	0.000	78.200	19.400	606.000	0.000	591.500	591.500
NC	0.080	0.000	0.035	0.300	0.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	495.600	586.500	0.000	0.000

U/S FACE CARLETON-ROCKWOOD RD.

X1	26325.000	0.000	0.000	0.000	35.000	35.000	35.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	601.800	600.100	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.100	603.900	0.000
BT	19.000	0.000	610.000	0.000	1.000	300.100	0.000	450.000	603.200	0.000
BT	485.000	604.300	0.000	495.600	504.300	598.500	495.700	605.800	601.800	517.700
BT	605.600	601.800	517.800	605.800	591.700	527.300	605.800	591.700	527.400	605.800
BT	601.800	551.800	605.800	601.800	551.900	605.800	591.900	561.400	605.800	591.900
BT	561.500	605.800	601.800	536.400	605.800	601.800	586.500	604.300	598.900	596.000
BT	604.300	0.000	700.000	604.400	0.000	701.000	610.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	1.410	0.000	250.000	640.000	0.000	0.000

VALLEY #29

X1	26475.000	9.000	535.000	563.000	150.000	130.000	150.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	65.000	596.900	335.000	593.200	540.000	592.400	550.000
GR	592.900	560.000	597.000	563.000	600.000	700.000	605.000	760.000	0.000	0.000

VALLEY #30

X1	27015.000	9.000	91.000	115.000	540.000	540.000	540.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	35.000	597.300	91.000	593.400	95.000	592.400	100.000
GR	592.900	105.000	596.500	115.000	600.000	600.000	603.000	1000.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

100' D/S DETROIT,TOLEDO&IRONTON R.R.

X1	29305.000	9.000	73.000	123.000	2500.000	2290.000	2290.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	43.000	0.000	153.000	0.000	0.000	0.000	0.000
GR	605.000	0.000	600.000	30.000	599.500	75.000	594.100	85.000	593.000	100.000
GR	594.400	115.000	597.200	123.000	600.000	240.000	611.100	260.000	0.000	0.000

D/S FACE DETROIT,TOLEDO&IRONTON R.R.

X1	29405.000	12.000	1.000	61.000	120.000	70.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
GR	611.300	0.900	595.200	1.000	595.200	1.100	593.600	15.000	594.900	29.000
GR	594.900	29.100	594.900	32.900	594.900	33.000	595.700	52.000	595.800	60.900
GR	595.800	61.000	611.300	61.100	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	29406.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
BT	10.000	0.900	611.300	0.000	1.000	611.300	595.200	1.100	611.300	605.300
BT	29.000	611.300	605.300	29.100	611.300	596.900	32.900	611.300	594.900	33.000
BT	611.300	605.300	60.900	611.300	605.300	61.000	611.300	595.800	61.100	611.300
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	29442.000	0.000	0.000	0.000	36.000	36.000	36.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.300	611.300	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE DETROIT,TOLEDO&IRONTON R.R.

X1	29443.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000

X3	10.000	0.000	0.300	0.000	0.000	0.000	0.000	611.300	611.300	0.000
NC	0.100	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

50' U/S DETROIT&TOLEDO IRONTON R.R

X1	29493.000	0.000	27.000	77.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	1.000	0.000	132.000	0.000	0.000	0.000	0.000
GR	603.400	0.000	599.500	27.000	594.100	39.000	592.900	54.000	594.400	69.000
GR	597.800	77.000	600.000	750.000	605.000	1200.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #33

X1	30013.000	12.000	546.000	594.000	520.000	520.000	520.000	0.000	0.000	0.000
GR	610.000	0.000	305.000	400.000	605.000	490.000	604.500	506.000	600.200	526.000
GR	598.600	346.000	594.400	352.000	593.400	570.000	595.100	588.000	599.800	594.000
GR	600.000	880.000	605.000	940.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.080	0.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VALLEY #34

X1	30723.000	11.000	230.000	280.000	900.000	500.000	710.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	150.000	600.200	230.000	595.500	240.000	593.300	257.000
GR	595.200	274.000	599.800	280.000	600.000	330.000	600.000	360.000	600.000	450.000
GR	610.000	550.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	5.000	1630.000	2463.000	2800.000	2800.000	3410.000	0.000	0.000	0.000	0.000

VALLEY #35 D/S CONFLUENCE WITH NORTH BRANCH SWAN CREEK

X1	31223.000	10.000	199.000	244.000	500.000	500.000	500.000	0.000	0.000	0.000
GR	606.000	0.000	600.000	50.000	600.000	199.000	594.000	208.000	592.100	220.000
GR	593.300	232.000	600.400	244.000	605.000	263.000	605.000	430.000	610.000	450.000
NC	0.100	0.100	0.000	0.300	0.300	0.300	0.000	0.000	0.000	0.000
QT	5.000	1060.000	1630.000	1840.000	1840.000	2240.000	0.000	0.000	0.000	0.000

100' D/S I-275

X1	32033.000	10.000	382.000	418.000	1000.000	700.000	810.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	353.000	0.000	446.000	0.000	0.000	0.000	0.000
GR	606.000	0.000	600.000	35.000	600.000	120.000	600.800	382.000	595.600	390.000
GR	593.900	400.000	595.600	410.000	601.600	418.000	600.000	1080.000	606.000	1170.000

D/S FACE I-275

X1	32133.000	10.000	0.100	43.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.000	615.000	0.000
GR	623.500	0.000	594.500	0.100	594.500	0.200	594.300	10.000	594.300	10.100
GR	594.300	10.900	594.300	11.000	594.500	21.000	594.500	21.100	594.500	21.900
GR	594.500	22.000	594.300	32.000	594.300	32.100	594.300	32.900	594.300	33.000
GR	595.600	42.900	595.600	43.000	623.500	43.100	0.000	0.000	0.000	0.000
SB	1.250	2.190	3.000	0.000	42.140	3.000	364.000	0.000	594.600	594.300

U/S FACE I-275

X1	32400.000	0.000	0.000	0.000	267.000	267.000	267.000	0.000	0.500	0.000
X2	0.000	0.000	1.000	603.900	623.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	623.500	623.500	0.000

BT	18.000	0.000	623.500	0.000	0.100	623.500	594.800	0.200	623.500	603.900
BT	10.000	623.500	603.900	10.100	623.300	594.600	10.900	623.500	594.600	11.000
BT	623.500	603.900	21.000	623.500	603.900	21.100	623.500	594.800	21.900	623.500
BT	594.800	22.000	623.500	603.900	32.000	623.500	603.900	32.100	623.500	594.600
BT	32.900	623.500	594.600	33.000	623.500	603.900	42.900	623.500	603.900	43.000
BT	623.500	595.600	43.100	623.500	0.000	0.000	0.000	0.000	0.000	0.000

50' U/S I-275

X1	32450.000	9.000	182.000	218.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	126.000	0.000	271.000	0.000	0.000	0.000	0.000
GR	620.000	0.000	602.000	50.000	600.800	182.000	597.100	190.000	597.000	200.000
GR	596.000	210.000	601.600	218.000	605.000	350.000	610.000	390.000	0.000	0.000
NC	0.120	0.120	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000

VALLEY #40

X1	32590.000	9.000	350.000	386.000	120.000	170.000	140.000	0.000	0.000	0.000
X3	0.000	0.000	0.000	156.000	0.000	539.000	0.000	0.000	0.000	0.000
GR	618.000	0.000	602.000	50.000	600.400	350.000	597.300	362.000	597.000	370.000
GR	597.300	378.000	600.400	386.000	600.000	470.000	610.000	540.000	0.000	0.000

VALLEY #41

X1	33520.000	9.000	599.000	630.000	930.000	930.000	930.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	100.000	601.000	599.000	597.900	602.000	597.600	610.000
GR	597.800	618.000	600.600	630.000	600.000	770.000	610.000	970.000	0.000	0.000

VALLEY #42

X1	34590.000	9.000	404.000	432.000	1070.000	1070.000	1070.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	130.000	602.700	408.000	598.600	411.000	597.200	420.000
GR	598.800	429.000	602.700	432.000	605.000	620.000	610.000	800.000	0.000	0.000
NC	0.060	0.060	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

X1	34770.000	14.000	353.000	387.000	150.000	200.000	180.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	100.000	602.700	170.000	602.300	270.000	602.400	353.000
GR	602.400	353.100	598.700	362.000	597.900	370.000	597.900	378.000	602.900	386.900
GR	602.900	387.000	602.100	470.000	605.700	570.000	610.000	780.000	0.000	0.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	34771.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
GT	13.000	0.000	610.000	0.000	100.000	605.300	0.000	170.000	602.700	0.000
BT	270.000	602.300	0.000	353.000	604.300	602.400	353.100	604.300	602.800	362.000
BT	606.400	604.900	378.000	606.400	604.900	386.900	604.200	602.900	387.000	604.200
BT	602.900	470.000	602.100	0.000	570.000	605.700	0.000	780.000	610.000	0.000

X1	34776.000	0.000	0.000	0.000	5.000	5.000	5.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE FOOTBRIDGE #42-A

X1	34777.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000

X1	33929.000	15.000	401.000	439.000	172.000	172.000	172.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	100.000	605.000	220.000	604.300	320.000	604.200	401.000
GR	604.200	401.100	599.000	412.000	597.100	420.000	598.400	430.000	603.400	438.900
GR	603.400	439.000	604.900	520.000	605.000	620.000	605.000	680.000	610.000	800.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000
X1	34930.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	13.000	0.000	610.000	0.000	100.000	605.000	0.000	220.000	605.000	0.000
BT	320.000	604.300	0.000	401.000	605.400	604.200	401.100	605.400	604.700	420.000
BT	606.500	605.600	438.900	605.300	604.600	439.000	605.300	603.400	520.000	604.900
BT	0.000	620.000	605.000	0.000	680.000	605.000	0.000	800.000	610.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000
X1	34938.000	0.000	0.000	0.000	8.000	8.000	8.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	0.000	0.000	0.000	0.000	110.000	660.000	0.000	0.000

U/S FACE FOOTBRIDGE #42-B

X1	34939.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000
X1	35259.000	14.000	600.000	640.000	320.000	320.000	320.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	140.000	606.400	420.000	605.600	520.000	605.000	600.000
GR	605.000	600.100	597.700	613.000	597.200	620.000	597.300	627.000	604.400	639.900
GR	604.400	640.000	602.100	720.000	607.000	820.000	610.000	930.000	0.000	0.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	35260.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	12.000	0.000	610.000	0.000	140.000	605.000	0.000	420.000	606.400	0.000
BT	520.000	605.800	0.000	600.000	605.800	605.000	600.100	605.800	605.100	620.000
BT	606.400	605.700	639.900	605.200	604.500	640.000	605.200	604.400	720.000	602.100
BT	0.000	820.000	607.000	0.000	930.000	610.000	0.000	0.000	0.000	0.000
X1	35268.000	0.000	0.000	0.000	8.000	8.000	8.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000

U/S FACE FOOTBRIDGE #42-C

X1	35269.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000
X1	35441.000	19.000	697.000	723.000	200.000	150.000	172.000	0.000	0.000	0.000
X3	19.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
GR	610.000	0.000	605.000	210.000	605.000	510.000	604.500	610.000	605.400	696.000
GR	602.600	697.000	602.600	697.100	598.100	704.000	596.900	709.700	596.900	709.800
GR	596.900	710.100	596.900	710.200	597.600	717.000	601.700	722.900	601.700	723.000
GR	605.400	724.000	604.800	810.000	605.400	910.000	610.000	1000.000	0.000	0.000
NC	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000

X1	35442.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
BT	17.000	0.000	610.000	0.000	210.000	605.000	0.000	510.000	605.000	0.000
BT	610.000	604.500	0.000	696.000	605.400	0.000	697.000	605.400	602.600	697.100
BT	605.400	604.200	709.700	605.600	604.400	709.800	605.600	596.900	710.100	605.600
BT	596.900	710.200	605.600	604.400	722.900	605.400	604.200	723.000	605.400	601.700
BT	724.000	605.400	0.000	810.000	604.800	0.000	910.000	605.400	0.000	1000.000
BT	610.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000
X1	35463.000	0.000	0.000	0.000	21.000	21.000	21.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	300.000	825.000	150.000	920.000

U/S FACE FOOTBRIDGE #42-D

X1	35464.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	604.500	604.800	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000
X1	35759.000	20.000	856.000	904.000	295.000	295.000	295.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	700.000	605.000	856.000	605.000	856.100	602.400	860.000
GR	602.400	860.100	602.400	860.900	602.400	861.000	597.600	871.000	596.600	880.000
GR	599.300	891.000	603.200	900.000	603.200	900.100	603.200	900.900	603.200	901.000
GR	605.000	903.900	605.000	904.000	606.000	930.000	608.200	1080.000	610.000	1120.000
NC	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000
X1	35760.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.900	605.900	0.000
BT	17.000	0.000	610.000	0.000	700.000	605.000	0.000	856.000	606.100	0.000
BT	856.100	606.100	605.300	860.000	606.100	605.300	860.100	609.500	602.400	860.900
BT	609.500	602.400	861.000	609.500	603.300	900.000	609.500	603.300	900.100	609.500
BT	603.200	900.900	609.500	603.200	901.000	606.300	605.500	903.900	606.300	605.500
BT	904.000	606.300	605.000	930.000	606.000	0.000	1080.000	608.200	0.000	1120.000
BT	610.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000
X1	35767.000	0.000	0.000	0.000	7.000	7.000	7.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	975.000	400.000	1020.000

U/S FACE FOOTBRIDGE #42-E

X1	35768.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000
X1	36068.000	16.000	726.500	773.500	250.000	350.000	300.000	0.000	0.000	0.000
GR	610.000	0.000	605.100	550.000	604.300	650.000	604.600	726.500	604.600	726.600
GR	599.900	735.000	599.900	735.100	599.900	735.900	599.900	736.000	596.200	750.000
GR	599.400	763.000	605.100	773.400	605.100	773.500	604.400	850.000	607.000	950.000
GR	610.000	1000.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000

X1	36069.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
BT	15.000	0.000	610.000	0.000	550.000	605.100	0.000	650.000	604.300	0.000
BT	726.500	605.000	604.600	726.500	605.000	604.600	735.000	606.000	605.400	735.100
BT	606.000	599.900	735.900	606.000	599.900	736.000	606.000	605.400	750.000	606.900
BT	606.300	773.400	606.000	605.400	773.500	606.000	605.100	850.000	604.400	0.000
BT	950.000	607.000	0.000	1000.000	610.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000
X1	36077.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
NC	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	600.000	825.000	400.000	870.000

U/S FACE FOOTBRIDGE 442-F

X1	36078.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
ET	0.000	7.100	9.100	9.100	9.100	9.100	565.000	670.000	400.000	750.000

100' D/S GRAFTON RD.

X1	36298.000	9.000	615.000	661.000	160.000	260.000	240.000	0.000	0.000	0.000
GR	610.000	0.000	605.000	520.000	603.500	615.000	599.100	635.000	597.200	645.000
GR	598.800	655.000	603.600	661.000	605.000	700.000	610.000	840.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	1.410	0.000	0.000	0.000	0.000	0.000

D/S FACE GRAFTON RD. (SKEW)

X1	36398.000	13.000	138.700	173.300	150.000	50.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	1.000	0.000	301.000	0.000	606.000	606.000	0.000
GR	615.000	0.000	608.500	0.000	607.000	1.000	607.000	128.000	598.200	138.700
GR	598.200	138.800	597.600	156.000	598.200	173.200	598.200	173.300	607.000	183.000
GR	607.000	312.000	608.700	313.000	615.000	313.000	0.000	0.000	0.000	0.000
SB	0.000	2.100	3.000	0.000	32.140	0.000	250.000	0.000	597.600	597.600

U/S FACE GRAFTON RD. (SKEW)

X1	36444.000	13.000	138.700	173.300	46.000	46.000	46.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.000	608.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	1.000	0.000	301.000	0.000	608.300	608.300	0.000
BT	10.000	0.000	615.000	0.000	0.000	606.500	0.000	128.000	608.400	0.000
BT	138.700	608.300	590.200	138.800	606.300	606.000	173.200	608.300	606.000	173.300
BT	608.300	598.200	183.000	608.400	0.000	313.000	608.700	0.000	313.000	615.000
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	615.000	0.000	608.500	0.000	607.700	1.000	607.700	128.000	598.200	138.700
GR	598.200	138.800	597.600	156.000	598.200	173.200	598.200	173.300	608.000	183.000
GR	608.000	312.000	608.700	313.000	615.000	313.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= 0.300 CEHV= 0.500
*SECNO 5.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IM2	ICONT	CORAR	TOPWID	ENDST
	100' D/S LABO RD.								
5.00	9.50	590.00	0.00	590.00	590.04	0.04	0.00	0.00	584.90
3470.	158.	997.	2315.	227.	352.	3761.	0.	0.	585.60
0.00	0.70	2.63	0.62	0.100	0.035	0.100	0.000	580.50	50.00
0.000279	0.	0.	0.	0	0	0	0.00	1150.00	1200.00

FLOW DISTRIBUTION FOR SECNO= 5.00 CWSEL= 590.00

STA=	50.	60.	100.	142.	240.	600.	1201.
PER Q=	0.3	4.3	28.7	9.3	37.7	19.8	
AREA=	25.0	202.0	352.3	460.6	1800.0	1500.0	
VEL=	0.4	0.7	2.8	0.7	0.7	0.5	

*SECNO 6.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 591.00 ELREA= 586.50

	D/S FACE LABO RD.								
6.00	5.29	589.99	0.00	0.00	590.12	0.13	0.04	0.05	586.30
3470.	0.	2301.	1169.	0.	648.	2065.	0.	3.	583.40
0.01	0.00	3.55	0.57	0.100	0.035	0.100	0.035	580.70	658.00
0.000490	100.	100.	100.	2	0	0	0.00	1139.80	1797.80

FLOW DISTRIBUTION FOR SECNO= 6.00 CWSEL= 589.99

STA=	650.	742.	800.	1000.	1100.	1200.	1799.
PER Q=	66.3	5.1	7.3	7.1	5.6	8.7	
AREA=	648.0	219.9	448.1	334.0	289.1	774.3	
VEL=	3.6	0.0	0.6	0.7	0.7	0.4	

*SECNO 7.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD= 586.50 MAX ELLC= 590.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 591.00 ELREA= 586.50

7.00	9.24	589.94	0.00	0.00	590.17	0.24	0.00	0.03	586.30
3470.	0.	2795.	675.	0.	643.	1821.	8.	3.	583.40
0.01	0.00	4.34	0.37	0.100	0.020	0.100	0.034	580.70	658.00
0.000242	1.	1.	1.	2	0	0	-189.95	1127.86	1785.86

FLOW DISTRIBUTION FOR SECNO= 7.00 CWSEL= 589.94

STA=	658.	742.	800.	1000.	1100.	1200.	1786.
PER Q=	80.5	0.1	4.9	4.8	3.8	5.8	

AREA=	643.3	27.2	437.7	328.9	283.9	743.7
VEL=	4.3	0.1	0.4	0.5	0.5	0.3

*SECNO 17.000

3370 NORMAL BRIDGE,NO= 12 ,IN ELTRD= 586.50 MAX ELLC= 590.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 591.00 ELREA= 586.50

17.00	9.24	589.94	0.00	0.00	590.18	0.24	0.00	0.00	586.30
3470.	0.	2793.	677.	0.	644.	1827.	9.	3.	583.40
0.01	0.00	4.34	0.37	0.100	0.020	0.100	0.032	580.70	658.00
0.000241	16.	16.	16.	0	0	0	-190.11	1129.10	1787.10

FLOW DISTRIBUTION FOR SECNO= 17.00 CWSEL= 589.94

STA=	658.	742.	800.	1000.	1100.	1200.	1787.
PER Q=	80.5	0.1	4.9	4.8	3.8	5.8
AREA=	643.7	27.4	438.8	329.4	284.4	746.8
VEL=	4.3	0.1	0.4	0.5	0.5	0.3

*SECNO 18.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IM2	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 591.00 ELREA= 586.50

U/S FACE LABO RD.

18.00	9.39	590.09	0.00	0.00	590.21	0.12	0.00	0.03	586.30
3470.	0.	2259.	1211.	0.	657.	2174.	9.	3.	583.40
0.01	0.00	3.44	0.56	0.100	0.035	0.100	0.032	580.70	658.00
0.000453	1.	1.	1.	2	0	0	0.00	1146.63	1804.63

FLOW DISTRIBUTION FOR SECNO= 18.00 CWSEL= 590.09

STA=	658.	742.	800.	1000.	1100.	1200.	1800.	1805.
PER Q=	65.1	5.1	7.5	7.2	5.7	9.5	0.0
AREA=	656.5	225.8	460.5	344.3	299.3	635.5	0.2
VEL=	3.4	0.8	0.6	0.7	0.7	0.4	0.0

*SECNO 68.000

50' U/S LABO RD.

68.00	9.70	590.20	0.00	0.00	590.25	0.05	0.02	0.02	584.90
3470.	332.	1117.	2022.	481.	361.	3329.	13.	4.	585.60
0.02	0.69	3.10	0.61	0.100	0.035	0.100	0.033	580.50	618.99
0.000324	50.	50.	50.	2	0	0	0.00	1242.71	1861.70

FLOW DISTRIBUTION FOR SECNO= 68.00 CWSEL= 590.20

STA=	619.	715.	770.	812.	1050.	1850.	1862.
PER Q=	2.8	6.7	32.2	25.9	32.3	0.0
AREA=	191.7	288.8	360.7	1166.6	2161.3	1.2

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    VEL=      0.5       0.8       3.1       0.8       0.5       0.1

CCHV=   0.100 CEHV=   0.300
*SECNO 1438.000

        VALLEY #3

  1438.00     10.40    590.70      0.00      0.00    590.83      0.13      0.55      0.02    585.30
    3470.     1382.     1691.      397.     1696.      414.      517.      119.       36.     586.30
     0.18      0.81      4.09      0.77     0.120     0.035     0.080     0.035    580.30    283.82
 0.000531     1200.     1370.     1450.         2         0         0      0.00    724.55   1008.37

FLOW DISTRIBUTION FOR SECNO=   1438.00          CWSEL=    590.70

STA=     284.      330.      470.      692.      738.      930.     1008.
  PER Q=      0.1       0.0      31.8      46.7      11.3       0.2
   AREA=     16.2     468.0    1232.0     413.9     489.5      27.4
    VEL=      0.1       0.6       0.9       4.1       0.8       0.2

*SECNO 2898.000

        VALLEY #4

  2898.00     10.03    591.33      0.00      0.00    591.33      0.05      0.54      0.01    584.50
    3470.     2449.      967.       54.     2959.      295.       71.      205.       60.     584.00
     0.42      0.83      3.27      0.77     0.080     0.035     0.080     0.037    581.30    528.93
 0.000329     1200.     1460.     1460.         2         0         0      0.00    958.36   1487.28

FLOW DISTRIBUTION FOR SECNO=   2898.00          CWSEL=    591.33

STA=     529.      720.     1400.     1435.     1468.     1487.
  PER Q=      0.9      61.8       7.8      27.9       1.6
   AREA=    126.0    2602.3     230.2     295.5      70.6
    VEL=      0.3       0.3       1.2       3.3       0.8

*SECNO 3768.000

        VALLEY #5

  3768.00     10.86    591.56      0.00      0.00    591.65      0.08      0.26      0.01    587.20
    3470.      301.     1231.     1938.      690.      352.     1418.      243.       69.     586.50
     0.51      0.44      3.50      1.37     0.120     0.035     0.070     0.038    580.70    567.31
 0.000425      350.      870.      950.         2         0         0      0.00    750.17   1317.48

FLOW DISTRIBUTION FOR SECNO=   3768.00          CWSEL=    591.56

STA=     567.      825.      990.     1032.     1250.     1280.     1317.
  PER Q=      1.3       7.4      35.5      51.7       3.9       0.3
   AREA=    201.2     488.7     351.9    1267.0     121.9      29.3
    VEL=      0.2       0.5       3.5       1.4       1.1       0.4

*SECNO 5150.000
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         ALOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


        VALLEY #6
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5158.00	10.19	592.29	0.00	0.00	592.42	0.13	0.76	0.01	595.20
3470.	0.	1632.	1838.	0.	396.	1944.	318.	90.	587.20
0.67	0.00	4.13	0.95	0.120	0.035	0.100	0.037	582.10	99.90
0.000764	1200.	1390.	1390.	2	0	0	0.00	633.32	733.30

FLOW DISTRIBUTION FOR SECNO= 5158.00 CHSEL= 592.29

STA=	100.	156.	660.	733.
PER Q=	47.0	51.9	1.1	
AREA=	395.5	1060.0	83.9	
VEL=	4.1	1.0	0.4	

*SECNO 6318.000

VALLEY #7 D/S CONFLUENCE WITH GRUNDMAN DRAIN

6318.00	11.11	593.01	0.00	0.00	593.15	0.15	0.72	0.00	587.60
3470.	1463.	2006.	1.	1633.	506.	4.	374.	105.	592.20
0.79	0.90	3.96	0.19	0.100	0.035	0.100	0.037	581.90	33.91
0.000562	1000.	1160.	1160.	2	0	0	0.00	492.58	526.49

FLOW DISTRIBUTION FOR SECNO= 6318.00 CHSEL= 593.01

STA=	34.	85.	455.	517.	526.
PER Q=	1.0	41.1	57.8	0.0	
AREA=	76.8	1556.0	506.3	3.8	
VEL=	0.5	0.9	4.0	0.2	

*SECNO 7818.000

VALLEY #8

7818.00	11.27	593.67	0.00	0.00	594.07	0.20	0.90	0.02	589.40
3470.	1371.	1843.	257.	1417.	380.	243.	440.	120.	587.80
0.92	0.97	4.35	1.05	0.100	0.035	0.100	0.037	582.60	31.75
0.000714	1300.	1500.	1700.	2	0	0	0.00	501.45	533.20

FLOW DISTRIBUTION FOR SECNO= 7818.00 CHSEL= 593.67

STA=	32.	140.	430.	470.	510.	535.
PER Q=	3.7	35.8	53.1	6.6	0.8	
AREA=	209.3	1208.2	379.6	198.6	44.8	
VEL=	0.6	1.0	4.9	1.2	0.6	

CCHV= 0.300 CEHV= 0.500
*SECNO 8718.000

3470 ENCROACHMENT STATIONS= 538.0 701.0 TYPE= 1 TARGET= 163.000

120' D/S SIGLER

8718.00	12.11	594.42	0.00	0.00	594.70	0.29	0.59	0.04	589.70
3470.	290.	2860.	320.	240.	610.	245.	472.	127.	589.00
0.98	1.21	4.68	1.31	0.080	0.035	0.080	0.037	582.30	538.00
0.000606	900.	900.	900.	2	0	0	0.00	163.00	701.00

FLOW DISTRIBUTION FOR SECNO= 8718.00 CHSEL= 594.42

STA=	538.	589.	651.	700.	701.
PER Q=	8.4	82.4	9.2	0.1	

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   AREA=     239.6     610.4     240.3       4.4
    VEL=       1.2       4.7       1.3       0.4

1490 NH CARD USED
*SECNO 8838.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.00 ELREA=      596.00


         D/S FACE SIGLER (SKEWED)

  8838.00     12.20    594.60      0.00      0.00    594.80      0.20      0.07      0.03    590.00
    3470.        0.     3470.        0.        0.      979.        0.       475.       127.    592.00
    0.99      0.00      3.54      0.00     0.080     0.588     0.080     0.037    582.40     53.80
0.000560       120.      120.      120.         2         0         0      0.00    103.20    157.00


FLOW DISTRIBUTION FOR SECNO=    8838.00          CHSEL=     594.60

STA=       54.      157.
  PER Q=     100.0
   AREA=     978.9
    VEL=       3.5

*SECNO 8839.000
   SECNO     DEPTH     CLSEL     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       LTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLCBR     ITRIAL    IP2       ICONT     CORAR     TOPWID      ENDST

3370 NORMAL BRIDGE,NRD= 14 MIN ELTRD=  596.20 MAX ELLC=  594.80

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.00 ELREA=      596.00

  8839.00     12.08    594.48      0.00      0.00    594.92      0.44      0.00      0.12    590.00
    3470.        0.     3470.        0.        0.      649.        0.       475.       127.    592.00
    0.99      0.00      5.35      0.00     0.070     0.020     0.070     0.037    582.40     53.80
0.000490          1.        1.        1.         2         0         0  -341.39    103.20    157.00


FLOW DISTRIBUTION FOR SECNO=    8839.00          CHSEL=     594.48

STA=       54.      157.
  PER Q=     100.0
   AREA=     646.8
    VEL=       5.3

*SECNO 8882.000

3370 NORMAL BRIDGE,NRD= 14 MIN ELTRD=  596.20 MAX ELLC=  594.80


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.20 ELREA=      597.30

  8882.00     12.10    594.50      0.00      0.00    594.94      0.44      0.02      0.00    590.00
    3470.        0.     3470.        0.        0.      650.        0.       476.       127.    592.00
    0.99      0.00      5.33      0.00     0.070     0.020     0.070     0.037    582.40     53.80
0.000486         43.       43.       43.         0         0         0  -342.42    103.20    157.00


FLOW DISTRIBUTION FOR SECNO=    8882.00          CHSEL=     594.50
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STA=      54.     157.
  PER Q=    100.0
   AREA=    650.5
    VEL=      5.3

1490 NH CARD USED
*SECNO 8883.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.20 ELREA=      597.30


        U/S FACE SIGLER (SKEWED)

  8883.00     12.44    594.84      0.00      0.00    595.02      0.19      0.00      0.08    590.00
    3470.        0.      3470.        0.        0.    1003.        0.      476.      127.     592.00
    0.99      0.00       3.46      0.00     0.070     0.583     0.070     0.037    582.40     53.80
 0.000313        1.         1.         1.         2         0         0      0.00    103.20    157.00

FLOW DISTRIBUTION FOR SECNO=    8883.00          CWSEL=     594.84

STA=      54.     157.
  PER Q=    100.0
   AREA=   1003.1
    VEL=      3.5

*SECNO 8973.000

3470 ENCROACHMENT STATIONS=      259.0      562.0  TYPE=      1  TARGET=      283.000

        90' U/S SIGLER

  8973.00     11.77    594.87      0.00      0.00    595.07      0.20      0.04      0.01    589.70
    3470.      514.      2519.      437.      550.      602.      390.      470.      128.     589.00
    1.00      0.94       4.10      1.12     0.100     0.035     0.070     0.037    503.10    259.00
 0.000486       80.        90.       100.         0         0         0      0.00    283.00    542.00

FLOW DISTRIBUTION FOR SECNO=    8973.00          CWSEL=     594.87

STA=      259.      280.      369.      431.      455.      542.
  PER Q=      2.4      12.4      72.6       5.3       7.3
   AREA=    102.5     447.7     602.5     129.1     261.0
    VEL=      0.8       1.0       4.2       1.4       1.0

CCHV=    0.100 CCHV=    0.300
*SECNO 10098.000

        VALLEY C11

 10098.00     11.52    595.52      0.00      0.00    595.64      0.12      0.55      0.01    589.80
    3470.     1622.      1914.      334.     1911.      374.      307.      532.      138.     591.30
    1.14      0.85       4.05      1.09     0.120     0.035     0.080     0.036    584.00    224.07
 0.000500     1125.      1125.      1125.         2         0         0      0.00    507.84    731.91

FLOW DISTRIBUTION FOR SECNO=   10098.00          CWSEL=     595.52

STA=      224.      250.      300.      612.      651.      695.      725.      732.
  PER Q=      0.0       2.5      44.2      43.6       7.4       2.2       0.0
   AREA=      6.7     150.9    1753.0     373.7     214.2      90.6       1.8
    VEL=      0.1       0.6       0.9       4.1       1.2       0.9       0.2
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CCHV= 0.100 CEHV= 0.300
*SECNO 11118.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

VALLEY #12 D/S CONFLUENCE WITH LITTLE SWAN CR.

11118.00	10.78	595.98	0.00	0.00	596.04	0.06	0.40	0.01	590.30
3470.	1903.	1090.	470.	2709.	331.	827.	605.	153.	590.00
1.32	0.70	3.29	0.53	0.120	0.035	0.120	0.036	585.20	167.40
0.000329	1000.	1020.	900.	1	3	0	0.00	835.64	1003.04

FLOW DISTRIBUTION FOR SECNO= 11118.00 CWSEL= 595.98

STA=	167.	250.	315.	733.	768.	810.	970.	1003.
PER Q=	0.2	3.4	51.3	31.4	5.4	8.3	0.1	
AREA=	40.9	226.9	2441.6	330.9	251.6	558.6	16.4	
VEL=	0.1	0.5	0.7	3.3	0.7	0.5	0.1	

CCHV= 0.500 CEHV= 0.500
*SECNO 12620.000

3470 ENCROACHMENT STATIONS= 562.3 714.8 TYPE= 1 TARGET= 152.500

140' D/S TELEGRAPH

12620.00	10.72	596.52	0.00	0.00	596.77	0.26	0.63	0.10	590.70
2910.	230.	2520.	159.	257.	579.	203.	689.	170.	591.60
1.43	0.90	4.36	0.78	0.120	0.035	0.120	0.036	585.80	562.25
0.000536	1500.	1502.	1500.	2	0	0	0.00	152.50	714.75

FLOW DISTRIBUTION FOR SECNO= 12620.00 CWSEL= 596.52

STA=	562.	606.	671.	715.
PER Q=	7.9	86.6	5.5	
AREA=	256.6	573.6	203.0	
VEL=	0.9	4.4	0.8	

1490 NH CARD USED
*SECNO 12760.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 599.00 ELREA= 599.00

D/S FACE TELEGRAPH SKEWED

12760.00	11.53	596.63	0.00	0.00	596.89	0.26	0.11	0.00	599.00
2910.	0.	2910.	0.	0.	713.	0.	692.	170.	599.00
1.44	0.00	4.08	0.00	0.120	0.701	0.120	0.036	585.10	353.33
0.001172	140.	140.	140.	2	0	0	0.00	82.44	465.77

FLOW DISTRIBUTION FOR SECNO= 12760.00 CWSEL= 596.63

STA=	383.	466.
PER Q=	100.0	
AREA=	713.1	
VEL=	4.1	

SPECIAL BRIDGE

SB	KK	KNOR	COFQ	QDLEN	B.C	BUP	BAREA	SS	ELCHU	ELCHD
	1.25	1.75	3.00	0.00	55.65	16.50	325.00	0.00	585.10	585.10

*SECNO 12817.000
PRESSURE AND WEIR FLOW

EGPRS	EGLLC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.70	597.11	0.23	76.	2812.	325.	325.	593.40	598.10

SECTION P

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 599.30 ELREA= 599.30

U/S FACE TELEGRAPH SKEWED

12817.00	13.36	598.46	0.00	0.00	599.64	0.18	1.75	0.00	599.00
2910.	0.	2910.	0.	0.	864.	0.	693.	171.	599.00
1.44	0.00	3.37	0.00	0.100	0.035	0.100	0.036	585.10	383.31
0.000343	57.	57.	57.	2	0	3	0.00	82.49	465.79

FLOW DISTRIBUTION FOR SECNO= 12817.00 CWSEL= 598.46

STA=	303.	466.				
PER Q=	100.0					
AREA=	864.4					
VEL=	3.4					

CCHV= 0.500 CEHV= 0.500
*SECNO 13087.000

270' U/S TELEGRAPH

13087.00	13.48	598.68	0.00	0.00	598.73	0.05	0.05	0.04	590.70
2910.	543.	1710.	657.	1107.	728.	1329.	705.	172.	591.30
1.49	0.49	2.35	0.49	0.100	0.035	0.100	0.036	585.20	33.10
0.000123	140.	270.	350.	2	0	0	0.00	595.72	628.82

FLOW DISTRIBUTION FOR SECNO= 13087.00 CWSEL= 598.66

STA=	33.	125.	236.	349.	570.	629.
PER Q=	1.4	17.2	58.8	21.6	0.9	
AREA=	168.9	938.0	728.5	1221.2	108.1	
VEL=	0.2	0.5	2.3	0.5	0.2	

*SECNO 14167.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	HTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

100' D/S D'WAY BRIDGE #15A

14167.00	13.01	598.01	0.00	0.00	599.12	0.31	0.26	0.13	591.30

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    2910.      275.     1943.      691.      282.      357.      912.      760.      185.    591.30
     1.57      0.98      5.45      0.76     0.100     0.035     0.100     0.036   585.80   259.92
0.000745      1000.     1000.     1000.         2         0         0      0.00   520.86   780.79

FLOW DISTRIBUTION FOR SECNO=  14167.00          CUSEL=    598.81

STA=     260.      335.      367.      400.      781.
  PER Q=     9.5      66.8       8.2      15.5
   AREA=   281.8    356.8     186.7     725.0
    VEL=     1.0      5.4       1.3       0.6

*SECNO 14267.000

        D/S FACE DUWAY BRIDGE #15A

 14267.00    12.57   598.38      0.00      0.00   599.21      0.33      0.06      0.01   586.60
    2910.      435.     1444.     1031.      357.      222.     1115.      764.      187.    586.90
     1.57      1.22      6.50      0.92     0.100     0.035     0.100     0.036   586.30    37.92
0.000822        75.      100.      110.         2         0         0      0.00   531.09   569.01

FLOW DISTRIBUTION FOR SECNO=  14267.00          CUSEL=    598.86

STA=      38.      101.      112.      116.      134.      138.      200.      569.
  PER Q=     8.1       4.8       2.1      49.6       2.1      17.1      16.3
   AREA=   232.6     83.9      40.3     222.2      39.5     361.1     714.9
    VEL=     1.0      1.6       1.5       6.5       1.5       1.4       0.7

*SECNO 14268.000

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  591.00 MAX ELLC=  590.30

 14268.00    12.69   598.99      0.00      0.00   599.24      0.24      0.00      0.03   586.60
    2910.      475.     1246.     1109.      356.      211.     1160.      764.      187.    586.90
     1.57      1.33      5.39      1.02     0.100     0.020     0.100     0.036   586.30    36.09
0.001015         1.        1.        1.         2         0         0    -30.95   543.56   580.45

FLOW DISTRIBUTION FOR SECNO=  14268.00          CUSEL=    598.99

STA=      37.      101.      112.      116.      134.      138.      200.      580.
  PER Q=     9.4       5.3       1.6      42.8       1.6      19.7      19.6
   AREA=   240.2     84.5      31.7     211.5      31.8     368.6     759.9
    VEL=     1.1      1.8       1.4       5.9       1.5       1.6       0.8

*SECNO 14281.000

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  591.00 MAX ELLC=  590.30

 14281.00    12.71   599.01      0.00      0.00   599.25      0.24      0.01      0.00   586.60
    2910.      475.     1246.     1191.      357.      212.     1165.      765.      187.    586.90
     1.57      1.33      5.00      1.02     0.100     0.020     0.100     0.036   586.30    36.79
0.001000        13.       13.       13.         0         0         0    -30.95   544.77   581.56

FLOW DISTRIBUTION FOR SECNO=  14281.00          CUSEL=    599.01

STA=      37.      101.      112.      116.      134.      138.      200.      582.
  PER Q=     9.4       5.3       1.6      42.7       1.6      19.6      19.7
   AREA=   241.0     84.6      31.8     211.7      31.8     369.3     764.3
    VEL=     1.1      1.8       1.4       5.9       1.5       1.5       0.7

*SECNO 14282.000
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U/S FACE D'WAY BRIDGE #15A

14282.00	12.67	598.97	0.00	0.00	599.29	0.31	0.00	0.04	586.60
2910.	436.	1424.	1050.	365.	224.	1159.	765.	187.	586.90
1.57	1.20	6.36	0.91	0.100	0.035	0.100	0.036	586.30	37.07
0.000778	1.	1.	1.	2	0	0	0.00	541.38	578.45

FLOW DISTRIBUTION FOR SECNO= 14282.00 CWSEL= 598.97

STA=	37.	101.	112.	116.	134.	138.	200.	578.
PER Q=	8.2	4.7	2.1	48.9	2.1	17.1	16.9	
AREA=	238.9	85.0	40.7	224.0	39.9	367.3	751.9	
VEL=	1.0	1.6	1.5	6.4	1.5	1.4	0.7	

*SECNO 14332.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IM2	ICONT	CORAR	TOPWID	ENDST

50' U/S D'WAY BRIDGE #15A

14332.00	13.25	599.05	0.00	0.00	599.33	0.28	0.04	0.01	591.30
2910.	283.	1903.	723.	301.	365.	978.	767.	187.	591.30
1.56	0.94	5.23	0.74	0.100	0.035	0.100	0.036	585.80	257.46
0.000665	50.	50.	50.	2	0	0	0.00	528.69	786.14

FLOW DISTRIBUTION FOR SECNO= 14332.00 CWSEL= 599.05

STA=	257.	335.	367.	400.	706.		
PER Q=	9.7	65.4	8.3	16.5			
AREA=	300.7	364.6	194.8	732.3			
VEL=	0.9	5.2	1.2	0.6			

*SECNO 15592.000

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 380.000

100' D/S D'WAY BRIDGE #16

15592.00	12.76	599.66	0.00	0.00	599.70	0.03	0.29	0.07	591.50
2910.	1338.	1537.	35.	2124.	796.	92.	834.	201.	591.50
1.84	0.63	1.94	0.39	0.100	0.035	0.100	0.036	586.90	45.00
0.000114	1260.	1260.	1260.	2	0	0	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15592.00 CWSEL= 599.66

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	3.6	21.6	20.5	52.8	0.0	0.7	0.5	
AREA=	22.0	192.3	979.3	930.4	794.0	0.8	41.8	49.0	
VEL=	0.3	0.5	0.6	0.6	1.9	0.6	0.5	0.3	

*SECNO 15692.000

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 380.000

D/S FACE D'WAY BRIDGE #16 SKEWED

15692.00	12.77	599.67	0.00	0.00	599.71	0.03	0.01	0.00	591.50
2910.	1338.	1536.	35.	2127.	795.	92.	841.	201.	591.50
1.86	0.63	1.93	0.39	0.100	0.035	0.100	0.036	586.90	45.00
0.000113	100.	100.	100.	2	0	0	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15692.00 CWSEL= 599.67

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	3.6	21.6	20.5	52.8	0.0	0.7	0.5	
AREA=	22.1	192.7	980.8	931.8	795.1	0.8	41.9	49.2	
VEL=	0.3	0.5	0.6	0.6	1.9	0.6	0.5	0.3	

SPECIAL BRIDGE

SB	XK	XKOR	COFC	RDLEN	BHC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	3.00	0.00	43.50	0.00	383.00	0.00	586.90	586.90

*SECNO 15704.000
PRESSURE AND WEIR FLOW

EGPRS	EGLOC	HS	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
601.11	599.71	0.00	2059.	862.	383.	383.	595.70	597.50

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 380.000

U/S FACE D'WAY BRIDGE #16 SKEWED

15704.00	12.84	599.74	0.00	0.00	599.80	0.06	0.09	0.00	591.50
2910.	960.	1925.	26.	2145.	801.	93.	842.	202.	591.50
1.87	0.45	2.40	0.27	0.100	0.020	0.100	0.036	586.90	45.00
0.000057	12.	12.	12.	2	0	7	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15704.00 CWSEL= 599.74

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	2.6	15.5	14.7	66.1	0.0	0.5	0.4	
AREA=	22.4	196.7	988.7	939.3	800.9	0.8	42.4	50.2	
VEL=	0.2	0.4	0.5	0.5	2.4	0.5	0.3	0.2	

*SECNO 15754.000

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 380.000

50' U/S D'WAY BRIDGE #16

15754.00	12.80	599.78	0.00	0.00	599.81	0.03	0.00	0.01	591.50
2910.	1340.	1534.	36.	2156.	804.	94.	845.	202.	591.50
1.88	0.62	1.91	0.36	0.100	0.035	0.100	0.036	586.90	45.00
0.000109	50.	50.	50.	2	0	0	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15754.00 CWSEL= 599.78

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	3.6	21.6	20.6	52.7	0.0	0.7	0.5	
AREA=	22.6	195.9	993.5	943.8	804.4	0.8	42.6	50.9	
VEL=	0.3	0.5	0.6	0.6	1.9	0.6	0.5	0.3	

CCHV= 0.100 CEHV= 0.300
*SECNO 16374.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	ALOB	CCH	CROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XACH	XNR	PTN	ELMIN	SSTA
SLOPE	XLOSL	XLCH	XLOSR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

VALLEY #10

16374.00	12.07	599.87	0.00	0.00	599.90	0.03	0.09	0.00	600.40
2910.	0.	911.	1999.	0.	389.	2344.	889.	208.	591.30
2.01	0.00	2.34	0.85	0.080	0.035	0.080	0.036	587.80	2.01
0.000190	750.	620.	600.	2	0	0	0.00	474.56	476.57

FLOW DISTRIBUTION FOR SECNO= 16374.00 CWSEL= 599.87

STA=	2.	47.	350.	477.
PER Q=	31.3	63.8	4.9	
AREA=	386.9	2035.6	308.1	
VEL=	2.3	0.9	0.5	

CCHV= 0.300 CEHV= 0.500
*SECNO 17384.000

170' D/S READY RD.

17384.00	12.00	600.00	0.00	0.00	600.02	0.02	0.11	0.01	592.90
2910.	1800.	779.	250.	3386.	429.	460.	962.	221.	592.10
2.31	0.56	1.82	0.54	0.080	0.035	0.080	0.036	588.00	1.85
0.000084	800.	1010.	1000.	0	0	0	0.00	717.05	718.09

FLOW DISTRIBUTION FOR SECNO= 17384.00 CWSEL= 600.00

STA=	2.	50.	589.	630.	690.	719.
PER Q=	1.3	63.3	26.8	7.8	0.8	
AREA=	120.6	3265.3	429.0	307.5	72.3	
VEL=	0.3	0.6	1.8	0.6	0.3	

*SECNO 17554.000

D/S FACE READY RD. SKEWED

17554.00	11.50	600.00	0.00	0.00	600.05	0.05	0.02	0.02	589.50
2910.	640.	1950.	312.	1339.	913.	667.	975.	223.	589.60
2.33	0.48	2.14	0.47	0.070	0.035	0.070	0.036	588.70	0.00
0.000102	150.	170.	210.	2	0	0	0.00	706.00	706.00

FLOW DISTRIBUTION FOR SECNO= 17554.00 CWSEL= 600.00

STA=	0.	88.	265.	353.	392.	399.	481.	491.	530.	705.	706.
PER Q=	3.7	10.3	4.3	2.7	1.3	67.0	2.2	2.6	6.0	0.0	
AREA=	251.1	611.3	273.1	148.8	54.3	913.1	81.7	144.9	438.1	2.5	
VEL=	0.6	0.5	0.5	0.5	0.7	2.1	0.8	0.5	0.4	0.2	

*SECNO 17555.000

3370 NORMAL BRIDGE,NRD= 16 MIN ELTRD= 596.50 MAX ELLC= 595.10

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 17555.00     11.30    600.00      0.00      0.00    600.06      0.06      0.00      0.01    589.50
    2910.     1019.     1506.      385.      1247.     577.      556.      975.      223.     589.60
    2.33      0.82      2.61      0.69      0.070     0.020     0.070     0.036    588.70      0.00
0.000322        1.        1.        1.          0         0         0   -537.67    706.00    706.00


FLOW DISTRIBUTION FOR SECNO=  17555.00          CWSEL=    600.00

STA=       0.       88.      265.      353.      392.      399.      481.      491.      530.      705.      706.
  PER Q=     6.5      18.3       7.6       2.3       0.3      51.7       0.5       2.2      10.6       0.0
   AREA=   251.1     611.3     273.1      96.2      15.7     577.4      23.7      92.1     438.1       2.5
    VEL=     0.8       0.9       0.8       0.7       0.6       2.6       0.6       0.7       0.7       0.3

*SECNO 17581.000

3370 NORMAL BRIDGE,NRD= 16 MIN ELTRD=  596.50 MAX ELLC=  595.10

 17581.00     11.31    600.01      0.00      0.00    600.07      0.06      0.01      0.00    589.50
    2910.     1019.     1505.      385.      1248.     577.      557.      977.      224.     589.60
    2.34      0.82      2.61      0.69      0.070     0.020     0.070     0.036    588.70      0.00
0.000322       26.       26.       26.          0         0         0   -537.67    706.00    706.00


FLOW DISTRIBUTION FOR SECNO=  17581.00          CWSEL=    600.01

STA=       0.       88.      265.      353.      392.      399.      481.      491.      530.      705.      706.
  PER Q=     6.5      18.3       7.6       2.3       0.3      51.7       0.5       2.2      10.6       0.0
   AREA=   251.2     611.4     273.2      96.2      15.7     577.4      23.7      92.1     438.2       2.5
    VEL=     0.8       0.9       0.8       0.7       0.6       2.6       0.6       0.7       0.7       0.3

*SECNO 17582.000
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        CLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       THA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       UTN       ELMIN       SSTA
   SLOPE     XLOEL     XLCH      XLOCR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


        U/S FACE READY RD,SKEWED

 17582.00     11.32    600.02      0.00      0.00    600.07      0.05      0.00      0.00    589.50
    2910.      650.     1948.      313.      1343.     914.      670.      977.      224.     589.60
    2.34      0.48      2.13      0.47      0.070     0.035     0.070     0.036    588.70      0.00
0.000102        1.        1.        1.          1         0         0      0.00    706.00    706.00


FLOW DISTRIBUTION FOR SECNO=  17582.00          CWSEL=    600.02

STA=       0.       88.      265.      353.      392.      399.      481.      491.      530.      705.      706.
  PER Q=     3.7      10.3       4.3       2.7       1.3      66.9       2.2       2.6       6.0       0.0
   AREA=   252.0     613.1     274.0     149.2      54.3     914.0      81.8     145.3     440.0       2.5
    VEL=     0.4       0.5       0.5       0.5       0.7       2.1       0.8       0.5       0.4       0.2

*SECNO 17632.000

         50' U/S READY RD.

 17632.00     11.27    600.07      0.00      0.00    600.08      0.01      0.00      0.01    592.90
    2910.     1069.      692.     1150.      1060.     415.     1931.      981.      225.     592.10
    2.36      0.57      1.67      0.60      0.070     0.035     0.070     0.036    588.80      15.51
0.000073       50.       50.       50.          2         0         0      0.00    747.44    762.94


FLOW DISTRIBUTION FOR SECNO=  17632.00          CWSEL=    600.07
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STA=       16.      100.      369.      410.      670.      763.
  PER Q=     2.5      34.3      23.8      36.8       2.7
   AREA=   214.2    1646.2     415.2    1695.1     235.6
    VEL=     0.3       0.6       1.7       0.6       0.3

CCHV=   0.100 CEHV=   0.300
*SECNO 19032.000

        VALLEY #21

 19032.00     10.33    600.23      0.00      0.00    400.27      0.04      0.18      0.01    593.50
    2910.      1975.      935.        0.      2466.      340.        0.      1094.      244.    601.00
    2.63      0.80      2.75      0.00     0.100     0.035     0.120     0.036    589.90      0.89
0.000276     1500.     1400.     1200.         2         0         0      0.00    469.49    470.37

FLOW DISTRIBUTION FOR SECNO=  19032.00          CHSEL=    600.23

STA=        1.       35.      432.      471.
  PER Q=     1.5      66.3      32.1
   AREA=    92.7    2373.2     340.2
    VEL=     0.5       0.8       2.7

*SECNO 20462.000

        VALLEY #22

 20462.00     10.61    600.61      0.00      0.00    600.65      0.05      0.38      0.00    592.60
    2910.      1104.      919.      807.      1704.      305.      1354.      1195.      262.    593.60
    2.91      0.69      3.02      0.60     0.120     0.035     0.120     0.036    590.00     34.87
0.000257     1430.     1430.     1430.         2         0         0      0.00    598.16    633.03

FLOW DISTRIBUTION FOR SECNO=  20462.00          CHSEL=    600.61

STA=       33.       50.       80.      316.      347.      500.      630.      633.
  PER Q=     0.0       1.3      39.3      31.6      21.9       5.9       0.0
   AREA=     4.6      93.2    1606.0     304.6     949.4     403.7       0.9
    VEL=     0.1       0.4       0.7       3.0       0.7       0.4       0.1

CCHV=   0.300 CEHV=   0.500
*SECNO 22092.000

        200' D/S SWEITZER RD.

 22092.00     10.67    601.07      0.00      0.00    601.13      0.06      0.47      0.00    592.70
    2910.      488.      737.      1686.      465.      219.      1568.      1300.      281.    593.80
    3.19      1.05      3.37      1.00     0.020     0.035     0.080     0.036    590.40     18.54
0.000329     1630.     1630.     1630.         2         0         0      0.00    442.91    461.46

FLOW DISTRIBUTION FOR SECNO=  22092.00          CHSEL=    601.07

STA=       19.       40.       90.      128.      151.      320.      440.      461.
  PER Q=     0.1       4.8      11.9      25.3      46.3      11.6       0.1
   AREA=    11.5     178.6     274.5     218.6    1127.7     428.7      11.5
    VEL=     0.2       0.8       1.3       3.4       1.2       0.8       0.2

*SECNO 22292.000
   SECNO     DEPTH     CHSEL     CRIWS     WSELK     EG        KV        HL        ULOSS    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    IH2       ICONT     CORAR     TOPWID     ENDST
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D/S FACE SWEITZER RD. SKEWED

22292.00	9.99	601.09	0.00	0.00	601.24	0.15	0.06	0.05	593.80
2910.	177.	2587.	146.	349.	778.	242.	1308.	283.	591.60
3.21	0.51	3.32	0.60	0.080	0.035	0.080	0.036	591.10	0.61
0.000331	240.	203.	160.	2	0	0	0.00	379.79	380.40

FLOW DISTRIBUTION FOR SECNO= 22292.00 CWSEL= 601.09

STA=	1.	185.	192.	279.	286.	350.	380.	380.
PER Q=	5.4	0.7	88.9	1.0	2.2	1.8	0.0	
AREA=	320.3	29.0	778.4	37.0	124.1	80.7	0.5	
VEL=	0.5	0.7	3.3	0.8	0.5	0.7	0.1	

*SECNO 22293.000

3370 NORMAL BRIDGE,NRD= 11 MIN ELTRD= 598.30 MAX ELLC= 598.10

22293.00	9.96	601.06	0.00	0.00	601.27	0.22	0.00	0.03	593.80
2910.	265.	2444.	202.	321.	601.	209.	1308.	283.	591.60
3.21	0.62	4.07	0.96	0.080	0.020	0.080	0.036	591.10	0.62
0.000985	1.	1.	1.	2	0	0	-226.34	379.78	380.39

FLOW DISTRIBUTION FOR SECNO= 22293.00 CWSEL= 601.06

STA=	1.	185.	192.	279.	286.	350.	380.	380.
PER Q=	9.0	0.1	86.0	0.1	3.8	3.1	0.0	
AREA=	314.5	6.7	601.1	7.0	122.0	79.7	0.5	
VEL=	0.8	0.5	4.1	0.4	0.9	1.1	0.2	

*SECNO 22309.000

3370 NORMAL BRIDGE,NRD= 11 MIN ELTRD= 598.30 MAX ELLC= 598.10

22309.00	9.97	601.07	0.00	0.00	601.29	0.22	0.02	0.00	593.80
2910.	266.	2441.	203.	323.	602.	210.	1309.	283.	591.60
3.21	0.62	4.03	0.96	0.080	0.020	0.080	0.036	591.10	0.61
0.000978	16.	16.	16.	0	0	0	-226.34	379.78	380.40

FLOW DISTRIBUTION FOR SECNO= 22309.00 CWSEL= 601.07

STA=	1.	185.	192.	279.	286.	350.	380.	380.
PER Q=	9.0	0.1	83.9	0.1	3.8	3.1	0.0	
AREA=	316.4	6.8	602.1	7.1	122.7	80.3	0.5	
VEL=	0.8	0.5	4.1	0.4	0.9	1.1	0.2	

*SECNO 22310.000

D/S FACE SWEITZER RD. SKEWED

22310.00	10.06	601.16	0.00	0.00	601.31	0.15	0.00	0.02	593.80
2910.	186.	2574.	151.	364.	785.	250.	1309.	283.	591.60
3.21	0.51	3.28	0.60	0.080	0.035	0.080	0.036	591.10	0.60
0.000319	1.	1.	1.	2	0	0	0.00	379.81	380.41

FLOW DISTRIBUTION FOR SECNO= 22310.00 CWSEL= 601.16

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STA=        1.      105.      192.      279.      286.      350.      380.      380.
  PER Q=     5.7       0.7      88.4       1.0       2.3       1.9       0.0
   AREA=   334.1      29.5     785.0      37.5     128.9      82.9       0.5
    VEL=     0.5       0.7       3.3       0.8       0.5       0.7       0.1

*SECNO 22410.000

        100' U/S SHEITZER RD.

 22410.00     10.14    601.34      0.00      0.00    601.37      0.03      0.03      0.03    593.00
    2910.      965.      572.     1342.     1151.      219.     1325.     1313.      284.     594.00
     3.23      0.56      2.62      1.01     0.070     0.035     0.070     0.036    591.20    178.67
0.000199       70.      100.      130.         2         0         0      0.00    542.05    720.71


FLOW DISTRIBUTION FOR SECNO=  22410.00          CWSEL=    601.34

STA=      179.      230.      410.      466.      491.      650.      710.      721.
  PER Q=     0.3      17.4      16.3      19.7      40.3       5.8       0.1
   AREA=    34.4     691.0     425.7     218.5    1087.4     230.3       7.2
    VEL=     0.2       0.7       1.1       2.6       1.1       0.7       0.2

CCHV=   0.100 CEHV=   0.300
*SECNO 23160.000
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        FV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       UTW       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


        VALLEY #25

 23160.00      9.87    601.47      0.00      0.00    601.49      0.02      0.11      0.00    595.00
    2910.     2164.      663.       79.     2911.      350.      189.     1366.      296.     595.40
     3.44      0.76      1.91      0.42     0.070     0.035     0.070     0.036    591.60    190.78
0.000119       750.      750.      750.         2         0         0      0.00    752.02    942.00


FLOW DISTRIBUTION FOR SECNO=  23160.00          CWSEL=    601.47

STA=      191.      270.      430.      773.      814.      845.      943.
  PER Q=     0.4      12.7      61.3      22.9       2.2       0.5
   AREA=    58.1     634.7    2218.2     349.7     116.8      71.7
    VEL=     0.2       0.6       0.8       1.9       0.6       0.2

*SECNO 24540.000

        VALLEY #26 D/S CONFLUENCE WITH MIDDLE CR.

 24540.00     10.38    601.68      0.00      0.00    601.75      0.07      0.25      0.02    595.50
    2910.      208.     1284.     1417.      425.      405.     2230.     1469.      319.     596.00
     3.66      0.49      3.17      0.54     0.120     0.035     0.120     0.036    591.30    165.71
0.000317      1380.     1380.     1380.         0         0         0      0.00    755.44    921.15


FLOW DISTRIBUTION FOR SECNO=  24540.00          CWSEL=    601.68

STA=      166.      250.      340.      386.      550.      820.      921.
  PER Q=     0.5       6.7      44.1      25.9      22.2       0.6
   AREA=    71.0     354.2     404.9    1014.5    1130.2      85.3
    VEL=     0.2       0.5       3.2       0.7       0.6       0.2

CCHV=   0.300 CEHV=   0.500
```

*SECNO 26060.000

230' D/S CARLETON-ROCKWOOD RD.

26060.00	9.88	601.98	0.00	0.00	602.00	0.02	0.22	0.02	596.70
2910.	1972.	900.	38.	3394.	557.	96.	1584.	343.	597.20
4.10	0.58	1.62	0.40	0.080	0.035	0.080	0.036	592.10	18.07
0.000093	1300.	1520.	1520.	1	0	0	0.00	697.10	715.17

FLOW DISTRIBUTION FOR SECNO= 26060.00 CHSEL= 601.98

STA=	18.	30.	170.	210.	613.	683.	693.	715.
PER Q=	0.1	10.5	6.3	50.9	30.9	0.8	0.5	
AREA=	11.9	628.4	279.5	2473.8	557.0	46.4	49.7	
VEL=	0.2	0.5	0.7	0.6	1.6	0.5	0.3	

1490 NH CARD USED
*SECNO 26290.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 600.10 ELREA= 603.90

D/S FACE CARLETON-ROCKWOOD RD.

26290.00	10.47	601.97	0.00	0.00	602.08	0.11	0.03	0.05	598.50
2910.	571.	2339.	0.	982.	805.	0.	1596.	345.	598.90
4.12	0.58	2.90	0.00	0.080	0.670	0.080	0.036	591.50	0.80
0.000391	170.	230.	230.	2	0	0	0.00	585.70	586.50

FLOW DISTRIBUTION FOR SECNO= 26290.00 CHSEL= 601.97

STA=	1.	450.	496.	587.
PER Q=	17.5	2.1	80.4	
AREA=	804.2	97.7	805.4	
VEL=	0.6	0.6	2.9	

SPECIAL BRIDGE

SP	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.95	1.50	3.00	0.00	78.20	19.40	606.00	0.00	591.50	591.50

CCHV= 0.300 CEHV= 0.500
*SECNO 26325.000
PRESSURE AND WEIR FLOW

EGPRS	EGLOC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
602.22	602.10	0.03	905.	1983.	606.	606.	601.80	600.10

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 600.10 ELREA= 603.90

U/S FACE CARLETON-ROCKWOOD RD.

26325.00	10.61	602.1	0.00	0.00	602.22	0.11	0.14	0.00	598.50
2910.	524.	2306.	0.	1051.	818.	0.	1598.	346.	598.90
4.13	0.50	2.92	0.00	0.080	0.035	0.080	0.036	591.50	0.79
0.000263	35.	35.	35.	2	0	2	0.00	585.71	586.50

FLOW DISTRIBUTION FOR SECNO= 26325.00 CWSEL= 602.11

STA=	1.	450.	485.	496.	587.
PER Q=	16.1	1.3	0.6	82.0	
AREA=	947.1	73.8	30.3	316.2	
VEL=	0.5	0.5	0.6	2.9	

CCHV= 0.100 CEHV= 0.300
*SECNO 26475.000

SECNO	DEPTH	CWSEL	CRITWS	WSELK	EG	HV	HL	CLOSS	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	IH2	ICONT	CORAR	TOPWID	ENDST
	VALLEY 429								
26475.00	9.81	602.21	0.00	0.00	602.27	0.06	0.05	0.00	596.90
2910.	1608.	836.	466.	1799.	247.	538.	1605.	348.	597.00
4.15	0.89	3.38	0.87	0.080	0.035	0.080	0.036	592.40	36.26
0.000404	150.	150.	150.	2	0	0	0.00	690.27	726.53

FLOW DISTRIBUTION FOR SECNO= 26475.00 CWSEL= 602.21

STA=	36.	65.	535.	563.	700.	727.
PER Q=	0.4	54.8	28.7	15.6	0.4	
AREA=	31.8	1767.5	247.3	508.4	29.3	
VEL=	0.4	0.9	3.4	0.9	0.4	

*SECNO 27015.000

	VALLEY 430								
27015.00	10.04	602.44	0.00	0.00	602.48	0.04	0.21	0.00	597.30
2910.	196.	649.	2066.	233.	202.	2428.	1639.	358.	596.50
4.26	0.83	3.21	0.85	0.080	0.035	0.080	0.036	592.40	17.93
0.000377	540.	540.	540.	2	0	0	0.00	907.17	925.10

FLOW DISTRIBUTION FOR SECNO= 27015.00 CWSEL= 602.44

STA=	18.	35.	91.	115.	600.	925.
PER Q=	0.3	6.4	22.3	65.4	5.6	
AREA=	20.9	212.1	202.4	2031.3	396.3	
VEL=	0.4	0.9	3.2	0.9	0.4	

CCHV= 0.300 CEHV= 0.500
*SECNO 29305.000

3470 ENCROACHMENT STATIONS= 43.0 153.0 TYPE= 1 TARGET= 110.000

	100' D/S DETROIT,TOLEDO&IRONTON R.R.								
29305.00	10.59	603.59	0.00	0.00	604.01	0.42	1.34	0.19	599.50
2910.	160.	2476.	274.	117.	440.	165.	1734.	385.	597.00
4.39	1.36	5.62	1.66	0.080	0.035	0.080	0.036	593.00	43.00
0.001015	2500.	2290.	2290.	2	0	0	0.00	110.00	153.00

SECTION

FLOW DISTRIBUTION FOR SECNO= 29305.00 CWSEL= 603.59

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STA=       43.       73.      123.      153.
  PER Q=      5.5      85.1       9.4
   AREA=    117.4     440.3     165.2
    VEL=      1.4       5.6       1.7

*SECNO 29405.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.30 ELREA=      611.30


        D/S FACE DETROIT,TOLEDO&IRONTON R.R.

 29405.00     10.07    603.67      0.00      0.00    604.14      0.47      0.11      0.03    595.20
    2910.        0.      2910.       0.        0.      527.        0.      1735.      385.    595.80
     4.40      0.00       5.53      0.00     0.080     0.035     0.080     0.036    593.60      1.00
0.001117       120.       100.       70.         1         0         0      0.00     60.00     61.00

FLOW DISTRIBUTION FOR SECNO=  29405.00          CWSEL=    603.67

STA=       1.       61.
  PER Q=    100.0
   AREA=    526.6
    VEL=      5.5

*SECNO 29406.000

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  611.30 MAX ELLC=  605.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.30 ELREA=      611.30

 29406.00     10.03    603.63      0.00      0.00    604.18      0.55      0.00      0.04    595.20
    2910.        0.      2910.       0.        0.      490.        0.      1735.      385.    595.80
     4.40      0.00       5.93      0.00     0.080     0.020     0.080     0.036    593.60      1.00
0.000462         1.         1.        1.         2         0         0    -34.65     60.00     61.00

FLOW DISTRIBUTION FOR SECNO=  29406.00          CWSEL=    603.63

STA=       1.       61.
  PER Q=    100.0
   AREA=    490.4
    VEL=      5.9

*SECNO 29442.000
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         CLOB      CCH       PROD      ALOB      ACH       AROB      VOL       TRA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IH2       ICONT     CORAR     TOPWID      ENDST

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  611.30 MAX ELLC=  605.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.30 ELREA=      611.30

 29442.00     10.05    603.65      0.00      0.00    604.20      0.54      0.02      0.00    595.20
    2910.        0.      2910.       0.        0.      492.        0.      1736.      385.    595.80
     4.40      0.00       5.92      0.00     0.080     0.020     0.080     0.036    593.60      1.00
0.000458        36.        36.       36.         0         0         0    -34.77     60.00     61.00
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FLOW DISTRIBUTION FOR SECNO= 29442.00 CHSEL= 603.65

STA= 1. 61.
PER Q= 100.0
AREA= 491.9
VEL= 5.9

*SECNO 29443.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEN= 611.30 ELREA= 611.30

U/S FACE DETROIT,TOLEDO&IRONTON R.R.

29443.00	10.16	603.76	0.00	0.00	604.22	0.46	0.00	0.02	595.20
2910.	0.	2910.	0.	0.	532.	0.	1736.	389.	595.60
4.40	0.00	5.47	0.00	0.060	0.035	0.060	0.036	593.60	1.00
0.001080	1.	1.	1.	2	0	0	0.00	60.00	61.00

FLOW DISTRIBUTION FOR SECNO= 29443.00 CHSEL= 603.76

STA= 1. 61.
PER Q= 100.0
AREA= 532.3
VEL= 5.5

*SECNO 29493.000

3470 ENCROACHMENT STATIONS= 1.0 132.0 TYPE= 1 TARGET= 131.000

50' U/S DETROIT,TOLEDO&IRONTON R.R

29493.00	11.04	603.94	0.00	0.00	604.30	0.36	0.05	0.03	599.50
2910.	32.	2414.	464.	67.	459.	333.	1737.	389.	597.80
4.40	0.79	5.25	1.33	0.100	0.035	0.100	0.036	592.90	1.00
0.000838	50.	50.	50.	2	0	0	0.00	131.00	132.00

FLOW DISTRIBUTION FOR SECNO= 29493.00 CHSEL= 603.94

STA= 1. 27. 77. 132.
PER Q= 1.8 82.9 15.3
AREA= 66.7 459.4 332.8
VEL= 0.8 5.3 1.3

CCHV= 0.100 CEHV= 0.300
*SECNO 30013.000

VALLEY #33

30013.00	11.09	604.49	0.00	0.00	604.61	0.12	0.28	0.02	598.60
2910.	100.	1687.	1115.	144.	465.	1433.	1754.	389.	599.80
4.46	0.73	3.63	0.78	0.100	0.035	0.100	0.036	593.40	506.06
0.000384	520.	520.	520.	2	0	0	0.00	427.78	933.84

FLOW DISTRIBUTION FOR SECNO= 30013.00 CHSEL= 604.49

STA= 506. 526. 546. 594. 880. 934.
PER Q= 0.7 3.0 58.0 36.2 2.1
AREA= 42.7 101.7 465.0 1311.8 120.8
VEL= 0.5 0.9 3.6 0.8 0.5

*SECNO 30723.000

VALLEY #34

30723.00	11.43	604.73	0.00	0.00	604.89	0.15	0.27	0.01	600.20
2910.	117.	1304.	938.	171.	466.	922.	1778.	394.	599.80
4.52	0.68	3.87	1.07	0.080	0.035	0.080	0.036	593.30	154.41
0.000456	900.	710.	500.	2	0	0	0.00	342.94	497.35

FLOW DISTRIBUTION FOR SECNO= 30723.00 CWSEL= 604.73

STA=	154.	230.	280.	330.	360.	450.	497.
PER Q=	4.0	62.0	9.4	5.5	16.4	2.7	
AREA=	171.4	466.2	241.8	142.1	426.2	112.1	
VEL=	0.7	3.9	1.1	1.1	1.1	0.7	

*SECNO 31223.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

VALLEY #35 D/S CONFLUENCE WITH NORTH BRANCH SWAN CREEK

31223.00	12.85	604.95	0.00	0.00	605.12	0.17	0.23	0.01	600.00
2800.	922.	1846.	32.	839.	458.	47.	1795.	397.	600.40
4.57	1.10	4.03	0.68	0.080	0.035	0.080	0.036	592.10	8.79
0.000456	500.	500.	500.	0	0	0	0.00	255.95	264.75

FLOW DISTRIBUTION FOR SECNO= 31223.00 CWSEL= 604.95

STA=	9.	50.	199.	244.	265.
PER Q=	2.6	30.3	65.9	1.1	
AREA=	101.9	736.8	458.3	47.1	
VEL=	0.7	1.2	4.0	0.7	

CCHV= 0.300 CEHV= 0.500

*SECNO 32033.000

3470 ENCROACHMENT STATIONS= 353.0 446.0 TYPE= 1 TARGET= 93.000

100' D/S I-275

32033.00	11.43	605.35	0.00	0.00	605.68	0.33	0.48	0.08	600.80
1840.	143.	1597.	101.	133.	323.	106.	1815.	401.	601.60
4.62	1.07	4.95	0.96	0.100	0.035	0.100	0.036	593.90	353.00
0.000834	1000.	810.	700.	1	0	0	0.00	93.00	446.00

FLOW DISTRIBUTION FOR SECNO= 32033.00 CWSEL= 605.35

STA=	353.	382.	418.	446.
PER Q=	7.7	86.8	5.5	
AREA=	132.9	322.8	105.6	
VEL=	1.1	4.9	1.0	

*SECNO 32133.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 615.00 ELREA= 615.00

D/S FACE I-275

32133.00	11.23	605.53	0.00	0.00	605.77	0.24	0.06	0.03	594.50
1840.	0.	1840.	0.	0.	472.	0.	1816.	401.	595.60
4.63	0.00	3.90	0.00	0.100	0.035	0.100	0.036	594.30	0.10
0.000467	100.	100.	100.	2	0	0	0.00	42.90	43.00

FLOW DISTRIBUTION FOR SECNO= 32133.00 CWSEL= 605.53

STA= 0. 43.
PER Q= 100.0
AREA= 472.1
VEL= 3.9

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BHC	BHP	BAREA	SS	ELCHU	ELCHD
	1.25	2.19	3.00	0.00	42.14	3.00	364.00	0.00	594.60	594.30

*SECNO 32400.000
PRESSURE FLOW

EGPRS	EGLOC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
606.40	605.33	0.04	0.	1840.	364.	364.	603.90	623.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 623.50 ELREA= 623.50

U/S FACE I-275

32400.00	11.37	606.17	0.00	0.00	606.40	0.23	0.63	0.00	595.00
1840.	0.	1840.	0.	0.	478.	0.	1819.	401.	596.10
4.65	0.00	3.85	0.00	0.100	0.035	0.100	0.036	594.80	0.10
0.000469	267.	267.	267.	2	0	0	0.00	42.90	43.00

Section AU

FLOW DISTRIBUTION FOR SECNO= 32400.00 CWSEL= 606.17

STA= 0. 43.
PER Q= 100.0
AREA= 478.1
VEL= 3.8

*SECNO 32450.000

3470 ENCROACHMENT STATIONS= 128.0 271.0 TYPE= 1 TARGET= 143.000

50' U/S I-275

32450.00	10.21	606.21	0.00	0.00	606.43	0.22	0.03	0.00	600.80
1840.	304.	1344.	192.	278.	306.	208.	1819.	401.	601.60
4.65	1.09	4.40	0.93	0.100	0.035	0.100	0.036	596.00	128.00
0.000680	50.	50.	50.	1	0	0	0.00	143.00	271.00

FLOW DISTRIBUTION FOR SECNO= 32450.00 CWSEL= 606.21

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STA=     128.      182.      218.      271.
  PER Q=     16.5      73.0      10.4
   AREA=    278.4     305.7     207.7
    VEL=      1.1       4.4       0.9

CCHV=   0.100 CEHV=   0.300
*SECNO 32590.000
   SECNO     DEPTH     CWSEL     CRIWS     USELK     EG        HV        XL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTW       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=     156.0     539.0  TYPE=     1  TARGET=     383.000

        VALLEY #40

 32590.00      9.45    606.45      0.00      0.00    606.50      0.05      0.05      0.02    600.40
    1840.      635.      802.      403.     1073.      301.      671.     1824.      402.     600.40
    4.68      0.59      2.67      0.60     0.120     0.035     0.120     0.036    597.00    156.00
0.000241      120.      140.      170.         2         0         0      0.00    359.15    515.15

FLOW DISTRIBUTION FOR SECNO=  32590.00          CWSEL=    606.45

STA=     156.      350.      386.      470.      515.
  PER Q=     34.5      43.6      18.6       3.3
   AREA=   1073.3     300.3     525.0     145.6
    VEL=      0.6       2.7       0.7       0.4

*SECNO 33520.000

        VALLEY #41

 33520.00      9.06    606.66      0.00      0.00    606.68      0.02      0.18      0.00    601.00
    1840.      679.      532.      629.     1855.      254.     1335.     1883.      415.     600.60
    4.97      0.37      2.09      0.47     0.120     0.035     0.120     0.036    597.60     66.76
0.000158      930.      930.      930.         2         0         0      0.00    836.48    903.24

FLOW DISTRIBUTION FOR SECNO=  33520.00          CWSEL=    606.66

STA=      67.      100.      599.      630.      770.      903.
  PER Q=      0.2      36.7      28.9      25.8       8.4
   AREA=     27.6    1527.4     254.2     690.7     443.8
    VEL=      0.1       0.4       2.1       0.5       0.3

*SECNO 34590.000

        VALLEY #42

 34590.00      9.70    606.90      0.00      0.00    607.02      0.12      0.31      0.03    602.70
    1840.      602.      820.      418.      896.      198.      639.     1946.      433.     602.70
    5.10      0.67      4.13      0.65     0.120     0.035     0.120     0.036    597.20     80.54
0.000705     1070.     1070.     1070.         2         0         0      0.00    607.95    688.48

FLOW DISTRIBUTION FOR SECNO=  34590.00          CWSEL=    606.90

STA=      81.      130.      408.      432.      620.      688.
  PER Q=      0.5      31.9      44.6      21.6       1.1
   AREA=     47.0     648.6     190.4     573.8      75.1
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    VEL=       0.3       0.7       4.1       0.7       0.3

CCHV=   0.300 CEHV=   0.500
*SECNO 34770.000
 34770.00      9.19    607.08      0.00      0.00    607.10      0.02      0.03      0.03    602.40
    1840.       841.      487.      512.     1120.      262.      745.     1954.      435.     602.90
     5.15      0.75      1.56      0.69     0.060     0.035     0.060     0.036    597.90     58.39
 0.000136       150.      180.      200.         2         0         0      0.00    579.02    637.41


FLOW DISTRIBUTION FOR SECNO=  34770.00          CWSEL=    607.08

STA=      50.      100.      170.      270.      353.      387.      470.      570.      637.
  PER Q=      0.7       7.8      19.8      17.4      26.5      16.5      10.8       0.6
   AREA=     43.3     226.1     458.0     392.6     262.1     380.2     318.0      46.5
    VEL=      0.3       0.6       0.8       0.8       1.9       0.8       0.6       0.2

*SECNO 34771.000

3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  602.10 MAX ELLC=  604.90

 34771.00      9.19    607.09      0.00      0.00    607.10      0.02      0.00      0.00    602.40
    1840.       968.      292.      500.     1041.      212.      691.     1954.      435.     602.90
     5.15      0.93      1.38      0.84     0.060     0.030     0.060     0.036    597.90     58.38
 0.000232         1.        1.        1.         0         0         0   -182.92    579.07    637.45


FLOW DISTRIBUTION FOR SECNO=  34771.00          CWSEL=    607.09

STA=      50.      100.      170.      270.      353.      387.      470.      570.      637.
  PER Q=      0.9      10.1      25.9      15.6      15.9      16.7      14.1       0.7
   AREA=     43.3     226.2     458.1     313.8     212.1     326.3     318.1      46.6
    VEL=      0.4       0.8       1.0       0.9       1.4       0.9       0.8       0.3

*SECNO 34776.000
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        AL        OLOSS    BANK ELEV
   Q         OLOB      OCH       OROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       HTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID     ENDST


3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  602.10 MAX ELLC=  604.90

 34776.00      9.19    607.09      0.00      0.00    607.10      0.02      0.00      0.00    602.40
    1840.       968.      292.      500.     1044.      212.      693.     1954.      435.     602.90
     5.15      0.93      1.37      0.84     0.060     0.030     0.030     0.036    597.90     58.23
 0.000231         5.        5.        5.         0         0         0   -182.92    579.57    637.01


FLOW DISTRIBUTION FOR SECNO=  34776.00          CWSEL=    607.09

STA=      50.      100.      170.      270.      353.      387.      470.      570.      636.
  PER Q=      0.9      10.1      25.9      15.6      15.9      16.7      14.1       0.8
   AREA=     43.6     226.7     458.8     314.4     212.3     326.9     313.8      47.1
    VEL=      0.4       0.8       1.0       0.9       1.4       0.9       0.8       0.3

*SECNO 34777.000

        U/S FACE FOOTBRIDGE #42-A

 34777.00      9.19    607.09      0.00      0.00    607.11      0.02      0.00      0.00    602.40
    1840.       841.      487.      513.     1123.      262.      747.     1954.      435.     602.90
     5.15      0.75      1.85      0.69     0.060     0.037     0.060     0.037    597.90     58.32
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 0.000135       1.       1.       1.        0        0        0     0.00   579.61   637.83

FLOW DISTRIBUTION FOR SECNO=  34777.00          CWSEL=    607.09

STA=      58.     100.     170.     270.     333.     387.     470.     570.     638.
  PER Q=      0.7      7.8     19.8     17.4     26.4     16.5     10.8      0.6
   AREA=     43.6    226.7    458.9    393.3    262.4    380.9    318.9     47.1
    VEL=      0.3      0.6      0.8      0.8      1.9      0.8      0.6      0.2

*SECNO 33929.000
 33929.00    10.00   607.10     0.00     0.00   607.16     0.03     0.03     0.02   604.20
    1840.     596.     759.     484.     776.     282.     636.    1962.     438.    603.40
     5.18     0.77     2.69     0.76    0.060    0.035    0.060    0.036   597.10    57.78
 0.000305      172.     172.     172.        1        0        0     0.00   672.89   730.67

FLOW DISTRIBUTION FOR SECNO=  33929.00          CWSEL=    607.10

STA=      58.     100.     220.     320.     401.     439.     520.     620.     680.     731.
  PER Q=      1.1      9.8     10.5     11.0     41.3     11.6      8.5      4.9      1.3
   AREA=     44.6    253.3    246.1    231.7    282.1    239.9    216.1    126.7     53.5
    VEL=      0.4      0.7      0.3      0.9      2.7      0.9      0.7      0.7      0.4

*SECNO 34930.000

3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  604.30 MAX ELLC=  605.80

 34930.00    10.03   607.13     0.00     0.00   607.16     0.03     0.00     0.01   604.20
    1840.     761.     529.     550.     734.     256.     565.    1962.     438.    603.40
     5.18     1.04     2.06     0.97    0.060    0.030    0.060    0.036   597.10    57.36
 0.000608       1.       1.       1.        2        0        0  -152.24   673.81   731.17

FLOW DISTRIBUTION FOR SECNO=  34930.00          CWSEL=    607.13

STA=      57.     100.     220.     320.     401.     439.     520.     620.     680.     731.
  PER Q=      1.6     14.1     15.1     10.6     28.8      8.8     12.2      7.0      1.9
   AREA=     45.5    255.8    248.2    184.9    256.2    164.6    218.2    127.9     54.5
    VEL=      0.6      1.0      1.1      1.1      2.1      1.0      1.0      1.0      0.6

*SECNO 34933.000

3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  604.30 MAX ELLC=  605.80

 34938.00    10.04   607.14     0.00     0.00   607.17     0.03     0.00     0.00   604.20
    1840.     762.     528.     550.     736.     256.     566.    1962.     438.    603.40
     5.18     1.04     2.06     0.97    0.060    0.030    0.060    0.036   597.10    57.28
 0.000605       8.       8.       8.        0        0        0  -152.24   673.98   731.26

FLOW DISTRIBUTION FOR SECNO=  34938.00          CWSEL=    607.14

STA=      57.     100.     220.     320.     401.     439.     520.     620.     680.     731.
  PER Q=      1.6     14.1     15.1     10.6     28.7      8.8     12.2      7.0      1.9
   AREA=     45.6    256.3    248.6    185.2    256.4    164.9    218.6    128.2     54.7
    VEL=      0.6      1.0      1.1      1.1      2.1      1.0      1.0      1.0      0.6

*SECNO 34939.000
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        FL        OLOSS   BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA   LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       LTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IH2       ICONT     CORAR     TOPWID     ENDST
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U/S FACE FOOTBRIDGE #42-B

34939.00	10.03	607.13	0.00	0.00	607.13	0.05	1.00	0.01	604.20
1040.	599.	755.	486.	783.	283.	642.	1962.	438.	603.40
5.19	0.76	2.67	0.76	0.060	0.035	0.060	0.036	597.10	57.34
0.000298	1.	1.	1.	1	0	0	0.00	673.84	731.19

FLOW DISTRIBUTION FOR SECNO= 34939.00 CWSEL= 607.13

STA=	37.	100.	220.	320.	401.	439.	520.	620.	680.	731.
PER Q=	1.1	9.9	10.6	11.0	41.0	11.6	8.5	4.9	1.3	
AREA=	45.5	255.9	248.3	233.5	282.9	241.6	218.3	128.0	54.6	
VEL=	0.4	0.7	0.8	0.9	2.7	0.9	0.7	0.7	0.4	

*SECNO 35259.000

35259.00	10.02	307.22	0.00	0.00	307.28	0.06	0.10	0.00	605.00
1840.	438.	815.	587.	754.	297.	586.	1974.	443.	604.40
5.23	0.58	2.75	1.00	0.060	0.035	0.060	0.036	597.20	77.74
0.000326	320.	320.	320.	2	0	0	0.00	750.46	828.20

FLOW DISTRIBUTION FOR SECNO= 35259.00 CWSEL= 607.22

STA=	78.	140.	420.	520.	600.	640.	720.	820.	828.
PER Q=	1.8	13.7	3.0	5.3	44.3	19.4	12.5	0.0	
AREA=	69.2	426.6	112.4	145.9	296.7	317.9	267.4	0.9	
VEL=	0.5	0.6	0.5	0.7	2.7	1.1	0.9	0.1	

*SECNO 35260.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD= 602.10 MAX ELLC= 605.70

35260.00	10.06	607.26	0.00	0.00	607.29	0.03	0.00	0.01	605.00
1840.	567.	543.	725.	740.	270.	361.	1974.	443.	604.40
5.23	0.77	2.03	1.29	0.060	0.030	0.060	0.036	597.20	76.77
0.000591	1.	1.	1.	2	0	0	-92.01	752.70	829.47

FLOW DISTRIBUTION FOR SECNO= 35260.00 CWSEL= 607.26

STA=	77.	160.	420.	520.	600.	640.	720.	820.	829.
PER Q=	2.5	19.2	4.2	4.9	29.8	22.2	17.2	0.0	
AREA=	71.4	436.3	115.8	116.7	270.1	288.7	270.8	1.2	
VEL=	0.7	0.8	0.7	0.8	2.0	1.4	1.2	0.2	

*SECNO 35260.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD= 602.10 MAX ELLC= 605.70

35260.00	10.06	607.26	0.00	0.00	607.29	0.03	0.00	0.00	605.00
1840.	568.	567.	725.	742.	270.	561.	1975.	443.	604.40
5.24	0.77	2.02	1.29	0.060	0.030	0.060	0.036	597.20	76.67
0.000588	8.	8.	8.	0	0	0	-92.01	752.92	829.60

FLOW DISTRIBUTION FOR SECNO= 35260.00 CWSEL= 607.26

STA=	77.	140.	420.	520.	600.	640.	720.	820.	830.
PER Q=	2.5	19.2	4.2	4.9	29.7	22.2	17.2	0.0	
AREA=	71.6	437.3	116.2	116.9	270.2	288.9	271.2	1.3	
VEL=	0.7	0.8	0.7	0.8	2.0	1.4	1.2	0.2	

*SECNO 35269.000

U/S FACE FOOTBRIDGE #42-C

35269.00	10.05	607.25	0.00	0.00	607.31	0.06	0.00	0.01	605.00
1040.	446.	807.	307.	772.	298.	593.	1975.	443.	604.40
5.24	0.50	2.71	0.99	0.060	0.035	0.060	0.036	597.20	76.79
0.000315	1.	1.	1.	1	0	0	0.00	752.64	829.44

FLOW DISTRIBUTION FOR SECNO= 35269.00 CHSEL= 607.25

STA=	77.	140.	420.	520.	600.	640.	720.	820.	829.
PER Q=	1.8	14.0	3.0	5.4	43.9	19.3	12.6	0.0	
AREA=	71.3	436.1	115.7	148.6	298.1	320.6	270.7	1.2	
VEL=	0.5	0.6	0.5	0.7	2.7	1.1	0.9	0.1	

*SECNO 35441.000

SECNO	DEPTH	CHSEL	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	LTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 150.0 920.0 TYPE= 1 TARGET= 770.000

35441.00	10.42	607.32	0.00	0.00	607.36	0.05	0.05	0.00	602.60
1040.	913.	625.	302.	1258.	224.	434.	1982.	446.	601.70
5.27	0.73	2.79	0.70	0.060	0.035	0.060	0.036	596.90	150.00
0.000280	200.	172.	150.	1	0	0	0.00	770.00	920.00

FLOW DISTRIBUTION FOR SECNO= 35641.00 CHSEL= 607.32

STA=	150.	210.	510.	610.	696.	697.	723.	724.	810.	910.	920.
PER Q=	3.0	27.5	10.9	8.2	0.1	34.0	0.1	7.3	8.5	0.5	
AREA=	96.5	697.0	257.3	204.1	3.3	224.1	3.8	191.2	222.3	16.7	
VEL=	0.6	0.7	0.8	0.7	0.4	2.8	0.4	0.7	0.7	0.5	

*SECNO 35442.000

3370 NORMAL BRIDGE, NRD= 17 MIN ELTRD= 604.50 MAX ELLC= 604.40

3470 ENCROACHMENT STATIONS= 150.0 920.0 TYPE= 1 TARGET= 770.000

35442.00	10.45	607.35	0.00	0.00	607.37	0.02	0.00	0.01	602.60
1040.	1006.	395.	359.	1270.	190.	437.	1982.	447.	601.70
5.27	0.86	2.09	0.82	0.060	0.025	0.060	0.036	596.90	150.00
0.000303	1.	1.	1.	2	0	0	-37.66	770.00	920.00

FLOW DISTRIBUTION FOR SECNO= 35442.00 CHSEL= 607.35

STA=	150.	210.	510.	610.	696.	697.	723.	724.	810.	910.	920.
PER Q=	3.5	32.8	12.9	9.7	0.0	21.5	0.0	8.7	10.2	0.6	
AREA=	97.9	704.0	259.7	206.1	1.9	190.3	1.9	193.2	224.7	16.9	
VEL=	0.7	0.9	0.9	0.9	0.4	2.1	0.3	0.8	0.8	0.6	

*SECNO 35463.000

3370 NORMAL BRIDGE, NRD= 17 MIN ELTRD= 604.50 MAX ELLC= 604.40

3470 ENCROACHMENT STATIONS= 150.0 920.0 TYPE= 1 TARGET= 770.000

35463.00	10.46	607.36	0.00	0.00	607.38	0.02	0.01	0.00	602.60
1840.	1086.	394.	359.	1274.	191.	438.	1983.	447.	601.70
5.28	0.95	2.07	0.82	0.060	0.025	0.060	0.036	596.90	150.00
0.000300	21.	21.	21.	0	0	3	-37.66	770.00	920.00

FLOW DISTRIBUTION FOR SECNO= 35463.00 CWSEL= 607.36

STA=	150.	210.	510.	610.	696.	697.	723.	724.	810.	910.	920.
PER Q=	3.6	32.3	12.9	9.7	0.0	21.4	0.3	8.7	10.2	0.6	
AREA=	93.4	706.1	260.4	206.7	2.0	190.5	2.0	193.3	225.4	17.0	
VEL=	0.7	0.9	0.9	0.9	0.4	2.1	0.3	0.8	0.8	0.6	

*SECNO 35464.000

3470 ENCROACHMENT STATIONS= 150.0 920.0 TYPE= 1 TARGET= 770.000

U/S FACE FOOTBRIDGE #42-D

35464.00	10.44	607.34	0.00	0.00	607.39	0.04	0.00	0.01	602.60
1840.	917.	619.	304.	1273.	225.	439.	1983.	447.	601.70
5.28	0.72	2.75	0.69	0.060	0.035	0.060	0.036	596.90	150.00
0.000272	1.	1.	1.	1	0	0	0.00	770.00	920.00

FLOW DISTRIBUTION FOR SECNO= 35464.00 CWSEL= 607.34

STA=	150.	210.	510.	610.	696.	697.	723.	724.	810.	910.	920.
PER Q=	3.0	27.6	10.9	8.2	0.1	33.7	0.1	7.4	8.6	0.5	
AREA=	98.2	705.0	260.0	206.4	3.4	224.8	3.3	193.5	225.0	16.9	
VEL=	0.6	0.7	0.8	0.7	0.4	2.8	0.4	0.7	0.7	0.5	

*SECNO 35759.000

3470 ENCROACHMENT STATIONS= 400.0 1020.0 TYPE= 1 TARGET= 620.000

35759.00	10.31	607.41	0.00	0.00	607.51	0.10	0.09	0.03	605.00
1840.	567.	1145.	127.	779.	370.	184.	1994.	452.	605.00
5.31	0.73	3.09	0.69	0.060	0.035	0.060	0.036	596.60	400.00
0.000386	295.	295.	295.	2	0	0	0.00	620.00	1020.00

FLOW DISTRIBUTION FOR SECNO= 35759.00 CWSEL= 607.41

STA=	400.	700.	856.	904.	980.	1020.
PER Q=	12.9	17.9	62.2	5.9	1.0	
AREA=	402.5	376.4	370.3	145.4	38.9	
VEL=	0.6	0.9	3.1	0.7	0.5	

*SECNO 35760.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XML	XMCH	XMR	WTN	ELVIM	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

3370 NORMAL BRIDGE,NRD= 17 MIN ELTRD= 605.00 MAX ELLC= 605.50

3470 ENCROACHMENT STATIONS= 400.0 1020.0 TYPE= 1 TARGET= 620.000

35760.00	10.81	607.41	0.00	0.00	607.51	0.10	0.00	0.00	605.00
1840.	956.	730.	154.	694.	195.	135.	1994.	452.	605.00
5.31	1.38	3.73	1.14	0.060	0.025	0.060	0.036	596.60	400.00

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 0.001721       1.       1.       1.        0        0        0  -310.09   620.00  1020.00

FLOW DISTRIBUTION FOR SECNO=  35760.00          CHSEL=    607.41

STA=     400.     700.     856.     904.     980.    1020.
  PER Q=     27.4     24.6     39.7      6.3      2.1
   AREA=    402.8    290.8    195.5     96.1     39.0
    VEL=      1.2      1.6      3.7      1.2      1.0

*SECNO 35767.000

3370 NORMAL BRIDGE,NRD= 17 MIN ELTRD=  605.00 MAX ELLC=  605.50

3470 ENCROACHMENT STATIONS=     400.0    1020.0  TYPE=     1  TARGET=     620.000
 35767.00    10.82   607.42     0.00     0.00   607.53     0.10     0.01     0.00   605.00
    1840.     957.     729.     155.     695.     193.     136.    1994.     452.    605.00
     5.31     1.38     3.72     1.14    0.060    0.025    0.060    0.036   596.60   400.00
 0.001711       7.       7.       7.        0        0        0  -310.26   620.00  1020.00

FLOW DISTRIBUTION FOR SECNO=  35767.00          CHSEL=    607.42

STA=     400.     700.     856.     904.     980.    1020.
  PER Q=     27.4     24.6     39.6      6.3      2.1
   AREA=    404.0    291.4    195.5     96.4     39.1
    VEL=      1.2      1.6      3.7      1.2      1.0

*SECNO 35760.000

3470 ENCROACHMENT STATIONS=     400.0    1020.0  TYPE=     1  TARGET=     620.000

        U/S FACE FOOTBRIDGE M42-E

 35768.00    10.83   607.43     0.00     0.00   607.53     0.09     0.00     0.00   605.00
    1840.     570.    1141.     128.     783.     371.     186.    1994.     452.    605.00
     5.31     0.73     3.08     0.69    0.060    0.035    0.060    0.036   596.60   400.00
 0.000381       1.       1.       1.        0        0        0     0.00   620.00  1020.00

FLOW DISTRIBUTION FOR SECNO=  35768.00          CHSEL=    607.43

STA=     400.     700.     856.     904.     980.    1020.
  PER Q=     13.1     17.9     62.0      5.9      1.0
   AREA=    406.2    378.4    370.9    146.3     39.4
    VEL=      0.6      0.9      3.1      0.7      0.5

*SECNO 36068.000

3470 ENCROACHMENT STATIONS=     400.0     870.0  TYPE=     1  TARGET=     470.000
 36068.00    11.37   607.57     0.00     0.00   607.63     0.07     0.09     0.01   604.60
    1840.     621.     993.     225.     795.     368.     274.    2003.     455.    605.10
     5.36     0.78     2.70     0.82    0.060    0.035    0.060    0.036   596.20   400.00
 0.000285     250.     300.     350.        2        0        0     0.00   470.00   870.00

FLOW DISTRIBUTION FOR SECNO=  36068.00          CHSEL=    607.57

STA=     400.     550.     630.     727.     774.     850.     870.
  PER Q=      9.0     13.2     11.6     54.0      9.8      2.5
   AREA=    269.9    286.7    238.5    368.4    215.5     58.1
    VEL=      0.6      0.8      0.9      2.7      0.8      0.8
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SECTION 2D

*SECNO 36069.000

3370 NORMAL BRIDGE,NRD= 15 MIN ELTRD= 604.30 MAX ELLC= 606.30

3470 ENCROACHMENT STATIONS= 400.0 870.0 TYPE= 1 TARGET= 470.000

36069.00	11.40	607.50	0.00	0.00	607.64	0.04	0.00	0.01	604.60
1840.	868.	711.	261.	791.	338.	243.	2003.	455.	605.10
5.36	1.10	2.10	1.08	0.060	0.030	0.060	0.036	596.20	400.00
0.000572	1.	1.	1.	2	0	0	-82.03	470.00	870.00

FLOW DISTRIBUTION FOR SECNO= 36069.00 C,SEL= 607.60

STA=	400.	550.	650.	727.	774.	850.	870.
PER Q=	13.2	19.0	15.0	38.6	10.6	3.6	
AREA=	275.2	290.3	225.9	337.8	183.8	58.9	
VEL=	0.9	1.2	1.2	2.1	1.1	1.1	

*SECNO 36077.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOC	VCH	VROB	XNL	XNCH	XNR	,TN	ELMIN	SSTA
SLOPE	XLOCL	XLCH	XLOCR	ITRIAL	IH2	ICONT	CORAR	TOPWID	ENDST

3370 NORMAL BRIDGE,NRD= 15 MIN ELTRD= 604.30 MAX ELLC= 606.30

3470 ENCROACHMENT STATIONS= 400.0 870.0 TYPE= 1 TARGET= 470.000

36077.00	11.41	607.61	0.00	0.00	607.65	0.04	0.00	0.00	604.60
1840.	869.	710.	261.	793.	338.	243.	2004.	455.	605.10
5.36	1.10	2.10	1.07	0.060	0.030	0.060	0.036	596.20	400.00
0.000570	8.	8.	8.	0	0	0	-82.03	470.00	870.00

FLOW DISTRIBUTION FOR SECNO= 36077.00 CWSEL= 607.61

STA=	400.	550.	650.	727.	774.	850.	870.
PER Q=	13.2	19.0	15.0	38.6	10.6	3.6	
AREA=	275.7	290.6	226.2	337.9	184.1	58.9	
VEL=	0.9	1.2	1.2	2.1	1.1	1.1	

*SECNO 36078.000

3470 ENCROACHMENT STATIONS= 400.0 870.0 TYPE= 1 TARGET= 470.000

U/S FACE FOOTBRIDGE #42-F

36078.00	11.40	607.60	0.00	0.00	607.66	0.06	0.00	0.01	604.60
1840.	627.	987.	227.	806.	370.	277.	2004.	455.	605.10
5.36	0.78	2.67	0.82	0.060	0.035	0.060	0.036	596.20	400.00
0.000278	1.	1.	1.	1	0	0	0.00	470.00	870.00

FLOW DISTRIBUTION FOR SECNO= 36078.00 CWSEL= 607.60

STA=	400.	550.	650.	727.	774.	850.	870.
PER Q=	9.2	13.2	11.6	53.6	9.8	2.6	
AREA=	275.0	290.2	241.1	370.0	218.2	58.3	
VEL=	0.6	0.8	0.9	2.7	0.8	0.8	

*SECNO 36298.000

3470 ENCROACHMENT STATIONS= 400.0 750.0 TYPE= 1 TARGET= 350.000

100' D/S GRAFTON RD.

36298.00	10.46	607.65	0.00	0.00	607.74	0.09	0.07	0.02	603.50
1840.	538.	1103.	199.	372.	357.	218.	2010.	457.	603.60
5.39	0.94	3.09	0.91	0.060	0.035	0.060	0.036	597.20	400.00
0.000369	160.	240.	260.	2	0	0	0.00	350.00	750.00

FLOW DISTRIBUTION FOR SECNO= 36298.00 CWSEL= 607.65

STA=	400.	520.	615.	661.	700.	750.
PER Q=	10.4	18.9	59.9	7.6	3.3	
AREA=	248.6	322.9	357.1	130.6	87.8	
VEL=	0.8	1.1	3.1	1.1	0.7	

*SECNO 36393.000

3470 ENCROACHMENT STATIONS= 1.0 301.0 TYPE= 1 TARGET= 300.000

D/S FACE GRAFTON RD. (SKEW)

36398.00	9.98	607.58	0.00	0.00	607.91	0.32	0.05	0.11	598.20
1840.	114.	1625.	102.	127.	335.	117.	2012.	458.	598.20
5.39	0.89	4.85	0.87	0.060	0.035	0.060	0.036	597.60	1.00
0.000633	150.	100.	50.	2	0	0	0.00	300.00	301.00

FLOW DISTRIBUTION FOR SECNO= 36398.00 CWSEL= 607.58

STA=	1.	128.	139.	173.	183.	301.
PER Q=	1.7	4.4	88.3	3.9	1.6	
AREA=	74.1	53.3	335.0	40.3	68.9	
VEL=	0.4	1.5	4.9	1.5	0.4	

SPECIAL BRIDGE

SO	XK	XKOR	COFQ	RDLEN	B'C	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.10	3.00	0.00	32.14	0.00	250.00	0.00	597.60	597.60

*SECNO 36644.000
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
609.35	608.05	0.00	249.	1574.	250.	270.	606.00	608.30

3470 ENCROACHMENT STATIONS= 1.0 301.0 TYPE= 1 TARGET= 300.000

U/S FACE GRAFTON RD. (SKEW)

36444.00	11.02	608.62	0.00	0.00	608.88	0.25	0.97	0.00	598.20
1840.	140.	1604.	96.	170.	371.	127.	2013.	458.	598.20
5.40	0.79	4.32	0.76	0.060	0.035	0.060	0.036	597.60	1.00
0.000439	46.	46.	46.	2	0	2	0.00	300.00	301.00

FLOW DISTRIBUTION FOR SECNO= 36444.00 CWSEL= 608.62

STA=	1.	126.	139.	173.	183.	301.
PER Q=	3.1	4.5	87.2	3.7	1.5	
AREA=	117.3	60.7	371.0	53.6	73.5	
VEL=	0.3	1.4	4.3	1.3	0.4	

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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T1 ASH TOWNSHIP F/S HUD2020-07 SWAN CREEK
T2 ENCROACHMENT RUN
T3      SWAN CR,ASH TWP.

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         USEL      FQ
       0.       5.        0.        0.  0.000000      0.00      0.0       0.   590.000     0.000
J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
    15.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000    15.000
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*PROF 2

CCHV=   0.300 CEHV=   0.500
*SECNO 5.000
 2800 NAT Q1=   2076.01  WSEL=    590.00  ENC Q1=   2076.01  WSEL=    590.10  RATIO=  0.0000
 NAT Q1=   2152.  RATIOS LOB,CH,ROB=  0.0456  0.2827  0.6717  WSEL=    590.10
   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       UTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      70.6     875.9  TYPE=     4  TARGET=       0.035

        100' D/S LAGO 3D.

     5.00      9.50    590.00      0.00    590.00    590.04      0.04      0.00      0.00    584.90
    3470.      101.     1027.     2341.      149.      352.     3323.        0.        0.     585.60
     0.00      0.68      2.92      0.70     0.100     0.035     0.100     0.000    580.50     70.55
 0.000297        0.        0.        0.         0         0         0      0.00    805.30    875.85


FLOW DISTRIBUTION FOR SECNO=      5.00          CWSEL=    590.00

STA=      71.     100.     142.     240.     600.     876.
  PER Q=      2.9     29.6      9.5     38.8     19.1
   AREA=    149.1    352.3    460.6   1000.0   1052.2
    VEL=      0.7      2.9      0.7      0.7      0.6

*SECNO 6.000
 2800 NAT Q1=   1567.30  WSEL=    589.99  ENC Q1=   1567.30  WSEL=    590.09  RATIO=  0.0000
 NAT Q1=   1630.  RATIOS LOB,CH,ROB=  0.0000  0.6511  0.3489  WSEL=    590.09

3470 ENCROACHMENT STATIONS=      658.0    1354.2  TYPE=     4  TARGET=       0.038

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      591.00 ELREA=      586.50


        D/S FACE LAGO 3D.

     6.00      9.20    589.99      0.00    589.99    590.13      0.14      0.04      0.05    586.30
    3470.        0.     2375.     1095.        0.      648.     1638.        7.        2.     583.40
     0.01      0.00      3.67      0.67     0.100     0.035     0.100     0.035    580.70    658.00
 0.000523      100.      100.      100.         2         0         0      0.00    696.17   1354.17


FLOW DISTRIBUTION FOR SECNO=      6.00          CWSEL=    589.99

STA=      658.     742.     800.    1000.    1100.    1200.    1354.
  PER Q=     68.6      5.2      7.5      7.3      5.7      5.8
   AREA=    647.8    219.7    467.7    333.9    208.9    347.6
    VEL=      3.7      0.8      0.6      0.8      0.7      0.6

*SECNO 7.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD=  586.50 MAX ELLC=  590.00


3470 ENCROACHMENT STATIONS=      657.0    1354.0  TYPE=     1  TARGET=     697.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      591.00 ELREA=      586.50
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     7.00      9.24    589.94      0.00    589.94    590.19      0.25      0.00      0.05    586.30
    3470.        0.     2853.      617.        0.      643.     1415.        7.        2.    583.40
     0.01      0.00      4.44      0.44     0.100     0.020     0.100     0.034    580.70    658.00
 0.000252        1.        1.        1.         2         0         0   -189.85    696.00   1354.00

FLOW DISTRIBUTION FOR SECNO=       7.00          CWSEL=     589.94

STA=      658.      742.      800.     1000.     1100.     1200.     1354.
  PER Q=      82.2       0.1       5.0       4.9       3.9       3.9
   AREA=     643.0      27.1     437.0     328.5     283.5     339.0
    VEL=       4.4       0.1       0.4       0.5       0.5       0.4

*SECNO 17.000

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD=  586.50 MAX ELLC=  590.00

3470 ENCROACHMENT STATIONS=      657.0     1375.0  TYPE=      1  TARGET=      718.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       591.00 ELREA=       586.50

    17.00      9.24    589.94      0.00    589.94    590.19      0.25      0.00      0.00    586.30
    3470.        0.     2840.      630.        0.      643.     1457.        8.        2.    583.40
     0.01      0.00      4.41      0.43     0.100     0.020     0.100     0.032    580.70    658.00
 0.000249       16.       16.       16.         0         0         0   -190.02    717.00   1375.00

FLOW DISTRIBUTION FOR SECNO=      17.00          CWSEL=     589.94

STA=      658.      742.      800.     1000.     1100.     1200.     1375.
  PER Q=      81.9       0.1       5.0       4.9       3.9       4.3
   AREA=     643.5      27.3     438.2     329.1     284.1     378.4
    VEL=       4.4       0.1       0.4       0.5       0.5       0.4

*SECNO 18.000
 2800 NAT Q1=    1630.88  WSEL=     590.09  ENC Q1=    1630.88  WSEL=     590.19  RATIO=  0.0000
 NAT Q1=    1695.  RATIOS LOB,CH,ROB=  0.0000  0.6391  0.3609  WSEL=     590.19
   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    IH2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      658.0     1375.1  TYPE=      4  TARGET=        0.038

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       591.00 ELREA=       586.50


        U/S FACE LABO RD.

    18.00      9.39    590.09      0.00    590.09    590.23      0.13      0.00      0.03    586.30
    3470.        0.     2329.     1141.        0.      657.     1744.        8.        2.    583.40
     0.01      0.00      3.55      0.65     0.100     0.035     0.100     0.032    580.70    658.00
 0.000482        1.        1.        1.         2         0         0      0.00    717.06   1375.06

FLOW DISTRIBUTION FOR SECNO=      18.00          CWSEL=     590.09

STA=      658.      742.      800.     1000.     1100.     1200.     1375.
  PER Q=      67.1       5.2       7.8       7.4       5.8       6.6
   AREA=     656.7     225.9     468.8     344.4     299.4     405.3
    VEL=       3.5       0.8       0.6       0.7       0.7       0.6
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*SECNO 68.000
 2800 NAT Q1=   1928.09  WSEL=    590.20  ENC Q1=   1928.09  WSEL=    590.30  RATIO=  0.0000
 NAT Q1=   2004.  RATIOS LOB,CH,ROB=  0.0958  0.3157  0.5885  WSEL=    590.30

3470 ENCROACHMENT STATIONS=     704.3    1468.6  TYPE=     4  TARGET=       0.038

        50' U/S LABO RD.

    68.00     9.71   590.21     0.00   590.20   590.27     0.06     0.02     0.02   584.90
    3470.      274.    1153.    2043.     341.     361.    2303.      11.       3.   585.60
     0.02     0.80     3.19     0.73    0.100    0.035    0.100    0.033   580.50   704.31
 0.000344      50.      50.      50.        2        0        0     0.00   764.44  1468.76


FLOW DISTRIBUTION FOR SECNO=     68.00          CWSEL=    590.21

STA=     704.     715.     770.     812.    1050.    1469.
  PER Q=     0.9      7.0     33.2     26.8     32.0
   AREA=    51.6    289.4    361.1   1168.9   1634.2
    VEL=     0.6      0.8      3.2      0.8      0.7

CCHV=   0.100 CEHV=   0.300
*SECNO 1438.000
 2800 NAT Q1=   1505.66  WSEL=    590.70  ENC Q1=   1505.66  WSEL=    590.80  RATIO=  0.0000
 NAT Q1=   1553.  RATIOS LOB,CH,ROB=  0.3990  0.4013  0.1188  WSEL=    590.80

3470 ENCROACHMENT STATIONS=     400.5     851.5  TYPE=     4  TARGET=       0.030

        VALLEY #3

  1438.00    10.44   590.74     0.00   590.70   590.88     0.14     0.58     0.02   585.30
    3470.     1373.    1732.     365.    1553.     416.     379.     103.       22.   586.30
     0.17     0.88     4.17     0.96    0.120    0.035    0.080    0.035   580.30   400.46
 0.000550     1200.    1370.    1450.        2        0        0     0.00   451.03   851.54


FLOW DISTRIBUTION FOR SECNO=   1438.00          CWSEL=    590.74

STA=     400.     470.     692.     738.     852.
  PER Q=     6.9     32.7     49.9     10.5
   AREA=   312.5   1240.1    415.6    379.4
    VEL=     0.8      0.9      4.2      1.0

*SECNO 2898.000
 2800 NAT Q1=   1913.98  WSEL=    591.33  ENC Q1=   1913.98  WSEL=    591.43  RATIO=  0.0000
 NAT Q1=   1985.  RATIOS LOB,CH,ROB=  0.7106  0.2738  0.0156  WSEL=    591.43

3470 ENCROACHMENT STATIONS=     850.1    1468.0  TYPE=     4  TARGET=       0.036

        VALLEY #4

  2898.00    10.12   591.42     0.00   591.33   591.46     0.05     0.58     0.01   584.50
    3470.     2570.     900.       0.     2650.     298.       0.      179.       37.   584.00
     0.41     0.97     3.02     0.00    0.000    0.035    0.080    0.037   581.30   850.06
 0.000360     1200.    1460.    1460.        2        0        0     0.00   617.94  1468.00


FLOW DISTRIBUTION FOR SECNO=   2898.00          CWSEL=    591.42

STA=     850.    1400.    1435.    1460.
  PER Q=    65.7      8.4     25.9
   AREA=  2416.7    233.3    298.4
    VEL=     0.9      1.2      3.0
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*SECNO 3768.000
 2800 NAT Q1=   1682.74  WSEL=    591.56  ENC Q1=   1682.74  WSEL=    591.66  RATIO=  0.0000
 NAT Q1=   1734.  RATIOS LOB,CH,ROB=  0.0904  0.3510  0.5586  WSEL=    591.66

3470 ENCROACHMENT STATIONS=     825.2    1266.7  TYPE=     4  TARGET=       0.030

        VALLEY #5

  3768.00    10.95   591.65     0.00   591.56   591.74     0.09     0.27     0.01   587.20
    3470.     270.    1256.    1945.     504.     356.    1375.     213.     44.    586.50
     0.50     0.54     3.53     1.41    0.120    0.035    0.070    0.038   580.70   825.18
 0.000427     350.     870.     950.        2        0        0     0.00   441.50  1266.68


FLOW DISTRIBUTION FOR SECNO=   3768.00          CWSEL=    591.65

STA=     625.     990.    1032.    1250.    1267.
  PER Q=      7.8     36.2     53.1      2.9
   AREA=    503.6    355.8   1287.1     87.8
    VEL=      0.5      3.5      1.4      1.1

*SECNO 5158.000
 2800 NAT Q1=   1271.94  WSEL=    592.29  ENC Q1=   1271.94  WSEL=    592.39  RATIO=  0.0000
 NAT Q1=   1317.  RATIOS LOB,CH,ROB=  0.0000  0.4641  0.5359  WSEL=    592.39
   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    XLOOL    XLCH     XLOOR    ITRIAL   IN2      ICONT    CORAR    TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      95.0     613.0  TYPE=     4  TARGET=       0.034

        VALLEY #6

  5158.00    10.20   592.38     0.00   592.29   592.52     0.14     0.77     0.01   595.20
    3470.       0.    1669.    1801.       0.     401.    1792.     282.     58.    587.20
     0.65     0.00     4.16     1.01    0.120    0.035    0.100    0.037   582.10    99.81
 0.000746     1200.    1390.    1390.        1        0        0     0.00   513.23   613.04


FLOW DISTRIBUTION FOR SECNO=   5158.00          CWSEL=    592.30

STA=     100.     156.     613.
  PER Q=     48.1     51.9
   AREA=    401.1   1792.1
    VEL=      4.2      1.0

*SECNO 6318.000
 2800 NAT Q1=   1464.00  WSEL=    593.01  ENC Q1=   1464.00  WSEL=    593.11  RATIO=  0.0000
 NAT Q1=   1507.  RATIOS LOB,CH,ROB=  0.4266  0.5732  0.0003  WSEL=    593.11

3470 ENCROACHMENT STATIONS=     105.6     517.0  TYPE=     4  TARGET=       0.028

        VALLEY #7 D/S CONFLUENCE WITH GRUNDMAN DRAIN

  6318.00    11.21   593.11     0.00   593.01   593.26     0.15     0.73     0.00   587.60
    3470.    1430.    2040.       0.    1516.     512.       0.     336.     70.    592.20
     0.77     0.94     3.98     0.00    0.100    0.035    0.100    0.037   581.90   108.62
 0.000571     1000.    1160.    1160.        1        0        0     0.00   408.39   517.00


FLOW DISTRIBUTION FOR SECNO=   6318.00          CWSEL=    593.11
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STA=     109.      455.      517.
  PER Q=      41.2      58.8
   AREA=   1515.7     512.2
    VEL=       0.9       4.0

*SECNO 7818.000
 2800 NAT Q1=   1299.05  WSEL=    593.87  ENC Q1=   1299.05  WSEL=    593.97  RATIO=  0.0000
 NAT Q1=   1337.  RATIOS LOB,CH,ROB=  0.4004  0.5251  0.0746  WSEL=    593.97

3470 ENCROACHMENT STATIONS=     110.0     508.5  TYPE=     4  TARGET=       0.028

        VALLEY #3

  7818.00     11.37    593.97      0.00    593.87    594.18      0.21      0.90      0.02    589.40
    3470.     1380.     1874.      216.     1342.      384.      197.      398.       83.     587.80
     0.90      1.03      4.00      1.10     0.100     0.035     0.100     0.037    582.60    110.03
 0.000711     1300.     1500.     1700.         2         0         0      0.00    398.47    508.50


FLOW DISTRIBUTION FOR SECNO=   7818.00          CWSEL=    593.97

STA=     110.      140.      430.      470.      509.
  PER Q=       2.5      37.2      54.0       6.2
   AREA=     103.0    1238.9     383.9     196.9
    VEL=       0.8       1.0       4.9       1.1

CCHV=   0.300 CEHV=   0.500
*SECNO 6710.000

3470 ENCROACHMENT STATIONS=     530.0     701.0  TYPE=     1  TARGET=     163.000

        120' D/S SIGLER

  6710.00     12.22    594.52      0.00    594.42    594.79      0.28      0.50      0.03    589.70
    3470.      294.     2851.      325.      245.      617.      250.      429.       88.     589.00
     0.96      1.20      4.62      1.30     0.080     0.035     0.080     0.037    582.30    536.00
 0.000582      900.      900.      900.         2         0         0      0.00    163.00    701.00


FLOW DISTRIBUTION FOR SECNO=   6710.00          CWSEL=    594.52

STA=     536.      609.      651.      700.      701.
  PER Q=       8.5      82.2       9.3       0.1
   AREA=     244.9    616.6     245.7       4.5
    VEL=       1.2       4.6       1.3       0.4

1490 NM CARD USED
*SECNO 8838.000
 2800 NAT Q1=   1466.73  WSEL=    594.60  ENC Q1=   1494.38  WSEL=    594.70  RATIO= -0.0188
 NAT Q1=   1494.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    594.70

3470 ENCROACHMENT STATIONS=      53.8     157.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEP=      596.00 ELAREA=      596.00

        D/S FACE SIGLER (SKEWED)

  8838.00     12.29    594.69      0.00    594.60    594.89      0.19      0.07      0.03    590.00
    3470.        0.     3470.        0.        0.      989.        0.      432.       39.     592.00
     0.97      0.00      3.51      0.00     0.080     0.597     0.080     0.037    582.40     53.80
 0.000541      120.      120.      120.         2         0         0      0.00    103.20    157.00
```

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FLOW DISTRIBUTION FOR SECNO=   8838.00          CWSEL=    594.69

STA=      54.     157.     157.
  PER Q=    100.0      0.0
   AREA=    988.4      0.0
    VEL=      3.5      5.4

*SECNO 8839.000
 2800 NAT Q1=   1567.73  WSEL=    594.48  ENC Q1=   1597.33  WSEL=    594.58  RATIO= -0.0188
 NAT Q1=   1597.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    594.58
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VCL       TWA   LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       HTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID     ENDST


3370 NORMAL BRIDGE,NRD= 14 MIN ELTRD=  596.20 MAX ELLC=  594.00

3470 ENCROACHMENT STATIONS=      53.8     157.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.00 ELREA=      596.00

  8839.00     12.17    594.57      0.00    594.48    595.01      0.43      0.00      0.12    590.00
    3470.        0.    3470.        0.        0.       656.        0.       432.        89.    592.00
     0.97      0.00      5.29      0.00     0.070     0.020     0.070     0.037    582.40     53.80
 0.000469         1.        1.        1.         2         0         0  -320.20    103.20    157.00

FLOW DISTRIBUTION FOR SECNO=   8839.00          CWSEL=    594.57

STA=      54.     157.
  PER Q=    100.0
   AREA=    655.7
    VEL=      5.3

*SECNO 8882.000
 2800 NAT Q1=   1576.28  WSEL=    594.50  ENC Q1=   1604.46  WSEL=    594.60  RATIO= -0.0192
 NAT Q1=   1604.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    594.60

3370 NORMAL BRIDGE,NRD= 14 MIN ELTRD=  596.20 MAX ELLC=  594.80

3470 ENCROACHMENT STATIONS=      53.8     157.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.20 ELREA=      597.30

  8882.00     12.20    594.60      0.00    594.50    595.03      0.43      0.02      0.00    590.00
    3470.        0.    3470.        0.        0.       657.        0.       433.        89.    592.00
     0.97      0.00      5.28      0.00     0.070     0.020     0.070     0.037    582.40     53.80
 0.000486        43.       43.       43.         0         0         0  -320.76    103.20    157.00


FLOW DISTRIBUTION FOR SECNO=   8882.00          CWSEL=    594.60

STA=      54.     157.
  PER Q=    100.0
   AREA=    657.3
    VEL=      5.3

1490 NH CARD USED
*SECNO 8883.000
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 2800 NAT Q1=   1531.64  WSEL=    594.86  ENC Q1=   1559.63  WSEL=    594.94  RATIO= -0.0183
 NAT Q1=   1560.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    594.94

3470 ENCROACHMENT STATIONS=      53.8     157.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      596.20 ELREA=      597.30


        U/S FACE SIGLER (SKEWED)

  8883.00    12.52   594.92     0.00   594.84   595.10     0.18     0.00     0.08   590.00
    3470.       0.     3470.       0.       0.     1012.       0.     433.     69.   592.00
    0.97     0.00     3.43     0.00    0.070    0.593    0.070    0.037   582.40    53.20
0.000498       1.       1.       1.        2        0        0     0.00   103.20   157.00

FLOW DISTRIBUTION FOR SECNO=   8883.00          CWSEL=    594.92

STA=      54.      157.      157.
  PER Q=    100.0       0.0
   AREA=   1012.0       0.0
    VEL=      3.4       5.3

*SECNO 8973.000

3470 ENCROACHMENT STATIONS=     259.0     542.0  TYPE=     1  TARGET=     283.000

        90' U/S SIGLER

  8973.00    11.86   594.96     0.00   596.37   595.15     0.20     0.04     0.01   589.70
    3470.     519.     2506.     445.     560.     608.     400.     435.     89.   589.00
    0.98     0.93     4.12     1.11    0.100    0.035    0.070    0.037   583.10   259.00
0.000467       80.      90.      100.        0        0        0     0.00   283.00   542.00

FLOW DISTRIBUTION FOR SECNO=   8973.00          CWSEL=    594.96

STA=      259.      280.      369.      431.      455.      542.
  PER Q=      2.4      12.5      72.2       5.4       7.4
   AREA=    104.3     455.3     607.8     131.2     268.5
    VEL=      0.8       1.0       4.1       1.4       1.0

CCHV=   0.100 CEHV=   0.300
*SECNO 10098.000
 2800 NAT Q1=   1551.44  WSEL=    595.52  ENC Q1=   1551.44  WSEL=    595.62  RATIO=  0.0000
 NAT Q1=   1592.  RATIOS LOB,CH,ROB=  0.4700  0.4326  0.0975  WSEL=    595.62

3470 ENCROACHMENT STATIONS=     206.4     702.4  TYPE=     4  TARGET=       0.026

        VALLEY #11

 10098.00    11.59   595.59     0.00   595.52   595.71     0.12     0.55     0.01   589.80
    3470.     1626.     1547.     297.     1840.     376.     254.     480.     90.   591.30
    1.11     0.88     4.11     1.17    0.120    0.035    0.080    0.037   584.00   286.44
0.000510     1125.     1125.     1125.        2        0        0     0.00   415.97   702.41


FLOW DISTRIBUTION FOR SECNO=  10098.00          CWSEL=    595.59

STA=      206.      300.      612.      651.      695.      702.
  PER Q=      1.3      45.6      44.6       7.6       0.9
   AREA=     66.6    1773.9     376.3     217.2      36.8
    VEL=      0.7       0.9       4.1       1.2       0.9
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CCHV=   0.100 CEHV=   0.300
*SECNO 11118.000
 2800 NAT Q1=   1912.22  WSEL=    595.98  ENC Q1=   1912.22  WSEL=    596.08  RATIO=  0.0000
 NAT Q1=   1962.  RATIOS LOB,CH,ROB=  0.5496  0.3111  0.1393  WSEL=    596.08
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        CLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOEL     XLCH      XLOBR     ITRIAL    IH2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=     287.4     900.3  TYPE=     4  TARGET=       0.026

        VALLEY #12 D/S CONFLUENCE WITH LITTLE SWAN CR.

 11118.00    10.86   596.06     0.00   595.98   596.12     0.06     0.41     0.01   590.30
    3470.     1910.    1110.     450.    2609.     333.     675.     557.     110.    590.00
     1.29      0.73     3.33     0.67    0.120    0.035    0.120    0.036   585.20   287.36
 0.000333     1000.    1020.     900.        2        0        0     0.00   612.98   900.34

FLOW DISTRIBUTION FOR SECNO=  11118.00          CWSEL=    596.06

STA=     287.     315.     733.     763.     810.     900.
  PER Q=      2.4     52.6     32.0      5.5      7.4
   AREA=    138.2   2471.3    333.4    254.6    420.2
    VEL=      0.6      0.7      3.3      0.8      0.6

CCHV=   0.500 CEHV=   0.500
*SECNO 12620.000

3470 ENCROACHMENT STATIONS=     562.3     714.8  TYPE=     1  TARGET=     152.500

        140' D/S TELEGRAPH

 12620.00    10.79   596.59     0.00   596.52   596.85     0.25     0.63     0.10   590.70
    2910.      232.    2517.     161.     260.     504.     206.     657.     123.    591.60
     1.40      0.89     4.31     0.78    0.120    0.035    0.120    0.036   585.80   562.25
 0.000570     1500.    1502.    1500.        2        0        0     0.00   152.50   714.75

FLOW DISTRIBUTION FOR SECNO=  12620.00          CWSEL=    596.59

STA=     562.     606.     671.     715.
  PER Q=      8.0     86.5      5.5
   AREA=    260.1    583.7    206.4
    VEL=      0.9      4.3      0.8

1490 NH CARD USED
*SECNO 12760.000
 2800 NAT Q1=    850.16  WSEL=    596.63  ENC Q1=    866.02  WSEL=    596.73  RATIO= -0.0187
 NAT Q1=    866.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    596.73

3470 ENCROACHMENT STATIONS=     303.3     465.8  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      599.00 ELREA=      599.00


        D/S FACE TELEGRAPH SKEWED

 12760.00    11.60   596.70     0.00   596.63   596.96     0.25     0.11     0.00   599.00
    2910.        0.    2910.        0.        0.     720.        0.     640.     123.    599.00
     1.41      0.00     4.04     0.00    0.120    0.701    0.120    0.036   585.10   383.33
 0.001138      140.     140.     140.        1        0        0     0.00    82.44   415.77
```

FLOW DISTRIBUTION FOR SECNO= 12760.00 CHSEL= 596.70

STA= 383. 466.
PER Q= 100.0
AREA= 719.7
VEL= 4.0

SPECIAL BRIDGE

SC	XK	XKOR	COEB	RDLEN	B/C	PWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.73	3.00	0.00	55.66	16.50	325.00	0.00	585.10	585.10

*SECNO 12817.000
2800 NAT Q1= 1571.90 WSEL= 598.66 ENC Q1= 1594.76 WSEL= 598.56 RATIO= -0.0145
NAT Q1= 1595. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 598.56
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.86	598.92	0.23	93.	2793.	325.	325.	593.40	598.10

3470 ENCROACHMENT STATIONS= 383.3 465.8 TYPE= 4 TARGET= 0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 599.30 ELREA= 599.30

U/S FACE TELEGRAPH SKEWED

12817.00	13.41	598.51	0.00	598.46	598.69	0.17	1.73	0.00	599.00
2910.	0.	2910.	0.	0.	866.	0.	641.	124.	599.00
1.41	0.00	3.35	0.00	0.100	0.035	0.100	0.036	585.10	383.31
0.000338	57.	57.	57.	2	0	3	0.00	82.49	465.79

FLOW DISTRIBUTION FOR SECNO= 12817.00 CHSEL= 598.51

STA= 383. 466.
PER Q= 100.0
AREA= 868.4
VEL= 3.4

CCHV= 0.300 CEHV= 0.500
*SECNO 13087.000
2800 NAT Q1= 2620.15 WSEL= 598.68 ENC Q1= 2620.15 WSEL= 598.78 RATIO= 0.0000
NAT Q1= 2677. RATIOS LOB,CH,ROB= 0.1885 0.5836 0.2280 WSEL= 598.78

3470 ENCROACHMENT STATIONS= 114.4 573.2 TYPE= 4 TARGET= 0.021

270° U/S TELEGRAPH

13087.00	13.52	598.72	0.00	598.68	598.77	0.05	0.05	0.04	598.70
2910.	524.	1738.	647.	982.	731.	1243.	652.	125.	591.30
1.46	0.53	2.38	0.52	0.100	0.035	0.100	0.036	585.20	114.36
0.000126	140.	270.	350.	2	0	0	0.00	458.87	573.23

FLOW DISTRIBUTION FOR SECNO= 13087.00 CHSEL= 598.72

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STA=     114.      125.      286.      349.      570.      573.
  PER Q=      0.4      17.6      59.7      22.2       0.1
   AREA=     37.3     945.1     731.3    1231.0      11.7
    VEL=      0.3       0.5       2.4       0.5       0.2

*SECNO 14167.000
 2800 NAT Q1=   1065.97  WSEL=    598.01  ENC Q1=   1065.97  WSEL=    598.91  RATIO=  0.0000
 NAT Q1=   1095.  RATIOS LOB,CH,ROB=  0.0954  0.6601  0.2445  WSEL=    598.91
   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       FTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IH2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=     301.2     575.0  TYPE=      4  TARGET=       0.026

        100' D/S D'WAY BRIDGE #15A

 14167.00     13.05    598.85      0.00    598.81    599.18      0.33      0.27      0.14    591.30
    2910.      244.     1981.      685.      198.      358.      709.      702.      134.     591.30
     1.53      1.23      5.53      0.97     0.100     0.035     0.100     0.036    585.80    301.15
 0.000764     1000.     1000.     1000.         2         0         0      0.00    273.85    575.00

FLOW DISTRIBUTION FOR SECNO=  14167.00          CWSEL=    598.85

STA=     301.      335.      367.      400.      575.
  PER Q=      8.4      68.1       3.4      15.1
   AREA=    198.3     358.1     108.1     520.8
    VEL=      1.2       5.5       1.3       0.8

*SECNO 14267.000
 2800 NAT Q1=   1015.13  WSEL=    598.88  ENC Q1=   1015.13  WSEL=    598.98  RATIO=  0.0000
 NAT Q1=   1043.  RATIOS LOB,CH,ROB=  0.1498  0.4392  0.4110  WSEL=    598.98

3470 ENCROACHMENT STATIONS=      73.6     369.9  TYPE=      4  TARGET=       0.027

        D/S FACE D'WAY BRIDGE #15A

 14267.00     12.62    598.92      0.00    598.88    599.27      0.35      0.08      0.01    586.60
    2910.      406.     1471.     1033.      284.      223.      919.      705.      134.     586.90
     1.54      1.63      6.59      1.12     0.100     0.035     0.100     0.036    586.30     73.60
 0.000842       75.       100.      110.         0         0         0      0.00    296.32    369.92


FLOW DISTRIBUTION FOR SECNO=  14267.00          CWSEL=    598.92

STA=      74.      101.      112.      116.      134.      138.      200.      370.
  PER Q=      6.9       4.9       2.2      50.5       2.1      17.5      15.9
   AREA=    159.5      84.4      40.5     223.1      39.7     364.1     515.1
    VEL=      1.3       1.7       1.5       6.6       1.6       1.4       0.9

*SECNO 14268.000
 2800 NAT Q1=    913.38  WSEL=    598.99  ENC Q1=    913.38  WSEL=    599.09  RATIO=  0.0000
 NAT Q1=    941.  RATIOS LOB,CH,ROB=  0.1630  0.4216  0.4153  WSEL=    599.09

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  591.00 MAX ELLC=  590.30


3470 ENCROACHMENT STATIONS=      72.6     377.7  TYPE=      4  TARGET=       0.029
 14268.00     12.74    599.04      0.00    598.99    599.30      0.26      0.00      0.03    586.60
    2910.      444.     1271.     1195.      284.      212.      956.      705.      134.     586.90
     1.54      1.56      5.99      1.25     0.100     0.020     0.100     0.036    586.30     72.55
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 0.001062       1.       1.       1.        2        0        0   -30.95   305.18   377.73


FLOW DISTRIBUTION FOR SECNO=  14268.00          CWSEL=    599.04

STA=      73.     101.     112.     116.     134.     138.     200.     378.
  PER Q=     8.2      5.5      1.6     43.7      1.6     20.2     19.2
   AREA=   167.3     85.0     31.9    212.3     32.0    371.5    552.5
    VEL=     1.4      1.9      1.5      6.0      1.5      1.6      1.0

*SECNO 14281.000
 2000 NAT Q1=    916.56  WSEL=    599.01  ENC Q1=    916.38  WSEL=    599.11  RATIO=  0.0300
 NAT Q1=    965.  RATIOS LOB,CH,ROB=  0.1630  0.4206  0.4164  WSEL=    599.11

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  591.00 MAX ELLC=  590.30


3470 ENCROACHMENT STATIONS=      72.8     377.7  TYPE=     4  TARGET=       0.030
 14281.00    12.76   599.06     0.00   599.01   599.31     0.26     0.01     0.00   586.60
    2910.     442.    1270.    1198.     284.     213.     959.     705.     134.    586.90
     1.54     1.56     5.98     1.25    0.100    0.020    0.100    0.036   586.30    72.78
 0.001037      13.      13.      13.        0        0        0   -30.95   304.90   377.68


FLOW DISTRIBUTION FOR SECNO=  14281.00          CWSEL=    599.06

STA=      73.     101.     112.     116.     134.     138.     200.     378.
  PER Q=     8.1      5.5      1.6     43.6      1.6     20.2     19.3
   AREA=   166.6     85.1     31.9    212.3     32.0    372.2    554.6
    VEL=     1.4      1.9      1.5      6.0      1.5      1.6      1.0

*SECNO 14282.000
 2000 NAT Q1=   1043.07  WSEL=    598.97  ENC Q1=   1043.07  WSEL=    599.07  RATIO=  0.0000
 NAT Q1=   1072.  RATIOS LOB,CH,ROB=  0.1499  0.4826  0.3675  WSEL=    599.07

3470 ENCROACHMENT STATIONS=      73.1     375.4  TYPE=     4  TARGET=       0.027

        U/S FACE DELAY BRIDGE #15A

 14282.00    12.72   599.02     0.00   598.97   599.35     0.33     0.00     0.04   586.60
    2910.     407.    1451.    1053.     291.     225.     954.     705.     134.    586.90
     1.54     1.40     6.45     1.10    0.100    0.035    0.100    0.036   586.30    73.07
 0.000798       1.       1.       1.        2        0        0     0.00   302.31   375.38


FLOW DISTRIBUTION FOR SECNO=  14282.00          CWSEL=    599.02

STA=      73.     101.     112.     116.     134.     138.     200.     375.
  PER Q=     7.0      4.0      2.1     49.9      2.1     17.5     16.5
   AREA=   164.4     85.5     40.9    224.9     40.1    370.1    543.5
    VEL=     1.2      1.6      1.5      6.5      1.5      1.4      0.9

*SECNO 14332.000
 2000 NAT Q1=   1128.77  WSEL=    599.05  ENC Q1=   1128.77  WSEL=    599.15  RATIO=  0.0000
 NAT Q1=   1159.  RATIOS LOB,CH,ROB=  0.0982  0.6466  0.2552  WSEL=    599.15
   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    IN2       ICONT     CORAR     TOPWID      ERODST


3470 ENCROACHMENT STATIONS=     299.6     579.3  TYPE=     4  TARGET=       0.026
```

50' U/S D'WAY BRIDGE #15A

14332.00	13.31	599.11	0.00	599.05	599.60	0.29	0.04	0.01	591.30
2910.	253.	1938.	719.	214.	366.	764.	707.	135.	591.30
1.54	1.19	5.29	0.94	0.100	0.035	0.100	0.036	585.80	299.63
0.000679	50.	50.	50.	2	0	0	0.00	279.67	579.30

FLOW DISTRIBUTION FOR SECNO= 14332.00 CWSEL= 599.11

STA=	300.	335.	367.	400.	579.
PER Q=	8.7	66.6	8.6	16.1	
AREA=	213.5	366.3	196.5	567.4	
VEL=	1.2	5.3	1.3	0.8	

*SECNO 15592.000

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 300.000

100' D/S D'WAY BRIDGE #16

15592.00	12.83	599.73	0.00	599.66	599.76	0.03	0.28	0.08	591.50
2910.	1339.	1535.	36.	2142.	800.	93.	770.	144.	591.50
1.81	0.62	1.92	0.38	0.100	0.035	0.100	0.036	586.90	45.00
0.000111	1260.	1260.	1260.	2	0	0	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15592.00 CWSEL= 599.73

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	3.6	21.6	20.6	52.8	0.0	0.7	0.5	
AREA=	22.4	194.4	987.5	938.2	800.0	0.8	42.3	50.1	
VEL=	0.3	0.5	0.6	0.6	1.9	0.6	0.5	0.3	

*SECNO 15692.000

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 300.000

D/S FACE D'WAY BRIDGE #16 SKEWED

15692.00	12.84	599.74	0.00	599.67	599.77	0.03	0.01	0.00	591.50
2910.	1339.	1535.	36.	2146.	801.	93.	777.	145.	591.50
1.83	0.62	1.92	0.38	0.100	0.035	0.100	0.036	586.90	45.00
0.000110	100.	100.	100.	2	0	0	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15692.00 CWSEL= 599.74

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	3.6	21.6	20.6	52.7	0.0	0.7	0.5	
AREA=	22.4	194.7	988.9	939.5	801.0	0.8	42.4	50.3	
VEL=	0.3	0.5	0.6	0.6	1.9	0.6	0.5	0.3	

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BUC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	3.00	0.00	43.50	0.00	383.00	0.00	586.90	586.90

*SECNO 15704.000
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID	ELLC	ELTRD

						AREA		
601.18	599.77	0.00	2070.	651.	383.	383.	595.70	597.50

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 380.000

U/S FACE D'UAY BRIDGE #16 SKEWED

15704.00	12.90	599.80	0.00	599.74	599.86	0.06	0.09	0.00	591.50
2910.	960.	1924.	26.	2162.	807.	95.	778.	145.	591.50
1.83	0.44	2.38	0.27	0.100	0.020	0.100	0.036	586.90	45.00
0.000055	12.	12.	12.	2	0	7	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15704.00 CWSEL= 599.80

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	2.6	15.5	14.7	66.1	0.0	0.5	0.4	
AREA=	22.7	196.6	996.4	946.6	806.6	0.8	42.8	51.3	
VEL=	0.2	0.4	0.5	0.5	2.4	0.5	0.3	0.2	

*SECNO 15754.000

3470 ENCROACHMENT STATIONS= 45.0 425.0 TYPE= 1 TARGET= 380.000

50' U/S D'UAY BRIDGE #16

15754.00	12.94	599.84	0.00	599.78	599.88	0.03	0.00	0.01	591.50
2910.	1341.	1533.	36.	2173.	810.	96.	762.	146.	591.50
1.84	0.62	1.89	0.38	0.100	0.035	0.100	0.036	586.90	45.00
0.000106	50.	50.	50.	2	0	0	0.00	380.00	425.00

FLOW DISTRIBUTION FOR SECNO= 15734.00 CWSEL= 599.84

STA=	45.	50.	80.	200.	314.	402.	402.	409.	425.
PER Q=	0.2	3.6	21.6	20.6	52.7	0.0	0.7	0.5	
AREA=	22.9	197.8	1001.2	951.1	810.0	0.8	43.1	51.9	
VEL=	0.3	0.5	0.6	0.6	1.9	0.6	0.5	0.3	

CCHV= 0.100 CEHV= 0.300
*SECNO 16374.000
2800 NAT Q1= 2110.00 WSEL= 599.87 ENC Q1= 2110.08 WSEL= 599.97 RATIO= 0.0000
NAT Q1= 2160. RATIOS LOB,CH,ROB= 0.0000 0.3107 0.6893 WSEL= 599.97

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	LTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IM2	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 1.0 378.8 TYPE= 4 TARGET= 0.023

VALLEY #18

16374.00	12.13	599.93	0.00	599.87	599.97	0.04	0.09	0.00	600.40
2910.	0.	928.	1982.	0.	392.	2183.	825.	151.	591.30
1.97	0.00	2.37	0.91	0.080	0.035	0.000	0.036	587.80	1.88
0.000193	750.	620.	600.	0	0	0	0.00	376.91	378.79

FLOW DISTRIBUTION FOR SECNO= 16374.00 CWSEL= 599.93

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STA=       2.       47.      350.      379.
  PER Q=     31.9     65.4      2.8
   AREA=    392.0   2056.6    126.2
    VEL=      2.4      0.9      0.6

CCHV=   0.300 CEHV=   0.500
*SECNO 17384.000
 2800 NAT Q1=   3183.46  WSEL=    600.00  ENC Q1=   3183.46  WSEL=    600.10  RATIO=  0.0000
 NAT Q1=   3260.  RATIOS LOB,CH,ROB=  0.6481  0.2636  0.0883  WSEL=    600.10

3670 ENCROACHMENT STATIONS=      47.7     690.4  TYPE=     4  TARGET=       0.023

        170' D/S READY RD.

 17384.00    12.07   600.07     0.00   600.00   600.09     0.02     0.11     0.01   592.90
    2910.     1886.     791.     233.     3306.     431.     393.     894.     162.    592.10
     2.26     0.57     1.84     0.39     0.080    0.035    0.050    0.036   588.00    47.73
 0.000085      800.     1010.    1000.        1        0        0     0.00   642.66   690.39


FLOW DISTRIBUTION FOR SECNO=  17384.00          CWSEL=    600.07

STA=      48.      50.     589.     630.     690.     690.
  PER Q=     0.1     64.7     27.2      8.0      0.0
   AREA=    11.2   3295.2    431.3    390.8      2.0
    VEL=      0.2      0.6      1.8      0.6      0.1

*SECNO 17554.000
 2800 NAT Q1=   2879.23  WSEL=    600.00  ENC Q1=   2879.23  WSEL=    600.10  RATIO=  0.0000
 NAT Q1=   2956.  RATIOS LOB,CH,ROB=  0.2276  0.6625  0.1099  WSEL=    600.10
3470 ENCROACHMENT STATIONS=      35.9     670.6  TYPE=     4  TARGET=       0.026

        D/S FACE READY RD. SKEWED

 17554.00    11.57   600.07     0.00   600.00   600.12     0.03     0.02     0.02   589.50
    2910.     638.     1984.     284.     1274.     919.     592.     907.     164.    589.60
     2.29     0.50     2.16     0.49     0.070    0.035    0.070    0.036   580.70    35.88
 0.000104      150.     170.     210.        1        0        0     0.00   634.71   670.59


FLOW DISTRIBUTION FOR SECNO=  17554.00          CWSEL=    600.07

STA=      36.      68.     265.     353.     392.     399.     481.     491.     530.     671.
  PER Q=     2.5     10.7      4.5      2.8      1.4     68.2      2.2      2.7      5.0
   AREA=    164.2    624.3    279.6    151.6     54.8    919.2     82.4    147.7    362.3
    VEL=      0.4      0.5      0.5      0.5      0.7      2.2      0.8      0.5      0.4

*SECNO 17555.000
 2800 NAT Q1=   1621.47  WSEL=    600.00  ENC Q1=   1621.47  WSEL=    600.10  RATIO=  0.0000
 NAT Q1=   1663.  RATIOS LOB,CH,ROB=  0.3543  0.5098  0.1359  WSEL=    600.10

3370 NORMAL BRIDGE,NRD= 16 MIN ELTRD=  596.50 MAX ELLC=  595.10


3470 ENCROACHMENT STATIONS=      29.5     677.8  TYPE=     4  TARGET=       0.037
 17555.00    11.36   600.06     0.00   600.00   600.13     0.06     0.00     0.01   589.50
    2910.     1011.     1546.     352.     1198.     583.     499.     907.     164.    589.60
     2.29     0.84     2.65     0.71     0.070    0.020    0.070    0.036   588.70    29.49
 0.000329        1.       1.       1.        0        0        0  -537.67   648.30   677.79


FLOW DISTRIBUTION FOR SECNO=  17555.00          CWSEL=    600.06
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STA=      29.      88.     265.     353.     392.     399.     481.     491.     530.     678.
  PER Q=     5.0     19.1      8.0      2.4      0.3     53.1      0.5      2.3      9.3
   AREA=   181.5    622.8    278.8     98.7     16.1    582.7     24.4     94.6    379.6
    VEL=     0.8      0.9      0.8      0.7      0.6      2.7      0.6      0.7      0.7

*SECNO 17581.000
 2800 NAT Q1=   1621.79  WSEL=    600.01  ENC Q1=   1621.79  WSEL=    600.11  RATIO=  0.0000
 NAT Q1=   1688.  RATIOS LOB,CH,ROB=  0.3547  0.5092  0.1362  WSEL=    600.11

3370 NORMAL BRIDGE,NRD= 16 MIN ELTRD=  596.50 MAX ELLC=  595.10


3470 ENCROACHMENT STATIONS=      31.5     675.5  TYPE=     4  TARGET=       0.039
 17581.00    11.37   600.07     0.00   600.01   600.13     0.06     0.01     0.00   589.50
    2910.     1010.    1550.     349.    1193.     583.     493.     903.     165.    589.60
     2.29      0.85     2.66     0.71    0.070    0.020    0.070    0.036   588.70    31.54
 0.000331       26.      26.      26.        0        0        0  -537.67   643.98   675.52


FLOW DISTRIBUTION FOR SECNO=  17581.00          CHSEL=    600.07

STA=      32.      88.     265.     353.     392.     399.     481.     491.     530.     676.
  PER Q=     4.0     19.1      3.0      2.4      0.3     53.3      0.5      2.3      9.2
   AREA=   176.0    623.1    279.0     98.8     16.2    582.8     24.4     94.7    374.0
    VEL=     0.8      0.9      0.8      0.7      0.6      2.7      0.6      0.7      0.7

*SECNO 17582.000
 2800 NAT Q1=   2887.24  WSEL=    600.02  ENC Q1=   2887.24  WSEL=    600.12  RATIO=  0.0000
 NAT Q1=   2970.  RATIOS LOB,CH,ROB=  0.2284  0.6611  0.1104  WSEL=    600.12
   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    IH2       ICONT     CORAR    TOPWID    ENDST


3470 ENCROACHMENT STATIONS=      37.5     660.4  TYPE=     4  TARGET=       0.028

        U/S FACE READY RD.SKEWED

 17582.00    11.39   600.09     0.00   600.02   600.14     0.05     0.00     0.00   589.50
    2910.     637.    1907.     206.    1270.     919.     567.     908.     165.    589.60
     2.29      0.50     2.16     0.49    0.070    0.035    0.070    0.036   588.70    37.81
 0.000104        1.       1.       1.        1        0        0     0.00   630.55   668.36


FLOW DISTRIBUTION FOR SECNO=  17582.00          CHSEL=    600.09

STA=      38.      38.     265.     353.     392.     399.     481.     491.     530.     668.
  PER Q=     2.5     10.8      4.5      2.8      1.4     68.3      2.2      2.7      4.9
   AREA=   158.9    624.6    279.8    151.7     54.8    919.3     82.5    147.8    356.9
    VEL=     0.4      0.5      0.5      0.5      0.7      2.2      0.8      0.5      0.4

*SECNO 17632.000

3470 ENCROACHMENT STATIONS=     139.0     867.0  TYPE=     1  TARGET=     728.000

        50' U/S READY RD.

 17632.00    11.36   600.14     0.00   600.07   600.15     0.02     0.00     0.01   592.90
    2910.     938.     737.    1235.    1458.     418.    1954.     912.     165.    592.10
     2.30      0.64     1.76     0.63    0.070    0.035    0.070    0.036   588.80   139.00
 0.000081       50.      50.      50.        2        0        0     0.00   625.15   764.15
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FLOW DISTRIBUTION FOR SECNO= 17632.CC CUSEL= 600.14

STA=	139.	369.	410.	670.	764.
PER Q=	32.2	25.3	39.5	3.0	
AREA=	1457.7	417.9	1712.2	241.8	
VEL=	0.6	1.8	0.7	0.4	

CCHV= 0.100 CEHV= 0.300
*SECNO 19032.000
2800 NAT Q1= 1751.02 WSEL= 600.23 ENC Q1= 1751.02 WSEL= 600.33 RATIO= 0.0000
NAT Q1= 1795. RATIOS LOB,CH,ROB= 0.6812 0.3188 0.0000 WSEL= 600.33

3470 ENCROACHMENT STATIONS= 37.0 471.0 TYPE= 4 TARGET= 0.024

VALLEY #21

19032.00	10.41	600.31	0.00	600.23	600.35	0.05	0.19	0.01	593.50
2910.	1953.	952.	0.	2394.	343.	0.	1018.	182.	601.00
2.57	0.82	2.77	0.00	0.100	0.035	0.120	0.036	589.90	37.01
0.000279	1500.	1400.	1200.	2	0	0	0.00	433.43	470.44

FLOW DISTRIBUTION FOR SECNO= 19032.00 CWSEL= 600.31

STA=	37.	432.	471.
PER Q=	67.3	32.7	
AREA=	2394.3	343.3	
VEL=	0.8	2.8	

*SECNO 20462.000
2800 NAT Q1= 1815.65 WSEL= 600.61 ENC Q1= 1815.65 WSEL= 600.71 RATIO= 0.0000
NAT Q1= 1861. RATIOS LOB,CH,ROB= 0.4072 0.3134 0.2794 WSEL= 600.71

3470 ENCROACHMENT STATIONS= 78.0 560.1 TYPE= 4 TARGET= 0.024

VALLEY #22

20462.00	10.69	600.69	0.00	600.61	600.74	0.05	0.39	0.00	592.60
2910.	1176.	937.	797.	1635.	307.	1233.	1115.	197.	593.80
2.85	0.72	3.05	0.65	0.120	0.035	0.120	0.036	590.00	78.03
0.000260	1430.	1430.	1430.	0	0	0	0.00	402.04	560.06

FLOW DISTRIBUTION FOR SECNO= 20462.00 CWSEL= 600.69

STA=	78.	80.	316.	347.	500.	560.
PER Q=	0.1	40.3	32.2	22.5	4.9	
AREA=	10.9	1624.1	306.9	961.1	271.9	
VEL=	0.3	0.7	3.1	0.7	0.5	

CCHV= 0.300 CEHV= 0.500
*SECNO 22092.000
2800 NAT Q1= 1605.30 WSEL= 601.07 ENC Q1= 1605.30 WSEL= 601.17 RATIO= 0.0000
NAT Q1= 1649. RATIOS LOB,CH,ROB= 0.1695 0.2509 0.5809 WSEL= 601.17

3470 ENCROACHMENT STATIONS= 64.5 396.5 TYPE= 4 TARGET= 0.026

200' D/S SUEITZER RD.

22092.00	10.76	601.16	0.00	601.07	601.22	0.06	0.48	0.00	592.70
2910.	464.	751.	1696.	402.	220.	1690.	1214.	213.	593.80
3.11	1.15	3.40	1.14	0.080	0.035	0.080	0.036	590.40	64.48
0.000332	1630.	1630.	1630.	0	0	0	0.00	331.98	396.46

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FLOW DISTRIBUTION FOR SECNO=  22092.00          CWSEL=    601.16

STA=      64.      90.     128.     131.     320.     396.
  PER Q=      3.0     12.1     25.8     47.4     10.9
   AREA=    124.5    277.6    220.5   1141.5    348.8
    VEL=      0.9      1.3      3.4      1.2      0.9

*SECNO 22292.000
 2800 NAT Q1=   1598.62  WSEL=    601.09  ENC Q1=   1598.62  WSEL=    601.19  RATIO=  0.0000
 NAT Q1=   1640.  RATIOS LOB,CH,ROB=  0.0648  0.8829  0.0523  WSEL=    601.19
   SECNO     DEPTH     CWSEL     CRIWS     LSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       ITN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    XH2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      25.9     361.0  TYPE=     4  TARGET=       0.025

        D/S FACE SWEITZER RD, SKEWED

 22292.00     10.08    601.18      0.00    601.09    601.33      0.16      0.06      0.05    593.80
    2910.      154.     2638.      118.      304.      786.      199.     1221.      214.     591.60
     3.13      0.51      3.36      0.59     0.080     0.035     0.030     0.036    591.10     25.87
 0.000334      240.      200.      160.         2         0         0      0.00    335.14    361.01


FLOW DISTRIBUTION FOR SECNO=  22292.00          CWSEL=    601.18

STA=      26.     185.     192.     279.     286.     350.     361.
  PER Q=      4.6      0.7     90.7      1.0      2.4      0.6
   AREA=    274.3     29.6    786.0     37.6    129.6     31.3
    VEL=      0.5      0.7      3.4      0.8      0.5      0.6

*SECNO 22293.000
 2800 NAT Q1=    927.30  WSEL=    601.06  ENC Q1=    927.30  WSEL=    601.16  RATIO=  0.0000
 NAT Q1=    960.  RATIOS LOB,CH,ROB=  0.0967  0.8311  0.0722  WSEL=    601.16

3370 NORMAL BRIDGE,NRD= 11 MIN ELTRD=  598.30 MAX ELLC=  598.10


3470 ENCROACHMENT STATIONS=      20.7     365.1  TYPE=     4  TARGET=       0.034
 22293.00     10.04    601.14      0.00    601.06    601.37      0.23      0.00      0.03    593.80
    2910.      237.     2508.      166.      288.      608.      177.     1221.      214.     591.60
     3.13      0.82      4.12      0.93     0.080     0.020     0.050     0.036    591.10     20.72
 0.000996         1.        1.        1.         2         0         0  -226.34    344.39    365.11


FLOW DISTRIBUTION FOR SECNO=  22293.00          CWSEL=    601.14

STA=      21.     185.     192.     279.     286.     350.     365.
  PER Q=      8.0      0.1     86.2      0.1      4.1      1.5
   AREA=    261.0      7.3    600.5      7.6    127.4     42.2
    VEL=      0.8      0.5      4.1      0.5      0.9      1.0

*SECNO 22309.000
 2800 NAT Q1=    930.67  WSEL=    601.07  ENC Q1=    930.67  WSEL=    601.17  RATIO=  0.0000
 NAT Q1=    966.  RATIOS LOB,CH,ROB=  0.0977  0.8296  0.0727  WSEL=    601.17

3370 NORMAL BRIDGE,NRD= 11 MIN ELTRD=  598.30 MAX ELLC=  598.10
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3470 ENCROACHMENT STATIONS=      22.0      364.1  TYPE=      4  TARGET=        0.036
 22309.00     10.06    601.16      0.00    601.07    601.39      0.23      0.02      0.00    593.80
    2910.      237.     2510.      164.      280.      610.      176.     1222.      214.     591.60
     3.13      0.82      4.12      0.93     0.000     0.020     0.080     0.036    591.10     22.02
 0.000990       16.       16.       16.         0         0         0   -226.34    342.03    364.05


FLOW DISTRIBUTION FOR SECNO=  22309.00          CWSEL=    601.16

STA=      22.      185.      192.      279.      286.      350.      364.
  PER Q=      8.0       0.1      86.2       0.1       4.1       1.4
   AREA=    280.4       7.4     609.8       7.7     128.4      39.3
    VEL=      0.8       0.5       4.1       0.5       0.9       1.0

*SECNO 22310.000
 2800 NAT Q1=   1629.19  WSEL=    601.16  ENC Q1=   1629.19  WSEL=    601.26  RATIO=  0.0000
 NAT Q1=   1671.  RATIOS LOB,CH,ROB=  0.0676  0.8785  0.0538  WSEL=    601.26

3470 ENCROACHMENT STATIONS=      24.6      361.8  TYPE=      4  TARGET=        0.025

        U/S FACE SHEITZER RD. SKEWED

 22310.00     10.16    601.26      0.00    601.16    601.41      0.15      0.00      0.02    593.80
    2910.      164.     2623.      123.      320.      793.      207.     1222.      214.     591.60
     3.13      0.51      3.31      0.59     0.080     0.035     0.080     0.036    591.10     24.59
 0.000320         1.        1.        1.         2         0         0      0.00    337.25    361.83


FLOW DISTRIBUTION FOR SECNO=  22310.00          CWSEL=    601.26

STA=      25.      155.      192.      279.      296.      350.      362.
  PER Q=      4.9       0.7      90.1       1.0       2.5       0.7
   AREA=    290.2      30.1     793.0      38.2     134.7      34.5
    VEL=      0.5       0.7       3.3       0.8       0.5       0.6

*SECNO 22410.000
 2800 NAT Q1=   2065.07  WSEL=    601.34  ENC Q1=   2065.07  WSEL=    601.44  RATIO=  0.0000
 NAT Q1=   2123.  RATIOS LOB,CH,ROB=  0.3444  0.1947  0.4609  WSEL=    601.44

3470 ENCROACHMENT STATIONS=     278.4      683.3  TYPE=      4  TARGET=        0.027

        100' U/S SHEITZER RD.

 22410.00     10.24    601.44      0.00    601.34    601.47      0.03      0.03      0.04    593.00
    2910.      989.      583.     1339.     1038.      221.     1271.     1226.      215.     594.00
     3.15      0.95      2.64      1.05     0.070     0.035     0.070     0.036    591.20    278.37
 0.000199        70.      100.      130.         2         0         0      0.00    404.89    683.26


FLOW DISTRIBUTION FOR SECNO=  22410.00          CWSEL=    601.44

STA=     278.      410.      460.      491.      650.      683.
  PER Q=     17.0      16.9      20.0      41.3       4.7
   AREA=    606.5     431.3     220.7    1102.8     168.0
    VEL=      0.8       1.1       2.6       1.1       0.8

CCHV=   0.100 CEHV=   0.300
*SECNO 23160.000
 2800 NAT Q1=   2665.73  WSEL=    601.67  ENC Q1=   2665.73  WSEL=    601.57  RATIO=  0.0000
 NAT Q1=   2741.  RATIOS LOB,CH,ROB=  0.7445  0.2275  0.0281  WSEL=    601.57
   SECNO     DEPTH     CWSEL     CRIWS     WSELK      EG        HV        HL       OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL      TUA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       FTN      ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR    TOPWID      ENDST
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3470 ENCROACHMENT STATIONS= 314.1 828.4 TYPE= 4 TARGET= 0.027

VALLEY #25

23160.00	9.96	601.56	0.00	601.47	601.59	0.02	0.11	0.00	595.00
2910.	2186.	681.	43.	2800.	354.	73.	1276.	223.	595.40
3.35	0.78	1.93	0.58	0.070	0.035	0.070	0.036	591.60	314.06
0.000120	730.	750.	750.	1	0	0	0.00	514.37	828.44

FLOW DISTRIBUTION FOR SECNO= 23160.00 CHSEL= 601.56

STA=	314.	430.	773.	814.	828.
PER Q=	12.2	62.9	23.4	1.5	
AREA=	530.4	2249.7	353.5	73.4	
VEL=	0.6	0.3	1.9	0.6	

*SECNO 24540.000
2800 NAT Q1= 1634.63 WSEL= 601.68 ENC Q1= 1634.63 WSEL= 601.78 RATIO= 0.0000
NAT Q1= 1680. RATIOS LOB,CH,ROB= 0.0731 0.4371 0.4897 WSEL= 601.78

3470 ENCROACHMENT STATIONS= 276.3 773.7 TYPE= 4 TARGET= 0.027

VALLEY #26 D/S CONFLUENCE WITH MIDDLE CR.

24540.00	10.48	601.78	0.00	601.68	601.86	0.08	0.25	0.02	595.50
2910.	179.	1309.	1422.	299.	409.	2083.	1371.	239.	596.00
3.56	0.60	3.20	0.68	0.120	0.035	0.120	0.036	591.30	276.28
0.000318	1380.	1380.	1380.	2	0	0	0.00	497.42	773.70

FLOW DISTRIBUTION FOR SECNO= 24540.00 CHSEL= 601.78

STA=	276.	340.	386.	550.	774.
PER Q=	6.1	45.0	26.6	22.3	
AREA=	298.7	609.3	1030.0	1053.4	
VEL=	0.6	3.2	0.8	0.6	

CCHV= 0.300 CEHV= 0.500
*SECNO 26060.000
2800 NAT Q1= 3025.17 WSEL= 601.98 ENC Q1= 3025.17 WSEL= 602.08 RATIO= 0.0000
NAT Q1= 3090. RATIOS LOB,CH,ROB= 0.6790 0.3077 0.0133 WSEL= 602.08

3470 ENCROACHMENT STATIONS= 68.1 686.1 TYPE= 4 TARGET= 0.024

230' D/S CARLETON-ROCKWOOD RD.

26060.00	9.98	602.08	0.00	601.98	602.10	0.02	0.22	0.02	596.70
2910.	1989.	917.	4.	3327.	563.	15.	1479.	257.	597.20
3.99	0.60	1.63	0.27	0.080	0.035	0.080	0.036	592.10	68.11
0.000093	1300.	1320.	1320.	0	0	0	0.00	617.98	686.10

FLOW DISTRIBUTION FOR SECNO= 26060.00 CHSEL= 602.08

STA=	68.	170.	210.	613.	683.	686.
PER Q=	9.7	6.4	52.2	31.5	0.1	
AREA=	535.4	203.0	2508.4	563.0	15.0	
VEL=	0.5	0.7	0.6	1.6	0.3	

1490 NH CARD USED

*SECNO 26290.000

3470 ENCROACHMENT STATIONS= 1.0 586.0 TYPE= 1 TARGET= 585.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 600.10 ELREA= 603.90

D/S FACE CARLETON-ROCKWOOD RD.

26290.00	10.57	602.07	0.00	601.97	602.17	0.10	0.03	0.04	598.50	
2910.	609.	2301.	0.	1033.	813.	0.	1491.	259.	100000.00	
4.02	0.59	2.83	0.00	0.060	0.681	0.080	0.036	591.50	1.00	
0.000378	170.	230.	230.	2	0	0	0.00	585.00	586.00	

FLOW DISTRIBUTION FOR SECNO= 26290.00 CHSEL= 602.07

STA=	1.	450.	496.	587.
PER Q=	18.7	2.2	79.1	
AREA=	931.0	102.5	813.3	
VEL=	0.6	0.6	2.8	

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BUC	SHP	BAREA	SS	ELCHU	ELCHD
	0.95	1.50	3.00	0.00	78.20	19.40	606.00	0.00	591.50	591.50

CCHV= 0.300 CEHV= 0.500
*SECNO 26325.000
PRESSURE AND WEIR FLOW

EGPRS	EGLLC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
602.31	602.20	0.03	973.	1938.	606.	606.	601.80	600.10

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 600.10 ELREA= 603.90

U/S FACE CARLETON-ROCKWOOD RD.

26325.00	10.71	602.21	0.00	602.11	602.31	0.10	0.14	0.00	598.50	
2910.	549.	2361.	0.	1101.	827.	0.	1492.	260.	598.90	
4.02	0.50	2.85	0.00	0.030	0.035	0.080	0.036	591.50	0.78	
0.000240	35.	35.	35.	2	0	4	0.00	585.72	586.50	

FLOW DISTRIBUTION FOR SECNO= 26325.00 CHSEL= 602.21

STA=	1.	450.	485.	496.	587.
PER Q=	16.9	1.3	0.6	81.1	
AREA=	992.1	77.3	31.4	827.2	
VEL=	0.5	0.5	0.6	2.9	

CCHV= 0.100 CEHV= 0.300
*SECNO 26475.000
2800 WAT Q1= 1440.57 WSEL= 602.21 ENC Q1= 1448.57 WSEL= 602.31 RATIO= 0.0000
WAT Q1= 1506. RATIOS LOB,CH,ROB= 0.5564 0.2820 0.1617 WSEL= 602.31

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	KL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TLA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	MTN	ELMIN	SSTA

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   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=       94.0      677.1  TYPE=      4  TARGET=        0.037

        VALLEY #29

 26475.00      9.90    602.30      0.00    602.21    602.36      0.06      0.05      0.00    596.90
    2910.      1623.     854.      433.     1740.     250.      462.      1500.     262.     597.00
     4.05      0.93      3.42      0.94     0.060     0.035     0.080     0.036   592.40     93.95
 0.000407      150.      150.      130.         2         0         0      0.00   583.18    677.13


FLOW DISTRIBUTION FOR SECNO=  26475.00          CWSEL=    602.30

STA=       94.      335.      563.      677.
  PER Q=      55.3      29.3      14.9
   AREA=    1740.1     249.8     462.3
    VEL=       0.9       3.4       0.9

*SECNO 27015.000
 2800 NAT Q1=    1499.05  WSEL=     602.44  ENC Q1=    1499.05  WSEL=     602.54  RATIO=  0.0000
 NAT Q1=    1559.  RATIOS LOB,CH,ROB=  0.0672  0.2188  0.7140  WSEL=     602.54

3470 ENCROACHMENT STATIONS=       53.8      696.9  TYPE=      4  TARGET=        0.039

        VALLEY #30

 27015.00      10.13   602.53      0.00    602.44    602.50      0.05      0.21      0.00    597.30
    2910.      146.      662.     2102.      161.      205.     2285.     1531.     269.     596.50
     4.15      0.90      3.24      0.92     0.080     0.035     0.080     0.036   592.40     53.76
 0.000378      540.      540.      540.         2         0         0      0.00   643.18    696.94


FLOW DISTRIBUTION FOR SECNO=  27015.00          CWSEL=    602.53

STA=       54.       91.      115.      600.      697.
  PER Q=       5.0      22.8      67.9       4.3
   AREA=     161.3     204.5    2075.2     209.9
    VEL=       0.9       3.2       1.0       0.6

CCHV=   0.300 CEHV=   0.500
*SECNO 29305.000

3470 ENCROACHMENT STATIONS=       43.0      153.0  TYPE=      1  TARGET=      110.000

        100' D/S DETROIT,TOLEDO&IRONTON R.R.

 29305.00      10.67   603.67      0.00    603.59    604.09      0.41      1.33      0.18    599.50
    2910.      162.     2472.      276.      120.      444.      160.     1621.     289.     597.80
     4.28      1.35      5.56      1.64     0.080     0.035     0.080     0.036   593.00     43.00
 0.000982     2500.     2290.     2290.         2         0         0      0.00   110.00    153.00


FLOW DISTRIBUTION FOR SECNO=  29305.00          CWSEL=    603.67

STA=       43.       73.      123.      153.
  PER Q=       5.6      85.0       9.5
   AREA=     119.9     444.4     167.6
    VEL=       1.4       5.6       1.6

*SECNO 29405.000
 2800 NAT Q1=     870.53  WSEL=     603.67  ENC Q1=     887.28  WSEL=     603.77  RATIO= -0.019
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 NAT Q1=    887.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    603.77

3470 ENCROACHMENT STATIONS=       1.0      61.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.30 ELREA=      611.30


        D/S FACE DETROIT,TOLEDO&IRONTON R.R.

 29405.00    10.16   603.76     0.00   603.67   604.22     0.46     0.11     0.02   595.20
    2910.       0.     2910.      0.       0.     533.       0.     1622.     290.    595.80
     4.28     0.00      5.46     0.00    0.090    0.035    0.080    0.036   593.60     1.00
0.001250      120.      100.      70.        1        0        0     0.00    60.00    61.00


FLOW DISTRIBUTION FOR SECNO=  29405.00          CWSEL=    603.76

STA=       1.       61.
  PER Q=    100.0
   AREA=    532.6
    VEL=      5.5

*SECNO 29406.000
 2000 NAT Q1=    1353.34  WSEL=    603.63  ENC Q1=    1377.79  WSEL=    603.73  RATIO= -0.0181
 NAT Q1=    1370.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    603.73

3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  611.30 MAX ELLC=  605.30

3470 ENCROACHMENT STATIONS=       1.0      61.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.30 ELREA=      611.30

 29406.00    10.12   603.72     0.00   603.63   604.26     0.54     0.00     0.04   595.20
    2910.       0.     2910.      0.       0.     495.       0.     1622.     290.    595.80
     4.28     0.00      5.88     0.00    0.060    0.020    0.000    0.036   593.60     1.00
0.000521        1.        1.       1.        2        0        0   -35.23    60.00    61.00


FLOW DISTRIBUTION FOR SECNO=  29406.00          CWSEL=    603.72

STA=       1.       61.
  PER Q=    100.0
   AREA=    494.7
    VEL=      5.9

*SECNO 29442.000
 2000 NAT Q1=    1360.16  WSEL=    603.65  ENC Q1=    1382.96  WSEL=    603.75  RATIO= -0.0168
 NAT Q1=    1383.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    603.75
   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       KTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


3370 NORMAL BRIDGE,NRD= 10 MIN ELTRD=  611.30 MAX ELLC=  605.30

3470 ENCROACHMENT STATIONS=       1.0      61.0  TYPE=     4  TARGET=       0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.30 ELREA=      611.30

 29442.00    10.14   603.74     0.00   603.65   604.38     0.74     0.02     0.00   595.20
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    2910.       0.    2910.       0.       0.     496.       0.    1623.     290.    595.80
     4.29     0.00     5.87     0.00    0.090    0.020    0.080    0.036   593.60     1.00
 0.000518      36.      36.      36.        0        0        0   -35.30    60.00    61.00

FLOW DISTRIBUTION FOR SECNO=  29442.00          CWSEL=    604.74

STA=       1.       61.
  PER Q=    100.0
   AREA=    495.7
    VEL=      5.9

*SECNO 29443.000
 2800 NAT Q1=     885.62  WSEL=    603.76  ENC Q1=    901.38  WSEL=    603.86  RATIO= -0.0178
 NAT Q1=    901.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    603.86

3470 ENCROACHMENT STATIONS=        1.0       61.0  TYPE=      4  TARGET=        0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       611.30 ELREA=       611.30

        U/S FACE DETROIT,TOLEDO&IRONTON R.R.

 29443.00    10.25   603.35     0.00   603.76   604.30     0.46     3.00     0.02   595.20
    2910.       0.    2910.       0.       0.     533.       0.    1623.     290.    595.80
     4.29     0.00     5.41     0.00    0.080    0.035    0.080    0.036   593.60     1.00
 0.001216       1.       1.       1.        2        0        0     0.00    60.00    61.00

FLOW DISTRIBUTION FOR SECNO=  29443.00          CWSEL=    603.85

STA=       1.       61.
  PER Q=    100.0
   AREA=    537.5
    VEL=      5.6

*SECNO 29493.000

3470 ENCROACHMENT STATIONS=        1.0      132.0  TYPE=      1  TARGET=      131.000

        50' U/S  DETROIT,TOLEDO&IRONTON R.R

 29493.00    11.13   604.03     0.00   603.94   604.38     0.35     0.05     0.03   599.50
    2910.      54.    2409.     446.      69.     464.     338.    1624.     290.    597.80
     4.29     0.79     5.19     1.32    0.100    0.035    0.100    0.036   592.90     1.00
 0.000808      50.      50.      50.        2        0        0     0.00   131.00   132.00


FLOW DISTRIBUTION FOR SECNO=  29493.00          CWSEL=    604.03

STA=       1.       27.       77.      132.
  PER Q=     1.9      82.8      15.3
   AREA=    69.0     463.9     337.7
    VEL=     0.8       5.2       1.3

CCHV=   0.100 CEHV=   0.300
*SECNO 30013.000
 2800 NAT Q1=    1484.80  WSEL=    604.49  ENC Q1=   1484.80  WSEL=    604.59  RATIO=  0.0000
 NAT Q1=    1524.  RATIOS LOB,CH,ROB=  0.0376  0.5749  0.3875  WSEL=    604.59

3470 ENCROACHMENT STATIONS=      527.2      889.1  TYPE=      4  TARGET=        0.025

        VALLEY 033
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30013.00	11.16	604.56	0.00	604.49	604.69	0.13	0.28	0.02	598.60
2910.	75.	1722.	1114.	98.	460.	1370.	1640.	293.	599.80
4.35	0.76	3.68	0.81	0.100	0.035	0.100	0.036	593.40	527.17
0.000390	520.	520.	520.	2	0	0	0.00	361.96	809.13

FLOW DISTRIBUTION FOR SECNO= 30013.00 CWSEL= 604.56

STA=	527.	546.	594.	880.	889.
PER Q=	2.6	59.2	37.5	0.8	
AREA=	98.0	468.4	1332.1	38.1	
VEL=	0.8	3.7	0.8	0.6	

*SECNO 30723.000
2800 NAT Q1= 1362.92 WSEL= 604.73 ENC Q1= 1362.92 WSEL= 604.84 RATIO= 0.0000
NAT Q1= 1398. RATIOS LOB,CH,ROB= 0.0416 0.6151 0.3433 WSEL= 604.84

3470 ENCROACHMENT STATIONS= 205.8 461.5 TYPE= 4 TARGET= 0.025

VALLEY #34

30723.00	11.51	604.81	0.00	604.73	604.97	0.16	0.27	0.01	600.20
2910.	85.	1842.	983.	94.	470.	871.	1663.	297.	599.80
4.41	0.91	3.92	1.13	0.080	0.035	0.080	0.036	593.30	205.85
0.000463	900.	710.	500.	2	0	0	0.00	255.68	461.53

FLOW DISTRIBUTION FOR SECNO= 30723.00 CWSEL= 604.81

STA=	206.	230.	280.	330.	360.	450.	462.
PER Q=	2.9	63.3	9.7	5.6	16.2	1.5	
AREA=	93.8	469.9	245.4	144.3	432.8	48.8	
VEL=	0.9	3.9	1.2	1.1	1.1	0.9	

*SECNO 31223.000
2800 NAT Q1= 1310.54 WSEL= 604.95 ENC Q1= 1310.04 WSEL= 605.05 RATIO= 0.0000
NAT Q1= 1343. RATIOS LOB,CH,ROB= 0.3333 0.6546 0.0120 WSEL= 605.05

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	XLOCL	XLCH	XLOBR	ITRIAL	IHS	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 39.3 246.2 TYPE= 4 TARGET= 0.024

VALLEY #35 D/S CONFLUENCE WITH NORTH BRANCH SWAN CREEK

31223.00	12.92	605.02	0.00	604.95	605.20	0.18	0.23	0.01	600.00
2800.	919.	1881.	0.	797.	462.	1.	1678.	299.	600.40
4.45	1.15	4.07	0.11	0.080	0.035	0.080	0.036	592.10	39.35
0.000460	500.	500.	500.	0	0	0	0.00	204.81	244.16

FLOW DISTRIBUTION FOR SECNO= 31223.00 CWSEL= 605.02

STA=	39.	50.	199.	244.	244.
PER Q=	1.5	31.4	67.2	0.0	
AREA=	46.8	749.9	462.3	0.7	
VEL=	0.9	1.2	4.1	0.1	

CCHV= 0.300 CEHV= 0.500
*SECNO 32033.000

3470 ENCROACHMENT STATIONS= 353.0 446.0 TYPE= 1 TARGET= 93.000

100' D/S I-275

32033.00	11.53	605.43	0.00	605.35	605.73	0.32	0.48	0.07	600.80
1840.	144.	1593.	103.	135.	326.	103.	1697.	302.	601.60
6.51	1.07	4.89	0.95	0.100	0.035	0.100	0.036	593.90	353.00
0.000806	1000.	810.	700.	1	0	0	0.00	93.00	446.00

FLOW DISTRIBUTION FOR SECNO= 32033.00 CWSEL= 605.43

STA=	353.	382.	413.	446.
PER Q=	7.8	86.6	5.6	
AREA=	135.3	325.7	107.9	
VEL=	1.1	4.9	1.0	

*SECNO 32133.000
2800 NAT Q1= 851.61 WSEL= 605.53 ENC Q1= 863.49 WSEL= 605.63 RATIO= -0.0140
NAT Q1= 863. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 605.63

3470 ENCROACHMENT STATIONS= 0.1 43.0 TYPE= 4 TARGET= 0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 615.00 ELREA= 615.00

D/S FACE I-275

32133.00	11.32	605.62	0.00	605.53	605.85	0.23	0.07	0.03	594.50
1840.	0.	1840.	0.	0.	476.	0.	1698.	303.	595.60
6.51	0.00	3.37	0.00	0.100	0.035	0.100	0.036	594.30	0.10
0.000574	100.	100.	100.	2	0	0	0.00	42.90	43.00

FLOW DISTRIBUTION FOR SECNO= 32133.00 CWSEL= 605.62

STA=	0.	43.
PER Q=	100.0	
AREA=	475.7	
VEL=	3.9	

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BUC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	2.19	3.00	0.00	42.14	3.00	364.00	0.00	594.60	594.30

*SECNO 32400.000
CLASS A LOW FLOW

3420 BRIDGE W.S.= 605.73 BRIDGE VELOCITY= 4.17 CALCULATED CHANNEL AREA= 435.

EGPRS	EGLWC	WS	OWEIR	QBR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
606.40	606.50	0.04	0.	1040.	364.	364.	603.90	623.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 623.50 ELREA= 623.50

U/S FACE I-275

32400.00	11.47	606.27	0.00	606.17	606.50	0.23	0.65	0.00	595.00

1840.	0.	1840.	0.	0.	482.	0.	1701.	303.	596.10
4.53	0.00	3.81	0.00	0.100	0.035	0.100	0.036	594.80	0.10
0.000437	267.	267.	267.	0	0	0	0.00	42.90	43.00

FLOW DISTRIBUTION FOR SECNO= 32400.00 CWSEL= 606.27

STA= 0. 43.
PER Q= 100.0
AREA= 482.4
VEL= 3.8

*SECNO 32450.000

3470 ENCROACHMENT STATIONS= 128.0 271.0 TYPE= 1 TARGET= 143.000

50' U/S I-275

32450.00	10.31	606.31	0.00	606.21	606.53	0.22	0.03	0.00	600.80
1840.	306.	1338.	196.	284.	309.	213.	1702.	303.	601.60
4.54	1.08	4.32	0.92	0.100	0.035	0.100	0.036	596.00	128.00
0.000647	50.	50.	50.	1	0	0	0.00	143.00	271.00

FLOW DISTRIBUTION FOR SECNO= 32450.00 CWSEL= 606.31

STA= 128. 182. 218. 271.
PER Q= 16.6 72.7 10.6
AREA= 284.0 309.5 213.2
VEL= 1.1 4.3 0.9

CCHV= 0.100 CEHV= 0.300

*SECNO 32590.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TW	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	LTW	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 156.0 539.0 TYPE= 1 TARGET= 383.000

VALLEY #40

32590.00	9.55	606.55	0.00	606.45	606.59	0.05	0.05	0.02	600.40
1840.	637.	798.	405.	1092.	304.	683.	1707.	304.	600.40
4.56	0.50	2.62	0.59	0.120	0.035	0.120	0.036	597.00	156.00
0.000230	120.	140.	170.	2	0	0	0.00	359.62	515.82

FLOW DISTRIBUTION FOR SECNO= 32590.00 CWSEL= 606.55

STA= 156. 350. 386. 470. 516.
PER Q= 34.6 43.4 18.6 3.3
AREA= 1091.9 304.2 533.0 149.9
VEL= 0.6 2.6 0.6 0.4

*SECNO 33520.000

2800 NAT Q1= 1465.85 LSEL= 606.66 ENC Q1= 1465.85 WSEL= 606.76 RATIO= 0.0000
NAT Q1= 1515. RATIOS LOB,CH,ROB= 0.3736 0.2856 0.3408 WSEL= 606.76

3470 ENCROACHMENT STATIONS= 181.3 821.7 TYPE= 4 TARGET= 0.032

VALLEY #41

```
 33520.00      9.15    606.75      0.00    606.66    606.77      0.02      0.18      0.00    601.00
    1840.       676.       545.       619.      1703.       257.      1185.      1762.       315.     600.60
    4.86       0.40       2.12       0.52      0.120      0.035      0.120      0.036    597.60    181.30
 0.000159       930.       930.       930.          2          0          0       0.00    640.42    821.72


FLOW DISTRIBUTION FOR SECNO=  33520.00          CWSEL=    606.75

STA=      181.      599.      630.      770.      822.
  PER Q=     36.0      29.6      26.6       7.1
   AREA=   1702.9     256.9     903.1     202.3
    VEL=      0.4       2.1       0.5       0.5

*SECNO 34590.000
 2800 NAT Q1=     692.90  WSEL=     606.90  ENC Q1=     692.90  WSEL=     607.00  RATIO=  0.0000
 NAT Q1=     722.  RATIOS LOB,CH,ROB=  0.3323  0.4366  0.2311  WSEL=     607.00

3470 ENCROACHMENT STATIONS=      149.2      608.0  TYPE=       4  TARGET=        0.040

        VALLEY #62

 34590.00      9.79    606.99      0.00    606.90    607.12      0.13      0.31      0.03    602.70
    1840.       597.       839.       404.       834.       201.       566.      1821.       328.     602.70
    4.96       0.72       4.18       0.71      0.120      0.035      0.120      0.036    597.20    149.17
 0.000712      1070.      1070.      1070.          2          0          0       0.00    458.86    608.02


FLOW DISTRIBUTION FOR SECNO=  34590.00          CWSEL=    606.99

STA=      169.      400.      432.      608.
  PER Q=     32.5      45.6      22.0
   AREA=    833.7     200.5     565.9
    VEL=      0.7       4.2       0.7

CCHV=   0.300 CEHV=   0.500
*SECNO 34770.000
 2800 NAT Q1=    1576.70  WSEL=     607.08  ENC Q1=    1576.70  WSEL=     607.18  RATIO=  0.0000
 NAT Q1=    1635.  RATIOS LOB,CH,ROB=  0.4582  0.2609  0.2809  WSEL=     607.18

3470 ENCROACHMENT STATIONS=      113.4      542.7  TYPE=       4  TARGET=        0.036
 34770.00      9.28    607.18      0.00    607.08    607.20      0.02      0.05      0.03    602.40
    1840.       840.       496.       502.      1069.       265.       662.      1828.       330.     602.90
    5.01       0.79       1.88       0.76      0.060      0.035      0.060      0.036    597.90    113.39
 0.000137       150.       180.       200.          2          0          0       0.00    429.34    542.73


FLOW DISTRIBUTION FOR SECNO=  34770.00          CWSEL=    607.18

STA=      113.      170.      270.      353.      307.      470.      543.
  PER Q=      7.1      20.6      18.0      27.1      17.1      10.2
   AREA=    200.7     467.5     400.5     265.4     388.0     273.9
    VEL=      0.7       0.8       0.3       1.9       0.3       0.7

*SECNO 34771.000
 2800 NAT Q1=    1207.23  WSEL=     607.09  ENC Q1=    1207.23  WSEL=     607.19  RATIO=  0.0000
 NAT Q1=    1263.  RATIOS LOB,CH,ROB=  0.5262  0.1560  0.3178  WSEL=     607.19

3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  602.10 MAX ELLC=  604.90


3470 ENCROACHMENT STATIONS=      112.0      544.4  TYPE=       4  TARGET=        0.044
 34771.00      9.28    607.18      0.00    607.09    607.20      0.02      0.00      0.00    602.40
    1840.       970.       301.       569.       993.       215.       612.      1828.       330.     602.90
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    5.01      0.98      1.40      0.93     0.060     0.030     0.060     0.036   597.90   112.03
0.000236        1.        1.        1.         0         0         0  -182.92   432.41   544.44

FLOW DISTRIBUTION FOR SECNO=  34771.00          CWSEL=    607.18

STA=     112.      170.      270.      353.      387.      470.      544.
  PER Q=      9.5      26.9      16.3      16.3      17.4      13.5
   AREA=    204.2     467.6     321.7     215.3     334.1     278.1
    VEL=      0.9       1.1       0.9       1.4       1.0       0.9

*SECNO 34776.000
 2800 NAT Q1=   1211.02  WSEL=    607.09  ENC Q1=   1211.02  WSEL=    607.19  RATIO=  0.0000
 NAT Q1=   1264.  RATIOS LOB,CH,ROB=  0.5262  0.1560  0.3178  WSEL=    607.19
   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    TH2       ICONT     CORAR     TOPWID     ENDST


3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  602.10 MAX ELLC=  604.90


3470 ENCROACHMENT STATIONS=     110.7     546.1  TYPE=     4  TARGET=       0.042
 34776.00      9.28    607.18      0.00    607.09    607.20      0.02      0.00      0.00   602.40
    1840.      970.      300.      570.      999.      216.      617.     1828.      330.    602.90
     5.01      0.97      1.39      0.92     0.060     0.030     0.060     0.036   597.90   110.68
0.000232        5.        5.        5.         0         0         0  -182.92   435.42   546.11

FLOW DISTRIBUTION FOR SECNO=  34776.00          CWSEL=    607.18

STA=     111.      170.      270.      353.      387.      470.      546.
  PER Q=      9.3      26.9      16.3      16.3      17.4      13.6
   AREA=    208.1     468.3     322.3     215.5     334.7     282.6
    VEL=      0.8       1.1       0.9       1.4       1.0       0.9

*SECNO 34777.000
 2800 NAT Q1=   1581.65  WSEL=    607.09  ENC Q1=   1581.65  WSEL=    607.19  RATIO=  0.0000
 NAT Q1=   1639.  RATIOS LOB,CH,ROB=  0.4563  0.2606  0.2811  WSEL=    607.19

3470 ENCROACHMENT STATIONS=     112.6     543.7  TYPE=     4  TARGET=       0.035

        U/S FACE FOOTBRIDGE 842-A

 34777.00      9.28    607.18      0.00    607.09    607.20      0.02      0.00      0.00   602.40
    1840.      841.      497.      502.     1073.      266.      666.     1828.      330.    602.90
     5.01      0.78      1.37      0.75     0.060     0.035     0.060     0.036   597.90   112.65
0.000136        1.        1.        1.         0         0         0      0.00   431.03   543.68


FLOW DISTRIBUTION FOR SECNO=  34777.00          CWSEL=    607.18

STA=     113.      170.      270.      353.      387.      470.      544.
  PER Q=      7.2      20.5      18.0      27.0      17.1      10.3
   AREA=    203.1     468.3     401.2     265.7     388.7     276.8
    VEL=      0.7       0.8       0.8       1.9       0.8       0.7

*SECNO 33929.000
 2800 NAT Q1=   1053.59  WSEL=    607.10  ENC Q1=   1053.59  WSEL=    607.20  RATIO=  0.0000
 NAT Q1=   1104.  RATIOS LOB,CH,ROB=  0.3298  0.4022  0.2680  WSEL=    607.20

3470 ENCROACHMENT STATIONS=     111.7     671.1  TYPE=     4  TARGET=       0.065
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 33929.00    10.10   607.20     0.00   607.10   607.25     0.05     0.03     0.02   604.20
    1840.      592.     775.     473.     734.     286.     586.     1835.     332.    603.40
     5.04     0.81     2.71     0.81    0.060    0.035    0.060    0.036   597.10   111.68
 0.000304      172.     172.     172.        1        0        0     0.00   559.41   671.09

 FLOW DISTRIBUTION FOR SECNO=  33929.00          CWSEL=    607.20

 STA=     112.     220.     320.     401.     439.     520.     620.     671.
   PER Q=     9.4     11.2     11.6     42.1     12.2      9.1      4.4
    AREA=   239.1    255.7    239.5    285.8    247.6    225.7    112.8
     VEL=     0.7      0.8      0.9      2.7      0.9      0.7      0.4

 *SECNO 34930.000
  2800 NAT Q1=    746.19  WSEL=    607.13  ENC Q1=    746.19  WSEL=    607.23  RATIO=  0.0000
  NAT Q1=    794.  RATIOS LOB,CH,ROB=  0.4187  0.2771  0.3043  WSEL=    607.23

 3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  604.30 MAX ELLC=  605.80


 3470 ENCROACHMENT STATIONS=     109.5     673.3  TYPE=     4  TARGET=       0.060
  34930.00    10.13   607.23     0.00   607.13   607.26     0.03     0.00     0.01   604.20
    1840.      760.     543.     537.     696.     260.     519.     1835.     332.    603.40
     5.04     1.09     2.09     1.03    0.060    0.030    0.060    0.036   597.10   109.48
 0.000612        1.       1.       1.        2        0        0  -152.24   563.84   673.32

 FLOW DISTRIBUTION FOR SECNO=  34930.00          CWSEL=    607.23

 STA=     109.     220.     320.     401.     439.     520.     620.     673.
   PER Q=    13.8     16.1     11.4     29.5      9.5     13.1      6.6
    AREA=   246.0    257.6    192.5    259.8    172.2    227.6    118.7
     VEL=     1.0      1.2      1.1      2.1      1.0      1.1      1.0

 *SECNO 34938.000
  2800 NAT Q1=    748.01  WSEL=    607.14  ENC Q1=    746.01  WSEL=    607.24  RATIO=  0.0000
  NAT Q1=    796.  RATIOS LOB,CH,ROB=  0.4189  0.2766  0.3045  WSEL=    607.24

 3370 NORMAL BRIDGE,NRD= 13 MIN ELTRD=  604.30 MAX ELLC=  605.80


 3470 ENCROACHMENT STATIONS=     109.6     673.2  TYPE=     4  TARGET=       0.060
  34938.00    10.13   607.23     0.00   607.14   607.26     0.03     0.03     0.00   604.20
    1840.      761.     543.     537.     697.     260.     519.     1836.     332.    603.40
     5.04     1.09     2.09     1.03    0.060    0.030    0.060    0.036   597.10   109.64
 0.000609        8.       8.       8.        0        0        0  -152.24   563.54   673.18


 FLOW DISTRIBUTION FOR SECNO=  34938.00          CWSEL=    607.23

 STA=     110.     220.     320.     401.     439.     520.     620.     673.
   PER Q=    13.8     16.1     11.4     29.5      9.5     13.1      6.5
    AREA=   246.2    258.1    192.9    260.0    172.6    223.1    118.6
     VEL=     1.0      1.2      1.1      2.1      1.0      1.1      1.0

 *SECNO 34939.000
  2800 NAT Q1=   1065.19  WSEL=    607.13  ENC Q1=   1065.19  WSEL=    607.23  RATIO=  0.0000
  NAT Q1=   1117.  RATIOS LOB,CH,ROB=  0.3312  0.3996  0.2692  WSEL=    607.23
    SECNO     DEPTH     CWSEL     CRIMS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       XTH       ELMIN       SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IH2       ICONT     CORAR     TOPWID      ENDST
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3470 ENCROACHMENT STATIONS= 111.8 671.0 TYPE= 4 TARGET= 0.046

U/S FACE FOOTBRIDGE #42-B

34939.00	10.12	607.22	0.00	607.13	607.27	0.05	0.00	0.01	604.20
1840.	594.	771.	475.	740.	286.	591.	1836.	332.	603.40
5.04	0.80	2.69	0.80	0.060	0.035	0.060	0.036	597.10	111.77
0.000299	1.	1.	1.	1	0	0	0.00	559.28	671.04

FLOW DISTRIBUTION FOR SECNO= 34939.00 CWSEL= 607.22

STA=	112.	220.	320.	401.	439.	520.	620.	671.
PER Q=	9.6	11.3	11.6	41.9	12.3	9.2	4.4	
AREA=	241.0	257.7	241.1	286.5	249.2	227.7	113.6	
VEL=	0.7	0.8	0.9	2.7	0.9	0.7	0.7	

*SECNO 35259.000
2800 NAT Q1= 1018.61 WSEL= 607.22 ENC Q1= 1018.61 WSEL= 607.32 RATIO= 0.0000
NAT Q1= 1073. RATIOS LOB,CH,ROB= 0.2515 0.4302 0.3183 WSEL= 607.32

3470 ENCROACHMENT STATIONS= 146.1 762.3 TYPE= 4 TARGET= 0.051

35259.00	10.12	607.32	0.00	607.22	607.38	0.06	0.10	0.00	605.00
1840.	436.	835.	568.	713.	300.	302.	1847.	336.	604.40
5.09	0.61	2.78	1.13	0.060	0.035	0.060	0.036	597.20	146.12
0.000329	320.	320.	320.	0	0	0	0.00	616.14	762.26

FLOW DISTRIBUTION FOR SECNO= 35259.00 CWSEL= 607.32

STA=	146.	420.	520.	600.	640.	720.	762.
PER Q=	14.6	3.4	5.8	45.4	20.2	10.7	
AREA=	438.5	121.6	153.3	300.4	325.3	176.7	
VEL=	0.6	0.5	0.7	2.0	1.1	1.1	

*SECNO 35260.000
2800 NAT Q1= 757.02 WSEL= 607.26 ENC Q1= 757.02 WSEL= 607.36 RATIO= 0.0000
NAT Q1= 806. RATIOS LOB,CH,ROB= 0.3232 0.2866 0.3903 WSEL= 607.36

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD= 602.10 MAX ELLC= 605.70

3470 ENCROACHMENT STATIONS= 142.1 764.8 TYPE= 4 TARGET= 0.061

35260.00	10.15	607.35	0.00	607.26	607.39	0.04	0.00	0.01	605.00
1840.	572.	563.	706.	707.	274.	482.	1847.	336.	604.40
5.09	0.71	2.05	1.46	0.060	0.030	0.060	0.036	597.20	142.11
0.000595	1.	1.	1.	2	0	0	-92.01	622.64	764.75

FLOW DISTRIBUTION FOR SECNO= 35260.00 CWSEL= 607.35

STA=	142.	420.	520.	600.	640.	720.	765.
PER Q=	20.8	4.8	5.5	30.6	23.3	15.1	
AREA=	457.5	125.2	124.1	273.8	296.1	193.9	
VEL=	0.8	0.7	0.8	2.1	1.4	1.5	

*SECNO 35268.000
2800 NAT Q1= 758.66 WSEL= 607.26 ENC Q1= 758.65 WSEL= 607.36 RATIO= 0.0000
NAT Q1= 808. RATIOS LOB,CH,ROB= 0.3238 0.2861 0.3901 WSEL= 607.36

3370 NORMAL BRIDGE,NRD= 12 MIN ELTRD= 602.10 MAX ELLC= 605.70

3470 ENCROACHMENT STATIONS= 142.3 764.7 TYPE= 4 TARGET= 0.061

35268.00	10.16	607.36	0.00	607.26	607.39	0.04	0.00	0.00	605.00
1840.	573.	562.	705.	708.	274.	482.	1847.	336.	604.40
5.10	0.81	2.05	1.46	0.060	0.030	0.060	0.036	597.20	142.33
0.000593	0.	0.	0.	0	0	0	-92.01	622.52	764.66

FLOW DISTRIBUTION FOR SECNO= 35268.00 CLSEL= 607.36

STA=	142.	420.	520.	600.	640.	720.	765.
PER Q=	20.9	4.8	3.5	30.5	23.3	15.1	
AREA=	453.2	125.6	124.5	274.0	296.5	185.9	
VEL=	0.8	0.7	0.8	2.1	1.4	1.5	

*SECNO 35269.000

2800 NAT Q1= 1036.68 WSEL= 607.25 ENC Q1= 1036.68 WSEL= 607.35 RATIO= 0.0000
NAT Q1= 1086. RATIOS LOB,CH,ROB= 0.2552 0.4260 0.3181 WSEL= 607.35

3470 ENCROACHMENT STATIONS= 143.7 763.8 TYPE= 4 TARGET= 0.047

U/S FACE FOOTBRIDGE #42-C

35269.00	10.15	607.35	0.00	607.25	607.40	0.06	0.00	0.01	605.00
1040.	447.	624.	569.	735.	302.	511.	1847.	336.	604.40
5.10	0.61	2.73	1.11	0.060	0.035	0.060	0.036	597.20	143.66
0.000315	1.	1.	1.	1	0	0	0.00	620.15	763.81

FLOW DISTRIBUTION FOR SECNO= 35269.00 CHSEL= 607.35

STA=	144.	420.	520.	600.	640.	720.	764.
PER Q=	15.0	3.5	5.8	44.8	20.1	10.8	
AREA=	453.8	125.1	156.1	301.8	328.1	183.0	
VEL=	0.6	0.5	0.7	2.7	1.1	1.1	

*SECNO 35441.000

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	UTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IH2	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 150.0 920.0 TYPE= 1 TARGET= 770.000

35441.00	10.52	607.42	0.00	607.32	607.46	0.04	0.05	0.01	602.60
1840.	928.	604.	308.	1314.	227.	454.	1855.	339.	601.70
5.13	0.71	2.66	0.63	0.060	0.035	0.060	0.036	596.90	150.00
0.000251	200.	172.	150.	0	0	0	0.00	770.00	920.00

FLOW DISTRIBUTION FOR SECNO= 35441.00 CHSEL= 607.42

STA=	150.	210.	510.	610.	696.	697.	723.	724.	810.	910.	920.
PER Q=	3.1	28.0	11.0	3.3	0.1	32.8	0.1	7.5	8.7	0.5	
AREA=	102.6	727.4	267.5	212.8	3.4	226.8	3.9	199.9	232.5	17.7	
VEL=	0.6	0.7	0.8	0.7	0.4	2.7	0.4	0.7	0.7	0.5	

*SECNO 35442.000

3370 NORMAL BRIDGE,NRD= 17 MIN ELTRD= 606.50 MAX ELLC= 606.40

3470 ENCROACHMENT STATIONS= 150.0 920.0 TYPE= 1 TARGET= 770.000

35442.00	10.55	607.45	0.00	607.35	607.47	0.02	0.00	0.01	602.60

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    1840.     1096.      381.      363.     1323.      193.      456.     1855.      339.     601.70
    5.13      0.83      1.98      0.80     0.060     0.025     0.060     0.036    596.90    150.00
0.000341        1.        1.        1.         2         0         0    -37.66    770.00    920.00


FLOW DISTRIBUTION FOR SECNO=  35442.00          CHSEL=    607.45

STA=     150.      210.      510.      610.      696.      697.      723.      724.      810.      910.      920.
  PER Q=    3.7      33.1      13.0       9.8       0.0      20.7       0.0       8.8      10.3       0.6
   AREA=  103.8     733.4     269.5     214.6       2.0     192.9       2.0     201.7     234.5      17.9
    VEL=    0.7       0.6       0.9       0.8       0.4       2.0       0.3       0.8       0.8       0.6

*SECNO 35463.000

3370 NORMAL BRIDGE,NRD= 17 MIN ELTRD=  604.50 MAX ELLC=  604.40


3470 ENCROACHMENT STATIONS=      150.0      920.0  TYPE=      1  TARGET=     770.000
 35463.00     10.35    607.45      0.00    607.36    607.47      0.02      0.01      0.00    602.60
    1840.     1096.      380.      364.     1327.      193.      457.     1856.      340.     601.70
    5.14      0.83      1.97      0.80     0.060     0.025     0.060     0.036    596.90    150.00
0.000338       21.       21.       21.         0         0         0    -37.66    770.00    920.00


FLOW DISTRIBUTION FOR SECNO=  35463.00          CHSEL=    607.45

STA=     150.      210.      510.      610.      696.      697.      723.      724.      810.      910.      920.
  PER Q=    3.7      33.1      13.0       9.8       0.0      20.7       0.0       8.8      10.3       0.6
   AREA=  104.2     735.4     270.1     215.1       2.1     193.0       2.1     202.2     235.1      18.0
    VEL=    0.7       0.6       0.9       0.8       0.4       2.0       0.3       0.8       0.8       0.6

*SECNO 35464.000

3470 ENCROACHMENT STATIONS=      150.0      920.0  TYPE=      1  TARGET=     770.000

        U/S FACE FOOTBRIDGE ,42=D

 35464.00     10.54    607.44      0.00    607.34    607.48      0.04      0.00      0.01    602.60
    1840.      932.      598.      310.     1329.      227.      459.     1856.      340.     601.70
    5.14      0.70      2.63      0.67     0.060     0.035     0.060     0.036    596.90    150.00
0.000243        1.        1.        1.         0         0         0      0.00    770.00    920.00


FLOW DISTRIBUTION FOR SECNO=  35464.00          CHSEL=    607.44

STA=     150.      210.      510.      610.      696.      697.      723.      724.      810.      910.      920.
  PER Q=    3.1      28.1      11.0       8.3       0.1      32.5       0.1       7.5       8.7       0.5
   AREA=  104.3     735.7     270.2     213.2       3.5     227.5       3.9     202.3     235.2      18.0
    VEL=    0.6       0.7       0.7       0.7       0.4       2.3       0.4       0.7       0.7       0.5

*SECNO 35759.000

3470 ENCROACHMENT STATIONS=      400.0     1020.0  TYPE=      1  TARGET=     620.000
 35759.00     10.91    607.51      0.00    607.41    607.59      0.09      0.09      0.02    605.70
    1840.      569.     1117.      133.      821.      375.      193.     1867.      344.     605.00
    5.18      0.72      2.98      0.68     0.060     0.035     0.060     0.036    596.60    400.00
0.000353       295.      295.      295.         2         0         0      0.00    620.00   1020.00


FLOW DISTRIBUTION FOR SECNO=  35759.00          CHSEL=    607.51

STA=     400.      700.      856.      904.      980.     1020.
  PER Q=   13.8      18.2      60.7       6.1       1.1
   AREA=  430.0     390.0     374.7     152.4      42.6
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    VEL=      0.6       0.9       3.0       0.7       0.5

*SECNO 35760.000
   SECNO     DEPTH     CHSEL     CRIWS     WSELK     EG        HV        KL        QLOSS    BANK ELEV
     Q       CLOB      OCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
    TIME     VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOCL     XLCH      XLOCR     ITRIAL    IP2       ICONT     CORAR     TOPWID      ENDST


3370 NORMAL BRIDGE,NRD= 17 MIN ELTRD=  605.00 MAX ELLC=  605.50


3470 ENCROACHMENT STATIONS=      400.0    1020.0  TYPE=      1  TARGET=      620.000
 35760.00     10.91   607.51      0.00   607.41   607.59      0.09      0.00      0.00   605.00
    1840.      987.     689.      164.     735.     196.      146.     1867.      344.    605.00
     5.18      1.34     3.51      1.13    0.060    0.025     0.060     0.036    596.60   400.00
 0.001516        1.       1.        1.        0        0         0   -313.83    620.00  1020.00


FLOW DISTRIBUTION FOR SECNO=  35760.00          CHSEL=    607.51

STA=     400.     700.     856.     904.     980.    1020.
  PER Q=    28.6     25.0     37.4      6.6      2.3
   AREA=   430.2    305.0    196.1    103.0     42.6
    VEL=     1.2      1.5      3.5      1.2      1.0

*SECNO 35767.000

3370 NORMAL BRIDGE,NRD= 17 MIN ELTRD=  605.00 MAX ELLC=  605.50


3470 ENCROACHMENT STATIONS=      400.0    1020.0  TYPE=      1  TARGET=      620.000
 35767.00     10.92   607.52      0.00   607.42   607.60      0.09      0.01      0.00   605.00
    1840.      989.     683.      165.     750.     196.      146.     1860.      345.    605.00
     5.18      1.34     3.50      1.13    0.060    0.025     0.060     0.036    596.60   400.00
 0.001303        7.       7.        7.        0        0         0   -314.09    620.00  1020.00


FLOW DISTRIBUTION FOR SECNO=  35767.00          CHSEL=    607.52

STA=     400.     700.     856.     904.     980.    1020.
  PER Q=    28.7     25.0     37.3      6.6      2.3
   AREA=   432.1    306.0    196.2    103.5     42.9
    VEL=     1.2      1.5      3.5      1.2      1.0

*SECNO 35768.000

3470 ENCROACHMENT STATIONS=      400.0    1020.0  TYPE=      1  TARGET=      620.000

        U/S FACE FOOTBRIDGE #42-E

 35768.00     10.92   607.52      0.00   607.63   607.61      0.09      0.00      0.00   605.00
    1840.      393.    1114.      134.     827.     375.      196.     1866.      345.    605.00
     5.18      0.72     2.97      0.68    0.060    0.035     0.060     0.036    596.60   400.00
 0.000348        1.       1.        1.        0        0         0      0.00    620.00  1020.00


FLOW DISTRIBUTION FOR SECNO=  35768.00          CHSEL=    607.32

STA=     400.     700.     856.     904.     980.    1020.
  PER Q=    13.9     18.3     60.5      6.2      1.1
   AREA=   434.0    392.8    375.3    153.4     43.1
    VEL=     0.6      0.9      3.0      0.7      0.5
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*SECNO 36068.000

3470 ENCROACHMENT STATIONS=      400.0      870.0  TYPE=      1  TARGET=      470.000
 36068.00     11.44    607.64      0.00    607.57    607.70      0.06      0.09      0.01    604.60
    1840.      632.      990.      228.      819.      372.      281.     1877.      348.     605.10
     5.22      0.77      2.63      0.31     0.060     0.035     0.060     0.036    596.20    400.00
 0.000269       250.      300.      350.         2         0         0      0.00    470.00    870.00

FLOW DISTRIBUTION FOR SECNO=  36068.00          CWSEL=     607.64

STA=     400.      550.      650.      727.      774.      850.      870.
  PER Q=      9.4      13.3      11.7      53.2       9.9       2.5
   AREA=    200.7     293.9     244.0     371.8     221.0      59.6
    VEL=      0.6       0.8       0.9       2.6       0.8       0.0

*SECNO 36069.000

3370 NORMAL BRIDGE,NRD= 15 MIN ELTRD=  604.30 MAX ELLC=  606.30


3470 ENCROACHMENT STATIONS=      400.0      870.0  TYPE=      1  TARGET=      470.000
 36069.00     11.47    607.67      0.00    607.60    607.71      0.04      0.00      0.01    604.60
    1840.      878.      696.      264.      814.      341.      249.     1877.      348.     605.10
     5.22      1.08      2.05      1.06     0.060     0.030     0.060     0.036    596.20    400.00
 0.000534         1.        1.        1.         2         0         0    -82.03    470.00    870.00

FLOW DISTRIBUTION FOR SECNO=  36069.00          CWSEL=     607.67

STA=     400.      550.      650.      727.      774.      850.      870.
  PER Q=     13.6      19.1      15.0      37.9      10.8       3.6
   AREA=    285.7     297.3     231.3     341.1     109.2      60.3
    VEL=      0.9       1.2       1.2       2.0       1.0       1.1

*SECNO 36077.000
   SECNO     DEPTH     CWSEL     CRIWS     USELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOEL     XLCH      XLOBR     ITRIAL    IN2       ICONT     CORAR     TOPWID      ENDST


3370 NORMAL BRIDGE,NRD= 15 MIN ELTRD=  604.30 MAX ELLC=  606.30

3470 ENCROACHMENT STATIONS=      400.0      870.0  TYPE=      1  TARGET=      470.000
 36077.00     11.48    607.68      0.00    607.61    607.71      0.04      0.03      0.00    604.60
    1840.      878.      697.      264.      815.      341.      250.     1877.      348.     605.10
     5.23      1.08      2.04      1.06     0.060     0.030     0.060     0.036    596.20    400.00
 0.000532         8.        8.        8.         0         0         0    -82.03    470.00    870.00

FLOW DISTRIBUTION FOR SECNO=  36077.00          CWSEL=     607.68

STA=     400.      550.      650.      727.      774.      850.      870.
  PER Q=     13.6      19.1      15.0      37.9      10.8       3.6
   AREA=    286.2     297.6     231.5     341.2     109.4      60.3
    VEL=      0.9       1.2       1.2       2.0       1.0       1.1

*SECNO 36078.000

3470 ENCROACHMENT STATIONS=      400.0      870.0  TYPE=      1  TARGET=      470.000
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U/S FACE FOOTBRIDGE #42-F

36078.00	11.47	607.67	0.00	607.60	607.73	0.06	0.00	0.01	604.60
1840.	637.	973.	229.	829.	373.	204.	1677.	348.	605.10
5.23	0.77	2.61	0.61	0.060	0.035	0.060	0.036	596.20	400.00
0.000262	1.	1.	1.	1	0	0	0.00	470.00	870.00

FLOW DISTRIBUTION FOR SECNO= 36078.00 CWSEL= 607.67

STA=	400.	550.	650.	727.	774.	950.	970.
PER Q=	9.5	13.4	11.7	52.9	10.0	2.5	
AREA=	285.6	297.2	246.5	373.3	223.5	60.2	
VEL=	0.6	0.8	0.9	2.6	0.8	0.8	

*SECNO 36290.000

3470 ENCROACHMENT STATIONS= 400.0 750.0 TYPE= 1 TARGET= 350.000

100' D/S GRAFTON RD.

36298.00	10.52	607.72	0.00	607.65	607.81	0.09	0.07	0.01	603.50
1840.	346.	1091.	203.	586.	360.	224.	1883.	350.	603.60
5.25	0.93	3.03	0.90	0.060	0.035	0.060	0.036	597.20	400.00
0.000351	160.	240.	260.	2	0	0	0.00	350.00	750.00

FLOW DISTRIBUTION FOR SECNO= 36298.00 CWSEL= 607.72

STA=	400.	520.	615.	661.	700.	750.
PER Q=	10.7	19.0	59.3	7.6	3.4	
AREA=	256.7	329.3	360.2	133.2	91.2	
VEL=	0.8	1.1	3.0	1.1	0.7	

*SECNO 36398.000

3470 ENCROACHMENT STATIONS= 1.0 301.0 TYPE= 1 TARGET= 300.000

D/S FACE GRAFTON RD. (SKEW)

36398.00	10.05	607.65	0.00	607.58	607.97	0.31	0.05	0.11	598.20
1840.	126.	1613.	107.	137.	337.	126.	1886.	351.	598.20
5.26	0.88	4.78	0.85	0.060	0.035	0.060	0.036	597.60	1.00
0.000609	150.	100.	50.	2	0	0	0.00	300.00	301.00

FLOW DISTRIBUTION FOR SECNO= 36398.00 CWSEL= 607.65

STA=	1.	128.	139.	173.	183.	301.
PER Q=	2.1	4.5	87.6	3.9	1.9	
AREA=	82.9	54.1	337.4	49.0	77.0	
VEL=	0.5	1.5	4.8	1.5	0.3	

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	SPC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.10	3.00	0.00	32.14	0.00	250.00	0.00	597.60	597.60

*SECNO 36444.000
PRESSURE AND WEIR FLOW

EGPRS	EGLNC	HS	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
609.42	609.04	0.00	275.	1550.	250.	270.	606.00	608.30

3470 ENCROACHMENT STATIONS= 1.0 301.0 TYPE= 1 TARGET= 300.000

U/S FACE GRAFTON RD. (SKEW)

36444.00	11.06	608.66	0.30	608.62	608.91	0.25	0.94	0.00	598.20
1840.	143.	1593.	99.	103.	372.	131.	1886.	351.	598.20
5.26	0.78	4.29	0.75	0.060	0.035	0.060	0.036	597.60	1.00
0.000631	46.	46.	46.	2	0	2	0.00	300.00	301.00

FLOW DISTRIBUTION FOR SECNO= 36444.00 CLSEL= 608.66

STA=	1.	121.	139.	173.	183.	301.
PER Q=	3.3	4.5	86.9	3.7	1.6	
AREA=	121.5	61.1	372.1	53.9	77.5	
VEL=	0.5	1.4	4.3	1.3	0.4	

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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

SWAN CR.ASH TWP.

SUMMARY PRINTOUT TABLE 110

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
5.000	590.00	0.00	590.04	1150.00	158.31	997.03	2314.66	0.00	0.00	100.00	142.00	0.00
5.000	590.00	0.00	590.04	805.30	101.29	1027.32	2341.39	0.04	70.55	100.00	142.00	875.85
6.000	589.99	0.00	590.12	1139.80	0.00	2300.99	1169.01	0.00	0.00	658.00	742.00	0.00
6.000	589.99	-0.00	590.13	696.17	0.00	2374.53	1095.47	0.04	658.00	658.00	742.00	1354.17
7.000	589.94	0.00	590.17	1127.86	0.00	2794.79	675.21	0.00	0.00	658.00	742.00	0.00
7.000	589.94	-0.00	590.19	696.00	0.00	2852.80	617.20	697.00	657.00	658.00	742.00	1354.00
17.000	589.94	0.00	590.18	1129.10	0.00	2793.19	676.81	0.00	0.00	658.00	742.00	0.00
17.000	589.94	0.00	590.19	717.00	0.00	2840.50	629.50	718.00	657.00	658.00	742.00	1375.00
18.000	590.09	0.00	590.21	1146.63	0.00	2258.53	1211.47	0.00	0.00	658.00	742.00	0.00
18.000	590.09	0.00	590.23	717.06	0.00	2329.40	1140.61	0.04	658.00	658.00	742.00	1375.06
68.000	590.20	0.00	590.25	1262.71	331.50	1114.00	2021.62	0.00	0.00	770.00	812.00	0.00
68.000	590.21	0.01	590.27	764.44	273.51	1153.36	2043.13	0.04	704.31	770.00	812.00	1468.76
1438.000	590.70	0.00	590.83	724.55	1382.00	1691.09	396.91	0.00	0.00	692.00	738.00	0.00
1438.000	590.74	0.04	590.88	451.08	1373.28	1732.14	364.57	0.03	400.46	692.00	738.00	851.54
2898.000	591.33	0.00	591.30	958.36	2448.74	967.21	54.05	0.00	0.00	1435.00	1468.00	0.00
2898.000	591.42	0.09	591.46	617.94	2570.03	899.97	0.00	0.04	850.06	1435.00	1468.00	1468.00
3768.000	591.56	0.00	591.65	750.17	300.93	1230.75	1938.32	0.00	0.00	990.00	1032.00	0.00
3768.000	591.65	0.09	591.74	441.50	269.50	1255.80	1944.70	0.03	825.18	990.00	1032.00	1266.68
5158.000	592.29	0.00	592.42	633.32	0.00	1631.91	1838.09	0.00	0.00	95.00	156.00	0.00
5158.000	592.39	0.09	592.52	513.23	0.00	1668.58	1801.42	0.03	95.00	95.00	156.00	613.04
6318.000	593.01	0.00	593.15	492.58	1463.31	2005.96	0.73	0.00	0.00	455.00	517.00	0.00
6318.000	593.11	0.10	593.26	408.39	1430.44	2039.56	0.00	0.03	108.62	455.00	517.00	517.00
7818.000	593.87	0.00	594.07	501.45	1370.66	1842.69	256.67	0.00	0.00	430.00	470.00	0.00
7818.000	593.97	0.11	594.18	393.47	1379.91	1873.71	216.38	0.03	110.03	430.00	470.00	508.50
8718.000	594.42	0.00	594.70	163.00	290.18	2859.72	320.10	163.00	538.00	589.00	651.00	701.00
8718.000	594.52	0.10	594.79	163.00	294.29	2851.19	324.52	163.00	538.00	589.00	651.00	701.00

SECNO	CHSEL	DIFCHS	EG	TOPHID	GLOB	GCH	GROB	PERENC	STENCL	STCHL	STCHR	STENCR
8838.000	594.60	0.00	594.80	103.20	0.00	3470.00	0.00	0.00	0.00	53.80	157.00	0.00
8838.000	594.69	0.09	594.89	103.20	0.00	3470.00	0.00	0.00	53.80	53.80	157.00	157.00
8839.000	594.48	0.00	594.92	103.20	0.00	3470.00	0.00	0.00	0.00	53.80	157.00	0.00
8839.000	594.57	0.09	595.01	103.20	0.00	3470.00	0.00	0.00	53.80	53.80	157.00	157.00
8882.000	594.50	0.00	594.94	103.20	0.00	3470.00	0.00	0.00	0.00	53.80	157.00	0.00
8882.000	594.60	0.09	595.03	103.20	0.00	3470.00	0.00	0.00	53.80	53.80	157.00	157.00
8883.000	594.84	0.00	595.02	103.20	0.00	3470.00	0.00	0.00	0.00	53.80	157.00	0.00
8883.000	594.92	0.09	595.10	103.20	0.00	3470.00	0.00	0.00	53.80	53.80	157.00	157.00
8973.000	594.87	0.00	595.07	283.00	514.43	2518.51	437.05	283.00	259.00	369.00	431.00	542.00
8973.000	594.96	0.09	595.15	283.00	518.75	2506.12	445.13	283.00	259.00	369.00	431.00	542.00
10095.000	595.52	0.00	595.64	507.64	1622.34	1513.90	333.76	0.00	0.00	612.00	651.00	0.00
10098.000	595.59	0.07	595.71	415.97	1625.87	1547.13	297.00	0.03	286.44	612.00	651.00	702.41
11118.000	595.98	0.00	596.04	835.64	1902.53	1089.84	477.63	0.00	0.00	733.00	768.00	0.00
11118.000	596.06	0.08	596.12	612.98	1910.11	1110.10	449.78	0.03	287.36	733.00	768.00	900.34
12620.000	596.52	0.00	596.77	152.50	230.39	2520.45	159.15	152.50	562.25	606.00	671.00	714.75
12620.000	596.59	0.08	596.85	152.50	231.62	2517.44	160.94	152.50	562.25	606.00	671.00	714.75
12760.000	596.63	0.00	596.89	82.44	0.00	2910.00	0.00	0.00	0.00	383.30	465.80	0.00
12760.000	596.70	0.07	596.96	82.44	0.00	2910.00	0.00	0.00	383.30	383.30	465.80	465.80
12817.000	598.46	0.00	598.64	82.49	0.00	2910.00	0.00	0.00	0.00	383.30	445.80	0.00
12817.000	598.51	0.05	598.69	82.49	0.00	2910.00	0.00	0.00	383.30	383.30	465.80	465.80
13087.000	598.68	0.00	598.73	595.72	542.95	1710.35	656.70	0.00	0.00	286.00	349.00	0.00
13087.000	598.72	0.04	598.77	458.87	524.44	1738.14	647.43	0.02	114.36	286.00	349.00	573.23
14167.000	598.81	0.00	599.12	320.86	275.25	1943.46	691.29	0.00	0.00	333.00	367.00	0.00
14167.000	598.85	0.04	599.18	273.85	244.32	1980.90	684.78	0.03	301.15	335.00	367.00	575.01
14267.000	598.88	0.00	599.21	531.09	435.22	1443.76	1031.02	0.00	0.00	116.00	134.00	0.00
14267.000	598.92	0.04	599.27	296.32	405.74	1470.89	1033.37	0.03	73.60	116.00	134.00	369.92
14268.000	598.99	0.00	599.24	543.56	474.53	1246.29	1189.19	0.00	0.00	116.00	134.00	0.00
14268.000	599.04	0.05	599.30	305.13	443.56	1271.30	1195.06	0.03	72.55	116.00	134.00	377.73
14281.000	599.01	0.00	599.25	544.77	474.52	1244.00	1191.48	0.00	0.00	116.00	134.00	0.00
14281.000	599.06	0.05	599.31	304.90	442.54	1270.13	1197.53	0.03	72.78	116.00	134.00	377.68
14282.000	598.97	0.00	599.29	541.38	435.78	1423.93	1050.29	0.00	0.00	116.00	134.00	0.00
14282.000	599.02	0.05	599.35	302.31	406.64	1450.75	1052.61	0.03	73.07	116.00	134.00	375.38
14332.000	599.05	0.00	599.33	528.69	283.33	1903.48	723.19	0.00	0.00	335.00	367.00	0.00
14332.000	599.11	0.05	599.40	279.67	253.33	1938.10	718.57	0.03	299.63	335.00	367.00	579.30
15592.000	599.66	0.00	599.70	380.00	1336.02	1536.64	35.35	380.00	45.00	314.00	402.00	425.00
15592.000	599.73	0.07	599.76	380.00	1339.00	1535.23	35.77	380.00	45.00	314.00	402.00	425.00
15692.000	599.67	0.00	599.71	380.00	1338.19	1536.39	35.42	380.00	45.00	314.00	402.00	425.00
15692.000	599.74	0.07	599.77	380.00	1339.16	1535.00	35.84	380.00	45.00	314.00	402.00	425.00

SECNO	CHSEL	DIFKUS	EG	TOPUID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
15704.000	599.74	0.00	599.80	380.00	959.53	1924.60	25.67	380.00	45.00	314.00	402.00	425.00
15704.000	599.80	0.06	599.86	380.00	960.41	1923.64	25.96	380.00	45.00	314.00	402.00	425.00
15754.000	599.78	0.00	599.81	380.00	1339.70	1534.23	36.07	380.00	45.00	314.00	402.00	425.00
15754.000	599.84	0.06	599.88	380.00	1340.60	1532.95	36.45	380.00	45.00	314.00	402.00	425.00
16374.000	599.87	0.00	599.90	474.56	0.00	910.65	1999.35	0.00	0.00	1.00	47.00	0.00
16374.000	599.93	0.06	599.97	376.91	0.00	927.60	1982.40	0.02	1.00	1.00	47.00	378.79
17384.000	600.00	0.00	600.02	717.05	1880.21	779.36	250.43	0.00	0.00	589.00	630.00	0.00
17384.000	600.07	0.07	600.09	642.66	1885.64	791.41	232.96	0.02	47.73	589.00	630.00	690.40
17554.000	600.00	0.00	600.05	706.00	648.13	1949.04	312.03	0.00	0.00	398.60	480.80	0.00
17554.000	600.07	0.06	600.12	634.71	637.62	1964.40	297.98	0.03	35.88	398.60	480.80	670.59
17555.000	600.00	0.00	600.06	706.00	1018.72	1505.86	385.41	0.00	0.00	398.60	480.80	0.00
17555.000	600.06	0.06	600.13	648.30	1011.33	1546.19	352.48	0.04	29.49	398.60	480.80	677.79
17581.000	600.01	0.00	600.07	706.00	1018.79	1505.75	385.46	0.00	0.00	398.60	480.80	0.00
17581.000	600.07	0.06	600.13	643.98	1010.22	1550.33	349.44	0.04	31.54	398.60	480.80	675.52
17582.000	600.02	0.00	600.07	706.00	649.63	1947.50	312.67	0.00	0.00	398.60	480.80	0.00
17582.000	600.09	0.07	600.14	630.55	636.56	1987.18	286.26	0.03	37.81	398.60	480.80	668.36
17632.000	600.07	0.00	600.08	747.46	1068.65	691.66	1149.69	0.00	0.00	369.00	410.00	0.00
17632.000	600.14	0.07	600.15	625.15	938.06	737.40	1234.54	720.00	139.00	369.00	410.00	867.00
19032.000	600.23	0.00	600.27	469.49	1974.90	935.11	0.00	0.00	0.00	432.00	471.00	0.00
19032.000	600.31	0.08	600.35	433.43	1957.71	952.29	0.00	0.02	37.01	432.00	471.00	471.00
20462.000	600.61	0.00	600.65	598.16	1184.10	919.06	806.84	0.00	0.00	316.00	347.00	0.00
20462.000	600.69	0.08	600.74	482.06	1176.30	936.88	796.74	0.02	78.03	316.00	347.00	560.06
22092.000	601.07	0.00	601.13	442.91	407.60	736.75	1685.66	0.00	0.00	128.00	151.00	0.00
22092.000	601.16	0.09	601.22	331.98	463.61	750.65	1695.74	0.03	64.48	128.00	151.00	396.46
22292.000	601.09	0.00	601.24	379.79	177.12	2586.68	146.20	0.00	0.00	192.00	279.00	0.00
22292.000	601.18	0.09	601.33	335.14	154.05	2638.15	117.80	0.03	25.87	192.00	279.00	361.02
22293.000	601.06	0.00	601.27	379.78	264.59	2443.79	201.52	0.00	0.00	192.00	279.00	0.00
22293.000	601.14	0.08	601.37	344.39	236.89	2507.58	165.53	0.03	20.72	192.00	279.00	365.11
22309.000	601.07	0.00	601.29	379.78	266.36	2441.11	202.53	0.00	0.00	192.00	279.00	0.00
22309.000	601.15	0.08	601.39	342.03	236.76	2509.51	163.73	0.04	22.02	192.00	279.00	364.06
22310.000	601.16	0.00	601.31	379.81	165.60	2573.68	150.72	0.00	0.00	192.00	279.00	0.00
22310.000	601.26	0.09	601.41	337.25	163.58	2623.35	123.07	0.02	24.59	192.00	279.00	361.83
22410.000	601.34	0.00	601.37	542.05	995.33	572.37	1342.30	0.00	0.00	468.00	491.00	0.00
22410.000	601.44	0.10	601.47	404.69	987.92	302.86	1339.22	0.03	278.37	468.00	491.00	683.26
23160.000	601.47	0.00	601.49	752.02	2163.87	667.36	78.57	0.00	0.00	773.00	814.00	0.00
23160.000	601.56	0.10	601.59	514.37	2106.21	681.19	42.61	0.03	314.06	773.00	814.00	828.44
24540.000	601.66	0.00	601.75	755.44	208.48	1284.04	1417.48	0.00	0.00	340.00	386.00	0.00
24540.000	601.76	0.10	601.86	497.42	176.79	1308.95	1422.26	0.03	276.28	340.00	386.00	773.70

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
26060.000	601.98	0.00	602.00	697.10	1972.07	899.85	38.08	0.00	0.00	613.00	683.00	0.00
26060.000	602.08	0.10	602.10	697.98	1988.52	917.30	4.10	0.02	68.11	613.00	683.00	686.10
26290.000	601.97	0.00	602.08	585.70	570.57	2339.43	0.00	0.00	0.00	495.60	586.50	0.00
26290.000	602.07	0.11	602.17	585.00	609.04	2300.96	0.00	585.00	1.00	495.60	586.50	586.00
26325.000	602.11	0.00	602.22	585.71	523.60	2386.40	0.00	0.00	0.00	495.60	586.50	0.00
26325.000	602.21	0.10	602.31	585.72	549.05	2360.95	0.00	0.00	0.00	495.60	586.50	0.00
26475.000	602.21	0.00	602.27	690.27	1607.73	835.99	466.29	0.00	0.00	535.00	563.00	0.00
26475.000	602.30	0.09	602.36	583.18	1622.72	854.06	433.22	0.04	93.95	535.00	563.00	677.13
27015.000	602.44	0.00	602.48	907.17	194.26	649.48	2066.26	0.00	0.00	91.00	115.00	0.00
27015.000	602.53	0.09	602.58	643.19	145.90	662.48	2101.62	0.04	53.76	91.00	115.00	696.94
29305.000	603.59	0.00	604.01	110.00	159.67	2476.35	273.99	110.00	43.00	73.00	123.00	153.00
29305.000	603.67	0.08	604.09	110.00	162.18	2472.22	275.60	110.00	43.00	73.00	123.00	153.00
29405.000	603.67	0.00	604.14	60.00	0.00	2910.00	0.00	0.00	0.00	1.00	61.00	0.00
29405.000	603.76	0.09	604.22	60.00	0.00	2910.00	0.00	0.00	1.00	1.00	61.00	61.00
29406.000	603.63	0.00	604.18	60.00	0.00	2910.00	0.00	0.00	0.00	1.00	61.00	0.00
29406.000	603.72	0.09	604.26	60.00	0.00	2910.00	0.00	0.00	1.00	1.00	61.00	61.00
29442.000	603.65	0.00	604.20	60.00	0.00	2910.00	0.00	0.00	0.00	1.00	61.00	0.00
29442.000	603.74	0.09	604.28	60.00	0.00	2910.00	0.00	0.00	1.00	1.00	61.00	61.00
29443.000	603.76	0.00	604.22	60.00	0.00	2910.00	0.00	0.00	0.00	1.00	61.00	0.00
29443.000	603.85	0.09	604.30	60.00	0.00	2910.00	0.00	0.00	1.00	1.00	61.00	61.00
29493.000	603.94	0.00	604.30	131.00	52.43	2413.71	463.86	131.00	1.00	27.00	77.00	132.00
29493.000	604.03	0.09	604.38	131.00	54.39	2409.31	466.30	131.00	1.00	27.00	77.00	132.00
30013.000	604.49	0.00	604.61	427.78	107.03	1687.33	1114.79	0.00	0.00	546.00	594.00	0.00
30013.000	604.56	0.07	604.69	361.96	74.86	1721.54	1113.61	0.03	527.17	546.00	594.00	889.13
30723.000	604.73	0.00	604.89	342.94	117.21	1004.33	988.46	0.00	0.00	230.00	280.00	0.00
30723.000	604.81	0.07	604.97	255.68	85.26	1042.05	982.69	0.03	205.85	230.00	280.00	461.53
31223.000	604.95	0.00	605.12	255.95	922.08	1046.00	31.33	0.00	0.00	199.00	244.00	0.00
31223.000	605.02	0.08	605.20	204.81	918.60	1681.32	0.08	0.02	39.35	199.00	244.00	244.16
32033.000	605.35	0.00	605.68	93.00	142.54	1596.60	100.87	93.00	353.00	382.00	418.00	446.00
32033.000	605.43	0.08	605.75	93.00	144.07	1593.36	102.58	93.00	353.00	382.00	418.00	446.00
32133.000	605.53	0.00	605.77	42.90	0.00	1840.00	0.00	0.00	0.00	0.10	43.00	0.00
32133.000	605.62	0.08	605.85	42.90	0.00	1840.00	0.00	0.00	0.10	0.10	43.00	43.00
32400.000	606.17	0.00	606.40	42.90	0.00	1840.00	0.00	0.00	0.00	0.10	43.00	0.00
32400.000	606.27	0.10	606.50	42.90	0.00	1840.00	0.00	0.00	0.00	0.10	43.00	0.00
32450.000	606.21	0.00	606.43	143.00	303.74	1344.07	192.19	143.00	128.00	182.00	218.00	271.00
32450.000	606.31	0.10	606.53	143.00	306.02	1338.35	195.63	143.00	128.00	182.00	218.00	271.00
32590.000	606.45	0.00	606.50	359.15	634.74	802.02	403.24	383.00	156.00	350.00	386.00	539.00
32590.000	606.55	0.10	606.59	359.82	637.41	797.98	404.60	383.00	156.00	350.00	386.00	539.00

SECNO	CHSEL	DIFKUS	EG	TOPMID	GLOB	GCH	GROB	PERENC	STENCL	STCHL	STCHR	STENCR
33520.000	606.66	0.00	606.68	836.68	678.68	532.18	629.15	0.00	0.00	599.00	630.00	0.00
33520.000	606.75	0.09	606.77	640.42	676.48	544.68	618.84	0.03	181.30	599.00	630.00	821.72
34590.000	606.90	0.00	607.02	607.95	602.13	820.09	417.78	0.00	0.00	408.00	432.00	0.00
34590.000	606.99	0.09	607.12	458.06	597.37	638.69	403.94	0.04	149.17	408.00	432.00	608.03
34770.000	607.08	0.00	607.10	579.02	840.52	487.22	512.26	0.00	0.00	353.00	387.00	0.00
34770.000	607.19	0.09	607.20	429.34	840.39	497.96	501.65	0.04	113.39	353.00	387.00	542.73
34771.000	607.09	0.00	607.10	579.07	967.84	292.03	580.13	0.00	0.00	353.00	387.00	0.00
34771.000	607.19	0.09	607.20	432.41	970.48	300.67	568.85	0.04	112.03	353.00	387.00	544.44
34776.000	607.09	0.00	607.10	579.57	967.86	291.68	580.45	0.00	0.00	353.00	387.00	0.00
34776.000	607.13	0.09	607.20	433.42	970.43	299.63	569.94	0.04	110.68	353.00	387.00	546.11
34777.000	607.09	0.00	607.11	579.61	840.75	486.60	512.66	0.00	0.00	353.00	387.00	0.00
34777.000	607.18	0.09	607.20	431.03	840.69	496.90	502.41	0.03	112.65	353.00	387.00	543.68
33929.000	607.10	0.00	607.16	672.89	596.35	759.36	484.29	0.00	0.00	401.00	439.00	0.00
33929.000	607.20	0.09	607.25	559.41	592.27	774.50	473.22	0.05	111.68	401.00	439.00	671.09
34930.000	607.13	0.00	607.16	673.81	761.35	529.02	549.63	0.00	0.00	401.00	439.00	0.00
34930.000	607.23	0.09	607.26	563.84	760.29	543.21	536.50	0.06	109.48	401.00	439.00	673.32
34938.000	607.14	0.00	607.17	673.90	761.72	528.24	550.04	0.00	0.00	401.00	439.00	0.00
34938.000	607.23	0.09	607.25	563.54	760.66	542.53	536.82	0.06	109.64	401.00	439.00	673.18
34939.000	607.13	0.00	607.13	673.84	598.84	754.75	486.41	0.00	0.00	401.00	439.00	0.00
34939.000	607.22	0.09	607.27	559.28	594.25	770.93	474.82	0.05	111.77	401.00	439.00	671.04
35259.000	607.22	0.00	607.28	750.46	437.71	815.25	587.04	0.00	0.00	600.00	640.00	0.00
35259.000	607.32	0.09	607.36	616.14	436.40	835.41	568.19	0.05	146.12	600.00	640.00	762.26
35260.000	607.26	0.00	607.29	752.70	566.86	547.74	725.40	0.00	0.00	600.00	640.00	0.00
35260.000	607.35	0.09	607.39	622.64	571.67	562.55	705.78	0.06	142.11	600.00	640.00	764.75
35268.000	607.26	0.00	607.29	752.92	567.84	547.02	725.15	0.00	0.00	600.00	640.00	0.00
35268.000	607.36	0.09	607.39	622.32	572.67	562.02	705.31	0.06	142.33	600.00	640.00	764.66
35269.000	607.25	0.00	607.31	752.64	446.30	807.12	586.59	0.00	0.00	600.00	640.00	0.00
35269.000	607.35	0.09	607.40	620.15	447.15	824.15	568.71	0.05	143.66	600.00	640.00	763.81
35441.000	607.32	0.00	607.36	770.00	912.69	625.14	302.17	770.00	150.00	697.00	723.00	920.00
35441.000	607.42	0.10	607.46	770.00	928.04	603.63	308.33	770.00	150.00	697.00	723.00	920.00
35442.000	607.35	0.00	607.37	770.00	1085.67	395.47	358.86	770.00	150.00	697.00	723.00	920.00
35442.000	607.45	0.10	607.47	770.00	1095.56	381.07	363.37	770.00	150.00	697.00	723.00	920.00
35463.000	607.36	0.00	607.38	770.00	1086.41	394.39	359.19	770.00	150.00	697.00	723.00	920.00
35463.000	607.45	0.10	607.47	770.00	1096.17	380.16	363.65	770.00	150.00	697.00	723.00	920.00
35464.000	607.36	0.00	607.39	770.00	916.87	619.29	303.64	770.00	150.00	697.00	723.00	920.00
35464.000	607.44	0.10	607.48	770.00	932.07	597.99	309.94	770.00	150.00	697.00	723.00	920.00
35759.000	607.41	0.00	607.51	620.00	567.32	1145.30	127.38	620.00	400.00	856.00	904.00	1020.00
35759.000	607.51	0.09	607.59	620.00	589.43	1117.43	133.15	620.00	400.00	856.00	904.00	1020.00

SECNO	CUSEL	DIFKLS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCKL	STCHR	STENCR
35760.000	607.41	0.00	607.51	620.00	955.87	729.76	154.37	620.00	400.00	856.00	904.00	1020.00
35760.000	607.51	0.09	607.59	620.00	987.13	688.79	164.08	620.00	400.00	856.00	904.00	1020.00
35767.000	607.42	0.00	607.53	620.00	957.35	727.82	154.82	620.00	400.00	856.00	904.00	1020.00
35767.000	607.52	0.09	607.60	620.00	989.20	686.06	164.73	620.00	400.00	856.00	904.00	1020.00
35768.000	607.43	0.00	607.53	620.00	570.37	1141.45	128.18	620.00	400.00	856.00	904.00	1020.00
35768.000	607.52	0.09	607.61	620.00	592.52	1113.52	133.96	620.00	400.00	856.00	904.00	1020.00
36068.000	607.57	0.00	607.63	470.00	621.24	993.26	225.50	470.00	400.00	726.50	773.50	870.00
36068.000	607.64	0.07	607.70	470.00	632.20	979.53	228.27	470.00	400.00	726.50	773.50	870.00
36069.000	607.60	0.00	607.64	470.00	868.04	710.88	261.08	470.00	400.00	726.50	773.50	870.00
36069.000	607.67	0.07	607.71	470.00	878.05	698.03	263.92	470.00	400.00	726.50	773.50	870.00
36077.000	607.61	0.00	607.65	470.00	869.34	710.24	261.22	470.00	400.00	726.50	773.50	870.00
36077.000	607.68	0.07	607.71	470.00	878.49	697.47	264.04	470.00	400.00	726.50	773.50	870.00
36078.000	607.60	0.00	607.66	470.00	626.52	986.64	226.84	470.00	400.00	726.50	773.50	870.00
36078.000	607.67	0.07	607.73	470.00	637.06	973.44	229.49	470.00	400.00	726.50	773.50	870.00
36298.000	607.65	0.00	607.74	350.00	537.90	1103.00	199.11	350.00	400.00	615.00	661.00	750.00
36298.000	607.72	0.07	607.81	350.00	546.01	1091.49	202.51	350.00	400.00	615.00	661.00	750.00
36398.000	607.58	0.00	607.91	300.00	113.72	1624.51	101.77	300.00	1.00	138.70	173.30	301.00
36398.000	607.65	0.07	607.97	300.00	119.67	1612.66	107.47	300.00	1.00	138.70	173.30	301.00
36444.000	608.62	0.00	608.88	300.00	139.94	1603.62	96.44	300.00	1.00	138.70	173.30	301.00
36444.000	608.66	0.03	608.91	300.00	143.00	1598.22	98.79	300.00	1.00	138.70	173.30	301.00

SWAN CR.ASH TWP.

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
5.000	0.00	0.00	0.00	580.50	3470.00	590.00	0.00	590.04	2.79	2.83	4339.85	2076.01
5.000	0.00	0.00	0.00	580.50	3470.00	590.00	0.00	590.04	2.97	2.92	3824.14	2014.79
6.000	100.00	0.00	0.00	580.70	3470.00	589.99	0.00	590.12	4.90	3.55	2713.32	1567.30
6.000	100.00	0.00	0.00	580.70	3470.00	589.99	0.00	590.13	5.23	3.67	2285.52	1517.01
7.000	1.00	586.50	590.00	580.70	3470.00	589.94	0.00	590.17	2.42	4.34	2464.68	2231.95
7.000	1.00	586.50	590.00	580.70	3470.00	589.94	0.00	590.19	2.52	4.44	2058.15	2184.88
17.000	16.00	586.50	590.00	580.70	3470.00	589.94	0.00	590.18	2.41	4.34	2470.59	2235.75
17.000	16.00	586.50	590.00	580.70	3470.00	589.94	0.00	590.19	2.49	4.41	2100.61	2197.16
18.000	1.00	0.00	0.00	580.70	3470.00	590.09	0.00	590.21	4.53	3.44	2830.07	1630.88
18.000	1.00	0.00	0.00	580.70	3470.00	590.09	0.00	590.23	4.82	3.55	2400.50	1580.64
60.000	30.00	0.00	0.00	580.50	3470.00	590.20	0.00	590.25	3.24	3.10	4170.40	1928.09
60.000	30.00	0.00	0.00	580.50	3470.00	590.21	0.00	590.27	3.44	3.19	3505.19	1870.55
1430.000	1370.00	0.00	0.00	580.30	3470.00	590.70	0.00	590.83	5.31	4.09	2627.04	1505.66
1430.000	1370.00	0.00	0.00	580.30	3470.00	590.74	0.00	590.88	5.50	4.17	2347.61	1479.82
2898.000	1460.00	0.00	0.00	581.30	3470.00	591.33	0.00	591.38	3.29	3.27	3325.38	1913.98
2898.000	1460.00	0.00	0.00	581.30	3470.00	591.42	0.00	591.46	3.60	3.02	2948.44	1828.72
3768.000	870.00	0.00	0.00	580.70	3470.00	591.56	0.00	591.65	4.25	3.50	2459.91	1682.74
3768.000	870.00	0.00	0.00	580.70	3470.00	591.65	0.00	591.74	4.27	3.53	2234.28	1679.57
5158.000	1390.00	0.00	0.00	582.10	3470.00	592.29	0.00	592.42	7.44	4.13	2339.50	1271.94
5158.000	1390.00	0.00	0.00	582.10	3470.00	592.38	0.00	592.52	7.46	4.16	2193.25	1270.71
6318.000	1160.00	0.00	0.00	581.90	3470.00	593.01	0.00	593.15	5.62	3.96	2142.90	1464.00
6318.000	1160.00	0.00	0.00	581.90	3470.00	593.11	0.00	593.26	5.71	3.98	2027.89	1452.73
7818.000	1500.00	0.00	0.00	582.60	3470.00	593.87	0.00	594.07	7.14	4.85	2040.62	1299.05
7818.000	1500.00	0.00	0.00	582.60	3470.00	593.97	0.00	594.18	7.11	4.88	1922.70	1301.40
8718.000	900.00	0.00	0.00	582.30	3470.00	594.42	0.00	594.70	6.06	4.68	1095.44	1409.50
8718.000	900.00	0.00	0.00	582.30	3470.00	594.52	0.00	594.79	5.82	4.62	1111.75	1437.76
8838.000	120.00	0.00	0.00	582.40	3470.00	594.60	0.00	594.80	5.60	3.54	978.95	1466.73
8838.000	120.00	0.00	0.00	582.40	3470.00	594.69	0.00	594.89	5.41	3.51	988.42	1491.26
8839.000	1.00	596.20	594.80	582.40	3470.00	594.48	0.00	594.92	4.90	5.35	648.82	1567.78
8839.000	1.00	596.20	594.80	582.40	3470.00	594.57	0.00	595.01	4.89	5.29	655.75	1568.80
8882.000	43.00	596.20	594.80	582.40	3470.00	594.50	0.00	594.94	4.86	5.33	650.49	1574.28
8882.000	43.00	596.20	594.80	582.40	3470.00	594.60	0.00	595.03	4.86	5.28	657.28	1574.55
8883.000	1.00	0.00	0.00	582.40	3470.00	594.84	0.00	595.02	5.13	3.46	1003.09	1531.64
8883.000	1.00	0.00	0.00	582.40	3470.00	594.92	0.00	595.10	4.98	3.43	1012.03	1555.13
8973.000	90.00	0.00	0.00	583.10	3470.00	594.87	0.00	595.07	4.86	4.18	1542.81	1574.70
8973.000	90.00	0.00	0.00	583.10	3470.00	594.96	0.00	595.15	4.67	4.12	1567.06	1605.82

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CHSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
10098.000	1125.00	0.00	0.00	584.00	3470.00	595.52	0.00	595.64	5.00	4.05	2590.92	1551.44
10098.000	1125.00	0.00	0.00	584.00	3470.00	595.59	0.00	595.71	5.10	4.11	2470.82	1535.88
11118.000	1020.00	0.00	0.00	585.20	3470.00	595.96	0.00	596.04	3.29	3.29	3867.02	1912.22
11118.000	1020.00	0.00	0.00	585.20	3470.00	596.06	0.00	596.12	3.33	3.33	3617.67	1900.88
12620.000	1502.00	0.00	0.00	585.80	2910.00	596.52	0.00	596.77	5.88	4.36	1038.15	1199.72
12620.000	1502.00	0.00	0.00	585.80	2910.00	596.59	0.00	596.85	5.70	4.31	1050.21	1219.00
12760.000	140.00	0.00	0.00	585.10	2910.00	596.63	0.00	596.89	11.72	4.08	713.15	850.16
12760.000	140.00	0.00	0.00	585.10	2910.00	596.70	0.00	596.96	11.38	4.04	719.71	862.79
12817.000	57.00	598.10	593.40	585.10	2910.00	598.46	0.00	598.64	3.43	3.37	864.44	1571.90
12817.000	57.00	598.10	593.40	585.10	2910.00	598.51	0.00	598.69	3.38	3.35	868.43	1582.95
13087.000	270.00	0.00	0.00	585.20	2910.00	598.68	0.00	598.73	1.23	2.35	3164.75	2620.15
13087.000	270.00	0.00	0.00	585.20	2910.00	598.72	0.00	598.77	1.26	2.38	2956.31	2594.62
14167.000	1080.00	0.00	0.00	585.80	2910.00	598.81	0.00	599.12	7.45	5.45	1550.28	1065.97
14167.000	1080.00	0.00	0.00	585.80	2910.00	598.85	0.00	599.18	7.64	5.53	1265.33	1052.55
14267.000	100.00	0.00	0.00	586.30	2910.00	598.88	0.00	599.21	8.22	6.50	1694.49	1015.13
14267.000	100.00	0.00	0.00	586.30	2910.00	598.92	0.00	599.27	8.42	6.59	1426.45	1002.98
14268.000	1.00	591.00	590.30	586.30	2910.00	598.99	0.00	599.24	10.15	5.89	1728.08	913.38
14268.000	1.00	591.00	590.30	586.30	2910.00	599.04	0.00	599.30	10.42	5.99	1452.37	901.35
14281.000	13.00	591.00	590.30	586.30	2910.00	599.01	0.00	599.25	10.08	5.88	1734.45	916.56
14281.000	13.00	591.00	590.30	586.30	2910.00	599.06	0.00	599.31	10.37	5.98	1455.03	903.79
14282.000	1.00	0.00	0.00	586.30	2910.00	598.97	0.00	599.29	7.78	6.36	1747.64	1043.07
14282.000	1.00	0.00	0.00	586.30	2910.00	599.02	0.00	599.35	7.98	6.45	1469.26	1030.09
14332.000	50.00	0.00	0.00	585.80	2910.00	599.05	0.00	599.33	6.65	5.22	1642.93	1128.77
14332.000	50.00	0.00	0.00	585.80	2910.00	599.11	0.00	599.40	6.79	5.29	1343.75	1116.94
15592.000	1260.00	0.00	0.00	586.90	2910.00	599.66	0.00	599.70	1.14	1.94	3009.69	2728.30
15592.000	1260.00	0.00	0.00	586.90	2910.00	599.73	0.00	599.76	1.11	1.92	3035.67	2765.36
15692.000	100.00	0.00	0.00	586.90	2910.00	599.67	0.00	599.71	1.13	1.93	3014.33	2734.90
15692.000	100.00	0.00	0.00	586.90	2910.00	599.74	0.00	599.77	1.10	1.92	3040.03	2771.60
15704.000	12.00	597.50	595.70	586.90	2910.00	599.74	0.00	599.80	0.57	2.40	3039.38	3866.83
15704.000	12.00	597.50	595.70	586.90	2910.00	599.80	0.00	599.86	0.55	2.36	3063.87	3914.96
15754.000	50.00	0.00	0.00	586.90	2910.00	599.78	0.00	599.81	1.09	1.91	3054.50	2792.36
15754.000	50.00	0.00	0.00	586.90	2910.00	599.84	0.00	599.88	1.06	1.89	3078.81	2827.36
16374.000	620.00	0.00	0.00	587.80	2910.00	599.87	0.00	599.90	1.90	2.34	2732.54	2110.08
16374.000	620.00	0.00	0.00	587.80	2910.00	599.93	0.00	599.97	1.93	2.37	2574.80	2095.08
17384.000	1010.00	0.00	0.00	588.00	2910.00	600.00	0.00	600.02	0.84	1.82	4274.71	3183.46
17384.000	1010.00	0.00	0.00	588.00	2910.00	600.07	0.00	600.09	0.85	1.84	4130.43	3162.72
17554.000	170.00	0.00	0.00	588.70	2910.00	600.00	0.00	600.05	1.02	2.14	2918.89	2879.23
17554.000	170.00	0.00	0.00	588.70	2910.00	600.07	0.00	600.12	1.04	2.16	2786.02	2860.25

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CHSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
17555.000	1.00	596.50	595.10	588.70	2910.00	600.00	0.00	600.06	3.22	2.61	2381.22	1621.47
17553.000	1.00	596.50	595.10	588.70	2910.00	600.06	0.00	600.13	3.29	2.65	2279.32	1603.60
17581.000	26.00	596.50	595.10	588.70	2910.00	600.01	0.00	600.07	3.22	2.61	2381.57	1621.79
17581.000	26.00	596.50	595.10	588.70	2910.00	600.07	0.00	600.13	3.31	2.66	2268.95	1599.95
17582.000	1.00	0.00	0.00	588.70	2910.00	600.02	0.00	600.07	1.02	2.13	2926.30	2887.24
17582.000	1.00	0.00	0.00	588.70	2910.00	600.09	0.00	600.14	1.04	2.16	2776.18	2857.19
17632.000	50.00	0.00	0.00	588.80	2910.00	600.07	0.00	600.08	0.73	1.67	4206.22	3413.77
17632.000	50.00	0.00	0.00	588.80	2910.00	600.14	0.00	600.15	0.81	1.76	3829.56	3236.85
19032.000	1400.00	0.00	0.00	589.90	2910.00	600.23	0.00	600.27	2.76	2.75	2806.11	1751.02
19032.000	1400.00	0.00	0.00	589.90	2910.00	600.31	0.00	600.35	2.79	2.77	2737.56	1742.70
20462.000	1430.00	0.00	0.00	590.00	2910.00	600.61	0.00	600.65	2.57	3.02	3362.31	1815.65
20462.000	1430.00	0.00	0.00	590.00	2910.00	600.69	0.00	600.74	2.60	3.05	3174.85	1804.27
22092.000	1630.00	0.00	0.00	590.40	2910.00	601.07	0.00	601.13	3.29	3.37	2251.12	1605.30
22092.000	1630.00	0.00	0.00	590.40	2910.00	601.16	0.00	601.22	3.32	3.40	2112.84	1598.23
22292.000	200.00	0.00	0.00	591.10	2910.00	601.09	0.00	601.24	3.31	3.32	1369.97	1598.62
22292.000	200.00	0.00	0.00	591.10	2910.00	601.18	0.00	601.33	3.34	3.36	1288.47	1592.96
22293.000	1.00	598.30	598.10	591.10	2910.00	601.06	0.00	601.27	9.85	4.07	1131.58	927.30
22293.000	1.00	598.30	598.10	591.10	2910.00	601.14	0.00	601.37	9.96	4.12	1073.93	922.14
22309.000	16.00	598.30	598.10	591.10	2910.00	601.07	0.00	601.29	9.78	4.05	1135.57	930.67
22309.000	16.00	598.30	598.10	591.10	2910.00	601.16	0.00	601.39	9.90	4.12	1073.30	924.87
22310.000	1.00	0.00	0.00	591.10	2910.00	601.16	0.00	601.31	3.19	3.28	1398.44	1629.19
22310.000	1.00	0.00	0.00	591.10	2910.00	601.26	0.00	601.41	3.20	3.31	1320.74	1625.60
22410.000	100.00	0.00	0.00	591.20	2910.00	601.34	0.00	601.37	1.99	2.62	2494.52	2065.07
22410.000	100.00	0.00	0.00	591.20	2910.00	601.44	0.00	601.47	1.99	2.64	2529.26	2062.43
23160.000	750.00	0.00	0.00	591.60	2910.00	601.47	0.00	601.49	1.19	1.91	3449.30	2665.73
23160.000	750.00	0.00	0.00	591.60	2910.00	601.56	0.00	601.59	1.20	1.93	3227.03	2659.44
24540.000	1380.00	0.00	0.00	591.30	2910.00	601.68	0.00	601.75	3.17	3.17	3060.10	1634.63
24540.000	1380.00	0.00	0.00	591.30	2910.00	601.78	0.00	601.86	3.18	3.20	2791.34	1632.31
26060.000	1520.00	0.00	0.00	592.10	2910.00	601.98	0.00	602.00	0.93	1.62	4046.76	3025.17
26060.000	1520.00	0.00	0.00	592.10	2910.00	602.08	0.00	602.10	0.93	1.63	3904.67	3020.84
26290.000	230.00	0.00	0.00	591.50	2910.00	601.97	0.00	602.08	3.91	2.90	1787.30	1470.91
26290.000	230.00	0.00	0.00	591.50	2910.00	602.07	0.00	602.17	3.78	2.83	1846.81	1496.92
26325.000	35.00	600.10	601.80	591.50	2910.00	602.11	0.00	602.22	2.63	2.92	1869.38	1795.51
26325.000	35.00	600.10	601.20	591.50	2910.00	602.21	0.00	602.31	2.48	2.85	1928.01	1848.63
26475.000	150.00	0.00	0.00	592.40	2910.00	602.21	0.00	602.27	4.04	3.38	2584.31	1448.57
26475.000	150.00	0.00	0.00	592.40	2910.00	602.30	0.00	602.36	4.07	3.42	2452.12	1441.84
27015.000	540.00	0.00	0.00	592.40	2910.00	602.44	0.00	602.48	3.77	3.21	2862.94	1499.05
27015.000	540.00	0.00	0.00	592.40	2910.00	602.53	0.00	602.58	3.78	3.24	2650.96	1496.04

SECNO	XLCH	ELTRO	ELLC	ELMIN	Q	CUSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
29305.000	2290.00	0.00	0.00	593.00	2910.00	603.59	0.00	604.01	10.15	5.62	722.98	913.22
29305.000	2290.00	0.00	0.00	593.00	2910.00	603.67	0.00	604.09	9.82	5.56	731.89	928.82
29405.000	100.00	0.00	0.00	593.60	2910.00	603.67	0.00	604.14	11.17	5.53	526.55	870.53
29405.000	100.00	0.00	0.00	593.60	2910.00	603.76	0.00	604.22	12.50	5.46	532.57	823.04
29406.000	1.00	611.30	605.30	593.60	2910.00	603.63	0.00	604.18	4.62	5.93	490.37	1353.34
29406.000	1.00	611.30	605.30	593.60	2910.00	603.72	0.00	604.26	5.21	5.88	494.70	1274.70
29442.000	36.00	611.31	605.30	593.60	2910.00	603.65	0.00	604.20	4.58	5.92	491.93	1360.16
29442.000	36.00	611.30	605.30	593.60	2910.00	603.74	0.00	604.28	5.18	5.87	495.69	1278.54
29443.000	1.00	0.00	0.00	593.60	2910.00	603.76	0.00	604.22	10.80	5.47	532.31	885.62
29443.000	1.00	0.00	0.00	593.60	2910.00	603.85	0.00	604.30	12.16	5.41	537.54	834.67
29493.000	50.00	0.00	0.00	592.90	2910.00	603.94	0.00	604.30	8.38	5.25	858.91	1005.43
29493.000	50.00	0.00	0.00	592.90	2910.00	604.03	0.00	604.38	8.08	5.19	870.58	1023.60
30013.000	520.00	0.00	0.00	593.40	2910.00	604.49	0.00	604.61	3.84	3.63	2041.95	1484.80
30013.000	520.00	0.00	0.00	593.40	2910.00	604.56	0.00	604.69	3.90	3.68	1936.65	1473.23
30723.000	710.00	0.00	0.00	593.30	2910.00	604.73	0.00	604.89	4.56	3.87	1559.76	1362.92
30723.000	710.00	0.00	0.00	593.30	2910.00	604.81	0.00	604.97	4.63	3.92	1434.95	1352.53
31223.000	500.00	0.00	0.00	592.10	2800.00	604.95	0.00	605.12	4.56	4.03	1344.12	1310.84
31223.000	500.00	0.00	0.00	592.10	2800.00	605.02	0.00	605.20	4.60	4.07	1259.67	1304.85
32033.000	810.00	0.00	0.00	593.90	1840.00	605.35	0.00	605.68	8.34	4.95	561.29	637.27
32033.000	810.00	0.00	0.00	593.90	1840.00	605.43	0.00	605.75	8.06	4.89	568.88	648.27
32133.000	100.00	0.00	0.00	594.30	1840.00	605.53	0.00	605.77	4.67	3.90	472.14	851.61
32133.000	100.00	0.00	0.00	594.30	1840.00	605.62	0.00	605.85	5.74	3.87	475.70	768.26
32400.000	267.00	623.30	603.90	594.80	1840.00	606.17	0.00	606.40	4.49	3.85	478.11	868.14
32400.000	267.00	623.30	603.90	594.80	1840.00	606.27	0.00	606.50	4.37	3.81	482.39	880.05
32450.000	50.00	0.00	0.00	596.00	1840.00	606.21	0.00	606.43	6.80	4.40	791.83	705.80
32450.000	50.00	0.00	0.00	596.00	1840.00	606.31	0.00	606.53	6.47	4.32	806.59	723.24
32590.000	140.00	0.00	0.00	597.00	1840.00	606.45	0.00	606.50	2.41	2.67	2044.75	1185.01
32590.000	140.00	0.00	0.00	597.00	1840.00	606.55	0.00	606.59	2.30	2.62	2079.07	1213.78
33520.000	930.00	0.00	0.00	597.60	1840.00	606.66	0.00	606.68	1.58	2.09	3443.72	1465.85
33520.000	930.00	0.00	0.00	597.60	1840.00	606.75	0.00	606.77	1.59	2.12	3145.23	1458.17
34590.000	1070.00	0.00	0.00	597.20	1840.00	606.90	0.00	607.02	7.05	4.13	1732.95	692.90
34590.000	1070.00	0.00	0.00	597.20	1840.00	606.99	0.00	607.12	7.12	4.18	1600.14	689.78
34770.000	180.00	0.00	0.00	597.90	1840.00	607.08	0.00	607.10	1.36	1.86	2126.93	1576.70
34770.000	180.00	0.00	0.00	597.90	1840.00	607.18	0.00	607.20	1.37	1.88	1996.06	1574.52
34771.000	1.00	602.10	604.90	597.90	1840.00	607.09	0.00	607.10	2.32	1.38	1944.43	1207.23
34771.000	1.00	602.10	604.90	597.90	1840.00	607.18	0.00	607.20	2.34	1.40	1820.94	1202.27
34776.000	5.00	602.10	604.90	597.90	1840.00	607.09	0.00	607.10	2.31	1.37	1948.67	1211.02
34776.000	5.00	602.10	604.90	597.90	1840.00	607.18	0.00	607.20	2.32	1.39	1831.50	1208.80

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CHSEL	CRIHS	EG	10K*S	VCH	AREA	.01K
34777.000	1.00	0.00	0.00	597.90	1840.00	607.09	0.00	607.11	1.35	1.85	2131.88	1581.65
34777.000	1.00	0.00	0.00	597.90	1840.00	607.18	0.00	607.20	1.36	1.87	2003.78	1580.58
33929.000	172.00	0.00	0.00	597.10	1840.00	607.10	0.00	607.16	3.05	2.69	1693.98	1053.59
33929.000	172.00	0.00	0.00	597.10	1840.00	607.20	0.00	607.25	3.04	2.71	1606.27	1055.39
34930.000	1.00	604.30	605.80	597.10	1840.00	607.13	0.00	607.16	6.08	2.06	1555.88	746.19
34930.000	1.00	604.30	605.80	597.10	1840.00	607.23	0.00	607.26	6.12	2.09	1474.41	743.66
34938.000	8.00	604.30	605.80	597.10	1840.00	607.14	0.00	607.17	6.05	2.06	1558.51	748.01
34938.000	8.00	604.30	605.80	597.10	1840.00	607.23	0.00	607.26	6.09	2.09	1476.51	745.48
34939.000	1.00	0.00	0.00	597.10	1840.00	607.13	0.00	607.18	2.98	2.67	1708.61	1065.19
34939.000	1.00	0.00	0.00	597.10	1840.00	607.22	0.00	607.27	2.99	2.69	1616.76	1064.82
35259.000	320.00	0.00	0.00	597.20	1840.00	607.22	0.00	607.28	3.26	2.75	1637.00	1018.61
35259.000	320.00	0.00	0.00	597.20	1840.00	607.32	0.00	607.38	3.29	2.78	1515.77	1014.79
35260.000	1.00	602.10	605.70	597.20	1840.00	607.26	0.00	607.29	5.91	2.03	1571.04	757.02
35260.000	1.00	602.10	605.70	597.20	1840.00	607.35	0.00	607.39	5.95	2.05	1462.69	754.13
35268.000	8.00	602.10	605.70	597.20	1840.00	607.26	0.00	607.29	5.88	2.02	1573.62	758.66
35268.000	8.00	602.10	605.70	597.20	1840.00	607.36	0.00	607.39	5.93	2.05	1464.60	755.65
35269.000	1.00	0.00	0.00	597.20	1840.00	607.25	0.00	607.31	3.15	2.71	1662.32	1036.68
35269.000	1.00	0.00	0.00	597.20	1840.00	607.33	0.00	607.40	3.15	2.73	1548.01	1036.69
35441.000	172.00	0.00	0.00	596.90	1840.00	607.32	0.00	607.36	2.80	2.79	1916.36	1100.36
35441.000	172.00	0.00	0.00	596.90	1840.00	607.42	0.00	607.46	2.51	2.66	1994.38	1161.98
35442.000	1.00	604.50	604.40	596.90	1840.00	607.35	0.00	607.37	3.83	2.08	1896.75	939.74
35442.000	1.00	604.50	604.40	596.90	1840.00	607.45	0.00	607.47	3.41	1.98	1972.32	997.15
35463.000	21.00	604.50	604.40	596.90	1840.00	607.36	0.00	607.38	3.80	2.07	1902.20	943.93
35463.000	21.00	604.50	604.40	596.90	1840.00	607.45	0.00	607.47	3.38	1.97	1977.21	1000.91
35464.000	1.00	0.00	0.00	596.90	1840.00	607.34	0.00	607.39	2.72	2.75	1937.04	1116.54
35464.000	1.00	0.00	0.00	596.90	1840.00	607.44	0.00	607.48	2.43	2.63	2015.81	1179.19
35759.000	295.00	0.00	0.00	596.60	1840.00	607.41	0.00	607.51	3.86	3.09	1333.57	937.09
35759.000	295.00	0.00	0.00	596.60	1840.00	607.51	0.00	607.59	3.53	2.98	1390.48	979.59
35760.000	1.00	605.00	605.50	596.60	1840.00	607.41	0.00	607.51	17.21	3.73	1024.08	443.54
35760.000	1.00	605.00	605.50	596.60	1840.00	607.51	0.00	607.59	15.16	3.51	1076.96	472.53
35767.000	7.00	605.00	605.50	596.60	1840.00	607.42	0.00	607.53	17.11	3.72	1026.49	444.84
35767.000	7.00	605.00	605.50	596.60	1840.00	607.52	0.00	607.60	15.03	3.50	1080.64	474.59
35768.000	1.00	0.00	0.00	596.60	1840.00	607.43	0.00	607.53	3.81	3.08	1341.29	942.78
35768.000	1.00	0.00	0.00	596.60	1840.00	607.52	0.00	607.61	3.48	2.97	1398.66	985.79
36060.000	300.00	0.00	0.00	596.20	1840.00	607.57	0.00	607.63	2.85	2.70	1437.14	1089.17
36060.000	300.00	0.00	0.00	596.20	1840.00	607.64	0.00	607.70	2.69	2.63	1470.99	1121.40
36069.000	1.00	604.30	606.30	596.20	1840.00	607.60	0.00	607.64	5.72	2.10	1371.87	769.66
36069.000	1.00	604.30	606.30	596.20	1840.00	607.67	0.00	607.71	5.34	2.05	1404.80	796.60

SECND	XLCN	ELTRD	ELLC	ELMIN	Q	CNSEL	CRINS	EG	10K*S	VCN	ARSA	.01K
36077.000	0.00	604.30	606.30	596.20	1840.00	607.61	0.00	607.65	5.70	2.10	1373.47	770.97
36077.000	0.00	604.30	606.30	596.20	1840.00	607.68	0.00	607.71	5.32	2.04	1406.29	797.83
36078.000	1.00	0.00	0.00	596.20	1840.00	607.60	0.00	607.66	2.78	2.67	1453.32	1104.51
36078.000	1.00	0.00	0.00	596.20	1840.00	607.67	0.00	607.73	2.62	2.61	1486.37	1136.20
36298.000	240.00	0.00	0.00	597.20	1840.00	607.65	0.00	607.74	3.69	3.09	1147.10	957.93
36298.000	240.00	0.00	0.00	597.20	1840.00	607.72	0.00	607.81	3.51	3.03	1170.60	982.03
36398.000	100.00	0.00	0.00	597.60	1840.00	607.58	0.00	607.91	6.33	4.85	579.61	731.54
36398.000	100.00	0.00	0.00	597.60	1840.00	607.65	0.00	607.97	6.09	4.78	600.34	745.70
36444.000	46.00	608.30	606.00	597.60	1840.00	608.62	0.00	608.88	4.39	4.32	676.06	878.41
36444.000	46.00	608.30	606.00	597.60	1840.00	608.66	0.00	608.91	4.31	4.29	686.02	885.93

SWAN CR.ASH TOP.

SUMMARY PRINTOUT TABLE 150

SECNO	C	CHSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
5.000	3470.00	590.00	0.00	0.00	0.00	1150.00	0.00
5.000	3470.00	590.00	0.00	0.00	0.00	805.30	0.00
6.000	3470.00	589.99	0.00	-0.01	0.00	1139.80	100.00
6.000	3470.00	589.99	0.00	-0.01	-0.00	696.17	100.00
7.000	3470.00	589.94	0.00	-0.05	0.00	1127.86	1.00
7.000	3470.00	589.94	0.00	-0.05	-0.00	696.00	1.00
17.000	3470.00	589.94	0.00	0.00	0.00	1129.10	16.00
17.000	3470.00	589.94	0.00	0.01	0.00	717.00	16.00
18.000	3470.00	590.09	0.00	0.15	0.00	1146.63	1.00
18.000	3470.00	590.09	0.00	0.13	0.00	717.06	1.00
63.000	3470.00	590.20	0.00	0.11	0.00	1242.71	50.00
63.000	3470.00	590.21	0.00	0.12	0.01	764.44	50.00
1438.000	3470.00	590.70	0.00	0.50	0.00	724.55	1370.00
1438.000	3470.00	590.74	0.00	0.52	0.04	451.08	1370.00
2893.000	3470.00	591.33	0.00	0.63	0.00	958.36	1460.00
2893.000	3470.00	591.42	0.00	0.66	0.09	617.94	1460.00
3768.000	3470.00	591.56	0.00	0.23	0.00	750.17	870.00
3768.000	3470.00	591.65	0.00	0.24	0.09	441.50	870.00
5158.000	3470.00	592.29	0.00	0.73	0.30	633.32	1390.00
5158.000	3470.00	592.38	0.00	0.73	0.09	513.25	1390.00
6318.000	3470.00	593.01	0.00	0.71	0.00	692.58	1160.00
6318.000	3470.00	593.11	0.00	0.72	0.10	408.39	1160.00
7818.000	3470.00	593.67	0.00	0.66	0.00	501.45	1500.00
7818.000	3470.00	593.77	0.00	0.65	0.11	398.47	1500.00
8718.000	3470.00	594.42	0.00	0.55	0.00	163.00	900.00
8718.000	3470.00	594.52	0.00	0.54	0.10	163.00	900.00
8838.000	3470.00	594.60	0.00	0.19	0.00	103.20	120.00
8838.000	3470.00	594.69	0.00	0.18	0.09	103.20	120.00
8839.000	3470.00	594.48	0.00	-0.12	0.00	103.20	1.00
8839.000	3470.00	594.57	0.00	-0.12	0.09	103.20	1.00
8882.000	3470.00	594.50	0.00	0.02	0.00	103.20	43.00
8882.000	3470.00	594.60	0.00	0.02	0.09	103.20	43.00
8883.000	3470.00	594.84	0.00	0.33	0.00	103.20	1.00
8883.000	3470.00	594.92	0.00	0.33	0.09	103.20	1.00
8973.000	3470.00	594.87	0.00	0.04	0.00	283.00	90.00
8973.000	3470.00	594.96	0.00	0.04	0.09	283.00	90.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
10098.000	3470.00	595.52	0.00	0.63	0.00	507.84	1125.00
10098.000	3470.00	595.59	0.00	0.63	0.07	415.97	1125.00
11118.000	3470.00	595.90	0.00	0.47	0.00	835.64	1020.00
11118.000	3470.00	596.06	0.00	0.48	0.08	612.98	1020.00
12620.000	2910.00	596.52	0.00	0.53	0.00	152.50	1502.00
12620.000	2910.00	596.59	0.00	0.53	0.08	152.50	1502.00
12760.000	2910.00	596.63	0.00	0.11	0.00	82.44	140.00
12760.000	2910.00	596.70	0.00	0.11	0.07	82.44	140.00
12817.000	2910.00	598.46	0.00	1.83	0.00	82.49	57.00
12817.000	2910.00	598.51	0.00	1.81	0.05	82.49	57.00
13087.000	2910.00	598.68	0.00	0.21	0.00	595.72	270.00
13087.000	2910.00	598.72	0.00	0.21	0.04	458.87	270.00
14167.000	2910.00	598.81	0.00	0.13	0.00	520.66	1080.00
14167.000	2910.00	598.85	0.00	0.13	0.04	273.65	1080.00
14267.000	2910.00	598.88	0.00	0.07	0.00	531.09	100.00
14267.000	2910.00	598.92	0.00	0.07	0.04	296.32	100.00
14268.000	2910.00	598.99	0.00	0.12	0.00	543.56	1.00
14268.000	2910.00	599.04	0.00	0.12	0.05	305.18	1.00
14281.000	2910.00	599.01	0.00	0.02	0.00	544.77	13.00
14281.000	2910.00	599.06	0.00	0.02	0.05	304.90	13.00
14282.000	2910.00	598.97	0.00	-0.04	0.00	541.38	1.00
14282.000	2910.00	599.02	0.00	-0.04	0.05	302.31	1.00
14332.000	2910.00	599.05	0.00	0.00	0.00	520.69	50.00
14332.000	2910.00	599.11	0.00	0.09	0.05	279.67	50.00
15592.000	2910.00	599.66	0.00	0.61	0.00	380.00	1260.00
15592.000	2910.00	599.73	0.00	0.62	0.07	380.00	1260.00
15692.000	2910.00	599.67	0.00	0.01	0.00	380.00	100.00
15692.000	2910.00	599.74	0.00	0.01	0.07	380.00	100.00
15704.000	2910.00	599.74	0.00	0.07	0.00	380.00	12.00
15704.000	2910.00	599.80	0.00	0.06	0.06	380.00	12.00
15754.000	2910.00	599.78	0.00	0.04	0.00	380.00	50.00
15754.000	2910.00	599.84	0.00	0.04	0.06	380.00	50.00
16374.000	2910.00	599.87	0.00	0.09	0.00	474.56	620.00
16374.000	2910.00	599.93	0.00	0.09	0.06	376.91	620.00
17384.000	2910.00	600.00	0.00	0.14	0.00	717.05	1010.00
17384.000	2910.00	600.07	0.00	0.14	0.07	642.66	1010.00
17554.000	2910.00	600.00	0.00	-0.00	0.00	706.00	170.00
17554.000	2910.00	600.07	0.00	-0.00	0.06	634.71	170.00

SECNO	P	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
17555.000	2910.00	600.00	0.00	-0.01	0.00	706.00	1.00
17555.000	2910.00	600.06	0.00	-0.01	0.06	648.30	1.00
17581.000	2910.00	600.01	0.00	0.01	0.00	706.00	26.00
17581.000	2910.00	600.07	0.00	0.01	0.06	643.98	26.00
17582.000	2910.00	600.02	0.00	0.01	0.00	706.00	1.00
17582.000	2910.00	600.09	0.00	0.02	0.07	630.55	1.00
17632.000	2910.00	600.07	0.00	0.05	0.00	747.44	50.00
17632.000	2910.00	600.14	0.00	0.05	0.07	625.15	50.00
19032.000	2910.00	600.23	0.00	0.16	0.00	469.49	1400.00
19032.000	2910.00	600.31	0.00	0.17	0.08	433.43	1400.00
20462.000	2910.00	600.61	0.00	0.38	0.00	598.16	1430.00
20462.000	2910.00	600.69	0.00	0.38	0.08	482.04	1430.00
22092.000	2910.00	601.07	0.00	0.47	0.00	442.91	1630.00
22092.000	2910.00	601.16	0.00	0.47	0.09	331.98	1630.00
22292.000	2910.00	601.09	0.00	0.02	0.00	379.79	200.00
22292.000	2910.00	601.18	0.00	0.02	0.09	335.14	200.00
22293.000	2910.00	601.06	0.00	-0.03	0.00	379.78	1.00
22293.000	2910.00	601.14	0.00	-0.03	0.08	344.39	1.00
22309.000	2910.00	601.07	0.00	0.02	0.00	379.78	16.00
22309.000	2910.00	601.16	0.00	0.02	0.08	342.03	16.00
22310.000	2910.00	601.16	0.00	0.09	0.00	379.81	1.00
22310.000	2910.00	601.26	0.00	0.10	0.09	337.25	1.00
22410.000	2910.00	601.34	0.00	0.18	0.00	342.05	100.00
22410.000	2910.00	601.44	0.00	0.18	0.10	404.89	100.00
23160.000	2910.00	601.47	0.00	0.13	0.00	752.02	750.00
23160.000	2910.00	601.55	0.00	0.13	0.10	514.37	750.00
24540.000	2910.00	601.68	0.00	0.22	0.00	755.44	1380.00
24540.000	2910.00	601.78	0.00	0.22	0.10	697.42	1380.00
26060.000	2910.00	601.98	0.00	0.30	0.00	697.10	1520.00
26060.000	2910.00	602.08	0.00	0.30	0.10	617.92	1520.00
26290.000	2910.00	601.97	0.00	-0.01	0.00	585.70	230.00
26290.000	2910.00	602.07	0.00	-0.01	0.11	585.00	230.00
26325.000	2910.00	602.11	0.00	0.14	0.00	585.71	35.00
26325.000	2910.00	602.21	0.00	0.14	0.10	585.72	35.00
26475.000	2910.00	602.21	0.00	0.10	0.00	690.27	150.00
26475.000	2910.00	602.30	0.00	0.09	0.09	583.18	150.00
27015.000	2910.00	602.44	0.00	0.23	0.00	907.17	540.00
27015.000	2910.00	602.53	0.00	0.23	0.09	643.18	540.00

SECNO	O	CHSEL	DIFHSP	DIFHSX	DIFKHS	TOPWID	XLCH
29305.000	2910.00	603.59	0.00	1.15	0.00	110.00	2290.00
29303.000	2910.00	603.67	0.00	1.14	0.03	110.00	2290.00
29405.000	2910.00	603.67	0.00	0.06	0.00	60.00	100.00
29405.000	2910.00	603.76	0.00	0.08	0.09	60.00	100.00
29406.000	2910.00	603.63	0.00	-0.04	0.00	60.00	1.00
29406.000	2910.00	603.72	0.00	-0.04	0.09	60.00	1.00
29442.000	2910.00	603.65	0.00	0.02	0.00	60.00	36.00
29442.000	2910.00	603.74	0.00	0.02	0.09	60.00	36.00
29443.000	2910.00	603.76	0.00	0.10	0.00	60.00	1.00
29443.000	2910.00	603.85	0.00	0.10	0.09	60.00	1.00
29493.000	2910.00	603.94	0.00	0.16	0.00	131.00	50.00
29493.000	2910.00	604.03	0.00	0.18	0.09	131.00	50.00
30013.000	2910.00	604.49	0.00	0.55	0.00	427.78	520.00
30013.000	2910.00	604.56	0.00	0.53	0.07	361.96	520.00
30723.000	2910.00	604.73	0.00	0.25	0.00	342.94	710.00
30723.000	2910.00	604.81	0.00	0.25	0.07	255.68	710.00
31223.000	2800.00	604.95	0.00	0.21	0.00	255.95	500.00
31223.000	2800.00	605.02	0.00	0.22	0.06	204.81	500.00
32033.000	1840.00	605.35	0.00	0.40	0.00	93.00	810.00
32033.000	1840.00	605.43	0.00	0.41	0.08	93.00	810.00
32133.000	1840.00	605.53	0.00	0.19	0.00	42.90	100.00
32133.000	1840.00	605.62	0.00	0.19	0.09	42.90	100.00
32400.000	1840.00	606.17	0.00	0.64	0.00	42.90	267.00
32400.000	1840.00	606.27	0.00	0.66	0.10	42.90	267.00
32450.000	1840.00	606.21	0.00	0.04	0.00	143.00	50.00
32450.000	1840.00	606.31	0.00	0.04	0.10	143.00	50.00
32590.000	1840.00	606.45	0.00	0.24	0.00	359.15	140.00
32590.000	1840.00	606.55	0.00	0.23	0.10	359.82	140.00
33520.000	1840.00	606.66	0.00	0.21	0.00	836.48	930.00
33520.000	1840.00	606.75	0.00	0.21	0.09	640.42	930.00
34590.000	1840.00	606.90	0.00	0.24	0.00	607.95	1070.00
34590.000	1840.00	606.99	0.00	0.24	0.09	458.86	1070.00
34770.000	1840.00	607.08	0.00	0.18	0.00	579.02	180.00
34770.000	1840.00	607.18	0.00	0.18	0.09	429.34	180.00
34771.000	1840.00	607.09	0.00	0.01	0.00	579.07	1.00
34771.000	1840.00	607.18	0.00	0.01	0.09	432.41	1.00
34776.000	1840.00	607.09	0.00	0.00	0.00	579.57	5.00
34776.000	1840.00	607.18	0.00	0.00	0.09	435.42	5.00

SECVO	Q	CHSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
34777.000	1840.00	607.09	0.00	-0.00	0.00	579.61	1.00
34777.000	1840.00	607.18	0.00	-0.00	0.09	431.03	1.00
33929.000	1840.00	607.10	0.00	0.02	0.00	672.89	172.00
33929.000	1840.00	607.20	0.00	0.02	0.09	559.41	172.00
34930.000	1840.00	607.13	0.00	0.03	0.00	673.81	1.00
34930.000	1840.00	607.23	0.00	0.03	0.09	563.84	1.00
34938.000	1840.00	607.14	0.00	0.00	0.00	673.98	8.00
34938.000	1840.00	607.23	0.00	0.00	0.09	563.54	8.00
34939.000	1840.00	607.13	0.00	-0.01	0.00	673.86	1.00
34939.000	1840.00	607.22	0.00	-0.01	0.09	559.28	1.00
35259.000	1840.00	607.22	0.00	0.10	0.00	750.46	320.00
35259.000	1840.00	607.32	0.00	0.10	0.09	616.14	320.00
35260.000	1840.00	607.26	0.00	0.03	0.00	752.70	1.00
35260.000	1840.00	607.35	0.00	0.03	0.09	622.64	1.00
35260.000	1840.00	607.24	0.00	0.00	0.00	752.92	8.00
35260.000	1840.00	607.36	0.00	0.00	0.09	622.32	8.00
35269.000	1840.00	607.25	0.00	-0.01	0.00	752.64	1.00
35269.000	1840.00	607.35	0.00	-0.01	0.09	620.15	1.00
35441.000	1840.00	607.32	0.00	0.07	0.00	770.00	172.00
35442.000	1840.00	607.35	0.00	0.03	0.00	770.00	1.00
35442.000	1840.00	607.45	0.00	0.03	0.10	770.00	1.00
35463.000	1840.00	607.36	0.00	0.01	0.00	770.00	21.00
35463.000	1840.00	607.45	0.00	0.01	0.10	770.00	21.00
35464.000	1840.00	607.34	0.00	-0.01	0.00	770.00	1.00
35464.000	1840.00	607.44	0.00	-0.01	0.10	770.00	1.00
35759.000	1840.00	607.41	0.00	0.07	0.00	620.00	295.00
35759.000	1840.00	607.51	0.00	0.06	0.09	620.00	295.00
35760.000	1840.00	607.41	0.00	-0.00	0.00	620.00	1.00
35760.000	1840.00	607.51	0.00	0.00	0.09	620.00	1.00
35767.000	1840.00	607.42	0.00	0.01	0.00	620.00	7.00
35767.000	1840.00	607.52	0.00	0.01	0.09	620.00	7.00
35768.000	1840.00	607.43	0.00	0.01	0.00	620.00	1.00
35768.000	1840.00	607.52	0.00	0.00	0.08	620.00	1.00
36068.000	1840.00	607.57	0.00	0.13	0.00	470.00	300.00
36068.000	1840.00	607.64	0.00	0.12	0.07	470.00	300.00
36069.000	1840.00	607.60	0.00	0.04	0.00	470.00	1.00
36069.000	1840.00	607.67	0.00	0.03	0.07	470.00	1.00

SECNO	C	CHSEL	DIFHSP	DIFHSX	DIFKHS	TOPHID	XLCH
36077.000	1840.00	607.61	0.00	0.00	0.00	470.00	8.00
36077.000	1840.00	607.68	0.00	0.00	0.07	470.00	8.00
36078.000	1840.01	607.60	0.00	-0.01	0.00	470.00	1.00
36078.000	1840.00	607.67	0.00	-0.01	0.07	470.00	1.00
36298.000	1840.00	607.65	0.00	0.05	0.00	350.00	240.00
36298.000	1840.00	607.72	0.00	0.05	0.07	350.00	240.00
36398.000	1840.00	607.58	0.00	-0.06	0.00	300.00	100.00
36398.000	1840.00	607.65	0.00	-0.06	0.07	300.00	100.00
36444.000	1840.00	608.62	0.00	1.04	0.00	300.00	46.00
36444.000	1840.07	608.66	0.00	1.00	0.03	300.00	46.00

SUMMARY OF ERRORS

FLOODWAY DATA, SWAN CR.ASH TWP.
PROFILE NO. 2

STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
5.000	805.	3024.	0.9	590.0	590.0	0.0
6.000	696.	2286.	1.5	590.0	590.0	0.0
7.000	696.	2058.	1.7	589.9	589.9	0.0
17.000	717.	2101.	1.7	589.9	589.9	0.0
18.000	717.	2401.	1.4	590.1	590.1	0.0
68.000	764.	3505.	1.0	590.2	590.2	0.0
1438.000	451.	2348.	1.5	590.7	590.7	0.0
2898.000	618.	2948.	1.2	591.4	591.3	0.1
3768.000	441.	2234.	1.6	591.7	591.6	0.1
5158.000	513.	2193.	1.6	592.4	592.3	0.1
6318.000	408.	2028.	1.7	593.1	593.0	0.1
7818.000	398.	1923.	1.8	594.0	593.9	0.1
8718.000	163.	1112.	3.1	594.5	594.4	0.1
8838.000	103.	988.	3.5	594.7	594.6	0.1
8839.000	103.	656.	5.3	594.6	594.5	0.1
8882.000	103.	657.	5.3	594.6	594.5	0.1
8883.000	103.	1012.	3.4	594.9	594.8	0.1
8973.000	283.	1567.	2.2	595.0	594.9	0.1
10098.000	416.	2471.	1.4	595.6	595.5	0.1
11118.000	613.	3610.	1.0	596.1	596.0	0.1
12620.000	152.	1050.	2.8	596.6	596.5	0.1
12760.000	82.	720.	4.0	596.7	596.6	0.1
12817.000	82.	868.	3.4	598.5	598.5	0.0
13087.000	459.	2956.	1.0	598.7	598.7	0.0
14167.000	274.	1265.	2.3	598.8	598.8	0.0
14267.000	206.	1426.	2.0	598.9	598.9	0.0
14268.000	305.	1452.	2.0	599.0	599.0	0.0
14281.000	305.	1455.	2.0	599.0	599.0	0.0
14282.000	302.	1469.	2.0	599.0	599.0	0.0
14332.000	260.	1344.	2.2	599.2	599.1	0.1
15592.000	360.	3036.	1.0	599.8	599.7	0.1
15692.000	360.	3040.	1.0	599.8	599.7	0.1
15704.000	380.	3064.	0.9	599.8	599.7	0.1
15754.000	380.	3079.	0.9	599.9	599.8	0.1
16374.000	377.	2575.	1.1	600.0	599.9	0.1
17384.000	643.	4130.	0.7	600.1	600.0	0.1
17554.000	635.	2786.	1.0	600.1	600.0	0.1
17555.000	648.	2279.	1.3	600.1	600.0	0.1
17581.000	644.	2269.	1.3	600.1	600.0	0.1
17582.000	631.	2776.	1.0	600.1	600.0	0.1
17632.000	625.	3830.	0.8	600.2	600.1	0.1
19032.000	433.	2738.	1.1	600.3	600.2	0.1
20462.000	482.	3175.	0.9	600.7	600.6	0.1
22092.000	332.	2113.	1.4	601.2	601.1	0.1
22292.000	335.	1208.	2.3	601.2	601.1	0.1
22293.000	344.	1074.	2.7	601.2	601.1	0.1
22309.000	342.	1073.	2.7	601.2	601.1	0.1
22310.000	337.	1321.	2.2	601.3	601.2	0.1
22410.000	405.	2529.	1.2	601.4	601.3	0.1
23160.000	514.	3227.	0.9	601.6	601.5	0.1

FLOODWAY DATA, SLAN CR.ASH TWP.
PROFILE NO. 2

STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
24540.000	497.	2791.	1.0	601.8	601.7	0.1
26060.000	618.	3905.	0.7	602.1	602.0	0.1
26290.000	523.	1847.	1.6	602.1	602.0	0.1
26325.000	586.	1928.	1.3	602.2	602.1	0.1
26475.000	583.	2452.	1.2	602.3	602.2	0.1
27015.000	663.	2651.	1.1	602.5	602.4	0.1
29305.000	110.	732.	4.0	603.7	603.6	0.1
29405.000	60.	533.	5.5	603.8	603.7	0.1
29406.000	60.	495.	5.9	603.7	603.6	0.1
29442.000	60.	496.	5.9	603.8	603.7	0.1
29443.000	60.	538.	5.4	603.9	603.8	0.1
29493.000	131.	871.	3.3	604.0	603.9	0.1
30013.000	362.	1937.	1.5	604.6	604.5	0.1
30723.000	256.	1435.	2.0	604.8	604.7	0.1
31223.000	205.	1261.	2.2	605.0	604.9	0.1
32033.000	93.	569.	3.2	605.4	605.3	0.1
32133.000	43.	476.	3.9	605.6	605.5	0.1
32400.000	43.	482.	3.8	606.3	606.2	0.1
32450.000	143.	807.	2.3	606.3	606.2	0.1
32590.000	360.	2079.	0.9	606.5	606.5	0.1
33520.000	640.	3143.	0.6	606.8	606.7	0.1
34590.000	459.	1600.	1.1	607.0	606.9	0.1
34770.000	429.	1996.	0.9	607.2	607.1	0.1
34771.000	432.	1821.	1.0	607.2	607.1	0.1
34776.000	455.	1831.	1.0	607.2	607.1	0.1
34777.000	431.	2004.	0.9	607.2	607.1	0.1
33929.000	559.	1606.	1.1	607.2	607.1	0.1
34930.000	564.	1474.	1.2	607.2	607.1	0.1
34938.000	564.	1477.	1.2	607.2	607.1	0.1
34939.000	559.	1617.	1.1	607.2	607.1	0.1
35259.000	616.	1516.	1.2	607.3	607.2	0.1
35260.000	623.	1463.	1.3	607.4	607.3	0.1
35268.000	622.	1465.	1.3	607.4	607.3	0.1
35269.000	620.	1548.	1.2	607.4	607.3	0.1
35441.000	770.	1994.	0.9	607.4	607.3	0.1
35442.000	770.	1972.	0.9	607.4	607.3	0.1
35463.000	770.	1977.	0.9	607.5	607.4	0.1
35464.000	770.	2016.	0.9	607.4	607.3	0.1
35759.000	620.	1390.	1.3	607.5	607.4	0.1
35760.000	620.	1077.	1.7	607.5	607.4	0.1
35767.000	620.	1081.	1.7	607.5	607.4	0.1
35768.000	620.	1399.	1.3	607.5	607.4	0.1
36068.000	470.	1471.	1.3	607.7	607.6	0.1
36069.000	470.	1405.	1.3	607.7	607.6	0.1
36077.000	470.	1406.	1.3	607.7	607.6	0.1
36078.000	470.	1486.	1.2	607.7	607.6	0.1
36298.000	350.	1171.	1.6	607.7	607.6	0.1
36398.000	300.	600.	3.1	607.7	607.6	0.1
36464.000	300.	686.	2.7	608.6	608.6	0.0

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Ash Township

3) WATERCOURSE: Swan Creek and N Br. Swan Creek

4) DOCUMENT TYPE: Caverage

00BREAK00

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

C
T1 SWAN CREEK CONVERGENCE RUN
T2 NORMAL DEPTH START
T3       SWAN CR. CONVERG.

J1  ICHECK    INQ      NINV     IDIR     STRT      METRIC    HVINS     Q         WSEL      FQ

        0.       2.       0.       0.  0.000641     0.00      C.0       0.    585.000     0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

    1.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000    15.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    150.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

NC    0.080     0.080     0.035     0.100     0.300     0.000     0.000     0.000     0.000     0.000
GT    3.000  3470.000  3470.000  3470.000     0.000     0.000     0.000     0.000     0.000     0.000

                VALLEY 7300' D/S LABO RD.

X1    0.500     9.000    64.000   134.000     0.000     0.000     0.000     0.000     0.000     0.000
GR  590.000     0.000   585.000     1.000   580.000    64.000   578.500    87.000   578.200   100.000
GR  576.500   113.000   580.000   134.000   585.000   400.000   590.000   410.000     0.000     0.000

                VALLEY 5800' D/S LABO RD.

X1    1.000     9.000   296.000   362.000  1500.000  1500.000  1500.000     0.000     0.000     0.000
GR  590.000     0.000   585.000   130.000   582.000   296.000   578.500   318.000   578.000   330.000
GR  578.500   342.000   582.000   362.000   585.000   560.000   590.000   620.000     0.000     0.000

                VALLEY 3800' D/S LABO RD.

X1    2.000     8.000   552.000   608.000  1800.000  2000.000  2000.000     0.000     0.000     0.000
GR  590.000     0.000   585.000    40.000   583.500   552.000   579.200   369.000   578.900   560.000
GR  579.200   591.000   583.500   608.000   593.000   680.000     0.000     0.000     0.000     0.000

                VALLEY 2500' D/S LABO RD.

X1    3.000     9.000   300.000   345.000  1200.000  1000.000  1300.000     0.000     0.000     0.000
GR  590.000     0.000   585.000    75.000   584.000   300.000   580.000   312.000   579.700   321.000
GR  580.000   330.000   584.000   345.000   585.000   500.000   590.000   540.000     0.000     0.000

                VALLEY 1400' D/S LABO RD.

X1    4.000     9.000   260.000   304.000   900.000  1000.000  1100.000     0.000     0.000     0.000
GR  595.000     0.000   590.000   230.000   585.000   260.000   580.400   273.000   580.100   282.000
GR  580.400   291.000   584.000   304.000   585.000   600.000   595.000   900.000     0.000     0.000
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NC	0.100	0.100	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000

100' D/S LABO RD.

X1	5.000	12.000	100.000	142.000	1300.000	1200.000	1300.000	0.000	0.000	0.000
GR	595.000	0.000	590.000	30.000	585.000	60.000	584.900	100.000	580.900	107.000
GR	580.500	120.000	580.900	133.000	585.600	142.000	585.000	240.000	585.000	600.000
GR	590.000	1200.000	595.000	1350.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= 0.100 CEHV= 0.300

*SECNO ****

SECNO	DEPTH	CWSEL	CRIWS	HSELK	EG	HV	HL	CLOSS	BANK ELEV	
C	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	IH2	ICONT	CORAR	TOPWID	ENDST	
	VALLEY 7300' D/S LABO RD.									
	0.50	9.42	585.62	0.00	585.00	585.83	0.21	0.00	0.00	580.00
	3470.	197.	2438.	835.	197.	565.	830.	0.	0.	580.00
	0.00	1.00	4.31	1.01	0.000	0.035	0.080	0.000	576.20	0.80
	0.000643	0.	0.	0.	0	0	4	0.00	400.37	401.24
	1.00	8.71	586.71	0.00	0.00	586.90	0.19	1.07	0.00	582.00
	3470.	627.	2109.	734.	570.	474.	653.	57.	15.	582.00
	0.13	1.10	4.65	1.13	0.080	0.035	0.080	0.035	578.00	85.60
	0.000801	1500.	1500.	1500.	2	0	0	0.03	494.40	580.40
	2.00	9.10	588.00	0.00	0.00	588.09	0.09	1.18	0.01	583.50
	3470.	1914.	1502.	54.	1956.	423.	77.	146.	39.	583.50
	0.39	0.98	3.55	0.70	0.080	0.035	0.080	0.036	578.90	16.00
	0.000484	1800.	2000.	2000.	2	0	0	0.00	626.11	642.11

FLOW DISTRIBUTION FOR SECNO= 0.50 CWSEL= 585.62

STA=	1.	64.	134.	400. 401.
PER Q=	5.7	70.2	24.1	0.0
AREA=	196.6	565.3	830.1	0.4
VEL=	1.0	4.3	1.0	0.2

*SECNO 1.000

VALLEY 5800' D/S LABO RD.

FLOW DISTRIBUTION FOR SECNO= 1.00 CWSEL= 586.71

STA=	86.	130.	296.	362.	560. 580.
PER Q=	0.5	17.5	60.8	20.9	0.2
AREA=	37.9	532.5	474.2	635.1	17.5
VEL=	0.5	1.1	4.6	1.1	0.5

*SECNO 2.000

VALLEY 3800' D/S LABO RD.

FLOW DISTRIBUTION FOR SECNO= 2.00 CWSEL= 588.00

STA=	16.	40.	552.	608.	642.
PER Q=	0.6	54.6	43.3	1.5	
AREA=	36.0	1920.3	423.0	76.8	
VEL=	0.5	1.0	3.6	0.7	

*SECNO 3.000

VALLEY 2500' D/S LABO RD.

3.00	8.97	588.67	0.00	0.00	588.79	0.12	0.68	0.01	584.00
3470.	1234.	1398.	838.	1038.	339.	700.	208.	55.	584.00
0.53	1.19	4.13	1.20	0.080	0.035	0.080	0.036	579.70	20.00
0.000663	1200.	1300.	1000.	2	0	0	0.00	509.34	529.33

FLOW DISTRIBUTION FOR SECNO= 3.00 CWSEL= 588.67

STA=	20.	75.	300.	345.	500.	529.
PER Q=	2.1	33.5	40.3	23.1	1.1	
AREA=	100.8	937.5	338.7	645.8	53.8	
VEL=	0.7	1.2	4.1	1.2	0.7	

*SECNO 4.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

VALLEY 1400' D/S LABO RD.

4.00	9.24	589.36	0.00	0.00	589.47	0.13	0.68	0.00	585.00
3470.	45.	1422.	2002.	57.	339.	1628.	254.	66.	584.60
0.65	0.80	4.19	1.23	0.080	0.035	0.080	0.036	580.10	233.93
0.000670	900.	1100.	1000.	2	0	0	0.00	496.40	730.33

FLOW DISTRIBUTION FOR SECNO= 4.00 CWSEL= 589.34

STA=	234.	260.	304.	600.	730.
PER Q=	1.3	41.0	51.1	6.6	
AREA=	56.6	339.1	1345.2	283.1	
VEL=	0.8	4.2	1.3	0.8	

CCHV= 0.300 CEHV= 0.500

*SECNO 5.000

100' D/S LABO RD.

5.00	9.47	589.97	0.00	0.00	590.01	0.04	0.52	0.03	584.90
3470.	158.	1001.	2311.	226.	351.	3730.	343.	89.	585.60
0.92	0.70	2.85	0.62	0.100	0.035	0.100	0.036	580.50	50.06
0.000285	1300.	1300.	1200.	2	0	0	0.00	1146.49	1196.54

FLOW DISTRIBUTION FOR SECNO= 5.00 CWSEL= 589.97

STA=	50.	60.	100.	142.	240.	600.	1197.
PER Q=	0.3	4.3	28.8	9.2	37.7	19.7	
AREA=	24.7	200.8	351.0	457.8	1789.6	1482.8	
VEL=	0.4	0.7	2.9	0.7	0.7	0.5	

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

T1 SWAN CREEK CONVERGENCE RUN
T2 CRITICAL DEPTH START
T3      SWAN CR. CONVERG.

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ
          0.        3.         0.         0.  -1.000000       0.00       0.0         0.     585.000    0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      XTRACE
      2.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000     15.000
```

*PROF 2

CCHV= 0.100 CEHV= 0.300

*SECNO ****

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	NL	CLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	NTW	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IH2	ICONT	CORAR	TOPWID	ENDST
0.50	5.77	581.97	581.97	585.00	583.58	1.60	0.00	0.00	580.00
3470.	42.	3253.	176.	25.	310.	104.	0.	0.	580.00
0.00	1.69	10.49	1.70	0.080	0.035	0.080	0.000	576.20	39.13
0.008483	0.	0.	0.	0	13	0	0.00	199.87	239.00

3720 CRITICAL DEPTH ASSUMED

VALLEY 7300' D/S LABO RD.

FLOW DISTRIBUTION FOR SECNO= 0.50 CWSEL= 581.97

STA=	39.	64.	136.	239.
PER Q=	1.2	93.7	5.1	
AREA=	24.5	310.1	103.6	
VEL=	1.7	10.5	1.7	

*SECNO 1.000

3301 HV CHANGED MORE THAN HVINS

VALLEY 5800' D/S LABO RD.

1.00	8.56	586.56	0.00	0.00	586.77	0.21	3.05	0.14	582.00
3470.	608.	2168.	714.	539.	464.	620.	35.	12.	582.00
0.13	1.13	4.63	1.15	0.080	0.035	0.080	0.035	578.00	89.51
0.000892	1500.	1500.	1500.	6	0	0	0.00	489.18	578.69

FLOW DISTRIBUTION FOR SECNO= 1.00 CWSEL= 586.56

STA=	90.	130.	296.	362.	560.	579.
PER Q=	0.4	17.1	61.9	20.4	0.2	
AREA=	31.5	507.5	464.3	605.4	14.6	
VEL=	0.5	1.2	4.6	1.2	0.5	

*SECNO 2.000

VALLEY 3800' D/S LABO RD.

2.00	9.05	587.95	0.00	0.00	586.04	0.10	1.26	0.01	583.50
3470.	1905.	1512.	53.	1930.	420.	75.	123.	36.	583.50
0.38	0.99	3.60	0.70	0.080	0.035	0.080	0.036	578.90	16.39
0.000501	1800.	2000.	2000.	4	0	0	0.00	625.35	641.74

FLOW DISTRIBUTION FOR SECNO= 2.00 CWSEL= 587.95

STA=	16.	40.	552.	600.	642.
PER Q=	0.5	54.4	43.6	1.5	
AREA=	34.8	1895.3	420.3	75.1	
VEL=	0.5	1.0	3.6	0.7	

*SECNO 3.000

VALLEY 2500' D/S LABO RD.

3.00	8.93	588.63	0.00	0.00	588.76	0.12	0.71	0.01	584.05
3470.	1230.	1404.	836.	1029.	337.	694.	184.	51.	564.00
0.52	1.20	4.16	1.21	0.080	0.035	0.080	0.036	579.70	20.49
0.000678	1200.	1300.	1000.	2	0	0	0.00	508.58	529.07

FLOW DISTRIBUTION FOR SECNO= 3.00 CWSEL= 588.63

STA=	20.	75.	300.	345.	500.	529.
PER Q=	2.1	33.4	40.4	23.0	1.1	
AREA=	99.0	930.1	337.2	640.7	52.8	
VEL=	0.7	1.2	4.2	1.2	0.7	

*SECNO 4.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

VALLEY 1400' D/S LABO RD.

4.00	9.22	589.32	0.00	0.00	589.45	0.13	0.69	0.00	585.00
3470.	45.	1425.	2000.	56.	338.	1619.	230.	62.	564.60
0.64	0.80	4.22	1.23	0.060	0.035	0.080	0.036	580.10	234.06
0.000679	900.	1100.	1000.	2	0	0	0.00	495.65	729.71

FLOW DISTRIBUTION FOR SECNO= 4.00 CWSEL= 589.32

STA=	234.	260.	304.	600.	750.
PER Q=	1.3	41.1	51.1	6.5	
AREA=	56.1	338.1	1339.0	280.4	
VEL=	0.8	4.2	1.3	0.8	

CCHV= 0.300 CEHV= 0.500

*SECNO 5.000

100' D/S LABO RD.

5.00	9.46	589.96	0.00	0.00	590.00	0.04	0.52	0.03	584.90
3470.	158.	1003.	2309.	225.	350.	3716.	318.	85.	585.60
0.91	0.70	2.86	0.62	0.100	0.035	0.100	0.036	580.50	50.08
0.000287	1300.	1300.	1200.	2	0	0	0.00	1144.88	1194.96

FLOW DISTRIBUTION FOR SECNO= 5.00 CWSEL= 589.96

STA=	50.	60.	100.	142.	240.	600.	1193.
PER Q=	0.3	4.3	28.9	9.2	37.7	19.6	
AREA=	24.6	200.3	350.5	456.5	1784.9	1474.9	
VEL=	0.4	0.7	2.9	0.7	0.7	0.5	

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

T1SWAN CREEK CONVERGENCE RUN
T2 1.5' HIGHER THAN NORMAL DEPTH
T3       SWAN CR. CONVERG.

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ
        0.       4.         0.         0.  0.000000       0.00       0.0        0.    587.120      0.000
J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBH        CHNIM      ITRACE
     15.000     0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000     15.000
```

*PROF 3

CCHV= 0.100 CEHV= 0.300

*SECNO ****

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	FL	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	IH2	ICONT	CORAR	TOPWID	ENDST
	VALLEY 7300' D/S LABO RD.								
0.50	10.92	587.12	0.00	587.12	587.22	0.10	0.00	0.00	580.00
3470.	252.	2150.	1068.	292.	670.	1233.	0.	0.	580.00
0.00	0.86	3.21	0.87	0.080	0.035	0.080	0.000	576.20	0.58
0.000284	0.	0.	0.	0	0	0	0.00	403.66	404.24
1.00	9.63	587.63	0.00	0.00	587.75	0.11	0.52	0.00	582.00
3470.	728.	1905.	837.	777.	535.	860.	75.	16.	582.00
0.17	0.94	3.56	0.97	0.080	0.035	0.080	0.035	578.00	61.31
0.000436	1500.	1500.	1500.	2	0	0	0.00	530.10	591.61
2.00	9.54	588.44	0.00	0.00	588.51	0.07	0.76	0.00	585.50
3470.	1988.	1423.	59.	2193.	448.	92.	181.	41.	583.50
0.47	0.91	3.18	0.64	0.080	0.035	0.080	0.036	578.90	12.48
0.000360	1800.	2000.	2000.	2	0	0	0.00	632.96	645.44

FLOW DISTRIBUTION FOR SECNO= 0.50 CWSEL= 587.12

STA=	1.	64.	134.	400.	404.
PER Q=	7.3	62.0	30.7	0.0	
AREA=	291.5	670.3	1229.0	4.5	
VEL=	0.9	3.2	0.9	0.3	

*SECNO 1.000

VALLEY 5800' D/S LABO RD.

FLOW DISTRIBUTION FOR SECNO= 1.00 CWSEL= 587.63

STA=	62.	130.	296.	362.	560. 592.
PER Q=	1.2	19.8	54.9	23.6	0.6
AREA=	90.2	686.3	535.4	818.6	41.6
VEL=	0.5	1.0	3.6	1.0	0.5

*SECNO 2.000

VALLEY 3800' D/S LABO RD.

FLOW DISTRIBUTION FOR SECNO= 2.00 CWSEL= 580.44

STA=	12.	40.	552.	608.	645.
PER Q=	0.7	56.6	41.0	1.7	
AREA=	47.3	2145.4	447.7	92.5	
VEL=	0.5	0.9	3.2	0.6	

*SECNO 3.000

VALLEY 1500' /S LABO RD.

3.00	9.25	588.95	0.00	0.00	589.05	0.10	0.53	0.01	584.00
3470.	1261.	1354.	856.	1119.	352.	753.	248.	56.	584.00
0.62	1.13	3.05	1.14	0.080	0.035	0.080	0.036	579.70	15.71
0.000549	1200.	1300.	1000.	2	0	0	0.00	515.91	531.62

FLOW DISTRIBUTION FOR SECNO= 3.00 CWSEL= 588.95

STA=	16.	75.	300.	345.	500.	532.
PER Q=	2.3	34.0	39.0	23.4	1.2	
AREA=	117.2	1001.8	351.6	690.2	62.5	
VEL=	0.7	1.2	3.9	1.2	0.7	

*SECNO 4.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IN2	ICONT	CORAR	TOPWID	ENDST

VALLEY 1400' D/S LABO RD.

4.00	9.43	589.53	0.00	0.00	589.66	0.11	0.56	0.00	585.00
3470.	48.	1395.	2027.	62.	347.	1707.	297.	68.	586.60
0.74	0.77	4.02	1.19	0.080	0.035	0.080	0.036	580.10	232.83
0.000596	900.	1100.	1000.	2	0	0	0.00	503.00	735.84

FLOW DISTRIBUTION FOR SECNO= 4.00 CWSEL= 589.53

STA=	233.	260.	304.	600.	736.
PER Q=	1.4	40.2	51.5	6.9	
AREA=	61.5	347.1	1399.4	307.5	
VEL=	0.8	6.0	1.3	0.8	

CCHV= 0.300 CEHV= 0.500

*SECNO 5.000

100' D/S LABO RD.

5.00	9.59	590.09	0.00	0.00	590.13	0.04	0.47	0.02	584.90
3470.	158.	982.	2330.	232.	356.	3860.	389.	91.	585.60
1.02	0.68	2.76	0.60	0.100	0.035	0.100	0.037	580.50	49.06
0.000261	1300.	1300.	1200.	2	0	0	0.00	1133.77	1202.83

FLOW DISTRIBUTION FOR SECNO= 5.00 CWSEL= 590.09

STA=	49.	60.	100.	142.	240.	600.	1200.	1203.
PER Q=	0.3	4.2	28.3	9.2	37.6	20.3	0.0	
AREA=	25.9	205.3	356.2	469.8	1833.9	1556.5	0.1	
VEL=	0.4	0.7	2.8	0.7	0.7	0.5	0.0	

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

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

SWAN CR. CONVERG.

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	0.500	0.00	0.00	0.00	576.20	3470.00	585.62	0.00	585.83	6.43	4.31	1592.45	1368.24
*	0.500	0.00	0.00	0.00	576.20	3470.00	581.97	581.97	583.58	84.83	10.49	438.21	376.76
	0.500	0.00	0.00	0.00	576.20	3470.00	587.12	0.00	587.22	2.34	3.21	2195.27	2060.33
	1.000	1500.00	0.00	0.00	578.00	3470.00	586.71	0.00	586.90	8.01	4.45	1697.25	1226.18
	1.000	1500.00	0.00	0.00	578.00	3470.00	586.56	0.00	586.77	8.92	4.63	1623.25	1162.06
	1.000	1500.00	0.00	0.00	578.00	3470.00	587.63	0.00	587.75	6.36	3.56	2172.09	1661.58
	2.000	2000.00	0.00	0.00	578.90	3470.00	588.00	0.00	588.09	4.84	3.55	2436.05	1376.90
	2.000	2000.00	0.00	0.00	578.90	3470.00	587.95	0.00	588.04	5.01	3.60	2423.49	1569.88
	2.000	2000.00	0.00	0.00	578.90	3470.00	588.44	0.00	588.51	3.60	3.18	2732.85	1829.86
	3.000	1300.00	0.00	0.00	579.70	3470.00	588.67	0.00	588.79	6.63	4.13	2076.69	1347.36
	3.000	1300.00	0.00	0.00	579.70	3470.00	588.63	0.00	588.76	6.78	4.16	2059.91	1332.37
	3.000	1300.00	0.00	0.00	579.70	3470.00	588.95	0.00	589.06	5.49	3.65	2223.24	1400.74
	4.000	1100.00	0.00	0.00	580.10	3470.00	589.34	0.00	589.47	6.70	4.19	2023.95	1340.76
	4.000	1100.00	0.00	0.00	580.10	3470.00	589.32	0.00	589.45	6.79	4.22	2013.66	1331.75
	4.000	1100.00	0.00	0.00	580.10	3470.00	589.53	0.00	589.64	5.96	4.02	2115.57	1421.76
	5.000	1300.00	0.00	0.00	580.50	3470.00	589.97	0.00	590.01	2.85	2.85	4306.77	2055.93
	5.000	1300.00	0.00	0.00	580.50	3470.00	589.96	0.00	590.00	2.87	2.86	4291.66	2046.77
	5.000	1300.00	0.00	0.00	580.50	3470.00	590.09	0.00	590.13	2.61	2.76	4448.40	2147.69

SWAN CR. CONVERG.

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	0.500	3470.00	585.62	0.00	0.00	0.62	400.37	0.00
*	0.500	3470.00	581.97	0.00	0.00	-3.03	199.87	0.00
	0.500	3470.00	587.12	0.00	0.00	0.00	403.66	0.00
	1.000	3470.00	586.71	0.00	1.09	0.00	494.90	1500.00
	1.000	3470.00	586.56	0.00	4.58	0.00	489.18	1500.00
	1.000	3470.00	587.63	0.00	0.51	0.00	530.10	1500.00
	2.000	3470.00	588.00	0.00	1.29	0.00	626.11	2000.00
	2.000	3470.00	587.93	0.00	1.39	0.00	625.35	2000.00
	2.000	3470.00	588.44	0.00	0.81	0.00	632.96	2000.00
	3.000	3470.00	588.67	0.00	0.67	0.00	509.34	1300.00
	3.000	3470.00	588.63	0.00	0.69	0.00	508.58	1300.00
	3.000	3470.00	588.95	0.00	0.51	0.00	515.91	1300.00
	4.000	3470.00	589.34	0.00	0.68	0.00	496.40	1100.00
	4.000	3470.00	589.32	0.00	0.69	0.00	495.65	1100.00
	4.000	3470.00	589.53	0.00	0.58	0.00	503.00	1100.00
	5.000	3470.00	589.97	0.00	0.63	0.00	1146.49	1300.00
	5.000	3470.00	589.96	0.00	0.63	0.00	1144.80	1300.00
	5.000	3470.00	590.09	0.00	0.57	0.00	1153.77	1300.00

SUMMARY OF ERRORS

CAUTION SECNO= 0.500 PROFILE= 2 CRITICAL DEPTH ASSUMED

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**************************************************
     HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
     ERROR CORR -  01
     MODIFICATION -  50,51,52
**************************************************
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**************************************************************
*                                                            *
*                    E R R O R   S U M M A R Y               *
*                                                            *
*                                                            *
*      0  ERROR(S) DETECTED BY THE USER PROGRAM              *
*      0  ERROR(S) DETECTED BY THE MATHEMATICAL PACKAGE      *
*      0  ERROR(S) DETECTED FOR INPUT/OUPUT STATEMENTS       *
*                                                            *
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Ash Township

3) WATERCOURSE: Swan Creek, N. Br. Swan Creek

4) DOCUMENT TYPE: Hydraulic Report

00BREAK00

HYDRAULIC REPORT
ASH TOWNSHIP, MICHIGAN
SWAN CREEK, NORTH BRANCH SWAN CREEK
AND APPROXIMATE STUDIES

Prepared By:

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HUD 2020-07

November, 1980

TABLE OF CONTENTS

		PAGE NO.
I	INTRODUCTION	I-1
II	SWAN CREEK AND NORTH BRANCH OF THE SWAN CREEK	II-1 - II-8
	A. METHOD OF ANALYSIS	II-1 - II-5
	B. VARIABLES AND COEFFICIENTS	II-5
	C. HIGH WATER MARKS	II-5
	D. STARTING CONDITIONS	II-5 - II-7
	E. SPECIAL PROBLEMS	II-7
	F. GENERAL	II-7 - II-8
III	APPROXIMATE STUDIES	III-1
	REFERENCES	

LIST OF TABLES

TABLE NO.		PAGE NO.
1	Cross Reference Index, Swan Creek	II-2
2	Cross Reference Index, North Branch of Swan Creek	II-3
3	Flood Flow Frequency Data	II-4
4	Typical Flood Elevations	II-6

LIST OF EXHIBITS

EXHIBIT NO.	
1	Field Cross Section Locations and 100-Year Flood Plain, Floodway Maps, 4 Sheets.
2	Bridge Notes and Sketches, 67 Sheets.
3	Water Surface Profiles, 5 Sheets.
4	Convergence Run, Swan Creek, 2 Sheets.
5	HEC-2 Printouts (Separate Folder).

I INTRODUCTION

The Township of Ash is located in northeastern Monroe County and consists of approximately 34 square miles. The Township is basically a rural suburban community.

This report summarizes the hydraulic analyses undertaken to support the detailed studies of approximately 7 miles of the Swan Creek and 2 miles of the North Branch of Swan Creek within the corporate boundary of the Township. In addition, approximate studies were conducted for 16 1/2 miles of various streams within the community.

This study was conducted by Wade, Trim & Associates, Inc., Consulting Engineers and Glen Roberts served as Project Manager.

II SWAN CREEK AND NORTH BRANCH OF THE SWAN CREEK

Detailed studies were performed on the Swan Creek from Grafton Road to Labo Road. North Branch of the Swan Creek was studied in detail from Will-Carleton Road to its confluence with the Swan Creek. A total of 66 cross sections, 24 bridges and 42 valley sections were field surveyed by Wade, Trim & Associates, Inc. in April, 1980, and were supplemented by U.S.G.S. Quad Maps consisting of 5-foot contour intervals (References 1 and 2). Tables 1 and 2 cross reference section designations by showing the computer section number which corresponds to the cross section letter shown in Exhibit 1 for Swan Creek and the North Branch of the Swan Creek, respectively. Table 3 lists discharges which have been approved by the Michigan Department of Natural Resources (MDNR) for each creek. (Reference 6).

Exhibit 2 contains bridge sketches as well as computations of total bridge loss coefficients. Plots of typical valley cross sections are shown in Exhibit 5 (separate folder).

A. METHOD OF ANALYSIS

The HEC-2 backwater computer program was utilized in the development of water surface profiles (Reference 3).

TABLE 1
SWAN CREEK
ASH TOWNSHIP, MICHIGAN
CROSS REFERENCE INDEX

COMPUTER SECTION NUMBER	F.W., F.B. CROSS SECTION	LOCATION
5	A	Valley Section
6	B	D/S Face Labo Rd.
68	C	Valley Section
1438	D	Valley Section
2898	E	Valley Section
3768	F	Valley Section
5158	G	Valley Section
6318	H	Valley Section
7818	I	Valley Section
8718	J	Valley Section
8838	K	D/S Face Sigler Rd.
8973	L	Valley Section
10098	M	Valley Section
11118	N	Valley Section
12620	O	Valley Section
12760	P	D/S Face Telegraph Rd.
12817	Q	U/S Face Telegraph Rd.
14167	R	Valley Section
14267	S	D/S Face D'Way Bridge
14332	T	Valley Section
15592	U	Valley Section
15692	V	D/S Face D'Way Bridge
15754	W	Valley Section
16374	X	Valley Section
17384	Y	Valley Section
17554	Z	D/S Face Ready Rd.
17582	AA	U/S Face Ready Rd.
19032	AB	Valley Section
20462	AC	Valley Section
22092	AD	Valley Section
22292	AE	D/S Face Sweitzer Rd.
22310	AF	U/S Face Sweitzer Rd.
23160	AG	Valley Section
24540	AH	Valley Section
26060	AI	Valley Section
26290	AJ	D/S Face Carleton-Rockwood Rd.
26325	AK	U/S Face Carleton-Rockwood Rd.
27015	AL	Valley Section
29305	AM	Valley Section
29405	AN	D/S Face D.T. & I. R.R.
29443	AO	U/S Face D.T. & I. R.R.
30013	AP	Valley Section
30723	AQ	Valley Section
31223	AR	Valley Section
32033	AS	Valley Section
32133	AT	D/S Face, I-275
32400	AU	U/S Face, I-275
32590	AV	Valley Section
33520	AW	Valley Section
34590	AX	Valley Section
34770	AY	D/S Face Footbridge
33929	AZ	D/S Face Footbridge
35259	BA	D/S Face Footbridge
35441	BB	D/S Face Footbridge
35759	BC	D/S Face Footbridge
36068	BD	D/S Face Footbridge
36298	BE	Valley Section
36398	BF	D/S Face Grafton Rd.
36444	BG	U/S Face Grafton Rd.

TABLE 2

NORTH BRANCH OF SWAN CREEK

ASH TOWNSHIP, MICHIGAN

CROSS REFERENCE INDEX

COMPUTER SECTION NUMBER	F.W., F.B. CROSS SECTION	LOCATION
1	AR	Valley Section, Confluence With Swan Creek
300	A	Valley Section
1020	B	Valley Section
2170	C	Valley Section
2320	D	D/S Face Newburg Rd.
2442	E	Valley Section
3212	F	D/S Face Footbridge
3329	G	Valley Section
3419	H	D/S Face I-275
3739	I	U/S Face I-275
3999	J	D/S Face Penn Central R.R.
4087	K	Valley Section
5267	L	Valley Section
6097	M	Valley Section
6447	N	Valley Section
7477	O	Valley Section
7627	P	D/S Face Grafton Rd.
7790	Q	Valley Section
8740	R	Valley Section
9580	S	Valley Section
9700	T	D/S Face Will-Carleton Rd.

V-29 SE

TABLE 3

ASH TOWNSHIP, MICHIGAN

FLOOD FLOW FREQUENCY DATA

LOCATION	DRAINAGE AREA (MI^2)	DISCHARGE (CFS) 10 YEAR	50 YEAR	100 YEAR	500 YEAR
SWAN CREEK					
Corp. Boundary @ Grafton Road to U/S of Confl. with N. Branch Swan Creek	35.2 – 35.7	1,060	1,630	1,840	2,240
D/S of Confl. with N. Branch Swan Creek to U/S Confl. with Duff Drain	56.9 – 56.9	1,630	2,485	2,800	3,410
D/S of Confl. with Duff Drain to U/S Confl. with Little Swan Creek	60.2 – 63.0	1,670	2,575	2,910	3,555
D/S of Confl. with Little Swan Creek to Corp. Boundary @ Labo Road	76.3 – 81.2	2,000 values at Little Swan	3,070	3,470	4,230
NORTH BRANCH SWAN CREEK					
Corp. Boundary @ Will-Carleton Drive to Mouth @ Swan Creek	20.3 – 21.2	565	855	960	1,170

values would be higher

Table 4 contains flood elevations at selected locations from the HEC-2 printouts. Water surface profiles resulting from the backwater analyses are presented as Exhibit 3. HEC-2 printouts are presented as Exhibit 5 (separate folder).

B. VARIABLES AND COEFFICIENTS

Roughness coefficients (Mannings "n") were estimated by field inspection at each cross section. Roughness values varied from .020 to .035 for the main channel and from .07 to .12 for the overbanks. These values are indicative of summer month conditions and are consistent with values recommended and used in engineering practice (Reference 4). Contraction and expansion coefficients ranged from .1 to .3 and .3 to .5, respectively. Expansion and contraction ratios used in effective flow modelling were 1:4 and 1:1, respectively, for all bridge sections and natural constrictions.

C. HIGH WATER MARKS

No documented high water data exists for flood elevations on Swan Creek or North Branch of the Swan Creek.

D. STARTING CONDITIONS

1. Swan Creek

A normal depth analysis (HEC-2 slope area method) was performed at a section located 7,350 feet downstream of the detailed study limit. The energy slope used in this analysis was obtained from survey data and the U.S.G.S. Quad Map. A convergence

TABLE 4

ASH TOWNSHIP, MICHIGAN

TYPICAL FLOOD ELEVATIONS*

LOCATION	FLOOD FREQUENCY 10 YEAR	50 YEAR	100 YEAR	500 YEAR
SWAN CREEK				
D/S Face Grafton Rd.	606.6	607.3	607.6	608.4
D/S Face I-275	603.6	605.1	605.5	606.3
Confluence with N. Branch Swan Creek	603.1	604.5	605.0	605.8
D/S Face Carleton-Rockwood Rd.	600.4	601.5	602.0	602.8
D/S Face Sweitzer Rd.	599.3	600.6	601.1	601.9
D/S Face Ready Rd.	598.2	599.4	600.0	600.8
D/S Face Telegraph Rd.	594.8	596.2	596.6	597.5
D/S Face Sigler Rd.	592.9	594.2	594.6	595.3
Corporate Boundary, D/S Face Labo Rd.	589.3	589.6	590.0	590.6
NORTH BRANCH OF SWAN CREEK				
Corporate Boundary, D/S Face Will-Carleton Rd.	610.8	611.6	611.8	612.5
D/S Face Grafton Rd.	608.3	609.2	609.6	610.1
D/S Face I-275	605.1	606.4	606.8	607.5
D/S Face Newburg Rd.	603.8	605.2	605.6	606.4
Starting Elevations, Confluence with Swan Creek	603.1	604.5	605.0	605.8

*Referenced to National Geodetic Vertical Datum.

run (Exhibit 4) was performed with the following starting water surface elevations: critical depth, normal depth and one and a half feet higher than normal depth. The convergence analysis indicated that convergence was achieved; therefore, the resulting energy slope at the start of the detailed study limit was utilized for the 10, 50, 100 and 500-year storms. The HEC-2 printout for this convergence analysis is presented in Exhibit 5.

Checked with Hydrology OK. 2/2/81

2. North Branch of Swan Creek

Flood peaks for both the Swan Creek and the North Branch of Swan Creek will occur simultaneously at their confluence as determined from the detailed hydrologic analysis which was performed as part of this Flood Insurance Study. Therefore, all floods for both streams will occur at the same time and starting water surface elevations for the 10, 50, 100 and 500-year backwater computations were taken from the HEC-2 multiple profile printout (Exhibit 5) of the Swan Creek at its confluence with North Branch of Swan Creek.

E. SPECIAL PROBLEMS

No special problems were encountered in the analysis of the Swan Creek or the North Branch of the Swan Creek.

F. GENERAL

Computed water surface elevations were developed to an accuracy of 0.5 feet for floods of the selected recurrence intervals.

All elevations are referenced to the U.S. Geological and Coastal Survey (U.S.G.C.S.) Datum. This datum is equivalent to the National Geodetic Vertical Datum of 1929 (N.G.V.D.).

The hydraulic analyses for this study were based only on the effects of flow unobstructed by ice or debris. The flood elevations are considered valid only if hydraulic structures, in general, remain unobstructed and do not fail.

III APPROXIMATE STUDIES

Approximate studies were performed for approximately 16 1/2 miles of various streams within the community. Approximate hydraulic analyses were performed for culverts and normal depth analyses were performed for channel cross sections with data obtained from field inspection and U.S.G.S. Quad Maps. A review of the existing Flood Hazard Boundary Map (Reference 5) in comparison with the above referenced approximate analyses indicated that the 100-year flood limits shown on this map are reasonable. Therefore, the approximate 100-year flood plain corresponds to that shown on the existing Flood Hazard Boundary Map.

REFERENCES

1. U.S. Geological Survey Topographical Maps, Flat Rock Quadrangle, Michigan, 7.5 Minute Series, Photo Revised, 1973.

2. U.S. Geological Survey Topographical Maps, Carleton Quadrangle, Michigan, 7.5 Minute Series, 1967.

3. U.S. Army Corps of Engineers, HEC-2 Water Surface Profiles, Users Manual, August, 1979.

4. V. T. Chow, Open Channel Hydraulics, McGraw-Hill, Inc., 1959.

5. Department of Housing and Urban Development, FIA Flood Hazard Boundary Map, Township of Ash, Michigan, (Monroe County), Map Revised April 25, 1975.

6. Wade, Trim & Associates, Inc., Taylor, Michigan, Hydrology Report, Ash Township, Michigan (Preliminary); Swan Creek, North Branch Swan Creek, and Approximate Studies; May, 1980.

SWAN CREEK

AND

NORTH BRANCH OF SWAN CREEK

EXHIBIT 1

Field Cross Section Locations
and 100-Year Flood Plain, Floodway Maps

SWAN CREEK

AND

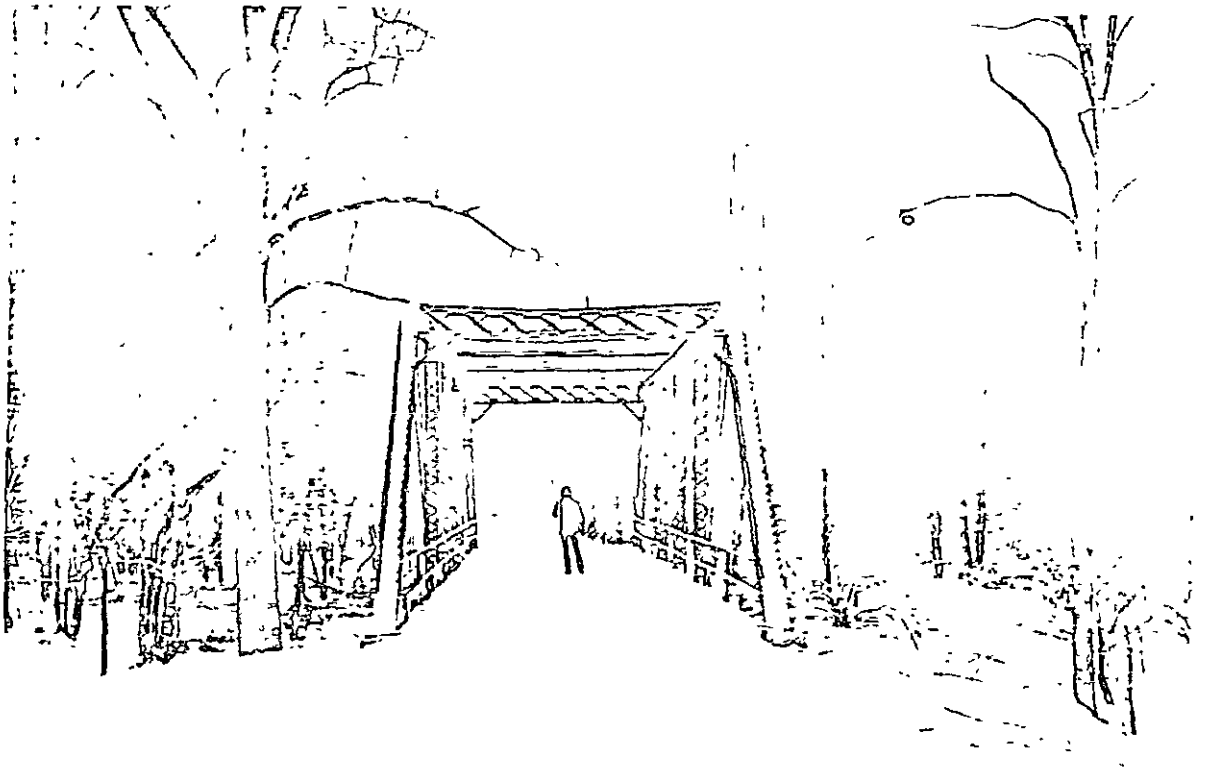
NORTH BRANCH OF SWAN CREEK

EXHIBIT 2

Bridge Notes and Sketches

SEC #1 - UPSTREAM FACING DOWNSTREAM (LABO RD)

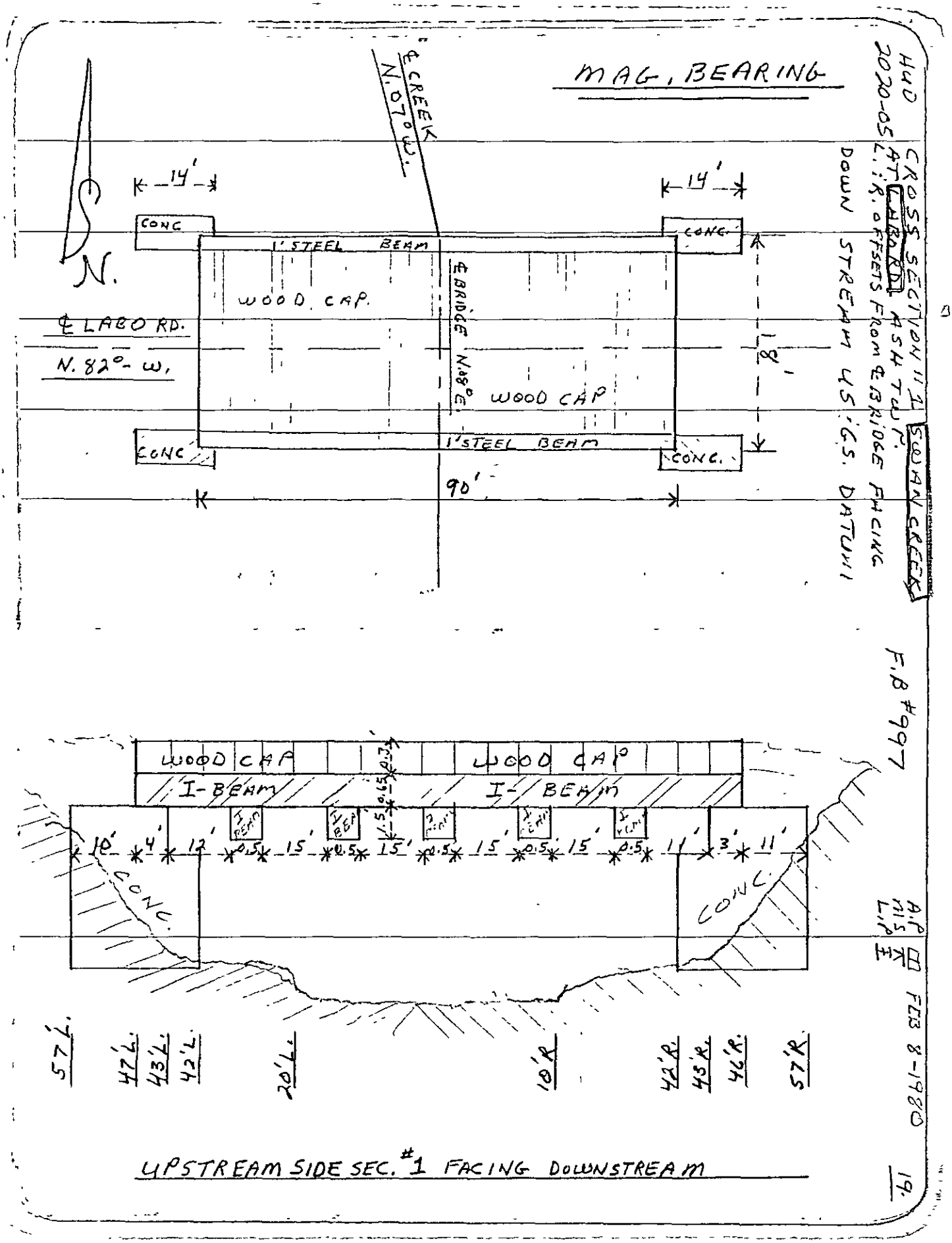
SWAN CREEK



SWAN CREEK

SEC #1 LEFTSIDE OF BRIDGE FACING RIGHT (LABO RD)

Sheet 10 of 67
Exhibit 2.



Sheet 2 of 3

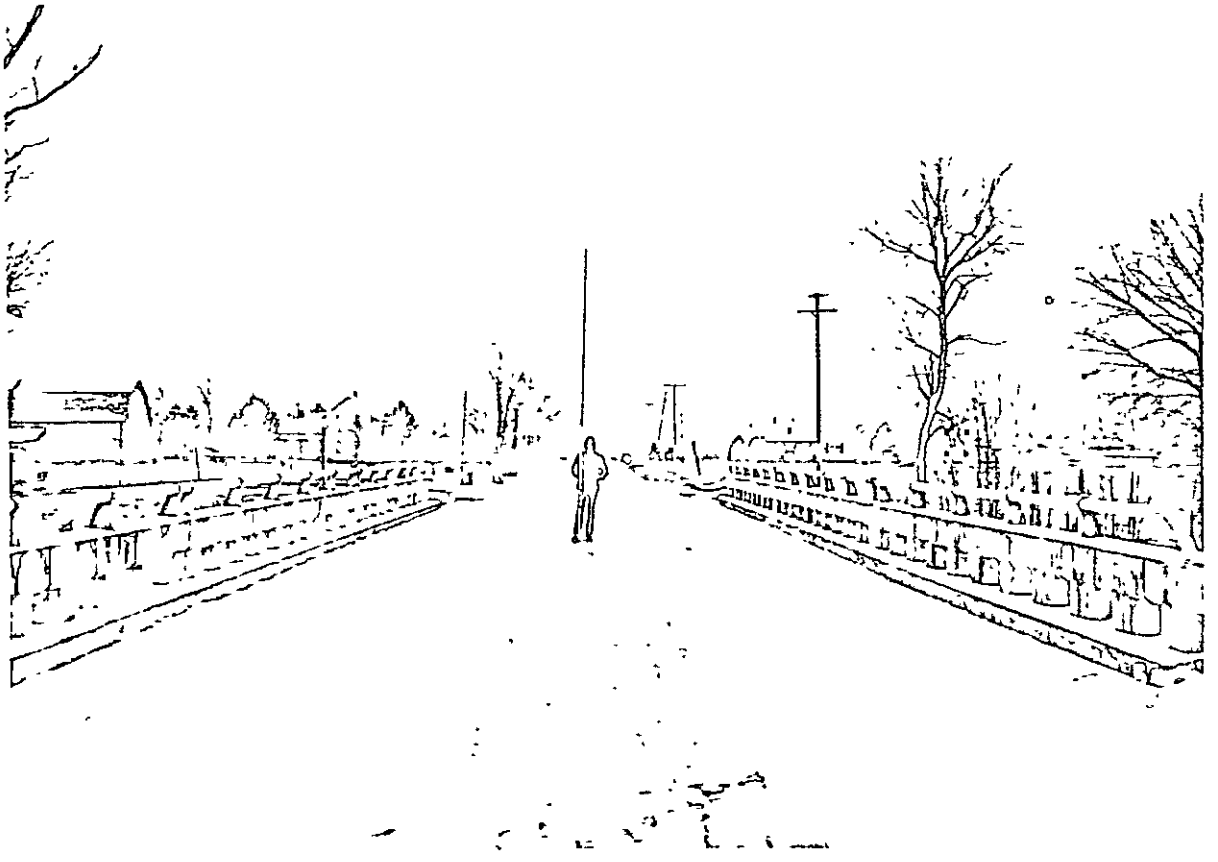
Exhibit 2

SECT #1 · BRIDGE FACING UPSTREAM (LABO RD)

SWAN CREEK

SWAN CREEK

SECT #10 · UPSTREAM FACING DOWNSTREAM (SIGLER RD)

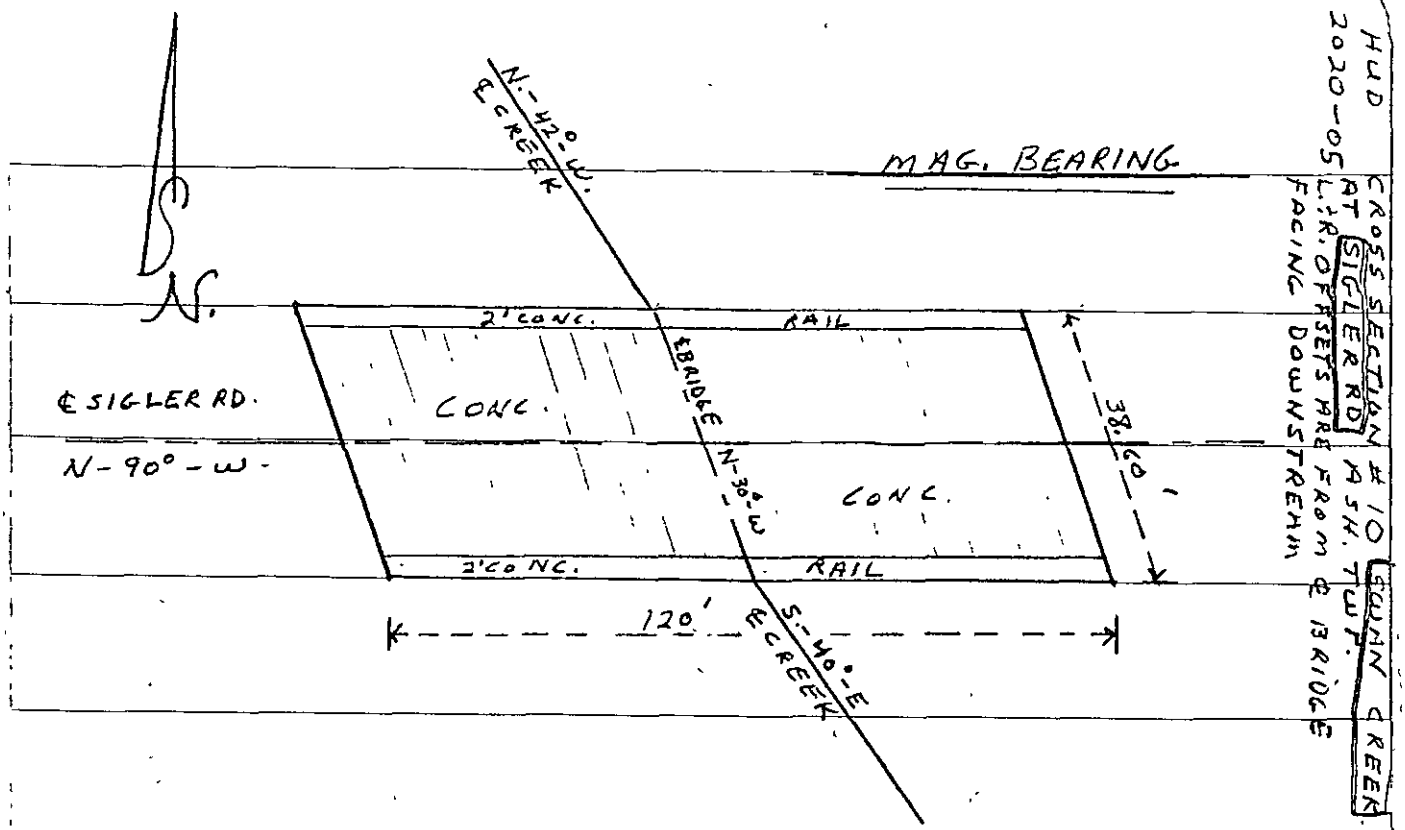


SEC. 10 LEFTSIDE OF BRIDGE FACING RIGHT (SIGLER RD)
SWAN CREEK

SWAN CREEK
SEC 10 - BRIDGE FACING UPSTREAM (SIGLER RD)
SWAN CREEK

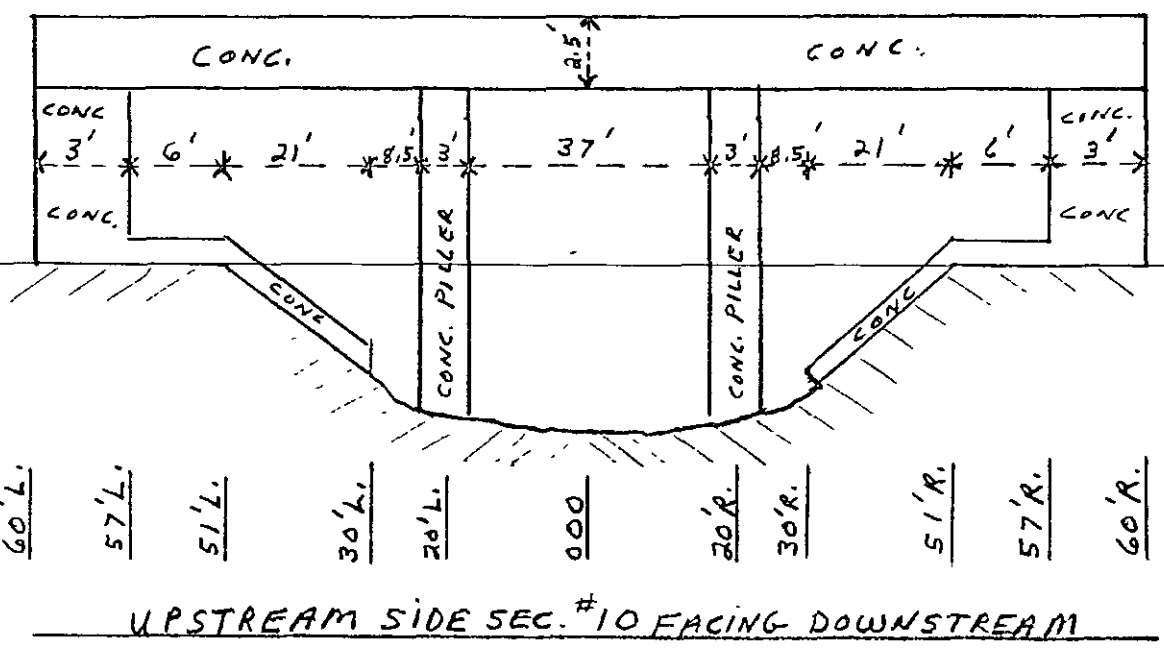
HUD 2020-05

CROSS SECTION AT SIGLER RD #10 SWAN CREEK
L.&R. OFFSETS ARE FROM ℄ IN ASH. TWP.
FACING DOWNSTREAM



CONT. ON PG. #27

F.B #997



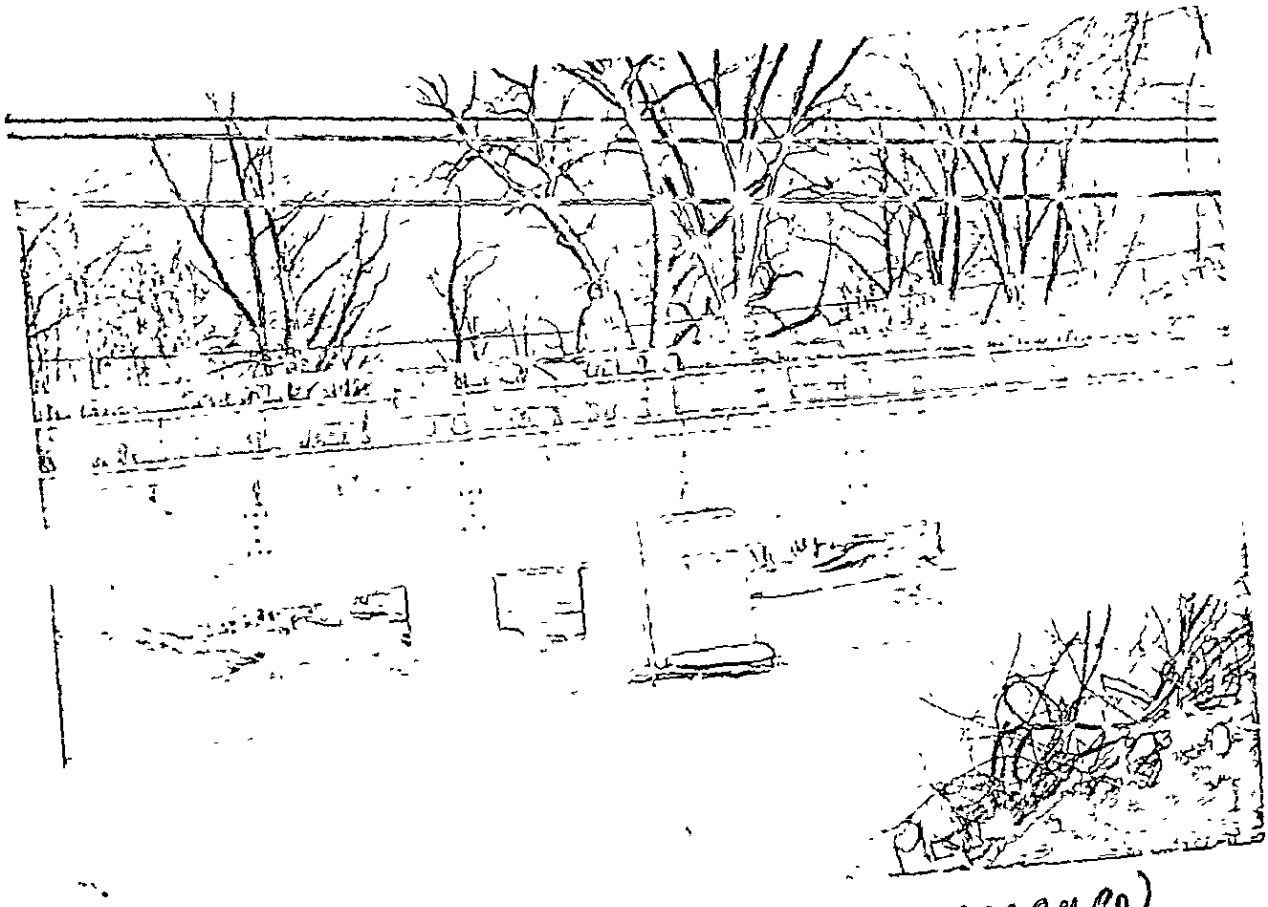
60'L. 57'L. 51'L. 30'L. 20'L. 000 20'R. 30'R. 51'R. 57'R. 60'R.

UPSTREAM SIDE SEC. #10 FACING DOWNSTREAM

A.I.F. M.S. L.I.P. III IV FEB 11-1980 26.

US-6 S. DATUM

Sheet 5 of 67
Exhibit 2



SEC. #11 - UPSTREAM FACING DOWNSTREAM (TELEGRAPH RD)
SWAN CREEK

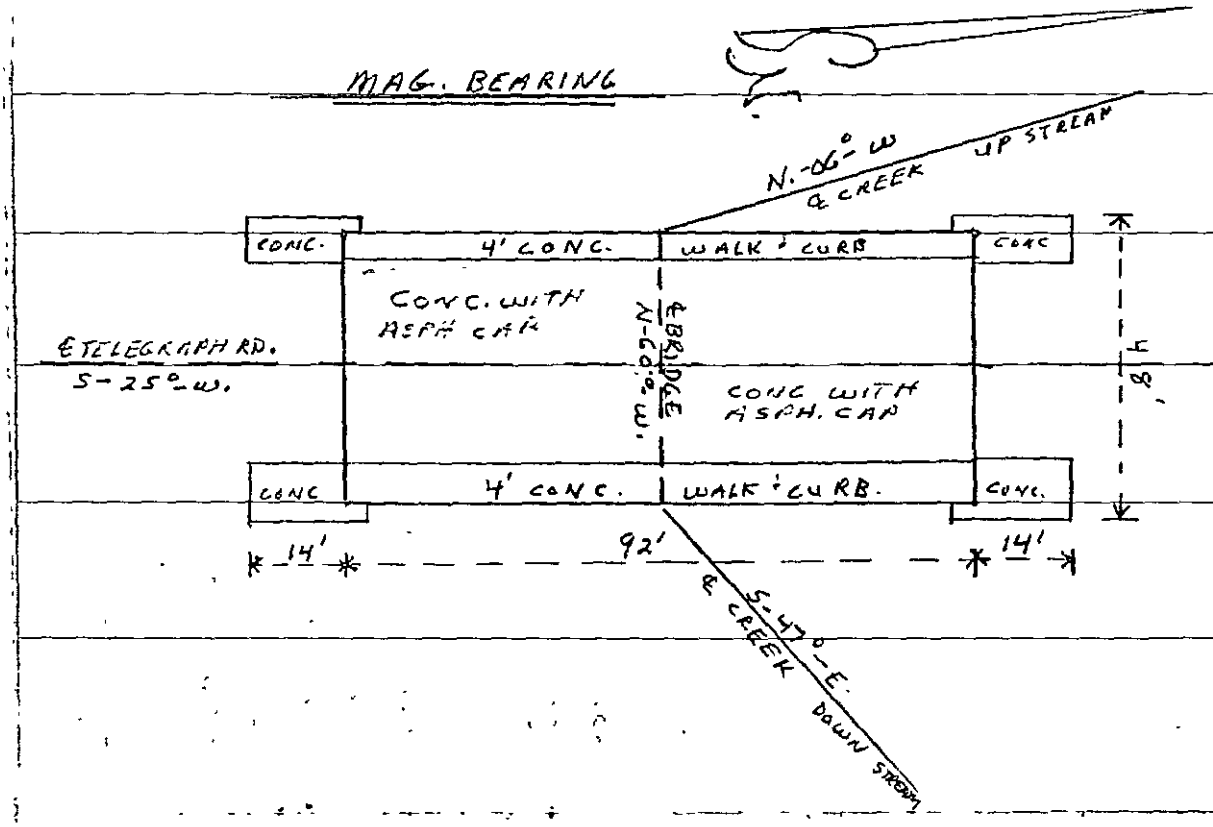
SEC #11 LEFTSIDE OF BRIDGE FACING RIGHT (TELEGRAPH RD)
SWAN CREEK

Sheet 6 of 6
Exhibit 2

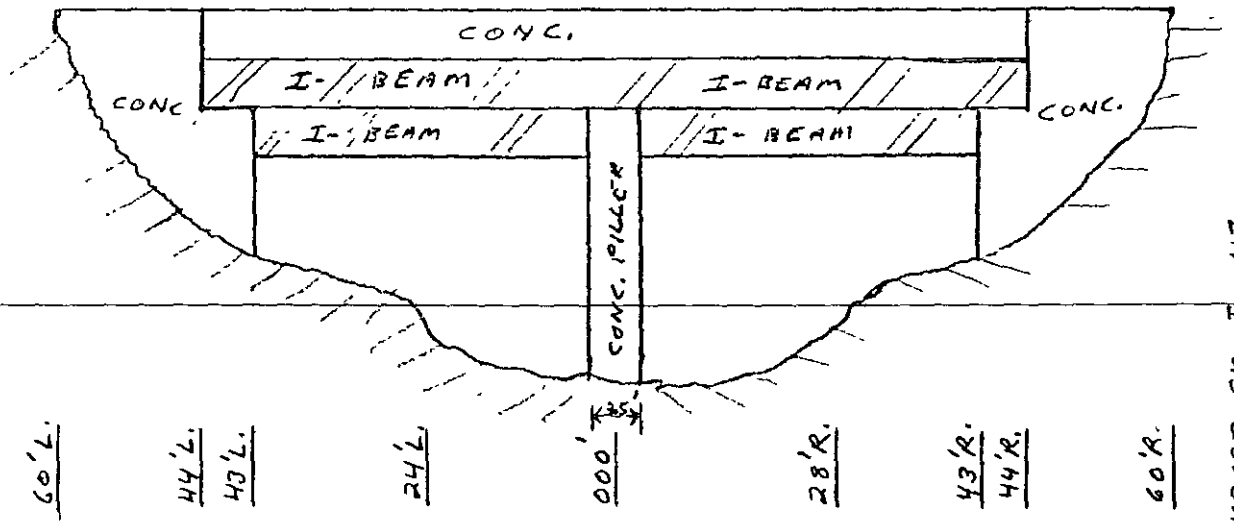
HUD 2020-05

CROSS SECTION #14 DOMESTIC DRAINAGE (SWAN CREEK) AT TELEGRAPH RD. L. & R. OFFSETS ARE FROM ℄ BRIDGE FACING DOWNSTREAM. ASH TWP

F.B. #997



CONT. ON PG. # 31



UPSTREAM SIDE SEC. #14 FACING DOWNSTREAM

H.P
M.S.
L.P

III
X
I

FEB 12-1980

U.S.-C.S. DATUM.

30.

Sheet 7 of 67
Exhibit 2

FORM 250 (313) 291-5700
Civil Engineers • Land Surveyors
WORK SHEET
25185 GODDARD ROAD TAYLOR, MICHIGAN 48180

Bridge Location: TELEGRAPH
Bridge Losses - SB Card

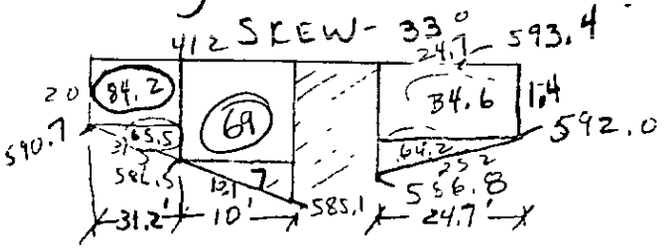
1. XK (Pier Shape Coefficient): 1.25 — HEC-2 manual
XKOR (Loss Coefficient) = 1.0 + Σk, $\Sigma k = k_f + k_e + k_p$
where k_f = friction loss coefficient
k_e = entrance loss coefficient
k_p = loss from intermediate piers

Description of Bridge:
$K_f = 29.1\, n^2 L / R^{4/3}$ for English units
Area = 325, = W_p = 120.7
$R = A/W_p$ 325/120.7 = 2.69 $R^{4/3}$ = 3.75 L = 57
n (composite) = .02
$K_f = 29.1 \times (.02)^2 \times 57/3.75 = .18$

K_e = .5 — Hydraulic Charts for the Selection of Highway Culverts Circular No. 5 Dec. 1965 pg. 43

K_p = 0 if bridge has no intermediate piers

K_p = 0.05 if bridge has no intermediate piers — HEC-2 manual



2. XKOR = 1 + .5 + .18 + .05 = 1.73
3. COFQ = Coefficient of discharge = 3.0 — HEC-2 manual
4. RDLEN = Length of weir = 0 (0 if read off BT cards)
5. BWC = bottom width of bridge opening (inc. piers): 55.66
6. BWP = total width of obstruction = 16.5 — field data
7. BAREA = bridge opening = 325.
8. SS = side slope = 0
(horizontal per 1 vertical unit)
9. ELCHU = Elevation of channel invert U/S side = 585.1
(0 if equal to minimum elevation in previous x-sect.)
10. ELCHD = Elevation of channel invert D/S side = 585.1
(0 if equal to minimum elevation in previous x-sect.)

Sheet 8 of 67
Exhibit 2

SUBJECT	BY	CHK.	SHEET NO.	File Code No. (Job No.) Owner Project Suffix
Ash Twp - Hydraulics Swan Cr	T Grant			HUD • 2020 • c7
	DATE 4-18-80	DATE	OF	

SEC #14 · BRIDGE FACING UPSTREAM (TELEGRAPH RD)
SWAN CREEK

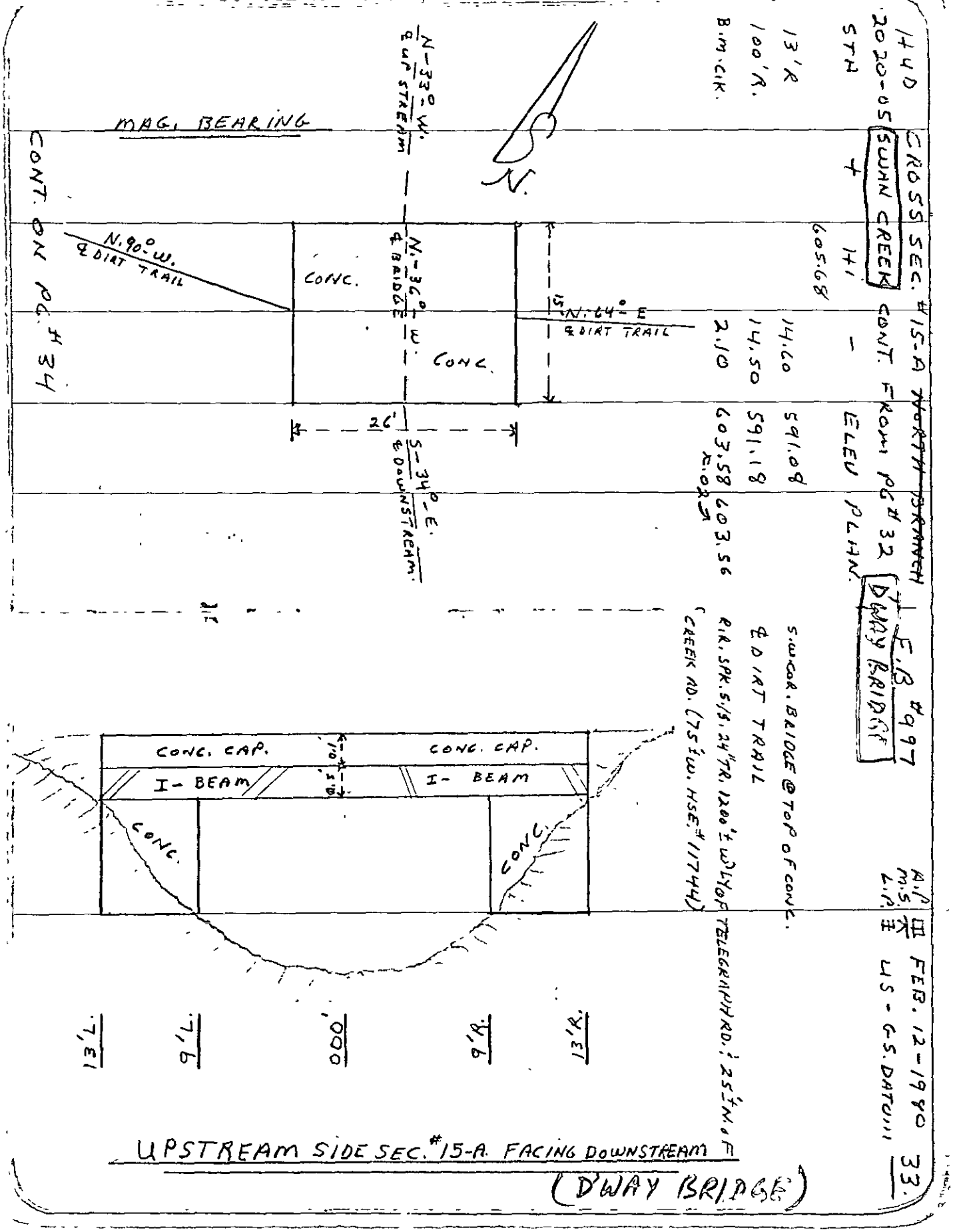
SWAN CREEK
SEC #15A UPSTREAM FACING DOWNSTREAM (D'WAY BRIDGE)
SWAN CREEK

Sheet 9 of (?)
Exhibit ?

SEE 15A LEFTSIDE OF BRIDGE FACING RIGHT (D'WAY BRIDGE)
SWAN CREEK

SWAN CREEK
SEE 15A - BRIDGE FACING D-STREAM (D'WAY BRIDGE)
SWAN CREEK

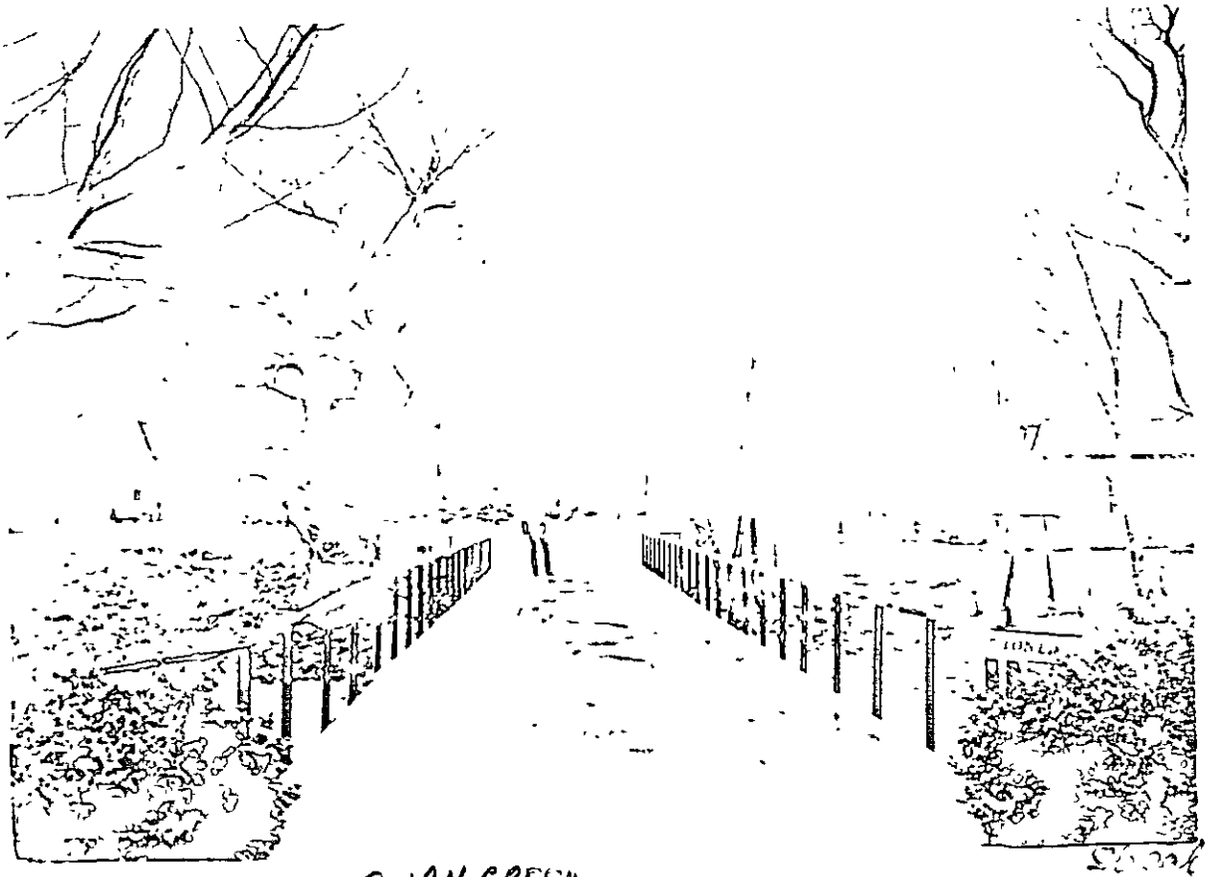
Sheet 10 of 17
Exhibit 2



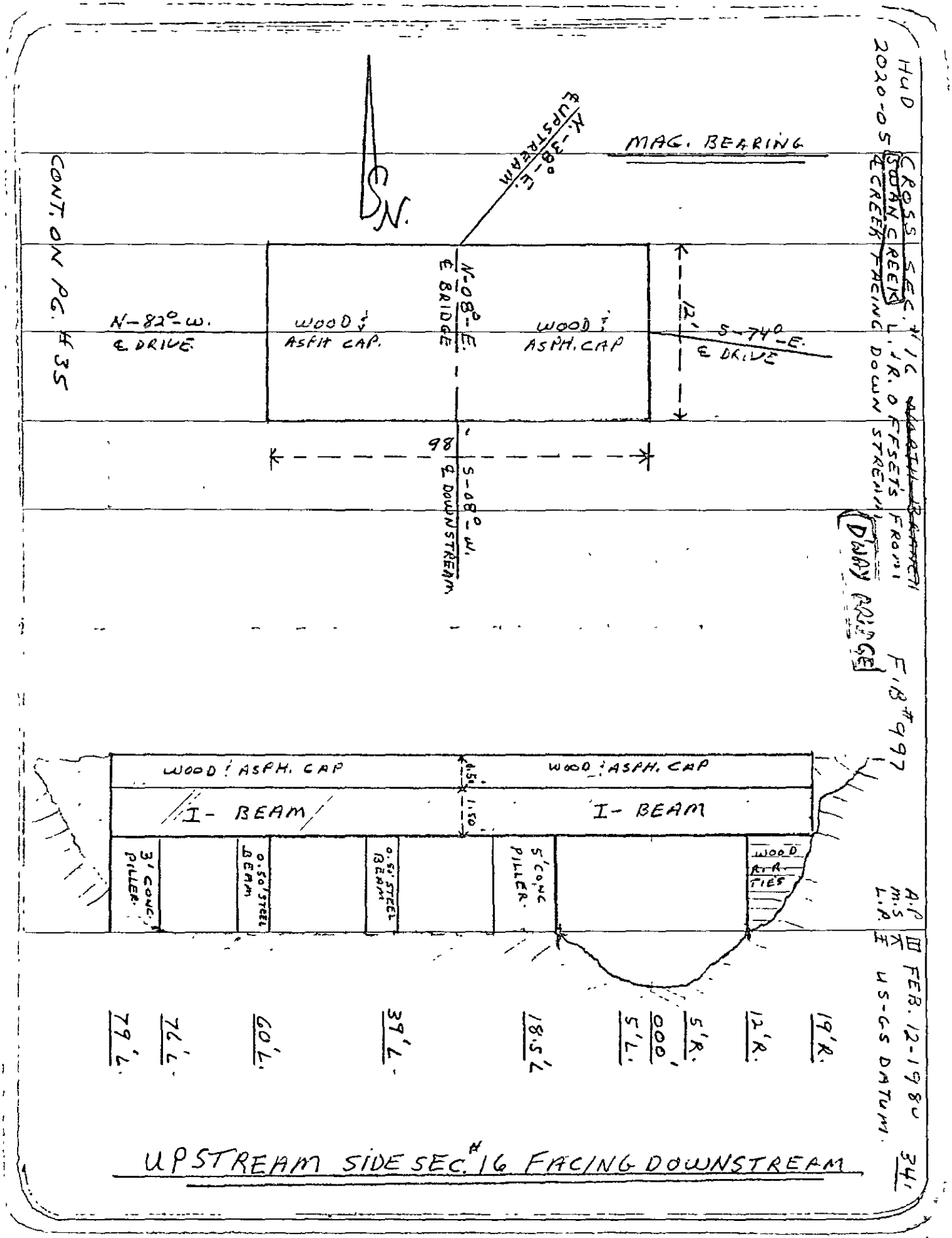
UPSTREAM SIDE SEC. #15-A FACING DOWNSTREAM

(D'WAY BRIDGE)

SEC. 16 - UPSTREAM FACING DOWNSTREAM (D'WAY BRIDGE)
SWAN CREEK



SWAN CREEK
SEC 16 - LEFTSIDE OF BRIDGE FACING RIGHT (D'WAY BRIDGE)



UPSTREAM SIDE SEC. #16 FACING DOWNSTREAM

Sheet 13 of 67

Exhibit C

FORM 25 0
(313) 291 5400

Wade, Trim & Associates, Inc.
Civil Engineers • Land Surveyors
WORK SHEET

25185 GODDARD ROAD
TAYLOR, MICHIGAN 48180

Bridge Location : D'Way Bridge # 16
Bridge Losses - SB Card

REFERENCE

1. XK (Pier Shape Coefficient) 0 — HEC-2 manual

XKOR (Loss Coefficient) = 1.0 + Σk , $\Sigma k = k_f + k_e + k_p$

where k_f = friction loss coefficient
k_e = entrance loss coefficient
k_p = loss from intermediate piers

Description of Bridge :

$k_f = 29.1\, n^2 L / R^{4/3}$ for English units

Area = 383 ft^2 = ____ W_p = 204 ft

$R = A/w_p$ = 1.88 ft $R^{4/3}$ = 2.3 L = 12 ft

n (composite) = .02

$K_f = 29.1 \times (.02)^2 \times 12 / 2.3 = .06$

K_e = 0.5 — Hydraulic Charts for the Selection of Highway Culverts Circular No. 5 Dec. 1965 pg. 45

K_p = 0 if bridge has no intermediate piers

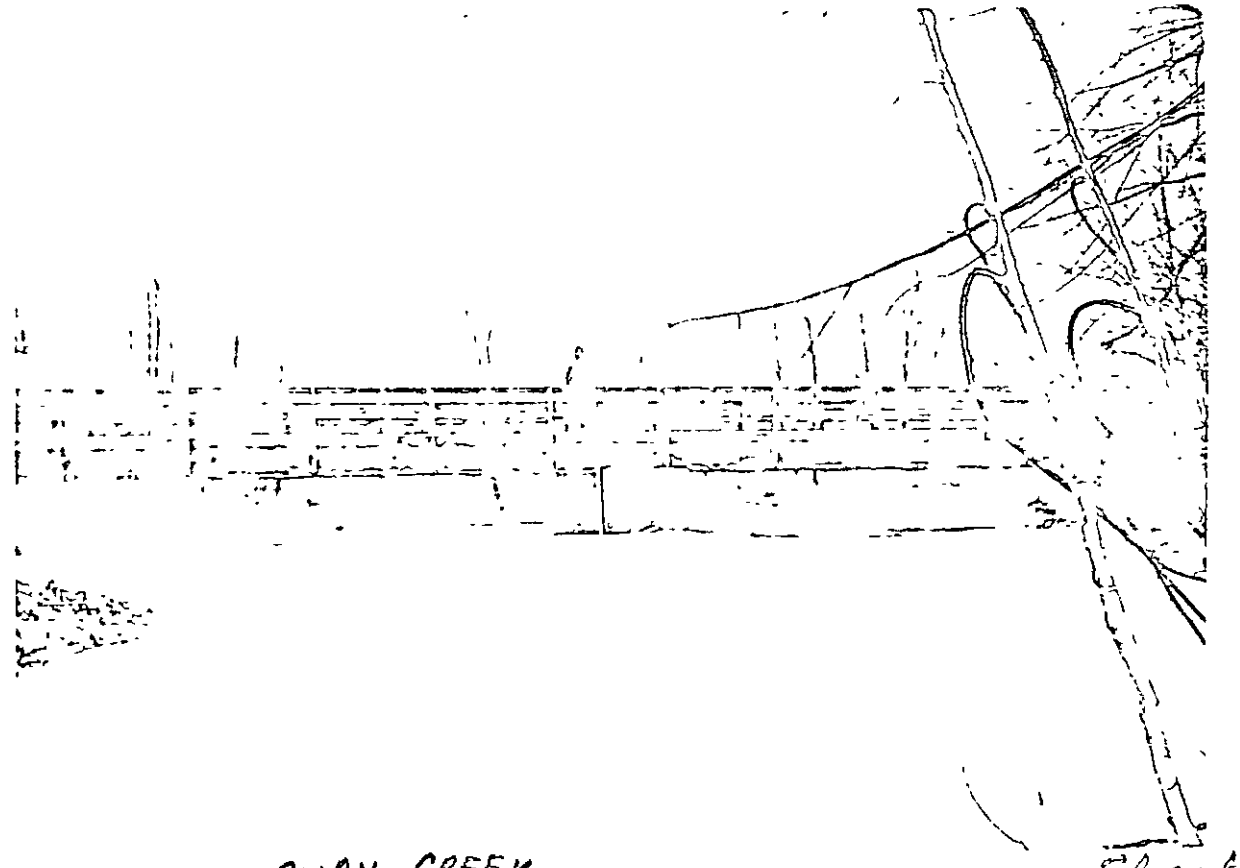
K_p = 0.05 if bridge has intermediate piers — HEC-2 manual

2. XKOR = 1 + .5 + .06 + .05 = 1.6
3. COFQ Coefficient of discharge = 3.0 — HEC-2 manual
4. RDLEN - Length of weir = 0 (0 if read off BT cards)
5. BWC - bottom width of bridge opening (inc. piers) = 43.5 ft
[illegible] of obstruction = 0 — field data
[illegible] bridge opening inc. piers = 383 ft^2
8. SS = side slope = 0
(horizontal per 1 vertical unit)
9. ELCHU = Elevation of channel invert U/S side = 586.9
(0 if equal to minimum elevation in previous x-sect.)
10. ELCHD = Elevation of channel invert D/S side = 586.9
(0 if equal to minimum elevation in previous x-sect.)

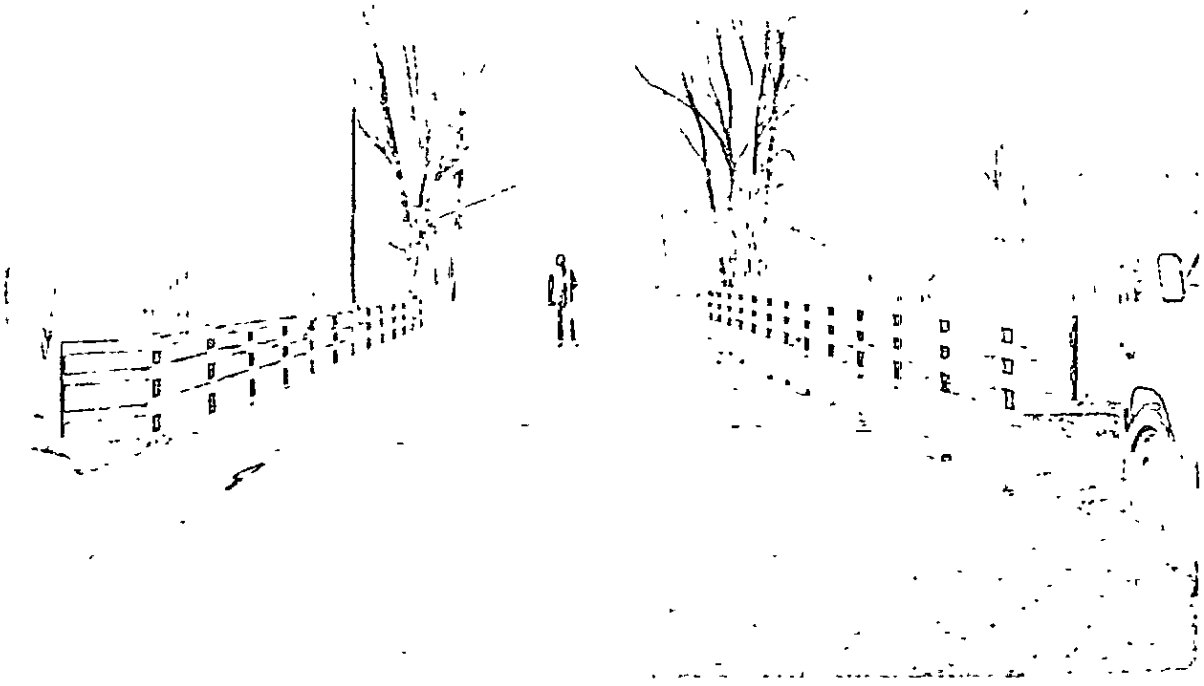
Sheet 14 of 67
Exhibit 2

SUBJECT	BY	CHK.	SHEET NO	File Code No (Job No) Owner Project Suffix
Ash Township Hydraulics Swan Creek	Sushil		___ OF ___	HUD 2020 07
	DATE 10/14/80	DATE		

SEC 16 - BRIDGE FACING UPSTREAM (D'WAY BRIDGE)
SWAN CREEK

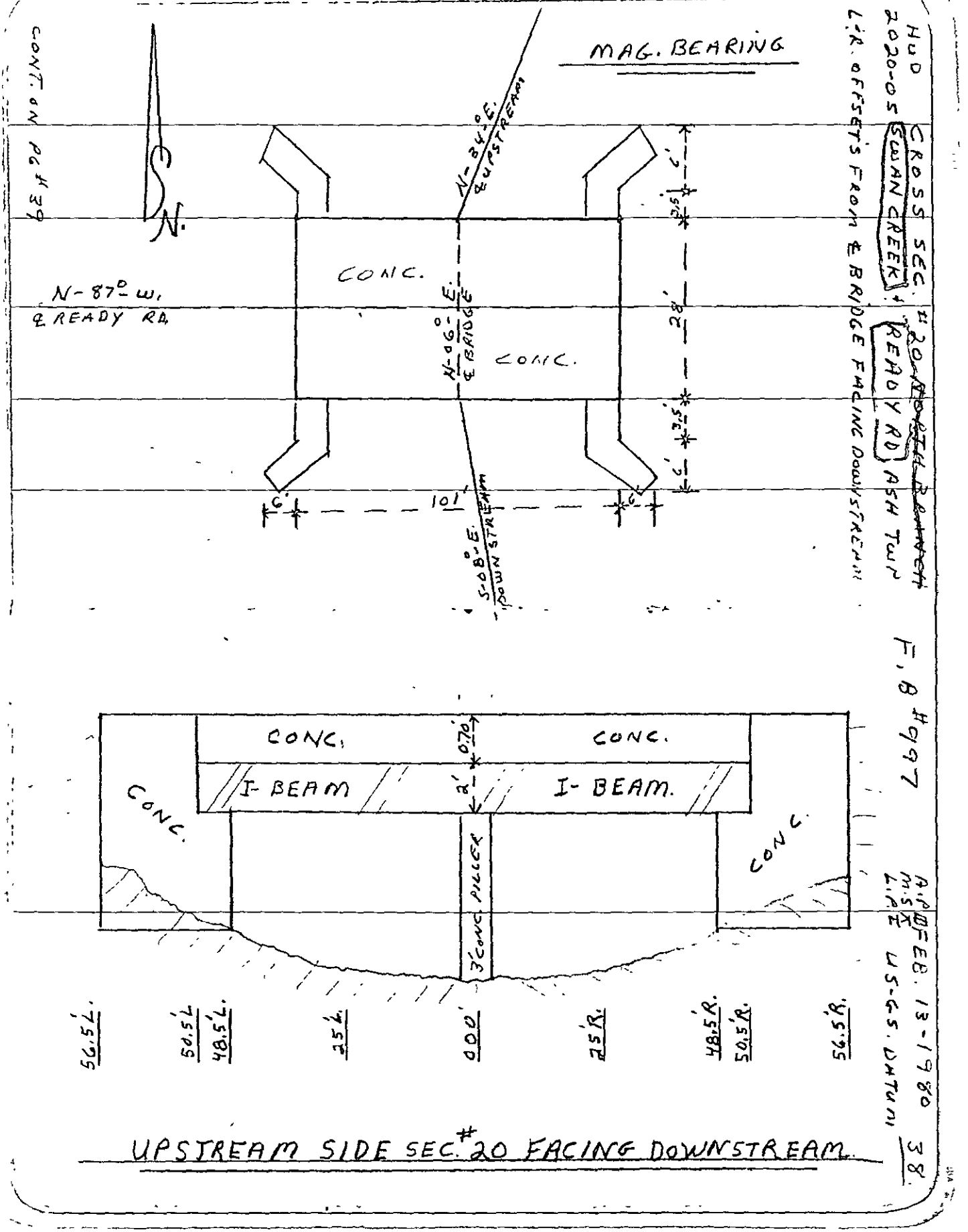


SWAN CREEK
SEC 19 - UPSTREAM FACING DOWNSTREAM (READY RD)

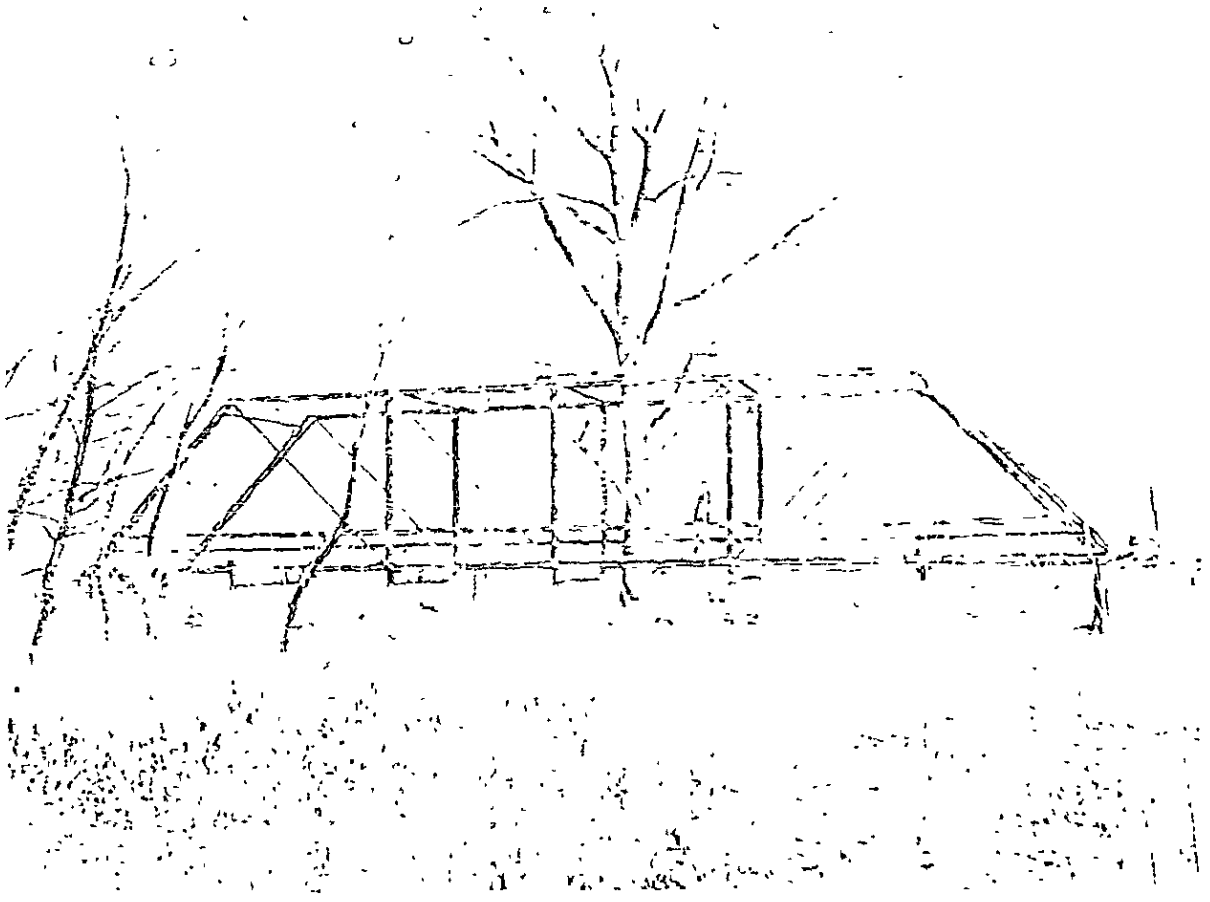


SEC "19" - LEFT SIDE OF BRIDGE FACING RIGHT (READY RD)
SWAN CREEK

SWAN CREEK
SEC "19" - BRIDGE FACING UPSTREAM (READY RD)



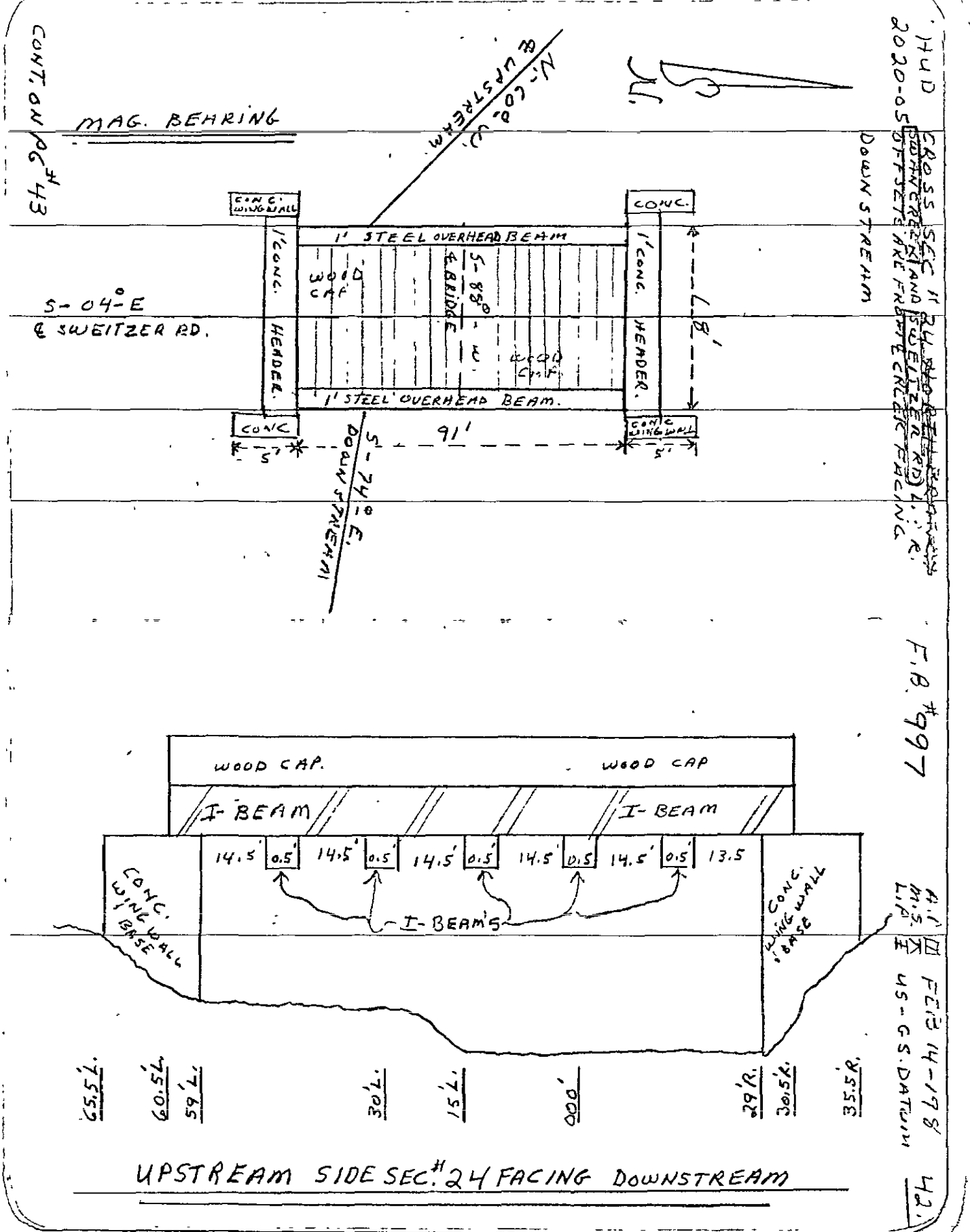
Sheet 17 of 67
Exhibit 2



SEC #24 - UPSTREAM FACING DOWNSTREAM (SWEITZER RD)
SWAN CREEK

SWAN CREEK
SEC #24 - RIGHTSIDE OF BRIDGE FACING LEFT (SWEITZER RD)

Sheet 16 of
Exhibit

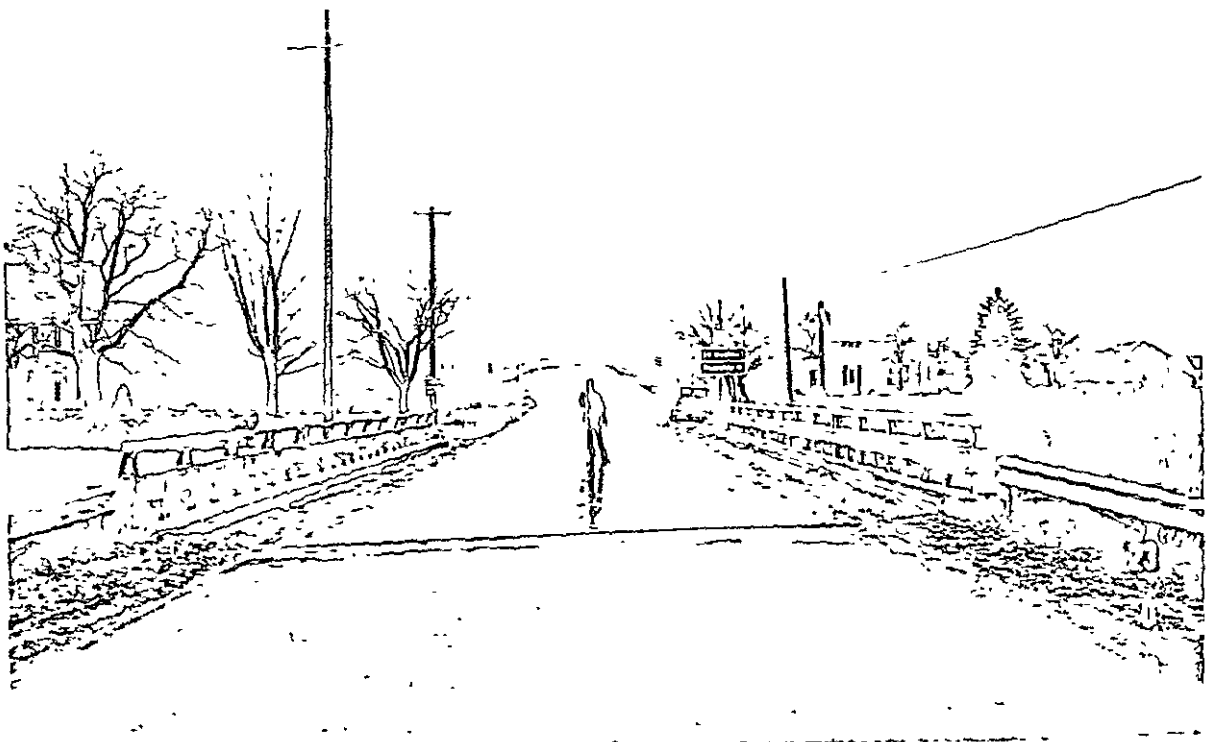


UPSTREAM SIDE SEC. #24 FACING DOWNSTREAM

Sheet 19 of 67
Exhibit P

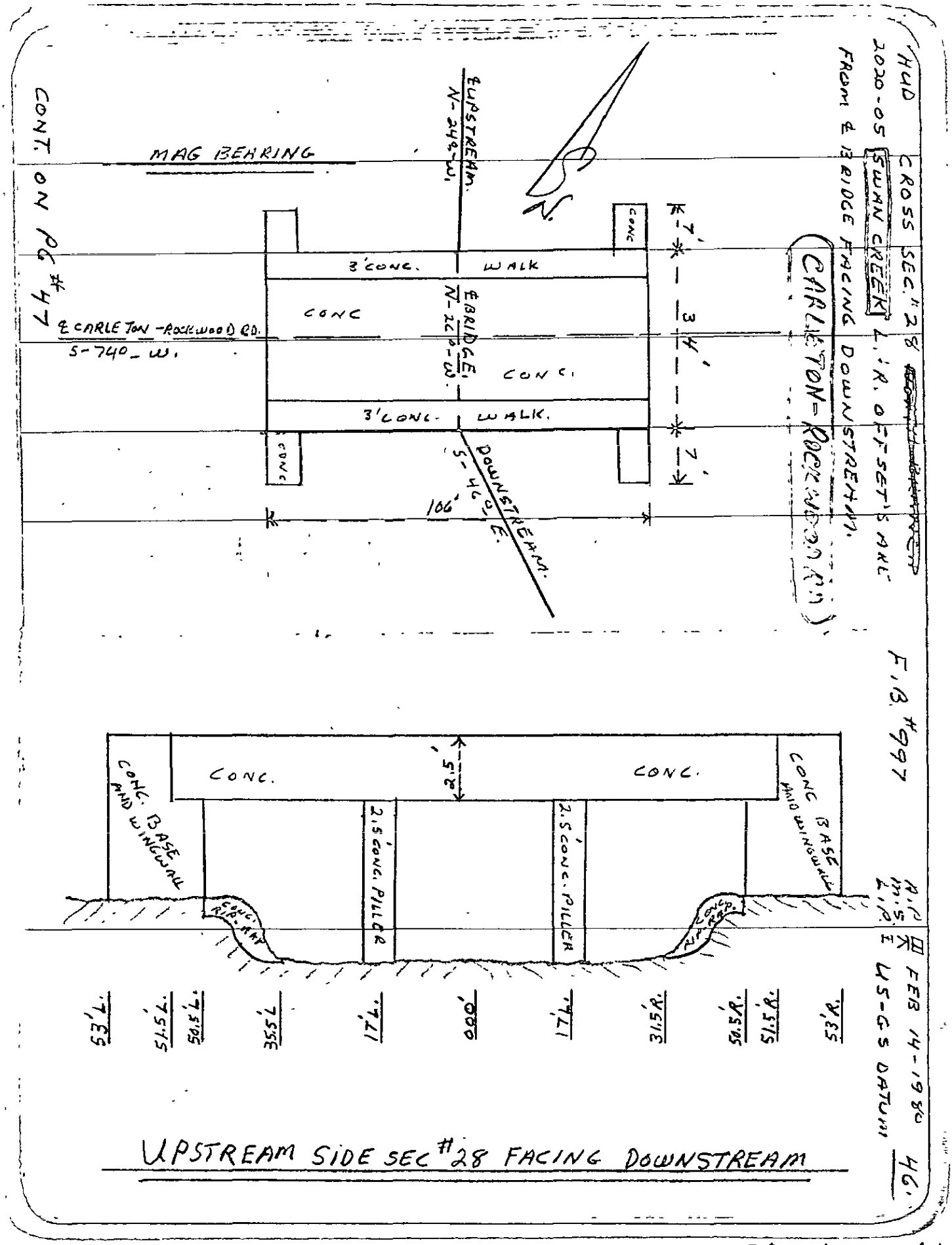
SWAN CREEK
SEC "24 - BRIDGE FACING UPSTREAM (SWEITZER RD)

SWAN CREEK
SEC "28 - UPSTREAM FACING DOWNSTREAM (CARLETON-ROSEWOOD)



SWAN CREEK
SEC. #28 - LEFTSIDE OF BRIDGE FACING RIGHT (CARLETON - ROCKWOOD RD)
LOOKING AT POB

SWAN CREEK
SEC. #28 - RIGHT SIDE FACING UPSTREAM (CARLETON - ROCKWOOD RD)



Sheet 22 of 67
Exhibit C

FORM 250 | Civil Engineers • Land Surveyors | 23185 CODDARD ROAD
(313) 291-5400 | WORK SHEET | TAYLOR, MICHIGAN 48180

Bridge Location: CARLETON-ROCKWOOD RD.

Bridge Losses - SB Card

1. XK (Pier Shape Coefficient): .95 — HEC-2 manual

XKOR (Loss Coefficient) = 1.0 + Σk, $\Sigma k = k_f + k_e + k_p$

where k_f = friction loss coefficient

k_e = entrance loss coefficient

k_p = loss from intermediate piers

Description of Bridge:

$K_f = 29.1\, n^2 L / R^{4/3}$ for English units

Area = 606 = W_p = 185.8

$R = A/W_p = 606/185.8 = 3.26$ $R^{4/3} = 4.84$ $L = 35$

n (composite) = .023

$K_f = 29.1 \times (.023)^2 \times 35/4.84 = .11$

K_e = .2 — Hydraulic Charts for the Selection of Highway Culverts Circular No. 5 Dec. 1965 pg 43

K_p = 0 if bridge has no intermediate piers

K_p = 0.05 if bridge has no intermediate piers — HEC-2 manual

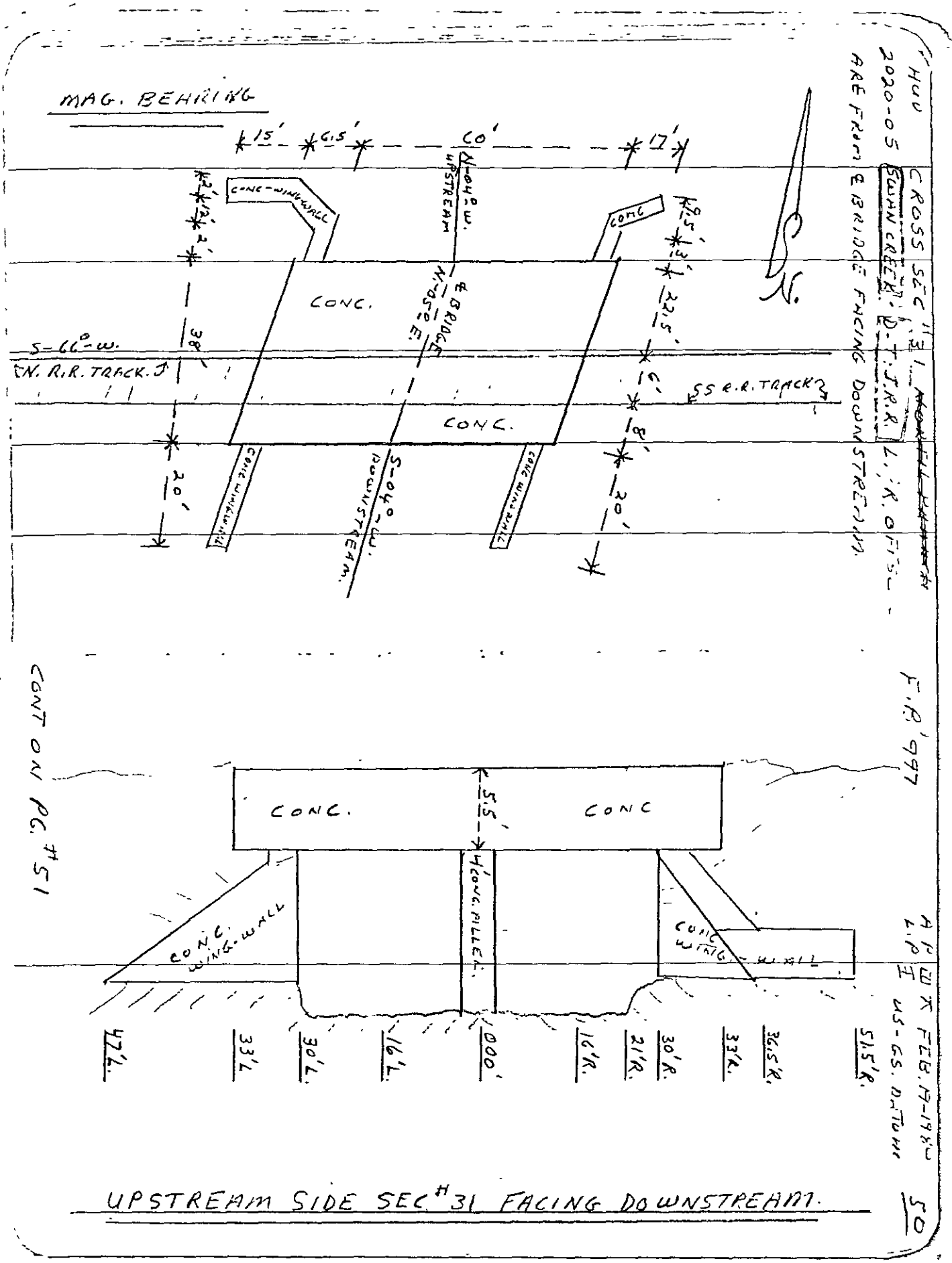
2. XKOR = 1 + .2 + .11 + .05 = use 1.5
3. COFQ = Coefficient of discharge = 3. — HEC-2 manual
4. RDLEN = Length of weir = 0 (0 if read off BT cards)
5. BWC = bottom width of bridge opening (inc. piers) = 78.2
6. BWP = total width of obstruction = 19.4 — field data
7. BAREA = bridge opening = 606
8. SS = side slope = 0 (horizontal per 1 vertical unit)
9. ELCHU = Elevation of channel invert U/S side = 591.5 (0 if equal to minimum elevation in previous X-sect.) — Sheet 23 of 67
10. ELCHD = Elevation of channel invert D/S side = 591.5 (0 if equal to minimum elevation in previous X-sect.) — Exhibit 2

SUBJECT Ash Twp - Hydraulics | BY T Green | CHK. | SHEET NO. ___ OF ___ | File Code No. (Job No.) Owner Project Suffix HUD 2020 07
DATE 2-27-80 | DATE

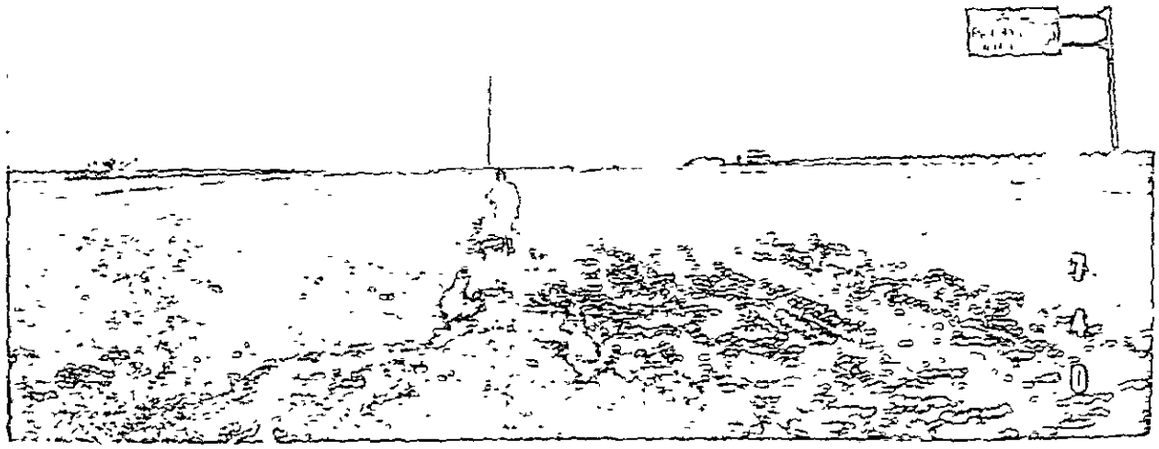
SEC #31 - UPSTREAM FACING DOWNSTREAM (D. T. & I. Railroad)
SWAN CREEK

SWAN CREEK
SEC. #31 - RIGHTSIDE OF BRIDGE TO LEFT (D. T. & I. Railroad)

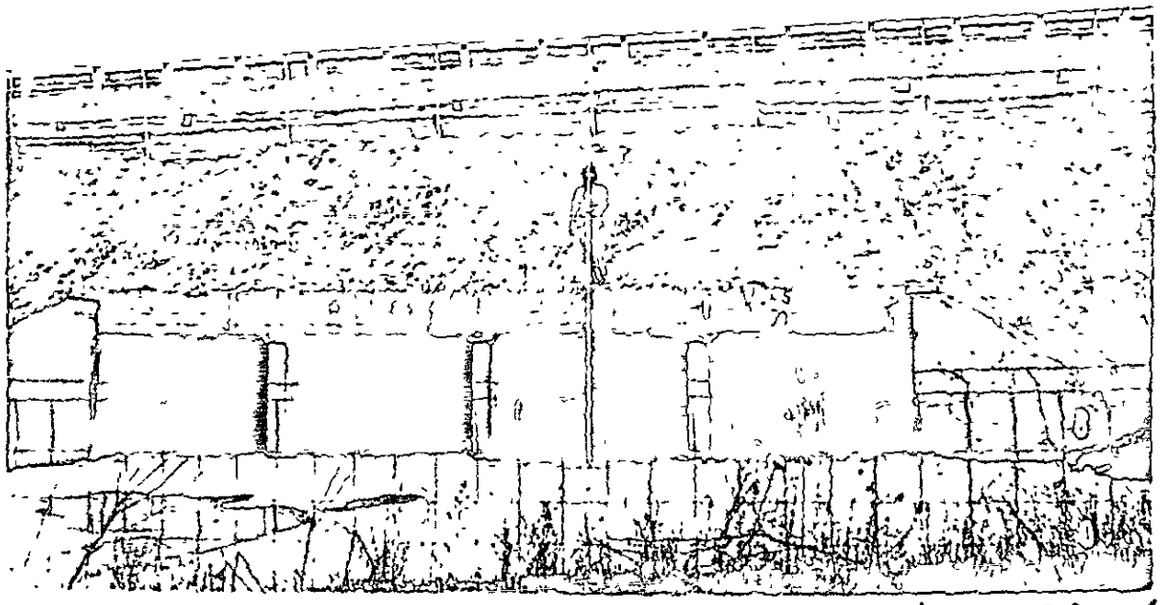
Sheet 24 of
Exhibit



Sheet 25 of 30
Exhibit

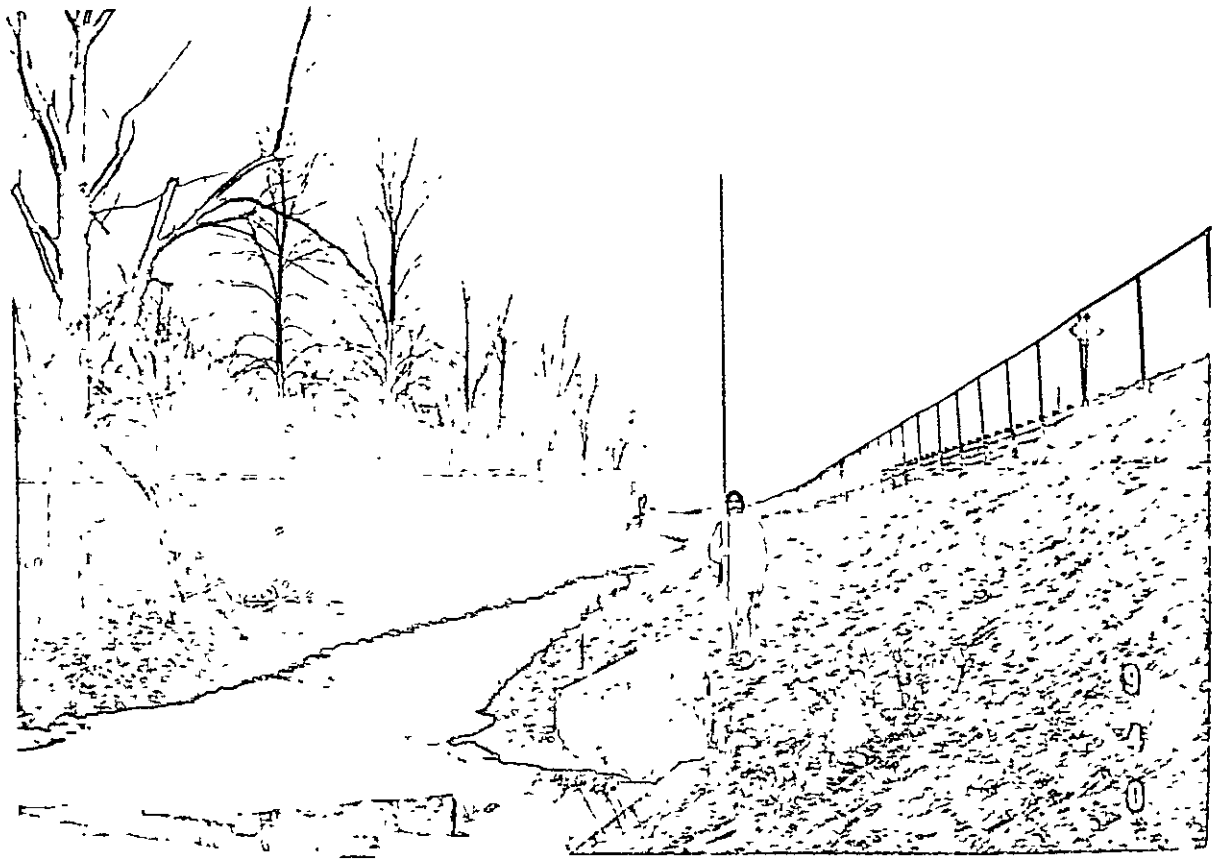


SEC #37 - MEDIAN OF 275 FACING SOUTH (I-275)
SWAN CREEK

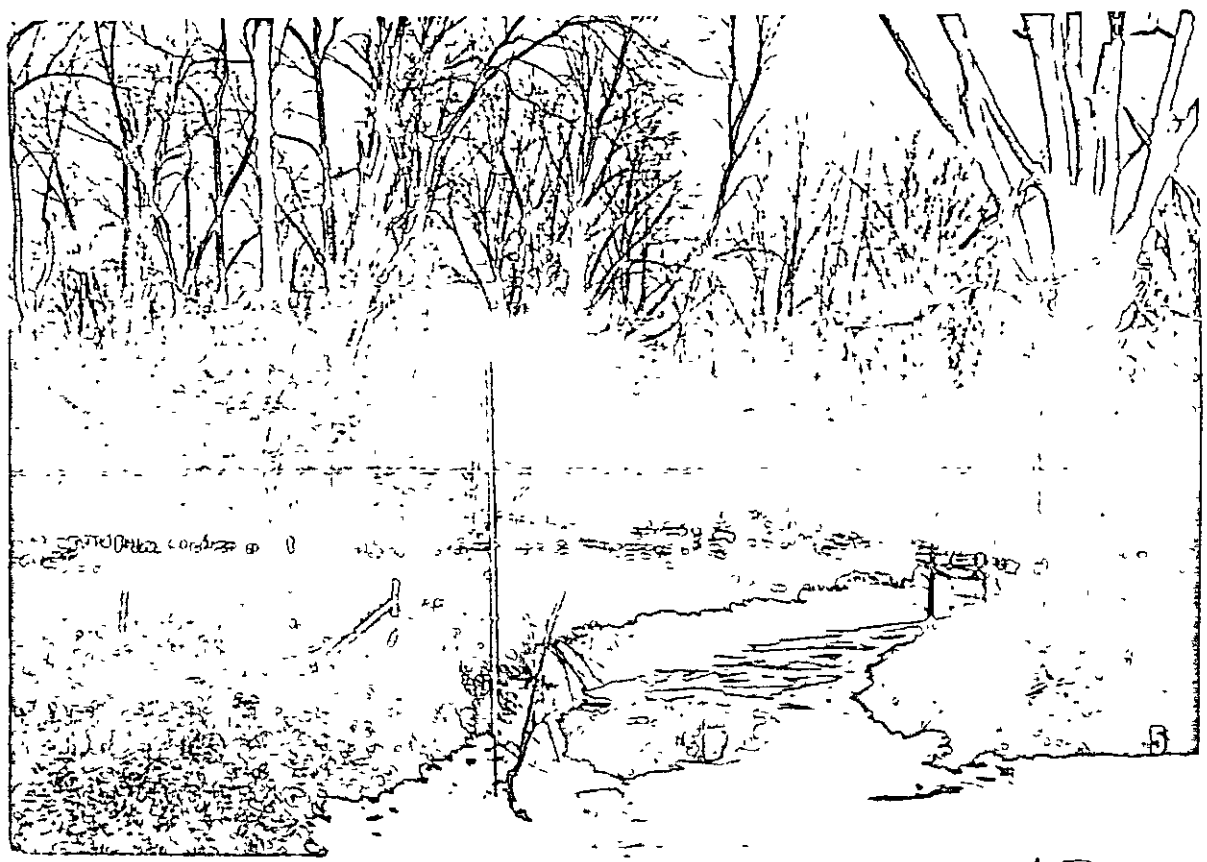


SEC #32 - UPSTREAM FACING DOWNSTREAM (I-275)
SWAN CREEK

Sheet 26 of 27
Exhibit 2



SEC #3B - RIGHTSIDE OF BOX CULVERT FACING LEFT (I-275)
SWAN CREEK

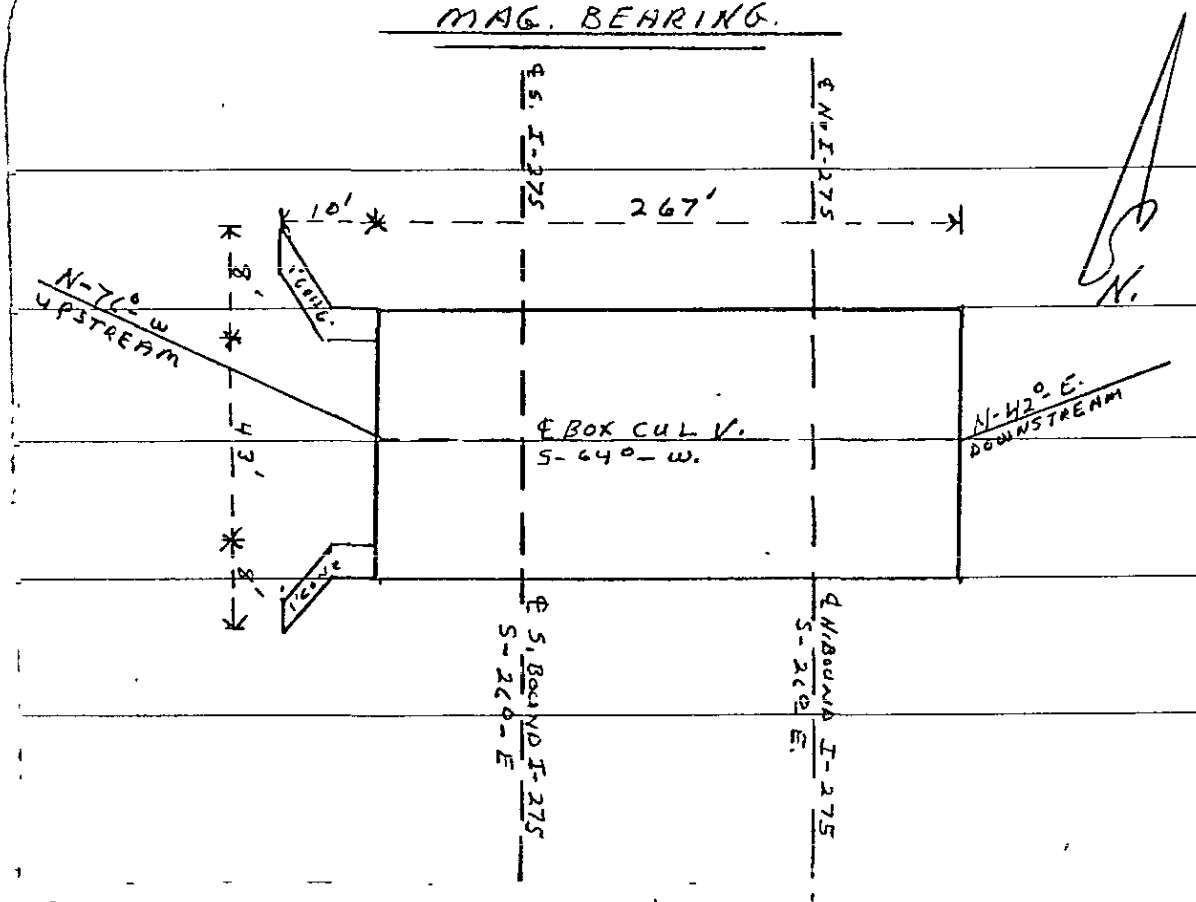


SEC #3B STANDING ON BOX CULVERT FACING UPSTREAM (I-275)
SWAN CREEK

Sheet 27 of 67
Exhibit 2

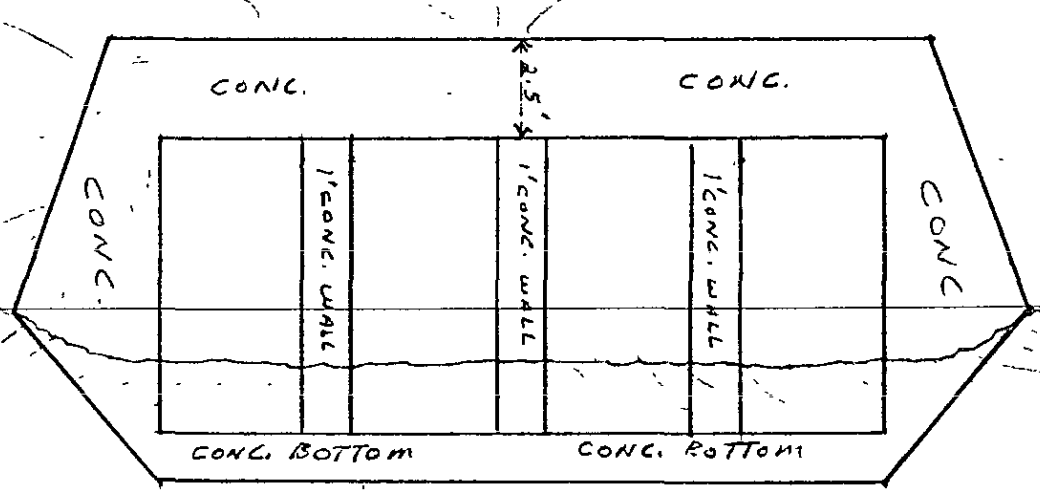
HUD CROSS SEC. # 37, 38 (SEE N)
2020-05 CREEK AND I-275 L. & R. OFFSETS.
FROM ℄ BOX. CULV. FACING DOWNSTREAM.

MAG. BEARING.



F.B. # 997

CONT ON PG #74



N.P.
M.S.
L.R.
X
II
FEB. 26-1980
73.

U.S.-G.S. DATUM.

29.5'R. 22.5'R. 21.5'R. 16.5'R. 5.5'R. 0.00' 5.5'L. 16.5'L. 21.5'L. 22.5'L. 29.5'L.

UPSTREAM SIDE SEC. #38 FACING DOWNSTREAM

Sheet 28 of 61
Exhibit 9

FORM 250
(313) 291-7700
Civil Engineers • Land Surveyors
WORK SHEET
25125 CODDINGTON ROAD
TAYLOR, MICHIGAN 48180

Bridge Location: I-275
Bridge Losses - SB Card

1. XK (Pier Shape Coefficient): 1.25 — HEC-2 Manual

XKOR (Loss Coefficient) = 1.0 + Σk, $\Sigma k = k_f + k_e + k_p$

where k_f = friction loss coefficient
k_e = entrance loss coefficient
k_p = loss from intermediate piers

Description of Bridge:

$K_f = 29.1\, n^2 L / R^{4/3}$ for English units.

Area = 3.64 = ____ KID = 153

$R = A/wp = 364/153 = 2.38$ $R^{4/3} = 3.13$ $L = 267$

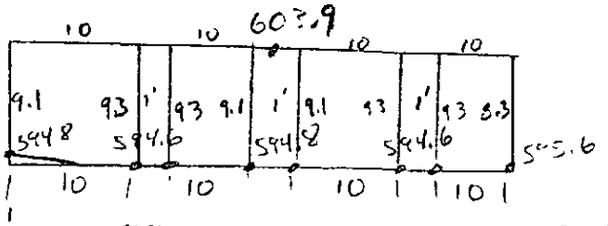
n (composite) = .02

$K_f = 29.1 \times (.02)^2 \times 267/3.13 = .99$

$K_e = .2$ — Hydraulic Charts for the Selection of Highway Culverts Hyd. Eng. Circular No. 5 Dec. 1965 Pg. 53

~~($K_p = 0$)~~ if bridge ~~has~~ no intermediate piers

$K_p = 0.05$ if bridge has no intermediate piers — HEC-2 manual



2. XKOR = 1 + .2 + .99 + 0 = 2.19

3. COFQ = Coefficient of discharge = 3. — HEC-2 manual

4. RDLEN = Length of weir = 0 (0 if read off BT cards)

5. BWC = bottom width of bridge opening (inc. piers) = 42.14

6. BWP = total width of obstruction = 3. — field data

7. BAREA = bridge opening = 364

8. SS = side slope = 0
(horizontal per 1 vertical unit)

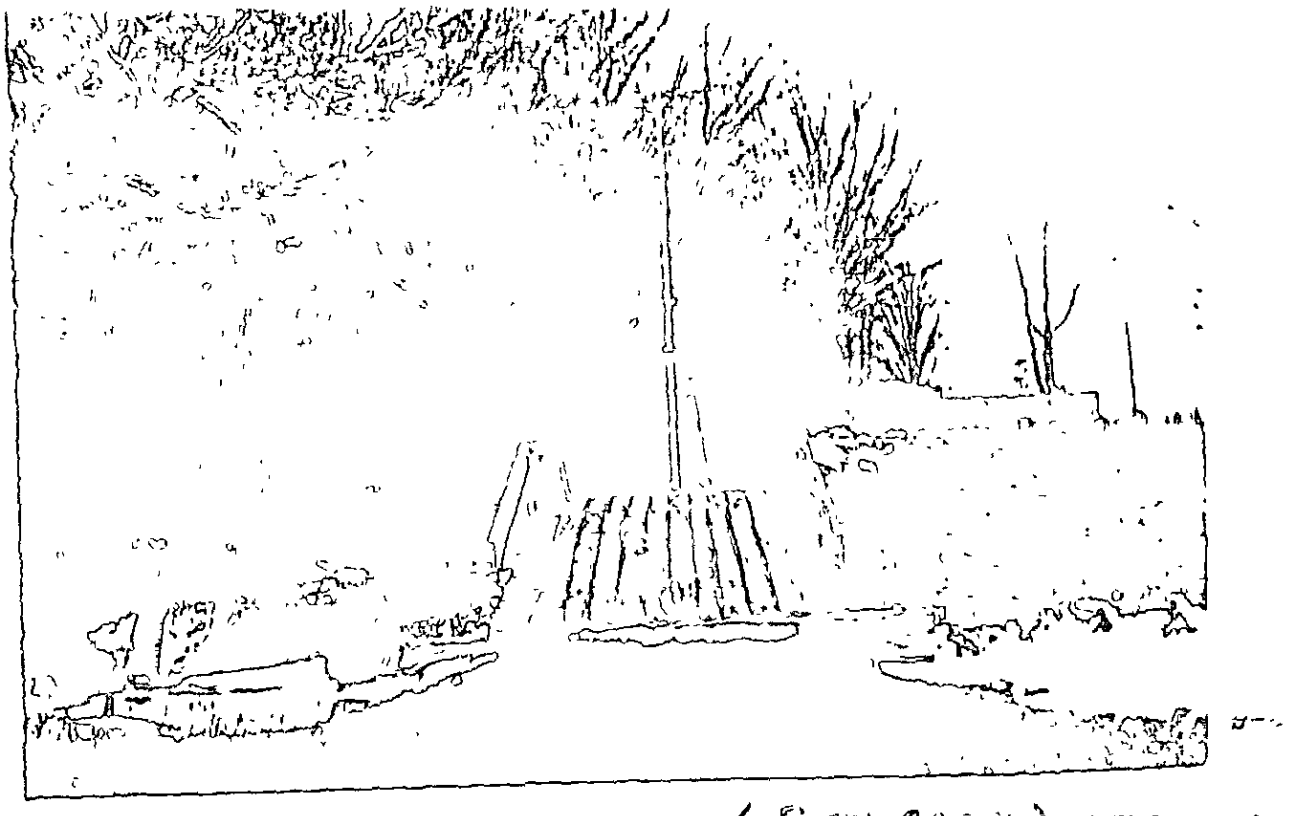
9. ELCHU = Elevation of channel invert U/S side = 594.6
(0 if equal to minimum elevation in previous X-sect.)

10. ELCHD = Elevation of channel invert D/S side = 594.3
(0 if equal to minimum elevation in previous X-sect.)

Sheet 29 of 67

Exhibit 2

SUBJECT	BY	CHK.	SHEET NO.	File Code No (Job No) Owner Project Suffix
Ash Twp. - Hydraulics Swan Creek	T. Grant		OF	AUD • 2020 • 07
	DATE 3-3-20	DATE		

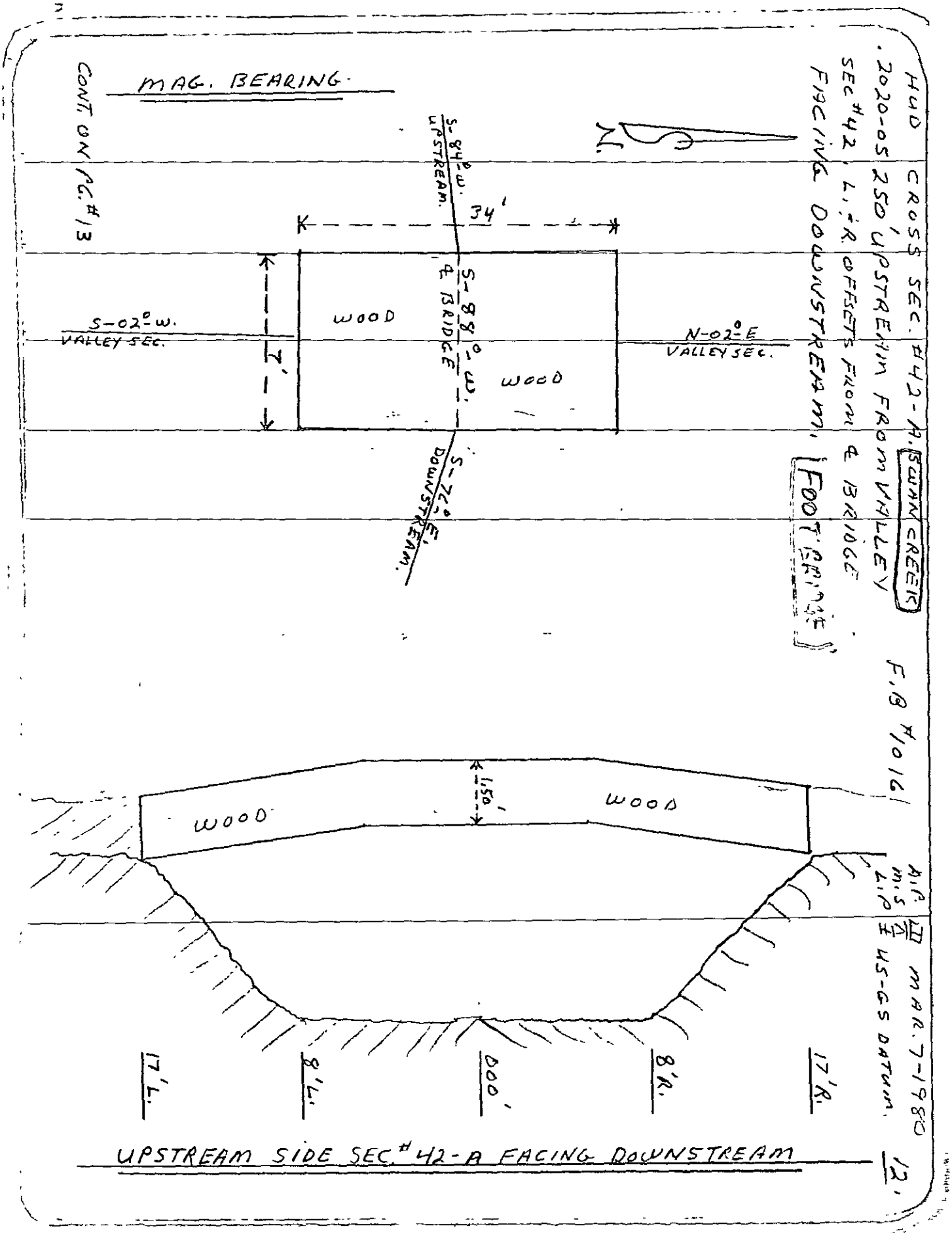


SKL #42A. LEFTSIDE OF BRIDGE TO RIGHT (FOOT BRIDGE)
SWAN CREEK

#74

STC #42A BRIDGE FACING UPSTREAM (FOOT BRIDGE)
SWAN CREEK

Sheet 30 of 67
Exhibit 2



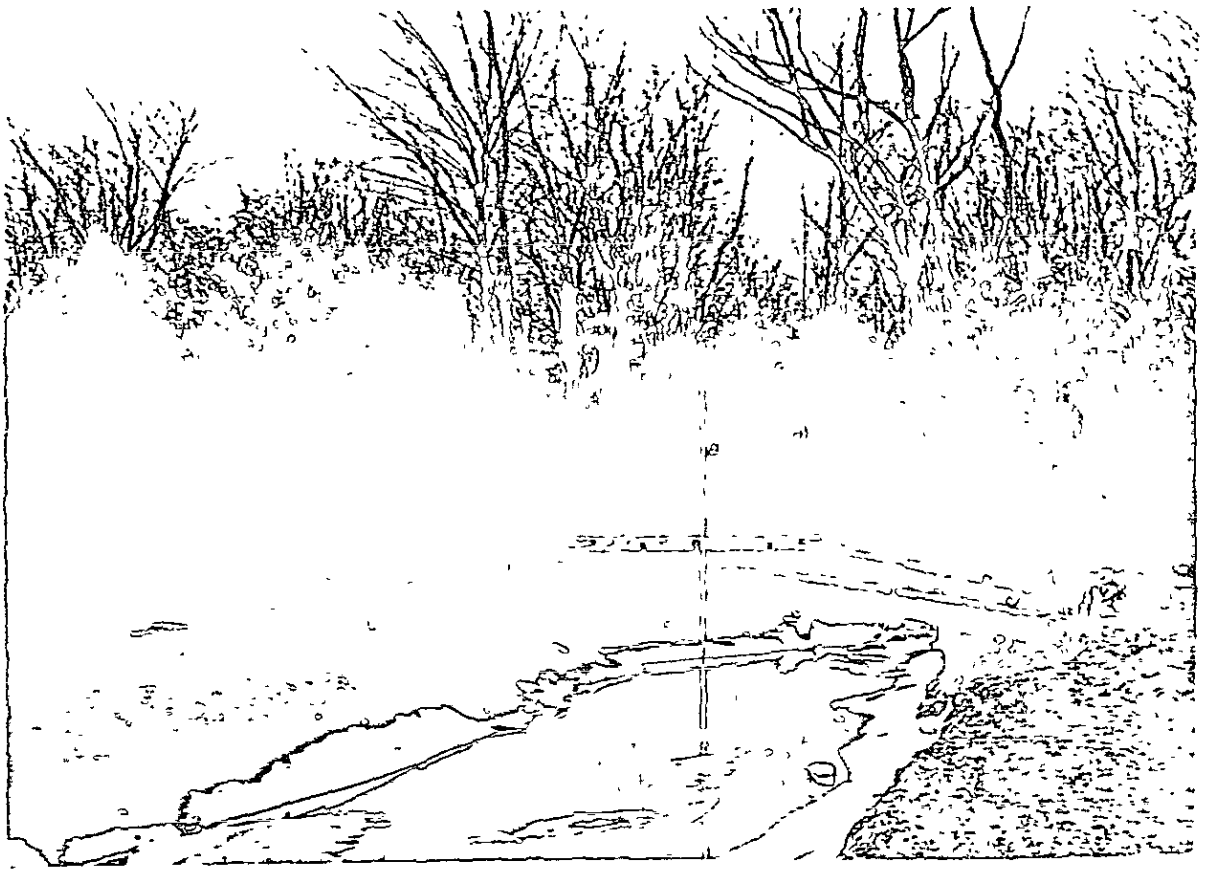
HUD CROSS SEC. #42-A, SWAN CREEK
.2020-05 250' UPSTREAM FROM VALLEY
SEC #42, L. & R. OFFSETS FROM ℄ BRIDGE
FIGURING DOWNSTREAM, FOOTBRIDGE

F.B. #1016

A.I.P. PROJ. NO. 2-20-MAR-7-1980
USGS DATUM.

12.

Sheet 31 of 67
Exhibit "



#72

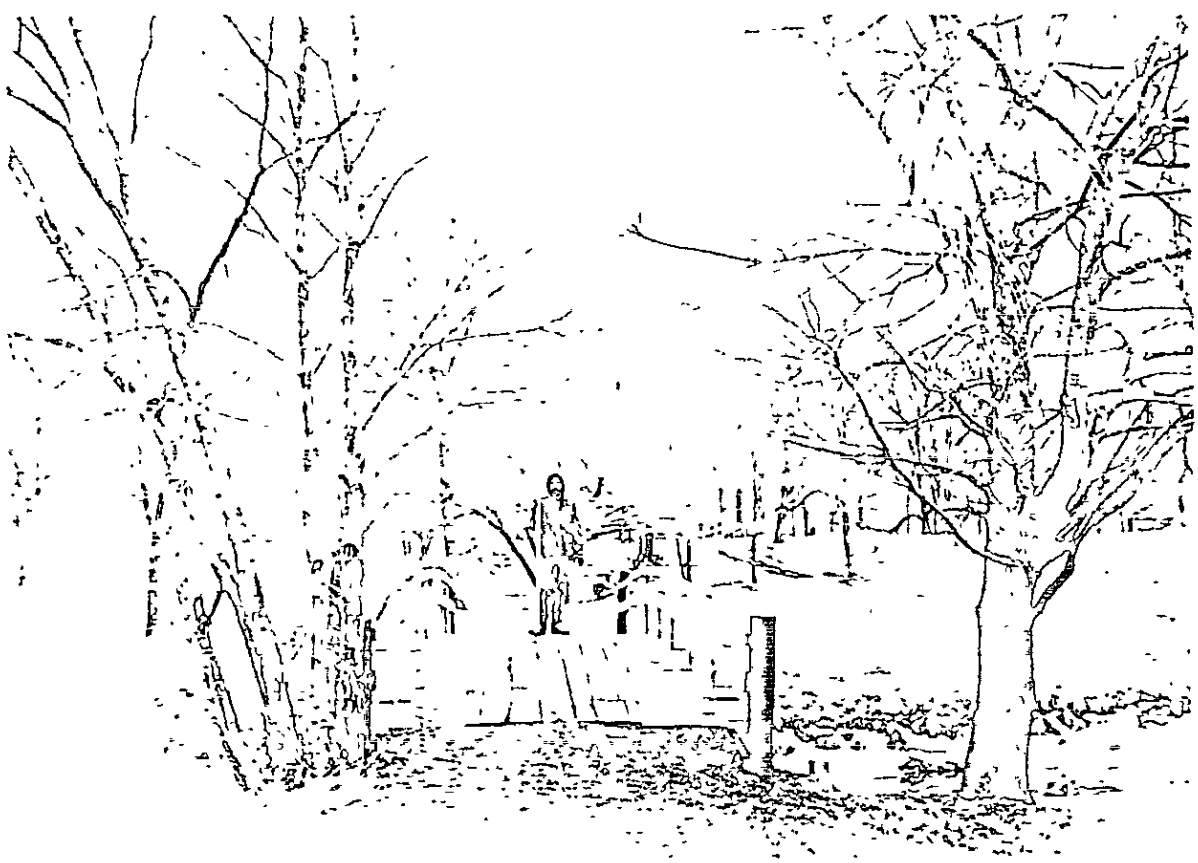
SEC #12A - UPSTREAM FACING DOWNSTREAM (FOOT BRIDGE)
SWAN CREEK

#71

SEC 12B - DOWNSTREAM FACING UPSTREAM (FOOT BRIDGE)
SWAN CREEK

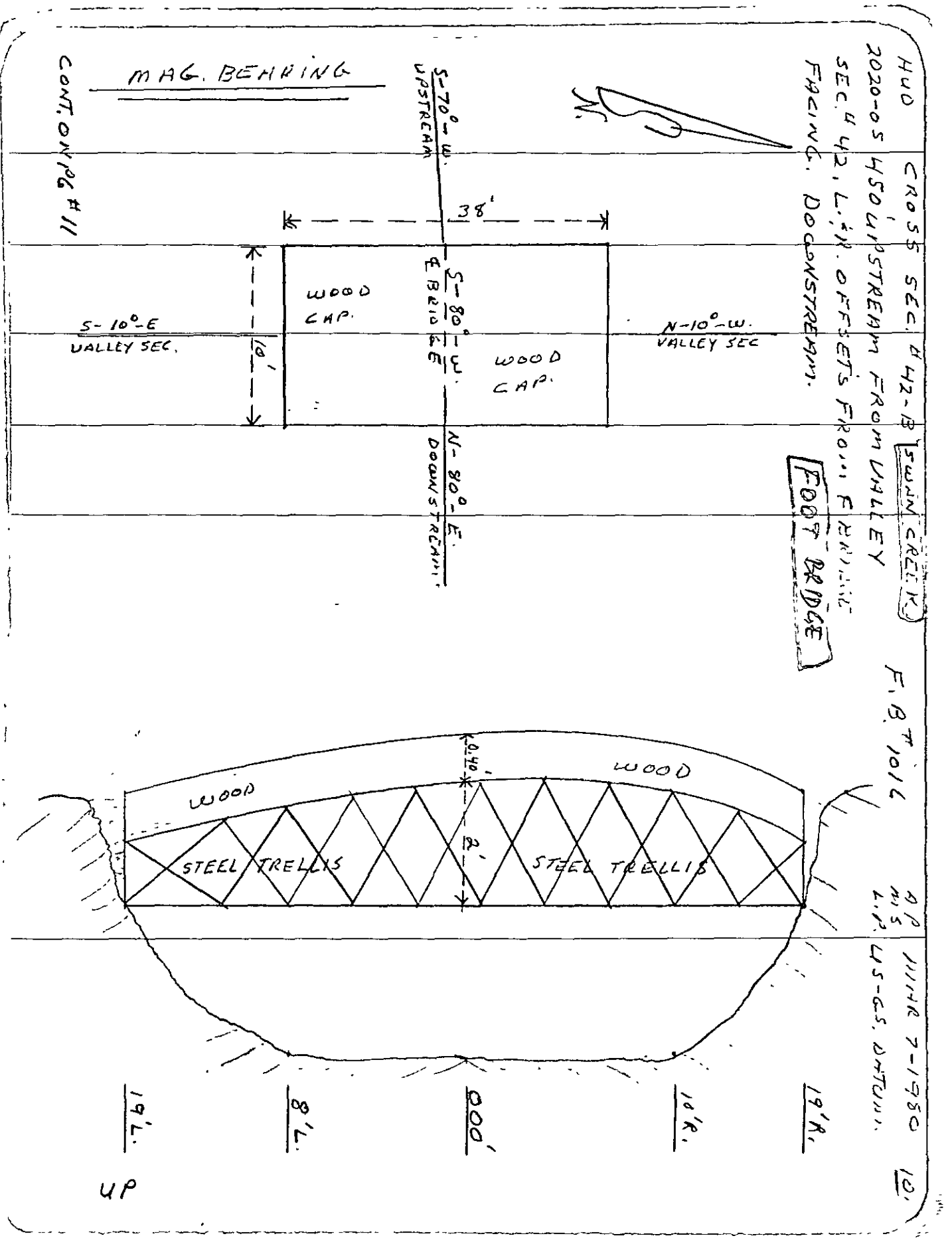
Sheet 32 of 67
Exhibit 9

SEC 42B - UPSTREAM FACING DOWNSTREAM (FOOT BRIDGE)
SWAN CREEK

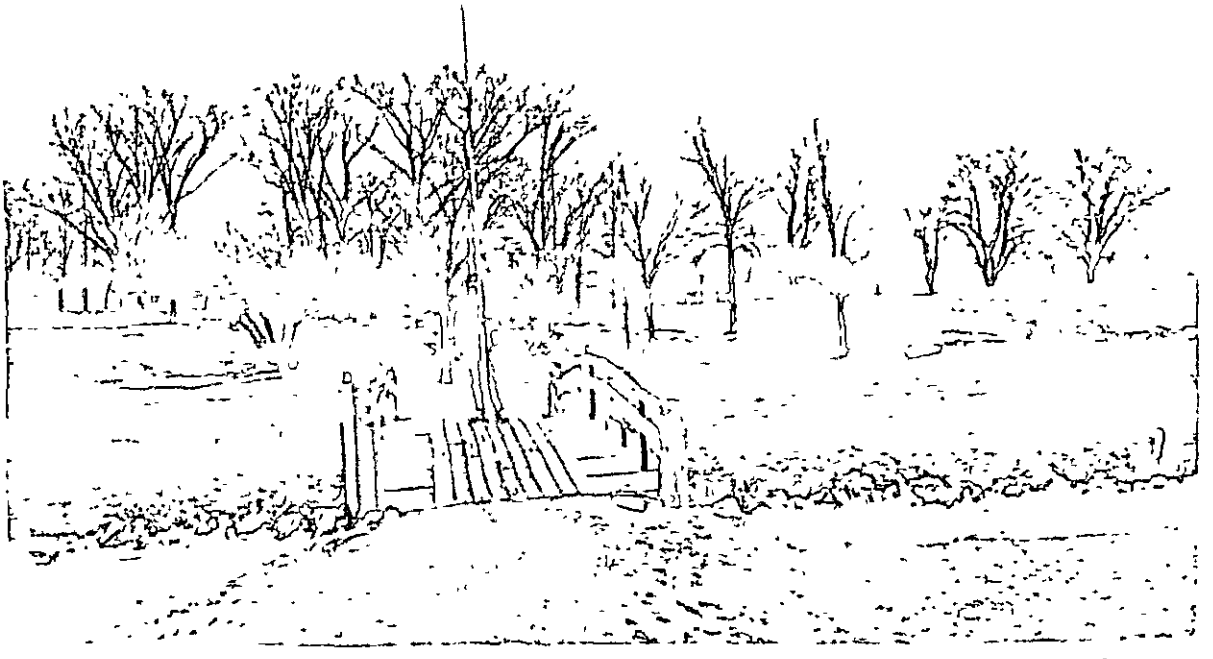


SEC 42B - LEFTSIDE OF BRIDGE TO THE RIGHT (FOOT BRIDGE)
SWAN CREEK

Exhibit



Sheet 34 of 61
Exhibit 2.



SEC 42C · LEFTSIDE OF BRIDGE FACING RIGHT (FOOT BRIDGE)
SWAN CREEK

SWAN CREEK
SEC 42C · BRIDGE FACING UPSTREAM (FOOT BRIDGE)

HUD 2020-05 SEC. #42.

CROSS SEC #42-C. SWAN CREEK.

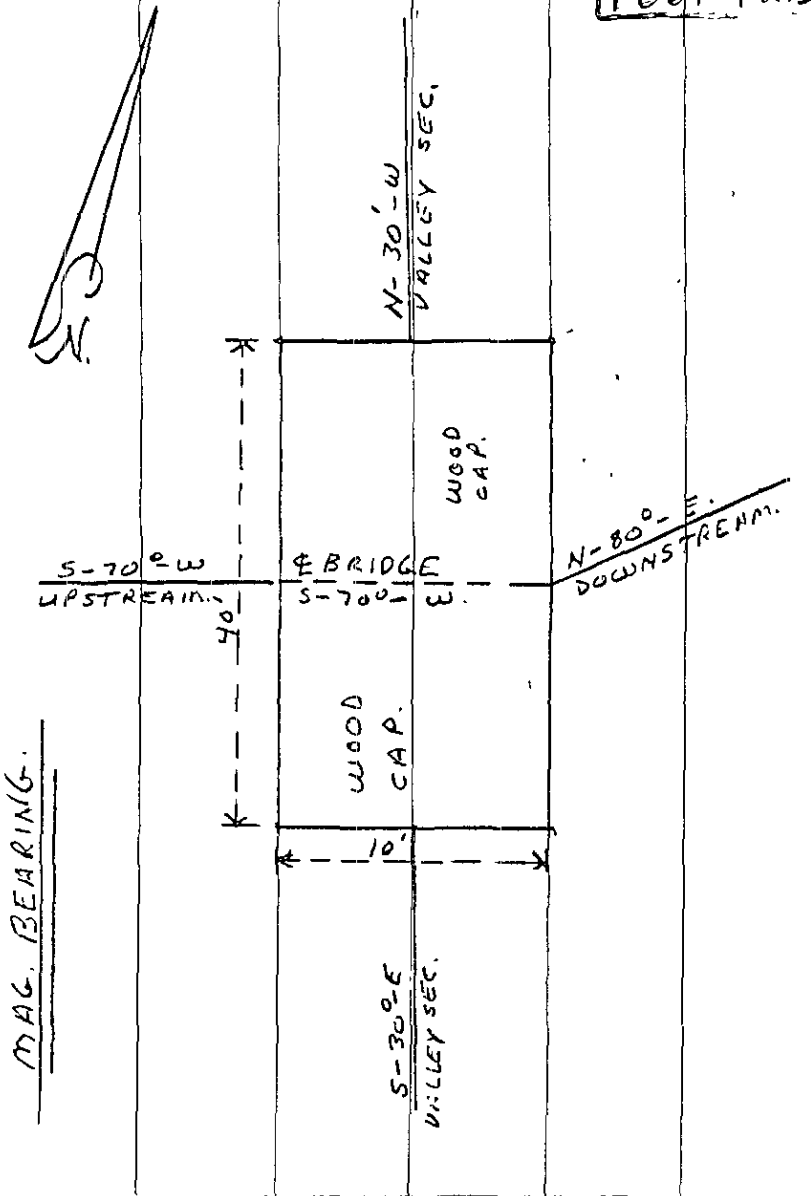
700' UPSTREAM FROM VALLEY L.'R OFFSETS FROM ℄ BRIDGE FACING DOWNSTREAM

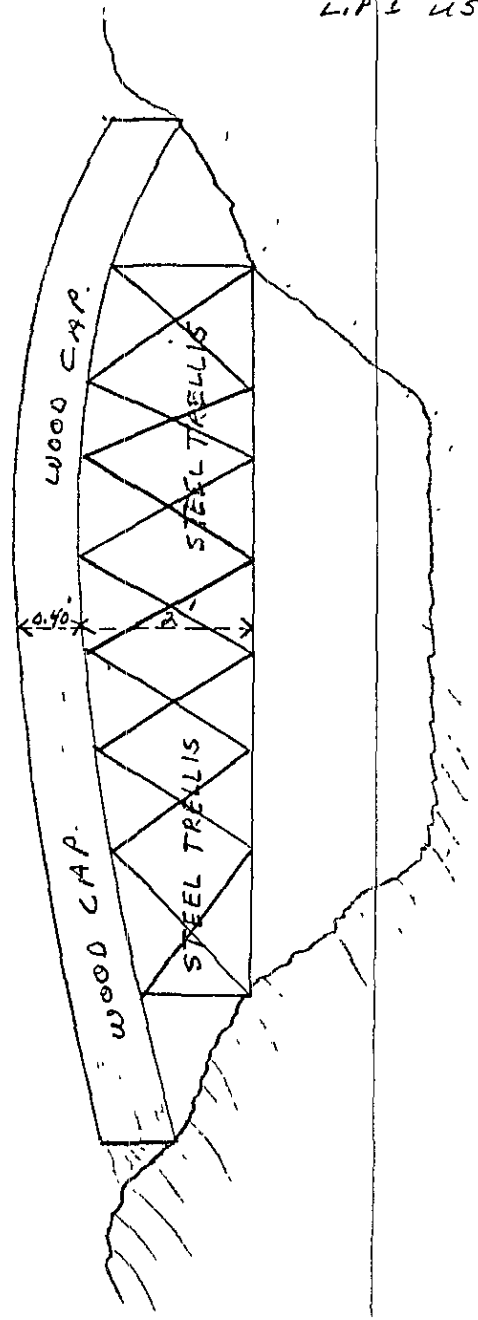
FOOT BRIDGE

F.B. #1016

A.P. 11 M.S. 4 L.P. 1 MAR. 7-1980 U.S.G.S. DATUM.

8.





20'R.

18'R.

7'R

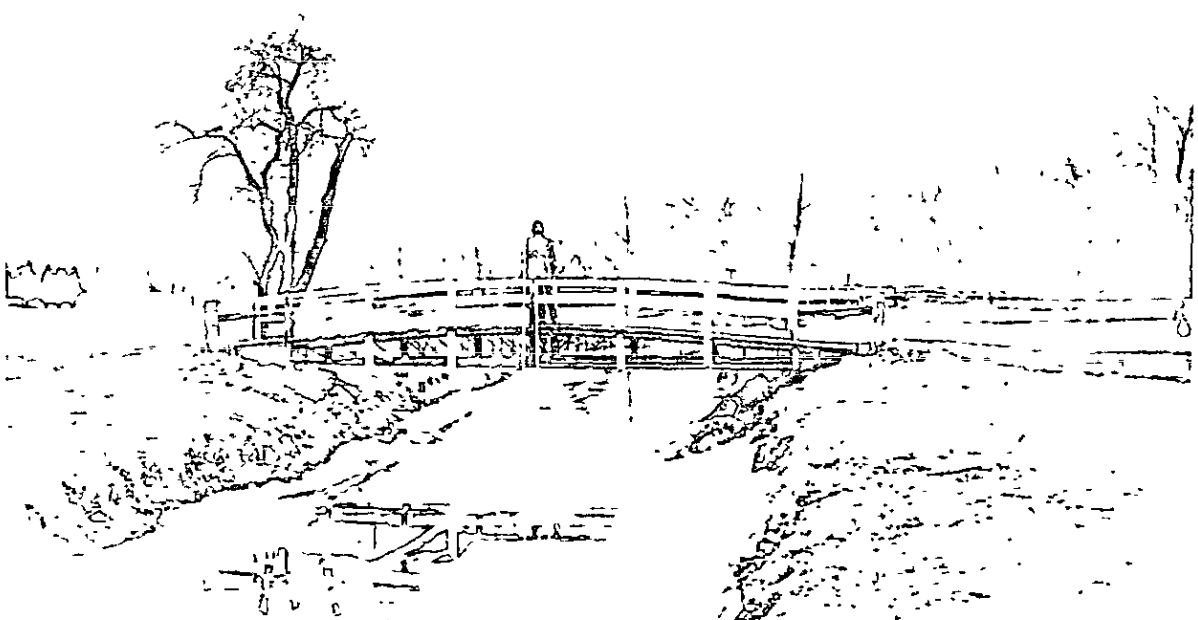
000'

7'L.

18'L.

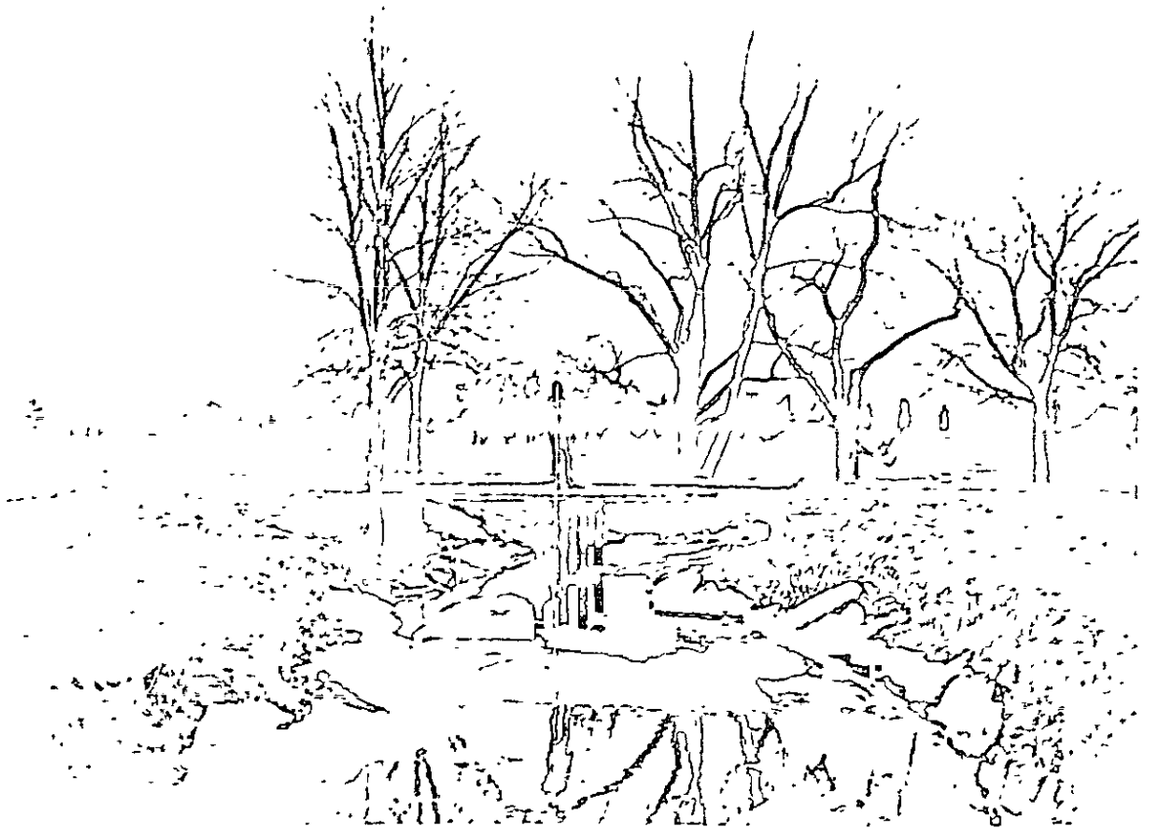
20'L.

SEC 42D - BRIDGE FACING UPSTREAM (FOOT BRIDGE)
SWAN CREEK



SWAN CREEK
SEC 42C - UPSTREAM FACING DOWNSTREAM (FOOT BRIDGE)

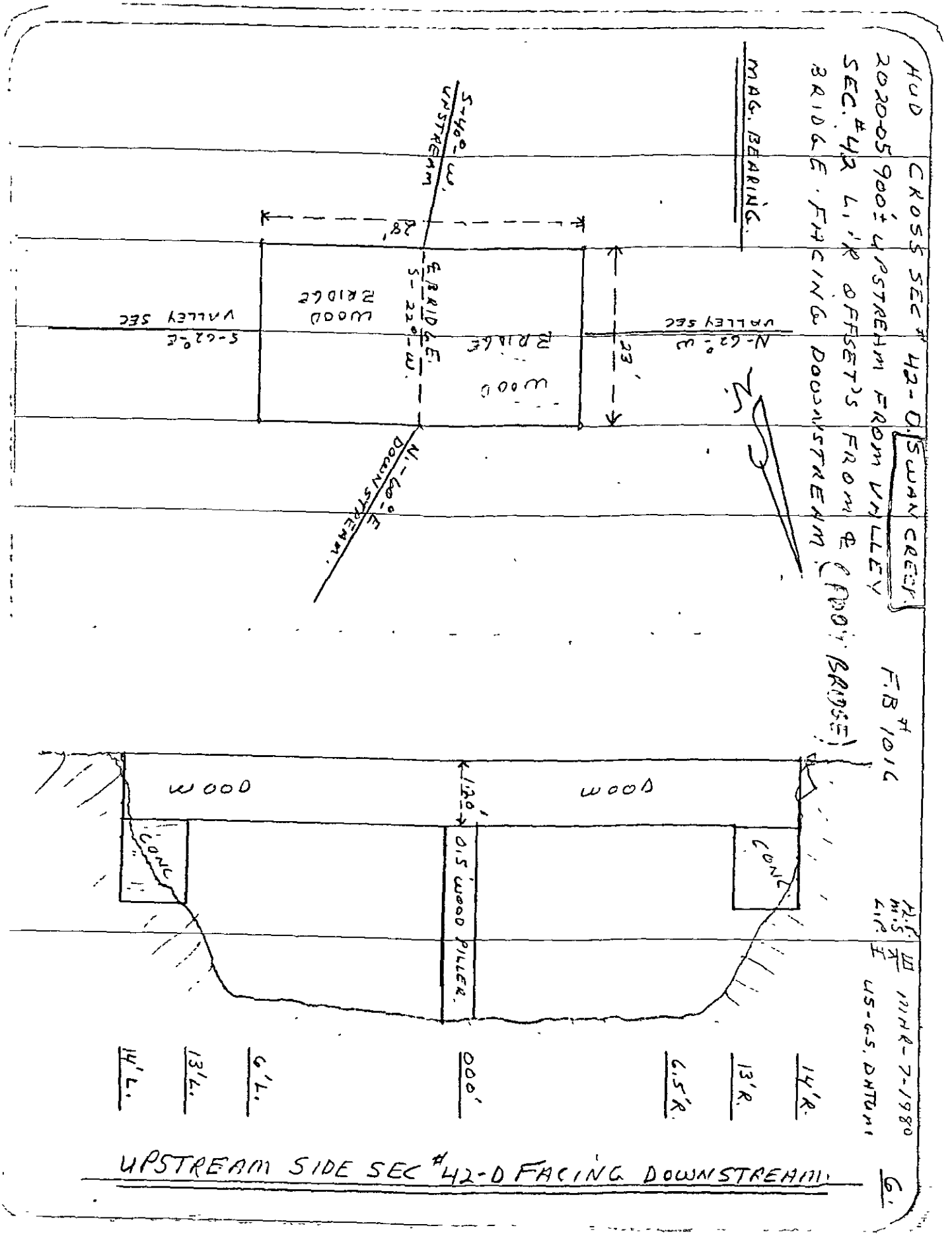
Sheet 37 of 61
Exhibit 9



SEC. 42D - UPSTREAM FACING DOWNSTREAM (FOOT BRIDGE)
SWAN CREEK

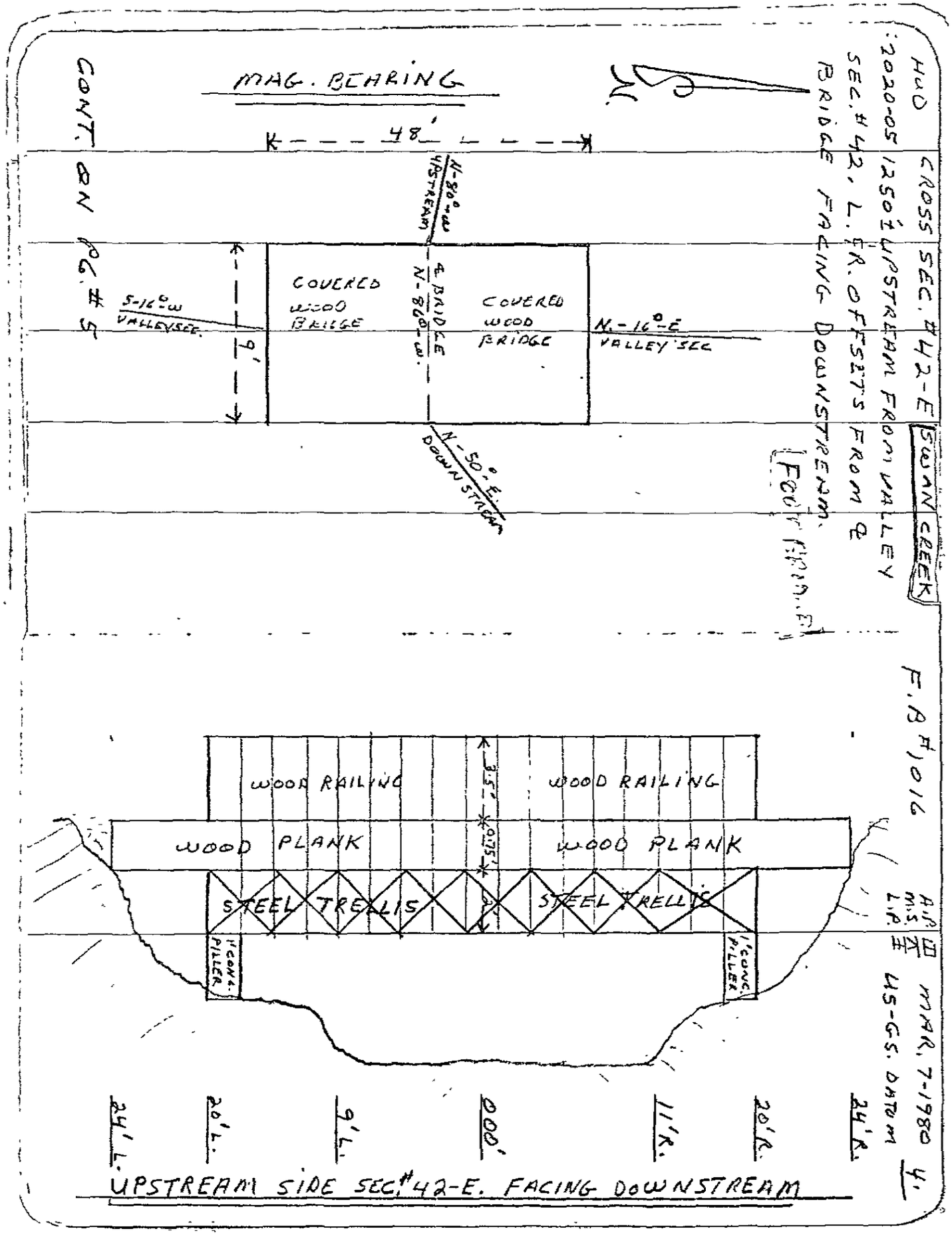
SWAN CREEK
SEC. 42D - LEFTSIDE OF BCHOLE FACING RIGHT (FOOT BRIDGE)

Exhibit

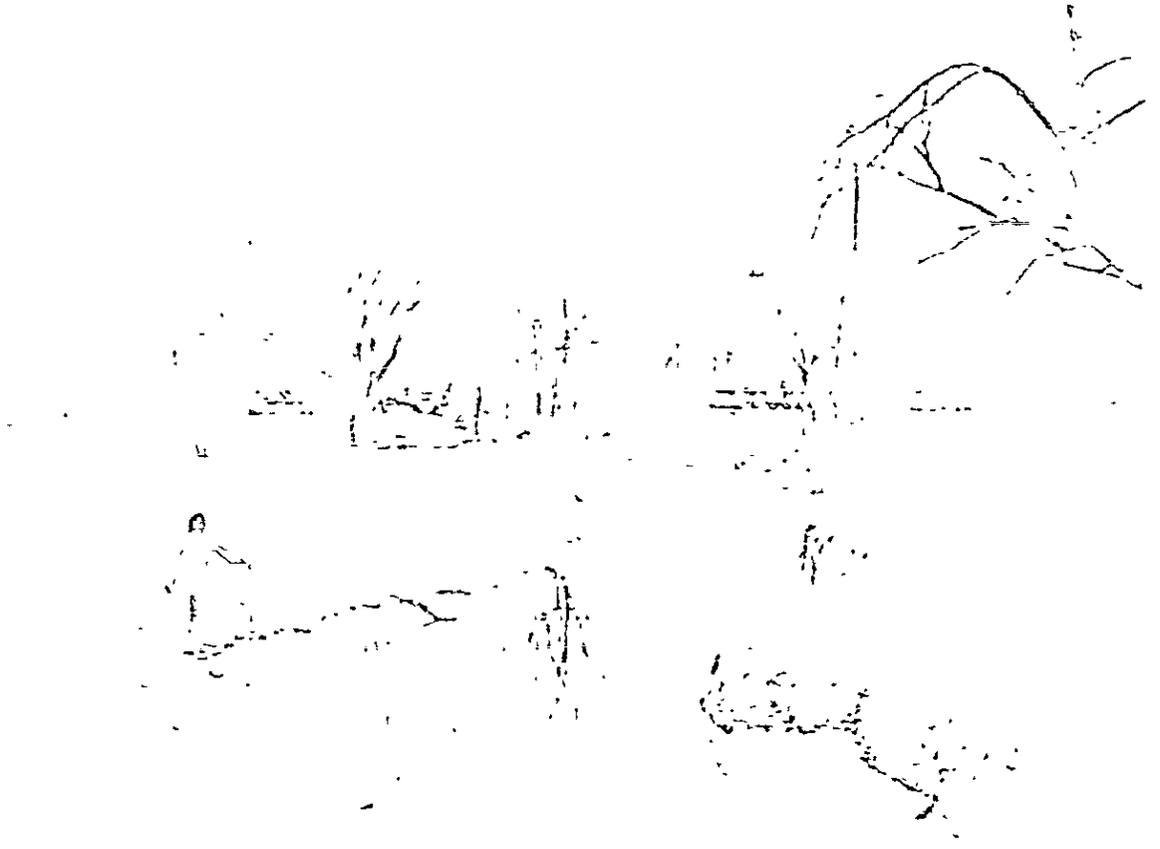


Sheet 39 of 61
Exhibit C

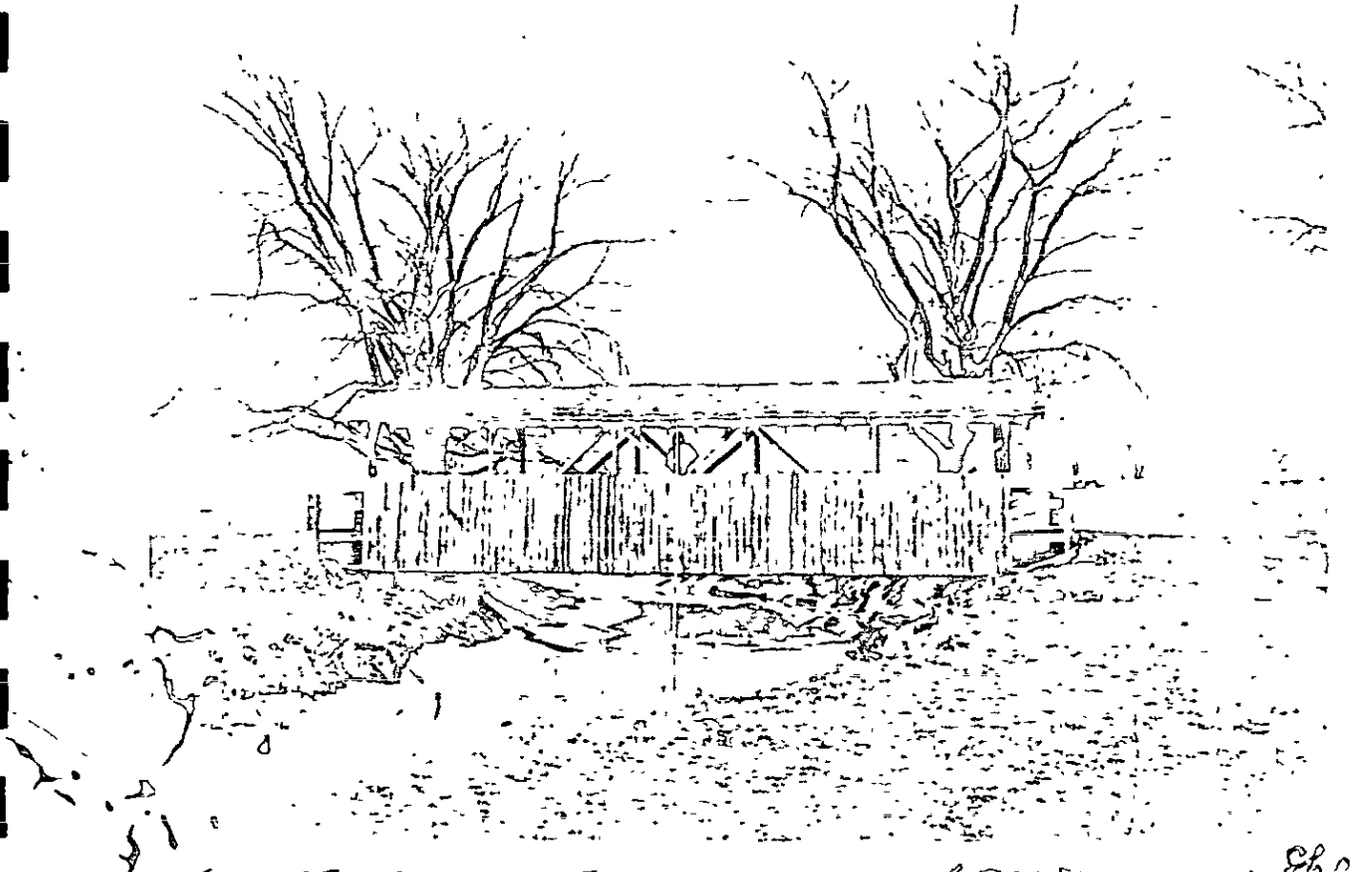
SEC 42E - BRIDGE FACING UPSTREAM (FOOT BRIDGE)
SWAN CREEK



Sheet 41 of 67



SEC 42F - BRIDGE FACING UPSTREAM (FOOT BRIDGE)
SWAN CREEK



SEC 42E - UPSTREAM FACING DOWNSTREAM (FOOT BRIDGE)
SWAN CREEK

Sheet 42E'
Exhibit B7

SEE 42F - UPSTREAM FACING DOWNSTREAM (FOOT BRIDGE)
SWAN CREEK

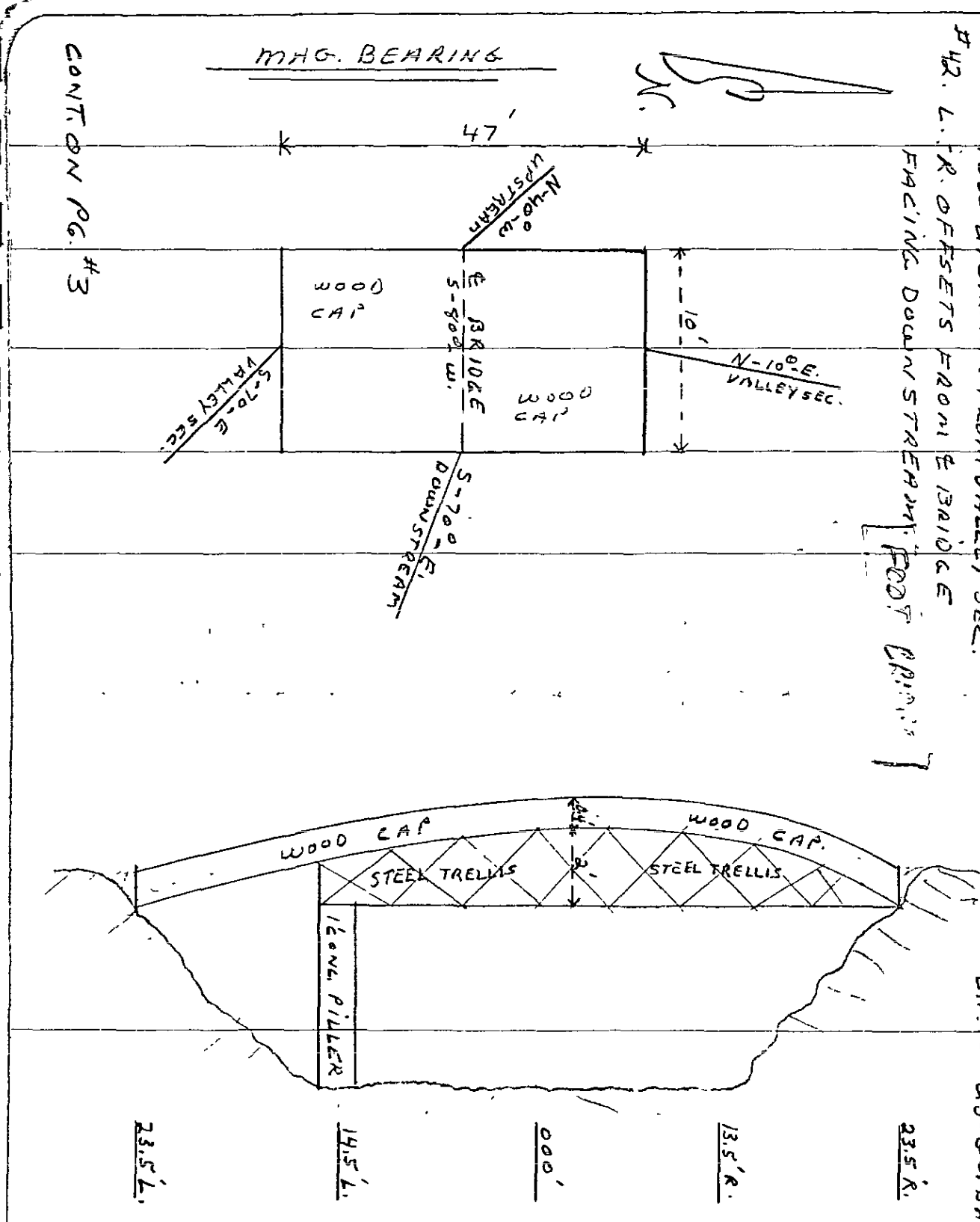
SEE 42F - LEFTSIDE OF BRIDGE TO RIGHT (FOOT BRIDGE)
SWAN CREEK

HUD CROSS SEC # 42-F. SWAN CREEK
2020-05 1550' UPSTREAM FROM VALLEY SEC.
#42. L.-R. OFFSETS FROM ℄ BRIDGE
FACING DOWNSTREAM [FOOT CRIP...]

F.B. # 1016

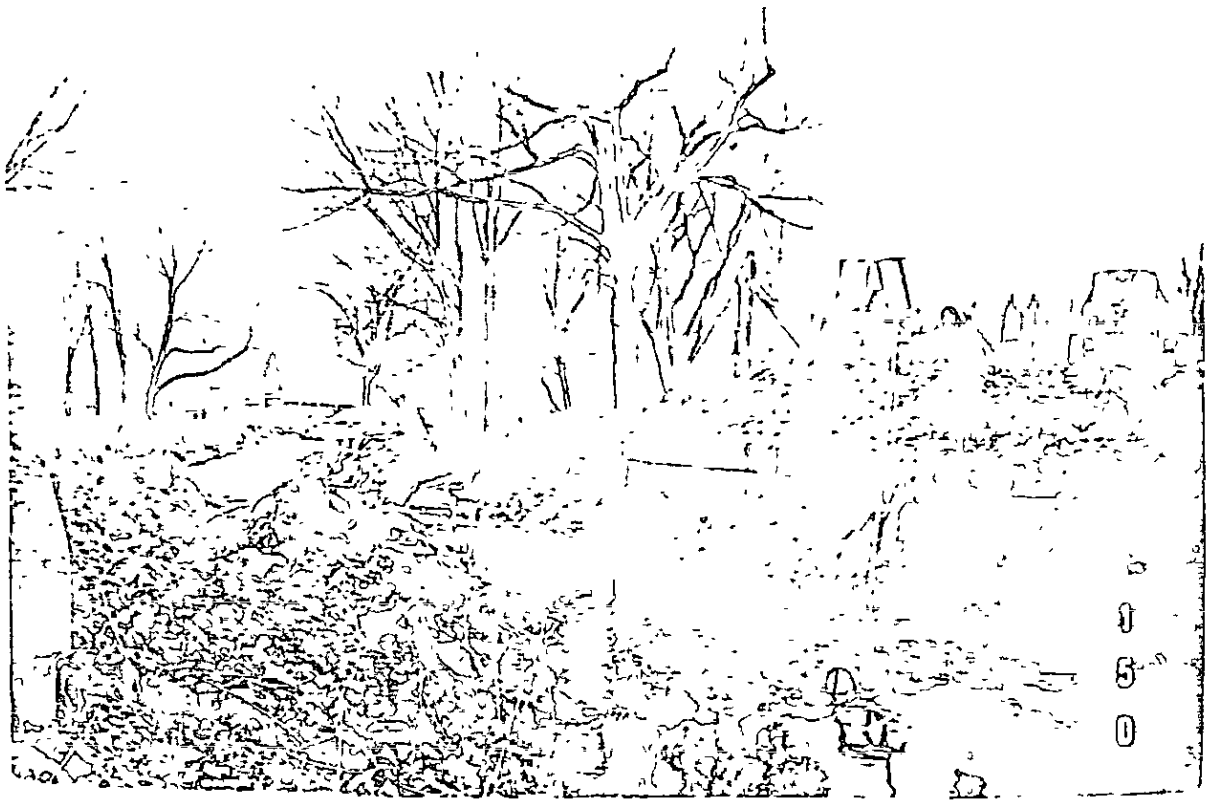
A.P. ☐ MAR. 7-1980
M.S. ☒
L.P. ☒ US-G.S. DATUM

CONT. ON PG. #3



UPSTREAM SIDE SEC. #42-F. FACING DOWNSTREAM

Sheet 44 of [illegible]
Exhibit E



SEC "44" UPSTREAM FACING DOWNSTREAM (GRAFTON RD)
SWAN CREEK
BRIDGE UNDER REPAIR AT THE TIME OF PHOTOGRAPH

BRIDGE UNDER REPAIR AT THE TIME OF PHOTOGRAPH
SEC "44 - LEFTSIDE OF [illegible] FACING RIGHT (GRAFTON RD)
SWAN CREEK

Sheet 45 [illegible]

HUD CROSS SEC. #44 SWAN CREEK
20205 AND GRAFTON RD L. & R OFFSETS
FROM ℄ BRIDGE FACING DOWNSTREAM

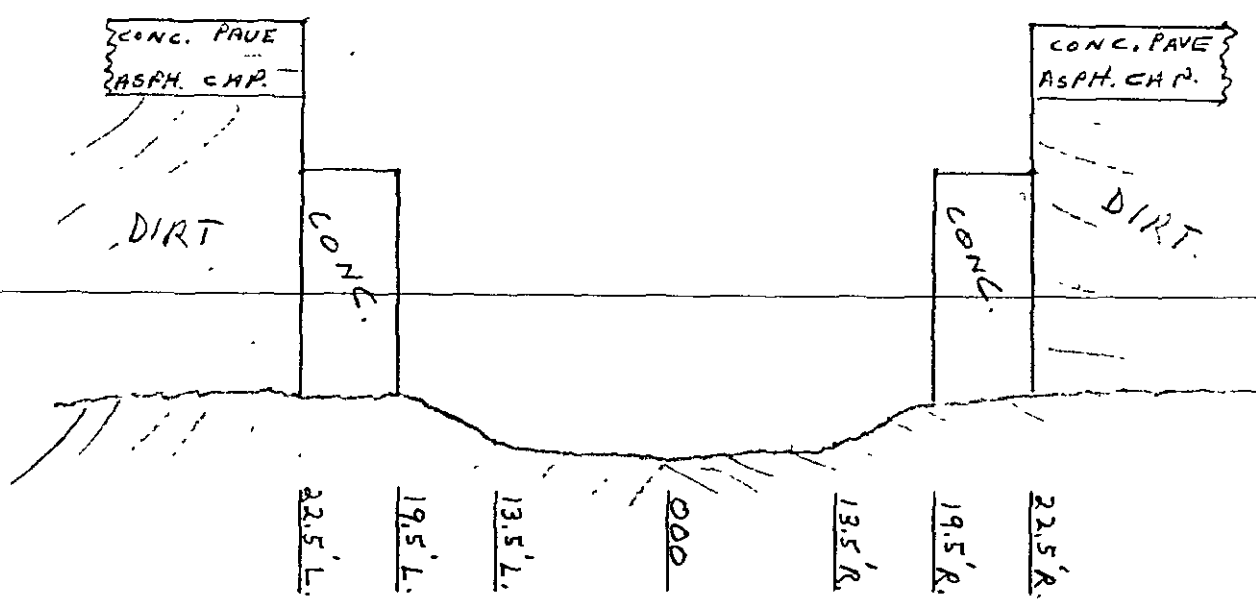
CONT. ON PG. #78

F.B. #997

AP MAR. 7-1980
MS
LP US-GS. DATUM.

77

NOTE: BRIDGE UNDER REPAIR



UPSTREAM SIDE SEC. #44 FACING DOWNSTREAM.

Sheet 46 of 67
Exhibit 2

FORM 25 0 | Civil Engineers • Land Surveyors | 2015 COLDWARD ROAD
(313) 291 5400 | WORK SHEET | TAYLOR, MICHIGAN 48180

Bridge Location : GRAFTON RD.

Bridge Losses - SB Card

1. XK (Pier Shape Coefficient): 0 — HEC-2 manual

XKOR (Loss Coefficient) = 1.0 + Σk , $\Sigma k = k_f + k_e + k_p$

where k_f = friction loss coefficient

k_e = entrance loss coefficient

k_p = loss from intermediate piers

Description of Bridge :

$K_f = 29.1\, n^2 L / R^{4/3}$ for English units

Area = 250 = W_p = 848

$R = A/W_p = 250/848 = 2.95$ $R^{4/3} = 4.23$ $L = 46'$

n (composite) = .04

$K_f = 29.1 \times (.04)^2 \times 46/4.23 = .5$

$K_e = 0.6$ — Hydraulic Charts for the Selection of Highway Culverts Circular No. 5 Dec. 1965 pg 53

$K_p = 0$ if bridge has no intermediate piers

$K_p = 0.05$ if bridge has no intermediate piers — HEC-2 manual

2. XKOR = 1 + .5 + .6 + = 2.1

3. COFQ = Coefficient of discharge = 3.0 — HEC-2 manual

4. RDLEN = Length of weir = _____ (0 if read off BT cards)

5. BWC = bottom width of bridge opening (inc. piers) = 32.14

6. BWP = total width of obstruction = _____ — field data

7. BAREA = bridge opening = 250.

8. SS = side slope = 0 (horizontal per 1 vertical unit)

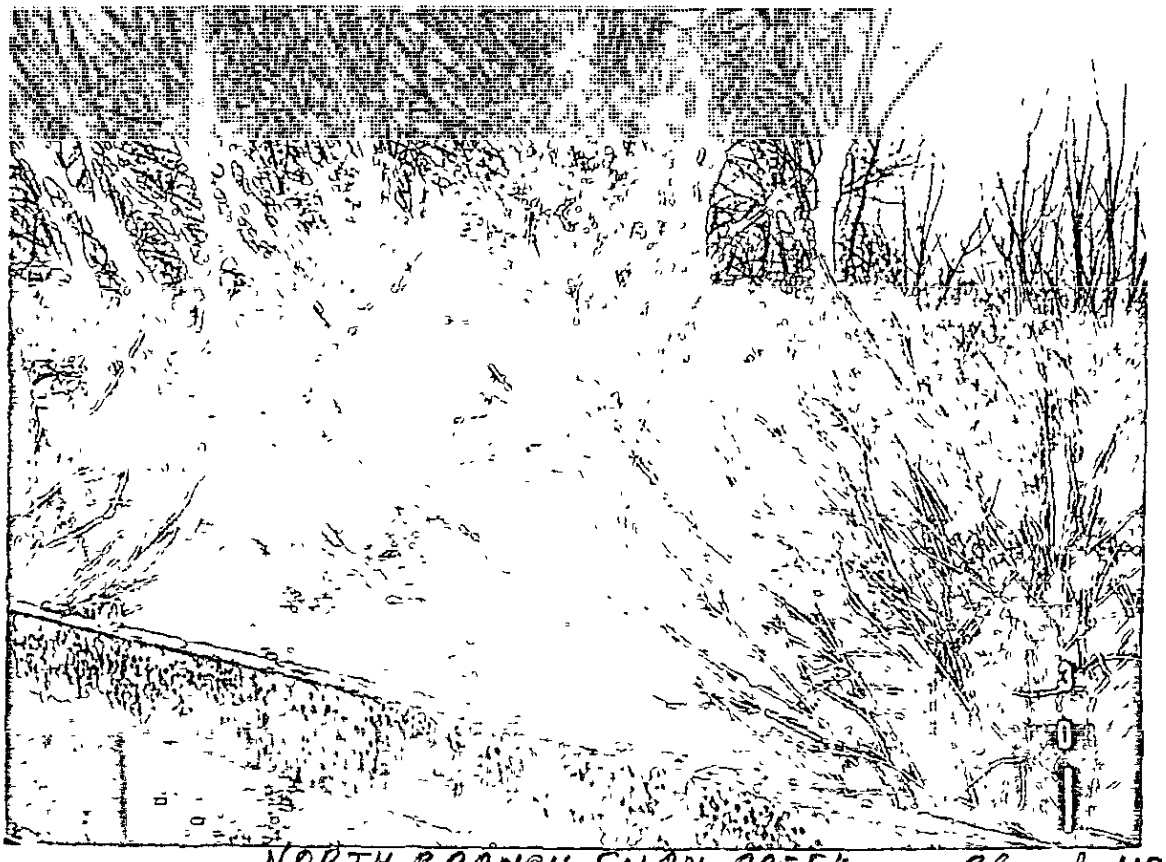
9. ELCHU = Elevation of channel invert U/S side = 597.6 (0 if equal to minimum elevation in previous X-sect.) — Sheet 47 of 67

10. ELCHD = Elevation of channel invert D/S side = 597.6 (0 if equal to minimum elevation in previous X-sect.) — Exhibit 2

SUBJECT	BY	CHK.	SHEET NO.	File Code No. (Job No.) Owner Project Suffix
Ash Twp - Hydraulics SWAN CR.	T. Grant		___ OF ___	HUD • 2020 • 07
	DATE 5 2 80	DATE		

SEC #47 - LEFT SIDE OF BRIDGE TO RIGHT (NEWBURG ROAD)

NORTH BRANCH SWAN CREEK



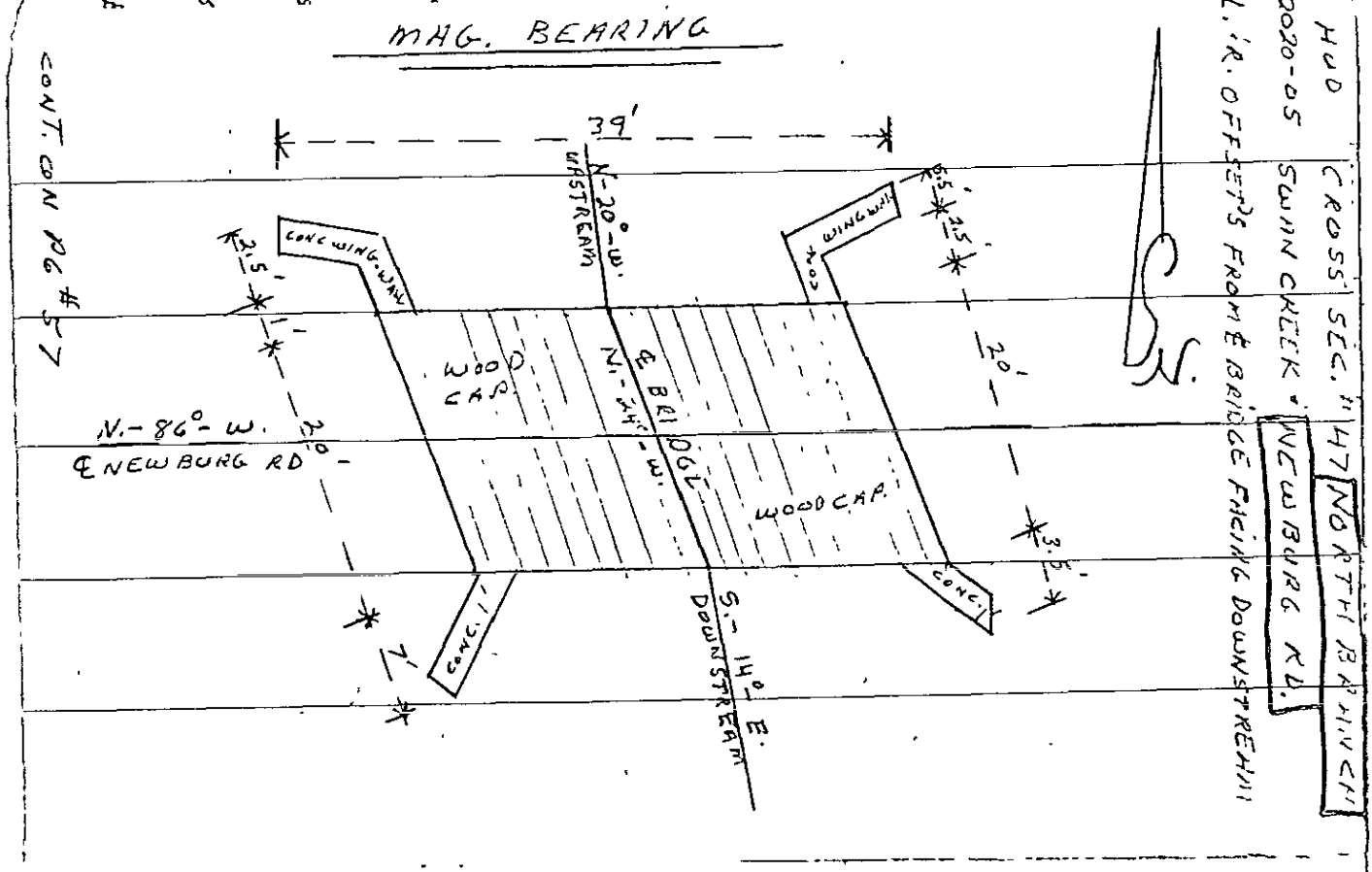
NORTH BRANCH SWAN CREEK

SEC #47 - BRIDGE FACING UPSTREAM (NEWBURG ROAD)

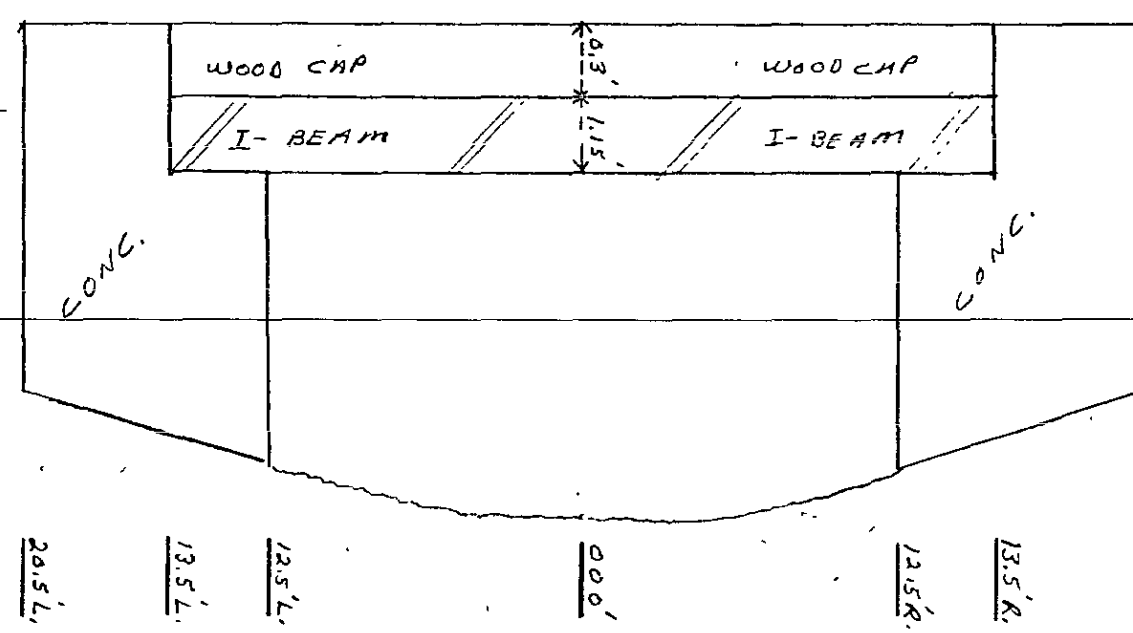
SEC "A7 - UPSTREAM FROM DOWNSTREAM (NEW BURG RD)

NORTH BRANCH SWAN CREEK

HUD CROSS SEC. #47 NORTH BRANCH
2020-05 SWAN CREEK NEWBURG RD.
L.&R. OFFSETS FROM ℄ BRIDGE FACING DOWNSTREAM



F.B. 997



UPSTREAM SIDE SEC. #47 FACING DOWNSTREM.

A.P. WT FEB 21-1980 SG.
L.P. I
US.-G.S. DATUM

Sheet 50 of 67
Exhibit

SEC #47A - UPSTREAM FACING DOWNSTREAM (APPROX. 870 FT U/S OF NEWBURG ROAD)

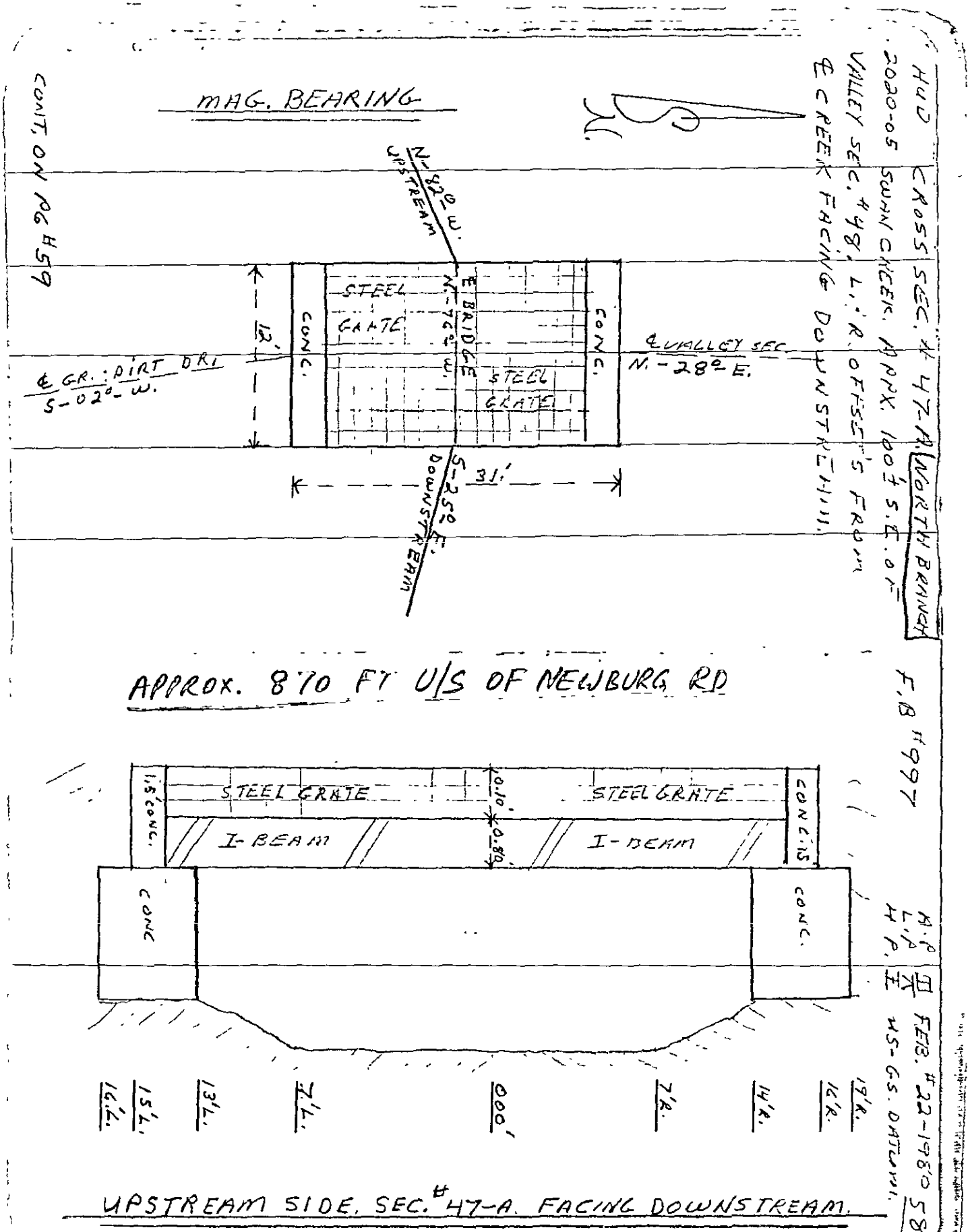
NORTH BRANCH OF SWAN CREEK

NORTH BRANCH OF SWAN CREEK

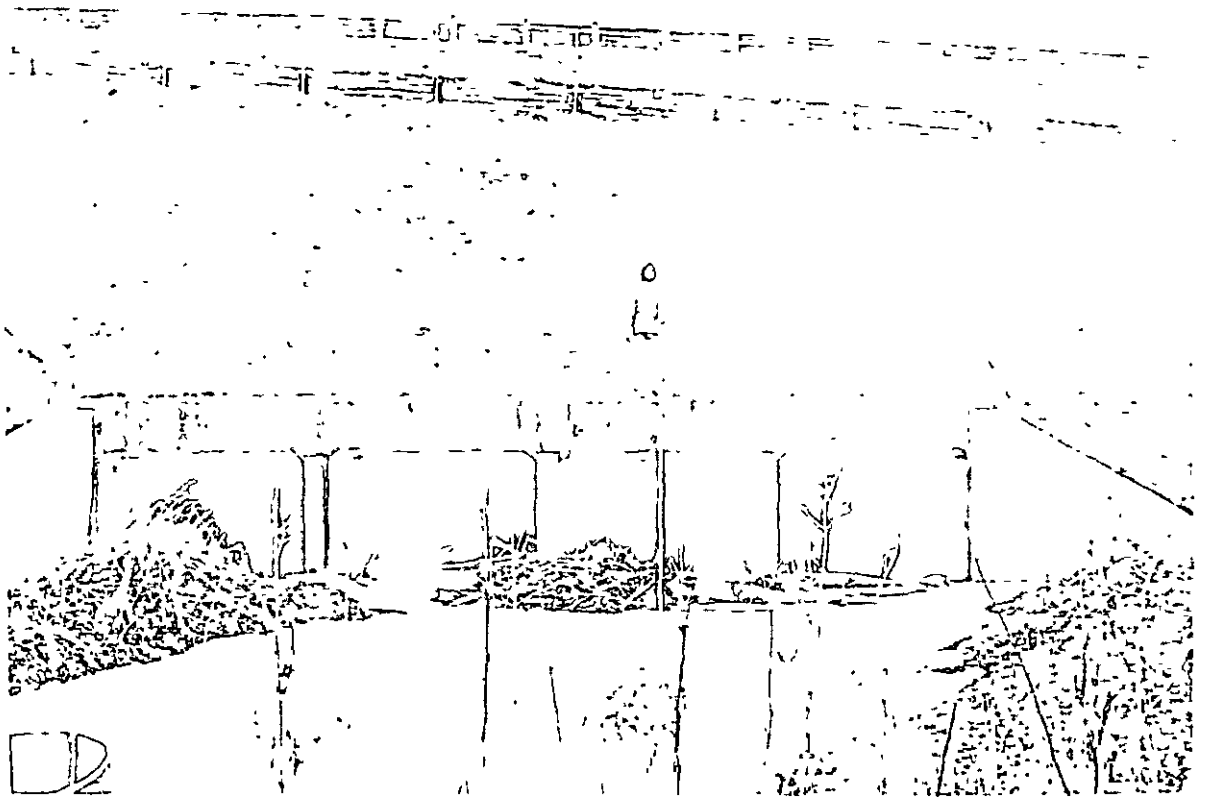
SEC #47B - BRIDGE FACING UPSTREAM (APPROX. 870 FT U/S OF NEWBURG ROAD)

SEE #4 MI. LEFTSIDE OF BRIDGE FACING RIGHT (APPROX. 870 FT U/S OF NEWBURG ROAD)

NORTH BRANCH OF SWAN CREEK



Sheet 53 of 61
Exhibit 2



SEC. #51 - UPSTREAM FACING DOWNSTREAM (I-275)

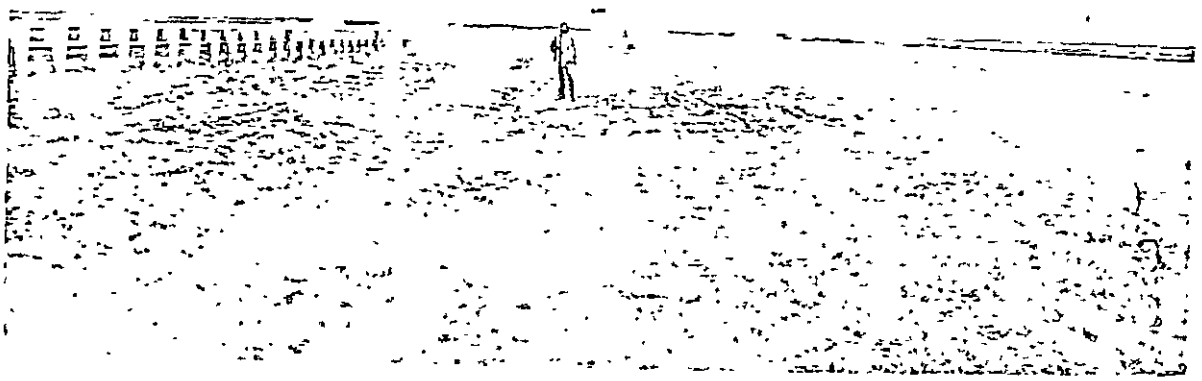
NORTH BRANCH OF SWAN CREEK

NORTH BRANCH OF SWAN CREEK

SEC #51 - RIGHT SIDE OF BOX CULVERT FACING LEFT (I-275)

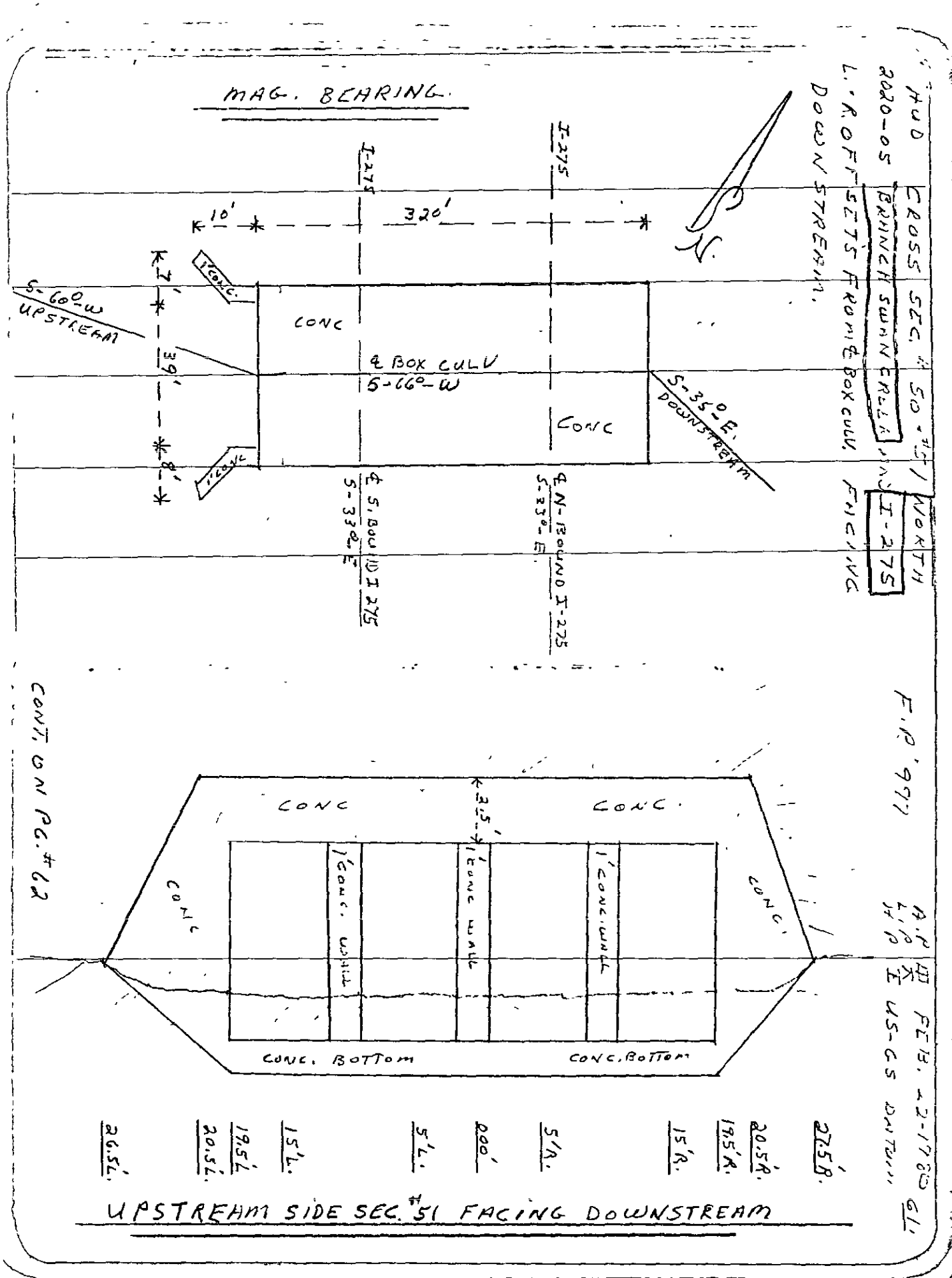
Sheet 6 of 9

Exhibit 2



SEC. #50 - MEDIAN OF 275 FACING SOUTH (I-275)

NORTH BRANCH OF SWAN CREEK



HUD
2020-05
CROSS SEC. #51
BRANCH SWAN ERR.
L. 'R OF I-275 FROM & BOX CULV.
DOWN STREAM.

NORTH
I-275
FACING

F.P. 907

A.P. 1,10
1,10

US-GS DATUM

CONT. ON PG. #52

UPSTREAM SIDE SEC. #51 FACING DOWNSTREAM

Sheet 56 of 67
Exhibit 2

Bridge Location: I-275
Bridge Losses - SB Card

1. XK (Pier Shape Coefficient): 1.25 — HEC-2 Manual

XKOR (Loss Coefficient) = 1.0 + ΣK, $\Sigma k = k_f + k_e + k_p$

where k_f = friction loss coefficient
k_e = entrance loss coefficient
k_p = loss from intermediate piers

Description of Bridge:

$K_f = 29.1\, n^2 L / R^{4/3}$ for English units.

Area = 264 = _____ W_p = 130.6

$R = A/W_p = 264/130.6 = 2.02$ $R^{4/3} = 2.56$ $L = 320$

n (composite) = .02

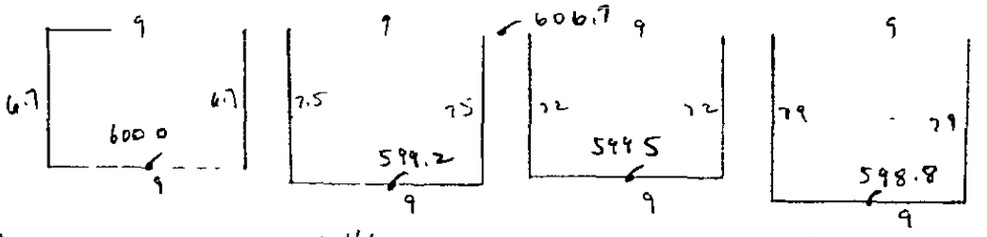
$K_f = 29.1 \times (.02)^2 \times 320/2.56 = 1.46$

$K_e = 0.2$

Hydraulic Charts for the Selection of Highway Culverts Hyd. Eng. Circular No. 5 Dec. 1965 Pg 43

$K_p = 0$ if bridge has no intermediate piers

$K_p = 0.05$ if bridge has no intermediate piers — HEC-2 manual

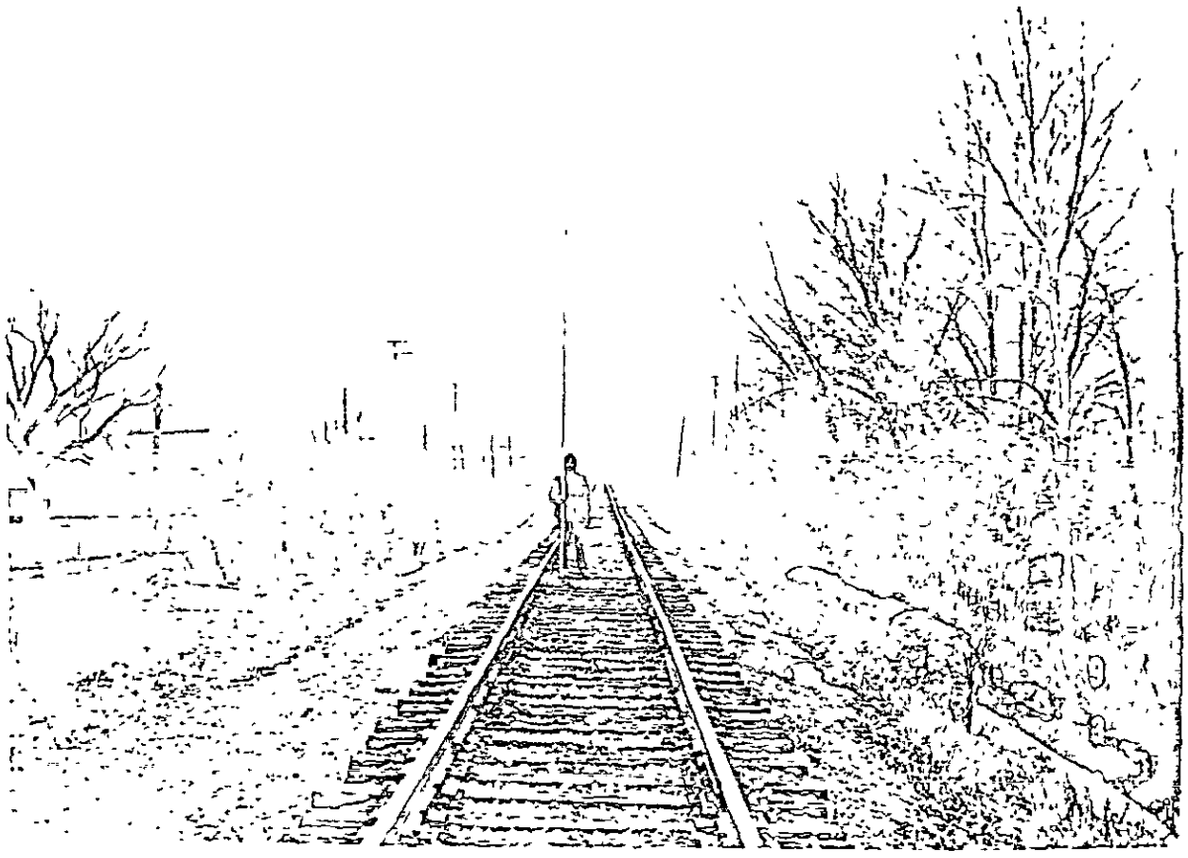


XKOR = 1 + .2 + 1.46 + = 2.66

3. COFQ = Coefficient of discharge = 3.0 — HEC-2 manual
4. RDLEN = Length of weir = _____ (0 if read off BT cards)
5. BWC = bottom width of bridge opening (inc. piers) = 36.42
6. BWP = total width of obstruction = 3.0 — field data
7. BAREA = bridge opening = 264
8. SS = side slope = 0
(horizontal per 1 vertical unit)
9. ELCHU = Elevation of channel invert U/S side = 598.8
(0 if equal to minimum elevation in previous X-sect.)
10. ELCHD = Elevation of channel invert D/S side = 598.0
(0 if equal to minimum elevation in previous x-sect.)

Sheet 57 of 67
Exhibit 2

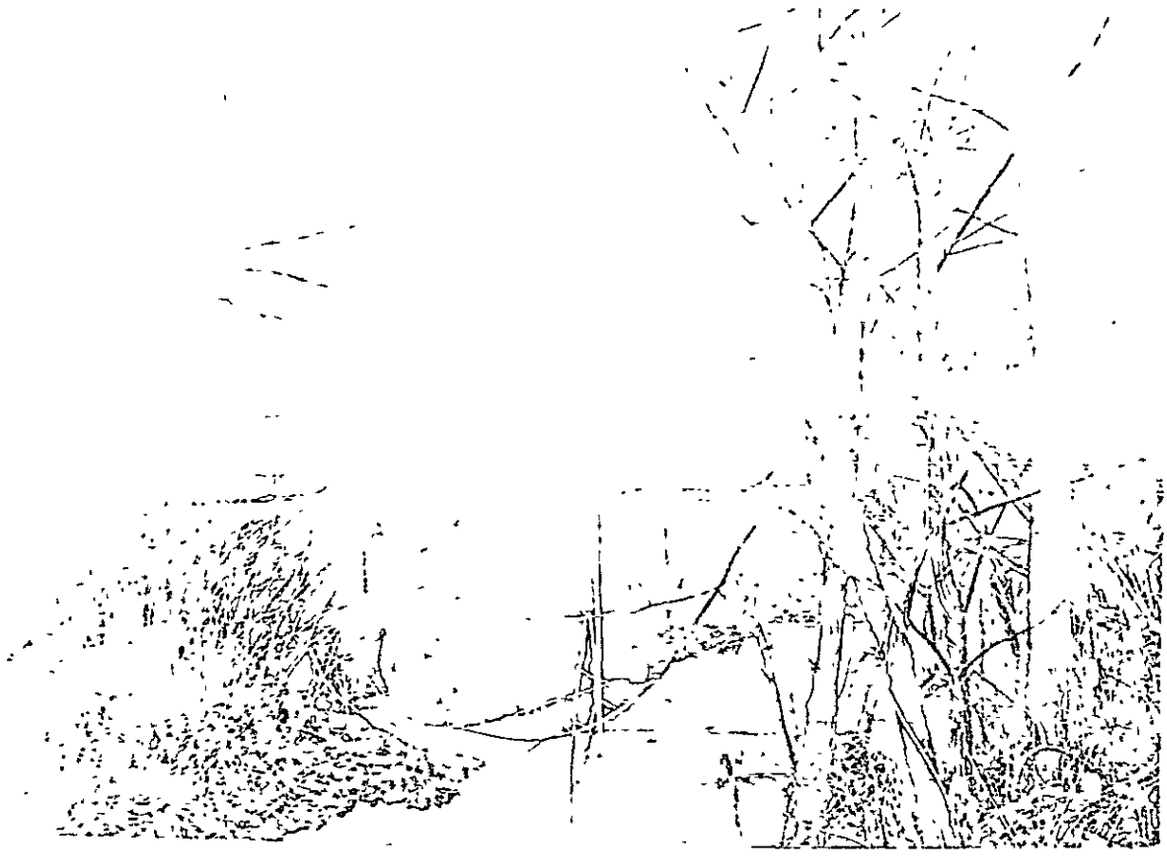
SUBJECT	BY	CHK.	SHEET NO.	File Code No (Job No) Owner Project Suffix
Ash Twp - Hydraulics N. Branch Swan Creek	DATE 2-21-06	DATE	___ OF ___	HUD •2020•07



SEC #52 - LEFTSIDE OF BRIDGE TO RIGHT (PENN CENTRAL R.R.)
NORTH BRANCH OF SWAN CREEK

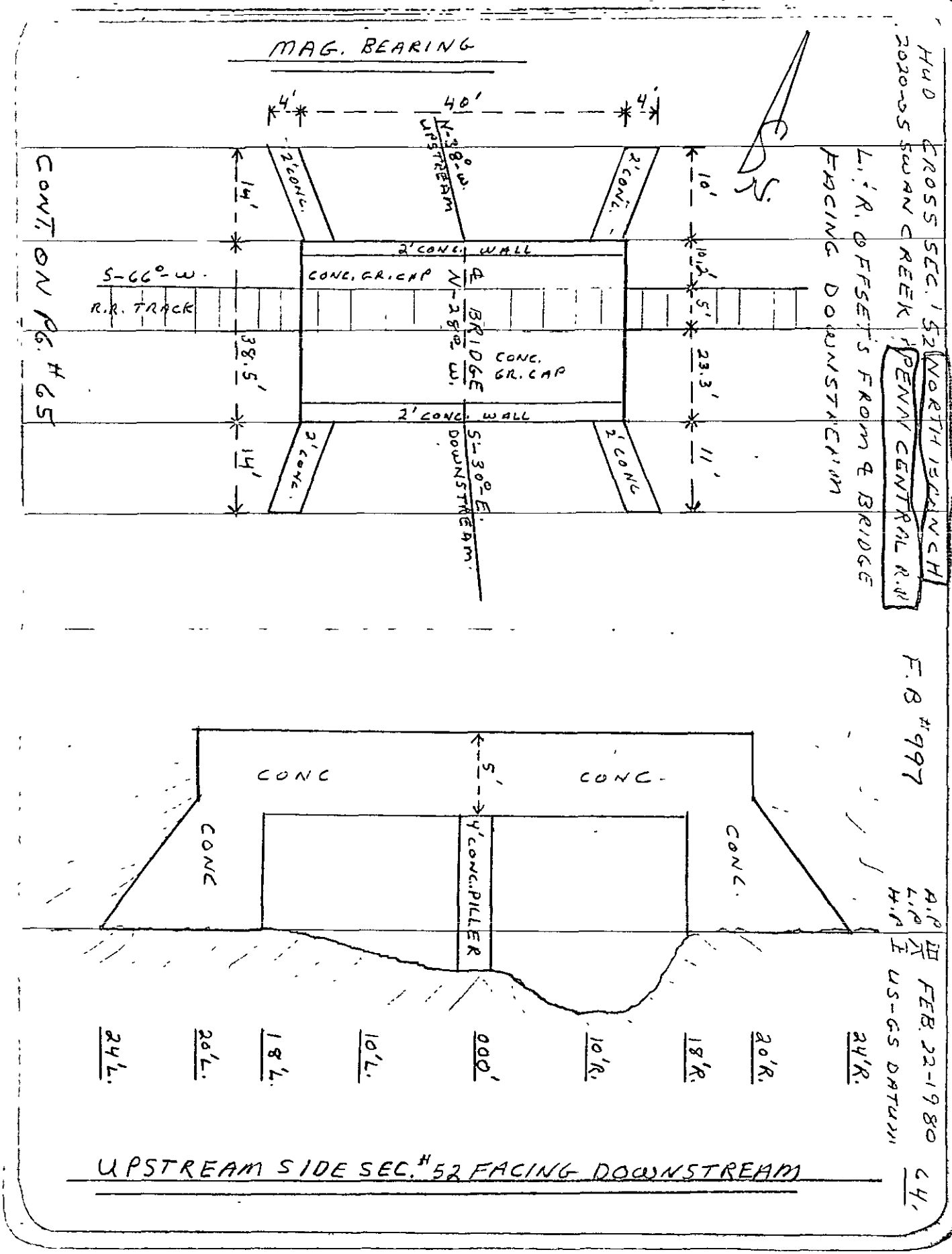
SEC #52 BRIDGE FACING UPSTREAM (PENN CENTRAL R.R.)
NORTH BRANCH OF SWAN CREEK

Sheet 50 of 52
Exhibit 5



SEC. #52 - UPSTREAM FACING DOWNSTREAM (PENN CENTRAL R.R.)
NORTH BRANCH OF SWAN CREEK

Sheet 59 of 67
Exhibit E



Sheet 60 of 67
Exhibit

FORM 250
(313) 291 5400
Civil Engineers • Land Surveyors
WORK SHEET
25185 CODDARD ROAD
TAYLOR, MICHIGAN 48180

Bridge Location : PENN CENTRAL R.R.
Bridge Losses - SB Card

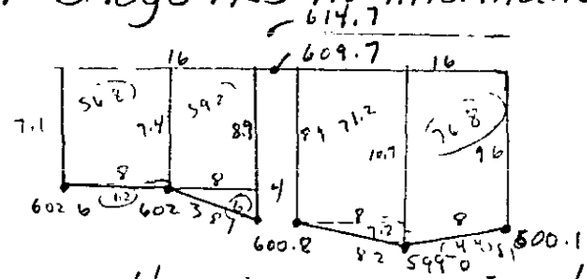
1. XK (Pier Shape Coefficient): 1.25 — HEC-2 manual
XKOR (Loss Coefficient) = 1.0 + Σk , $\Sigma k = k_f + k_e + k_p$
where k_f = friction loss coefficient
k_e = entrance loss coefficient
k_p = loss from intermediate piers

Description of Bridge :
$K_f = 29.1 n^2 L / R^{4/3}$ for English units
Area = 283 = _____ W_p = 98.9
$R = A/W_p = 283/98.9 = 2.86$ $R^{4/3} = 4.06$ $L = 38$
n (composite) = .02
$K_f = 29.1 \times (.02)^2 \times 38/4.06 = .11$

$K_e = 0.4$ — Hydraulic Charts for the Selection of Highway Culverts Circular No. 5 Dec. 1965 pg. 43

$K_p = 0$ if bridge has no intermediate piers

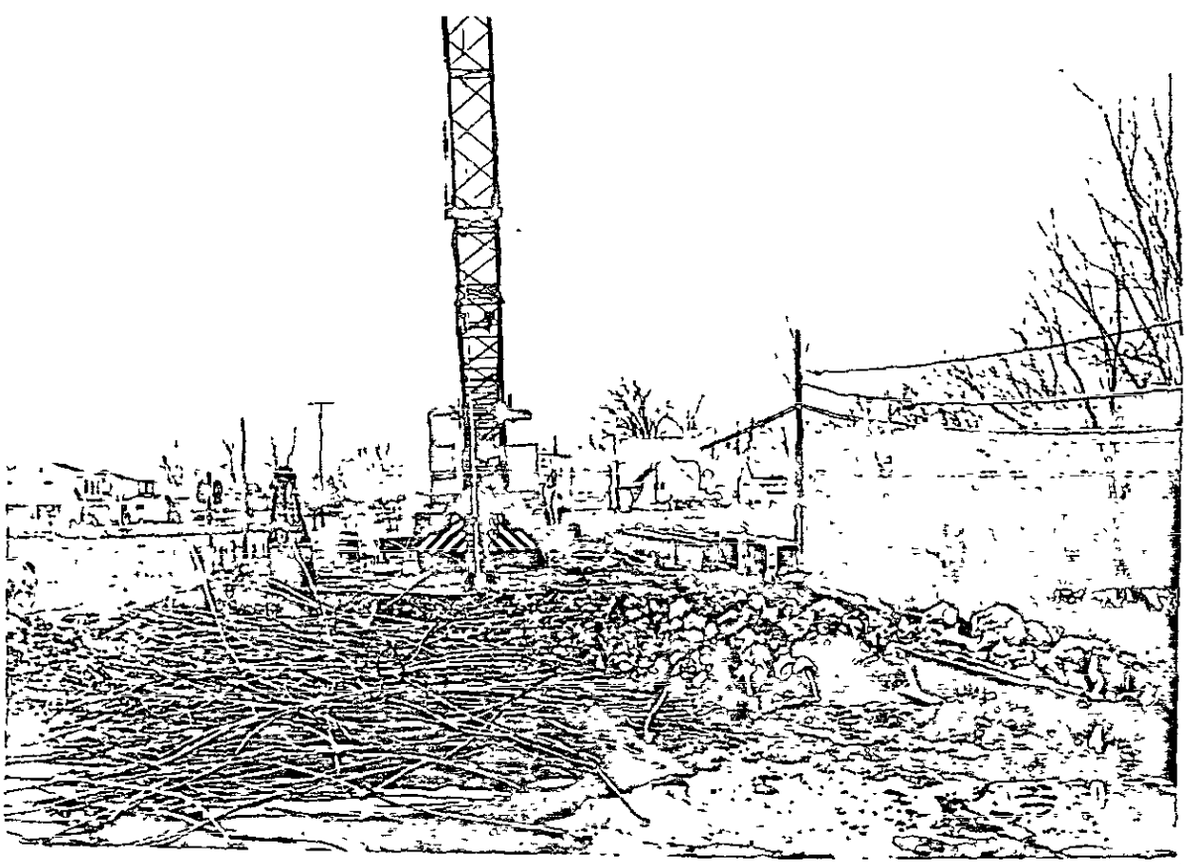
$K_p = 0.05$ if bridge has no intermediate piers — HEC-2 manual



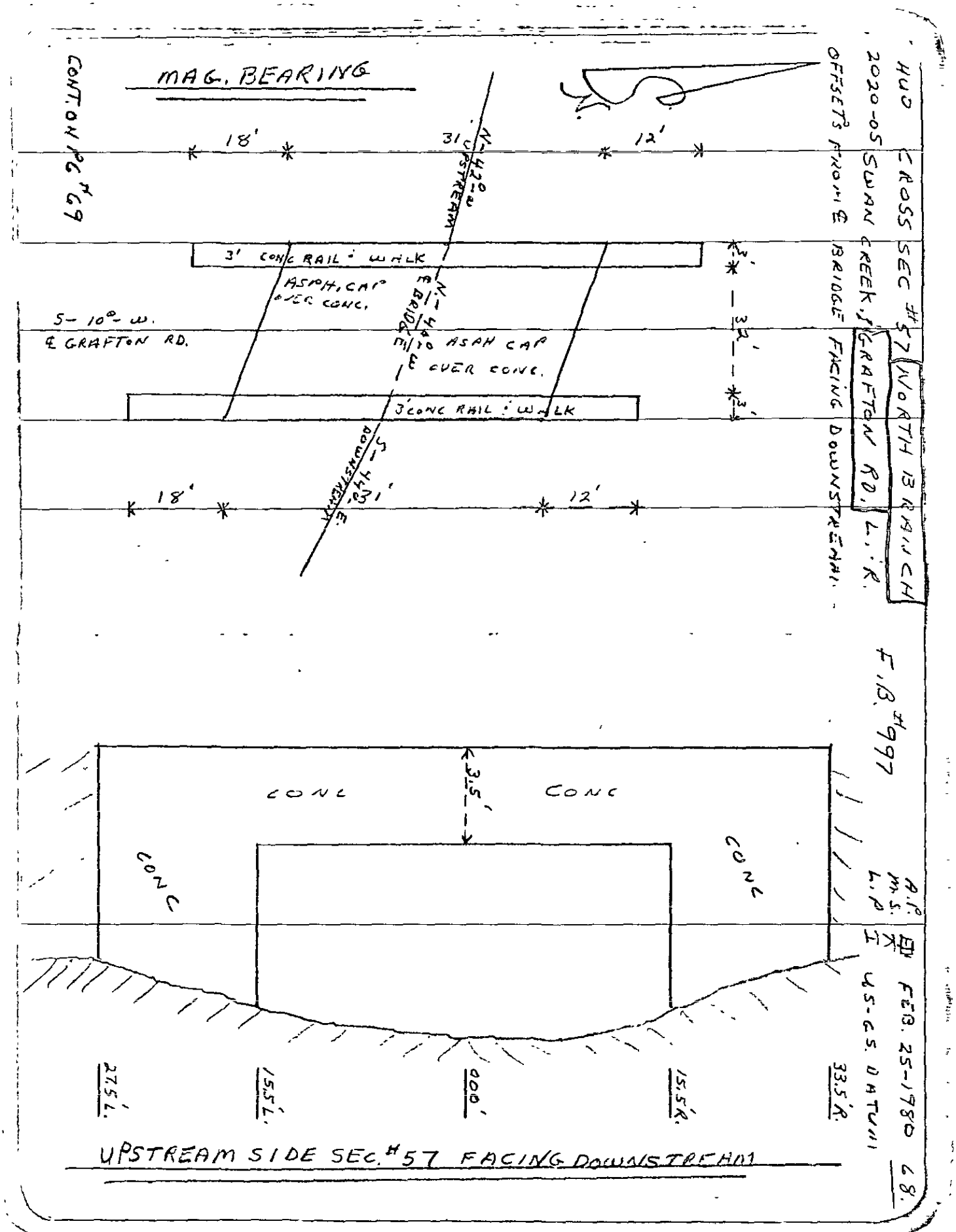
2. XKOR = 1 + .4 + .11 + = 1.51
3. COFQ = Coefficient of discharge = 3. — HEC-2 manual
4. RDLEN = Length of weir = _____ (0 if read off BT cards)
5. BWC = bottom width of bridge opening (inc. piers) = 30.45
6. BWP = total width of obstruction = 4.0 — field data
7. BAREA = bridge opening = 283
8. SS = side slope = 0
(horizontal per 1 vertical unit) — Sheet 61 of 67
9. ELCHU = Elevation of channel invert U/S side = 599.
(0 if equal to minimum elevation in previous x-sect.) — Exhibit 2
10. ELCHD = Elevation of channel invert D/S side = 599.
(0 if equal to minimum elevation in previous x-sect.)

SUBJECT	BY	CHK.	SHEET NO.	File Code No. (Job No.) Owner Project Suffix
Ash Twp - Hydraulics N. Branch Swan Cr.	T Grant		___ OF ___	HUD • 2020 • 07
	DATE 3-31-80	DATE		

SEC #57 - UPSTREAM FROM DOWNSTREAM (GRAFTON RD)
NORTH BRANCH OF SWAN CREEK



SEC #57 - LEFTSIDE OF BRIDGE TO RIGHT (GRAFTON RD)
NORTH BRANCH OF SWAN CREEK



Sheet 63 of 67

Exhibit

Bridge Location : GRAFTON RD.
Bridge Losses - SB Card

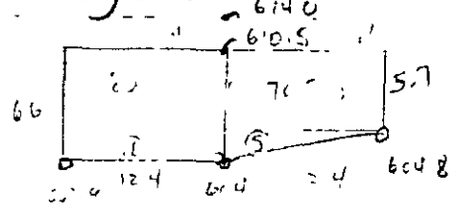
1. XK (Pier Shape Coefficient): 0 — HEC-2 manual
XKOR (Loss Coefficient) = 1.0 + Σk , $\Sigma k = k_f + k_e + k_p$
where k_f = friction loss coefficient
k_e = entrance loss coefficient
k_p = loss from intermediate piers

Description of Bridge :
$K_f = 29.1\, n^2 L / R^{4/3}$ for English units.
Area = 157 = _____ W_p = 61.9
$R = A/W_p$ 157/61.9 = 2.54 $R^{4/3}$ = 3.46 L = 63'
n (composite) = .02
$K_f = 29.1 \times (.02)^2 \times$ 63/3.46 = .2

K_e = 0.4 — Hydraulic Charts for the Selection of Highway Culverts Circular No. 5 Dec. 1965 pg. 43

K_p = 0 if bridge has no intermediate piers

K_p = 0.05 if bridge has no intermediate piers — HEC-2 manual

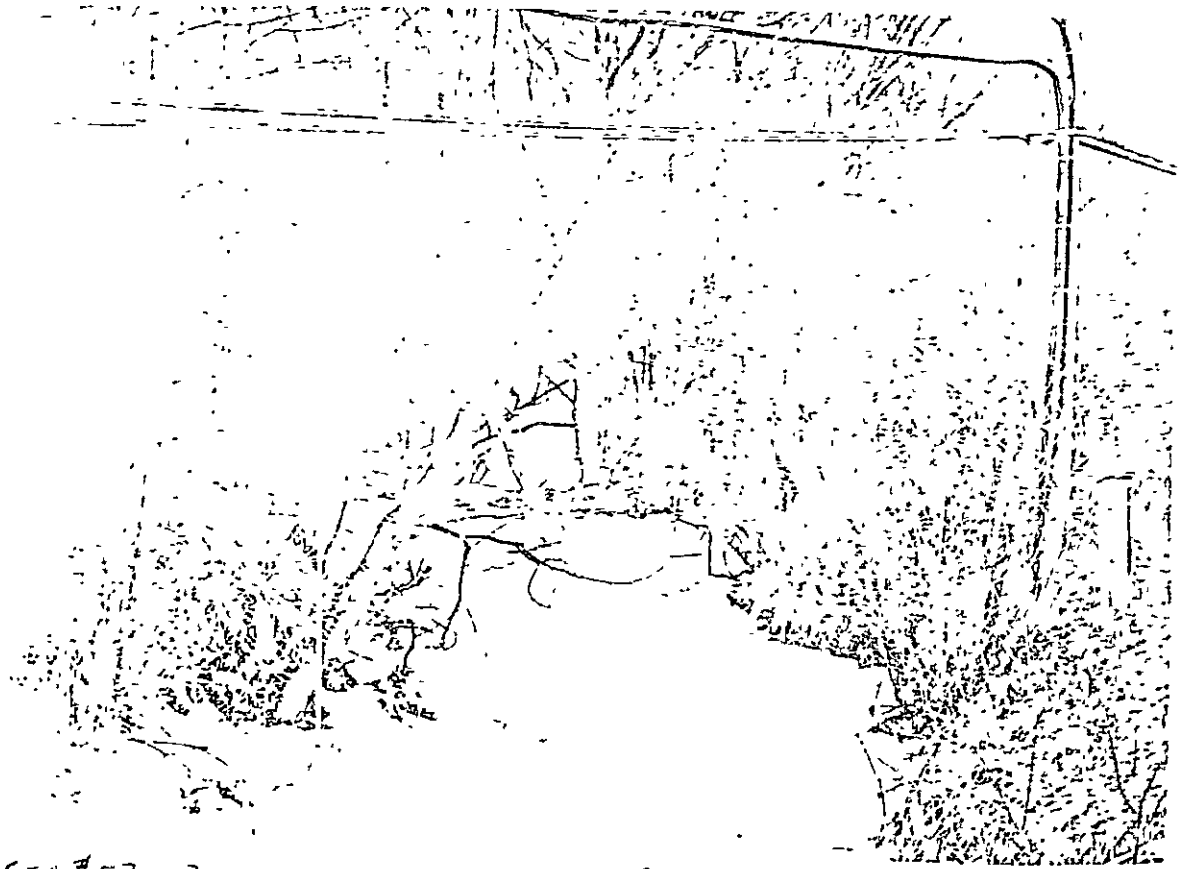


2. XKOR = 1 + .2 + .4 + = 1.6
3. COFQ = Coefficient of discharge = 3.0 — HEC-2 manual
4. RDLEN = Length of weir = _____ (0 if read off BT cards)
5. BWC = bottom width of bridge opening (inc. piers) = 23.79
6. BWP = total width of obstruction = 0 — field data
7. BAREA = bridge opening = 157
8. SS = side slope = 0
(horizontal per 1 vertical unit)
9. ELCHU = Elevation of channel invert U/S side = 603.9
(0 if equal to minimum elevation in previous X-sect.)
10. ELCHD = Elevation of channel invert D/S side = 603.9
(0 if equal to minimum elevation in previous X-sect.)

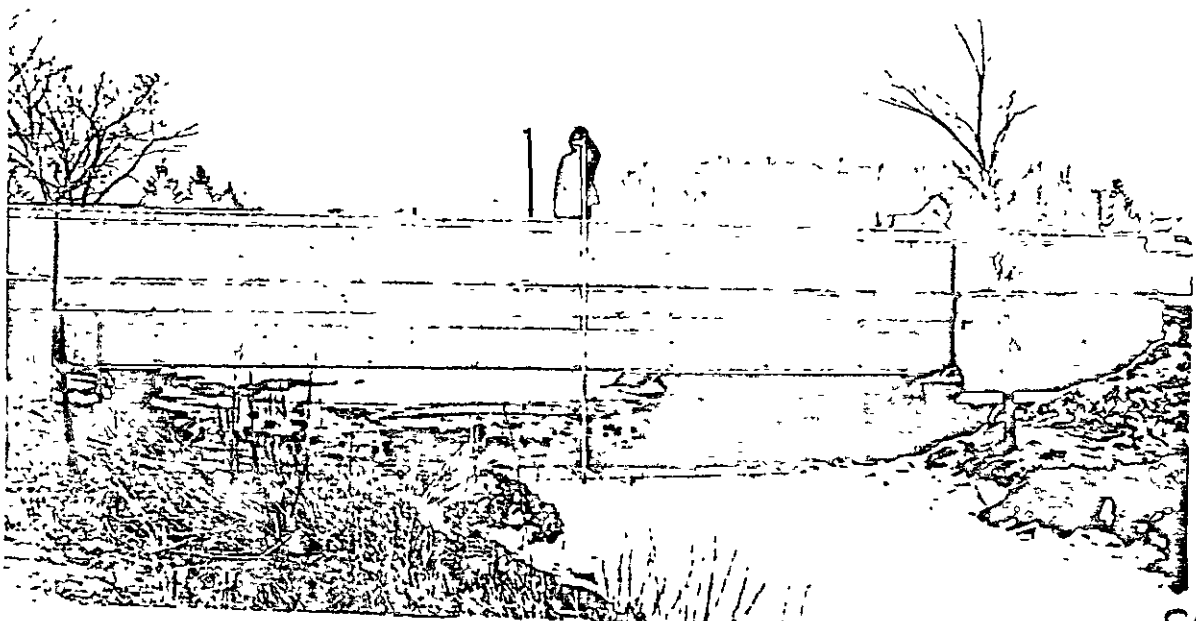
Sheet 64 of 67

Exhibit 2

SUBJECT Ash Twp - Hydraulics N. B. [illegible] Sewer Co. | BY T. Grant | CHK. | SHEET NO. ___ OF ___ | File Code No. (Job No.) Owner Project Suffix HUO • 2020 • 7
DATE [illegible] | DATE



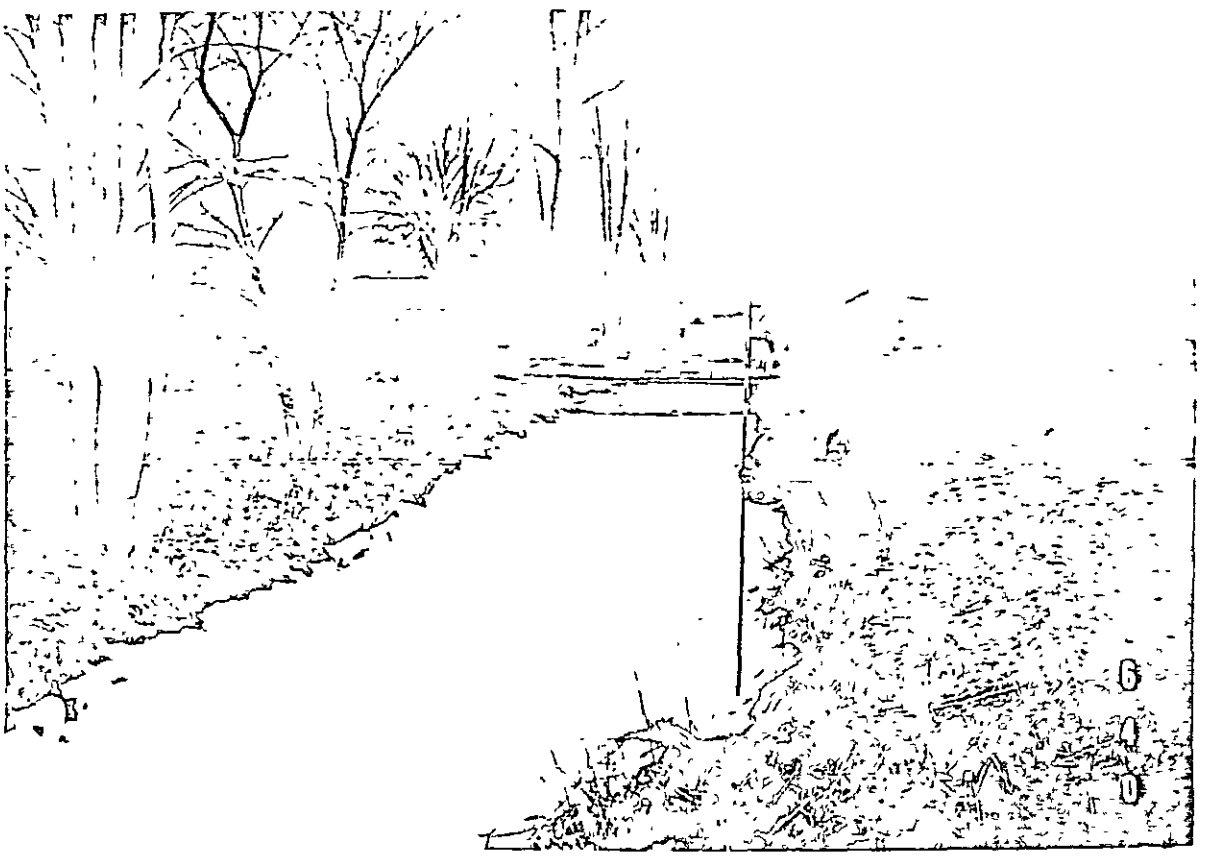
SEC #57 - BRIDGE FACING UPSTREAM (GRAFTON RD)
NORTH BRANCH OF SWAN CREEK



SEC #59 - UPSTREAM FACING DOWNSTREAM (WILL-CARLETON RD) Exhibit 67
NORTH BRANCH OF SWAN CREEK

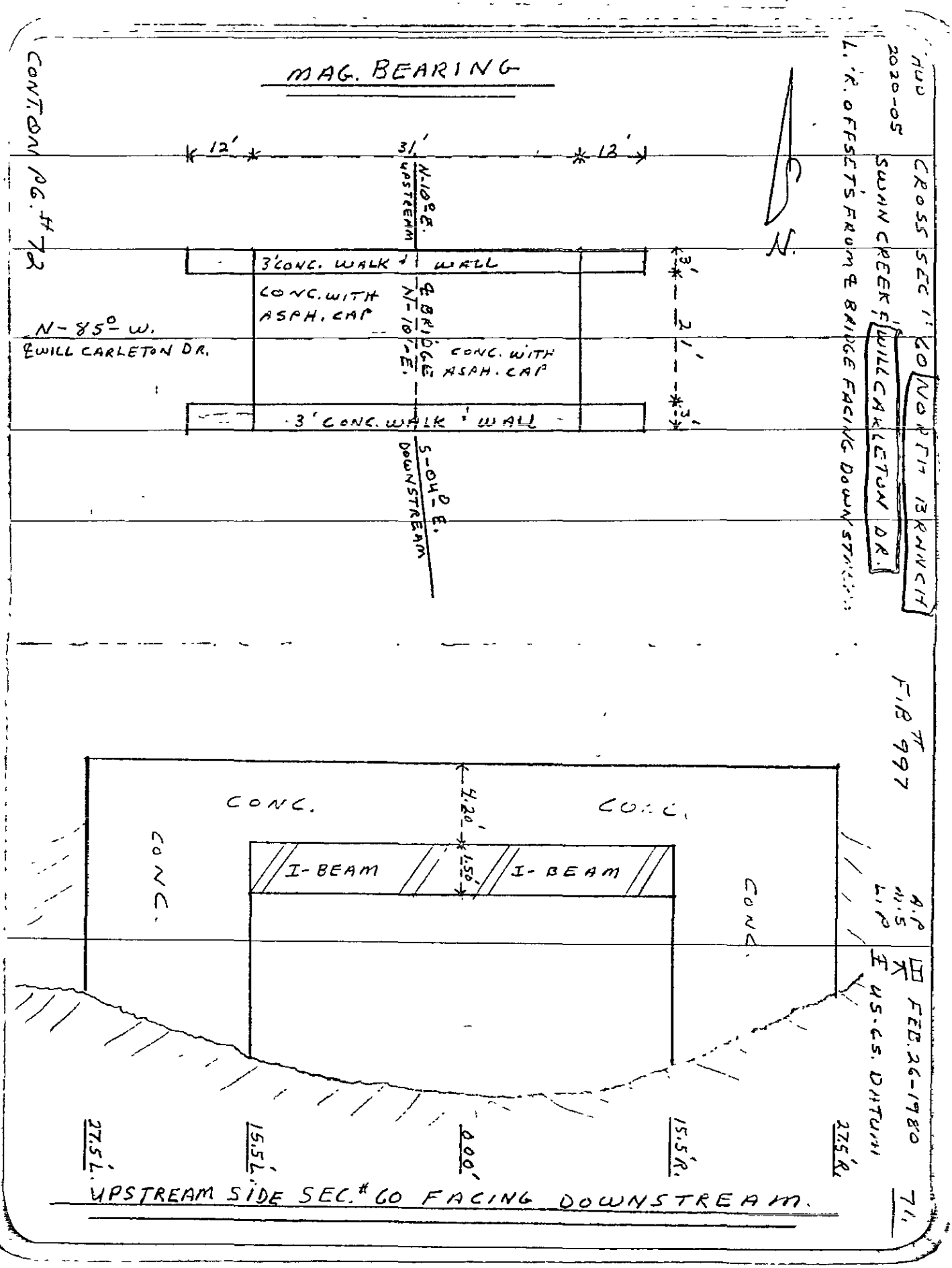
SEC #59 - LEFTSIDE OF BRIDGE TO THE RIGHT (WILL - CARLETON RD)

NORTH BRANCH OF SWAN CREEK



SEC #59 BRIDGE FACING UPSTREAM (WILL - CARLETON RD) Sheet 6 of 17 Exhibit 1

NORTH BRANCH OF SWAN CREEK



Sheet 67 of 67
Exhibit 2

SWAN CREEK

AND

NORTH BRANCH OF SWAN CREEK

EXHIBIT 3

Water Surface Profiles

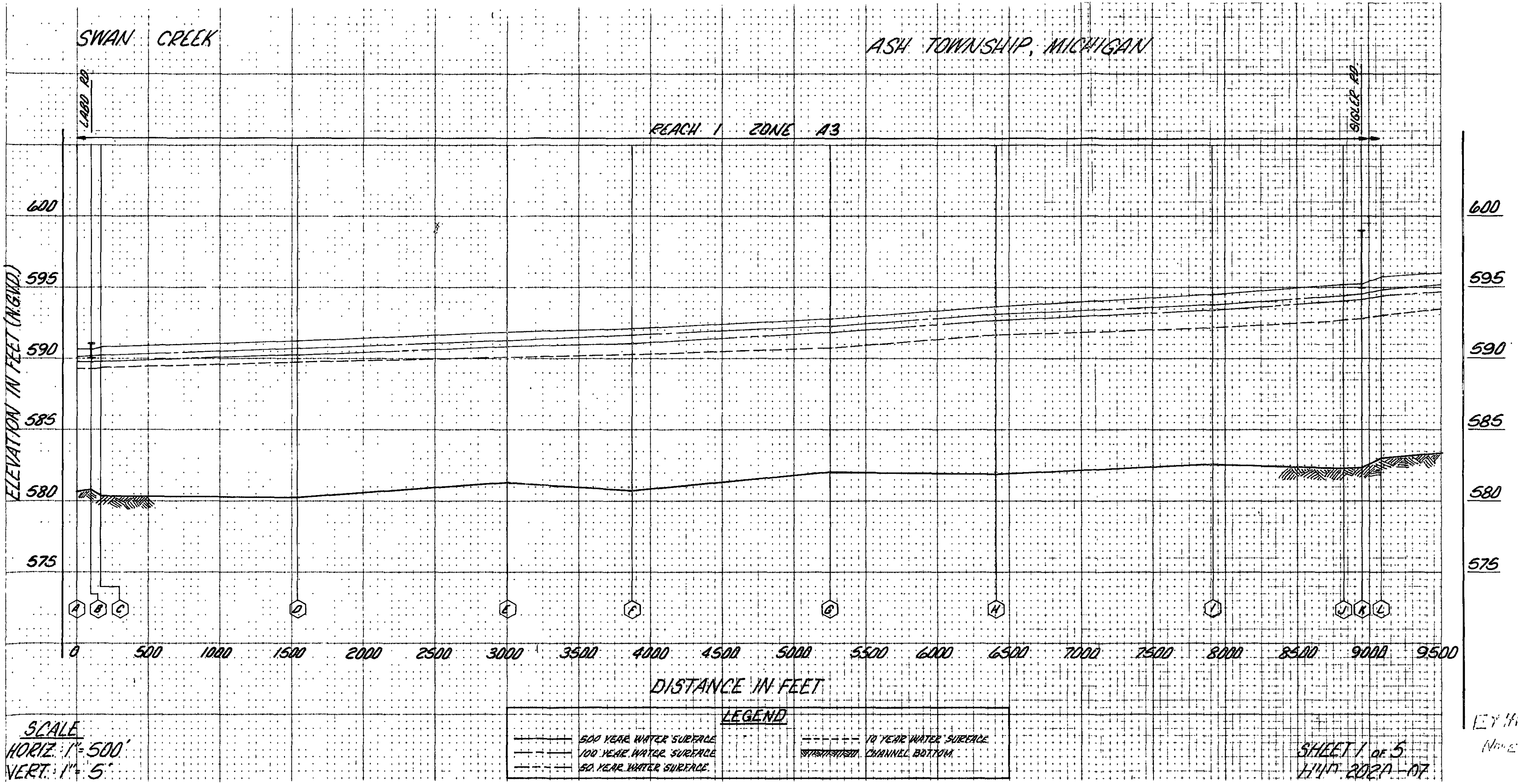

SWAN CREEK
ASH TOWNSHIP, MICHIGAN
LABO RD
SIBLEY RD
REACH 1 ZONE A3
ELEVATION IN FEET (N.G.V.D.)
600
595
590
585
580
575
A
B
C
D
E
F
G
H
I
J
K
L
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
8500
9000
9500
DISTANCE IN FEET
LEGEND
500 YEAR WATER SURFACE
100 YEAR WATER SURFACE
50 YEAR WATER SURFACE
10 YEAR WATER SURFACE
CHANNEL BOTTOM
SCALE
HORIZ. 1"=500'
VERT. 1"=5'
SHEET 1 OF 5
HWT 2020-07

EXHIBIT 3

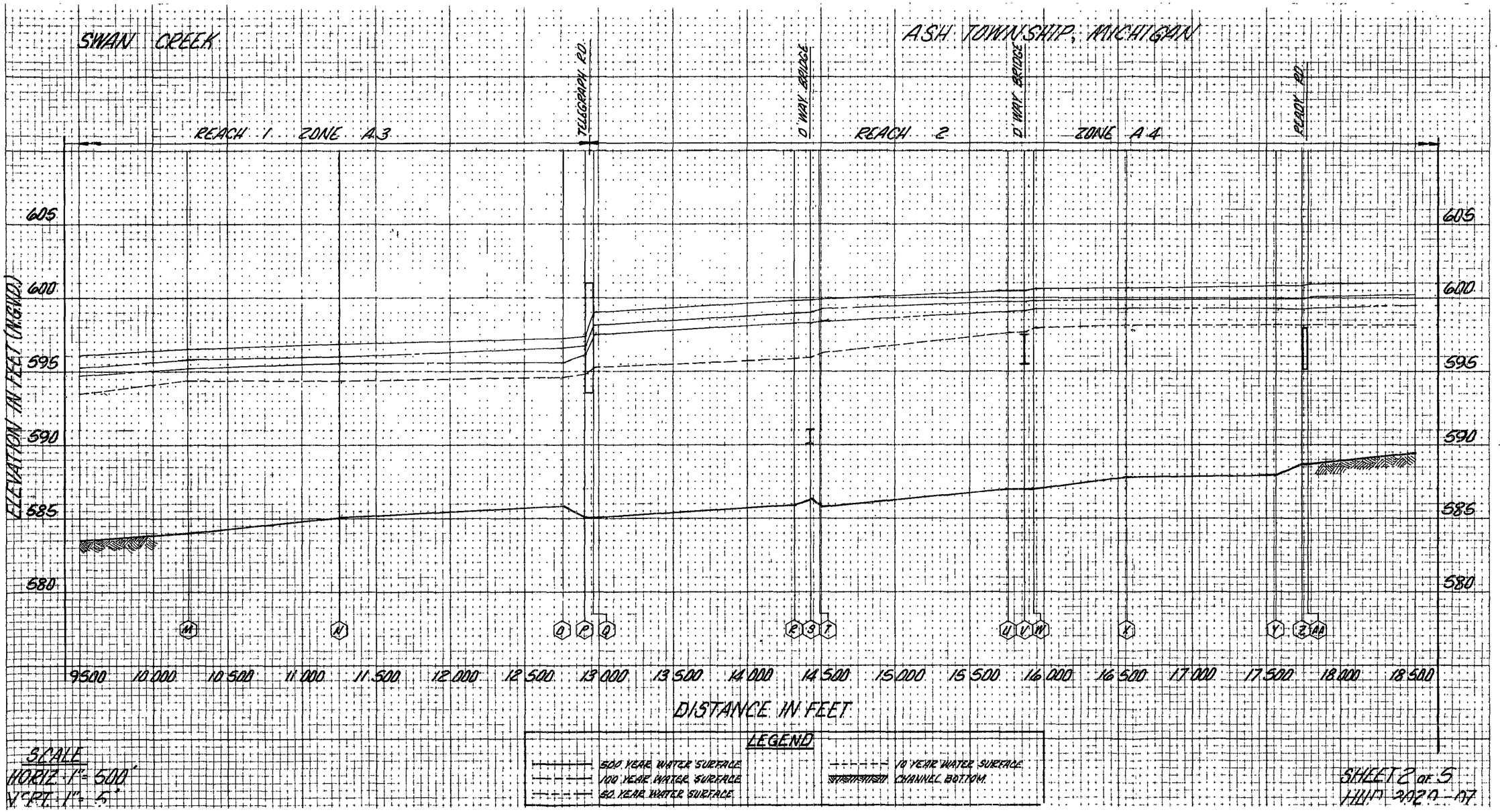
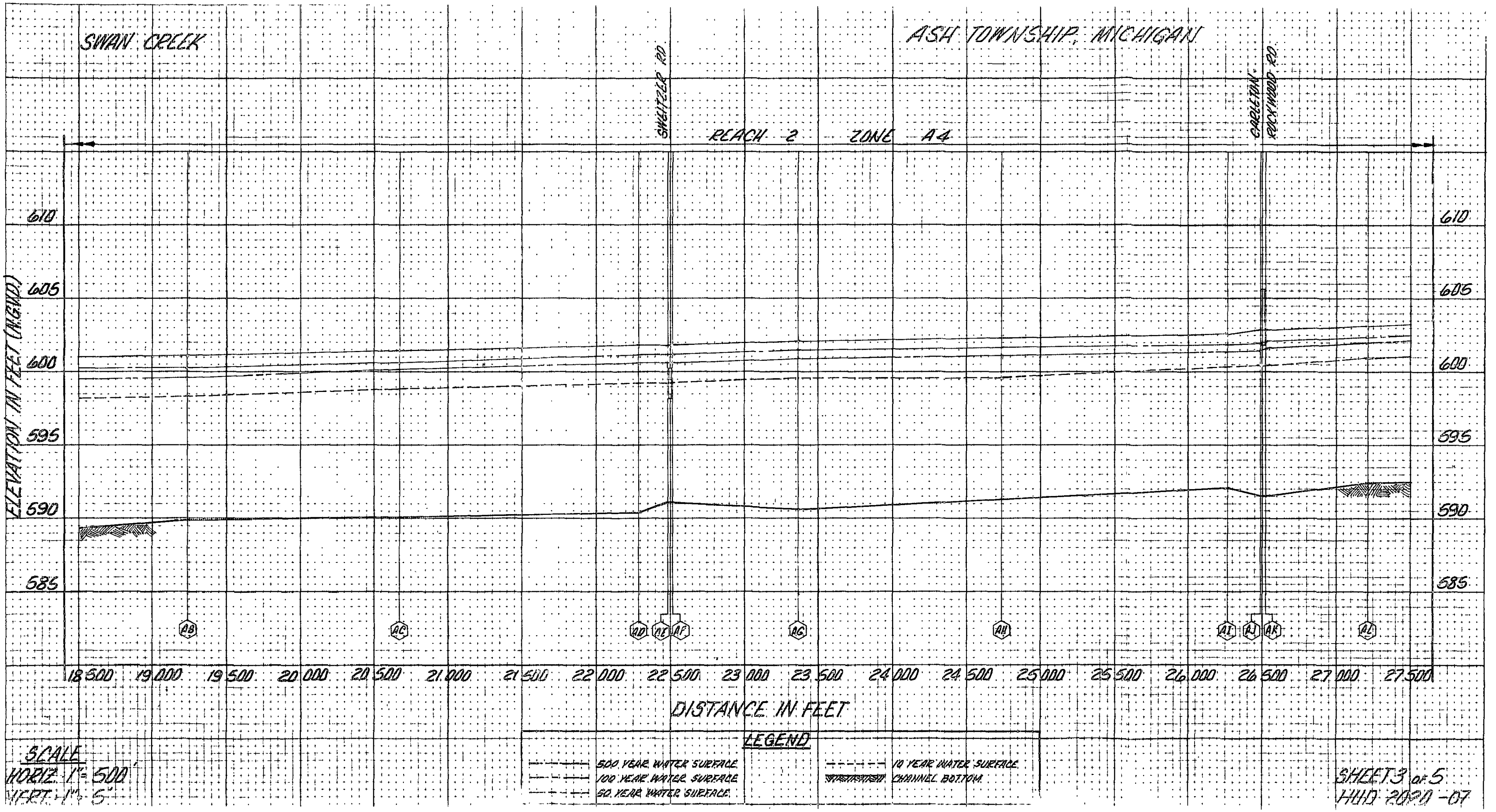
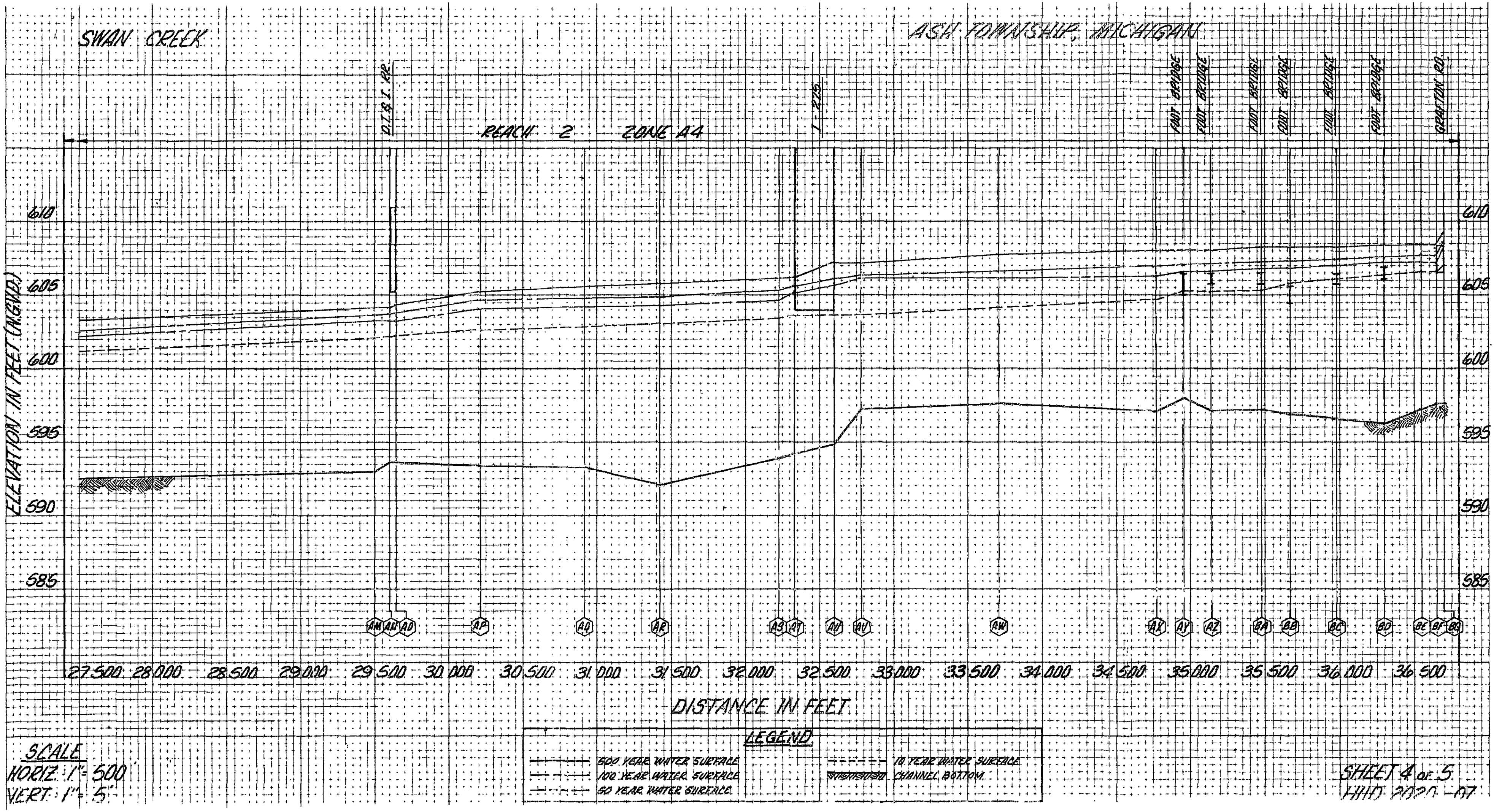
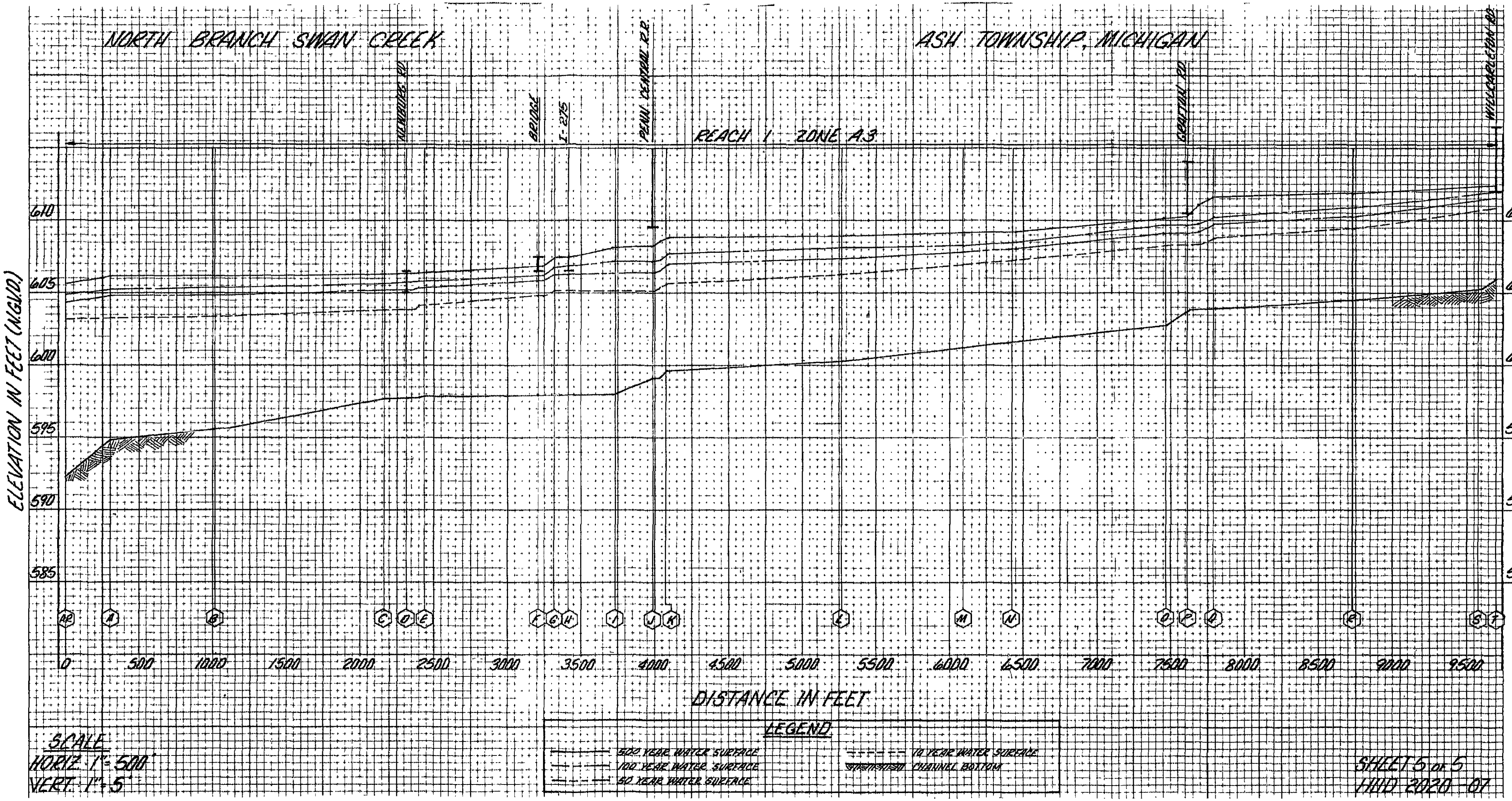

SWAN CREEK
ASH TOWNSHIP, MICHIGAN
TELEGRAPH RD.
O'WAY BRIDGE
O'WAY BRIDGE
READY RD.
REACH 1 ZONE A3
REACH 2 ZONE A4
ELEVATION IN FEET (N.G.V.D.)
605
600
595
590
585
580
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
AA
9500
10 000
10 500
11 000
11 500
12 000
12 500
13 000
13 500
14 000
14 500
15 000
15 500
16 000
16 500
17 000
17 500
18 000
18 500
DISTANCE IN FEET
LEGEND
500 YEAR WATER SURFACE
100 YEAR WATER SURFACE
50 YEAR WATER SURFACE
10 YEAR WATER SURFACE
CHANNEL BOTTOM
SCALE
HORIZ 1" = 500'
VERT 1" = 5'
SHEET 2 OF 5
HUD 2020-07

EXHIBIT 3


SWAN CREEK
ASH TOWNSHIP, MICHIGAN
SWITZER RD
CARLETON-ROCKWOOD RD
REACH 2
ZONE A4
ELEVATION IN FEET (N.G.V.D.)
610
605
600
595
590
585
AB
AC
AD
AE
AF
AG
AH
AI
AJ
AK
AL
18 500
19 000
19 500
20 000
20 500
21 000
21 500
22 000
22 500
23 000
23 500
24 000
24 500
25 000
25 500
26 000
26 500
27 000
27 500
DISTANCE IN FEET
LEGEND
500 YEAR WATER SURFACE
100 YEAR WATER SURFACE
50 YEAR WATER SURFACE
10 YEAR WATER SURFACE
CHANNEL BOTTOM
SCALE
HORIZ. 1" = 500'
VERT. 1" = 5'
SHEET 3 OF 5
HUD 2020-07


SWAN CREEK
ASH TOWNSHIP, MICHIGAN
REACH 2
ZONE AA
D.T.& I. R.R.
I-275
FOOT BRIDGE
FOOT BRIDGE
FOOT BRIDGE
FOOT BRIDGE
FOOT BRIDGE
FOOT BRIDGE
GRAFTON RD.
ELEVATION IN FEET (NGVD)
610
605
600
595
590
585
AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG
27 500 28 000 28 500 29 000 29 500 30 000 30 500 31 000 31 500 32 000 32 500 33 000 33 500 34 000 34 500 35 000 35 500 36 000 36 500
DISTANCE IN FEET
LEGEND
500 YEAR WATER SURFACE
100 YEAR WATER SURFACE
50 YEAR WATER SURFACE
10 YEAR WATER SURFACE
CHANNEL BOTTOM
SCALE
HORIZ. 1" = 500'
VERT. 1" = 5'
SHEET 4 OF 5
HHD 2120-07


NORTH BRANCH SWAN CREEK
ASH TOWNSHIP, MICHIGAN
REACH 1 ZONE A3
ROMULUS RD.
BRIDGE
I-275
PENN CENTRAL R.R.
GRATING RD.
WILLOWBROOK RD.
ELEVATION IN FEET (NGVD)
610
605
600
595
590
585
AB
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
8500
9000
9500
DISTANCE IN FEET
LEGEND
500 YEAR WATER SURFACE
100 YEAR WATER SURFACE
50 YEAR WATER SURFACE
10 YEAR WATER SURFACE
ESTIMATED CHANNEL BOTTOM
SCALE
HORIZ. 1"= 500'
VERT. 1"= 5'
SHEET 5 OF 5
HUD 2020-01

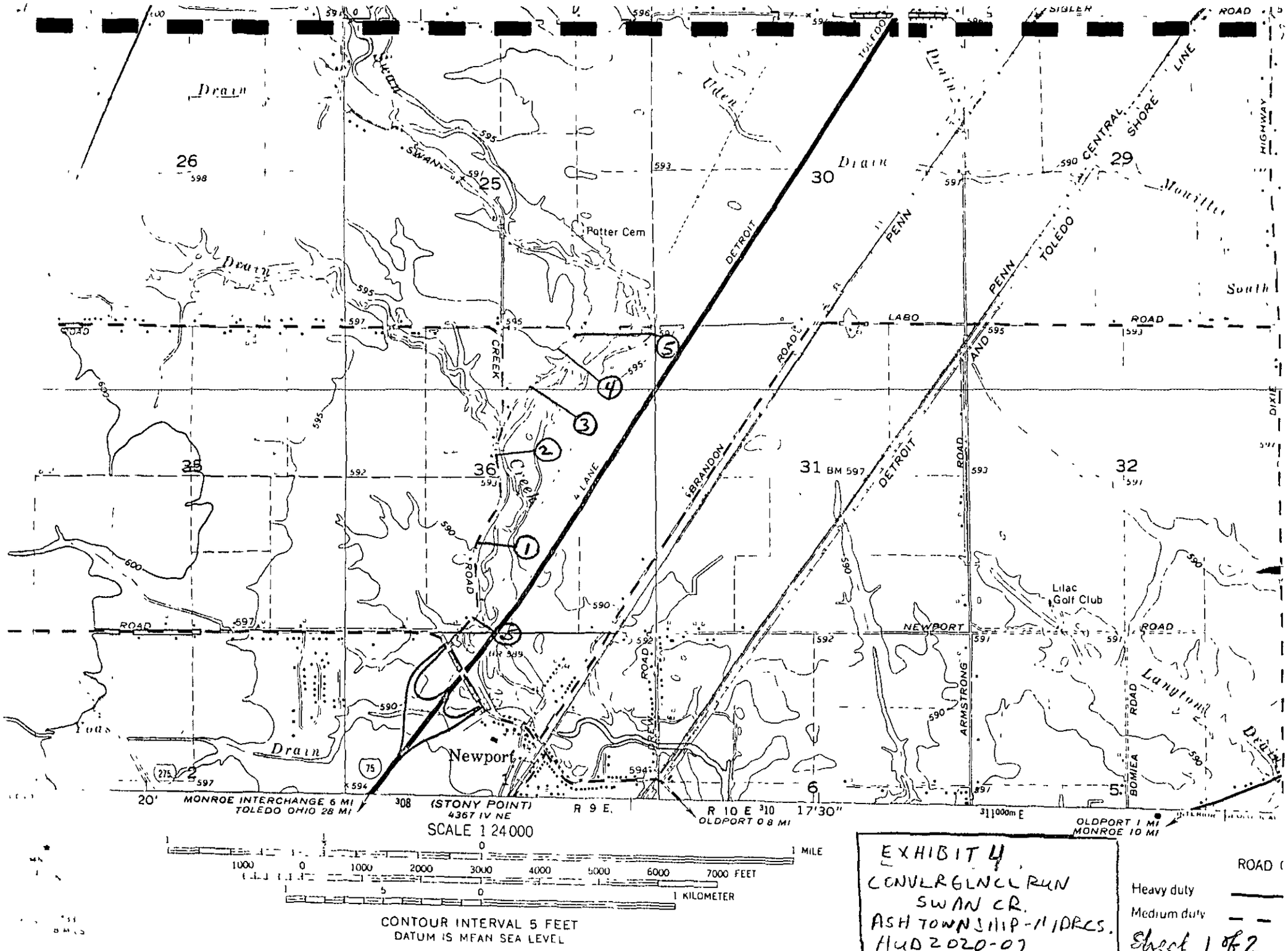


EXHIBIT 4
CONVERGENCE RUN
SWAN CR.
ASH TOWNSHIP - MIDRCS.
HUD 2020-07
4-15-80 7 [illegible]

Sheet 1 of 2

K&E 10 X 10 TO ½ INCH 7 X 10 INCHES
KEUFFEL & ESSER CO MADE IN U.S.A.

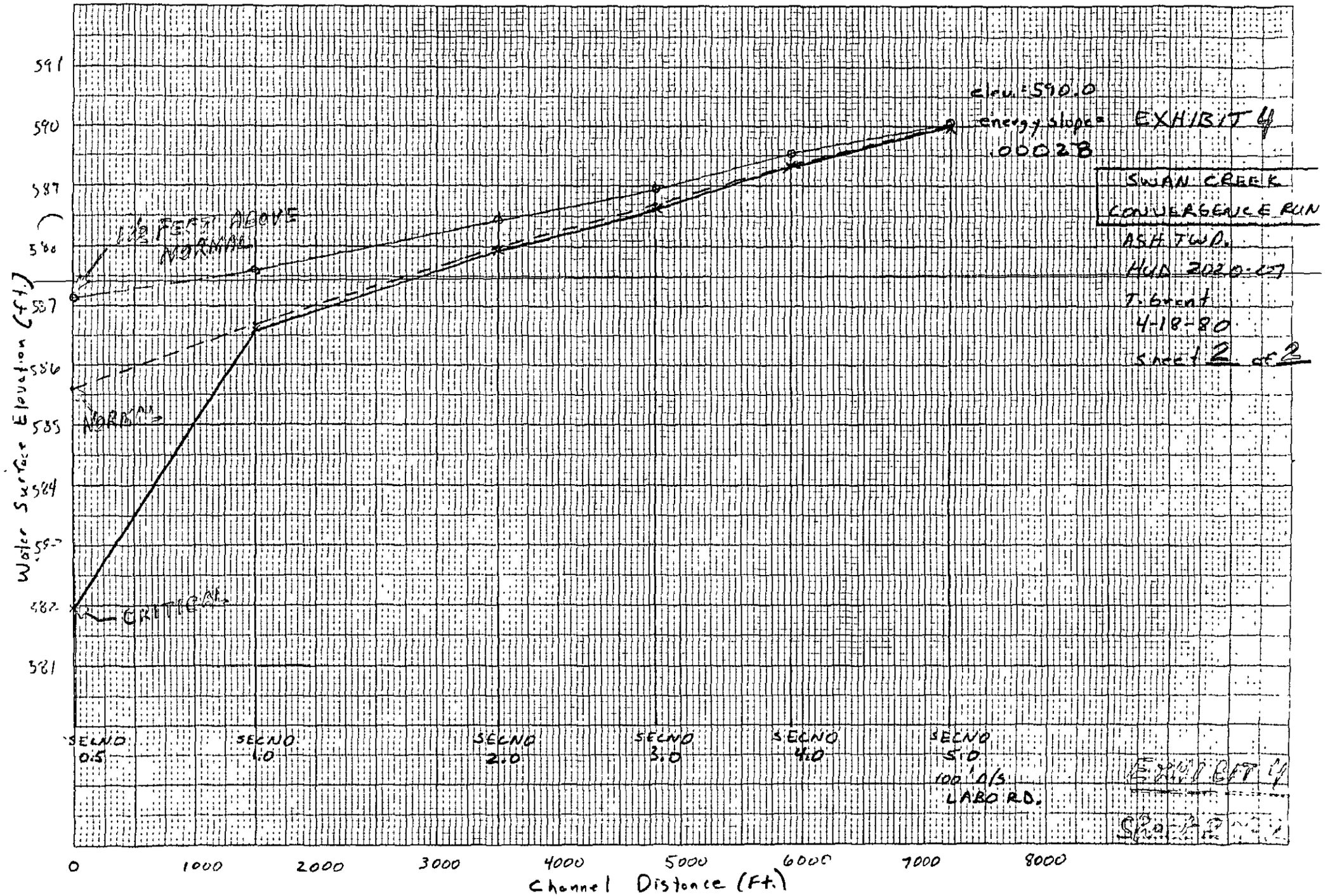


EXHIBIT 4

SWAN CREEK

EXHIBIT 4

Convergence Run

SWAN CREEK

AND

NORTH BRANCH OF SWAN CREEK

EXHIBIT 5

HEC-2 Backwater Analysis With
Cross Section Plots
(See Separate Folder)

WATER MANAGEMENT
JUL 31 1981
RECEIVED

AIRPORT ROAD

622

MACKERLY ROAD

Christian Hills

620

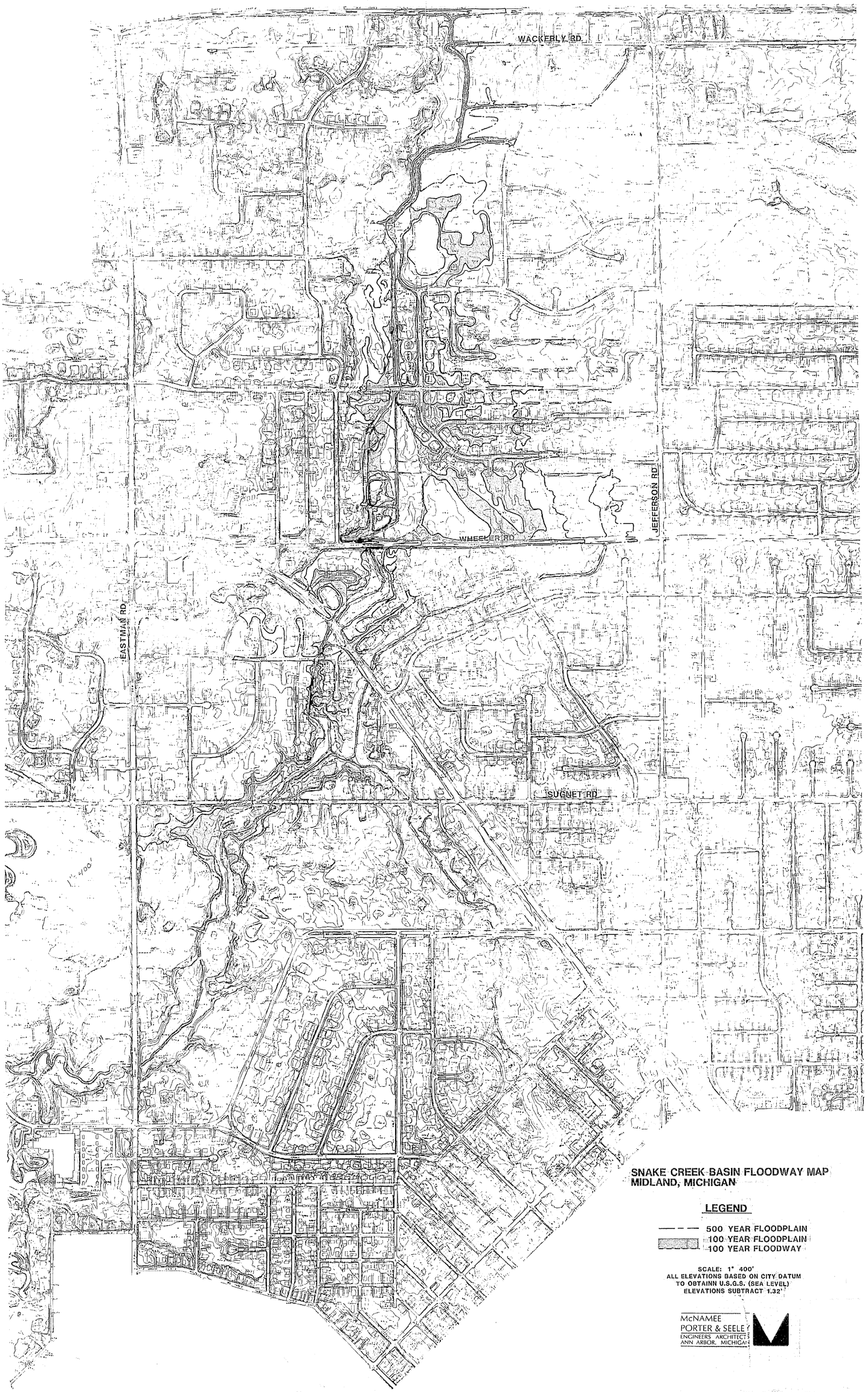
610

Woodcrest Sch

Municipal Cemetery

FLOODWAY

7/31/81



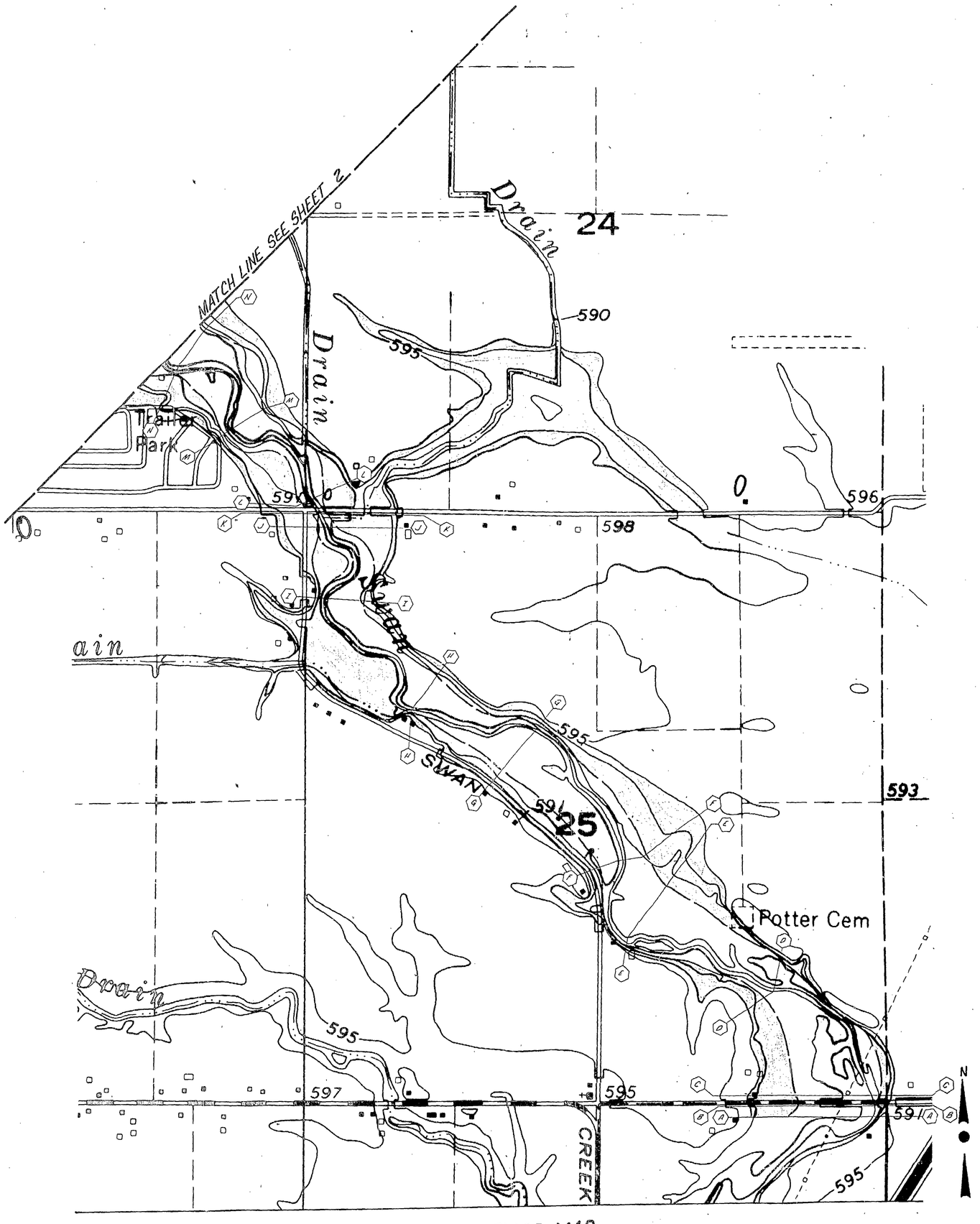
SNAKE CREEK BASIN FLOODWAY MAP
MIDLAND, MICHIGAN

LEGEND

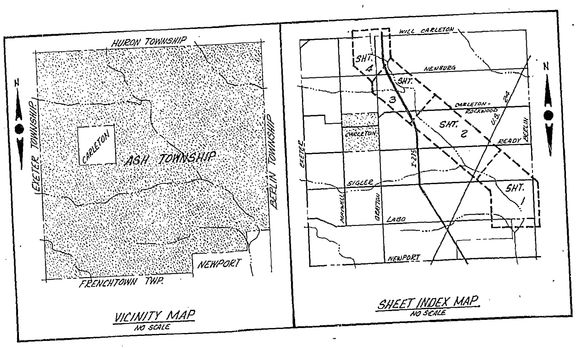
- 500 YEAR FLOODPLAIN
- 100 YEAR FLOODPLAIN
- 100 YEAR FLOODWAY

SCALE: 1" 400'
ALL ELEVATIONS BASED ON CITY DATUM
TO OBTAINN U.S.G.S. (SEA LEVEL)
ELEVATIONS SUBTRACT 1.32'

McNAMEE
PORTER & SEELEY
ENGINEERS ARCHITECTS
ANN ARBOR, MICHIGAN



FLOOD MAP



LEGEND

FLOODWAY — 100 YR. BOUNDARY — 500 YR. BOUNDARY

A — B CROSS SECTION

CORPORATE LIMITS

COUNTY BOUNDARY

EXHIBIT 1, NOVEMBER 1980

ASH TOWNSHIP

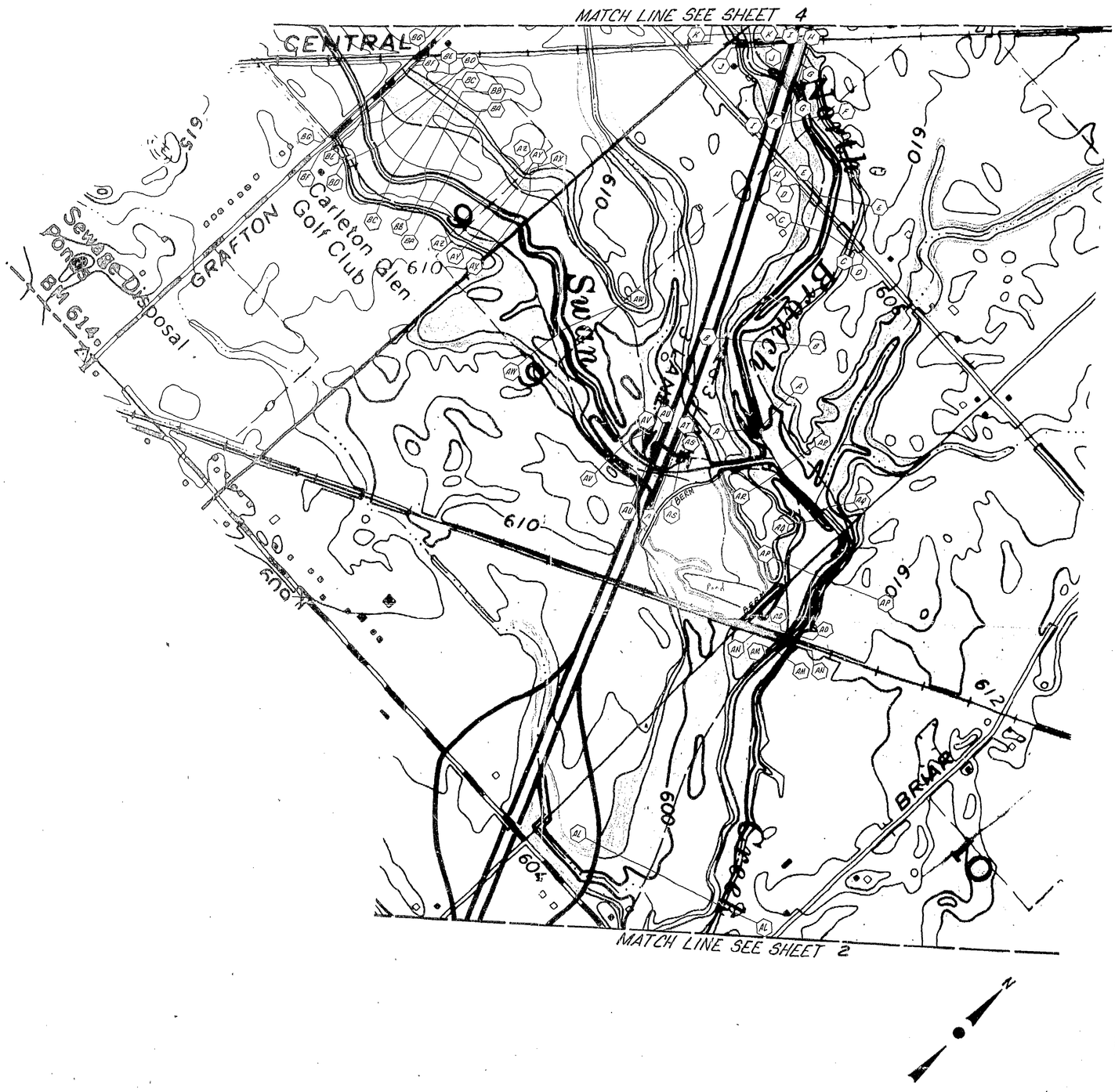
MONROE COUNTY, MICHIGAN

SCALE: 1" = 400'

EXHIBIT 1

SHEET 1 OF 4

IWD 2020-10



FLOOD MAP

LEGEND

FLOODWAY — 100 YR. BOUNDARY — 500 YR. BOUNDARY

A — A CROSS SECTION

CORPORATE LIMITS

COUNTY BOUNDARY

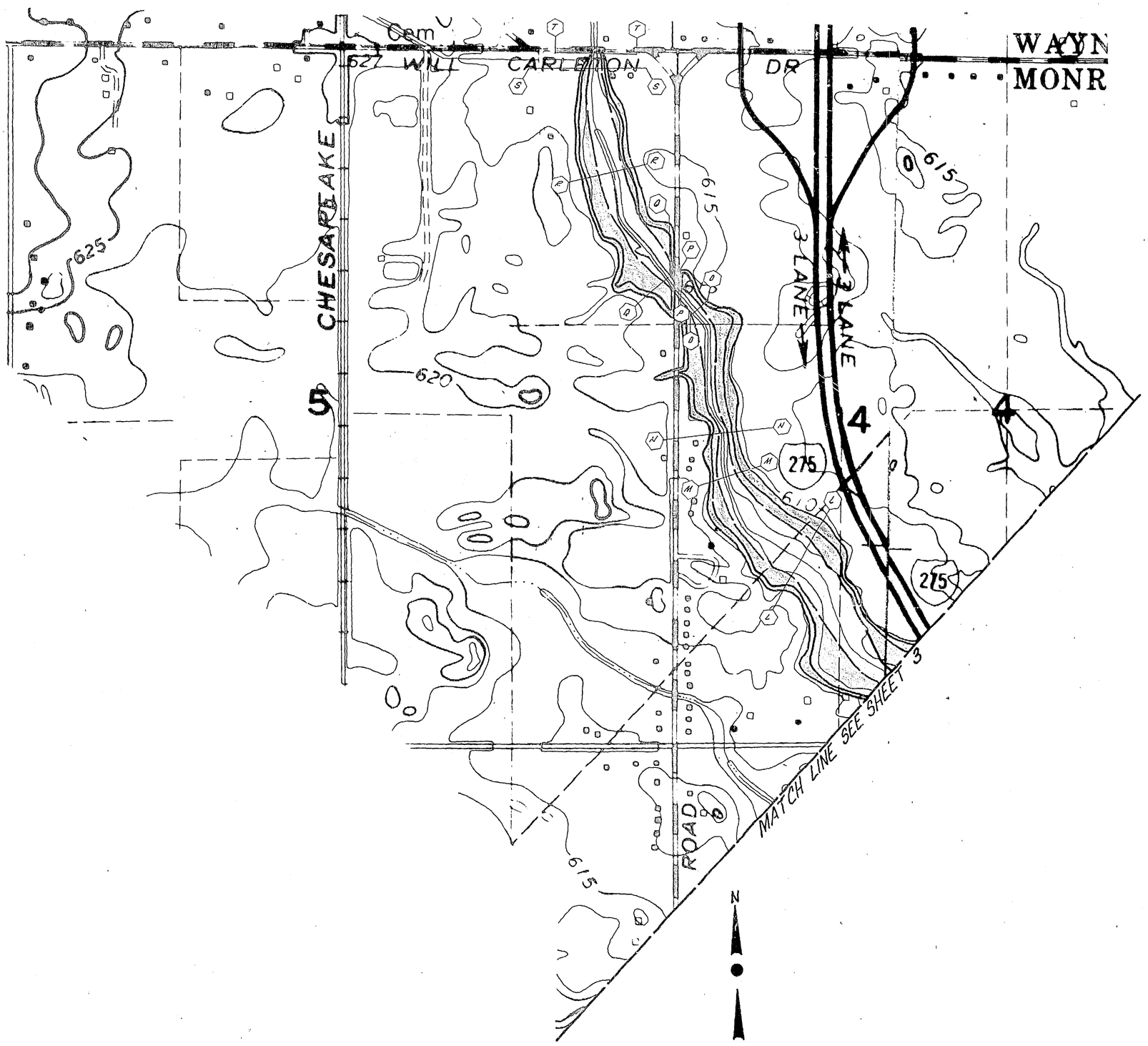
EXHIBIT 1, NOVEMBER 1980

ASH TOWNSHIP
MONROE COUNTY, MICHIGAN

SCALE: 1" = 400'

EXHIBIT 1

SHEET 3 of 4
HUD 2020-10



FLOOD MAP

LEGEND

FLOODWAY — 100 YR. BOUNDARY — 500 YR. BOUNDARY

A — A CROSS SECTION

CORPORATE LIMITS

COUNTY BOUNDARY

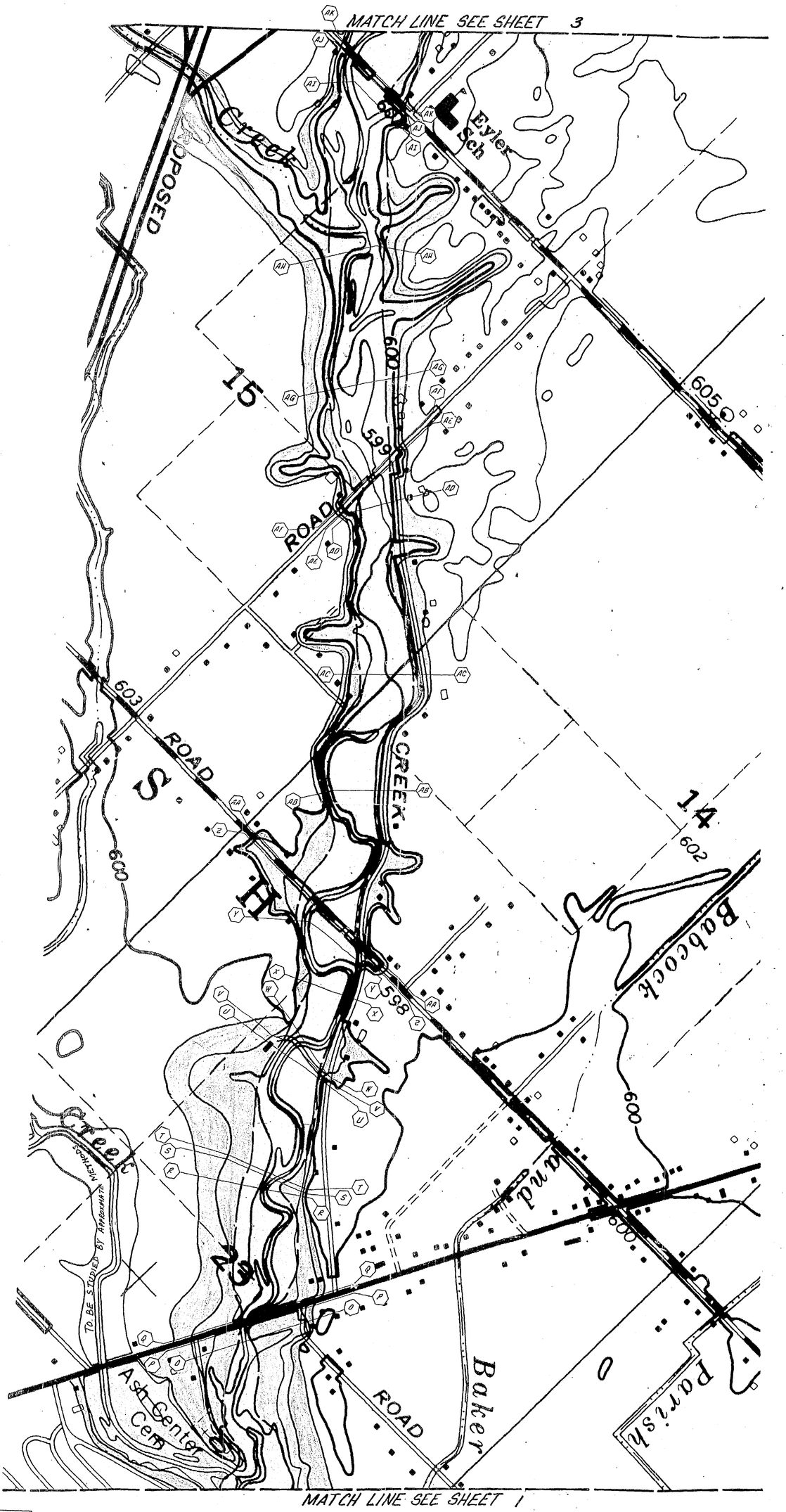
EXHIBIT 1, NOVEMBER 1980

ASH TOWNSHIP
MONROE COUNTY, MICHIGAN

SCALE: 1" = 400'

EXHIBIT 1

SHEET 4 of 4
HUD 2020-10



FLOODWAY — 100 YR. BOUNDARY — 500 YR. BOUNDARY

CROSS SECTION

CORPORATE LIMITS

COUNTY BOUNDARY

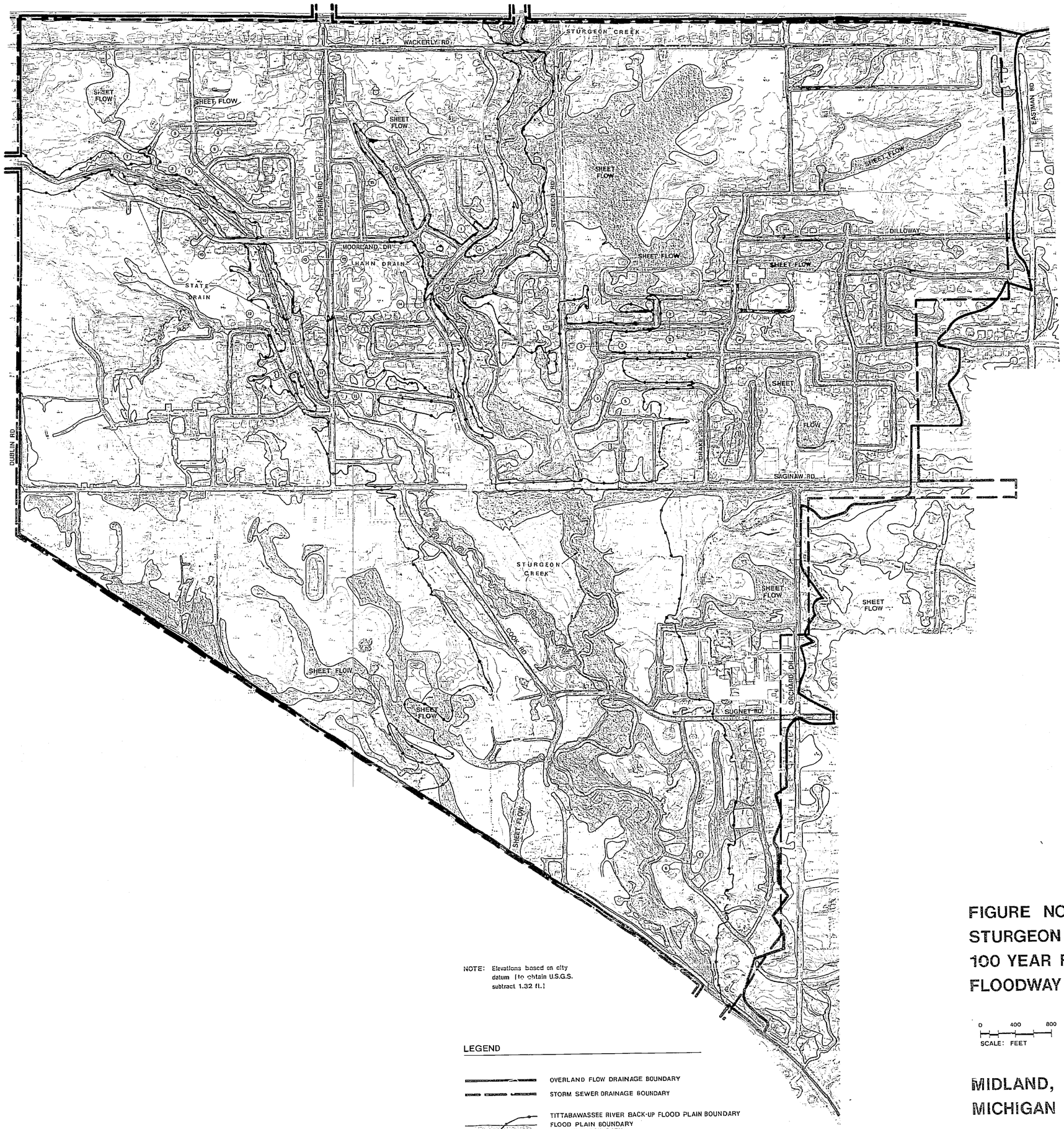
EXHIBIT 1. NOVEMBER 1980

FLOOD MAP

ASH TOWNSHIP
MONROE COUNTY, MICHIGAN

SCALE: 1" = 400'

EXHIBIT 1



ABRAMS
AERIAL SURVEY CORPORATION
704 N. LARCH ST., LANSING, MICHIGAN 48906

RP
△ REFERENCE POINT
THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION

N

NOTE: Elevations based on city datum (to obtain U.S.G.S. subtract 1.32 ft.)

LEGEND

- OVERLAND FLOW DRAINAGE BOUNDARY
- STORM SEWER DRAINAGE BOUNDARY
- TITTABAWASSEE RIVER BACK-UP FLOOD PLAIN BOUNDARY
- FLOOD PLAIN BOUNDARY
- FLOODWAY BOUNDARY
- FLOODWAY BOUNDARY
- FLOOD PLAIN BOUNDARY
- TITTABAWASSEE RIVER BACK-UP FLOOD PLAIN BOUNDARY
- CROSS SECTION

FIGURE NO. 4
STURGEON CREEK BASIN-100 YEAR FLOOD PLAIN/ FLOODWAY MAP

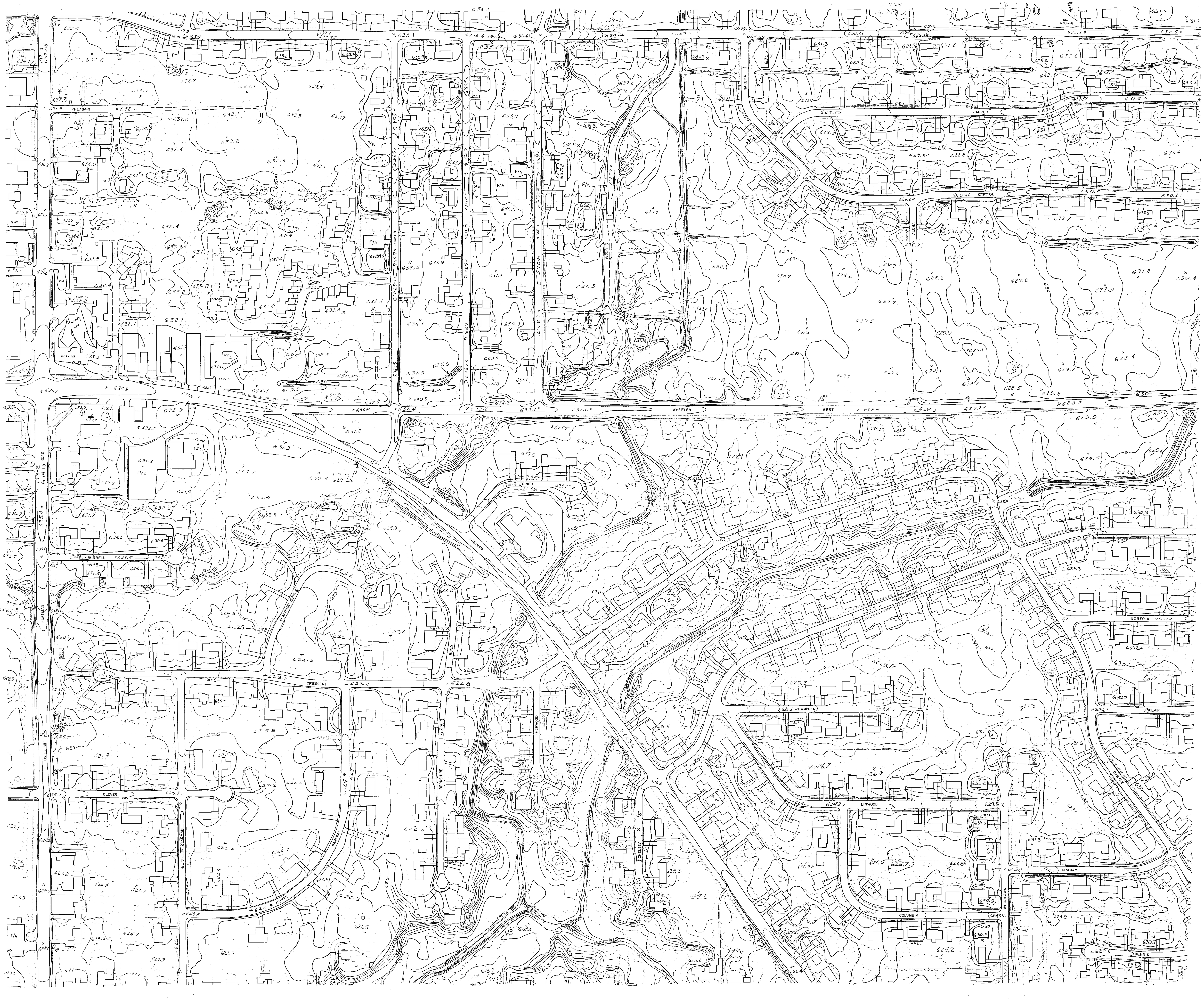
0 400 800
SCALE: FEET

MIDLAND, MICHIGAN

STORMWATER MANAGEMENT STUDY

McNAMEE PORTER & SEELEY
ENGINEERS ARCHITECTS
ANN ARBOR, MICHIGAN

12-2A


SYLVAN
PHEASANT
HARPER
NAKOMA
CAPITOL
ALOHA
MEYERS
RUSSELL
WHEELER
WEST
TRINITY
CRESCENT
SAGINAW
BURRELL
EASTMAN
ROAD
MEADOWBROOK
NORFOLK
HAMPDEN
SINCLAIR
LINWOOD
GRAHAM
COLUMBIA
WALL
DENNIS
CLOVER
PARKWAY
NORTH
BERKSHIRE
CHELSEA
WOODLAWN
P/A
POOL
PARKING

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 10 yr.

00BREAK00

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

T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK  10 YEAR FLOW=350 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.       2.        0.        0.    .001700      0.00     -1.0       0.    593.700     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     2.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
```

*PRCF 2

CCHV= .300 CEHV= .500

*SECNO 301.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST
301.00	6.27	591.17	0.00	593.70	591.32	.15	0.00	0.00	589.90
350.	12.	338.	0.	15.	109.	0.	0.	0.	591.30
0.00	.82	3.11	0.00	.060	.045	.060	0.000	584.90	427.13
.001697	0.	0.	0.	0	0	5	0.00	49.69	476.82

*SECNO 301.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 592.50 ELREA= 592.50

** C/S FACE RAILROAD BRIDGE

301.98	7.11	591.31	0.00	0.00	591.64	.33	.23	.09	587.30
350.	0.	350.	0.	0.	76.	0.	0.	0.	587.10
.01	0.00	4.60	0.00	.060	.045	.060	.045	584.20	455.00
.002780	108.	108.	108.	2	0	0	0.00	12.00	467.00

SPECIAL BRIDGE

SB	XK	XKCR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNC 302.020

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
591.86	591.64	0.00	0.	350.	72.	72.	590.20	593.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 593.50 ELREA= 593.50

302.02	7.36	591.56	0.00	0.00	591.86	.30	.22	0.00	587.30
350.	0.	350.	0.	0.	79.	0.	0.	0.	587.10
.01	0.00	4.42	0.00	.060	.045	.060	.044	584.20	455.00
.002485	42.	42.	42.	2	0	0	0.00	12.00	467.00

*SECNO 302.500

3280 CROSS SECTION 302.50 EXTENDED 1.12 FEET

302.50	7.52	591.92	0.00	0.00	591.97	.05	.03	.08	589.40
350.	35.	292.	22.	44.	149.	34.	0.	0.	589.90

.02	.80	1.96	.65	.060	.045	.060	.044	584.40	425.00
.000437	40.	40.	40.	2	0	0	0.00	75.00	500.00

*SECNC 302.980

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.30 ELREA= 593.30

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	7.31	591.91	0.00	0.00	592.02	.11	.02	.03	585.40
350.	0.	350.	0.	0.	131.	0.	1.	0.	584.60
.02	0.00	2.66	0.00	.060	.045	.060	.044	584.60	516.00
.000542	40.	40.	40.	2	0	0	0.00	19.00	535.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNO 303.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
593.79	593.62	0.00	0.	350.	61.	61.	591.30	597.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.30 ELREA= 597.30

303.02	7.49	593.69	C.00	C.00	593.79	.10	1.77	0.00	587.00
350.	0.	350.	0.	0.	135.	0.	2.	0.	586.20
.07	0.00	2.60	0.00	.060	.045	.060	.045	586.20	516.00
.000501	453.	453.	453.	2	0	0	0.00	19.00	535.00

*SECNO 303.500
3280 CROSS SECTION 303.50 EXTENDED 1.38 FEET

303.50	7.58	593.78	C.00	0.C0	593.82	.04	.01	.02	591.10
350.	35.	302.	13.	48.	172.	27.	2.	0.	592.50
.07	.72	1.76	.48	.060	.045	.060	.045	586.20	425.00
.000323	26.	26.	26.	2	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNO 303.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 596.60 ELREA= 596.60

** D/S FACE RAILROAD BRIDGE

303.98	7.45	593.65	0.00	0.00	593.90	.25	.02	.06	586.40
350.	0.	350.	0.	0.	88.	0.	2.	0.	586.50
.07	0.00	3.99	0.00	.060	.045	.060	.045	586.20	458.00
.001562	26.	26.	26.	2	0	0	0.00	12.00	470.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNO 304.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
594.10	593.90	0.00	0.	350.	74.	74.	592.40	598.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.00 ELREA= 598.00

304.02	7.67	593.87	0.00	0.00	594.10	.23	.20	0.00	586.40
350.	0.	350.	0.	0.	90.	0.	2.	0.	586.50
.09	0.00	3.87	0.00	.060	.045	.060	.045	586.20	458.00
.001441	34.	34.	34.	2	0	0	0.00	12.00	470.00

*SECNO 304.500
3280 CROSS SECTION 304.50 EXTENDED 1.70 FEET

SECNO	DEPTH	CWSEL	CRITS	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
304.50	7.90	594.10	0.00	0.00	594.13	.04	.02	.02	591.10
350.	39.	294.	17.	55.	181.	34.	2.	0.	592.50
.08	.71	1.62	.50	.060	.045	.060	.045	586.20	425.00
.000256	32.	32.	32.	2	0	0	0.00	75.00	500.00

CCHV= .150 CEHV= .350
*SECNO 304.980

** D/S FACE TELEGRAPH RD

304.98	7.92	594.12	0.00	0.00	594.14	.02	.01	.00	592.50
350.	11.	337.	3.	38.	262.	16.	3.	1.	593.30
.09	.28	1.29	.18	.060	.045	.060	.044	586.20	458.24
.000169	32.	32.	32.	0	0	0	0.00	150.65	608.89

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	225.00	10.00	0.00	57.00	0.00	586.20	586.20

*SECNC 305.020
3280 CROSS SECTION 305.02 EXTENDED .02 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	GWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.05	594.14	0.00	3.	345.	57.	57.	591.90	595.00

305.02	8.81	595.01	0.00	0.00	595.03	.01	.88	0.00	592.50
350.	31.	305.	14.	122.	305.	70.	3.	1.	593.30
.11	.25	1.00	.21	.060	.045	.060	.044	586.20	400.00
.000083	63.	63.	63.	1	0	0	0.00	250.00	650.00

*SECNO 306.000
3280 CROSS SECTION 306.00 EXTENDED 2.12 FEET

306.00	8.83	595.03	0.00	0.00	595.03	.00	.00	.00	589.30
350.	76.	106.	168.	289.	126.	482.	4.	1.	589.90
.14	.26	.84	.35	.060	.045	.060	.044	586.20	0.00
.000050	50.	50.	50.	0	0	0	0.00	350.00	350.00

*SECNO 310.000
3280 CROSS SECTION 310.00 EXTENDED .56 FEET

310.00	7.56	595.06	0.00	0.00	595.09	.02	.05	.01	594.10
350.	10.	244.	96.	32.	176.	237.	12.	5.	594.60
.27	.32	1.39	.41	.060	.045	.060	.045	587.50	0.00
.000255	500.	500.	500.	0	0	0	0.00	325.00	325.00

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED .01 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLCB	QCH	QRCB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST

** D/S FACE SUB STATION RD

310.98	7.11	595.11	0.00	0.00	595.18	.07	.05	.04	594.90
350.	0.	350.	0.	2.	159.	0.	13.	6.	595.10
.28	.06	2.20	.01	.060	.045	.060	.045	588.00	500.00

.000605	142.	142.	142.	2	0	0	0.00	191.03	691.03

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNO 311.02C
3280 CROSS SECTION 311.02 EXTENDED .35 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.52	595.18	0.00	1.	346.	83.	83.	594.40	595.50

311.02	7.45	595.45	0.00	0.00	595.51	.06	.33	0.00	594.90
350.	15.	333.	2.	57.	170.	10.	13.	6.	595.10
.29	.26	1.97	.16	.060	.045	.060	.045	588.00	500.00
.000446	16.	16.	16.	2	0	0	0.00	245.34	745.34

*SECNC 311.100
3280 CROSS SECTION 311.10 EXTENDED .19 FEET

311.10	7.29	595.49	0.00	0.00	595.54	.04	.02	.01	594.00
350.	79.	271.	0.	142.	146.	0.	13.	6.	595.80
.30	.56	1.85	0.00	.060	.045	.060	.045	588.20	0.00
.000433	50.	50.	50.	1	0	0	0.00	186.67	186.67

CCHV= .150 CEHV= .350
*SECNO 312.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLFA= 596.70 ELREA= 596.90

312.00	6.31	596.21	0.00	0.00	596.31	.10	.75	.02	596.70
350.	0.	350.	0.	0.	139.	0.	19.	9.	596.90
.43	0.00	2.51	0.00	.060	.045	.060	.045	589.90	451.51
.000975	1200.	1200.	1200.	2	0	0	0.00	32.89	484.40

*SECNO 312.10C
3280 CROSS SECTION 312.10 EXTENDED .14 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 597.00 ELREA= 597.20

312.10	6.04	596.84	0.00	0.00	596.99	.15	.66	.02	597.00
350.	0.	350.	0.	0.	114.	0.	20.	10.	597.20
.47	0.00	3.08	0.00	.060	.045	.060	.045	590.80	294.25
.001741	520.	520.	520.	2	0	0	0.00	30.82	325.07

CCHV= .200 CEHV= .400
*SECNO 312.980

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	ICC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.19	597.09	0.00	0.00	597.22	.14	.23	.00	597.10
350.	0.	350.	0.	0.	118.	0.	21.	10.	597.30
.49	0.00	2.96	0.00	.060	.045	.060	.045	590.90	294.02
.001566	142.	142.	142.	2	0	0	0.00	31.43	325.45

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.40	597.25	0.00	0.	350.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.90 ELREA= 598.90

313.02	6.35	597.25	0.00	0.00	597.40	.15	.18	0.00	597.60
350.	0.	350.	0.	0.	113.	0.	21.	10.	597.70
.49	0.00	3.09	0.00	.060	.045	.060	.045	590.90	273.78
.001654	17.	17.	17.	2	0	0	0.00	28.58	302.36

*SECNO 313.100

313.10	5.91	597.31	0.00	0.00	597.49	.19	.08	.01	598.10
350.	0.	350.	0.	0.	101.	0.	21.	10.	598.20
.49	0.00	3.45	0.00	.060	.045	.060	.045	591.40	274.74
.002227	42.	42.	42.	0	0	0	0.00	27.00	301.74

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 50yr.

00BREAK00

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  C1
  MODIFICATION -  50,51,52
**************************************************

T1       HUD-FIA  H-4705
T2       BEDFORD  TOWNSHIP  F.S
T3       FLAT CREEK  50 YEAR FLOW=400 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     G         WSEL      FQ

      -1.       3.        0.        0.    .001700      0.00     -1.0       0.    593.700     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     3.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
```

*PROF 3

CCHV= .300 CEHV= .500
*SECNO 301.000
3280 CROSS SECTION 301.00 EXTENDED .25 FEET

SECNO	DEPTH	CWSEL	CRITS	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
301.00	6.55	591.45	0.00	593.70	591.61	.16	0.00	0.00	589.90
400.	21.	379.	0.	21.	117.	1.	0.	0.	591.30
0.00	1.00	3.24	.18	.060	.045	.060	0.000	584.90	425.00
.001692	0.	0.	0.	0	0	4	0.00	69.69	494.69

*SECNO 301.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 592.50 ELREA= 592.50

** D/S FACE RAILROAD BRIDGE

301.98	7.38	591.58	0.00	0.00	591.97	.39	.25	.12	587.30
400.	0.	400.	0.	0.	79.	0.	0.	0.	587.10
.01	0.00	5.04	0.00	.060	.045	.060	.045	584.20	455.00
.003218	108.	108.	108.	2	0	0	0.00	12.00	467.00

SPECIAL BRIDGE

SB	XK	XKOR	COFO	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNO 302.020
3280 CROSS SECTION 302.02 EXTENDED .35 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
592.30	591.97	0.00	0.	400.	72.	72.	590.20	593.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 593.50 ELREA= 593.50

302.02	7.74	591.94	0.00	0.00	592.30	.35	.32	0.00	587.30
400.	0.	400.	0.	0.	84.	0.	0.	0.	587.10
.01	0.00	4.78	0.00	.060	.045	.060	.044	584.20	455.00
.002750	42.	42.	42.	2	0	0	0.00	12.00	467.00

*SECNO 302.500
3280 CROSS SECTION 302.50 EXTENDED 1.57 FEET

302.50	7.97	592.37	0.00	0.00	592.42	.05	.03	.09	589.40
400.	48.	320.	32.	55.	162.	44.	1.	0.	589.90
.01	.87	1.97	.73	.060	.045	.060	.044	584.40	425.00
.000396	40.	40.	40.	2	0	0	0.00	75.00	500.00

*SECNO 302.980

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.30 ELREA= 593.30

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	7.75	592.35	0.00	0.00	592.48	.13	.02	.04	585.40
400.	0.	400.	0.	0.	140.	0.	1.	0.	584.60
.02	0.00	2.86	0.00	.060	.045	.060	.044	584.60	516.00
.000582	40.	40.	40.	2	0	0	0.00	19.00	535.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNC 303.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
594.81	594.08	0.00	0.	400.	61.	61.	591.30	597.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.30 ELREA= 597.30

303.02	8.50	594.70	0.00	0.00	594.81	.10	2.33	0.00	587.00
400.	0.	400.	0.	0.	154.	0.	2.	0.	586.20
.07	0.00	2.60	0.00	.060	.045	.060	.045	586.20	516.00
.000430	453.	453.	453.	2	0	0	0.00	19.00	535.00

*SECNO 303.500
3280 CROSS SECTION 303.50 EXTENDED 2.41 FEET

303.50	8.61	594.81	0.00	0.00	594.84	.03	.01	.02	591.10
400.	54.	317.	29.	71.	202.	51.	2.	0.	592.50
.07	.75	1.57	.57	.060	.045	.060	.045	586.20	425.00
.000209	26.	26.	26.	2	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNO 303.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 596.60 ELREA= 596.60

** D/S FACE RAILROAD BRIDGE

303.98	8.47	594.67	0.00	0.00	594.91	.25	.01	.06	586.40
400.	0.	400.	0.	0.	100.	0.	2.	0.	586.50
.07	0.00	4.00	0.00	.060	.045	.060	.045	586.20	458.00
.001423	26.	26.	26.	2	0	0	0.00	12.00	470.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNO 304.020
3280 CROSS SECTION 304.02 EXTENDED .02 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.25	594.91	0.00	0.	400.	74.	74.	592.40	598.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 598.00

304.02	8.82	595.02	0.00	0.00	595.25	.23	.33	0.00	586.40
400.	0.	400.	0.	0.	104.	0.	3.	0.	586.50
.08	0.00	3.84	0.00	.060	.045	.060	.045	586.20	458.00
.001269	34.	34.	34.	2	0	0	0.00	12.00	470.00

*SECNO 304.500
3280 CROSS SECTION 304.50 EXTENDED 2.85 FEET

SECNO	DEPTH	CHSEL	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
304.50	9.05	595.25	0.00	0.00	595.28	.03	.01	.02	591.10
400.	59.	307.	34.	82.	215.	61.	3.	0.	592.50
.08	.72	1.43	.56	.060	.045	.060	.045	586.20	425.00
.000159	32.	32.	32.	2	0	0	0.00	75.00	500.00

CCHV= .150 CEHV= .350
*SECNO 304.980
3280 CROSS SECTION 304.98 EXTENDED .28 FEET

** D/S FACE TELEGRAPH RD

304.98	9.07	595.27	0.00	0.00	595.29	.01	.00	.00	592.50
400.	44.	333.	23.	153.	317.	90.	3.	1.	593.30
.09	.29	1.05	.25	.060	.045	.060	.044	586.20	400.00
.000087	32.	32.	32.	0	0	0	0.00	250.00	650.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	225.00	10.00	0.00	57.00	0.00	586.20	586.20

*SECNO 305.020
3280 CROSS SECTION 305.02 EXTENDED .52 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	GWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
596.49	595.29	0.00	217.	183.	57.	57.	591.90	595.00

305.02	9.32	595.52	0.00	0.00	595.53	.01	.24	0.00	592.50
400.	52.	319.	28.	183.	329.	110.	4.	1.	593.30
.11	.29	.97	.26	.060	.045	.060	.044	586.20	400.00
.000071	63.	63.	63.	1	0	4	0.00	250.00	650.00

*SECNO 306.000
3280 CROSS SECTION 306.00 EXTENDED 2.62 FEET

306.00	9.33	595.53	0.00	0.00	595.53	.00	.00	.00	589.30
400.	100.	104.	196.	369.	134.	569.	5.	1.	589.90
.15	.27	.78	.34	.060	.045	.060	.044	586.20	0.00
.000039	50.	50.	50.	0	0	0	0.00	350.00	350.00

*SECNO 310.000
3280 CROSS SECTION 310.00 EXTENDED 1.05 FEET

310.00	8.06	595.56	0.00	0.00	595.57	.01	.04	.00	594.10
400.	20.	232.	148.	57.	195.	354.	15.	5.	594.60
.31	.35	1.19	.42	.060	.045	.060	.045	587.50	0.00
.000164	500.	500.	500.	0	0	0	0.00	325.00	325.00

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED .48 FEET

SECNO	DEPTH	CRSEL	CRITS	WSELK	EG	HV	HL	OLOSS	BANK ELEV

Q	QLCB	QCH	QROE	ALOB	ACH	ARCB	VOL	TwA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
	** D/S FACE SUB STATION RD								
310.98	7.58	595.58	0.00	0.00	595.65	.07	.04	.04	594.90
400.	26.	370.	4.	77.	173.	18.	16.	6.	595.10
.33	.34	2.13	.21	.060	.045	.060	.045	588.00	500.00
.000509	142.	142.	142.	1	0	0	0.00	264.96	764.96

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNO 311.020
3280 CROSS SECTION 311.02 EXTENDED .66 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
596.12	595.65	0.00	138.	263.	83.	83.	594.40	595.50
311.02	7.76	595.76	0.00	0.00	595.82	.05	.17	0.00	594.90
400.	41.	351.	8.	107.	179.	35.	16.	6.	595.10
.33	.38	1.96	.24	.060	.045	.060	.045	588.00	500.00
.000412	16.	16.	16.	2	0	3	0.00	294.30	794.30

*SECNO 311.100
3280 CROSS SECTION 311.10 EXTENDED .49 FEET

311.10	7.60	595.80	0.00	0.00	595.84	.04	.02	.01	594.00
400.	116.	284.	0.	191.	155.	0.	16.	7.	595.80
.34	.61	1.83	0.00	.060	.045	.060	.045	588.20	0.00
.000398	50.	50.	50.	1	0	0	0.00	186.99	186.99

CCHV= .150 CEHV= .350
*SECNO 312.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 596.70 ELREA= 596.90

312.00	6.59	596.49	0.00	0.00	596.60	.11	.74	.03	596.70
400.	0.	400.	0.	0.	149.	0.	23.	10.	596.90
.46	0.00	2.69	0.00	.060	.045	.060	.045	589.90	451.22
.001065	1200.	1200.	1200.	2	0	0	0.00	33.84	485.06

*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .46 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 597.00 ELREA= 597.20

312.10	6.36	597.16	0.00	0.00	597.31	.15	.70	.01	597.00
400.	7.	393.	0.	14.	124.	0.	25.	10.	597.20
.51	.48	3.18	0.00	.060	.045	.060	.045	590.80	251.00
.001731	520.	520.	520.	2	0	0	0.00	74.90	325.90

CCHV= .200 CEHV= .400
*SECNO 312.980

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.93	6.50	597.40	0.00	0.00	597.55	.15	.24	.00	597.10
400.	0.	400.	0.	0.	128.	0.	25.	10.	597.30
.52	0.00	3.12	0.00	.060	.045	.060	.045	590.90	294.00
.001608	142.	142.	142.	2	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNC 313.020
PRESSURE FLOW

EGPRS	EGLWC	H3	CWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.81	597.58	0.00	0.	400.	89.	39.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.90 ELREA= 598.90

313.02	6.75	597.65	0.00	0.00	597.81	.16	.26	0.00	597.60
400.	0.	400.	0.	0.	125.	0.	25.	10.	597.70
.52	0.00	3.20	0.00	.060	.045	.060	.045	590.90	273.00
.001660	17.	17.	17.	2	0	0	0.00	29.93	302.93

*SECNO 313.100

313.10	6.30	597.70	0.00	0.00	597.90	.20	.08	.02	598.10
400.	0.	400.	0.	0.	112.	0.	26.	10.	598.20
.53	0.00	3.56	0.00	.060	.045	.060	.045	591.40	273.87
.002218	42.	42.	42.	1	0	0	0.00	28.44	302.30

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 50 yr.

00BREAK00

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  C1
  MODIFICATION -  50,51,52
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T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK  50 YEAR FLOW=400 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.       3.        0.        0.  0.000000      0.00     -1.0       0.    597.160     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLOC     IBW       CHNIM     ITRACE

     3.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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*PROF 3

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .46 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST
312.10	6.36	597.16	0.00	597.16	597.31	.15	0.00	0.00	597.00
400.	7.	393.	0.	14.	124.	0.	0.	0.	597.20
0.00	.48	3.18	0.00	.060	.045	.060	0.000	590.80	251.00
.001733	52C.	520.	520.	0	0	0	0.00	74.90	325.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.00 ELREA= 597.20

CCHV= .200 CEHV= .400
*SECNO 312.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.50	597.40	0.00	0.00	597.55	.15	.24	.00	597.10
400.	0.	400.	0.	0.	128.	0.	0.	0.	597.30
.01	0.00	3.12	0.00	.060	.045	.060	.045	590.90	294.00
.001600	142.	142.	142.	0	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.81	597.58	0.00	0.	400.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.90 ELREA= 598.90

313.02	6.75	597.65	0.00	0.00	597.81	.16	.26	0.00	597.60
400.	0.	400.	0.	0.	125.	0.	0.	0.	597.70
.01	0.00	3.20	0.00	.060	.045	.060	.044	590.90	273.00
.001658	17.	17.	17.	2	0	0	0.00	29.93	302.93

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*SECNO 313.100
   313.10      6.31    597.71      0.00      0.00    597.90      .20       .08       .02    598.10
     400.         0.      400.        0.        0.      112.        0.        1.        0.     598.20
      .02      0.00      3.56      0.00      .060      .045      .060      .044    591.40    273.86
  .002216        42.       42.       42.         1         0         0      0.00     28.44    302.30

CCHV=     .150 CEHV=     .350
*SECNO 313.200
   SECNO     DEPTH     CHSEL     CRITS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    ICC       ICONT     CORAR     TOPWID      ENDST

   313.20      6.52    599.32      0.00      0.00    599.49      .18       1.59      .00     599.50
     400.         0.      400.        0.        0.      118.        0.        2.        1.     599.60
      .07      0.00      3.39      0.00      .080      .050      .080      .049    592.80    273.41
  .002392         690.      690.      690.         2         0         0      0.00     29.18    302.59

*SECNO 313.300
   313.30      6.49    600.69      0.00      0.00    600.81      .12       1.31      .01     600.30
     400.        23.      377.        0.        64.      131.        0.        5.        3.     601.00
      .14       .37      2.87      0.00      .080      .050      .080      .049    594.20     40.71
  .001545        690.      690.      690.         2         0         0      0.00    213.90    254.61

*SECNO 314.000
3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      601.90 ELREA=        0.00

   314.00      6.27    601.87      0.00      0.00    602.03      .16       1.21      .01     601.70
     400.         0.      400.        0.        0.      124.        0.        7.        5.     602.40
      .20      0.00      3.22      0.00      .080      .050      .080      .049    595.60    224.00
  .002058        680.      680.      680.         3         0         0      0.00     30.33    254.33

*SECNO 314.100
   314.10      6.40    603.50      0.00      0.00    603.63      .13       1.60      .00     603.20
     400.        15.      385.        0.        47.      128.        0.        10.       7.     603.90
      .28       .33      3.00      0.00      .080      .050      .080      .050    597.10     49.97
  .001721        850.      850.      850.         2         0         0      0.00    204.53    254.49

*SECNO 314.200

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      603.80 ELREA=      606.20

   314.20      6.39    604.89      0.00      0.00    605.02      .13       1.38      .00     603.80
     400.         9.      391.        0.        19.      135.        0.        14.       10.     606.20
      .37       .47      2.90      0.00      .080      .050      .080      .050    598.50    164.67
  .001537        850.      850.      850.         2         0         0      0.00     82.78    250.00

*SECNO 315.000
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3265 DIVIDED FLOW

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 605.30 ELREA= 607.70

315.00	6.26	606.26	0.00	0.00	606.39	.14	1.37	.00	605.30
400.	6.	394.	0.	13.	131.	0.	16.	11.	607.70
.45	.47	3.01	0.00	.080	.050	.080	.050	600.00	176.18
.001703	850.	850.	650.	1	0	0	0.00	71.02	250.00

*SECNO 315.100

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 606.20 ELREA= 608.60

315.10	6.29	607.19	0.00	0.00	607.33	.14	.93	.00	606.20
400.	7.	393.	0.	14.	132.	0.	18.	12.	608.60
.50	.47	2.98	0.00	.080	.050	.080	.050	600.90	173.43
.001662	555.	555.	555.	2	0	0	0.00	73.83	250.00

*SECNO 315.200

3265 DIVIDED FLOW

3280 CROSS SECTION 315.20 EXTENDED .09 FEET

315.20	6.89	608.19	0.00	0.00	608.34	.15	1.01	.01	608.00
400.	0.	400.	0.	3.	127.	0.	20.	13.	608.30
.55	.16	3.15	0.00	.080	.050	.080	.050	601.30	170.00
.001991	555.	555.	555.	2	0	0	0.00	65.11	254.93

*SECNO 315.900

315.90	6.60	609.40	0.00	0.00	609.58	.18	1.23	.01	609.50
400.	0.	400.	0.	0.	118.	0.	22.	14.	609.80
.59	0.00	3.39	0.00	.080	.050	.080	.050	602.80	224.08
.002442	560.	560.	560.	2	0	0	0.00	30.15	254.23

CCHV= .400 CEHV= .800
*SECNO 315.980
3280 CROSS SECTION 315.98 EXTENDED .22 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 610.30 ELREA= 610.30

** D/S FACE CRABB RD

315.99	7.02	609.72	0.00	0.00	609.82	.11	.21	.03	609.40
340.	0.	340.	0.	0.	131.	0.	22.	14.	609.70
.61	0.00	2.60	0.00	.080	.050	.080	.050	602.70	223.96
.001324	117.	117.	117.	2	0	0	0.00	31.24	255.20

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNO 316.020
3280 CROSS SECTION 316.02 EXTENDED .78 FEET

SECNO	DEPTH	CRSEL	CRITS	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	CCHAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
610.63	609.78	0.00	0.	340.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.70 ELREA= 611.70

316.02	7.88	610.58	0.00	0.00	610.63	.05	.81	0.00	609.10
340.	0.	340.	0.	0.	191.	0.	22.	14.	604.90
.61	0.00	1.78	0.00	.080	.050	.080	.050	602.70	247.00
.000355	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
3280 CROSS SECTION 316.10 EXTENDED .64 FEET

316.10	7.74	610.64	0.00	0.00	610.65	.01	.01	.02	609.30
340.	4.	190.	147.	24.	187.	301.	22.	14.	605.10
.63	.15	1.01	.49	.080	.050	.080	.050	602.90	211.82
.000114	50.	50.	50.	2	0	0	0.00	148.18	360.00

CCHV= .150 CEHV= .350
*SECNO 316.200

316.20	8.63	610.63	0.00	0.00	610.67	.04	.01	.01	608.50
340.	30.	300.	11.	67.	175.	31.	23.	14.	608.50
.64	.44	1.71	.35	.080	.050	.080	.050	602.00	4.69
.000326	50.	50.	50.	2	0	0	0.00	100.06	104.75

*SECNO 316.250
WATER EL=X5 CARD= 610.703

** WOOD BRIDGE

316.25	8.70	610.70	0.00	0.00	610.74	.04	.00	.00	608.50
340.	31.	297.	11.	70.	177.	33.	23.	14.	608.50
.64	.45	1.68	.35	.080	.050	.080	.050	602.00	4.43
.000310	1.	1.	1.	0	0	0	0.00	101.26	105.69

*SECNC 316.300
3280 CROSS SECTION 316.30 EXTENDED .78 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.90 ELREA= 610.60

316.30	7.29	610.79	0.00	0.00	610.88	.09	.12	.02	611.70
340.	0.	339.	1.	0.	140.	4.	24.	14.	610.60
.66	0.00	2.43	.13	.080	.050	.080	.050	603.50	412.02
.001153	220.	220.	220.	1	0	0	0.00	82.55	494.57

*SECNO 316.980

SECNO	DEPTH	CHSEL	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

** O/S FACE WOODSIDE DR

316.98	6.35	610.95	0.00	0.00	611.10	.15	.20	.02	612.80
340.	0.	340.	0.	0.	109.	0.	24.	15.	611.70
.68	0.00	3.11	0.00	.080	.050	.080	.050	604.60	414.06
.002239	130.	130.	130.	2	0	0	0.00	30.47	444.53

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNC 317.020
3280 CROSS SECTION 317.02 EXTENDED 1.29 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.78	611.09	0.00	0.	340.	53.	53.	609.90	612.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 612.00 ELREA= 0.00

317.02	7.09	611.69	0.00	0.00	611.78	.09	.68	0.00	611.50
340.	0.	340.	0.	0.	140.	0.	24.	15.	613.60
.68	0.00	2.44	0.00	.080	.050	.080	.050	604.60	383.00
.001154	28.	28.	28.	2	0	0	0.00	33.82	416.82

*SECNO 317.100
3280 CROSS SECTION 317.10 EXTENDED 1.24 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 612.00 ELREA= 0.00

317.10	7.04	611.74	0.00	0.00	611.83	.09	.05	.00	611.60
340.	0.	340.	0.	0.	138.	0.	25.	15.	613.70
.68	0.00	2.47	0.00	.080	.050	.080	.050	604.70	383.00
.001201	40.	40.	40.	2	0	0	0.00	33.73	416.73

*SECNO 317.150
3280 CROSS SECTION 317.15 EXTENDED 1.50 FEET

317.15	7.30	612.00	0.00	0.00	612.05	.04	.21	.01	611.60
340.	74.	266.	0.	105.	147.	0.	26.	15.	613.70
.73	.71	1.81	0.00	.080	.050	.080	.050	604.70	310.00
.000605	250.	250.	250.	2	0	0	0.00	107.17	417.17

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	7.34	612.04	0.00	0.00	612.09	.06	.04	.01	610.30
340.	5.	328.	7.	14.	170.	18.	26.	15.	610.30
.74	.38	1.93	.37	.080	.050	.080	.050	604.70	95.56
.000480	70.	70.	70.	2	0	0	0.00	71.15	166.71

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

SECNO	DEPTH	CHSEL	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.34	612.11	.01	127.	214.	35.	35.	608.70	612.50

317.22	8.22	612.92	0.00	0.00	612.95	.03	.85	0.00	610.30
340.	15.	306.	19.	44.	196.	54.	26.	15.	610.30
.74	.35	1.56	.35	.080	.050	.080	.050	604.70	67.57
.000259	30.	30.	30.	2	0	4	0.00	136.88	204.45

*SECNC 317.250

317.25	8.03	612.93	0.00	0.00	612.97	.04	.01	.00	610.50
340.	13.	312.	16.	36.	191.	43.	27.	15.	610.50
.75	.36	1.63	.36	.080	.050	.080	.050	604.90	73.36
.000295	50.	50.	50.	0	0	0	0.00	123.75	197.12

CCHV= .150 CEHV= .350

*SECNO 317.270

317.27	7.31	613.01	0.00	0.00	613.05	.04	.08	.00	610.50
340.	24.	299.	17.	60.	180.	64.	28.	16.	611.70
.80	.39	1.66	.27	.080	.050	.080	.050	605.70	71.97
.000335	250.	250.	250.	0	0	0	0.00	172.87	244.84

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	6.73	613.03	0.00	0.00	613.08	.06	.03	.01	611.10
340.	15.	323.	2.	36.	163.	13.	29.	16.	612.30
.81	.42	1.99	.14	.080	.050	.080	.050	606.30	82.87
.000544	75.	75.	75.	0	0	0	0.00	153.58	236.45

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	BDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNC 317.320

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.38	613.08	0.00	147.	193.	80.	79.	611.60	612.60

317.32	6.78	613.08	0.00	0.00	613.14	.06	.06	0.00	611.10
340.	16.	321.	3.	38.	164.	18.	29.	17.	612.30
.81	.42	1.96	.16	.080	.050	.080	.050	606.30	81.85
.000521	15.	15.	15.	2	0	4	0.00	155.39	237.24

*SECNO 317.340

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

317.34	7.02	613.12	0.00	0.00	613.17	.05	.03	.00	610.90
340.	19.	312.	9.	47.	171.	38.	29.	17.	612.10
.82	.41	1.82	.22	.080	.050	.080	.050	606.10	77.39
.000428	60.	60.	60.	0	0	0	0.00	163.28	240.67

*SECNO 317.400

317.40	6.84	613.24	0.00	0.00	613.31	.07	.13	.01	613.50
340.	0.	337.	3.	0.	162.	12.	30.	17.	612.70
.85	0.00	2.08	.21	.080	.050	.080	.050	606.40	75.27
.000702	240.	240.	240.	0	0	0	0.00	77.30	152.58

*SECNO 317.450
WATER EL=X5 CARD= 613.439

** PRIVATE DRIVE ACRCSS CREEK

317.45	7.04	613.44	0.00	0.00	613.50	.06	.00	.00	613.50
340.	0.	334.	6.	0.	169.	22.	30.	17.	612.70
.85	0.00	1.97	.27	.080	.050	.080	.050	606.40	75.06
.000605	1.	1.	1.	0	0	0	0.00	92.04	167.10

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 2.43 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 613.90 ELREA= 611.60

318.00	7.23	613.73	0.00	0.00	613.76	.03	.25	.00	613.90
340.	0.	225.	115.	0.	132.	160.	33.	18.	611.60
.95	0.00	1.71	.72	.080	.050	.080	.050	606.50	586.38
.000509	460.	460.	460.	1	0	0	0.00	99.62	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 1.98 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLFA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	6.78	613.78	0.00	0.00	613.83	.05	.06	.01	614.40
340.	0.	241.	99.	0.	119.	128.	33.	19.	612.10
.96	0.00	2.03	.78	.080	.050	.080	.050	607.00	587.39
.000790	100.	100.	100.	0	0	0	0.00	98.61	686.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.15 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	GWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.12	613.83	0.00	71.	269.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

318.12	6.95	613.95	0.00	0.00	613.99	.04	.16	0.00	614.40
340.	0.	234.	106.	0.	123.	140.	34.	19.	612.10
.97	0.00	1.90	.76	.080	.050	.080	.050	607.00	587.01
.000668	18.	18.	18.	2	0	3	0.00	98.99	686.00

*SECNC 318.150
3280 CROSS SECTION 318.15 EXTENDED 1.09 FEET

318.15	7.09	614.09	0.00	0.00	614.18	.09	.17	.02	612.20
340.	26.	176.	139.	34.	55.	115.	34.	19.	612.20
.99	.75	3.19	1.21	.080	.050	.080	.050	607.00	540.44
.002533	150.	150.	150.	2	0	0	0.00	141.56	682.00

*SECNO 318.160
WATER EL=X5 CARD= 614.100
3280 CROSS SECTION 318.16 EXTENDED 1.10 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	7.10	614.10	0.00	0.00	614.19	.09	.00	.00	612.20
340.	26.	175.	139.	35.	55.	116.	34.	19.	612.20
.99	.75	3.17	1.20	.080	.050	.080	.050	607.00	540.42
.002496	1.	1.	1.	0	0	0	0.00	141.58	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 1.98 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.80 ELREA= 612.50

318.20	6.79	614.19	0.00	0.00	614.24	.05	.04	.01	614.80
340.	0.	240.	100.	0.	119.	128.	34.	19.	612.50
.99	0.00	2.03	.78	.080	.050	.080	.050	607.40	587.39
.000789	30.	30.	30.	1	0	0	0.00	98.61	686.00

*SECNO 318.250
WATER EL=X5 CARD= 614.338
3280 CROSS SECTION 318.25 EXTENDED 2.14 FEET

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        **  PRIVATE DRIVE

   318.25      6.94    614.34      0.00      0.00    614.38       .04       .00       .00    614.80
     340.        0.       235.      105.        0.      123.      139.       34.       19.     612.50
      .99      0.00      1.90       .76      .080      .050      .080      .050    607.40    587.04
  .000674        1.        1.        1.         0         0         0      0.00     98.96    686.00

*SECNO 318.300
3280 CROSS SECTION    318.30 EXTENDED      1.98 FEET

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

   318.30      6.77    614.57      0.00      0.00    614.62       .05       .24       .00    615.20
     340.        0.       241.       99.        0.      119.      128.       36.       20.     612.90
     1.05      0.00      2.03       .78      .080      .050      .080      .050    607.80    587.40
  .000794       325.      325.      325.         0         0         0      0.00     98.60    686.00

*SECNO 318.350
 WATER EL=X5 CARD=    614.671
3280 CROSS SECTION    318.35 EXTENDED      2.07 FEET

        **  PRIVATE DRIVE

   318.35      6.87    614.67      0.00      0.00    614.72       .04       .00       .00    615.20
     340.        0.       237.      103.        0.      121.      135.       36.       20.     612.90
     1.05      0.00      1.96       .76      .080      .050      .080      .050    607.80    587.19
  .000721        1.        1.        1.         0         0         0      0.00     98.81    686.00

*SECNO 319.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      616.90 ELREA=      614.50

   319.00      6.31    614.91      0.00      0.00    615.03       .12       .29       .03    616.10
     315.        0.       312.        3.        0.      110.       13.       38.       21.     614.50
     1.07      0.00      2.84       .27      .080      .050      .080      .050    608.60    706.23
  .001750       275.      275.      275.         2         0         0      0.00     90.03    796.26

*SECNO 319.100
3280 CROSS SECTION    319.10 EXTENDED      1.49 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      616.90 ELREA=      614.10

   319.10      6.59    615.39      0.00      0.00    615.43       .04       .39       .01    616.90
     315.        0.       270.       45.        0.      153.       86.       39.       21.     614.10
     1.15      0.00      1.76       .52      .080      .050      .080      .050    608.80    635.09
  .000507       450.      450.      450.         2         0         0      0.00     91.91    727.00
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*SECNC 319.980
3280 CROSS SECTICN 319.98 EXTENDED .25 FEET

** D/S FACE CORL RD

319.98	5.35	615.45	0.00	0.00	615.52	.07	.08	.01	610.40
315.	22.	245.	49.	26.	105.	62.	40.	22.	610.30
1.17	.84	2.34	.78	.080	.050	.080	.050	610.10	629.74
.000683	140.	140.	140.	2	0	0	0.00	97.26	727.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNC 320.020
3280 CROSS SECTICN 320.02 EXTENDED .63 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	FV	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.06	615.59	0.00	50.	265.	58.	58.	614.90	615.50

320.02	5.73	615.83	0.00	C.00	615.88	.05	.36	0.00	610.40
315.	22.	234.	58.	30.	112.	87.	40.	22.	610.30
1.17	.75	2.09	.67	.080	.050	.080	.050	610.10	628.97
.000498	21.	21.	21.	2	0	4	0.00	98.03	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.25 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 618.60 ELREA= 615.50

320.10	6.04	615.84	C.00	C.CC	615.92	.07	.03	.01	617.90
315.	0.	277.	38.	0.	120.	67.	40.	22.	615.50
1.18	0.00	2.32	.56	.080	.050	.080	.050	609.80	537.33
.001025	40.	40.	40.	0	0	0	0.00	102.67	640.00

*SECNO 320.900

320.90	6.62	616.32	C.00	C.00	616.45	.13	.51	.02	620.10
315.	0.	310.	5.	0.	107.	15.	42.	23.	615.70
1.22	0.00	2.90	.35	.080	.050	.080	.050	609.70	10.99
.001658	400.	400.	400.	2	0	0	0.00	74.74	85.73

CCHV= .400 CEHV= .800
*SECNO 320.980

** D/S FACE TEMPERANCE RD

320.98	6.33	616.53	0.00	0.00	616.59	.06	.12	.03	613.00
315.	58.	257.	0.	84.	121.	0.	42.	23.	618.00
1.24	.69	2.12	0.00	.080	.050	.080	.050	610.20	373.26
.000719	110.	110.	110.	2	0	0	0.00	102.29	475.56

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNO 321.020
3280 CROSS SECTION 321.02 EXTENDED 3.42 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	CWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
617.94	616.59	0.00	0.	313.	43.	36.	616.00	617.90

321.02	7.71	617.91	0.00	0.00	617.92	.01	1.33	0.00	615.20
315.	100.	196.	20.	262.	206.	52.	43.	23.	614.10
1.26	.38	.95	.38	.080	.050	.080	.050	610.20	233.00
.000096	55.	55.	55.	0	0	0	0.00	137.70	370.70

*SECNO 322.000
3280 CROSS SECTION 322.00 EXTENDED 3.41 FEET

SECNO	DEPTH	CHSEL	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	ICC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 619.30 ELREA= 619.30

322.00	7.30	617.90	0.00	0.00	617.97	.07	.01	.05	615.60
315.	0.	315.	0.	0.	151.	0.	43.	23.	612.00
1.26	0.00	2.09	0.00	.080	.050	.080	.050	610.60	319.00
.000499	30.	30.	30.	1	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNO 322.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.98	7.C2	617.72	C.00	0.00	618.21	.49	.02	.21	610.80
315.	0.	315.	0.	0.	56.	0.	43.	23.	610.70
1.26	0.00	5.63	0.00	.080	.050	.C80	.050	610.70	689.00
.004924	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	C.CO	1.60	2.90	150.00	7.00	0.00	39.20	0.00	610.70	610.70

*SECNO 323.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
619.32	618.22	0.00	0.	315.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 624.00 ELREA= 624.00

323.02	8.26	618.96	C.00	C.CO	619.32	.36	1.11	0.00	610.90
315.	C.	315.	0.	0.	65.	0.	43.	23.	610.90
1.26	0.00	4.83	0.00	.080	.050	.080	.050	610.70	346.00
.003124	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNO 323.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 624.00 ELREA= 624.00

323.10	8.62	619.42	0.00	0.00	619.43	.01	.01	.10	615.30
315.	C.	315.	0.	0.	347.	0.	43.	23.	616.90
1.27	0.00	.91	0.00	.080	.C5C	.080	.050	610.80	300.00
.C00107	30.	30.	30.	2	0	0	0.00	66.00	366.00

CCHV= .150 CEHV= .350
*SECNO 324.000
3280 CROSS SECTION 324.00 EXTENDED 1.44 FEET

324.00	8.64	619.44	0.00	C.CC	619.45	.01	.01	.00	615.60
315.	90.	184.	41.	247.	192.	148.	44.	24.	616.70
1.32	.36	.96	.28	.080	.050	.080	.050	610.80	100.00
.000093	120.	120.	120.	2	C	0	0.00	200.00	300.00

*SECNO 324.300
3280 CROSS SECTION 324.30 EXTENDED .96 FEET

SECNO	DEPTH	CWSEL	CRITS	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

324.30	8.16	619.46	0.00	0.00	619.47	.01	.02	.00	616.10
315.	82.	201.	32.	204.	179.	108.	47.	24.	617.20
1.38	.40	1.13	.29	.080	.050	.080	.050	611.30	100.00
.000142	200.	200.	200.	0	0	0	0.00	198.86	298.86

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 1.47 FEET

** D/S FACE TEMPERANCE RD

324.48	7.78	619.48	0.00	0.00	619.49	.01	.02	.00	616.70
315.	47.	180.	88.	152.	180.	223.	48.	25.	615.00
1.43	.31	1.00	.40	.080	.050	.080	.050	611.70	875.00
.000109	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKCR	CDFQ	RDLEN	BWC	BWP	SAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 1.60 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.06	619.49	0.00	247.	68.	31.	31.	617.00	618.80

324.52	7.89	619.59	0.00	0.00	619.60	.01	.11	0.00	616.70
315.	49.	177.	90.	161.	184.	232.	49.	25.	615.00
1.45	.30	.96	.39	.080	.050	.080	.050	611.70	875.00
.000098	50.	50.	50.	0	0	5	0.00	180.00	1055.00

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED 1.39 FEET

324.60	7.89	619.59	0.00	0.00	619.61	.03	.00	.01	616.40
315.	94.	130.	91.	191.	68.	188.	49.	25.	616.40
1.46	.49	1.93	.48	.080	.030	.080	.050	611.70	875.00
.000240	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=X5 CARD= 619.590
3280 CROSS SECTION 324.65 EXTENDED 1.39 FEET

** WALK BRIDGE

324.65	7.89	619.59	0.00	0.00	619.62	.03	.00	.00	616.40
315.	94.	130.	91.	191.	67.	188.	49.	25.	616.40
1.46	.49	1.93	.48	.080	.030	.080	.050	611.70	875.00
.000241	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED 1.15 FEET

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
325.00	7.55	619.65	0.00	0.00	619.66	.01	.04	.01	616.00
315.	94.	187.	34.	266.	172.	108.	52.	26.	617.80
1.54	.35	1.08	.32	.080	.050	.080	.050	612.10	250.00
.000140	235.	235.	235.	0	0	0	0.00	225.00	475.00

CCHV= .200 CEHV= .400
*SECNO 325.980
3280 CROSS SECTION 325.98 EXTENDED 1.69 FEET

** D/S FACE WASHINGTON ST

325.98	7.58	619.68	0.00	0.00	619.69	.01	.03	.00	616.60
315.	84.	168.	64.	209.	149.	185.	54.	27.	617.10
1.60	.40	1.13	.34	.080	.050	.080	.050	612.10	200.00
.000149	175.	175.	175.	0	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 326.020
3280 CROSS SECTION 326.02 EXTENDED 1.74 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
623.47	619.69	0.00	273.	42.	26.	26.	616.10	618.70
326.02	7.63	619.73	0.00	0.00	619.74	.01	.05	0.00	616.60
315.	85.	166.	65.	214.	150.	190.	55.	27.	617.10
1.61	.40	1.10	.34	.080	.050	.080	.050	612.10	200.00
.000142	34.	34.	34.	1	0	7	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 2.25 FEET

326.50	7.55	619.75	C.CO	0.CO	619.76	.01	.01	.00	616.50
315.	95.	205.	16.	260.	197.	46.	56.	28.	617.40
1.65	.36	1.04	.34	.C8C	.050	.080	.050	612.20	217.96
.000126	110.	110.	110.	0	0	0	0.00	192.04	410.00

CCHV= .400 CEHV= .800
*SECNC 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.16 FEET

** D/S FACE PRIVATE DR

326.98	7.46	619.76	0.00	0.00	619.78	.01	.02	.00	616.60
315.	92.	208.	15.	248.	195.	44.	57.	28.	617.50
1.70	.37	1.07	.34	.080	.050	.080	.050	612.30	218.93
.000135	13C.	130.	130.	0	0	0	0.00	191.07	410.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNC 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.20 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLCBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	CWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
631.11	619.78	0.00	296.	19.	16.	16.	615.20	616.80

327.02	7.49	619.79	C.CO	C.00	619.81	.01	.03	0.00	616.60
315.	93.	206.	15.	253.	196.	45.	58.	29.	617.50
1.71	.37	1.05	.34	.080	.050	.080	.050	612.30	218.52
.000131	43.	43.	43.	1	0	5	0.00	191.48	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 1.82 FEET

327.50	7.12	619.82	0.00	C.CO	619.84	.02	.03	.00	617.00
315.	82.	220.	14.	202.	183.	37.	60.	29.	617.90

1.76	.41	1.20	.36	.080	.050	.080	.050	612.70	226.38
.000187	180.	180.	180.	0	0	0	0.00	183.62	410.00

CCHV= .300 CEHV= .500
*SECNC 327.980
3280 CROSS SECTION 327.98 EXTENDED 1.65 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.10 ELREA= 620.10

** D/S FACE LEWIS RD

327.98	6.66	619.86	0.00	0.00	619.89	.03	.05	.01	617.50
240.	0.	240.	0.	0.	164.	0.	61.	30.	617.00
1.80	0.00	1.46	0.00	.080	.050	.080	.050	613.20	705.00
.000305	210.	210.	210.	0	0	0	0.00	32.00	737.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNC 328.020
3280 CROSS SECTION 328.02 EXTENDED 2.15 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.38	619.89	0.00	0.	240.	52.	52.	617.50	620.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.50 ELREA= 620.50

328.02	7.15	620.35	0.00	0.00	620.38	.03	.49	0.00	617.50
240.	0.	240.	0.	0.	180.	0.	61.	30.	617.00
1.81	0.00	1.33	0.00	.080	.050	.080	.050	613.20	705.00
.000226	33.	33.	33.	2	0	0	0.00	32.00	737.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED .38 FEET

328.10	7.39	620.39	0.00	0.00	620.40	.01	.02	.00	618.60
240.	29.	153.	58.	115.	139.	169.	62.	30.	618.90
1.84	.25	1.10	.34	.080	.050	.080	.050	613.00	100.00
.000177	90.	90.	90.	1	0	0	0.00	250.00	350.00

*SECNO 329.000

3265 DIVIDED FLOW

3280 CROSS SECTION 329.00 EXTENDED .98 FEET

SECNO	DEPTH	CHSEL	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
329.00	6.78	620.78	0.00	0.00	620.82	.04	.40	.01	620.40
240.	21.	219.	0.	64.	129.	0.	72.	36.	620.90
2.09	.32	1.70	0.00	.080	.050	.080	.050	614.00	125.00
.000541	1400.	1400.	1400.	2	0	0	0.00	129.76	255.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.40 ELREA= 620.90

*SECNO 329.100
3280 CROSS SECTION 329.10 EXTENDED 1.22 FEET

329.10	7.02	621.12	0.00	0.00	621.14	.02	.31	.01	620.50
240.	25.	172.	43.	88.	136.	128.	77.	40.	621.00
2.32	.29	1.26	.33	.080	.050	.080	.050	614.10	125.00
.000281	825.	825.	825.	2	0	0	0.00	250.00	375.00

*SECNO 329.250
WATER EL=XS CARD= 621.122
3280 CROSS SECTION 329.25 EXTENDED 1.22 FEET

** PRIVATE DRIVE

329.25	7.02	621.12	0.00	0.00	621.14	.02	.00	.00	620.50
240.	25.	172.	43.	88.	136.	128.	77.	40.	621.00
2.32	.29	1.26	.33	.080	.050	.080	.050	614.10	125.00
.000280	1.	1.	1.	0	0	0	0.00	250.00	375.00

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  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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T1       HUD-FIA  H-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       FLAT CREEK  500 YEAR FLOW=550 CFS

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

      -1.         5.         0.         0.  0.000000       0.00       -1.0         0.    598.680      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     15.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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*PROF 4

CCHV= .150 CEHV= .350
*SECNO 312.10C
3280 CROSS SECTION 312.10 EXTENDED 1.98 FEET

SECNO	DEPTH	CWSEL	CRITS	KSELK	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
312.10	7.88	598.68	0.00	598.68	598.76	.08	0.00	0.00	597.00
550.	77.	436.	37.	79.	172.	47.	0.	0.	597.20
0.00	.98	2.53	.79	.060	.045	.060	0.000	590.80	251.00
.000708	520.	520.	520.	0	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED 1.11 FEET

** D/S FACE MINX RD - CORPORATE BDRY

312.98	7.91	598.81	0.00	0.00	598.83	.02	.06	.01	597.10
550.	222.	273.	55.	360.	173.	136.	2.	1.	597.30
.04	.62	1.57	.40	.060	.045	.060	.045	590.90	100.00
.000272	142.	142.	142.	2	0	0	0.00	371.00	471.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNC 313.020
3280 CROSS SECTION 313.02 EXTENDED 1.48 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
599.58	598.99	0.00	159.	393.	89.	89.	597.00	598.90

313.02	8.28	599.18	0.00	C.CC	599.20	.03	.37	0.00	597.60
550.	149.	296.	105.	272.	171.	185.	2.	1.	597.70
.04	.55	1.73	.57	.060	.045	.060	.044	590.90	75.00
.000321	17.	17.	17.	2	C	3	0.00	353.00	428.00

*SECNO 313.10C
3280 CROSS SECTION 313.10 EXTENDED .98 FEET

313.10	7.78	599.18	0.00	0.00	599.24	.06	.02	.01	598.10
550.	103.	369.	78.	174.	156.	123.	2.	1.	598.20
.05	.59	2.36	.63	.060	.045	.060	.044	591.40	75.00
.000676	42.	42.	42.	1	0	0	0.00	353.00	428.00

CCHV= .150 CEHV= .350
*SECNC 313.200
3280 CROSS SECTION 313.20 EXTENDED .30 FEET

SECNC	DEPTH	CRWSEL	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
313.20	7.10	599.90	0.00	0.00	600.11	.22	.82	.05	599.50
550.	14.	520.	16.	40.	136.	38.	8.	7.	599.60
.10	.34	3.83	.43	.080	.050	.080	.049	592.80	75.00
.002641	690.	690.	690.	2	0	0	0.00	353.00	428.00

*SECNO 313.300
3280 CROSS SECTION 313.30 EXTENDED .18 FEET

313.30	7.08	601.28	0.00	0.00	601.39	.10	1.26	.02	600.30
550.	115.	430.	5.	188.	149.	24.	12.	13.	601.00
.18	.61	2.88	.21	.080	.050	.080	.049	594.20	0.00
.001329	690.	690.	690.	2	0	0	0.00	400.00	400.00

*SECNO 314.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 601.90 ELREA= 602.40

314.00	6.76	602.36	0.00	0.00	602.52	.16	1.12	.02	601.70
550.	69.	481.	0.	117.	139.	0.	17.	18.	602.40
.24	.59	3.45	0.00	.080	.050	.080	.049	595.60	13.52
.002086	680.	680.	680.	2	0	0	0.00	241.44	254.96

*SECNO 314.100
3280 CROSS SECTION 314.10 EXTENDED .01 FEET

314.10	6.91	604.01	0.00	0.00	604.14	.13	1.61	.00	603.20
550.	89.	461.	0.	148.	144.	3.	22.	23.	603.90
.33	.60	3.20	.11	.080	.050	.080	.050	597.10	0.00
.001730	850.	850.	850.	2	0	0	0.00	305.42	305.42

*SECNO 314.200

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 603.80 ELREA= 606.20

314.20	6.98	605.48	C.00	C.CC	6C5.63	.16	1.49	.01	603.80
550.	41.	509.	0.	65.	154.	0.	27.	27.	6C6.20
.40	.63	3.31	C.00	.080	.050	.080	.050	598.50	111.24
.001767	850.	850.	850.	2	0	0	0.00	137.36	250.00

*SECNO 315.00C

3265 DIVIDED FLOW

SECNC	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 605.30 ELREA= 607.70

315.00	6.98	606.98	C.00	C.CO	607.14	.16	1.50	.00	6C5.30
550.	41.	509.	0.	64.	154.	0.	32.	3C.	6C7.70
.48	.63	3.31	C.CO	.080	.05C	.080	.050	600.00	111.40
.001770	850.	850.	850.	1	0	0	0.00	137.19	250.00

*SECNO 315.100

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 606.20 ELREA= 608.60

315.10	7.04	607.94	0.00	0.CC	608.C9	.15	.95	.00	6C6.20
550.	46.	504.	0.	72.	156.	0.	34.	32.	6C8.60
.53	.63	3.23	C.CO	.080	.05C	.080	.050	600.90	104.61
.001659	555.	555.	555.	1	0	0	0.00	144.12	250.0C

*SECNO 315.200
3280 CROSS SECTION 315.20 EXTENDED .80 FEET

315.20	7.61	608.91	0.00	0.00	609.08	.17	.98	.01	608.00
550.	26.	507.	17.	39.	149.	31.	37.	34.	608.30
.58	.65	3.40	.54	.080	.050	.080	.050	601.30	170.00
.001889	555.	555.	555.	1	0	0	0.00	142.00	312.00

*SECNO 315.900
3280 CROSS SECTION 315.90 EXTENDED .51 FEET

315.90	7.30	610.10	0.00	0.00	610.32	.22	1.23	.02	6C9.50
550.	13.	532.	5.	23.	140.	15.	40.	36.	609.80
.62	.54	3.81	.38	.C80	.C50	.080	.050	602.80	170.00
.002575	56C.	560.	560.	2	0	0	0.00	142.00	312.00

CCHV= .400 CEHV= .800
*SECNO 315.98C

3280 CROSS SECTION 315.98 EXTENDED .97 FEET

** D/S FACE CRABB RC

315.98	7.77	610.47	0.00	0.00	610.56	.10	.19	.05	609.40
450.	27.	403.	20.	48.	154.	41.	40.	36.	609.70
.63	.56	2.62	.48	.080	.050	.080	.050	602.70	170.00
.001065	117.	117.	117.	2	0	0	0.00	142.00	312.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNO 316.02C
3280 CROSS SECTION 316.02 EXTENDED 2.07 FEET

SECNO	DEPTH	CHSEL	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
612.07	610.56	0.00	31.	422.	53.	53.	608.70	611.70

316.02	9.16	611.86	0.00	0.00	611.87	.01	1.31	0.00	609.10
450.	21.	223.	206.	79.	230.	419.	41.	36.	604.90
.65	.26	.97	.49	.080	.050	.080	.050	602.70	205.80
.000079	33.	33.	33.	0	0	2	0.00	154.20	360.00

*SECNC 316.100
3280 CROSS SECTION 316.10 EXTENDED 1.87 FEET

316.10	8.97	611.87	0.00	0.00	611.88	.01	.00	.00	609.30
450.	19.	226.	205.	70.	224.	402.	42.	36.	605.10
.66	.26	1.01	.51	.080	.050	.080	.050	602.90	206.67
.000089	50.	50.	50.	2	0	0	0.00	153.33	360.00

CCHV= .150 CEHV= .350
*SECNO 316.200

316.20	9.86	611.86	0.00	0.00	611.89	.03	.01	.01	608.50
450.	70.	345.	35.	125.	207.	74.	42.	36.	608.50
.67	.56	1.67	.47	.080	.050	.080	.050	602.00	.13
.000247	50.	50.	50.	1	0	0	0.00	116.02	116.15

*SECNC 316.250

WATER EL=X5 CARD= 611.958
3280 CROSS SECTION 316.25 EXTENDED .06 FEET

** WOOD BRIDGE

316.25	9.96	611.96	0.00	C.00	611.99	.03	.00	.00	608.50
450.	72.	342.	36.	130.	210.	77.	42.	36.	608.50
.67	.55	1.63	.47	.080	.050	.080	.050	602.00	C.00
.000233	1.	1.	1.	C	0	0	0.00	116.96	116.96

*SECNO 316.300
3280 CROSS SECTION 316.30 EXTENDED 2.02 FEET

316.30	8.52	612.02	0.00	C.CO	612.07	.05	.07	.00	611.70
450.	53.	351.	46.	88.	183.	91.	44.	37.	610.60
.71	.60	1.92	.51	.080	.050	.080	.050	603.50	340.00
.000539	220.	220.	220.	1	0	0	0.00	176.00	516.00

*SECNO 316.980

3265 DIVIDED FLOW

3280 CROSS SECTION 316.98 EXTENDED .98 FEET

SECNO	DEPTH	CLSEL	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

** D/S FACE WOODSIDE DR

316.98	7.49	612.09	C.CO	C.00	612.21	.12	.11	.03	612.80
450.	26.	419.	5.	37.	146.	18.	45.	38.	611.70
.73	.69	2.86	.30	.080	.050	.080	.050	604.60	340.00
.001523	130.	130.	130.	1	0	0	0.00	145.14	516.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNO 317.02C
3280 CROSS SECTION 317.02 EXTENDED 2.25 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.54	612.21	0.00	161.	29C.	53.	53.	609.90	612.0C

317.02	8.05	612.65	0.00	0.00	612.69	.04	.49	0.00	611.50
450.	124.	326.	0.	159.	173.	0.	45.	38.	613.60
.73	.78	1.89	0.00	.080	.050	.080	.050	604.60	310.00
.000554	28.	28.	28.	2	0	3	0.00	108.41	418.41

*SECNC 317.100
3280 CROSS SECTION 317.10 EXTENDED 2.17 FEET

317.10	7.97	612.67	0.00	0.00	612.71	.04	.02	.00	611.60
450.	122.	328.	0.	153.	170.	0.	46.	38.	613.70
.74	.80	1.93	0.00	.080	.050	.080	.050	604.70	310.00
.000591	40.	40.	40.	2	0	0	0.00	108.28	418.28

*SECNO 317.150
3280 CROSS SECTION 317.15 EXTENDED 2.31 FEET

317.15	8.11	612.81	0.00	0.00	612.85	.04	.14	.00	611.60
450.	126.	324.	0.	163.	175.	0.	47.	38.	613.70
.78	.77	1.85	0.00	.080	.050	.080	.050	604.70	310.00
.000526	250.	250.	250.	0	0	0	0.00	108.52	418.52

CCHV= .400 CEHV= .800
*SECNO 317.180
** D/S FACE GRAVEL DRIVEWAY

317.18	8.14	612.84	0.00	0.00	612.91	.06	.03	.02	610.30
450.	19.	408.	23.	41.	194.	50.	48.	39.	610.30
.79	.47	2.10	.47	.080	.050	.080	.050	604.70	69.59
.000474	70.	70.	70.	0	0	0	0.00	132.42	202.01

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.87	612.91	.01	300.	153.	35.	35.	608.70	612.50

317.22	8.56	613.26	0.00	0.00	613.31	.05	.40	0.00	610.30

450.	27.	389.	34.	62.	206.	77.	48.	39.	610.30
.80	.43	1.88	.45	.080	.050	.080	.050	604.70	56.49
.000352	30.	30.	30.	2	0	4	0.00	161.29	217.78

*SECNO 317.250

317.25	8.38	613.28	0.00	0.00	613.33	.05	.02	.00	610.50
450.	23.	397.	29.	52.	201.	64.	49.	39.	610.50
.80	.45	1.98	.46	.080	.050	.080	.050	604.90	62.22
.000401	50.	50.	50.	0	0	0	0.00	148.66	210.88

CCHV= .150 CEHV= .350

*SECNO 317.270

317.27	7.69	613.39	0.00	0.00	613.44	.05	.10	.00	610.50
450.	39.	371.	40.	80.	191.	102.	51.	40.	611.70
.85	.48	1.94	.39	.080	.050	.080	.050	605.70	64.59
.000419	250.	250.	250.	1	0	0	0.00	185.91	250.50

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	7.11	613.41	0.00	0.00	613.49	.08	.04	.01	611.10
450.	28.	407.	15.	52.	174.	48.	51.	40.	612.30
.86	.54	2.33	.32	.080	.050	.080	.050	606.30	75.40
.000685	75.	75.	75.	0	0	0	0.00	166.79	242.19

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNO 317.320
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.03	613.49	0.00	256.	191.	80.	79.	611.60	612.60

317.32	7.15	613.45	0.00	0.00	613.52	.08	.04	0.00	611.10
450.	28.	405.	16.	53.	175.	50.	51.	40.	612.30
.86	.53	2.31	.33	.080	.050	.080	.050	606.30	74.87
.000669	15.	15.	15.	2	0	5	0.00	167.74	242.61

*SECNO 317.340

SECNO	DEPTH	CI SEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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
317.34	7.40	613.50	0.00	0.00	613.56	.06	.04	.00	610.90
450.	33.	390.	27.	65.	183.	73.	52.	40.	612.10
.87	.51	2.14	.37	.080	.050	.080	.050	606.10	70.14

.000539	60.	60.	60.	1	0	0	0.00	176.10	246.24

*SECNO 317.400

317.40	7.24	613.64	0.00	0.00	613.74	.09	.16	.01	613.50
450.	0.	436.	14.	0.	176.	35.	53.	41.	612.70
.89	.10	2.48	.39	.080	.050	.080	.050	606.40	72.13
.000905	240.	240.	240.	0	0	0	0.00	109.53	181.66

*SECNO 317.450
WATER EL=X5 CARD= 613.993

** PRIVATE DRIVE ACROSS CREEK

317.45	7.59	613.99	0.00	0.00	614.07	.07	.00	.00	613.50
450.	0.	422.	28.	2.	188.	65.	53.	41.	612.70
.89	.19	2.24	.42	.080	.050	.080	.050	606.40	65.13
.000681	1.	1.	1.	0	0	0	0.00	136.14	201.27

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 3.01 FEET

318.00	7.81	614.31	0.00	0.00	614.34	.04	.27	.01	613.90
450.	4.	277.	169.	17.	149.	200.	56.	43.	611.60
.98	.23	1.86	.85	.080	.050	.080	.050	606.50	540.60
.000521	460.	460.	460.	2	0	0	0.00	145.40	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 2.57 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	7.36	614.36	0.00	0.00	614.41	.05	.06	.00	614.40
450.	0.	292.	158.	0.	136.	169.	57.	43.	612.10
1.00	0.00	2.15	.93	.080	.050	.080	.050	607.00	586.07
.000788	100.	100.	100.	0	0	0	0.00	99.93	686.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.69 FEET

SECNO	DEPTH	CHSEL	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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPP	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.95	614.41	0.00	205.	246.	80.	80.	612.70	613.30

318.12	7.49	614.49	0.00	0.00	614.54	.05	.13	0.00	614.40
450.	0.	288.	162.	4.	140.	178.	57.	43.	612.10
1.00	.10	2.06	.91	.080	.050	.080	.050	607.00	545.85
.000701	18.	18.	18.	2	0	4	0.00	140.15	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED 1.64 FEET

318.15	7.64	614.64	0.00	0.00	614.71	.07	.17	.01	612.20
450.	63.	179.	209.	66.	59.	157.	58.	44.	612.20
1.02	.55	3.01	1.33	.080	.050	.080	.050	607.00	539.37
.002024	150.	150.	150.	2	0	0	0.00	142.63	682.00

*SECNO 318.160
WATER EL=X5 CARD= 614.664
3280 CROSS SECTION 318.16 EXTENDED 1.66 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	7.66	614.66	0.00	0.00	614.73	.07	.00	.00	612.20
450.	63.	177.	209.	67.	60.	159.	58.	44.	612.20
1.02	.95	2.97	1.32	.080	.050	.080	.050	607.00	539.33
.001972	1.	1.	1.	0	0	0	0.00	142.67	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 2.52 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.80 ELREA= 612.50

318.20	7.32	614.72	0.00	0.00	614.77	.05	.04	.00	614.80
450.	0.	294.	156.	0.	135.	166.	59.	44.	612.50
1.03	0.00	2.18	.94	.080	.050	.080	.050	607.40	586.17
.000820	30.	30.	30.	0	0	0	0.00	99.83	686.00

*SECNO 318.250
WATER EL=X5 CARD= 614.968
3280 CROSS SECTION 318.25 EXTENDED 2.77 FEET

** PRIVATE DRIVE

318.25	7.57	614.97	0.00	0.00	615.01	.04	.00	.00	614.80
450.	1.	285.	164.	7.	142.	183.	59.	44.	612.50
1.03	.14	2.01	.89	.080	.050	.080	.050	607.40	542.45
.000653	1.	1.	1.	0	0	0	0.00	143.55	686.00

*SECNO 318.300
3280 CROSS SECTION 318.30 EXTENDED 2.60 FEET

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
318.30	7.39	615.19	0.00	0.00	615.24	.05	.23	.00	615.20
450.	0.	291.	159.	0.	137.	172.	61.	45.	612.90
1.08	0.00	2.13	.93	.080	.050	.080	.050	607.80	586.00
.000766	325.	325.	325.	1	0	0	0.00	100.00	686.00

*SECNO 318.350
WATER EL=XS CARD= 615.343
3280 CROSS SECTION 318.35 EXTENDED 2.74 FEET

** PRIVATE DRIVE

318.35	7.54	615.34	0.00	0.00	615.39	.05	.00	.00	615.20
450.	1.	286.	163.	6.	141.	182.	61.	45.	612.90
1.08	.13	2.03	.90	.080	.050	.080	.050	607.80	543.55
.000668	1.	1.	1.	0	0	0	0.00	142.45	686.00

*SECNC 319.000
3280 CROSS SECTION 319.00 EXTENDED .55 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.90 ELREA= 614.50

319.00	6.95	615.55	0.00	0.00	615.66	.11	.25	.02	616.10
390.	0.	354.	36.	0.	129.	60.	63.	45.	614.50
1.11	0.00	2.76	.60	.080	.050	.080	.050	608.60	705.04
.001413	275.	275.	275.	1	0	0	0.00	104.96	810.00

*SECNC 319.100
3280 CROSS SECTION 319.10 EXTENDED 2.08 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.90 ELREA= 614.10

319.10	7.18	615.98	0.00	0.00	616.02	.04	.35	.01	616.90
390.	0.	312.	78.	0.	173.	121.	65.	46.	614.10
1.19	0.00	1.81	.64	.080	.050	.080	.050	608.80	633.29
.000489	450.	450.	450.	2	0	0	0.00	93.71	727.00

*SECNO 319.980
3280 CROSS SECTION 319.98 EXTENDED .84 FEET

** O/S FACE CORL RD

319.98	5.94	616.04	0.00	0.00	616.11	.07	.08	.01	610.40
390.	28.	283.	79.	32.	116.	101.	66.	47.	610.30
1.21	.87	2.43	.78	.080	.050	.080	.050	610.10	628.55
.000642	140.	140.	140.	2	0	0	0.00	98.45	727.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.020
3280 CROSS SECTION 320.02 EXTENDED .97 FEET

SECNO	DEPTH	CHSEL	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	ICCNT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.96	616.11	0.00	212.	178.	58.	58.	614.90	615.50

320.02	6.07	616.17	0.00	0.00	616.23	.06	.12	0.00	610.40
390.	28.	279.	83.	34.	119.	110.	66.	47.	610.30
1.21	.84	2.35	.75	.080	.050	.080	.050	610.10	628.28
.000579	21.	21.	21.	2	0	4	0.00	98.72	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.59 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	6.39	616.19	0.00	0.00	616.27	.08	.03	.01	617.90
390.	0.	324.	66.	0.	129.	92.	66.	47.	615.50
1.22	0.00	2.51	.71	.080	.050	.080	.050	609.80	536.95
.001110	40.	40.	40.	0	0	0	0.00	133.05	640.00

*SECNO 320.900
3280 CROSS SECTION 320.90 EXTENDED .00 FEET

320.90	7.00	616.70	0.00	0.00	616.85	.15	.56	.02	620.10
390.	0.	367.	23.	C.	116.	47.	68.	48.	615.70
1.25	0.00	3.15	.49	.080	.050	.080	.050	609.70	10.38
.001800	400.	400.	400.	2	0	0	0.00	169.62	180.00

CCHV= .400 CEHV= .800
*SECNO 320.980
3280 CROSS SECTION 320.98 EXTENDED .04 FEET

** D/S FACE TEMPERANCE RD

320.98	6.74	616.94	0.00	0.00	617.00	.06	.12	.03	613.00
390.	91.	299.	0.	123.	132.	0.	69.	48.	618.00
1.27	.74	2.27	0.00	.080	.050	.080	.050	610.20	330.00
.000766	110.	110.	110.	2	0	0	0.00	146.24	476.24

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNO 321.020
3280 CROSS SECTION 321.02 EXTENDED 4.03 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
619.10	617.02	0.00	52.	335.	43.	36.	616.00	617.90

321.02	8.32	618.52	0.00	0.00	618.54	.01	1.53	0.00	615.20
390.	135.	229.	26.	315.	226.	64.	69.	49.	614.10
1.29	.43	1.01	.41	.080	.050	.080	.050	610.20	233.00
.000096	55.	55.	55.	1	0	3	0.00	139.20	372.20

*SECNC 322.000
3280 CROSS SECTICN 322.00 EXTENDED 4.02 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 619.30 ELREA= 619.30

322.00	7.92	618.52	0.00	0.00	618.60	.09	.01	.06	615.60
390.	C.	390.	0.	C.	165.	0.	69.	49.	612.00
1.29	0.00	2.36	0.00	.080	.050	.080	.050	610.60	319.00
.000575	30.	30.	30.	2	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNO 322.980

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.98	7.56	618.26	0.00	0.00	618.91	.65	.03	.28	610.80
390.	0.	390.	0.	0.	60.	0.	69.	49.	610.70
1.30	0.00	6.46	0.00	.080	.050	.080	.050	610.70	689.00
.006191	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKCR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.90	150.00	7.00	0.00	39.20	0.00	610.70	610.70

*SECNO 323.020
3280 CROSS SECTION 323.02 EXTENDED .41 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.72	618.92	0.00	0.	390.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.02	9.61	620.31	0.00	0.00	620.72	.41	1.81	0.00	610.90
390.	0.	390.	0.	0.	76.	0.	69.	49.	610.90
1.30	0.00	5.12	0.00	.080	.050	.080	.050	610.70	346.00
.003234	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNO 323.100
3280 CROSS SECTION 323.10 EXTENDED .83 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.10	10.03	620.83	0.00	0.00	620.85	.01	.01	.12	615.30
390.	0.	390.	0.	0.	440.	0.	70.	49.	616.90
1.31	0.00	.89	0.00	.080	.050	.080	.050	610.80	300.00
.000075	30.	30.	30.	2	0	0	0.00	66.00	366.00

CCHV= .150 CEHV= .350
*SECNO 324.000
3280 CROSS SECTION 324.00 EXTENDED 2.85 FEET

324.00	10.05	620.85	0.00	0.00	620.85	.01	.01	.00	615.60
390.	128.	185.	77.	372.	232.	265.	71.	49.	616.70
1.37	.34	.80	.29	.080	.050	.080	.050	610.80	100.00
.000051	120.	120.	120.	2	0	0	0.00	200.00	300.00

*SECNO 324.300
3280 CROSS SECTION 324.30 EXTENDED 2.36 FEET

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
324.30	9.56	620.86	0.00	0.00	620.87	.01	.01	.00	616.10
390.	123.	197.	69.	329.	218.	225.	75.	50.	617.20
1.45	.38	.91	.31	.080	.050	.080	.050	611.30	100.00
.000070	200.	200.	200.	0	0	0	0.00	200.00	300.00

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 2.87 FEET

** D/S FACE TEMPERANCE RD

324.48	9.17	620.87	0.00	0.00	620.88	.01	.01	.00	616.70
390.	81.	187.	122.	256.	222.	328.	77.	51.	615.00
1.51	.32	.84	.37	.080	.050	.080	.050	611.70	875.00
.000059	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 2.93 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
624.83	620.88	0.00	340.	50.	31.	31.	617.00	618.80

324.52	9.23	620.93	0.00	0.00	620.93	.01	.06	0.00	616.70
390.	82.	186.	122.	261.	224.	333.	78.	51.	615.00
1.54	.31	.83	.37	.080	.050	.080	.050	611.70	875.00
.000057	50.	50.	50.	0	0	7	0.00	180.00	1055.00

*SECNO 324.60C
3280 CROSS SECTION 324.60 EXTENDED 2.73 FEET

324.60	9.23	620.93	0.00	0.00	620.94	.01	.00	.00	616.40
390.	138.	117.	136.	305.	80.	303.	79.	51.	616.40
1.54	.45	1.47	.45	.080	.030	.080	.050	611.70	875.00
.000112	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=XS CARC= 620.930
3280 CROSS SECTION 324.65 EXTENDED 2.73 FEET

** WALK BRIDGE

324.65	9.23	620.93	0.00	0.00	620.94	.01	.00	.00	616.40
390.	138.	117.	136.	305.	80.	304.	79.	51.	616.40
1.54	.45	1.46	.45	.080	.030	.080	.050	611.70	875.00
.000112	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED 2.46 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
325.00	8.86	620.96	0.00	0.00	620.96	.01	.02	.00	616.00
390.	149.	182.	59.	440.	212.	190.	83.	52.	617.80
1.66	.34	.86	.31	.080	.050	.080	.050	612.10	250.00
.000067	235.	235.	235.	0	0	0	0.00	225.00	475.00

CCHV= .200 CEHV= .400
*SECNO 325.98C
3280 CROSS SECTION 325.98 EXTENDED 2.97 FEET

** C/S FACE WASHINGTON ST

325.99	8.87	620.97	0.00	0.00	620.98	.01	.01	.00	616.60
390.	121.	163.	106.	322.	180.	311.	86.	53.	617.10
1.74	.37	.91	.34	.080	.050	.080	.050	612.10	200.00
.000075	175.	175.	175.	0	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 326.020
3280 CROSS SECTION 326.02 EXTENDED 3.03 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
626.78	620.98	0.00	355.	38.	26.	26.	616.10	618.70

326.02	8.92	621.02	0.00	0.00	621.03	.01	.05	0.00	616.60
390.	121.	162.	107.	327.	181.	316.	87.	53.	617.10
1.76	.37	.89	.34	.080	.050	.080	.050	612.10	200.00
.000072	34.	34.	34.	0	0	6	0.00	210.00	410.00

*SECNC 326.500
3280 CROSS SECTION 326.50 EXTENDED 3.53 FEET

326.50	8.83	621.03	0.00	0.00	621.03	.01	.01	.00	616.50
390.	154.	213.	23.	446.	241.	72.	89.	54.	617.40
1.80	.35	.88	.33	.080	.050	.080	.050	612.20	203.15
.000070	110.	110.	110.	0	0	0	0.00	206.85	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 3.44 FEET

** D/S FACE PRIVATE DR

326.98	8.74	621.04	0.00	0.00	621.04	.01	.01	.00	616.60
390.	152.	215.	23.	432.	238.	70.	91.	54.	617.50
1.86	.35	.90	.33	.080	.050	.080	.050	612.30	204.21
.000074	130.	130.	130.	0	0	0	0.00	205.79	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 3.48 FEET

SECNO	DEPTH	CHSEL	CRIPS	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	HTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
638.43	621.04	0.00	371.	20.	16.	16.	615.20	616.80

327.02	8.77	621.07	0.00	0.00	621.08	.01	.04	0.00	616.60
390.	153.	214.	23.	439.	239.	71.	92.	54.	617.50
1.88	.35	.89	.33	.080	.050	.080	.050	612.30	203.70
.000072	43.	43.	43.	0	0	5	0.00	206.30	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 3.09 FEET

327.50	8.39	621.09	0.00	0.00	621.10	.01	.01	.00	617.00
390.	143.	225.	22.	380.	226.	63.	95.	55.	617.90
1.95	.38	.99	.36	.080	.050	.080	.050	612.70	208.27
.000096	180.	180.	180.	0	0	0	0.00	201.73	410.00

CCHV= .300 CEHV= .500
*SECNO 327.980
3280 CROSS SECTION 327.98 EXTENDED 2.91 FEET

** D/S FACE LEWIS RD

327.98	7.91	621.11	0.00	0.00	621.12	.01	.02	.00	617.50
390.	103.	183.	104.	305.	204.	273.	98.	56.	617.00
2.04	.34	.90	.38	.080	.050	.080	.050	613.20	600.00
.000082	210.	210.	210.	0	0	0	0.00	215.00	815.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.020
3280 CROSS SECTION 328.02 EXTENDED 3.03 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.48	621.12	0.00	275.	115.	52.	52.	617.50	620.50

328.02	8.02	621.22	0.00	0.00	621.23	.01	.11	0.00	617.50
390.	105.	180.	105.	318.	208.	283.	99.	56.	617.00
2.06	.33	.87	.37	.080	.050	.080	.050	613.20	600.00
.000075	33.	33.	33.	0	0	4	0.00	215.00	815.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED 1.23 FEET

328.10	8.23	621.23	0.00	0.00	621.24	.01	.01	.00	618.60
390.	79.	196.	115.	215.	162.	258.	100.	57.	618.90
2.09	.37	1.21	.45	.080	.050	.080	.050	613.00	100.00
.000175	90.	90.	90.	0	0	0	0.00	250.00	350.00

*SECNO 329.000
3280 CROSS SECTION 329.00 EXTENDED 1.76 FEET

SECNO	DEPTH	CHSEL	CRITS	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
329.00	7.56	621.56	0.00	0.00	621.59	.02	.34	.01	620.40
390.	63.	234.	93.	143.	153.	193.	118.	65.	620.90
2.44	.44	1.54	.48	.080	.050	.080	.050	614.00	125.00
.000357	1400.	1400.	1400.	2	0	0	0.00	250.00	375.00

*SECNO 329.100
3280 CROSS SECTION 329.10 EXTENDED 1.93 FEET

329.10	7.73	621.83	0.00	0.00	621.85	.02	.26	.00	620.50
390.	68.	223.	99.	160.	158.	213.	128.	70.	621.00
2.67	.43	1.41	.46	.080	.050	.080	.050	614.10	125.00
.000290	825.	825.	825.	2	0	0	0.00	250.00	375.00

*SECNO 329.250
WATER EL=XS CARC= 621.837
3280 CROSS SECTION 329.25 EXTENDED 1.94 FEET

** PRIVATE DRIVE

329.25	7.74	621.84	0.00	0.00	621.86	.02	.00	.00	620.50
390.	68.	223.	99.	160.	158.	214.	128.	70.	621.00
2.67	.43	1.41	.46	.080	.050	.080	.050	614.10	125.00
.000288	1.	1.	1.	0	0	0	0.00	250.00	375.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100yr

00BREAK00

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**********************************************
  HEC 2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  C1
  MODIFICATION -  50,51,52
**********************************************


C
T1       HUD-FIA  H-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       FLAT CREEK  100 YEAR FLOW=450 CFS

J1   ICHECK      INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       -1.         4.         0.         0.   0.000000       0.00      -1.0         0.    597.560      0.000

J2   NPROF       IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

       0.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

NC        .060       .060       .045       .150       .350     0.000      0.000      0.000      0.000      0.000
QT       5.000    350.000    400.000    450.000    550.000   450.000      0.000      0.000      0.000      0.000
ET       0.000      0.000      0.000      0.000      0.000     1.400      0.000      0.000      0.000      0.000


X1     312.100     11.000    294.000    326.000    520.000   520.000    520.000      0.000      0.000      0.000
X3      10.000      0.000      0.000      0.000      0.000     0.000      0.000      0.000      0.000      0.000
GR     596.700    251.000    596.700    252.000    596.700   253.000    597.000    294.000    591.200    303.000
GR     590.800    309.000    591.000    313.000    593.300   316.000    597.200    326.000    597.400    350.000
GR     597.500    361.000      0.000      0.000      0.000     0.000      0.000      0.000      0.000      0.000
NC       0.000      0.000      0.000       .200       .400     0.000      0.000      0.000      0.000      0.000
ET       0.000      0.000      0.000      0.000      0.000     7.100    100.000    471.000      0.000      0.000


         **  D/S FACE MINX RD - CORPORATE BDRY

X1     312.980     11.000    294.000    326.000    142.000   142.000    142.000      0.000       .100      0.000
X3      10.000      0.000      0.000      0.000      0.000     0.000      0.000    598.200    598.200      0.000
GR     597.600    100.000    597.300    110.000    596.500   200.000    597.000    294.000    591.200    303.000
GR     590.800    309.000    591.000    313.000    593.300   316.000    597.200    326.000    597.900    400.000
GR     598.100    471.000      0.000      0.000      0.000     0.000      0.000      0.000      0.000      0.000
SB       0.000      1.300      2.700    350.000     14.610     0.000     89.100      0.000    590.900    590.900


X1     313.020     12.000    273.000    303.000     16.500    16.500     16.500      0.000      -.500      0.000
X2       0.000      0.000      1.000    597.000    598.900     0.000      0.000      0.000      0.000      0.000
X3      10.000      0.000      0.000      0.000      0.000     0.000      0.000    598.900    598.900      0.000
GR     598.400     75.000    598.400    100.000    598.200   259.000    598.100    273.000    591.800    287.000
GR     591.400    290.000    591.500    296.000    596.100   300.000    598.200    303.000    598.200    400.000
GR     598.200    418.000    598.200    428.000      0.000     0.000      0.000      0.000      0.000      0.000
ET       0.000      0.000      0.000      0.000      0.000     1.400      0.000      0.000      0.000      0.000


X1     313.100     12.000    273.000    303.000     42.000    42.000     42.000      0.000      0.000      0.000
GR     598.400     75.000    598.400    100.000    598.200   259.000    598.100    273.000    591.800    287.000
GR     591.400    290.000    591.500    296.000    596.100   300.000    598.200    303.000    598.200    400.000
GR     598.200    418.000    598.200    428.000      0.000     0.000      0.000      0.000      0.000      0.000
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NC	.080	.080	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	313.200	0.000	0.000	0.000	690.000	690.000	690.000	0.000	1.400	0.000
X1	313.300	10.000	224.000	255.000	690.000	690.000	690.000	0.000	-1.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.500	0.000	0.000
GR	602.500	0.000	601.500	100.000	601.900	200.000	601.700	224.000	596.700	234.000
GR	595.600	240.000	596.100	247.000	602.400	255.000	602.500	300.000	602.600	400.000
X1	314.000	0.000	0.000	0.000	680.000	680.000	680.000	0.000	1.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	601.900	0.000	0.000
X1	314.100	0.000	0.000	0.000	850.000	850.000	850.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.400	0.000	0.000
X1	314.200	15.000	216.000	250.000	850.000	850.000	850.000	0.000	-1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	610.500	0.000	608.100	75.000	607.100	100.000	606.000	200.000	605.300	216.000
GR	600.200	225.000	600.200	230.000	600.000	235.000	607.700	250.000	606.200	300.000
GR	606.400	337.000	606.500	400.000	608.800	500.000	609.400	550.000	609.100	600.000
X1	315.000	0.000	0.000	0.000	850.000	850.000	850.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	315.100	0.000	0.000	0.000	555.000	555.000	555.000	0.000	.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	315.200	10.000	246.000	290.000	555.000	555.000	555.000	.710	-1.500	0.000
GR	609.600	170.000	609.600	171.000	609.600	200.000	609.900	220.000	609.500	246.000
GR	603.200	257.000	602.800	261.000	603.100	267.000	609.800	290.000	609.900	370.000
X1	315.900	0.000	0.000	0.000	560.000	560.000	560.000	0.000	1.500	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	315.000	340.000	370.000	450.000	370.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	170.000	370.000	0.000	0.000

** D/S FACE CRABB RD

X1	315.980	0.000	0.000	0.000	117.000	117.000	117.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	610.300	610.300	0.000
SB	0.000	1.400	2.900	150.000	8.750	0.000	52.500	0.000	602.700	602.700
X1	315.020	16.000	247.000	277.000	33.000	33.000	33.000	0.000	-.200	0.000
X2	0.000	0.000	1.000	608.700	611.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.700	611.700	0.000
GR	612.600	160.000	612.600	161.000	612.600	162.000	612.600	163.000	612.600	173.000
GR	612.600	190.000	612.500	200.000	612.500	204.000	610.600	212.000	609.300	247.000
GR	603.000	253.000	602.900	254.000	603.100	256.000	605.100	277.000	605.400	300.000
GR	610.000	360.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000

X1	316.100	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	316.200	11.000	50.000	76.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	611.900	0.000	609.200	10.000	609.000	45.000	608.500	50.000	602.500	56.000
GR	602.400	62.000	602.000	65.000	603.000	70.000	608.500	76.000	610.800	107.000
GR	615.800	150.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

** WOOD BRIDGE

X1	316.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.050	.070	.080	.100	.080	0.000	0.000	0.000	0.000
X1	316.300	10.000	410.000	446.000	220.000	220.000	220.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.900	0.000	0.000
GR	610.000	340.000	609.900	371.000	611.900	389.000	611.900	400.000	611.700	410.000
GR	603.500	428.000	603.500	432.000	610.600	446.000	610.800	500.000	610.800	516.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	340.000	516.000	0.000	0.000

** D/S FACE WOODSIDE DR

X1	316.980	10.000	410.000	446.000	130.000	130.000	130.000	0.000	1.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.900	609.900	0.000
GR	610.000	340.000	609.900	371.000	611.900	389.000	611.900	400.000	611.700	410.000
GR	603.500	428.000	603.500	432.000	610.600	446.000	610.800	500.000	610.800	516.000
SB	0.000	1.300	2.800	100.000	10.000	0.000	53.000	0.000	604.600	604.600
X1	317.020	11.000	383.000	420.000	28.000	28.000	28.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	609.900	612.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
GR	610.500	310.000	609.200	352.000	611.800	359.000	612.000	373.000	611.600	383.000
GR	605.400	398.000	605.400	399.000	604.700	401.000	604.700	405.000	613.700	420.000
GR	615.000	490.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.100	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
X1	317.150	11.000	383.000	420.000	250.000	250.000	250.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
GR	610.500	310.000	609.200	352.000	611.800	359.000	612.000	373.000	611.600	383.000
GR	605.400	398.000	605.400	399.000	604.700	401.000	604.700	405.000	613.700	420.000
GR	614.700	490.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	1.000	250.000	0.000	0.000

** D/S FACE GRAVEL DRIVEWAY

X1	317.180	9.000	115.000	145.000	70.000	70.000	70.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.700	608.700	0.000
GR	615.000	1.000	611.900	100.000	610.300	115.000	604.700	123.000	604.700	135.000

GR	610.300	145.000	612.000	165.000	612.800	200.000	614.100	250.000	0.000	0.000
SB	1.250	1.600	2.800	150.000	9.340	.500	35.340	0.000	604.700	604.700
X1	317.220	0.000	0.000	0.000	30.000	30.000	30.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	608.700	612.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.500	612.500	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.250	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	317.270	11.000	120.000	150.000	250.000	250.000	250.000	0.000	-.300	0.000
GR	616.000	20.000	610.800	120.000	608.000	122.000	606.300	125.000	606.000	135.000
GR	606.500	140.000	608.000	145.000	612.000	150.000	612.500	155.000	612.700	236.000
GR	615.000	270.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	20.000	270.000	0.000	0.000

** D/S FACE PRIVATE DR

X1	317.280	0.000	0.000	0.000	75.000	75.000	75.000	0.000	.600	0.000
SB	0.000	1.250	2.600	165.000	15.000	0.000	79.500	0.000	606.300	606.300
X1	317.320	0.000	0.000	0.000	15.000	15.000	15.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	611.600	612.600	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.340	0.000	0.000	0.000	60.000	60.000	60.000	0.000	-.200	0.000
X1	317.400	11.000	75.000	109.000	240.000	240.000	240.000	0.000	0.000	0.000
GR	615.000	45.000	613.500	75.000	610.600	78.000	606.400	84.000	606.400	95.000
GR	609.000	103.000	612.000	106.000	612.700	109.000	613.200	150.000	613.900	200.000
GR	615.000	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

** PRIVATE DRIVE ACROSS CREEK

X1	317.450	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.150	.200	.250	.350	.250	0.000	0.000	0.000	0.000
X1	318.000	15.000	586.000	616.000	460.000	460.000	460.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.800	515.000	619.800	516.000	618.800	528.000	617.200	535.000	614.100	541.000
GR	613.900	550.000	613.900	586.000	609.000	597.000	607.800	600.000	606.600	602.000
GR	606.500	604.000	606.600	607.000	611.600	616.000	611.300	685.000	611.300	686.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	515.000	686.000	0.000	0.000

** D/S FACE PRIVATE DRIVE

X1	319.080	0.000	0.000	0.000	100.000	100.000	100.000	0.000	.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.200	2.600	0.000	14.000	0.000	79.800	0.000	607.000	607.000

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X1    318.120      0.000      0.000      0.000     18.000     18.000     18.000      0.000      0.000      0.000
X2      0.000      0.000      1.000    612.700    613.300      0.000      0.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
BT      9.000      0.000    614.600      0.000     10.000    614.200      0.000     28.000    613.800      0.000
BT     29.000    614.500      0.000     42.000    615.500      0.000     52.000    614.900      0.000     53.000
BT    613.500      0.000    100.000    613.300      0.000    150.000    614.300      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      1.400      0.000      0.000      0.000      0.000

X1    318.150     13.000    597.000    605.000    150.000    150.000    150.000      0.000     -.300      0.000
GR    619.800    512.000    619.800    513.000    618.800    528.000    617.200    535.000    614.100    541.000
GR    613.900    550.000    613.900    586.000    612.500    597.000    607.700    597.100    607.300    601.000
GR    607.500    604.900    612.500    605.000    613.300    682.000      0.000      0.000      0.000      0.000

      **  ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

X1    318.160      0.000      0.000      0.000      1.000      1.000      1.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
X5     -5.000       .010       .010       .010       .020       .010      0.000      0.000      0.000      0.000

X1    318.200     15.000    586.000    616.000     30.000     30.000     30.000      0.000       .900      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
GR    619.800    515.000    619.800    516.000    618.800    528.000    617.200    535.000    614.100    541.000
GR    613.900    550.000    613.900    586.000    609.000    597.000    607.800    600.000    606.600    602.000
GR    606.500    604.000    606.600    607.000    611.600    616.000    611.300    685.000    611.300    686.000

      **  PRIVATE DRIVE

X1    318.250      0.000      0.000      0.000      1.000      1.000      1.000      0.000      0.000      0.000
X5     -5.000       .120       .150       .200       .250       .200      0.000      0.000      0.000      0.000

X1    318.300      0.000      0.000      0.000    325.000    325.000    325.000      0.000       .400      0.000

      **  PRIVATE DRIVE

X1    318.350      0.000      0.000      0.000      1.000      1.000      1.000      0.000      0.000      0.000
X5     -5.000       .080       .100       .120       .150      0.000      0.000      0.000      0.000      0.000
QT      5.000    265.000    315.000    335.000    390.000    335.000      0.000      0.000      0.000      0.000

X1    319.000     11.000    704.000    735.000    275.000    275.000    275.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    616.900      0.000      0.000
GR    615.600    630.000    616.900    684.000    616.600    697.000    616.100    704.000    609.700    716.000
GR    608.600    717.000    608.700    720.000    608.800    722.000    610.200    727.000    614.500    735.000
GR    615.000    810.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

X1    319.100     16.000    630.000    667.000    450.000    450.000    450.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
GR    618.300    554.000    618.300    555.000    618.300    556.000    618.300    557.000    618.000    581.000
GR    617.700    590.000    617.400    599.000    617.500    614.000    616.900    630.000    615.500    635.000
GR    609.100    640.000    608.800    646.000    609.000    653.000    614.100    667.000    613.900    700.000
GR    613.900    727.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      7.100    554.000    727.000      0.000      0.000
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** D/S FACE CORL RD

X1	319.980	16.000	640.000	660.000	140.000	140.000	140.000	0.000	1.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.900	614.900	0.000
GR	618.300	554.000	618.300	555.000	618.300	556.000	618.300	557.000	618.000	581.000
GR	617.700	590.000	617.400	599.000	617.500	614.000	616.900	620.000	615.500	627.000
GR	609.100	640.000	608.800	650.000	609.000	660.000	614.100	680.000	613.900	700.000
GR	613.900	727.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.600	0.000	12.000	0.000	57.600	0.000	610.100	610.100
X1	320.020	0.000	0.000	0.000	21.000	21.000	21.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	614.900	615.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.500	615.500	0.000
BT	11.000	758.000	618.000	0.000	767.000	617.600	0.000	770.000	616.500	0.000
BT	774.000	616.500	0.000	774.100	617.800	0.000	789.900	617.600	0.000	790.000
BT	616.100	0.000	800.000	615.800	0.000	900.000	615.500	0.000	1000.000	615.900
BT	0.000	1200.000	618.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	320.100	16.000	535.000	565.000	40.000	40.000	40.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	618.600	0.000	0.000
GR	616.100	460.000	616.100	461.000	616.100	462.000	616.100	463.000	615.900	484.000
GR	615.400	490.000	618.200	500.000	618.600	516.000	618.100	532.000	617.900	535.000
GR	610.000	544.000	609.800	549.000	609.900	556.000	615.500	565.000	614.900	600.000
GR	614.600	640.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	320.900	9.000	5.000	36.000	400.000	400.000	400.000	0.000	0.000	0.000
GR	620.300	0.000	620.100	5.000	611.900	18.000	610.100	21.000	609.700	24.000
GR	610.100	29.000	615.700	36.000	616.500	100.000	616.700	180.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	330.000	510.000	0.000	0.000

** D/S FACE TEMPERANCE RD

X1	320.980	9.000	450.000	478.000	110.000	110.000	110.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	616.350	616.350	0.000
GR	616.900	330.000	616.700	365.000	615.500	425.000	613.000	450.000	610.200	455.000
GR	610.200	465.000	618.000	478.000	623.300	490.000	623.400	510.000	0.000	0.000
SB	0.000	1.650	2.700	0.000	6.160	0.000	42.530	0.000	610.200	610.200
X1	321.020	15.000	319.000	352.000	55.000	55.000	55.000	0.000	-.400	0.000
X2	0.000	0.000	1.000	616.000	617.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	617.900	617.900	0.000
BT	7.000	0.000	617.900	0.000	100.000	618.500	0.000	200.000	619.500	0.000
BT	300.000	620.700	0.000	400.000	621.700	0.000	460.000	622.800	0.000	510.000
BT	623.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	614.900	233.000	614.900	234.000	614.900	235.000	615.500	300.000	615.600	319.000
GR	610.600	327.000	610.600	331.000	610.700	337.000	612.000	343.000	614.500	352.000
GR	614.800	362.000	623.300	383.000	624.000	400.000	624.300	435.000	624.500	436.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	322.000	10.000	319.000	343.000	30.000	30.000	30.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	619.300	619.300	0.000
GR	616.000	99.000	615.500	100.000	614.700	200.000	615.500	300.000	615.600	319.000

GR	610.600	327.000	610.600	331.000	610.700	337.000	612.000	343.000	614.500	352.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	550.000	800.000	0.000	0.000

** D/S FACE RAILROAD BRIDGE

X1	322.980	10.000	689.000	697.000	20.000	20.000	20.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.000	620.000	0.000
GR	622.800	550.000	619.600	673.000	614.900	683.000	610.800	689.000	610.700	692.000
GR	610.700	695.000	610.700	697.000	616.500	700.000	618.200	706.000	623.900	800.000
SB	0.000	1.600	2.900	150.000	7.000	0.000	39.200	0.000	610.700	610.700
X1	323.020	9.000	346.000	354.000	33.000	33.000	33.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	616.300	624.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	624.000	624.000	0.000
GR	620.000	275.000	615.300	300.000	615.000	337.000	611.000	346.000	610.800	350.000
GR	611.000	354.000	616.900	366.000	618.600	400.000	621.200	500.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	323.100	9.000	300.000	366.000	30.000	30.000	30.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	624.000	624.000	0.000
GR	620.000	275.000	615.300	300.000	615.000	337.000	611.000	346.000	610.800	350.000
GR	611.000	353.000	616.900	366.000	618.600	400.000	621.200	500.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	324.000	11.000	189.000	217.000	120.000	120.000	120.000	0.000	0.000	0.000
GR	618.000	100.000	617.200	126.000	616.600	140.000	615.600	189.000	610.900	197.000
GR	610.800	200.000	611.100	202.000	614.100	216.000	616.700	217.000	617.500	260.000
GR	619.000	300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	324.300	0.000	0.000	0.000	200.000	200.000	200.000	0.000	.500	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	875.000	1055.000	0.000	0.000

** D/S FACE TEMPERANCE RD

X1	324.480	7.000	950.000	980.000	125.000	125.000	125.000	0.000	0.000	0.000
GR	618.200	875.000	616.700	950.000	612.600	960.000	611.700	965.000	612.100	969.000
GR	615.000	980.000	618.000	1055.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.650	2.600	180.000	5.920	0.000	31.380	0.000	611.700	611.700
X1	324.520	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	617.000	618.800	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	324.600	8.000	960.000	969.000	13.000	13.000	13.000	0.000	0.000	0.000
GR	618.200	875.000	616.700	950.000	616.400	960.000	612.600	960.100	611.700	965.000
GR	612.100	968.900	616.400	969.000	618.400	1055.000	0.000	0.000	0.000	0.000

** WALK BRIDGE

X1	324.650	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.001	.001	.002	.003	.002	0.000	0.000	0.000	0.000
NC	0.000	0.000	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	325.000	13.000	383.000	413.000	235.000	235.000	235.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.200	250.000	619.200	251.000	619.200	252.000	619.200	253.000	619.200	254.000
GR	616.000	383.000	612.200	393.000	612.100	396.000	612.400	402.000	617.800	413.000
GR	617.400	415.000	617.500	425.000	618.500	475.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	200.000	410.000	0.000	0.000

** D/S FACE WASHINGTON ST

X1	325.980	10.000	288.000	312.000	175.000	175.000	175.000	0.000	0.000	0.000
GR	618.000	200.000	616.700	283.000	616.600	288.000	613.200	295.000	612.200	296.000
GR	612.100	300.000	612.100	304.000	612.200	307.000	617.100	312.000	618.500	410.000
SB	0.000	1.700	2.600	210.000	6.570	0.000	26.280	0.000	612.100	612.100
X1	326.020	0.000	0.000	0.000	34.000	34.000	34.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	616.100	618.700	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	326.500	11.000	356.000	390.000	110.000	110.000	110.000	0.000	-.100	0.000
GR	621.400	200.000	619.500	222.000	618.700	265.000	617.300	300.000	616.600	356.000
GR	613.900	366.000	612.900	370.000	612.300	380.000	612.600	382.000	617.500	390.000
GR	617.600	410.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	200.000	410.000	0.000	0.000

** D/S FACE PRIVATE DR

X1	326.980	0.000	0.000	0.000	130.000	130.000	130.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.900	2.700	195.000	5.540	0.000	16.060	0.000	612.300	612.300
X1	327.020	0.000	0.000	0.000	43.000	43.000	43.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.200	616.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	327.500	0.000	0.000	0.000	180.000	180.000	180.000	0.000	.400	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	160.000	240.000	280.000	390.000	280.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	600.000	815.000	0.000	0.000

** D/S FACE LEWIS RD

X1	327.980	8.000	705.000	737.000	210.000	210.000	210.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.100	620.100	0.000
GR	618.900	600.000	617.500	705.000	613.700	715.000	613.200	721.000	613.200	727.000
GR	616.000	732.000	617.000	737.000	618.200	815.000	0.000	0.000	0.000	0.000
SB	0.000	1.550	2.700	215.000	12.000	0.000	51.600	0.000	613.200	613.200

X1	328.020	0.000	0.000	0.000	33.000	33.000	33.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	617.500	620.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.500	620.500	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	328.100	14.000	218.000	245.000	90.000	90.000	90.000	0.000	0.000	0.000
GR	620.000	100.000	619.500	139.000	619.500	140.000	619.000	184.000	619.600	206.000
GR	618.600	218.000	613.400	225.000	613.000	230.000	613.800	234.000	618.900	245.000
GR	618.700	269.000	618.500	300.000	618.500	325.000	620.000	350.000	0.000	0.000
X1	329.000	10.000	225.000	255.000	1400.000	1400.000	1400.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.100	125.000	620.100	151.000	620.100	200.000	620.400	225.000	614.200	233.000
GR	614.000	237.000	614.300	242.000	620.900	255.000	619.700	300.000	619.800	375.000
X1	329.100	0.000	0.000	0.000	825.000	825.000	825.000	0.000	.100	0.000

** PRIVATE DRIVE

X1	329.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.001	.001	.002	.004	.002	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .86 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLCB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST
312.10	6.76	597.56	0.00	597.56	597.70	.14	0.00	0.00	597.00
450.	23.	424.	3.	31.	136.	7.	0.	0.	597.20
0.00	.75	3.11	.36	.060	.045	.060	0.000	590.80	251.00
.001457	520.	520.	520.	0	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED .07 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RC - CORPORATE BDRY

312.93	6.86	597.76	0.00	0.00	597.92	.16	.21	.01	597.10
450.	0.	450.	0.	0.	140.	0.	1.	0.	597.30
.01	0.00	3.22	0.00	.060	.045	.060	.045	590.90	294.00
.001531	142.	142.	142.	0	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .41 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.28	597.95	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.90 ELREA= 598.90

313.02	7.21	598.11	0.00	0.00	598.28	.16	.35	0.00	597.60
450.	0.	450.	0.	0.	139.	0.	1.	0.	597.70

.01	0.00	3.24	0.00	.060	.045	.060	.044	590.90	273.00
.001493	17.	17.	17.	2	0	0	0.00	30.00	303.00

*SECNO 313.100

313.10	6.76	598.16	0.00	0.00	598.36	.20	.07	.01	598.10
450.	0.	450.	0.	C.	126.	0.	1.	0.	598.20
.02	.12	3.58	0.00	.060	.045	.060	.044	591.40	263.14
.002064	42.	42.	42.	1	0	0	0.00	39.82	302.96

CCHV= .150 CEHV= .350
*SECNO 313.200
3280 CROSS SECTION 313.20 EXTENDED .09 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
313.20	6.88	599.68	0.00	0.00	599.87	.18	1.50	.00	599.50
450.	1.	447.	2.	5.	129.	11.	3.	2.	599.60
.07	.16	3.46	.18	.080	.050	.080	.049	592.80	188.02
.002298	690.	690.	690.	2	0	0	0.00	239.98	428.00

*SECNO 313.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 600.50 ELREA= 601.00

313.30	6.78	600.98	0.00	0.00	601.08	.11	1.21	.01	600.30
450.	58.	392.	0.	120.	140.	0.	6.	6.	601.00
.15	.48	2.80	0.00	.080	.050	.080	.049	594.20	12.17
.001372	690.	690.	690.	2	0	0	0.00	242.80	254.97

*SECNO 314.000

314.00	6.47	602.07	0.00	0.00	602.22	.16	1.12	.02	601.70
450.	24.	426.	0.	59.	130.	0.	10.	10.	602.40
.21	.40	3.27	0.00	.080	.050	.080	.049	595.60	43.41
.002019	680.	680.	680.	2	0	0	0.00	211.17	254.58

*SECNO 314.100

314.10	6.58	603.68	0.00	0.00	603.82	.14	1.60	.00	603.20
450.	36.	414.	0.	81.	134.	0.	14.	14.	603.90
.29	.44	3.09	0.00	.080	.050	.080	.050	597.10	31.53
.001750	850.	850.	850.	2	0	0	0.00	223.19	254.73

*SECNO 314.200

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 603.80 ELREA= 606.20

314.20	6.61	605.11	0.00	0.00	605.25	.14	1.43	.00	603.80
450.	17.	433.	0.	32.	142.	0.	17.	17.	606.20

.37	.52	3.05	0.00	.080	.050	.080	.050	598.50	144.39
.001618	850.	850.	850.	2	0	0	0.00	103.49	250.00

*SECNO 315.00C

3265 DIVIDED FLOW

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 605.30 ELREA= 607.70

315.00	6.53	606.53	0.00	0.00	606.68	.15	1.42	.00	605.30
450.	14.	436.	0.	27.	139.	0.	21.	19.	607.70
.45	.52	3.12	0.00	.080	.050	.080	.050	600.00	151.50
.001727	850.	850.	850.	1	0	0	0.00	96.23	250.00

*SECNO 315.10C

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 606.20 ELREA= 608.60

315.10	6.58	607.48	0.00	0.00	607.62	.14	.94	.00	606.20
450.	15.	435.	0.	29.	141.	0.	23.	20.	608.60
.50	.52	3.09	0.00	.080	.050	.080	.050	600.90	148.32
.001678	555.	555.	555.	1	0	0	0.00	99.47	250.00

*SECNO 315.200
3280 CROSS SECTION 315.20 EXTENDED .37 FEET

315.20	7.17	608.47	0.00	0.00	608.64	.16	1.01	.01	608.00
450.	6.	443.	1.	16.	136.	7.	25.	22.	608.30
.55	.38	3.27	.20	.080	.050	.080	.050	601.30	170.00
.001972	555.	555.	555.	2	0	0	0.00	142.00	312.00

*SECNO 315.90C

3265 DIVIDED FLOW

3280 CROSS SECTION 315.90 EXTENDED .09 FEET

315.90	6.89	609.69	0.00	0.00	609.89	.19	1.24	.01	609.50
450.	1.	449.	0.	3.	127.	0.	27.	23.	609.80
.59	.18	3.54	0.00	.080	.050	.080	.050	602.80	170.00
.002510	560.	560.	560.	2	0	0	0.00	65.60	254.94

CCHV= .400 CEHV= .800
*SECNC 315.980

3280 CROSS SECTION 315.98 EXTENDED .52 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 610.30 ELREA= 610.30

** D/S FACE CRABB RD

315.98	7.32	610.02	0.00	0.00	610.13	.11	.21	.03	609.40
370.	0.	370.	0.	0.	140.	0.	27.	23.	609.70
.60	0.00	2.64	0.00	.080	.050	.080	.050	602.70	223.96
.001250	117.	117.	117.	2	0	0	0.00	31.24	255.20

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNC 316.020
3280 CROSS SECTION 316.02 EXTENDED 1.25 FEET

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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.10	610.09	0.00	C.	370.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.70 ELREA= 611.70

316.02	8.35	611.05	0.00	0.00	611.10	.05	.97	0.00	609.10
370.	0.	370.	0.	0.	206.	0.	27.	24.	604.90
.61	0.00	1.80	0.00	.080	.050	.080	.050	602.70	247.00
.000337	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
3280 CROSS SECTION 316.10 EXTENDED 1.12 FEET

316.10	8.22	611.12	0.00	0.00	611.13	.01	.01	.02	609.30
370.	8.	198.	164.	41.	202.	340.	28.	24.	605.10
.63	.20	.98	.48	.080	.050	.080	.050	602.90	209.82
.000097	50.	50.	50.	2	0	0	0.00	150.18	360.00

CCHV= .150 CEHV= .350
*SECNC 316.200

316.20	9.11	611.11	0.00	0.00	611.14	.04	.01	.01	608.50

```
    370.      43.     309.      18.      89.     187.      46.      28.      24.    608.50
     .64      .48     1.65      .39     .080     .050     .080     .050   602.00      2.94
 .000276      50.      50.      50.        2        0        0     0.00   106.71    109.64

*SECNO 316.250
 WATER EL=X5 CARD=   611.187

          **  WOOD BRIDGE

  316.25     9.19   611.19     0.00     0.00   611.22      .03      .00      .00    608.50
    370.      45.     306.      19.      93.     190.      48.      28.      24.    608.50
     .64      .48     1.62      .40     .080     .050     .080     .050   602.00      2.64
 .000261       1.       1.       1.        0        0        0     0.00   107.69    110.33

*SECNO 316.300
3280 CROSS SECTION    316.30 EXTENDED      1.25 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.90 ELREA=      610.60

  316.30     7.76   611.26     0.00     0.00   611.34      .08      .10      .02    611.70
    370.       0.      357.      13.       0.     156.      37.      30.      24.    610.60
     .67     0.00     2.29      .37     .080     .050     .080     .050   603.50    411.00
 .000920      220.     220.     220.        0        0        0     0.00   105.00    516.00

*SECNO 316.980
3265 DIVIDED FLOW

3280 CROSS SECTION    316.98 EXTENDED       .29 FEET

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

          **  D/S FACE WOODSIDE DR

  316.98     6.79   611.39     0.00     0.00   611.52      .14      .17      .02    612.80
    370.       4.      366.       0.      11.     123.       0.      30.      25.    611.70
     .68      .38     2.97     0.00     .080     .050     .080     .050   604.60    340.00
.001896      130.     130.     130.        2        0        0     0.00    66.75    445.38


SPECIAL BRIDGE

SB  XK         XKCR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.30       2.80     100.00      10.00       0.00      53.00       0.00     604.60     604.60

*SECNO 317.020
3280 CROSS SECTION    317.02 EXTENDED      1.77 FEET
```

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
612.37	611.51	0.00	28.	339.	53.	53.	609.90	612.00

317.02	7.57	612.17	0.00	C.00	612.21	.04	.69	0.00	611.50
370.	89.	281.	0.	124.	156.	0.	30.	25.	613.60
.68	.71	1.80	0.00	.080	.050	.080	.050	604.60	310.00
.000562	28.	28.	28.	2	C	2	0.00	107.62	417.62

*SECNO 317.10C
3280 CROSS SECTION 317.10 EXTENDED 1.69 FEET

317.10	7.49	612.19	C.CO	0.00	612.24	.04	.02	.00	611.60
370.	86.	284.	0.	118.	153.	0.	30.	25.	613.70
.69	.73	1.85	0.00	.080	.050	.080	.050	604.70	310.00
.000602	40.	40.	40.	2	0	0	0.00	107.49	417.49

*SECNO 317.15C
3280 CROSS SECTION 317.15 EXTENDED 1.84 FEET

317.15	7.64	612.34	0.00	C.CO	612.38	.04	.14	.00	611.60
370.	91.	279.	0.	129.	158.	0.	32.	25.	613.70
.74	.70	1.76	0.00	.080	.050	.080	.050	604.70	310.00
.000529	250.	250.	250.	0	0	0	0.00	107.73	417.73

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	7.67	612.37	0.00	0.00	612.43	.06	.03	.01	610.30
370.	9.	349.	11.	23.	180.	28.	32.	25.	610.30
.75	.41	1.94	.41	.080	.050	.080	.050	604.70	84.67
.000448	70.	70.	70.	0	0	0	0.00	96.95	181.62

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.09	612.44	.01	183.	188.	35.	35.	608.70	612.50

317.22	8.34	613.04	0.00	0.00	613.07	.04	.65	0.00	610.30
370.	18.	329.	23.	50.	200.	61.	33.	26.	610.30
.75	.37	1.64	.38	.080	.050	.080	.050	604.70	63.69
.000280	30.	30.	30.	2	0	4	0.00	145.43	209.12

*SECNO 317.250

317.25	8.15	613.05	0.00	0.00	613.09	.04	.01	.00	610.50
370.	16.	335.	19.	41.	194.	50.	33.	26.	610.50
.76	.38	1.73	.38	.080	.050	.080	.050	604.90	69.49
.000320	50.	50.	50.	0	0	0	0.00	132.63	202.13

CCHV= .150 CEHV= .350

*SECNO 317.270

317.27	7.44	613.14	0.00	C.CC	613.18	.04	.08	.00	610.50
370.	28.	318.	24.	67.	184.	77.	35.	27.	611.70
.81	.42	1.73	.31	.080	.050	.080	.050	605.70	69.39
.000352	250.	250.	250.	1	0	0	0.00	177.42	246.81

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	6.86	613.16	0.00	0.00	613.22	.06	.03	.01	611.10
370.	19.	347.	5.	41.	167.	24.	35.	27.	612.30
.82	.46	2.08	.20	.080	.050	.080	.050	606.30	80.35
.000578	75.	75.	75.	0	0	0	0.00	158.05	238.40

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNO 317.320

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.58	613.22	0.00	181.	191.	80.	79.	611.60	612.60

317.32	6.91	613.21	0.00	0.00	613.27	.06	.05	0.00	611.10
370.	19.	345.	6.	43.	168.	28.	35.	27.	612.30
.82	.45	2.05	.21	.080	.050	.080	.050	606.30	79.49
.000556	15.	15.	15.	2	0	4	0.00	159.57	239.06

*SECNO 317.340

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
317.34	7.15	613.25	0.00	0.00	613.30	.05	.03	.00	610.90
370.	23.	334.	13.	53.	175.	50.	36.	27.	612.10
.83	.44	1.91	.27	.080	.050	.080	.050	606.10	74.99
.000455	60.	60.	60.	0	0	0	0.00	167.53	242.52

*SECNO 317.400

317.40	6.97	613.37	0.00	0.00	613.45	.07	.14	.01	613.50
370.	0.	365.	5.	0.	167.	18.	37.	28.	612.70
.86	0.00	2.19	.28	.080	.050	.080	.050	606.40	75.13
.000754	240.	240.	240.	0	0	0	0.00	86.98	162.11

*SECNO 317.450
WATER EL=X5 CARD= 613.622

** PRIVATE DRIVE ACROSS CREEK

317.45	7.22	613.62	0.00	0.00	613.69	.06	.00	.00	613.50
370.	0.	359.	11.	0.	175.	34.	37.	28.	612.70
.85	.07	2.05	.32	.080	.050	.080	.050	606.40	72.56
.000627	1.	1.	1.	0	0	0	0.00	107.60	180.15

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 2.61 FEET

318.00	7.41	613.91	0.00	0.00	613.95	.03	.26	.00	613.90
370.	0.	239.	131.	1.	137.	173.	40.	29.	611.60
.95	.03	1.74	.76	.080	.050	.080	.050	606.50	549.33
.000511	460.	460.	460.	2	0	0	0.00	136.67	686.00

*SECNO 318.080
3280 CROSS SECTION 318.09 EXTENDED 2.17 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	6.97	613.97	0.00	0.00	614.02	.05	.06	.01	614.40
370.	0.	254.	116.	0.	124.	142.	40.	29.	612.10
.97	0.00	2.05	.82	.080	.050	.080	.050	607.00	586.96
.000772	100.	100.	100.	0	0	0	0.00	99.04	686.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.33 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.37	614.02	0.00	110.	262.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

318.12	7.13	614.13	0.00	0.00	614.17	.04	.15	0.00	614.40
370.	0.	248.	122.	0.	129.	152.	40.	29.	612.10
.97	0.00	1.93	.80	.080	.050	.080	.050	607.00	586.62
.000666	18.	18.	18.	2	0	0	0.00	99.39	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED 1.27 FEET

318.15	7.27	614.27	0.00	0.00	614.35	.08	.17	.01	612.20
370.	36.	175.	159.	44.	56.	129.	41.	30.	612.20
.99	.81	3.09	1.24	.080	.050	.080	.050	607.00	540.09
.002298	150.	150.	150.	2	0	0	0.00	141.91	682.00

*SECNC 318.160
WATER EL=X5 CARD= 614.279
3280 CROSS SECTION 318.16 EXTENDED 1.28 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	7.28	614.28	0.00	0.00	614.36	.08	.00	.00	612.20
370.	36.	174.	160.	45.	57.	129.	41.	30.	612.20
.99	.81	3.08	1.24	.080	.050	.080	.050	607.00	540.07
.002265	1.	1.	1.	0	0	0	0.00	141.93	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 2.15 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.80 ELREA= 612.50

318.20	6.95	614.35	0.00	0.00	614.40	.05	.04	.00	614.80
370.	0.	255.	115.	0.	123.	140.	41.	30.	612.50
1.00	0.00	2.06	.82	.080	.050	.080	.050	607.40	587.02
.000791	30.	30.	30.	0	0	0	0.00	98.98	686.00

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*SECNO 318.250
 WATER EL=X5 CARD=    614.553
3280 CROSS SECTION     318.25 EXTENDED       2.35 FEET


          **  PRIVATE DRIVE

   318.25      7.15    614.55      0.00      0.00    614.59       .04       .00       .00    614.80
     370.        0.       247.      123.        0.      129.      154.       41.       30.     612.50
     1.00      0.00      1.91       .79      .080      .050      .080      .050    607.40    586.56
  .000649        1.        1.        1.         0         0         0      0.00     99.45    686.00

*SECNO 318.300
3280 CROSS SECTION     318.30 EXTENDED       2.19 FEET

   SECNO     DEPTH     CHSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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

   318.30      6.98    614.78      0.00      0.00    614.82       .05       .23       .00    615.20
     370.        0.       253.      117.        0.      125.      143.       44.       31.     612.90
     1.05      0.00      2.03       .82      .080      .050      .080      .050    607.80    586.93
  .000761       325.      325.      325.         0         0         0      0.00     99.07    686.00

*SECNO 319.100
 WATER EL=X5 CARD=    614.897
3280 CROSS SECTION     318.35 EXTENDED       2.30 FEET


          **  PRIVATE DRIVE

   318.35      7.10    614.90      0.00      0.00    614.94       .04       .00       .00    615.20
     370.        0.       249.      121.        0.      128.      150.       44.       31.     612.90
     1.05      0.00      1.95       .80      .080      .050      .080      .050    607.80    586.68
  .000684        1.        1.        1.         0         0         0      0.00     99.32    686.00

*SECNO 319.000
3280 CROSS SECTION     319.00 EXTENDED        .12 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      616.90 ELREA=      614.50

   319.00      6.52    615.12      0.00      0.00    615.24       .12       .27       .03    616.10
     335.        0.       324.       11.        0.      116.       28.       45.       31.     614.50
     1.08      0.00      2.80       .38      .080      .050      .080      .050    608.60    705.84
  .001614       275.      275.      275.         2         0         0      0.00    104.16    810.00

*SECNO 319.100
3280 CROSS SECTION     319.10 EXTENDED       1.67 FEET
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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 616.90 ELREA= 614.10

319.10	6.77	615.57	C.CO	C.CO	615.62	.04	.37	.01	616.90
335.	0.	281.	54.	0.	159.	97.	47.	32.	614.10
1.16	0.CO	1.76	.56	.080	.050	.080	.050	608.80	634.74
.000491	450.	450.	450.	2	0	0	0.00	92.26	727.00

*SECNO 319.980
3280 CROSS SECTICN 319.98 EXTENDED .44 FEET

** D/S FACE CORL RD

319.98	5.54	615.64	0.00	C.00	615.70	.07	.08	.01	610.40
335.	24.	255.	56.	28.	108.	74.	48.	33.	610.30
1.18	.84	2.36	.76	.080	.050	.080	.050	610.10	629.36
.000662	140.	140.	140.	2	0	0	0.00	97.64	727.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.02C
3280 CROSS SECTION 320.02 EXTENDED .73 FEET

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	ICCNT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.32	615.7C	0.00	92.	240.	58.	58.	614.90	615.50

320.02	5.83	615.93	0.00	0.00	615.99	.06	.28	0.00	610.40
335.	24.	246.	65.	31.	114.	94.	48.	33.	610.30
1.18	.77	2.16	.69	.080	.050	.C80	.050	610.10	628.76
.000517	21.	21.	21.	2	0	2	0.00	98.24	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.36 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	6.15	615.95	0.00	0.00	616.02	.08	.03	.01	617.9C

335.	C.	290.	45.	C.	123.	75.	48.	33.	615.50
1.19	0.00	2.36	.61	.080	.050	.080	.050	609.80	537.21
.001041	40.	40.	40.	0	0	0	0.00	102.79	640.00

*SECNO 320.900

320.90	6.73	616.43	C.00	0.00	616.57	.13	.52	.02	620.10
335.	0.	327.	8.	0.	110.	22.	50.	34.	615.70
1.23	0.C0	2.98	.39	.080	.050	.080	.050	609.70	10.81
.001706	400.	400.	400.	2	0	0	0.00	83.97	94.78

CCHV= .400 CEHV= .800
*SECNO 320.980

** D/S FACE TEMPERANCE RD

320.98	6.46	616.66	0.00	0.00	616.72	.06	.12	.03	613.00
335.	66.	269.	0.	94.	125.	0.	50.	34.	618.00
1.24	.70	2.16	0.00	.080	.050	.080	.050	610.20	367.17
.000732	110.	110.	110.	2	0	0	0.00	108.59	475.76

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNO 321.020
3280 CROSS SECTION 321.02 EXTENDED 3.68 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
618.25	616.72	0.00	7.	328.	43.	36.	616.00	617.90

321.02	7.98	618.18	0.00	C.00	618.18	.01	1.47	0.00	615.20
335.	110.	203.	22.	285.	215.	57.	50.	34.	614.10
1.26	.39	.94	.38	.080	.050	.080	.050	610.20	233.00
.000089	55.	55.	55.	0	0	4	0.00	138.35	371.35

*SECNO 322.000
3280 CROSS SECTION 322.00 EXTENDED 3.68 FEET

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 619.30 ELREA= 619.30

322.00	7.57	618.17	0.00	0.00	618.24	.07	.01	.05	615.60

```
     335.        0.      335.        0.        0.      157.        0.       51.       34.     612.00
     1.27      0.00      2.13      0.00      .080      .050      .080      .050    610.60    319.00
  .000496       30.       30.       30.         1         0         0      0.00     24.00    343.00

CCHV=     .300 CEHV=     .500
*SECNO 322.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       620.00 ELREA=       620.00

          **  D/S FACE RAILROAD BRIDGE

   322.98      7.27    617.97      0.00      0.00    618.49       .52       .02       .22    610.80
     335.        0.      335.        0.        0.       58.        0.       51.       34.     610.70
     1.27      0.00      5.78      0.00      .080      .050      .080      .050    610.70    689.00
  .005072       20.       20.       20.         2         0         0      0.00      8.00    697.00


SPECIAL BRIDGE

SB  XK         XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.60       2.90     150.00       7.00       0.00      39.20       0.00     610.70     610.70

*SECNC 323.020
PRESSURE FLCW

 EGPRS       EGLWC        H3        CWEIR       QPR        BAREA    TRAPEZOID       ELLC      ELTRD
                                                                       AREA
   619.78     618.50      0.00         0.       335.        39.        39.       616.30     624.00


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       624.00 ELREA=       624.00

   323.02      8.71    619.41      0.00      0.00    619.78       .37      1.30      0.00    610.90
     335.        0.      335.        0.        0.       69.        0.       51.       34.     610.90
     1.27      0.00      4.86      0.00      .080      .050      .080      .050    610.70    346.00
  .003070       33.       33.       33.         2         0         0      0.00      8.00    354.00

*SECNO 323.100

3495 OVERBANK AREA ASSUMED NCN-EFFECTIVE,ELLEA=       624.00 ELREA=       624.00

   323.10      9.08    619.88      0.00      0.00    619.90       .01       .01       .11    615.30
     335.        0.      335.        0.        0.      377.        0.       51.       34.     616.90
     1.28      0.00       .89      0.00      .080      .050      .080      .050    610.80    300.00
  .000092       30.       30.       30.         2         0         0      0.00     66.00    366.00


CCHV=     .150 CEHV=     .350
*SECNO 324.000
3280 CROSS SECTION    324.00 EXTENDED       1.90 FEET

   324.00      9.10    619.90      0.00      0.00    619.91       .01       .01       .00    615.60
     335.      101.      181.       52.      288.      205.      186.       52.       35.     616.70
     1.33       .35       .89       .28      .080      .050      .080      .050    610.80    100.00
```

.000073	120.	120.	120.	2	0	0	0.00	200.00	300.00

*SECNO 324.300
3280 CROSS SECTION 324.30 EXTENDED 1.42 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
324.30	8.61	619.91	0.00	0.00	619.93	.01	.02	.00	616.10
335.	95.	197.	43.	245.	191.	146.	55.	35.	617.20
1.41	.39	1.03	.30	.080	.050	.080	.050	611.30	100.00
.000107	200.	200.	200.	0	0	0	0.00	200.00	300.00

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 1.93 FEET

** D/S FACE TEMPERANCE RD

324.48	8.23	619.93	0.00	0.00	619.94	.01	.01	.00	616.70
335.	57.	179.	98.	186.	194.	257.	57.	36.	615.00
1.46	.31	.92	.38	.080	.050	.080	.050	611.70	875.00
.000085	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 2.00 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.85	619.94	0.00	282.	53.	31.	31.	617.00	618.80

324.52	8.30	620.00	0.00	0.00	620.00	.01	.07	0.00	616.70
335.	59.	177.	99.	192.	196.	263.	58.	36.	615.00
1.48	.31	.90	.38	.080	.050	.080	.050	611.70	875.00
.000080	50.	50.	50.	0	0	5	0.00	180.00	1055.00

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED 1.80 FEET

324.60	8.30	620.00	0.00	0.00	620.01	.02	.00	.01	616.40
335.	107.	123.	104.	226.	71.	223.	58.	36.	616.40
1.48	.48	1.73	.47	.080	.030	.080	.050	611.70	875.00
.000181	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=X5 CARD= 619.998
3280 CROSS SECTION 324.65 EXTENDED 1.80 FEET

** WALK BRIDGE

324.65	8.30	620.00	0.00	0.00	620.02	.02	.00	.00	616.40
335.	107.	123.	104.	226.	71.	223.	58.	36.	616.40
1.49	.48	1.73	.47	.080	.030	.080	.050	611.70	875.00
.000181	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED 1.54 FEET

SECNO	DEPTH	CHSEL	CRIMS	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
325.00	7.94	620.04	0.00	0.00	620.05	.01	.03	.00	616.00
335.	110.	182.	42.	318.	184.	133.	61.	37.	617.80
1.58	.35	.99	.32	.080	.050	.080	.050	612.10	250.00
.000109	235.	235.	235.	0	0	0	0.00	225.00	475.00

CCHV= .200 CEHV= .400
*SECNO 325.980
3280 CROSS SECTION 325.98 EXTENDED 2.07 FEET

** D/S FACE WASHINGTON ST

325.98	7.96	620.06	0.00	0.00	620.07	.01	.02	.00	616.60
335.	95.	164.	76.	243.	158.	222.	64.	38.	617.10
1.65	.39	1.04	.34	.080	.050	.080	.050	612.10	200.00
.000117	175.	175.	175.	0	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED 1.80 FEET

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
624.35	620.07	0.00	297.	39.	26.	26.	616.10	618.70

326.02	8.01	620.11	0.00	0.00	620.12	.01	.05	0.00	616.60
335.	95.	162.	77.	248.	159.	228.	64.	38.	617.10
1.66	.39	1.02	.34	.080	.050	.080	.050	612.10	200.00
.000111	34.	34.	34.	0	0	5	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 2.63 FEET

326.50	7.93	620.13	0.00	0.00	620.14	.01	.01	.00	616.50
335.	111.	206.	18.	313.	210.	54.	66.	39.	617.40
1.70	.36	.98	.33	.080	.050	.080	.050	612.20	213.59
.000103	110.	110.	110.	0	0	0	0.00	196.41	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.54 FEET

** D/S FACE PRIVATE DR

326.98	7.84	620.14	0.00	0.00	620.15	.01	.01	.00	616.60
335.	109.	208.	18.	300.	207.	52.	67.	40.	617.50
1.75	.36	1.01	.34	.080	.050	.080	.050	612.30	214.60
.000110	130.	130.	130.	0	0	0	0.00	195.40	410.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.58 FEET

SECNO	DEPTH	CHSEL	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
632.98	620.15	0.00	316.	19.	16.	16.	615.20	616.80

327.02	7.87	620.17	0.00	C.00	620.18	.01	.03	0.00	616.60
335.	110.	207.	18.	306.	209.	53.	68.	40.	617.50
1.77	.36	.99	.34	.080	.050	.080	.050	612.30	214.17
.000107	43.	43.	43.	1	0	5	0.00	195.83	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 2.19 FEET

327.50	7.49	620.19	0.CO	0.00	620.21	.01	.02	.00	617.00
335.	99.	220.	16.	252.	195.	45.	70.	41.	617.90
1.82	.39	1.13	.36	.080	.050	.080	.050	612.70	218.63
.000150	180.	180.	180.	0	0	0	0.00	191.37	410.00

CCHV= .300 CEHV= .500
*SECNO 327.990
3280 CROSS SECTION 327.98 EXTENDED 2.02 FEET

** D/S FACE LEWIS RD

327.98	7.03	620.23	0.00	0.00	620.23	.01	.02	.00	617.50
280.	6C.	152.	68.	212.	176.	204.	73.	41.	617.00
1.92	.28	.86	.33	.080	.050	.080	.050	613.20	600.00
.000093	210.	210.	210.	0	0	0	0.00	215.00	815.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.020
3280 CROSS SECTION 328.02 EXTENDED 2.50 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.94	620.27	0.00	52.	229.	52.	52.	617.50	620.50

328.02	7.50	620.70	0.00	0.00	620.70	.00	.47	0.CC	617.50
280.	68.	139.	72.	263.	191.	242.	73.	42.	617.00
1.94	.26	.73	.30	.080	.050	.080	.050	613.20	6CC.00
.000059	33.	33.	33.	0	0	3	0.00	215.00	815.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED .70 FEET

328.10	7.70	620.70	0.00	0.00	620.71	.01	.01	.00	618.60
280.	43.	162.	75.	152.	148.	202.	74.	42.	618.90
1.97	.29	1.10	.37	.080	.050	.080	.050	613.0C	1CC.0C

.000162	90.	90.	90.	0	0	0	0.00	250.00	350.00

*SECNO 329.000
3280 CROSS SECTION 329.00 EXTENDED 1.23 FEET

SECNO	DEPTH	CHSEL	CRITS	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
329.00	7.03	621.03	0.00	0.00	621.05	.02	.33	.01	620.40
280.	30.	201.	50.	89.	136.	128.	88.	50.	620.90
2.31	.33	1.47	.39	.080	.050	.080	.050	614.00	125.00
.000379	1400.	1400.	1400.	3	0	0	0.00	250.00	375.00

*SECNO 329.100
3280 CROSS SECTION 329.10 EXTENDED 1.41 FEET

329.10	7.21	621.31	0.00	0.00	621.33	.02	.27	.00	620.50
280.	35.	188.	56.	107.	142.	150.	95.	55.	621.00
2.53	.33	1.33	.38	.080	.050	.080	.050	614.10	125.00
.000293	825.	825.	825.	2	0	0	0.00	250.00	375.00

*SECNO 329.250
WATER EL=XS CARD= 621.310
3280 CROSS SECTION 329.25 EXTENDED 1.41 FEET

** PRIVATE DRIVE

329.25	7.21	621.31	0.00	0.00	621.33	.02	.00	.00	620.50
280.	35.	188.	56.	107.	142.	150.	95.	55.	621.00
2.53	.33	1.33	.38	.080	.050	.080	.050	614.10	125.00
.000293	1.	1.	1.	0	0	0	0.00	250.00	375.00

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**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK  100 YEAR FLOW=450 CFS  N * 1.3

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

     -1.        4.        0.        0.   0.000000      0.00     -1.0         0.   597.560     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     2.000     0.000    -1.000     0.000     0.000     1.300     0.000     0.000     0.000     0.000
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*PROF 2

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .86 FEET

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
312.10	6.76	597.56	0.00	597.56	597.70	.14	0.00	0.00	597.00
450.	23.	424.	3.	31.	136.	7.	0.	0.	597.20
0.00	.75	3.11	.36	.078	.059	.078	0.000	590.80	251.00
.002462	520.	520.	520.	0	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED .20 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.93	7.00	597.90	0.00	0.00	598.05	.15	.34	.00	597.10
450.	0.	450.	0.	0.	144.	0.	1.	0.	597.30
.01	0.00	3.12	0.00	.078	.059	.078	.058	590.90	294.00
.002344	142.	142.	142.	1	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .56 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.41	598.07	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLFA= 598.90 ELREA= 598.90

313.02	7.36	598.26	0.00	0.00	598.41	.15	.36	0.00	597.60
450.	0.	450.	0.	0.	143.	0.	1.	0.	597.70

.01	0.00	3.14	0.00	.078	.059	.078	.058	590.90	273.00
.002283	17.	17.	17.	2	0	0	0.00	30.00	303.00

*SECNO 313.100
3280 CROSS SECTION 313.10 EXTENDED .15 FEET

313.10	6.95	598.35	0.00	0.00	598.53	.17	.11	.01	598.10
450.	3.	441.	6.	12.	131.	19.	1.	0.	598.20
.02	.23	3.37	.30	.078	.059	.078	.058	591.40	136.23
.002916	42.	42.	42.	0	0	0	0.00	291.77	428.00

CCHV= .150 CEHV= .350
*SECNO 313.200
3280 CROSS SECTION 313.20 EXTENDED .54 FEET

SECNO	DEPTH	CHSEL	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	ICC	ICONT	CORAR	TOPWID	ENDST
313.20	7.34	600.14	0.00	0.00	600.24	.10	1.70	.01	599.50
450.	33.	389.	29.	86.	143.	67.	4.	6.	599.60
.10	.38	2.72	.43	.104	.065	.104	.063	592.80	75.00
.002111	690.	690.	690.	1	0	0	0.00	353.00	428.00

*SECNO 313.300
3280 CROSS SECTION 313.30 EXTENDED .24 FEET

313.30	7.15	601.35	0.00	0.00	601.41	.06	1.17	.01	600.30
450.	100.	344.	6.	200.	151.	32.	10.	11.	601.00
.20	.50	2.28	.20	.104	.065	.104	.064	594.20	0.00
.001382	690.	690.	690.	2	0	0	0.00	400.00	400.00

*SECNO 314.000

314.00	6.86	602.46	0.00	0.00	602.56	.10	1.14	.01	601.70
450.	68.	382.	0.	139.	143.	1.	15.	17.	602.40
.28	.49	2.68	.07	.104	.065	.104	.064	595.60	3.58
.002071	680.	680.	680.	2	0	0	0.00	280.28	283.87

*SECNO 314.100
3280 CROSS SECTION 314.10 EXTENDED .09 FEET

314.10	6.99	604.09	0.00	0.00	604.17	.08	1.61	.00	603.20
450.	83.	366.	1.	167.	146.	10.	21.	23.	603.90
.39	.50	2.50	.13	.104	.065	.104	.064	597.10	0.00
.001734	850.	850.	850.	2	0	0	0.00	389.35	389.35

*SECNO 314.200

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 603.80 ELREA= 606.20

314.20	7.09	605.59	0.00	0.00	605.68	.10	1.51	.01	603.80
450.	40.	410.	0.	77.	157.	0.	26.	29.	606.20
.49	.52	2.61	0.00	.104	.065	.104	.065	598.50	101.27
.001815	850.	850.	850.	2	0	0	0.00	147.54	250.00

*SECNO 315.000

3265 DIVIDED FLOW

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 605.30 ELREA= 607.70

315.00	7.11	607.11	0.00	0.00	607.21	.09	1.53	.00	605.30
450.	41.	409.	0.	79.	158.	0.	31.	31.	607.70
.59	.52	2.59	0.00	.104	.065	.104	.065	600.00	99.78
.001778	850.	850.	850.	1	0	0	0.00	149.07	250.00

*SECNO 315.100

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 606.20 ELREA= 608.60

315.10	7.18	608.08	0.00	0.00	608.17	.09	.96	.00	606.20
450.	46.	404.	0.	87.	160.	0.	34.	33.	608.60
.65	.52	2.52	0.00	.104	.065	.104	.065	600.90	98.09
.001667	555.	555.	555.	2	0	0	0.00	150.89	250.00

*SECNO 315.200
3280 CROSS SECTION 315.20 EXTENDED .94 FEET

315.20	7.75	609.05	0.00	0.00	609.14	.10	.97	.00	608.00
450.	26.	405.	19.	47.	153.	39.	37.	35.	608.30
.72	.56	2.64	.48	.104	.065	.104	.065	601.30	170.00
.001854	555.	555.	555.	1	0	0	0.00	142.00	312.00

*SECNO 315.900
3280 CROSS SECTION 315.90 EXTENDED .63 FEET

315.90	7.43	610.23	0.00	0.00	610.36	.13	1.21	.01	609.50
450.	15.	427.	8.	30.	144.	22.	40.	37.	609.80
.77	.49	2.97	.38	.104	.065	.104	.065	602.80	170.00
.002549	560.	560.	560.	2	0	0	0.00	142.00	312.00

CCHV= .400 CEHV= .800
*SECNO 315.98C
3280 CROSS SECTION 315.98 EXTENDED 1.03 FEET

** D/S FACE CRABB RD

315.98	7.83	610.53	0.00	0.00	610.59	.06	.20	.03	609.40
370.	24.	328.	18.	52.	156.	44.	40.	37.	609.70
.79	.47	2.10	.41	.104	.065	.104	.065	602.70	170.00
.001142	117.	117.	117.	2	0	0	0.00	142.00	312.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNO 316.02C
3280 CROSS SECTION 316.02 EXTENDED 1.77 FEET

SECNO	DEPTH	CHSEL	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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.61	610.59	0.00	0.	370.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.70 ELREA= 611.70

316.02	8.87	611.57	0.00	0.00	611.61	.04	1.02	0.00	609.10
370.	0.	370.	0.	0.	221.	0.	41.	37.	604.90
.80	0.00	1.67	0.00	.104	.065	.104	.065	602.70	247.00
.000454	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.10C
3280 CROSS SECTION 316.10 EXTENDED 1.63 FEET

316.10	8.73	611.63	0.00	0.00	611.63	.01	.01	.01	609.30
370.	13.	190.	167.	61.	217.	382.	41.	38.	605.10
.82	.21	.87	.44	.104	.065	.104	.065	602.90	207.67
.000118	50.	50.	50.	2	0	0	0.00	152.33	360.00

CCHV= .150 CEHV= .350
*SECNO 316.20C

316.20	9.62	611.62	0.00	0.00	611.65	.03	.01	.01	608.50

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     370.       53.      291.       25.      114.      201.       64.       42.       38.    608.50
      .83       .47      1.45       .40      .104      .065      .104      .065   602.00      .99
  .000328       50.       50.       50.         1         0         0      0.00   113.18   114.17

*SECNO 316.250
 WATER EL=X5 CARD=   611.705

          **  WOOD BRIDGE

   316.25      9.70   611.70      0.00      0.00   611.73       .03       .00       .00    608.50
     370.       55.      289.       26.      118.      203.       67.       42.       38.    608.50
      .83       .46      1.42       .39      .104      .065      .104      .065   602.00      .72
  .000313        1.        1.        1.         0         0         0      0.00   114.05   114.78

*SECNO 316.300
3280 CROSS SECTION    316.30 EXTENDED      1.80 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      611.90 ELREA=      610.60

   316.30      8.30   611.80      0.00      0.00   611.85       .05       .11       .01    611.70
     370.        0.      335.       35.        0.      175.       75.       43.       38.    610.60
      .86      0.00      1.91       .46      .104      .065      .104      .065   603.50    410.00
  .000961      220.      220.      220.         2         0         0      0.00   106.00    516.00

*SECNO 316.980
3265 DIVIDED FLOW

3280 CROSS SECTION    316.98 EXTENDED       .85 FEET

   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    ICC       ICONT     CORAR     TOPWID      ENDST

          **  D/S FACE WOODSIDE DR

   316.98      7.35   611.95      0.00      0.00   612.04       .09       .17       .01    612.80
     370.       18.      351.        1.       32.      142.        9.       44.       39.    611.70
      .88       .56      2.47       .17      .104      .065      .104      .065   604.60    340.00
  .001982      130.      130.      130.         2         0         0      0.00   143.66    516.00


SPECIAL BRIDGE

SB  XK          XKOR        CDFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.30        2.80      100.00       10.00        0.00       53.00        0.00      604.60      604.60

*SECNO 317.020
3280 CROSS SECTION    317.02 EXTENDED      2.05 FEET
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PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
612.93	612.04	0.00	95.	274.	53.	53.	609.90	612.00

317.02	7.85	612.45	0.00	0.00	612.49	.03	.45	0.00	611.50
370.	97.	273.	0.	145.	166.	0.	44.	39.	613.60
.88	.67	1.65	0.00	.104	.065	.104	.065	604.60	310.00
.000744	28.	28.	28.	2	0	2	0.00	108.09	418.09

*SECNO 317.100
3280 CROSS SECTION 317.10 EXTENDED 1.98 FEET

317.10	7.78	612.48	0.00	0.00	612.52	.03	.03	.00	611.60
370.	95.	275.	0.	139.	163.	0.	44.	39.	613.70
.89	.68	1.68	0.00	.104	.065	.104	.065	604.70	310.00
.000790	40.	40.	40.	2	0	0	0.00	107.97	417.97

*SECNO 317.150
3280 CROSS SECTION 317.15 EXTENDED 2.17 FEET

317.15	7.97	612.67	0.00	0.00	612.70	.03	.18	.00	611.60
370.	100.	270.	0.	153.	170.	0.	46.	39.	613.70
.94	.65	1.59	0.00	.104	.065	.104	.065	604.70	310.00
.000672	250.	250.	250.	0	0	0	0.00	108.29	418.29

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	8.01	612.71	0.00	0.00	612.76	.05	.04	.01	610.30
370.	14.	340.	17.	35.	190.	43.	47.	40.	610.30
.95	.39	1.79	.39	.104	.065	.104	.065	604.70	73.94
.000597	70.	70.	70.	1	0	0	0.00	122.39	196.33

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.43	612.76	.00	221.	150.	35.	35.	608.70	612.50

317.22	8.42	613.12	0.00	0.00	613.16	.04	.40	0.00	610.30
370.	20.	325.	25.	54.	202.	67.	47.	40.	610.30
.96	.36	1.61	.37	.104	.065	.104	.065	604.70	60.98
.000445	30.	30.	30.	2	0	4	0.00	151.39	212.37

*SECNC 317.250

317.25	8.24	613.14	0.00	0.00	613.18	.04	.02	.00	610.50
370.	17.	332.	21.	45.	197.	56.	47.	40.	610.50
.97	.38	1.68	.38	.104	.065	.104	.065	604.90	66.54
.000505	50.	50.	50.	0	0	0	0.00	139.15	205.68

CCHV= .150 CEHV= .350

*SECNO 317.270

317.27	7.58	613.28	0.00	0.00	613.31	.04	.13	.00	610.50
370.	30.	311.	29.	74.	188.	91.	49.	41.	611.70
1.02	.41	1.66	.32	.104	.065	.104	.065	605.70	66.72
.000527	250.	250.	250.	1	0	0	0.00	182.15	248.87

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	7.01	613.31	0.00	0.00	613.37	.06	.05	.01	611.10
370.	21.	340.	9.	47.	171.	38.	50.	41.	612.30
1.03	.45	1.98	.24	.104	.065	.104	.065	606.30	77.37
.000856	75.	75.	75.	0	0	0	0.00	163.30	240.68

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	DWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNC 317.320

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.73	613.37	0.00	201.	170.	80.	79.	611.60	612.60

317.32	7.05	613.35	0.00	0.00	613.40	.05	.03	0.00	611.10
370.	22.	338.	10.	49.	172.	41.	50.	41.	612.30
1.03	.45	1.96	.25	.104	.065	.104	.065	606.30	76.77
.000833	15.	15.	15.	2	0	6	0.00	164.37	241.14

*SECNO 317.340

SECNO	DEPTH	CHSEL	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	XLCBL	XLCH	XLCBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
317.34	7.30	613.40	0.00	0.00	613.45	.05	.04	.00	610.90
370.	26.	325.	19.	60.	180.	64.	50.	41.	612.10
1.04	.43	1.81	.29	.104	.065	.104	.065	606.10	71.95
.000669	60.	60.	60.	0	0	0	0.00	172.89	244.85

*SECNO 317.400

317.40	7.19	613.59	0.00	0.00	613.66	.06	.20	.01	613.50
370.	0.	360.	10.	0.	174.	31.	52.	42.	612.70
1.07	.00	2.07	.31	.104	.065	.104	.065	606.40	73.32
.001083	240.	240.	240.	0	0	0	0.00	104.11	177.43

*SECNO 317.450
WATER EL=X5 CARD= 613.842

** PRIVATE DRIVE ACROSS CREEK

317.45	7.44	613.84	0.00	0.00	613.90	.06	.00	.00	613.50
370.	0.	353.	17.	1.	183.	51.	52.	42.	612.70
1.07	.13	1.93	.34	.104	.065	.104	.065	606.40	68.15
.000881	1.	1.	1.	0	0	0	0.00	127.74	195.89

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 2.92 FEET

318.00	7.72	614.22	0.00	0.00	614.25	.03	.34	.00	613.90
370.	2.	230.	138.	14.	146.	194.	55.	44.	611.60
1.18	.16	1.57	.71	.104	.065	.104	.065	606.50	540.77
.000646	460.	460.	460.	2	0	0	0.00	145.23	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 2.50 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	7.29	614.29	0.00	0.00	614.33	.04	.08	.00	614.40
370.	0.	243.	127.	0.	134.	164.	55.	44.	612.10
1.20	0.00	1.81	.78	.104	.065	.104	.065	607.00	586.23
.000961	100.	100.	100.	0	0	0	0.00	99.77	686.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BKP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.59 FEET

SECNO	DEPTH	CVSEL	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.69	614.33	0.00	157.	214.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.40 ELREA= 612.10

318.12	7.39	614.39	0.00	0.00	614.42	.03	.10	0.00	614.40
370.	0.	240.	130.	0.	137.	171.	56.	44.	612.10
1.20	0.00	1.75	.76	.104	.065	.104	.065	607.00	586.02
.000882	18.	18.	18.	2	0	4	0.00	99.98	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED 1.59 FEET

318.15	7.59	614.59	0.00	0.00	614.64	.05	.21	.01	612.20
370.	49.	151.	170.	63.	59.	153.	57.	44.	612.20
1.22	.79	2.55	1.11	.104	.065	.104	.065	607.00	539.48
.002490	150.	150.	150.	2	0	0	0.00	142.52	682.00

*SECNO 318.160
WATER EL=X5 CARD= 614.598
3280 CROSS SECTION 318.16 EXTENDED 1.60 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	7.60	614.60	0.00	0.00	614.65	.05	.00	.00	612.20
370.	50.	150.	170.	63.	59.	154.	57.	44.	612.20
1.23	.78	2.54	1.11	.104	.065	.104	.065	607.00	539.46
.002457	1.	1.	1.	0	0	0	0.00	142.54	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 2.46 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.80 ELREA= 612.50

318.20	7.26	614.66	0.00	0.00	614.69	.04	.04	.00	614.80
370.	0.	244.	126.	0.	133.	162.	57.	44.	612.50
1.23	0.00	1.83	.78	.104	.065	.104	.065	607.40	586.30
.000989	30.	30.	30.	1	0	0	0.00	99.70	686.00

*SECNO 318.250
 WATER EL=X5 CARD=   614.857
3280 CROSS SECTION   318.25 EXTENDED   2.66 FEET

          ** PRIVATE DRIVE

318.25	7.46	614.86	0.00	0.00	614.89	.03	.00	.00	614.80
370.	0.	238.	132.	2.	139.	176.	57.	44.	612.50
1.23	.06	1.72	.75	.104	.065	.104	.065	607.40	547.44
.000829	1.	1.	1.	0	0	0	0.00	138.56	686.00

*SECNO 318.300
3280 CROSS SECTION   318.30 EXTENDED   2.55 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
318.30	7.34	615.14	0.00	0.00	615.17	.04	.28	.00	615.20
370.	0.	241.	129.	0.	135.	168.	59.	45.	612.90
1.29	0.00	1.78	.77	.104	.065	.104	.065	607.80	586.12
.000919	325.	325.	325.	1	0	0	0.00	99.88	686.00

*SECNO 318.350
 WATER EL=X5 CARD=   615.259
3280 CROSS SECTION   318.35 EXTENDED   2.66 FEET

          ** PRIVATE DRIVE

318.35	7.46	615.26	0.00	0.00	615.29	.03	.00	.00	615.20
370.	0.	238.	132.	2.	139.	176.	59.	45.	612.90
1.29	.06	1.71	.75	.104	.065	.104	.065	607.80	547.36
.000828	1.	1.	1.	0	0	0	0.00	138.64	686.00

*SECNO 319.000
3280 CROSS SECTION   319.00 EXTENDED   .54 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=   616.90 ELREA=   614.50

319.00	6.94	615.54	0.00	0.00	615.62	.08	.32	.02	616.10
335.	0.	305.	30.	0.	128.	59.	61.	46.	614.50
1.33	0.00	2.37	.51	.104	.065	.104	.065	608.60	705.04
.001770	275.	275.	275.	2	0	0	0.00	104.96	810.00

*SECNO 319.100
3280 CROSS SECTION   319.10 EXTENDED   2.13 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.90 ELREA= 614.10

319.10	7.23	616.03	0.00	0.00	616.06	.03	.43	.01	616.90
335.	0.	267.	68.	0.	174.	124.	63.	47.	614.10
1.42	0.00	1.53	.55	.104	.065	.104	.065	608.80	633.12
.000589	450.	450.	450.	2	0	0	0.00	93.88	727.00

*SECNO 319.980
3280 CROSS SECTION 319.98 EXTENDED .91 FEET

** D/S FACE CORL RD

319.98	6.01	616.11	0.00	0.00	616.16	.05	.09	.01	610.40
335.	24.	241.	69.	33.	118.	106.	64.	47.	610.30
1.45	.74	2.05	.66	.104	.065	.104	.065	610.10	628.41
.000758	140.	140.	140.	2	0	0	0.00	98.59	727.00

SPECIAL BRIDGE

SB XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.020
3280 CROSS SECTION 320.02 EXTENDED .98 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLCSS	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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.79	616.16	0.00	195.	141.	58.	58.	614.90	615.50

320.02	6.08	616.18	0.00	0.00	616.23	.05	.07	0.00	610.40
335.	24.	239.	71.	34.	119.	111.	64.	48.	610.30
1.45	.72	2.01	.65	.104	.065	.104	.065	610.10	628.26
.000714	21.	21.	21.	2	0	4	0.00	98.74	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.61 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	6.41	616.21	0.00	0.00	616.27	.06	.04	.00	617.90

335.	0.	278.	57.	0.	130.	94.	64.	48.	615.50
1.46	0.00	2.14	.61	.104	.065	.104	.065	609.80	536.92
.001360	40.	40.	40.	C	0	0	0.00	103.08	640.00

*SECNO 320.900
3280 CROSS SECTION 320.90 EXTENDED .14 FEET

320.90	7.14	616.84	0.00	C.CO	616.93	.09	.65	.01	620.10
335.	0.	306.	29.	0.	120.	66.	66.	49.	615.70
1.50	0.00	2.55	.44	.104	.065	.104	.065	609.70	10.17
.001943	400.	400.	40C.	2	0	0	0.00	169.83	180.00

CCHV= .400 CEHV= .8C0
*SECNO 320.980
3280 CROSS SECTION 320.98 EXTENDED .14 FEET

** D/S FACE TEMPERANCE RD

320.98	6.84	617.04	0.00	0.00	617.09	.04	.14	.02	613.00
335.	82.	253.	0.	135.	135.	0.	67.	49.	618.00
1.52	.61	1.88	0.00	.104	.065	.104	.065	610.20	330.00
.000870	110.	110.	110.	2	0	0	0.00	146.41	476.41

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.0C	610.20	610.20

*SECNO 321.020
3280 CROSS SECTION 321.02 EXTENDED 3.89 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
618.63	617.10	0.00	27.	308.	43.	36.	616.00	617.90

321.02	8.18	618.38	0.00	0.00	618.39	.01	1.31	0.00	615.20
335.	114.	199.	22.	303.	222.	61.	67.	49.	614.10
1.54	.38	.90	.37	.104	.065	.104	.065	610.20	233.00
.000131	55.	55.	55.	0	0	4	0.00	138.86	371.86

*SECNO 322.00C
3280 CROSS SECTION 322.00 EXTENDED 3.89 FEET

SECNO	DEPTH	CHSEL	CRIKS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	THA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLCBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 619.30 ELREA= 619.30

322.00	7.78	618.38	0.00	C.CO	618.45	.07	.01	.05	615.60
335.	0.	335.	0.	0.	162.	0.	68.	49.	612.00
1.55	0.CO	2.07	0.00	.1C4	.065	.104	.065	610.60	315.00
.000760	30.	30.	30.	1	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNC 322.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.99	7.50	618.20	0.00	0.00	618.69	.49	.04	.21	610.80
335.	0.	335.	0.	0.	60.	0.	68.	50.	610.70
1.55	0.00	5.59	0.00	.1C4	.C65	.104	.065	610.70	689.00
.007876	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	SKC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.90	150.00	7.00	0.00	39.20	0.00	61C.70	610.70

*SECNO 323.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAR EA	TRAPEZOID AREA	ELLC	ELTRD
620.02	618.70	0.00	0.	335.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.02	8.97	619.67	C.CO	0.00	620.02	.35	1.33	0.00	610.90
335.	0.	335.	0.	C.	71.	0.	68.	50.	610.90
1.55	0.CO	4.72	0.00	.104	.065	.104	.065	610.70	346.00
.004811	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNO 323.10C
3280 CROSS SECTION 323.10 EXTENDED .12 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.10	9.32	620.12	C.CO	0.00	620.13	.01	.01	.10	615.30
335.	0.	335.	0.	0.	393.	0.	68.	50.	616.90
1.56	0.CO	.85	0.00	.104	.065	.104	.065	610.80	3CC.00
.000136	30.	30.	30.	2	0	0	0.00	66.00	366.00

CCHV= .150 CEHV= .350
*SECNO 324.000
3280 CROSS SECTION 324.00 EXTENDED 2.14 FEET

324.00	9.34	620.14	0.00	0.00	620.15	.01	.01	.00	615.60
335.	104.	175.	56.	309.	212.	206.	69.	50.	616.70
1.62	.34	.83	.27	.104	.065	.104	.065	610.80	100.00
.000103	120.	120.	120.	2	0	0	0.00	200.00	300.00

*SECNO 324.300
3280 CROSS SECTION 324.30 EXTENDED 1.66 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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
324.30	8.86	620.16	0.00	0.00	620.17	.01	.02	.00	616.10
335.	99.	188.	48.	267.	198.	167.	73.	51.	617.20
1.70	.37	.95	.29	.104	.065	.104	.065	611.30	100.00
.000148	200.	200.	200.	0	0	0	0.00	200.00	300.00

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 2.18 FEET

** D/S FACE TEMPERANCE RD

324.48	8.48	620.18	0.00	0.00	620.19	.01	.02	.00	616.70
335.	61.	174.	100.	205.	201.	276.	74.	51.	615.00
1.76	.30	.86	.36	.104	.065	.104	.065	611.70	875.00
.000119	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.52	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 2.25 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
623.10	620.19	0.00	286.	50.	31.	31.	617.00	618.80

324.52	8.54	620.24	0.00	0.00	620.25	.01	.06	0.00	616.70

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     335.       62.      172.      101.      210.      204.      281.       75.       52.    615.00
    1.78       .30       .85       .36      .104      .065      .104      .065    611.70    875.00
 .000113       50.       50.       50.         0         0         7      0.00    180.00   1055.00

*SECNO 324.600
3280 CROSS SECTION    324.60 EXTENDED      2.04 FEET

   324.60      8.54    620.24      0.00      0.00    620.26       .02       .00       .01    616.40
     335.      111.      116.      108.      246.       73.      244.       75.       52.    616.40
    1.78       .45      1.58       .44      .104      .039      .104      .065    611.70    875.00
 .000245        13.       13.       13.         0         0         0      0.00    180.00   1055.00

*SECNO 324.650
 WATER EL=X5 CARD=   620.243
3280 CROSS SECTION    324.65 EXTENDED      2.04 FEET

          **  WALK BRIDGE

   324.65      8.54    620.24      0.00      0.00    620.26       .02       .00       .00    616.40
     335.      111.      116.      108.      246.       73.      245.       75.       52.    616.40
    1.78       .45      1.58       .44      .104      .039      .104      .065    611.70    875.00
 .000245         1.        1.        1.         0         0         0      0.00    180.00   1055.00

*SECNO 325.000
3280 CROSS SECTION    325.00 EXTENDED      1.80 FEET

   SECNO     DEPTH     CHSEL     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      XAR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST

   325.00      8.20    620.30      0.00      0.00    620.31       .01       .04       .00    616.00
     335.      116.      174.       45.      353.      192.      149.       79.       53.    617.80
    1.89       .33       .90       .30      .104      .065      .104      .065    612.10    250.00
 .000143      235.      235.      235.         0         0         0      0.00    225.00    475.00

CCHV=     .200 CEHV=     .400
*SECNO 325.980
3280 CROSS SECTION    325.98 EXTENDED      2.33 FEET

          **  D/S FACE WASHINGTON ST

   325.98      8.22    620.32      0.00      0.00    620.33       .01       .03       .00    616.60
     335.       98.      156.       81.      266.      164.      248.       82.       54.    617.10
    1.97       .37       .95       .33      .104      .065      .104      .065    612.10    200.00
 .000157      175.      175.      175.         0         0         0      0.00    210.00    410.00

SPECIAL BRIDGE
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SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 326.020
3280 CROSS SECTION 326.02 EXTENDED 2.38 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
624.61	620.33	0.00	300.	38.	26.	26.	616.10	618.70

326.02	8.27	620.37	0.00	0.00	620.38	.01	.05	0.00	616.60
335.	98.	154.	82.	270.	165.	253.	82.	54.	617.10
1.98	.36	.93	.33	.104	.065	.104	.065	612.10	200.00
.000150	34.	34.	34.	0	0	6	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 2.89 FEET

326.50	8.19	620.39	0.00	0.00	620.40	.01	.02	.00	616.50
335.	118.	198.	19.	351.	219.	59.	84.	54.	617.40
2.03	.34	.90	.32	.104	.065	.104	.065	612.20	210.55
.000140	110.	110.	110.	0	0	0	0.00	199.45	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.81 FEET

** C/S FACE PRIVATE DR

326.98	8.11	620.41	0.00	0.00	620.41	.01	.02	.00	616.60
335.	116.	201.	18.	335.	216.	57.	86.	55.	617.50
2.08	.34	.93	.32	.104	.065	.104	.065	612.30	211.51
.000150	130.	130.	130.	0	0	0	0.00	198.49	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.85 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
633.24	620.41	0.00	319.	19.	16.	16.	615.20	616.80
327.02	8.14	620.44	0.00	0.00	620.45	.01	.03	0.00	616.60
335.	117.	199.	19.	345.	218.	58.	86.	55.	617.50
2.10	.34	.92	.32	.104	.065	.104	.065	612.30	211.03
.000145	43.	43.	43.	0	0	4	0.00	198.97	410.00

*SECNC 327.500
3280 CROSS SECTION 327.50 EXTENDED 2.47 FEET

327.50	7.77	620.47	0.00	0.00	620.48	.01	.03	.00	617.00
335.	107.	211.	17.	290.	205.	50.	89.	56.	617.90
2.16	.37	1.03	.34	.104	.065	.104	.065	612.70	215.46
.000199	180.	180.	180.	0	0	0	0.00	194.55	410.00

CCHV= .300 CEHV= .500
*SECNO 327.980
3280 CROSS SECTION 327.98 EXTENDED 2.30 FEET

** C/S FACE LEWIS RD

327.98	7.31	620.51	0.00	0.00	620.51	.01	.03	.00	617.50
280.	65.	144.	71.	242.	185.	227.	92.	57.	617.00
2.27	.27	.78	.31	.104	.065	.104	.065	613.20	600.00
.000120	210.	210.	210.	0	0	0	0.00	215.00	815.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.020
3280 CROSS SECTION 328.02 EXTENDED 2.61 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
621.22	620.51	0.00	99.	182.	52.	52.	617.50	620.50
328.02	7.60	620.80	0.00	0.00	620.81	.00	.29	0.00	617.50
280.	70.	137.	73.	274.	194.	250.	92.	57.	617.00
2.29	.26	.71	.29	.104	.065	.104	.065	613.20	600.00
.000091	33.	33.	33.	0	0	3	0.00	215.00	815.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED .81 FEET

328.10	7.81	620.81	0.00	0.00	620.82	.01	.01	.00	618.60
280.	47.	157.	77.	165.	151.	214.	93.	58.	618.90
2.32	.28	1.04	.36	.104	.065	.104	.065	613.00	100.00
.000241	90.	90.	90.	0	0	0	0.00	250.00	350.00

*SECNO 329.000
3280 CROSS SECTION 329.00 EXTENDED 1.46 FEET

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
329.00	7.26	621.26	0.00	0.00	621.28	.02	.45	.00	620.40
280.	37.	185.	58.	113.	144.	157.	109.	66.	620.50
2.72	.33	1.29	.37	.104	.065	.104	.065	614.00	125.00
.000459	1400.	1400.	1400.	2	0	0	0.00	250.00	375.00

*SECNO 329.100
3280 CROSS SECTION 329.10 EXTENDED 1.69 FEET

329.10	7.49	621.59	0.00	0.00	621.61	.01	.32	.00	620.50
280.	43.	172.	65.	136.	150.	184.	117.	70.	621.00
3.00	.32	1.14	.35	.104	.065	.104	.065	614.10	125.00
.000339	825.	825.	825.	2	0	0	0.00	250.00	375.00

*SECNO 329.250
 WATER EL=X5 CARD= 621.595
3280 CROSS SECTION 329.25 EXTENDED 1.70 FEET

** PRIVATE DRIVE

329.25	7.50	621.60	0.00	0.00	621.61	.01	.00	.00	620.50
280.	43.	172.	65.	136.	151.	185.	117.	70.	621.00
3.00	.32	1.14	.35	.104	.065	.104	.065	614.10	125.00
.000338	1.	1.	1.	0	0	0	0.00	250.00	375.00

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**********************************************
  HEC 2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  C1
  MODIFICATION -  50,51,52
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T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK  100 YEAR FLOW=450 CFS  N * 0.7

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     G         WSEL      FQ

     -1.        4.        0.        0.  0.000000      0.00      -1.0        0.    597.560     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

    15.000     0.000    -1.000     0.000     0.000      .700     0.000     0.000     0.000     0.000
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*PROF 3

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .86 FEET

SECNO	DEPTH	CRWSEL	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
312.10	6.76	597.56	0.00	597.56	597.70	.14	0.00	0.00	597.00
450.	23.	424.	3.	31.	136.	7.	0.	0.	597.20
0.00	.75	3.11	.36	.042	.032	.042	0.000	590.80	251.00
.000714	520.	520.	520.	0	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.75	597.65	0.00	0.00	597.82	.17	.11	.01	597.10
450.	0.	450.	0.	0.	137.	0.	1.	0.	597.30
.01	0.00	3.30	0.00	.042	.032	.042	.031	590.90	294.00
.000812	142.	142.	142.	0	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .30 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.17	597.85	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.90 ELREA= 598.90

313.02	7.10	598.00	0.00	0.00	598.17	.17	.35	0.00	597.60
450.	0.	450.	0.	0.	135.	0.	1.	0.	597.70
.01	0.00	3.32	0.00	.042	.032	.042	.031	590.90	273.00
.000795	17.	17.	17.	2	0	0	0.00	30.00	303.00

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*SECNO 313.100
   313.10      6.61    598.01      0.00      C.00    598.22      .22       .04       .02    598.10
     450.        0.     450.        0.        0.      121.        0.        1.        C.     598.20
      .02      0.00      3.72      0.00      .042      .032      .042      .031    591.40    273.20
  .001130        42.       42.       42.         2         0         0      0.00     29.52    302.73

CCHV=     .150 CEHV=     .350
*SECNO 313.200
    SECNO     DEPTH     CHSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
    TIME      VLOB      VCH       VRCB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST

    313.20      6.16    598.96      0.00      0.00    599.23      .27       .99       .02    599.50
     450.        0.     450.        0.        0.      108.        0.        2.        1.     599.60
      .06      0.00      4.17      0.00      .056      .035      .056      .034    592.80    274.19
  .001873        690.      690.      690.         2         0         0      0.00     27.89    302.09

*SECNO 313.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      600.50 ELREA=         C.00

    313.30      5.98    600.18      0.00      C.00    600.42      .23      1.18       .01    600.30
     450.        0.     450.        0.        0.      116.        0.        4.        1.     601.00
      .11      0.00      3.89      0.00      .056      .035      .056      .034    594.20    224.23
  .001570        690.      690.      690.         2         0         0      0.00     29.73    253.96

*SECNO 314.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      601.90 ELREA=         C.00

    314.00      5.73    601.33      0.00      C.00    601.60      .27      1.17       .01    601.70
     450.        0.     450.        0.        0.      108.        0.        6.        2.     602.40
      .16      0.00      4.16      0.00      .056      .035      .056      .035    595.60    224.74
  .001883        680.      680.      680.         2         0         0      0.00     28.90    253.64

*SECNO 314.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      603.40 ELREA=         0.00

    314.10      5.80    602.90      0.00      C.00    603.16      .26      1.56       .00    603.20
     450.        0.     450.        0.        0.      110.        0.        8.        2.     603.90
      .22      0.00      4.08      0.00      .056      .035      .056      .035    597.10    224.60
  .001789        850.      850.      850.         2         0         0      0.00     29.13    253.73

*SECNO 314.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      603.80 ELREA=       606.20

    314.20      5.83    604.33      0.00      C.00    604.55      .23      1.39       .00    603.80
     450.        1.     449.        0.        3.      117.        0.       10.        3.     606.20
      .28       .42      3.82      0.00      .056      .035      .056      .035    598.50    203.99
  .001495        850.      850.      850.         2         0         0      0.00     42.36    246.35
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*SECNO 315.000

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 605.30 ELREA= 607.70

315.00	5.67	605.67	0.00	0.00	605.91	.25	1.35	.01	605.30
450.	1.	449.	0.	2.	113.	0.	13.	4.	607.70
.34	.35	3.99	0.00	.056	.035	.056	.035	600.00	207.64
.001700	850.	850.	850.	2	0	0	0.00	38.39	246.04

*SECNO 315.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 606.20 ELREA= 608.60

315.10	5.70	606.60	0.00	0.00	606.84	.24	.93	.00	606.20
450.	1.	449.	0.	2.	114.	0.	14.	4.	608.60
.38	.37	3.95	0.00	.056	.035	.056	.035	600.90	206.84
.001652	555.	555.	555.	2	0	0	0.00	39.27	246.11

*SECNO 315.200

315.20	6.27	607.57	0.00	0.00	607.84	.27	.99	.01	608.00
450.	0.	450.	0.	0.	108.	0.	16.	5.	608.30
.41	0.00	4.16	0.00	.056	.035	.056	.035	601.30	224.49
.001914	555.	555.	555.	2	0	0	0.00	28.93	253.42

*SECNO 315.900

315.90	5.94	608.74	0.00	0.00	609.06	.32	1.21	.02	609.50
450.	0.	450.	0.	0.	99.	0.	17.	5.	609.80
.45	0.00	4.56	0.00	.056	.035	.056	.035	602.80	224.90
.002438	560.	560.	560.	2	0	0	0.00	27.71	252.62

CCHV= .400 CEHV= .800
*SECNO 315.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLFA= 610.30 ELREA= 610.30

** D/S FACE CRABB RD

315.98	6.46	609.16	0.00	0.00	609.32	.16	.19	.06	609.40
370.	0.	370.	0.	0.	114.	0.	17.	5.	609.70
.46	0.00	3.26	0.00	.056	.035	.056	.035	602.70	224.26
.001134	117.	117.	117.	2	0	0	0.00	29.61	253.87

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNC 316.020
3280 CROSS SECTION 316.02 EXTENDED .37 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	OPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
610.24	609.25	0.00	0.	370.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.70 ELREA= 611.70

316.02	7.47	610.17	0.00	0.00	610.24	.07	.91	0.00	609.10
370.	0.	370.	0.	0.	179.	0.	17.	5.	604.90
.46	0.00	2.07	0.00	.056	.035	.056	.035	602.70	247.00
.000254	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
3280 CROSS SECTION 316.10 EXTENDED .25 FEET

316.10	7.35	610.25	0.00	0.00	610.26	.02	.01	.02	609.30
370.	2.	214.	154.	12.	175.	268.	18.	5.	605.10
.48	.15	1.22	.58	.056	.035	.056	.035	602.90	221.50
.000088	50.	50.	50.	2	0	0	0.00	138.50	360.00

CCHV= .150 CEHV= .350
*SECNC 316.200

316.20	8.22	610.22	0.00	0.00	610.29	.06	.01	.02	608.50
370.	22.	340.	8.	49.	165.	20.	18.	5.	608.50
.48	.46	2.07	.38	.056	.035	.056	.035	602.00	6.21
.000253	50.	50.	50.	2	0	0	0.00	93.04	99.24

*SECNO 316.250
WATER EL=X5 CARD= 610.304

** WOOD BRIDGE

316.25	8.30	610.30	0.00	0.00	610.36	.06	.00	.00	608.50
370.	24.	337.	8.	52.	167.	22.	18.	5.	608.50
.48	.47	2.02	.38	.056	.035	.056	.035	602.00	5.91
.000239	1.	1.	1.	0	0	0	0.00	94.41	100.32

*SECNO 316.300
3280 CROSS SECTION 316.30 EXTENDED .35 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.90 ELREA= 0.00

316.30	6.85	610.35	0.00	0.00	610.48	.14	.09	.03	611.70
370.	0.	370.	0.	0.	125.	0.	19.	6.	610.60
.50	0.00	2.95	0.00	.056	.035	.056	.035	603.50	412.96
.000908	220.	220.	220.	1	0	0	0.00	32.55	445.51

*SECNO 316.980

SECNO	DEPTH	CHSEL	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

** D/S FACE WOODSIDE DR

316.98	5.85	610.45	0.00	0.00	610.68	.24	.17	.04	612.80
370.	0.	370.	0.	0.	95.	0.	19.	6.	611.70
.51	0.00	3.91	0.00	.056	.035	.056	.035	604.60	415.17
.001921	130.	130.	130.	2	0	0	0.00	28.36	443.53

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNO 317.020
3280 CROSS SECTION 317.02 EXTENDED .90 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.43	610.66	0.00	0.	370.	53.	53.	609.90	612.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 612.00 ELREA= 0.00

317.02	6.70	611.30	0.00	0.00	611.43	.13	.75	0.00	611.50
370.	0.	370.	0.	0.	126.	0.	19.	6.	613.60
.52	0.00	2.93	0.00	.056	.035	.056	.035	604.60	383.49
.000887	28.	28.	28.	2	0	0	0.00	32.67	416.16

*SECNO 317.100
3280 CROSS SECTION 317.10 EXTENDED .83 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 612.00 ELREA= 0.00

317.10	6.63	611.33	0.00	0.00	611.47	.14	.04	.00	611.60
370.	0.	370.	0.	0.	124.	0.	20.	6.	613.70
.52	0.00	2.98	0.00	.056	.035	.056	.035	604.70	383.66

.000929	40.	40.	40.	2	0	0	0.00	32.39	416.05

*SECNO 317.150
3280 CROSS SECTION 317.15 EXTENDED 1.06 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 612.00 ELREA= C.00

317.15	6.86	611.56	0.00	C.00	611.68	.12	.21	.00	611.60
370.	0.	370.	0.	0.	132.	0.	20.	6.	613.70
.54	0.00	2.81	0.00	.056	.035	.056	.035	604.70	383.11
.000795	250.	250.	250.	0	0	0	0.00	33.32	416.43

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	6.96	611.66	0.00	0.00	611.74	.08	.04	.02	610.30
370.	3.	362.	4.	9.	158.	11.	20.	6.	610.30
.55	.39	2.29	.39	.056	.035	.056	.035	604.70	102.27
.000363	70.	70.	70.	2	0	0	0.00	58.69	160.97

SPECIAL BRIDGE

SB XK	XKOR	COEQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.39	611.75	.01	118.	253.	35.	35.	608.70	612.50

317.22	8.19	612.89	0.00	0.00	612.93	.04	1.19	0.00	610.30
370.	16.	334.	20.	42.	195.	52.	21.	6.	610.30
.56	.38	1.71	.38	.056	.035	.056	.035	604.70	68.44
.000153	30.	30.	30.	2	0	4	0.00	134.95	203.39

*SECNO 317.250

317.25	8.00	612.90	0.00	0.00	612.94	.05	.01	.00	610.50
370.	13.	340.	16.	34.	190.	42.	21.	6.	610.50
.57	.39	1.79	.39	.056	.035	.056	.035	604.90	74.42
.000175	50.	50.	50.	0	0	0	0.00	121.26	195.67

CCHV= .150 CEHV= .350
*SECNO 317.270

317.27	7.24	612.94	0.00	0.00	612.99	.05	.05	.00	610.50
370.	25.	329.	17.	57.	178.	59.	23.	7.	611.70
.61	.43	1.85	.28	.056	.035	.056	.035	605.70	73.15
.000205	250.	250.	250.	0	0	0	0.00	170.78	243.93

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	6.64	612.94	0.00	0.00	613.02	.07	.02	.01	611.10
370.	15.	354.	1.	33.	160.	7.	23.	7.	612.30
.62	.46	2.21	.14	.056	.035	.056	.035	606.30	84.41
.000336	75.	75.	75.	1	0	0	0.00	131.56	215.97

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNO 317.320
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.37	613.02	0.00	143.	228.	80.	79.	611.60	612.60

317.32	6.74	613.04	0.00	0.00	613.10	.07	.09	0.00	611.10
370.	17.	351.	2.	36.	163.	13.	23.	7.	612.30
.62	.46	2.16	.15	.056	.035	.056	.035	606.30	82.77
.000314	15.	15.	15.	2	0	3	0.00	153.76	236.53

*SECNO 317.340

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

317.34	6.96	613.06	0.00	0.00	613.12	.06	.02	.00	610.90
370.	20.	342.	7.	45.	169.	33.	23.	8.	612.10
.63	.45	2.02	.23	.056	.035	.056	.035	606.10	78.55
.000261	60.	60.	60.	0	0	0	0.00	161.23	239.78

*SECNO 317.400

317.40	6.73	613.13	0.00	0.00	613.21	.08	.08	.01	613.50
370.	0.	368.	2.	0.	159.	8.	25.	8.	612.70
.66	0.00	2.32	.20	.056	.035	.056	.035	606.40	75.38
.000433	240.	240.	240.	0	0	0	0.00	69.18	144.55

*SECNO 317.450
WATER EL=X5 CARD= 613.379

** PRIVATE DRIVE ACROSS CREEK

317.45	6.98	613.38	0.00	0.00	613.45	.07	.00	.00	613.50
370.	0.	365.	5.	0.	167.	19.	25.	8.	612.70
.66	0.00	2.18	.28	.056	.035	.056	.035	606.40	75.13
.000367	1.	1.	1.	0	0	0	0.00	87.64	162.76

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 2.27 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 613.90 ELREA= 611.60

318.00	7.08	613.58	0.00	0.00	613.62	.04	.16	.00	613.90
370.	0.	250.	120.	0.	127.	149.	27.	9.	611.60
.74	0.00	1.97	.81	.056	.035	.056	.035	606.50	586.74
.000344	460.	460.	460.	1	0	0	0.00	99.26	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 1.81 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	6.60	613.60	0.00	0.00	613.67	.07	.04	.01	614.40
370.	0.	269.	101.	0.	114.	116.	28.	9.	612.10
.75	0.00	2.37	.86	.056	.035	.056	.035	607.00	587.77
.000548	100.	100.	100.	0	0	0	0.00	98.23	686.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.04 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	FG	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.00	613.67	0.00	54.	316.	30.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

318.12	6.84	613.84	0.00	0.00	613.89	.05	.22	0.00	614.40
370.	0.	259.	111.	0.	120.	133.	28.	10.	612.10
.75	0.00	2.15	.84	.056	.035	.056	.035	607.00	587.25
.000431	18.	18.	18.	2	0	3	0.00	98.75	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED .91 FEET

318.15	6.90	613.90	0.00	0.00	614.05	.15	.12	.03	612.20
370.	20.	210.	140.	24.	54.	101.	28.	10.	612.20
.77	.82	3.93	1.39	.056	.035	.056	.035	607.00	540.79
.001949	150.	150.	150.	1	0	0	0.00	141.21	682.00

*SECNO 318.160
WATER EL=X5 CARD= 613.909
3280 CROSS SECTION 318.16 EXTENDED .91 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	6.91	613.91	0.00	0.00	614.06	.15	.00	.00	612.20
370.	20.	210.	140.	24.	54.	101.	28.	10.	612.20
.77	.82	3.93	1.39	.056	.035	.056	.035	607.00	540.79
.001943	1.	1.	1.	0	0	0	0.00	141.21	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 1.83 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.80 ELREA= 612.50

318.20	6.63	614.03	0.00	0.00	614.10	.07	.03	.01	614.80
370.	0.	268.	102.	0.	114.	118.	29.	10.	612.50
.77	0.00	2.35	.86	.056	.035	.056	.035	607.40	587.72
.000535	30.	30.	30.	2	0	0	0.00	98.28	686.00

*SECNO 318.250
WATER EL=X5 CARD= 614.232
3280 CROSS SECTION 318.25 EXTENDED 2.03 FEET

** PRIVATE DRIVE

318.25	6.83	614.23	0.00	0.00	614.29	.05	.00	.00	614.80
370.	0.	200.	110.	0.	120.	132.	29.	10.	612.50
.77	0.00	2.16	.84	.056	.035	.056	.035	607.40	587.27
.000435	1.	1.	1.	0	0	0	0.00	98.73	686.00

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*SECNC 318.300
3280 CROSS SECTION    318.30 EXTENDED      1.79 FEET

   SECNO     DEPTH     CHSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLCB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLCBL     XLCH      XLCBR     ITRIAL    ICC       ICONT     CORAR     TOPWID     ENDST

   318.30      6.58    614.38      0.00      0.00    614.45       .07       .16       .00    615.20
     370.        0.      270.      100.        0.      113.      115.       30.       11.     612.90
      .82      0.00      2.39       .87      .056      .035      .056      .035    607.80    587.82
  .000560      325.      325.      325.         0         0         0      0.00     98.18    686.00

*SECNC 318.350
 WATER EL=X5 CARD=   614.503
3280 CROSS SECTION    318.35 EXTENDED      1.90 FEET

          **  PRIVATE DRIVE

   318.35      6.70    614.50      0.00      0.00    614.56       .06       .00       .00    615.20
     370.        0.      265.      105.        0.      116.      123.       30.       11.     612.90
      .82      0.00      2.28       .85      .056      .035      .056      .035    607.80    587.56
  .000497        1.        1.        1.         0         0         0      0.00     98.44    686.00

*SECNO 319.000
3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      616.90 ELREA=      614.50

   319.00      6.03    614.63      0.00      0.00    614.80       .17       .20       .04    616.10
     335.        0.      335.        0.        0.      102.        1.       31.       11.     614.50
      .84      0.00      3.28       .16      .056      .035      .056      .035    608.60    706.74
  .001228      275.      275.      275.         1         0         0      0.00     49.43    756.17

*SECNO 319.100
3280 CROSS SECTION    319.10 EXTENDED      1.13 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      616.90 ELREA=      614.10

   319.10      6.24    615.04      0.00      0.00    615.10       .06       .29       .02    616.90
     335.        0.      300.       35.        0.      142.       65.       33.       12.     614.10
      .91      0.00      2.11       .54      .056      .035      .056      .035    608.80    635.37
  .000390      450.      450.      450.         1         0         0      0.00     91.63    727.00

*SECNO 319.980

          **  D/S FACE CURL RD

   319.98      4.98    615.08      0.00      0.00    615.18       .10       .06       .01    610.40
     335.       22.      266.       47.       22.       97.       45.       34.       12.     610.30
      .92       .98      2.74      1.05      .056      .035      .056      .035    610.10    630.49
  .000507      140.      140.      140.         2         0         0      0.00     48.26    678.75
```

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.020
3280 CROSS SECTION 320.02 EXTENDED .45 FEET

SECNO	DEPTH	CHSEL	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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.76	615.27	0.00	12.	324.	58.	58.	614.90	615.50
320.02	5.55	615.65	0.00	0.00	615.72	.07	.54	0.00	610.40
335.	24.	255.	57.	28.	109.	75.	34.	12.	610.30
.93	.84	2.35	.76	.056	.035	.056	.035	610.10	629.34
.000321	21.	21.	21.	2	0	4	0.00	97.66	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.05 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	5.85	615.65	0.00	0.00	615.75	.10	.02	.01	617.90
335.	0.	305.	30.	0.	114.	51.	34.	12.	615.50
.93	0.00	2.68	.57	.056	.035	.056	.035	609.80	537.57
.000707	40.	40.	40.	2	0	0	0.00	102.43	640.00

*SECNO 320.900

320.90	6.26	615.96	0.00	0.00	616.14	.18	.37	.03	620.10
335.	0.	334.	1.	0.	98.	3.	35.	13.	615.70
.96	0.00	3.42	.24	.056	.035	.056	.035	609.70	11.56
.001228	400.	400.	400.	2	0	0	0.00	45.27	56.83

CCHV= .400 CEHV= .800
*SECNO 320.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.35 ELREA= 616.35

** D/S FACE TEMPERANCE RD

320.93	5.93	616.13	0.00	0.00	616.27	.14	.11	.02	613.00
335.	0.	335.	0.	0.	111.	0.	35.	13.	618.00

.97	0.00	3.01	0.00	.056	.035	.056	.035	610.20	450.00
.000849	110.	110.	110.	2	0	0	0.00	24.88	474.88

SPECIAL BRIDGE

SP	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNC 321.020
3280 CROSS SECTION 321.02 EXTENDED 3.17 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
617.72	616.21	0.00	0.	335.	43.	36.	616.00	617.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 617.90 ELREA= 617.90

321.02	7.47	617.67	0.00	0.00	617.72	.04	1.45	0.00	615.20
335.	0.	335.	0.	0.	198.	0.	36.	13.	614.10
.98	0.00	1.69	0.00	.056	.035	.056	.035	610.20	315.00
.000166	55.	55.	55.	2	0	0	0.00	33.00	352.00

*SECNO 322.000
3280 CROSS SECTION 322.00 EXTENDED 3.18 FEET

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 619.30 ELREA= 619.30

322.00	7.07	617.67	0.00	0.00	617.75	.08	.01	.03	615.60
335.	0.	335.	0.	0.	145.	0.	36.	13.	612.00
.99	0.00	2.31	0.00	.056	.035	.056	.035	610.60	319.00
.000311	30.	30.	30.	1	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNO 322.980

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.98	6.72	617.42	0.00	C.CO	618.03	.61	.01	.26	610.80
335.	0.	335.	0.	0.	54.	0.	36.	13.	610.70
.99	0.00	6.24	C.00	.056	.035	.056	.035	610.70	689.00
.003055	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.90	150.00	7.00	0.00	39.20	0.00	610.70	610.70

*SECNO 323.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
619.24	618.05	0.00	0.	335.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 624.00 ELREA= 624.00

323.02	8.12	618.82	0.00	0.00	619.24	.42	1.21	0.00	610.90
335.	0.	335.	0.	0.	64.	0.	36.	13.	610.90
.99	0.00	5.22	0.00	.056	.035	.056	.035	610.70	346.00
.001812	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNO 323.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 624.00 ELREA= 624.00

323.10	8.55	619.35	0.00	0.00	619.37	.01	.01	.12	615.30
335.	0.	335.	0.	C.	342.	0.	36.	13.	616.90
1.00	0.00	.98	0.00	.056	.035	.C56	.035	610.80	3CC.00
.000062	30.	30.	30.	2	0	0	0.00	66.00	366.00

CCHV= .150 CEHV= .350
*SECNO 324.000
3280 CROSS SECTICN 324.00 EXTENDED 1.36 FEET

324.00	8.56	619.36	0.00	C.CO	619.37	.01	.01	.00	615.60
335.	94.	198.	42.	240.	190.	142.	37.	14.	616.70
1.04	.39	1.04	.30	.056	.035	.056	.035	610.80	100.00
.000055	120.	120.	120.	2	0	0	0.00	200.00	300.00

*SECNO 324.30C
3280 CROSS SECTICN 324.30 EXTENDED .88 FEET

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

324.30	8.07	619.37	0.00	0.00	619.39	.02	.01	.00	616.10
335.	85.	217.	32.	197.	176.	102.	40.	14.	617.20
1.10	.43	1.23	.32	.056	.035	.056	.035	611.30	100.00
.000085	200.	200.	200.	0	0	0	0.00	196.69	296.69

CCHV= .400 CEHV= .300
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 1.38 FEET

** D/S FACE TEMPERANCE RD

324.48	7.69	619.39	0.00	0.00	619.40	.01	.01	.00	616.70
335.	48.	194.	93.	145.	178.	216.	41.	15.	615.00
1.14	.33	1.09	.43	.056	.035	.056	.035	611.70	875.00
.000066	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKCR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.52	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 1.54 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.31	619.40	0.00	260.	78.	31.	31.	617.00	618.80

324.52	7.84	619.54	0.00	0.00	619.55	.01	.15	0.00	616.70
335.	51.	189.	95.	157.	182.	228.	42.	15.	615.00
1.16	.32	1.04	.42	.056	.035	.056	.035	611.70	875.00
.000057	50.	50.	50.	1	0	5	0.00	180.00	1055.00

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED 1.34 FEET

324.60	7.83	619.53	0.00	0.00	619.56	.03	.00	.02	616.40
335.	99.	141.	95.	186.	67.	184.	42.	15.	616.40
1.16	.53	2.10	.52	.056	.021	.056	.035	611.70	875.00
.000141	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=X5 CARD= 619.535
3280 CROSS SECTION 324.65 EXTENDED 1.34 FEET

** WALK BRIDGE

324.65	7.84	619.54	C.00	C.00	619.57	.03	.00	.00	616.40
335.	99.	141.	95.	186.	67.	184.	42.	15.	616.40
1.16	.53	2.10	.52	.056	.021	.056	.035	611.70	875.00
.000141	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED 1.08 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	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
325.00	7.48	619.58	0.00	0.00	619.60	.01	.03	.01	616.00
335.	98.	202.	36.	256.	170.	104.	44.	16.	617.80
1.24	.38	1.19	.34	.056	.035	.056	.035	612.10	250.00
.000084	235.	235.	235.	1	0	0	0.00	225.00	475.00

CCHV= .200 CEHV= .400
*SECNO 325.980
3280 CROSS SECTION 325.98 EXTENDED 1.60 FEET

** D/S FACE WASHINGTON ST

325.98	7.50	619.60	0.00	0.00	619.61	.01	.02	.00	616.60
335.	88.	182.	65.	202.	147.	177.	47.	17.	617.10
1.30	.43	1.24	.37	.056	.035	.056	.035	612.10	200.00
.000090	175.	175.	175.	0	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNC 326.020
3280 CROSS SECTION 326.02 EXTENDED 1.67 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
623.89	619.61	0.00	290.	45.	26.	26.	616.10	618.70
326.02	7.56	619.66	0.00	C.CC	619.68	.01	.06	0.00	616.60
335.	89.	179.	67.	208.	148.	183.	47.	17.	617.10
1.31	.43	1.21	.37	.056	.035	.056	.035	612.10	200.00
.000084	34.	34.	34.	1	0	8	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 2.17 FEET

326.50	7.47	619.67	0.00	0.00	619.68	.01	.01	.00	616.50
335.	98.	221.	16.	249.	195.	44.	48.	18.	617.40
1.34	.39	1.13	.36	.056	.035	.056	.035	612.20	218.85
.000075	110.	110.	110.	0	0	0	0.00	191.15	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.08 FEET

** D/S FACE PRIVATE DR

326.98	7.38	619.68	0.00	0.00	619.70	.01	.01	.00	616.60
335.	95.	224.	16.	237.	192.	43.	50.	18.	617.50
1.38	.40	1.17	.37	.056	.035	.056	.035	612.30	219.91
.000081	130.	130.	130.	0	0	0	0.00	190.10	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.12 FEET

SECNO	DEPTH	CHSEL	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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
632.52	619.70	0.00	317.	20.	16.	16.	615.20	616.80

327.02	7.41	619.71	0.00	0.00	619.73	.01	.03	0.00	616.60
335.	97.	222.	16.	242.	193.	43.	50.	19.	617.50
1.40	.40	1.15	.37	.056	.035	.056	.035	612.30	219.46
.000078	43.	43.	43.	1	0	5	0.00	190.54	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 1.73 FEET

327.50	7.03	619.73	0.00	0.00	619.75	.02	.02	.00	617.00
335.	84.	237.	14.	190.	180.	36.	52.	19.	617.90
1.44	.44	1.32	.39	.056	.035	.056	.035	612.70	231.35

.000113	180.	180.	180.	0	0	0	0.00	178.65	410.00

CCHV= .300 CEHV= .500
*SECNO 327.980
3280 CROSS SECTION 327.93 EXTENDED 1.55 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.10 ELREA= 620.10

** D/S FACE LEWIS RD

327.93	6.54	619.74	0.00	0.00	619.79	.05	.03	.01	617.50
280.	0.	280.	0.	0.	161.	0.	53.	20.	617.00
1.48	0.00	1.74	0.00	.056	.035	.056	.035	613.20	705.00
.000218	210.	210.	210.	0	0	0	0.00	32.00	737.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.020
3280 CROSS SECTION 328.02 EXTENDED 2.22 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.45	619.79	0.00	0.	280.	52.	52.	617.50	620.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.50 ELREA= 620.50

328.02	7.22	620.42	0.00	0.00	620.45	.04	.66	0.00	617.50
280.	0.	280.	0.	0.	182.	0.	53.	20.	617.00
1.48	0.00	1.54	0.00	.056	.035	.056	.035	613.20	705.00
.000145	33.	33.	33.	2	0	0	0.00	32.00	737.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED .46 FEET

328.10	7.46	620.46	0.00	0.00	620.47	.02	.01	.01	618.60
280.	36.	174.	70.	123.	141.	176.	54.	20.	618.90
1.51	.29	1.24	.39	.056	.035	.056	.035	613.00	100.00
.000108	90.	90.	90.	2	0	0	0.00	250.00	350.00

*SECNO 329.000

3265 DIVIDED FLOW

3280 CROSS SECTION 329.00 EXTENDED .89 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLCBR	ITRIAL	IBC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.40 ELREA= 620.90

329.00	6.69	620.69	0.00	0.00	620.75	.06	.26	.02	620.40
280.	20.	260.	0.	56.	126.	0.	64.	26.	620.90
1.71	.36	2.06	0.00	.056	.035	.056	.035	614.00	125.00
.000395	1400.	1400.	1400.	2	0	0	0.00	129.59	255.00

*SECNC 329.100

3265 DIVIDED FLOW

3280 CROSS SECTION 329.10 EXTENDED 1.08 FEET

329.10	6.88	620.98	0.00	0.00	621.01	.03	.24	.01	620.50
280.	24.	212.	44.	74.	132.	111.	69.	30.	621.00
1.89	.33	1.60	.40	.056	.035	.056	.035	614.10	125.00
.000231	825.	825.	825.	2	0	0	0.00	249.12	375.00

*SECNC 329.250
WATER EL=X5 CARD= 620.980

3265 DIVICED FLOW

3280 CROSS SECTION 329.25 EXTENDED 1.08 FEET

** PRIVATE DRIVE

329.25	6.88	620.98	0.00	0.00	621.01	.03	.00	.00	620.50
280.	24.	212.	44.	74.	132.	111.	69.	30.	621.00
1.89	.33	1.60	.40	.056	.035	.056	.035	614.10	125.00
.000230	1.	1.	1.	0	0	0	0.00	249.19	375.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100yr.

00BREAK00

JOB NO. UM3924 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 20:14:10 11-29-79

Flat Creek
100 Yr Convergence
(From 8500' D/S Main
to Mouth)
(Slope Avg, S.A.+1, S.A.-1)

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM         MM  NN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM       MMM  NNN        NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM     MMMM  NNNN       NN  EE                 TT
MM MM   MM MM  NN NN      NN  EE                 TT
MM  MMMM   MM  NN  NN     NN  EE                 TT
MM   MM    MM  NN   NN    NN  EEEEEEEE           TT
MM         MM  NN    NN   NN  EEEEEEEE           TT
MM         MM  NN     NN  NN  EE                 TT
MM         MM  NN      NNNN   EE                 TT
MM         MM  NN       NNN   EE                 TT
MM         MM  NN        NN   EEEEEEEEEEEE       TT
MM         MM  NN         N   EEEEEEEEEEEE       TT

XX         XX   SSSSSSSSSS   NN         NN  LL
XX         XX  SSSSSSSSSSSS  NNN        NN  LL
 XX       XX   SS         SS NNNN       NN  LL
  XX     XX    SS            NN NN      NN  LL
   XX   XX     SSS           NN  NN     NN  LL
    XXXX        SSSSSSSSS    NN   NN    NN  LL
    XXXX         SSSSSSSSS   NN    NN   NN  LL
   XX  XX              SSS   NN     NN  NN  LL
  XX     XX             SS   NN      NNNN   LL
 XX       XX   SS       SS   NN       NNN   LL
XX         XX  SSSSSSSSSSSS  NN        NN   LLLLLLLLLLLL
XX         XX   SSSSSSSSSS   NN         N   LLLLLLLLLLLL
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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  5C,51,52
**************************************************

C
T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK 100 YEAR FLOW=450 CFS

J1  ICHECK     INC       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.        4.        0.        0.   .001700      0.00     -1.0       0.   591.720     0.000

NC      .060      .060      .045      .300      .500     0.000     0.000     0.000     0.000     0.000
QT     5.000   350.000   400.000   450.000   550.000   450.000     0.000     0.000     0.000     0.000

X1   301.000    10.000   448.000   477.000     0.000     0.000     0.000     0.000     0.000     0.000
GR   591.200   425.000   591.200   426.000   591.200   427.000   591.000   428.000   589.900   448.000
GR   585.900   462.000   585.200   465.000   584.900   468.000   591.300   477.000   591.500   500.000

         **  D/S FACE RAILROAD BRIDGE

X1   301.980    11.000   455.000   467.000   108.000   108.000   108.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   592.500   592.500     0.000
GR   592.000   423.000   591.900   424.000   591.400   425.000   590.900   426.000   589.900   448.000
GR   587.300   455.000   584.200   460.000   584.200   466.000   587.100   467.000   591.500   477.000
GR   591.600   498.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
SB     0.000     1.500     2.600    75.000    12.000     0.000    72.000     0.000   584.200   584.200

X1   302.020     0.000     0.000     0.000    42.000    42.000    42.000     0.000     0.000     0.000
X2     0.000     0.000     1.000   590.200   593.500     0.000     0.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   593.500   593.500     0.000

X1   302.500    11.000   448.000   477.000    40.000    40.000    40.000     0.000     0.000     0.000
GR   590.800   425.000   590.700   426.000   590.700   427.000   590.400   428.000   589.400   448.000
GR   586.800   457.000   585.400   462.000   584.700   465.000   584.400   468.000   589.900   477.000
GR   591.000   500.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

       **  D/S FACE ABANDONED RAILROAD BRIDGE

X1   302.980    10.000   516.000   535.000    40.000    40.000    40.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   593.300   593.300     0.000
GR   595.200   400.000   593.400   465.000   591.400   505.000   590.100   510.000   585.400   516.000
GR   584.600   535.000   585.100   554.000   591.400   568.000   593.900   590.000   596.000   620.000
SB     0.000     3.700     2.600   150.000    12.000     0.000    61.200     0.000   586.200   584.600

X1   303.020     0.000     0.000     0.000   453.000   453.000   453.000     0.000     1.600     0.000
X2     0.000     0.000     1.000   591.300   597.300     0.000     0.000     0.000     0.000     0.000
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X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.300	597.300	0.000
X1	303.500	10.000	448.000	477.000	26.000	26.000	26.000	0.000	0.000	0.000
GR	592.400	425.000	592.400	426.000	592.400	427.000	592.100	428.000	591.100	448.000
GR	588.500	457.000	586.200	462.000	586.200	474.000	592.500	477.000	592.700	500.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000

** D/S FACE RAILROAD BRIDGE

X1	303.980	11.000	458.000	470.000	26.000	26.000	26.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	596.600	596.600	0.000
GR	595.000	412.000	595.000	413.000	595.000	444.000	590.000	450.000	586.400	458.000
GR	586.200	462.000	586.500	470.000	591.000	475.000	594.900	480.000	596.600	550.000
GR	598.000	600.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.900	175.000	12.000	0.000	74.400	0.000	586.200	586.200
X1	304.020	0.000	0.000	0.000	34.000	34.000	34.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.400	598.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.000	598.000	0.000
X1	304.500	10.000	448.000	477.000	32.000	32.000	32.000	0.000	0.000	0.000
GR	592.400	425.000	592.400	426.000	592.400	427.000	592.100	428.000	591.100	448.000
GR	588.500	457.000	586.200	462.000	586.200	474.000	592.500	477.000	592.700	500.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000

** D/S FACE TELEGRAPH RD

X1	304.980	10.000	522.000	570.000	32.000	32.000	32.000	0.000	0.000	0.000
GR	595.000	400.000	593.500	500.000	592.500	522.000	590.500	528.000	586.500	537.000
GR	586.200	545.000	586.600	552.000	591.000	565.000	593.300	570.000	595.000	650.000
SB	0.000	1.600	2.600	225.000	10.000	0.000	57.000	0.000	586.200	586.200
X1	305.020	0.000	0.000	0.000	63.000	63.000	63.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	591.900	595.000	0.000	0.000	0.000	0.000	0.000
X1	306.000	12.000	159.000	175.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.500	0.000	0.000
GR	594.200	0.000	592.600	100.000	593.400	154.000	589.300	159.000	586.700	162.000
GR	586.200	167.000	586.500	171.000	589.900	175.000	590.500	180.000	591.800	200.000
GR	592.800	300.000	592.900	350.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	310.000	14.000	50.000	88.000	500.000	500.000	500.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	594.900	0.000	594.700	12.000	594.400	20.000	594.300	27.000	594.100	50.000
GR	591.300	60.000	588.100	70.000	587.700	74.000	587.500	78.000	594.600	88.000
GR	594.000	100.000	593.600	150.000	594.000	200.000	594.500	325.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

** D/S FACE SUB STATION RD

X1	310.980	12.000	660.000	690.000	142.000	142.000	142.000	0.000	0.000	0.000
GR	595.100	500.000	595.100	600.000	595.100	655.000	594.900	660.000	590.000	662.000

GR	588.000	665.000	588.500	675.000	589.000	680.000	591.000	685.000	594.500	689.000
GR	595.100	690.000	595.800	800.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.500	2.600	300.000	13.000	0.000	83.200	0.000	588.000	588.000
X1	311.020	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	594.400	595.500	0.000	0.000	0.000	0.000	0.000
X1	311.100	10.000	158.000	187.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	595.300	0.000	595.100	50.000	594.100	100.000	594.000	158.000	592.400	159.000
GR	588.900	170.000	588.500	174.000	588.200	179.000	595.800	187.000	596.000	250.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	312.000	11.000	451.000	486.000	1200.000	1200.000	1200.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	597.300	199.000	597.300	200.000	597.200	300.000	596.400	400.000	596.700	451.000
GR	589.900	458.000	589.900	463.000	590.400	471.000	596.900	486.000	597.500	500.000
GR	598.700	600.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	312.100	11.000	294.000	326.000	520.000	520.000	520.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	596.700	251.000	596.700	252.000	596.700	253.000	597.000	294.000	591.200	303.000
GR	590.800	309.000	591.000	313.000	593.300	316.000	597.200	326.000	597.400	350.000
GR	597.500	361.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000

** D/S FACE MINX RD - CORPORATE BDRY

X1	312.980	11.000	294.000	326.000	142.000	142.000	142.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.200	598.200	0.000
GR	597.600	100.000	597.300	110.000	596.500	200.000	597.000	294.000	591.200	303.000
GR	590.800	309.000	591.000	313.000	593.300	316.000	597.200	326.000	597.900	400.000
GR	598.100	471.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.700	350.000	14.610	0.000	89.100	0.000	590.900	590.900
X1	313.020	12.000	273.000	303.000	16.500	16.500	16.500	0.000	-.500	0.000
X2	0.000	0.000	1.000	597.000	598.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.900	598.900	0.000
GR	598.400	75.000	598.400	100.000	598.200	259.000	598.100	273.000	591.800	287.000
GR	591.400	290.000	591.500	296.000	596.100	300.000	598.200	303.000	598.200	400.000
GR	598.200	418.000	598.200	428.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	313.100	12.000	273.000	303.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	598.400	75.000	598.400	100.000	598.200	259.000	598.100	273.000	591.800	287.000
GR	591.400	290.000	591.500	296.000	596.100	300.000	598.200	303.000	598.200	400.000
GR	598.200	418.000	598.200	428.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= .300 CEHV= .500
*SECNC 301.000
3280 CROSS SECTION 301.00 EXTENDED .47 FEET

SECNC	DEPTH	CISEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
301.00	6.77	591.67	0.00	591.72	591.84	.17	0.00	0.00	589.90
450.	30.	418.	3.	26.	123.	6.	0.	0.	591.30
0.00	1.14	3.39	.43	.060	.045	.060	0.000	584.90	425.00
.001730	0.	0.	0.	0	0	3	0.00	75.00	500.00

*SECNO 301.980
3280 CROSS SECTION 301.98 EXTENDED .18 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.50 ELREA= 592.50

** D/S FACE RAILROAD BRIDGE

301.98	7.58	591.78	0.00	0.00	592.25	.47	.26	.15	587.30
450.	0.	450.	0.	0.	82.	0.	0.	0.	587.10
.01	0.00	5.50	0.00	.060	.045	.060	.045	584.20	455.00
.003730	108.	108.	108.	2	0	0	0.00	12.00	467.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNC 302.020
3280 CROSS SECTION 302.02 EXTENDED .69 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
592.69	592.25	0.00	0.	450.	72.	72.	590.20	593.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.50 ELREA= 593.50

302.02	8.08	592.28	0.00	0.00	592.69	.41	.44	0.00	587.30
450.	0.	450.	0.	0.	88.	0.	0.	0.	587.10
.01	0.00	5.12	0.00	.060	.045	.060	.044	584.20	455.00

.003032	42.	42.	42.	2	0	0	0.00	12.00	467.00

*SECNO 302.500
3280 CROSS SECTION 302.50 EXTENDED 1.98 FEET

302.50	8.38	592.78	0.00	0.00	592.83	.05	.03	.11	589.40
450.	60.	348.	43.	64.	174.	54.	1.	0.	589.90
.01	.93	2.00	.80	.060	.045	.060	.044	584.40	425.00
.000369	40.	40.	40.	2	0	0	0.00	75.00	500.00

*SECNO 302.980

SECNO	DEPTH	CHSEL	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	XLOH	XLOBR	ITRIAL	IOC	IOCNT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.30 ELREA= 593.30

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	8.15	592.75	0.00	0.00	592.90	.14	.02	.05	585.40
450.	0.	450.	0.	0.	147.	0.	1.	0.	584.60
.02	0.00	3.05	0.00	.060	.045	.060	.044	584.60	516.00
.000624	40.	40.	40.	2	0	0	0.00	19.00	535.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNO 303.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.86	594.50	0.00	0.	450.	61.	61.	591.30	597.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.30 ELREA= 597.30

303.02	9.56	595.76	0.00	0.00	595.86	.10	2.96	0.00	587.00
450.	0.	450.	0.	0.	174.	0.	2.	0.	586.20
.07	0.00	2.59	0.00	.060	.045	.060	.045	586.20	516.00
.000372	453.	453.	453.	2	0	0	0.00	19.00	535.00

*SECNO 303.500
3280 CROSS SECTION 303.50 EXTENDED 3.46 FEET

303.50	9.66	595.86	0.00	0.00	595.89	.03	.01	.02	591.10

450.	72.	333.	45.	96.	233.	75.	3.	0.	592.50
.07	.75	1.43	.60	.060	.045	.060	.045	586.20	425.00
.000144	26.	26.	26.	2	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNC 303.980
3280 CROSS SECTION 303.98 EXTENDED .72 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 596.60 ELREA= 596.60

** D/S FACE RAILROAD BRIDGE

303.98	9.52	595.72	0.00	0.00	595.96	.25	.01	.07	586.40
450.	0.	450.	0.	0.	113.	0.	3.	0.	586.50
.07	0.00	4.00	0.00	.060	.045	.060	.045	586.20	458.00
.001302	26.	26.	26.	2	0	0	0.00	12.00	470.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNC 304.020
3280 CROSS SECTION 304.02 EXTENDED 1.23 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
596.45	595.96	0.00	0.	450.	74.	74.	592.40	598.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 598.00

304.02	10.03	596.23	0.00	0.00	596.45	.22	.49	0.00	586.40
450.	0.	450.	0.	0.	119.	0.	3.	0.	586.50
.08	0.00	3.79	0.00	.060	.045	.060	.045	586.20	458.00
.001127	34.	34.	34.	2	0	0	0.00	12.00	470.00

*SECNO 304.500
3280 CROSS SECTION 304.50 EXTENDED 4.06 FEET

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	ICCNT	CORAR	TOPWID	ENDST
304.50	10.26	596.46	0.00	0.00	596.48	.02	.01	.02	591.10
450.	77.	322.	50.	110.	250.	89.	3.	0.	592.50

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     .08       .71      1.29       .57      .060      .045      .060      .045    586.20    425.00
 .000106       32.       32.       32.         2         0         0      0.00     75.00    500.00

CCHV=     .150 CEHV=     .350
*SECNC 304.980
3280 CROSS SECTION    304.98 EXTENDED       1.48 FEET


          **  D/S FACE TELEGRAPH RD

  304.98     10.28    596.48      0.00      0.00    596.49       .01       .00       .00    592.50
    450.       89.      308.       52.      300.      375.      187.        4.        1.    593.30
     .10       .30       .82       .28      .060      .045      .060      .044    586.20    400.00
 .000043       32.       32.       32.         0         0         0      0.00    250.00    650.00


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN      BWC       BWP       BAREA      SS        ELCHU     ELCHD
     0.00      1.60      2.60     225.00     10.00      0.00     57.00      0.00     586.20    586.20

*SECNC 305.020
3280 CROSS SECTION    305.02 EXTENDED       1.54 FEET

PRESSURE AND WEIR FLOW

 EGPRS      EGLWC       H3       QWEIR       QPR       BAREA   TRAPEZOID      ELLC      ELTRD
                                                                 AREA
  598.03    596.49      0.00      358.        92.       57.       57.       591.90    595.00

  305.02     10.34    596.54      0.00      0.00    596.54       .01       .06      0.00    592.50
    450.       91.      305.       54.      307.      378.      191.        5.        1.    593.30
     .13       .30       .81       .28      .060      .045      .060      .044    586.20    400.00
 .000041       63.       63.       63.         0         0         7      0.00    250.00    650.00

*SECNO 306.000
3280 CROSS SECTION    306.00 EXTENDED       3.64 FEET

  306.00     10.34    596.54      0.00      0.00    596.54       .00       .00       .00    589.30
    450.      133.       93.      224.      531.      150.      748.        6.        1.    589.90
     .16       .25       .62       .30      .060      .045      .060      .044    586.20      0.00
 .000021       50.       50.       50.         0         0         0      0.00    350.00    350.00

*SECNO 310.000
3280 CROSS SECTION    310.00 EXTENDED       2.06 FEET

  310.00      9.06    596.56      0.00      0.00    596.56       .01       .02       .00    594.10
    450.       35.      197.      218.      107.      233.      591.       20.        5.    594.60
     .41       .33       .85       .37      .060      .045      .060      .045    587.50      0.00
 .000065      500.      500.      500.         0         0         0      0.00    325.00    325.00
```

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED 1.46 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCh	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TCPWID	ENDST
	** D/S FACE SUB STATION RD								
310.98	8.57	596.57	0.00	0.00	596.59	.02	.01	.01	594.90
450.	105.	300.	46.	235.	203.	122.	22.	6.	595.10
.44	.45	1.48	.37	.060	.045	.060	.045	588.00	500.00
.000198	142.	142.	142.	0	0	0	0.00	300.00	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNC 311.020
3280 CROSS SECTION 311.02 EXTENDED 1.5C FEET

PRESSURE AND WEIR FLCW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.25	596.59	0.00	328.	124.	83.	83.	594.40	595.50
311.02	8.60	596.60	0.00	0.00	596.62	.02	.03	0.00	594.90
450.	107.	296.	47.	240.	204.	126.	22.	6.	595.10
.45	.44	1.45	.37	.060	.045	.060	.045	588.00	500.00
.000190	16.	16.	16.	2	0	7	0.00	300.00	800.00

*SECNO 311.100
3280 CROSS SECTION 311.10 EXTENDED 1.31 FEET

311.10	8.41	596.61	0.00	0.00	596.63	.02	.01	.00	594.00
450.	183.	254.	12.	319.	179.	45.	23.	7.	595.80
.46	.57	1.42	.28	.060	.045	.060	.045	588.20	0.00
.000199	50.	50.	50.	0	0	0	0.00	250.00	250.00

CCHV= .150 CEHV= .350
*SECNO 312.000

312.00	7.10	597.00	0.00	0.00	597.10	.10	.44	.03	596.70
450.	18.	432.	0.	46.	167.	0.	33.	12.	596.90
.59	.39	2.60	.10	.060	.045	.060	.045	589.90	324.82
.000897	1200.	1200.	1200.	2	0	0	0.00	163.55	488.37

```
*SECNO 312.100
3280 CROSS SECTION    312.10 EXTENDED       .86 FEET

   312.10      6.76    597.56      0.00      0.00    597.70       .14       .59       .01    597.00
    450.       23.       424.       3.       31.      136.        7.        36.       14.     597.20
     .64       .75       3.11      .36      .060      .045      .060      .045    590.80    251.00
 .001457       520.      520.      520.        2         0         0      0.00    110.00    361.00

CCHV=    .200 CEHV=    .400
*SECNO 312.980
3280 CROSS SECTION    312.98 EXTENDED       .06 FEET

   SECNO     DEPTH     CHSEL     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    IOC       ICONT     CORAR     TOPWID      ENDST


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      598.20 ELREA=      598.20

         **  D/S FACE MINX RD - CORPORATE BDRY

   312.98      6.86    597.76      0.00      0.00    597.92       .16       .21       .01    597.10
    450.        0.       450.       0.        0.      140.        0.        36.       14.     597.30
     .65       0.00      3.22      0.00      .060      .045      .060      .045    590.90    294.00
 .001538       142.      142.      142.        2         0         0      0.00     32.00    326.00


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.30      2.70    350.00     14.61      0.00     89.10      0.00    590.90    590.90

*SECNO 313.020
3280 CROSS SECTION    313.02 EXTENDED       .41 FEET

PRESSURE FLOW

 EGPRS      EGLWC       H3        QWEIR      QPR       BAREA    TRAPEZOID      ELLC      ELTRD
                                                                  AREA
   598.29    597.95      0.00        0.       450.       89.       89.      597.00    598.90


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      598.90 ELREA=      598.90

   313.02      7.21    598.11      0.00      0.00    598.28       .16       .35       0.00    597.60
    450.        0.       450.       0.        0.      139.        0.        36.       14.     597.70
     .65       0.00      3.24      0.00      .060      .045      .060      .045    590.90    273.00
 .001493        17.       17.       17.        2         0         0      0.00     30.00    303.00
```

*SECNO 313.10C

313.10	6.76	598.16	C.CO	C.CO	598.36	.20	.07	.01	598.10
450.	0.	450.	0.	0.	126.	0.	36.	14.	598.20
.66	.12	3.58	0.00	.060	.045	.060	.045	591.40	263.17
.002065	42.	42.	42.	1	C	0	0.00	39.78	302.96

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**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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T1      HUD-FIA  F-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK  100 YEAR FLOW=450 CFS  STRT + 1

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
      -1.       4.        0.        0.  0.000000      0.00     -1.0       0.   592.670     0.000
J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
     2.000     0.000     0.000     0.000     0.000     0.000     0.000     0.00      0.000     0.000
```

*PROF 2

CCHV= .300 CEHV= .500
*SECNO 301.000
3280 CROSS SECTION 301.00 EXTENDED 1.47 FEET

SECNO	DEPTH	CHSEL	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	HTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST
301.00	7.77	592.67	0.00	592.67	592.75	.08	0.00	0.00	589.90
450.	52.	376.	22.	49.	152.	29.	0.	0.	591.30
0.00	1.07	2.47	.74	.060	.045	.060	0.000	584.90	425.00
.000692	0.	0.	0.	0	0	0	0.00	75.00	500.00

*SECNO 301.980
3280 CROSS SECTION 301.98 EXTENDED 1.14 FEET

** D/S FACE RAILROAD BRIDGE

301.98	8.54	592.74	0.00	0.00	592.83	.09	.07	.01	587.30
450.	108.	275.	66.	84.	93.	60.	1.	0.	587.10
.01	1.29	2.95	1.11	.060	.045	.060	.045	584.20	423.00
.000694	108.	108.	108.	0	0	0	0.00	75.00	498.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNO 302.020
3280 CROSS SECTION 302.02 EXTENDED 1.96 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
593.65	593.10	0.00	7.	440.	72.	72.	590.20	593.50
302.02	9.36	593.56	0.00	0.00	593.61	.06	.78	0.00	587.30
450.	124.	243.	82.	110.	103.	85.	1.	0.	587.10
.02	1.13	2.36	.97	.060	.045	.060	.044	584.20	423.00
.000390	42.	42.	42.	2	0	2	0.00	75.00	498.00

*SECNO 302.500
3280 CROSS SECTION 302.50 EXTENDED 2.79 FEET

302.50	9.19	593.59	0.00	0.00	593.63	.03	.01	.01	589.40
450.	69.	328.	52.	82.	197.	72.	1.	0.	589.90
.03	.84	1.66	.73	.060	.045	.060	.044	584.40	425.00
.000217	40.	40.	40.	1	0	0	0.00	75.00	500.00

*SECNO 302.980

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	IOC	ICONT	CORAR	TOPWID	ENDST

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	9.02	593.62	0.00	0.00	593.64	.02	.00	.01	585.40
450.	40.	202.	208.	99.	164.	263.	2.	0.	584.60
.04	.40	1.23	.79	.060	.045	.060	.044	584.60	457.25
.000079	40.	40.	40.	1	0	0	0.00	130.24	587.49

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNO 303.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
596.73	595.34	0.00	0.	450.	61.	61.	591.30	597.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.30 ELREA= 597.30

303.02	10.44	596.64	0.00	0.00	596.73	.09	3.09	0.00	587.00
450.	0.	450.	0.	0.	191.	0.	5.	1.	586.20
.09	0.00	2.36	0.00	.060	.045	.060	.045	586.20	516.00
.000281	453.	453.	453.	2	0	0	0.00	19.00	535.00

*SECNC 303.500
3280 CROSS SECTION 303.50 EXTENDED 4.34 FEET

303.50	10.54	596.74	0.00	0.00	596.75	.02	.00	.02	591.10
450.	79.	318.	53.	116.	258.	95.	5.	1.	592.50
.10	.69	1.23	.55	.060	.045	.060	.045	586.20	425.00
.000093	26.	26.	26.	2	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNO 303.980
3280 CROSS SECTION 303.98 EXTENDED 1.73 FEET

** D/S FACE RAILROAD BRIDGE

303.98	10.52	596.72	0.00	0.00	596.76	.04	.00	.01	586.40
450.	126.	249.	75.	149.	125.	128.	6.	1.	586.50
.10	.85	1.99	.58	.060	.045	.060	.045	586.20	412.00
.000161	26.	26.	26.	1	0	0	0.00	142.72	554.72

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNO 304.020
3280 CROSS SECTION 304.02 EXTENDED 2.28 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.46	596.93	0.00	0.	450.	74.	74.	592.40	598.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 598.00

304.02	11.08	597.28	0.00	0.00	597.46	.18	.70	0.00	586.40
450.	0.	450.	0.	0.	131.	0.	6.	1.	586.50
.11	0.00	3.43	0.00	.060	.045	.060	.045	586.20	458.00
.000862	34.	34.	34.	2	0	0	0.00	12.00	470.00

*SECNO 304.500
3280 CROSS SECTION 304.50 EXTENDED 5.07 FEET

SECNO	DEPTH	CWSEL	CRITS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
304.50	11.27	597.47	0.00	0.00	597.48	.01	.01	.02	591.10
450.	84.	308.	58.	133.	279.	112.	6.	1.	592.50
.12	.64	1.10	.51	.060	.045	.060	.045	586.20	425.00
.000067	32.	32.	32.	2	0	0	0.00	75.00	500.00

CCHV= .150 CEHV= .350
*SECNO 304.980
3280 CROSS SECTION 304.98 EXTENDED 2.49 FEET

** D/S FACE TELEGRAPH RD

304.98	11.28	597.48	0.00	0.00	597.49	.00	.00	.00	592.50
450.	112.	270.	68.	422.	423.	267.	7.	2.	593.30
.13	.27	.64	.25	.060	.045	.060	.044	586.20	400.00
.000022	32.	32.	32.	0	0	0	0.00	250.00	650.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	225.00	10.00	0.00	57.00	0.00	586.20	586.20

*SECNO 305.020
3280 CROSS SECTION 305.02 EXTENDED 2.53 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
599.03	597.49	0.00	368.	82.	57.	57.	591.90	595.00

305.02	11.33	597.53	0.00	0.00	597.53	.00	.05	0.00	592.50
450.	113.	269.	68.	428.	425.	271.	8.	2.	593.30
.17	.26	.63	.25	.060	.045	.060	.044	586.20	400.00
.000021	63.	63.	63.	0	0	6	0.00	250.00	650.00

*SECNO 306.000
3280 CROSS SECTION 306.00 EXTENDED 4.63 FEET

306.00	11.33	597.53	0.00	0.00	597.54	.00	.00	.00	589.30
450.	146.	78.	225.	689.	166.	922.	10.	2.	589.90
.22	.21	.47	.24	.060	.045	.060	.044	586.20	0.00
.000011	50.	50.	50.	0	0	0	0.00	350.00	350.00

*SECNO 310.000
3280 CROSS SECTION 310.00 EXTENDED 3.04 FEET

310.00	10.04	597.54	0.00	0.00	597.54	.00	.01	.00	594.10
450.	42.	164.	244.	156.	270.	825.	27.	6.	594.60
.56	.27	.61	.30	.060	.045	.060	.045	587.50	0.00
.000027	500.	500.	500.	0	0	0	0.00	325.00	325.00

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED 2.44 FEET

SECNO	DEPTH	CHSEL	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	ICC	ICONT	CORAR	TOPWID	ENDST

** D/S FACE SUB STATION RD

310.98	9.55	597.55	0.00	0.00	597.55	.01	.01	.00	594.90
450.	147.	225.	78.	392.	232.	230.	31.	7.	595.10
.62	.38	.97	.34	.060	.045	.060	.045	588.00	500.00
.000071	142.	142.	142.	0	0	0	0.00	300.00	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNC 311.020
3280 CROSS SECTION 311.02 EXTENDED 2.49 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.23	597.55	0.00	341.	108.	83.	83.	594.40	595.50

311.02	9.58	597.58	0.00	0.00	597.59	.01	.03	0.00	594.90
450.	148.	223.	79.	398.	234.	235.	31.	7.	595.10
.63	.37	.95	.34	.060	.045	.060	.045	588.00	500.00
.000068	16.	16.	16.	0	0	6	0.00	300.00	800.00

*SECNO 311.100
3280 CROSS SECTION 311.10 EXTENDED 2.28 FEET

311.10	9.38	597.58	0.00	0.00	597.59	.01	.00	.00	594.00
450.	216.	202.	32.	473.	207.	106.	32.	8.	595.80
.65	.46	.98	.30	.060	.045	.060	.045	588.20	0.00
.000077	50.	50.	50.	0	0	0	0.00	250.00	250.00

CCHV= .150 CEHV= .350
*SECNC 312.000
3280 CROSS SECTION 312.00 EXTENDED .44 FEET

312.00	7.84	597.74	0.00	0.00	597.78	.04	.18	.01	596.70
450.	90.	357.	3.	203.	192.	10.	49.	15.	596.90
.86	.45	1.86	.27	.060	.045	.060	.045	589.90	199.00
.000379	1200.	1200.	1200.	2	0	0	0.00	320.59	519.59

*SECNC 312.100
3280 CROSS SECTION 312.10 EXTENDED 1.29 FEET

312.10	7.19	597.99	0.00	0.00	598.09	.10	.29	.02	597.00
450.	40.	397.	13.	49.	150.	23.	52.	18.	597.20
.92	.82	2.64	.56	.060	.045	.060	.045	590.80	251.00

.000924	520.	520.	520.	2	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED .42 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE EDRY

312.98	7.22	598.12	0.00	0.00	598.25	.14	.15	.02	597.10
450.	0.	450.	0.	0.	151.	0.	53.	18.	597.30
.94	0.00	2.98	0.00	.060	.045	.060	.045	590.90	294.00
.001193	142.	142.	142.	2	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .79 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.63	598.28	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.90 ELREA= 598.90

313.02	7.59	598.49	0.00	0.00	598.63	.14	.38	0.00	597.60
450.	0.	450.	0.	0.	150.	0.	53.	18.	597.70
.94	0.00	2.99	0.00	.060	.045	.060	.045	590.90	272.00
.001155	17.	17.	17.	2	0	0	0.00	30.00	303.00

*SECNO 313.100
3280 CROSS SECTION 313.10 EXTENDED .35 FEET

313.10	7.16	598.56	0.00	0.00	598.69	.13	.05	.00	598.10
450.	18.	413.	19.	49.	137.	44.	53.	18.	598.20
.94	.36	3.02	.44	.060	.045	.060	.045	591.40	75.00
.001308	42.	42.	42.	1	0	0	0.00	353.00	428.00

*PROF 3

CCHV= .300 CEHV= .500
*SECNO 301.000

SECNO	DEPTH	CRISEL	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
301.00	5.77	590.67	0.00	590.67	591.01	.34	0.00	0.00	589.90
450.	5.	445.	0.	5.	94.	0.	0.	0.	591.30
0.00	.88	4.72	0.00	.060	.045	.060	0.000	584.90	434.00
.004543	0.	0.	0.	0	0	0	0.00	42.11	476.11

*SECNO 301.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 592.50 ELREA= 592.50

** D/S FACE RAILROAD BRIDGE

301.98	6.87	591.07	0.00	0.00	591.66	.59	.52	.12	587.30
450.	0.	450.	0.	0.	73.	0.	0.	0.	587.10
.00	0.00	6.14	0.00	.060	.045	.060	.045	584.20	455.00
.005157	108.	108.	108.	2	0	0	0.00	12.00	467.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNO 302.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
591.98	591.66	0.00	0.	450.	72.	72.	590.20	593.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 593.50 ELREA= 593.50

302.02	7.26	591.46	0.00	0.00	591.98	.52	.32	0.00	587.30
450.	0.	450.	0.	0.	78.	0.	0.	0.	587.10
.01	0.00	5.77	0.00	.060	.045	.060	.044	584.20	455.00
.004282	42.	42.	42.	2	0	0	0.00	12.00	467.00

*SECNO 302.500
3280 CROSS SECTION 302.50 EXTENDED 1.29 FEET

302.50	7.69	592.09	0.00	0.00	592.16	.08	.05	.13	589.40
450.	49.	370.	32.	48.	154.	38.	0.	0.	589.90

.01	1.01	2.40	.84	.060	.045	.060	.044	584.40	425.00
.000628	40.	40.	40.	2	C	0	0.00	75.00	500.00

*SECNC 302.980

SECNO	DEPTH	CLSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLCB	QCH	QRCB	ALCB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 593.30 ELREA= 593.30

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	7.47	592.07	0.00	C.CC	592.24	.17	.03	.05	585.40
450.	0.	450.	0.	0.	134.	0.	1.	0.	584.60
.02	0.00	3.35	0.00	.060	.045	.060	.044	584.60	516.00
.000835	40.	40.	40.	2	C	0	0.00	19.00	535.00

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNC 303.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.17	593.84	0.00	0.	450.	61.	61.	591.30	597.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 597.30 ELREA= 597.30

303.02	8.85	595.05	0.00	0.00	595.17	.12	2.93	0.00	587.00
450.	C.	450.	0.	0.	161.	0.	2.	0.	586.20
.06	0.00	2.80	0.00	.060	.045	.060	.045	586.20	516.00
.000477	453.	453.	453.	2	0	0	0.00	19.00	535.00

*SECNC 303.500
3280 CROSS SECTION 303.50 EXTENDED 2.77 FEET

303.50	8.97	595.17	0.00	0.00	595.21	.03	.01	.03	591.10
450.	65.	348.	37.	80.	213.	59.	2.	0.	592.50
.07	.81	1.63	.63	.060	.045	.060	.045	586.20	425.00
.000211	26.	26.	26.	2	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNO 303.980
3280 CROSS SECTION 303.98 EXTENDED .01 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 596.60 ELREA= 596.60

** D/S FACE RAILROAD BRIDGE

303.98	8.81	595.01	C.00	C.C0	595.30	.29	.01	.08	586.40
450.	0.	450.	0.	0.	104.	0.	2.	0.	586.50
.C7	0.00	4.32	0.00	.060	.045	.060	.045	586.20	458.00
.00 1612	26.	26.	26.	2	C	0	0.00	12.00	470.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNC 304.020
3280 CROSS SECTION 304.02 EXTENDED .4S FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.75	595.30	0.00	0.	450.	74.	74.	592.40	598.CC

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 598.00

304.02	9.29	595.49	0.C0	C.C0	595.75	.26	.45	0.00	586.40
45C.	0.	450.	0.	0.	110.	0.	3.	0.	586.50
.07	0.00	4.10	C.C0	.060	.045	.060	.045	586.20	458.00
.001393	34.	34.	34.	2	0	0	0.00	12.00	47C.0C

*SECNO 304.50C
3280 CROSS SECTICN 304.50 EXTENDED 3.35 FEET

SECNC	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST
304.50	9.55	595.75	0.00	0.00	595.78	.03	.01	.02	591.10
450.	71.	335.	44.	93.	229.	73.	3.	0.	592.50
.08	.76	1.46	.60	.06C	.045	.060	.045	586.20	425.00
.000152	32.	32.	32.	2	0	0	0.00	75.0C	5C0.00

CCHV= .150 CEHV= .350
*SECNO 304.98C
3280 CROSS SECTION 304.98 EXTENDED .78 FEET

** D/S FACE TELEGRAPH RD

304.98	9.57	595.77	0.00	C.CC	595.79	.01	.00	.00	592.50
450.	68.	344.	38.	214.	341.	130.	3.	1.	593.30
.09	.32	1.01	.29	.060	.045	.060	.044	586.20	400.00
.000073	32.	32.	32.	0	0	0	C.00	250.00	650.00

SPECIAL BRIDGE

SB	XK	XKCR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	225.00	10.CO	0.00	57.00	0.00	586.20	586.20

*SECNO 305.02C
3280 CROSS SECTION 305.02 EXTENDED .88 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.32	595.79	0.00	330.	120.	57.	57.	591.90	595.CO

305.02	9.67	595.87	0.00	0.00	595.88	.01	.10	0.00	592.50
450.	71.	338.	40.	226.	346.	138.	4.	1.	593.30
.11	.32	.98	.29	.060	.045	.060	.044	586.20	400.00
.000067	63.	63.	63.	1	0	4	0.00	250.00	65C.0C

*SECNC 306.000
3280 CROSS SECTICN 306.00 EXTENDED 2.98 FEET

306.00	9.68	595.88	0.00	0.00	595.89	.00	.00	.00	589.30
450.	121.	107.	222.	425.	140.	632.	5.	1.	589.90
.14	.28	.77	.35	.060	.045	.060	.044	586.20	0.00
.000036	50.	50.	50.	0	0	0	0.00	350.00	350.0C

*SECNC 310.000
3280 CROSS SECTICN 310.00 EXTENDED 1.41 FEET

310.00	8.41	595.91	0.00	0.00	595.92	.01	.03	.00	594.10
450.	28.	233.	189.	74.	208.	438.	16.	5.	594.60
.32	.37	1.12	.43	.060	.045	.060	.045	587.50	0.00
.000133	50C.	500.	500.	0	0	0	0.00	325.00	325.00

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED .83 FEET

SECNO	DEPTH	CHSEL	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
** D/S FACE SUB STATION RD									
310.98	7.93	595.93	0.00	C.CC	595.99	.05	.03	.03	594.90
450.	60.	374.	16.	133.	184.	52.	18.	6.	595.10
.34	.45	2.03	.31	.C60	.045	.060	.045	588.00	500.00
.000428	142.	142.	142.	1	0	0	0.00	300.00	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNO 311.020
3280 CROSS SECTION 311.02 EXTENDED .9C FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
596.61	595.99	0.00	269.	184.	83.	83.	594.40	595.50
311.02	8.00	596.00	0.00	0.00	596.05	.05	.06	0.00	594.90
450.	66.	365.	20.	144.	186.	60.	18.	6.	595.10
.34	.46	1.96	.33	.060	.045	.060	.045	588.00	500.00
.000392	16.	16.	16.	2	0	3	0.00	300.00	800.00

*SECNO 311.100
3280 CROSS SECTION 311.10 EXTENDED .72 FEET

311.10	7.83	596.03	0.00	0.00	596.07	.04	.02	.00	594.00
450.	149.	300.	1.	227.	162.	8.	19.	7.	595.80
.35	.66	1.85	.12	.060	.045	.060	.045	588.20	C.0C
.000386	50.	50.	50.	1	0	0	0.00	250.00	250.00

CCHV= .150 CEHV= .350
*SECNO 312.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 596.70 ELREA= 596.90

312.00	6.82	596.72	C.00	C.00	596.84	.12	.74	.03	596.70
450.	4.	446.	0.	15.	157.	0.	26.	12.	596.90
.47	.25	2.85	C.C0	.060	.045	.060	.045	589.90	359.88
.001150	1200.	1200.	1200.	2	0	0	0.00	125.71	485.59

*SECNO 312.100
3280 CROSS SECTICN 312.10 EXTENDED .72 FEET

312.10	6.61	597.41	0.00	0.00	597.57	.16	.72	.01	597.00
450.	17.	432.	1.	25.	132.	3.	28.	13.	597.20
.52	.70	3.28	.24	.060	.045	.060	.045	590.80	251.00
.001695	520.	520.	520.	2	0	0	0.00	100.78	351.78

CCHV= .200 CEHV= .400
*SECNO 312.980

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	XAL	XACH	XAR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.75	597.65	0.00	0.00	597.82	.17	.24	.00	597.10
450.	0.	450.	0.	0.	136.	0.	29.	13.	597.30
.53	0.00	3.31	0.00	.060	.045	.060	.045	590.90	294.00
.001674	142.	142.	142.	2	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .29 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.16	597.85	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.90 ELREA= 598.90

313.02	7.09	597.99	0.00	0.00	598.16	.17	.35	0.00	597.60
450.	0.	450.	0.	0.	135.	0.	29.	13.	597.70
.53	0.00	3.33	0.00	.060	.045	.060	.045	590.90	273.00
.001628	17.	17.	17.	2	0	0	0.00	30.00	303.00

*SECNO 313.100

313.10	6.65	598.05	0.00	0.00	598.26	.21	.08	.02	598.10
450.	0.	450.	0.	0.	122.	0.	29.	13.	598.20
.53	0.00	3.68	0.00	.060	.045	.060	.045	591.40	273.10
.002239	42.	42.	42.	1	0	0	0.00	29.69	302.79

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100yr.

00BREAK00

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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C
T1       HUD-FIA  H-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       FLAT CREEK  100 YEAR FLOW=450 CFS

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

      -1.        4.         0.         0.  0.000000       0.00       -1.0         0.    597.560      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

      0.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    200.000      0.000    150.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

NC       .060       .060       .045       .150       .350      0.000      0.000      0.000      0.000      0.000
QT      5.000    350.000    400.000    450.000    550.000    450.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      1.400      0.000      0.000      0.000      0.000

X1    312.100     11.000    294.000    326.000    520.000    520.000    520.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
GR    596.700    251.000    596.700    252.000    596.700    253.000    597.000    294.000    591.200    303.000
GR    590.800    309.000    591.000    313.000    593.300    316.000    597.200    326.000    597.400    350.000
GR    597.500    361.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
NC      0.000      0.000      0.000       .200       .400      0.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      7.100    100.000    471.000      0.000      0.000

        **  D/S FACE MINX RD - CORPORATE BDRY

X1    312.980     11.000    294.000    326.000    142.000    142.000    142.000      0.000       .100      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    598.200    598.200      0.000
GR    597.600    100.000    597.300    110.000    596.500    200.000    597.000    294.000    591.200    303.000
GR    590.800    309.000    591.000    313.000    593.300    316.000    597.200    326.000    597.900    400.000
GR    598.100    471.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
SB      0.000      1.300      2.700    350.000     14.610      0.000     89.100      0.000    590.900    590.900

X1    313.020     12.000    273.000    303.000     16.500     16.500     16.500      0.000      -.500      0.000
X2      0.000      0.000      1.000    597.000    598.900      0.000      0.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    598.900    598.900      0.000
GR    598.400     75.000    598.400    100.000    598.200    259.000    598.100    273.000    591.800    287.000
GR    591.400    290.000    591.500    296.000    596.100    300.000    598.200    303.000    598.200    400.000
GR    598.200    418.000    598.200    428.000      0.000      0.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      1.400      0.000      0.000      0.000      0.000
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X1	313.100	12.000	273.000	303.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	598.400	75.000	598.400	100.000	598.200	259.000	598.100	273.000	591.800	287.000
GR	591.400	290.000	591.500	296.000	596.100	300.000	598.200	303.000	598.200	400.000
GR	598.200	418.000	598.200	428.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.080	.080	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	313.200	0.000	0.000	0.000	690.000	690.000	690.000	0.000	1.400	0.000
X1	313.300	10.000	224.000	255.000	690.000	690.000	690.000	0.000	-1.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.500	0.000	0.000
GR	602.500	0.000	601.500	100.000	601.900	200.000	601.700	224.000	596.700	234.000
GR	595.600	240.000	596.100	247.000	602.400	255.000	602.500	300.000	602.600	400.000
X1	314.000	0.000	0.000	0.000	680.000	680.000	680.000	0.000	1.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	601.900	0.000	0.000
X1	314.100	0.000	0.000	0.000	850.000	850.000	850.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.400	0.000	0.000
X1	314.200	15.000	216.000	250.000	850.000	850.000	850.000	0.000	-1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	610.500	0.000	608.100	75.000	607.100	100.000	606.000	200.000	605.300	216.000
GR	600.200	225.000	600.200	230.000	600.000	235.000	607.700	250.000	606.200	300.000
GR	606.400	337.000	606.500	400.000	608.800	500.000	609.400	550.000	609.100	600.000
X1	315.000	0.000	0.000	0.000	850.000	850.000	850.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	315.100	0.000	0.000	0.000	555.000	555.000	555.000	0.000	.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	315.200	10.000	246.000	290.000	555.000	555.000	555.000	.710	-1.500	0.000
GR	609.600	170.000	609.600	171.000	609.600	200.000	609.900	220.000	609.500	246.000
GR	603.200	257.000	602.800	261.000	603.100	267.000	609.800	290.000	609.900	370.000
X1	315.900	0.000	0.000	0.000	560.000	560.000	560.000	0.000	1.500	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	315.000	340.000	370.000	450.000	370.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	170.000	370.000	0.000	0.000

** D/S FACE CRABB RD

X1	315.980	0.000	0.000	0.000	117.000	117.000	117.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	610.300	610.300	0.000
SB	0.000	1.400	2.900	150.000	8.750	0.000	52.500	0.000	602.700	602.700
X1	316.020	16.000	247.000	277.000	33.000	33.000	33.000	0.000	-.200	0.000
X2	0.000	0.000	1.000	608.700	611.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.700	611.700	0.000
GR	612.600	160.000	612.600	161.000	612.600	162.000	612.600	163.000	612.600	173.000

GR	612.600	190.000	612.500	200.000	612.500	204.000	610.600	212.000	609.300	247.000
GR	603.000	253.000	602.900	254.000	603.100	256.000	605.100	277.000	605.400	300.000
GR	610.000	360.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	316.100	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	316.200	11.000	50.000	76.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	611.900	0.000	609.200	10.000	609.000	45.000	608.500	50.000	602.500	56.000
GR	602.400	62.000	602.000	65.000	603.000	70.000	608.500	76.000	610.800	107.000
GR	615.800	150.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

** WOOD BRIDGE

X1	316.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.050	.070	.080	.100	.080	0.000	0.000	0.000	0.000
X1	316.300	10.000	410.000	446.000	220.000	220.000	220.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.900	0.000	0.000
GR	610.000	340.000	609.900	371.000	611.900	389.000	611.900	400.000	611.700	410.000
GR	603.500	428.000	603.500	432.000	610.600	446.000	610.800	500.000	610.800	516.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	340.000	516.000	0.000	0.000

** D/S FACE WOODSIDE DR

X1	316.980	10.000	410.000	446.000	130.000	130.000	130.000	0.000	1.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.900	609.900	0.000
GR	610.000	340.000	609.900	371.000	611.900	389.000	611.900	400.000	611.700	410.000
GR	603.500	428.000	603.500	432.000	610.600	446.000	610.800	500.000	610.800	516.000
SB	0.000	1.300	2.800	100.000	10.000	0.000	53.000	0.000	604.600	604.600
X1	317.020	11.000	383.000	420.000	28.000	28.000	28.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	609.900	612.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
GR	610.500	310.000	609.200	352.000	611.800	359.000	612.000	373.000	611.600	383.000
GR	605.400	398.000	605.400	399.000	604.700	401.000	604.700	405.000	613.700	420.000
GR	615.000	490.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.100	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
X1	317.150	11.000	383.000	420.000	250.000	250.000	250.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
GR	610.500	310.000	609.200	352.000	611.800	359.000	612.000	373.000	611.600	383.000
GR	605.400	398.000	605.400	399.000	604.700	401.000	604.700	405.000	613.700	420.000
GR	614.700	490.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	1.000	250.000	0.000	0.000

** D/S FACE GRAVEL DRIVEWAY

X1	317.180	9.000	115.000	145.000	70.000	70.000	70.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.700	608.700	0.000
GR	615.000	1.000	611.900	100.000	610.300	115.000	604.700	123.000	604.700	135.000
GR	610.300	145.000	612.000	165.000	612.800	200.000	614.100	250.000	0.000	0.000
SB	1.250	1.600	2.800	150.000	9.340	.500	35.340	0.000	604.700	604.700
X1	317.220	0.000	0.000	0.000	30.000	30.000	30.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	608.700	612.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.500	612.500	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.250	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	317.270	11.000	120.000	150.000	250.000	250.000	250.000	0.000	-.300	0.000
GR	616.000	20.000	610.800	120.000	608.000	122.000	606.300	125.000	606.000	135.000
GR	606.500	140.000	608.000	145.000	612.000	150.000	612.500	155.000	612.700	236.000
GR	615.000	270.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	20.000	270.000	0.000	0.000

** D/S FACE PRIVATE DR

X1	317.280	0.000	0.000	0.000	75.000	75.000	75.000	0.000	.600	0.000
SB	0.000	1.250	2.600	165.000	15.000	0.000	79.500	0.000	606.300	606.300
X1	317.320	0.000	0.000	0.000	15.000	15.000	15.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	611.600	612.600	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.340	0.000	0.000	0.000	60.000	60.000	60.000	0.000	-.200	0.000
X1	317.400	11.000	75.000	109.000	240.000	240.000	240.000	0.000	0.000	0.000
GR	615.000	45.000	613.500	75.000	610.600	78.000	606.400	84.000	606.400	95.000
GR	609.000	103.000	612.000	106.000	612.700	109.000	613.200	150.000	613.900	200.000
GR	615.000	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

** PRIVATE DRIVE ACRCSS CREEK

X1	317.450	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.150	.200	.250	.350	.250	0.000	0.000	0.000	0.000
X1	318.000	15.000	586.000	616.000	460.000	460.000	460.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.800	515.000	619.800	516.000	618.800	528.000	617.200	535.000	614.100	541.000
GR	613.900	550.000	613.900	586.000	609.000	597.000	607.800	600.000	606.600	602.000
GR	606.500	604.000	606.800	607.000	611.600	616.000	611.300	685.000	611.300	686.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	515.000	686.000	0.000	0.000

** D/S FACE PRIVATE DRIVE

X1	318.080	0.000	0.000	0.000	100.000	100.000	100.000	0.000	.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.200	2.600	0.000	14.000	0.000	79.800	0.000	607.000	607.000
X1	318.120	0.000	0.000	0.000	18.000	18.000	18.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	612.700	613.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BT	9.000	0.000	614.600	0.000	10.000	614.200	0.000	28.000	613.800	0.000
BT	29.000	614.500	0.000	42.000	615.500	0.000	52.000	614.900	0.000	53.000
BT	613.500	0.000	100.000	613.300	0.000	150.000	614.300	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	318.150	13.000	597.000	605.000	150.000	150.000	150.000	0.000	-.300	0.000
GR	619.800	512.000	619.800	513.000	618.800	528.000	617.200	535.000	614.100	541.000
GR	613.900	550.000	613.900	586.000	612.500	597.000	607.700	597.100	607.300	601.000
GR	607.500	604.900	612.500	605.000	613.300	682.000	0.000	0.000	0.000	0.000

** ABANCONED BRIDGE - STEEL BEAMS ACROSS CREEK

X1	319.160	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X5	-5.000	.010	.010	.010	.020	.010	0.000	0.000	0.000	0.000
X1	318.200	15.000	586.000	616.000	30.000	30.000	30.000	0.000	.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.800	515.000	619.800	516.000	618.800	528.000	617.200	535.000	614.100	541.000
GR	613.900	550.000	613.900	586.000	609.000	597.000	607.800	600.000	606.600	602.000
GR	606.500	604.000	606.600	607.000	611.600	616.000	611.300	685.000	611.300	686.000

** PRIVATE DRIVE

X1	318.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.120	.150	.200	.250	.200	0.000	0.000	0.000	0.000
X1	318.300	0.000	0.000	0.000	325.000	325.000	325.000	0.000	.400	0.000

** PRIVATE DRIVE

X1	319.350	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.080	.100	.120	.150	0.000	0.000	0.000	0.000	0.000
QT	5.000	265.000	315.000	335.000	390.000	335.000	0.000	0.000	0.000	0.000
X1	319.000	11.000	704.000	735.000	275.000	275.000	275.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	616.900	0.000	0.000
GR	615.600	630.000	616.900	684.000	616.600	697.000	616.100	704.000	609.700	716.000
GR	608.600	717.000	608.700	720.000	608.800	722.000	610.200	727.000	614.500	735.000
GR	615.000	810.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	319.100	16.000	630.000	667.000	450.000	450.000	450.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	618.300	554.000	618.300	555.000	618.300	556.000	618.300	557.000	618.000	581.000
GR	617.700	590.000	617.400	599.000	617.500	614.000	616.900	630.000	615.500	635.000

GR	609.100	640.000	608.800	646.000	609.000	653.000	614.100	667.000	613.900	700.000
GR	613.900	727.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	554.000	727.000	0.000	0.000

** D/S FACE CORL RD

X1	319.980	16.000	640.000	660.000	140.000	140.000	140.000	0.000	1.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.900	614.900	0.000
GR	618.300	554.000	618.300	555.000	618.300	556.000	618.300	557.000	618.000	581.000
GR	617.700	590.000	617.400	599.000	617.500	614.000	616.900	620.000	615.500	627.000
GR	609.100	640.000	608.800	650.000	609.000	660.000	614.100	680.000	613.900	700.000
GR	613.900	727.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.600	0.000	12.000	0.000	57.600	0.000	610.100	610.100
X1	320.020	0.000	0.000	0.000	21.000	21.000	21.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	614.900	615.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.500	615.500	0.000
BT	11.000	758.000	618.000	0.000	767.000	617.600	0.000	770.000	616.500	0.000
BT	774.000	616.500	0.000	774.100	617.800	0.000	789.900	617.600	0.000	790.000
BT	616.100	0.000	800.000	615.800	0.000	900.000	615.500	0.000	1000.000	615.900
BT	0.000	1200.000	618.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	320.100	16.000	535.000	565.000	40.000	40.000	40.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	618.600	0.000	0.000
GR	616.100	460.000	616.100	461.000	616.100	462.000	616.100	463.000	615.900	484.000
GR	615.400	490.000	618.200	500.000	618.600	516.000	618.100	532.000	617.900	535.000
GR	610.000	544.000	609.800	549.000	609.900	556.000	615.500	565.000	614.900	600.000
GR	614.600	640.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	320.900	9.000	5.000	36.000	400.000	400.000	400.000	0.000	0.000	0.000
GR	620.300	0.000	620.100	5.000	611.900	18.000	610.100	21.000	609.700	24.000
GR	610.100	29.000	615.700	36.000	616.500	100.000	616.700	180.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	330.000	510.000	0.000	0.000

** D/S FACE TEMPERANCE RD

X1	320.980	9.000	450.000	478.000	110.000	110.000	110.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	616.350	616.350	0.000
GR	616.900	330.000	616.700	365.000	615.500	425.000	613.000	450.000	610.200	455.000
GR	610.200	465.000	618.000	478.000	623.300	490.000	623.400	510.000	0.000	0.000
SB	0.000	1.650	2.700	0.000	6.160	0.000	42.530	0.000	610.200	610.200
X1	321.020	15.000	319.000	352.000	55.000	55.000	55.000	0.000	-.400	0.000
X2	0.000	0.000	1.000	616.000	617.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	617.900	617.900	0.000
BT	7.000	0.000	617.900	0.000	100.000	618.500	0.000	200.000	619.500	0.000
BT	300.000	620.700	0.000	400.000	621.700	0.000	460.000	622.800	0.000	510.000
BT	623.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	614.900	233.000	614.900	234.000	614.900	235.000	615.500	300.000	615.600	319.000
GR	610.600	327.000	610.600	331.000	610.700	337.000	612.000	343.000	614.500	352.000
GR	614.800	362.000	623.300	383.000	624.000	400.000	624.300	435.000	624.500	436.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000

XI	322.000	10.000	319.000	343.000	30.000	30.000	30.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	619.300	619.300	0.000
GR	616.000	99.000	615.500	100.000	614.700	200.000	615.500	300.000	615.600	319.000
GR	610.600	327.000	610.600	331.000	610.700	337.000	612.000	343.000	614.500	352.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	550.000	800.000	0.000	0.000

** D/S FACE RAILROAD BRIDGE

X1	322.980	10.000	689.000	697.000	20.000	20.000	20.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.000	620.000	0.000
GR	622.800	550.000	619.600	673.000	614.900	683.000	610.800	689.000	610.700	692.000
GR	610.700	695.000	610.700	697.000	616.500	700.000	618.200	706.000	623.900	800.000
SB	0.000	1.600	2.900	150.000	7.000	0.000	39.200	0.000	610.700	610.700
X1	323.020	9.000	346.000	354.000	33.000	33.000	33.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	616.300	624.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	624.000	624.000	0.000
GR	620.000	275.000	615.300	300.000	615.000	337.000	611.000	346.000	610.800	350.000
GR	611.000	354.000	616.900	366.000	618.600	400.000	621.200	500.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	323.100	9.000	300.000	366.000	30.000	30.000	30.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	624.000	624.000	0.000
GR	620.000	275.000	615.300	300.000	615.000	337.000	611.000	346.000	610.800	350.000
GR	611.000	353.000	616.900	366.000	618.600	400.000	621.200	500.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000

X1	324.000	11.000	189.000	217.000	120.000	120.000	120.000	0.000	0.000	0.000
GR	618.000	100.000	617.200	126.000	616.600	140.000	615.600	189.000	610.900	197.000
GR	610.800	200.000	611.100	202.000	614.100	216.000	616.700	217.000	617.500	260.000
GR	619.000	300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	324.300	0.000	0.000	0.000	200.000	200.000	200.000	0.000	.500	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	875.000	1055.000	0.000	0.000

** D/S FACE TEMPERANCE RD

X1	324.480	7.000	950.000	980.000	125.000	125.000	125.000	0.000	0.000	0.000
GR	618.200	875.000	616.700	950.000	612.600	960.000	611.700	965.000	612.100	969.000
GR	615.000	980.000	618.000	1055.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.650	2.600	180.000	5.920	0.000	31.380	0.000	611.700	611.700
X1	324.520	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	617.000	618.800	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	324.600	8.000	960.000	969.000	13.000	13.000	13.000	0.000	0.000	0.000
GR	618.200	875.000	616.700	950.000	616.400	960.000	612.600	960.100	611.700	965.000
GR	612.100	968.900	616.400	969.000	618.400	1055.000	0.000	0.000	0.000	0.000

** WALK BRIDGE

X1	324.650	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.001	.001	.002	.003	.002	0.000	0.000	0.000	0.000
NC	0.000	0.000	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	325.000	13.000	383.000	413.000	235.000	235.000	235.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.200	250.000	619.200	251.000	619.200	252.000	619.200	253.000	619.200	254.000
GR	616.000	383.000	612.200	393.000	612.100	396.000	612.400	402.000	617.800	413.000
GR	617.400	415.000	617.500	425.000	618.500	475.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	200.000	410.000	0.000	0.000

** D/S FACE WASHINGTON ST

X1	325.980	10.000	288.000	312.000	175.000	175.000	175.000	0.000	0.000	0.000
GR	618.000	200.000	616.700	283.000	616.600	288.000	613.200	295.000	612.200	296.000
GR	612.100	300.000	612.100	304.000	612.200	307.000	617.100	312.000	618.500	410.000
SB	0.000	1.700	2.600	210.000	6.570	0.000	26.280	0.000	612.100	612.100
X1	326.020	0.000	0.000	0.000	34.000	34.000	34.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	616.100	618.700	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	326.500	11.000	356.000	390.000	110.000	110.000	110.000	0.000	-.100	0.000
GR	621.400	200.000	619.500	222.000	618.700	265.000	617.300	300.000	616.600	356.000
GR	613.900	366.000	612.900	370.000	612.300	380.000	612.600	382.000	617.500	390.000
GR	617.600	410.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	200.000	410.000	0.000	0.000

** D/S FACE PRIVATE DR

X1	326.980	0.000	0.000	0.000	130.000	130.000	130.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.900	2.700	195.000	5.540	0.000	16.060	0.000	612.300	612.300
X1	327.020	0.000	0.000	0.000	43.000	43.000	43.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.200	616.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	327.500	0.000	0.000	0.000	180.000	180.000	180.000	0.000	.400	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	160.000	240.000	280.000	390.000	280.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	600.000	815.000	0.000	0.000

** D/S FACE LEWIS RD

X1	327.980	8.000	705.000	737.000	210.000	210.000	210.000	0.000	0.000	0.000

X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.100	620.100	0.000
GR	618.900	600.000	617.500	705.000	613.700	715.000	613.200	721.000	613.200	727.000
GR	616.000	732.000	617.000	737.000	618.200	815.000	0.000	0.000	0.000	0.000
SB	0.000	1.550	2.700	215.000	12.000	0.000	51.600	0.000	613.200	613.200
X1	328.020	0.000	0.000	0.000	33.000	33.000	33.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	617.500	620.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.500	620.500	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	328.100	14.000	218.000	245.000	90.000	90.000	90.000	0.000	0.000	0.000
GR	620.000	100.000	619.500	139.000	619.500	140.000	619.000	184.000	619.600	206.000
GR	618.600	218.000	613.400	225.000	613.000	230.000	613.800	234.000	618.900	245.000
GR	618.700	269.000	618.500	300.000	618.500	325.000	620.000	350.000	0.000	0.000
X1	329.000	10.000	225.000	255.000	1400.000	1400.000	1400.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.100	125.000	620.100	151.000	620.100	200.000	620.400	225.000	614.200	233.000
GR	614.000	237.000	614.300	242.000	620.900	255.000	619.700	300.000	619.800	375.000
X1	329.100	0.000	0.000	0.000	825.000	825.000	825.000	0.000	.100	0.000

** PRIVATE DRIVE

X1	329.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.001	.001	.002	.004	.002	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .86 FEET

SECNO	DEPTH	CHSEL	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	XNP	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST
312.10	6.76	597.56	0.00	597.56	597.70	.14	0.00	0.00	597.00
450.	23.	424.	3.	31.	136.	7.	0.	0.	597.20
0.00	.75	3.11	.36	.060	.045	.060	0.000	590.80	251.00
.001457	520.	520.	520.	0	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED .07 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.86	597.76	0.00	0.00	597.92	.16	.21	.01	597.10
450.	0.	450.	0.	0.	140.	0.	1.	0.	597.30
.01	0.00	3.22	0.00	.060	.045	.060	.045	590.90	294.00
.001531	142.	142.	142.	0	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .41 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.28	597.95	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.90 ELREA= 598.90

313.02	7.21	598.11	0.00	0.00	598.28	.16	.35	0.00	597.60
450.	0.	450.	0.	0.	139.	0.	1.	0.	597.70

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     .01      0.00      3.24      0.00      .060      .045      .060      .044    590.90    273.00
  .001493      17.       17.       17.         2         0         0      0.00     30.00    303.00


*SECNC 313.100
   313.10      6.76    598.16      0.00      0.00    598.36       .20       .07       .01    598.10
     450.        0.      450.        0.        0.      126.        0.        1.        0.    598.20
      .02       .12      3.58      0.00      .060      .045      .060      .044    591.40    263.14
  .002064       42.       42.       42.         1         0         0      0.00     39.82    302.96


CCHV=     .150 CEHV=     .350
*SECNO 313.200
3280 CROSS SECTION     313.20 EXTENDED        .09 FEET


   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLCSS    BANK ELEV
   Q         QLCB      QCH       QRCB      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


   313.20      6.88    599.68      0.00      0.00    599.67       .18      1.50       .00    599.50
     450.        1.      447.        2.        5.      129.       11.        3.        2.    599.60
      .07       .16      3.46       .18      .080      .050      .080      .049    592.80    188.02
  .002298      690.      690.      690.         2         0         0      0.00    239.98    428.00


*SECNO 313.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       600.50 ELREA=       601.00

   313.30      6.78    600.98      0.00      0.00    601.08       .11      1.21       .01    600.30
     450.       58.      392.        0.      120.      140.        0.        6.        6.    601.00
      .15       .48      2.80      0.00      .080      .050      .080      .049    594.20     12.17
  .001372      690.      690.      690.         2         0         0      0.00    242.80    254.97


*SECNO 314.000
   314.00      6.47    602.07      0.00      0.00    602.22       .16      1.12       .02    601.70
     450.       24.      426.        0.       59.      130.        0.       10.       10.    602.40
      .21       .40      3.27      0.00      .080      .050      .080      .049    595.60     43.41
  .002019      680.      680.      680.         2         0         0      0.00    211.17    254.58


*SECNC 314.100
   314.10      6.58    603.68      0.00      0.00    603.82       .14      1.60       .00    603.20
     450.       36.      414.        0.       81.      134.        0.       14.       14.    603.90
      .29       .44      3.09      0.00      .080      .050      .080      .050    597.10     31.53
  .001750      850.      850.      850.         2         0         0      0.00    223.19    254.73


*SECNO 314.200

3265 DIVIDED FLOW


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       603.80 ELREA=       606.20

   314.20      6.61    605.11      0.00      0.00    605.25       .14      1.43       .00    603.80
     450.       17.      433.        0.       32.      142.        0.       17.       17.    606.20
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      .37       .52      3.05      0.00      .080      .050      .080      .050    598.50    144.39
  .001618      850.      850.      850.         2         0         0      0.00    103.49    250.00

*SECNO 315.000

3265 DIVIDED FLOW

   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      XLCBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      605.30 ELREA=      607.70

   315.00      6.53    606.53      0.00      0.00    606.68       .15      1.42       .00    605.30
     450.       14.      436.        0.       27.      139.        0.       21.       19.     607.70
      .45       .52      3.12      0.00      .080      .050      .080      .050    600.00    151.50
  .001727      850.      850.      850.         1         0         0      0.00     96.23    250.00

*SECNO 315.100

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      606.20 ELREA=      608.60

   315.10      6.58    607.48      0.00      0.00    607.62       .14       .94       .00    606.20
     450.       15.      435.        0.       29.      141.        0.       23.       20.     608.60
      .50       .52      3.09      0.00      .080      .050      .080      .050    600.90    148.32
  .001678      555.      555.      555.         1         0         0      0.00     99.47    250.00

*SECNO 315.200
3280 CROSS SECTION     315.20 EXTENDED       .37 FEET

   315.20      7.17    608.47      0.00      0.00    608.64       .16      1.01       .01    608.00
     450.        6.      443.        1.       16.      136.        7.       25.       22.     608.30
      .55       .38      3.27       .20      .080      .050      .080      .050    601.30    170.00
  .001972      555.      555.      555.         2         0         0      0.00    142.00    312.00

*SECNO 315.900

3265 DIVIDED FLOW

3280 CROSS SECTION     315.90 EXTENDED       .09 FEET

   315.90      6.89    609.69      0.00      0.00    609.89       .19      1.24       .01    609.50
     450.        1.      449.        0.        3.      127.        0.       27.       23.     609.80
      .59       .18      3.54      0.00      .080      .050      .080      .050    602.80    170.00
  .002510      560.      560.      560.         2         0         0      0.00     65.60    254.94


CCHV=     .400 CEHV=     .800
*SECNO 315.980
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3280 CROSS SECTION 315.98 EXTENDED .52 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 610.30 ELREA= 610.30

** D/S FACE CRABB RD

315.98	7.32	610.02	0.00	0.00	610.13	.11	.21	.03	609.40
370.	0.	370.	0.	0.	140.	0.	27.	23.	609.70
.60	0.00	2.64	0.00	.080	.050	.080	.050	602.70	223.96
.001250	117.	117.	117.	2	0	0	0.00	31.24	255.20

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNC 316.020
3280 CROSS SECTION 316.02 EXTENDED 1.25 FEET

SECNO	DEPTH	CHSEL	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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.10	610.09	0.00	0.	370.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.70 ELREA= 611.70

316.02	8.35	611.05	0.00	0.00	611.10	.05	.97	0.00	609.10
370.	0.	370.	0.	0.	206.	0.	27.	24.	604.90
.61	0.00	1.80	0.00	.080	.050	.080	.050	602.70	247.00
.000337	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
3280 CROSS SECTION 316.10 EXTENDED 1.12 FEET

316.10	8.22	611.12	0.00	0.00	611.13	.01	.01	.02	609.30
370.	8.	198.	164.	41.	202.	340.	28.	24.	605.10
.63	.20	.98	.48	.080	.050	.080	.050	602.90	209.82
.000097	50.	50.	50.	2	0	0	0.00	150.18	360.00

CCHV= .150 CEHV= .350
*SECNO 316.200

316.20	9.11	611.11	0.00	0.00	611.14	.04	.01	.01	608.50

370.	43.	309.	18.	89.	187.	46.	28.	24.	608.50
.64	.48	1.65	.39	.080	.050	.080	.050	602.00	2.94
.000276	50.	50.	50.	2	0	0	0.00	106.71	109.64

*SECNO 316.250
WATER EL=X5 CARD= 611.187

** WOOD BRIDGE

316.25	9.19	611.19	0.00	0.00	611.22	.03	.00	.00	608.50
370.	45.	306.	19.	93.	190.	48.	28.	24.	608.50
.64	.48	1.62	.40	.080	.050	.080	.050	602.00	2.64
.000261	1.	1.	1.	0	0	0	0.00	107.69	110.33

*SECNO 316.300
3280 CROSS SECTION 316.30 EXTENDED 1.25 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.90 ELREA= 610.60

316.30	7.76	611.26	0.00	0.00	611.34	.08	.10	.02	611.70
370.	0.	357.	13.	0.	156.	37.	30.	24.	610.60
.67	0.00	2.29	.37	.080	.050	.080	.050	603.50	411.00
.000920	220.	220.	220.	0	0	0	0.00	105.00	516.00

*SECNO 316.980
3265 DIVIDED FLOW

3280 CROSS SECTION 316.98 EXTENDED .29 FEET

SECNO	DEPTH	CHSEL	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

** D/S FACE WOODSIDE DR

316.98	6.79	611.39	0.00	0.00	611.52	.14	.17	.02	612.80
370.	4.	366.	0.	11.	123.	0.	30.	25.	611.70
.68	.38	2.97	0.00	.080	.050	.080	.050	604.60	340.00
.001896	130.	130.	130.	2	0	0	0.00	66.75	445.38

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNO 317.020
3280 CROSS SECTION 317.02 EXTENDED 1.77 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
612.37	611.51	0.00	28.	339.	53.	53.	609.90	612.00
317.02	7.57	612.17	0.00	0.00	612.21	.04	.69	0.00	611.50
370.	89.	281.	0.	124.	156.	0.	30.	25.	613.60
.68	.71	1.80	0.00	.080	.050	.080	.050	604.60	310.00
.000562	28.	28.	28.	2	0	2	0.00	107.62	417.62

*SECNO 317.100
3280 CROSS SECTION 317.10 EXTENDED 1.69 FEET

317.10	7.49	612.19	0.00	0.00	612.24	.04	.02	.00	611.60
370.	86.	284.	0.	118.	153.	0.	30.	25.	613.70
.69	.73	1.85	0.00	.080	.050	.080	.050	604.70	310.00
.000602	40.	40.	40.	2	0	0	0.00	107.49	417.49

*SECNO 317.150
3280 CROSS SECTION 317.15 EXTENDED 1.84 FEET

317.15	7.64	612.34	0.00	0.00	612.38	.04	.14	.00	611.60
370.	91.	279.	0.	129.	158.	0.	32.	25.	613.70
.74	.70	1.76	0.00	.080	.050	.080	.050	604.70	310.00
.000529	250.	250.	250.	0	0	0	0.00	107.73	417.73

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	7.67	612.37	0.00	0.00	612.43	.06	.03	.01	610.30
370.	9.	349.	11.	23.	180.	28.	32.	25.	610.30
.75	.41	1.94	.41	.080	.050	.080	.050	604.70	84.67
.000448	70.	70.	70.	0	0	0	0.00	96.95	181.62

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.09	612.44	.01	193.	188.	35.	35.	608.70	612.50
317.22	8.34	613.04	0.00	0.00	613.07	.04	.65	0.00	610.30
370.	18.	329.	23.	50.	200.	61.	33.	26.	610.30
.75	.37	1.64	.38	.080	.050	.080	.050	604.70	63.69
.000280	30.	30.	30.	2	0	4	0.00	145.43	209.12

*SECNO 317.250

317.25	8.15	613.05	0.00	0.00	613.09	.04	.01	.00	610.50
370.	16.	335.	19.	41.	194.	50.	33.	26.	610.50
.76	.38	1.73	.38	.080	.050	.080	.050	604.90	69.49
.000320	50.	50.	50.	0	0	0	0.00	132.83	202.13

CCHV= .150 CEHV= .350

*SECNO 317.270

317.27	7.44	613.14	0.00	0.00	613.18	.04	.08	.00	610.50
370.	28.	318.	24.	67.	184.	77.	35.	27.	611.70
.81	.42	1.73	.31	.080	.050	.080	.050	605.70	69.39
.000352	250.	250.	250.	1	0	0	0.00	177.42	246.81

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	6.86	613.16	0.00	0.00	613.22	.06	.03	.01	611.10
370.	19.	347.	5.	41.	167.	24.	35.	27.	612.30
.82	.46	2.08	.20	.080	.050	.080	.050	606.30	80.35
.000578	75.	75.	75.	0	0	0	0.00	158.05	238.40

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNO 317.320

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.58	613.22	0.00	181.	191.	80.	79.	611.60	612.60
317.32	6.91	613.21	0.00	0.00	613.27	.06	.05	0.00	611.10
370.	19.	345.	6.	43.	168.	28.	35.	27.	612.30
.82	.45	2.05	.21	.080	.050	.080	.050	606.30	79.49
.000556	15.	15.	15.	2	0	4	0.00	159.57	239.06

*SECNO 317.340

SECNO	DEPTH	CHSEL	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	XLCBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
317.34	7.15	613.25	0.00	0.00	613.30	.05	.03	.00	610.90
370.	23.	334.	13.	53.	175.	50.	36.	27.	612.10
.83	.44	1.91	.27	.080	.050	.080	.050	606.10	74.99
.000455	60.	60.	60.	0	0	0	0.00	167.53	242.52

*SECNO 317.400

317.40	6.97	613.37	0.00	0.00	613.45	.07	.14	.01	613.50
370.	0.	365.	5.	0.	167.	18.	37.	28.	612.70
.86	0.00	2.19	.28	.080	.050	.080	.050	606.40	75.13
.000754	240.	240.	240.	0	0	0	0.00	86.98	162.11

*SECNO 317.450
WATER EL=X5 CARD= 613.622

** PRIVATE DRIVE ACROSS CREEK

317.45	7.22	613.62	0.00	0.00	613.69	.06	.00	.00	613.50
370.	0.	359.	11.	0.	175.	34.	37.	28.	612.70
.86	.07	2.05	.32	.080	.050	.080	.050	606.40	72.56
.000622	1.	1.	1.	0	0	0	0.00	107.60	180.15

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 2.61 FEET

318.00	7.41	613.91	0.00	0.00	613.95	.03	.26	.00	613.90
370.	0.	239.	131.	1.	137.	173.	40.	29.	611.60
.95	.03	1.74	.76	.080	.050	.080	.050	606.50	549.33
.000511	460.	460.	460.	2	0	0	0.00	136.67	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 2.17 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.40 ELREA= 612.10

** C/S FACE PRIVATE DRIVE

318.08	6.97	613.97	0.00	0.00	614.02	.05	.06	.01	614.40
370.	0.	254.	116.	0.	124.	142.	40.	29.	612.10
.97	0.00	2.05	.82	.080	.050	.080	.050	607.00	586.96
.000772	100.	100.	100.	0	0	0	0.00	99.04	686.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.33 FEET

SECNO	DEPTH	CHSEL	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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.37	614.02	0.00	110.	262.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

318.12	7.13	614.13	0.00	0.00	614.17	.04	.15	0.00	614.40
370.	0.	248.	122.	0.	129.	152.	40.	29.	612.10
.97	0.00	1.93	.80	.080	.050	.080	.050	607.00	586.62
.000666	18.	18.	18.	2	0	0	0.00	99.39	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED 1.27 FEET

318.15	7.27	614.27	0.00	0.00	614.35	.08	.17	.01	612.20
370.	36.	175.	159.	44.	56.	129.	41.	30.	612.20
.99	.81	3.09	1.24	.080	.050	.080	.050	607.00	540.09
.002298	150.	150.	150.	2	0	0	0.00	141.91	682.00

*SECNO 318.160
WATER EL=X5 CARD= 614.279
3280 CROSS SECTION 318.16 EXTENDED 1.28 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	7.28	614.28	0.00	0.00	614.36	.08	.00	.00	612.20
370.	36.	174.	160.	45.	57.	129.	41.	30.	612.20
.99	.81	3.08	1.24	.080	.050	.080	.050	607.00	540.07
.002265	1.	1.	1.	0	0	0	0.00	141.93	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 2.15 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.80 ELREA= 612.50

318.20	6.95	614.35	0.00	0.00	614.40	.05	.04	.00	614.80
370.	0.	255.	115.	0.	123.	140.	41.	30.	612.50
1.00	0.00	2.06	.82	.080	.050	.080	.050	607.40	587.02
.000791	30.	30.	30.	0	0	0	0.00	98.98	686.00

*SECNO 318.250
WATER EL=X5 CARD= 614.553
3280 CROSS SECTION 318.25 EXTENDED 2.35 FEET

** PRIVATE DRIVE

318.25	7.15	614.55	0.00	0.00	614.59	.04	.00	.00	614.80
370.	0.	247.	123.	C.	129.	154.	41.	30.	612.50
1.00	0.00	1.91	.79	.080	.050	.080	.050	607.40	586.56
.000649	1.	1.	1.	0	0	0	0.00	99.45	686.00

*SECNC 318.300
3280 CROSS SECTION 318.30 EXTENDED 2.19 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
318.30	6.98	614.78	0.00	0.00	614.82	.05	.23	.00	615.20
370.	C.	253.	117.	C.	125.	143.	44.	31.	612.90
1.05	0.00	2.03	.82	.080	.050	.080	.050	607.80	586.93
.000761	325.	325.	325.	0	0	0	0.00	99.07	686.00

*SECNO 318.350
WATER EL=X5 CARD= 614.897
3280 CROSS SECTION 318.35 EXTENDED 2.30 FEET

** PRIVATE DRIVE

318.35	7.10	614.90	0.00	C.00	614.94	.04	.00	.00	615.20
370.	0.	249.	121.	0.	128.	150.	44.	31.	612.90
1.05	0.00	1.95	.80	.080	.050	.080	.050	607.80	586.68
.000684	1.	1.	1.	0	0	0	0.00	99.32	686.00

*SECNO 319.000
3280 CROSS SECTION 319.00 EXTENDED .12 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 616.90 ELREA= 614.50

319.00	6.52	615.12	0.00	C.00	615.24	.12	.27	.03	616.10
335.	0.	324.	11.	0.	116.	28.	45.	31.	614.50
1.08	0.00	2.80	.38	.080	.050	.080	.050	608.60	705.84
.001614	275.	275.	275.	2	0	0	0.00	104.16	810.00

*SECNC 319.100
3280 CROSS SECTION 319.10 EXTENDED 1.67 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.90 ELREA= 614.10

319.10	6.77	615.57	0.00	0.00	615.62	.04	.37	.01	616.90
335.	0.	281.	54.	0.	159.	97.	47.	32.	614.10
1.16	0.00	1.76	.56	.080	.050	.080	.050	608.80	634.74
.000491	450.	450.	450.	2	0	0	0.00	92.26	727.00

*SECNO 319.980
3280 CROSS SECTION 319.98 EXTENDED .44 FEET

** D/S FACE CORL RD

319.98	5.54	615.64	0.00	0.00	615.70	.07	.08	.01	610.40
335.	24.	255.	56.	28.	108.	74.	48.	33.	610.30
1.18	.84	2.36	.76	.080	.050	.080	.050	610.10	629.36
.000662	140.	140.	140.	2	0	0	0.00	97.64	727.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.020
3280 CROSS SECTION 320.02 EXTENDED .73 FEET

SECNO	DEPTH	CHSEL	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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.32	615.70	0.00	92.	240.	58.	58.	614.90	615.50

320.02	5.83	615.93	0.00	0.00	615.99	.06	.28	0.00	610.40
335.	24.	246.	65.	31.	114.	94.	48.	33.	610.30
1.18	.77	2.16	.69	.080	.050	.080	.050	610.10	628.76
.000517	21.	21.	21.	2	0	2	0.00	98.24	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.36 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	6.15	615.95	0.00	0.00	616.02	.08	.03	.01	617.90

335.	0.	290.	45.	0.	123.	75.	48.	33.	615.5C
1.19	0.C0	2.36	.61	.080	.050	.080	.050	609.80	537.21
.001041	40.	40.	40.	C	0	0	0.00	102.79	64C.00

*SECNO 320.900

320.90	6.73	616.43	0.00	C.CC	616.57	.13	.52	.02	620.10
335.	C.	327.	8.	0.	110.	22.	50.	34.	615.70
1.23	0.00	2.98	.39	.080	.050	.080	.050	609.70	10.81
.001706	400.	400.	400.	2	0	0	0.00	83.97	94.78

CCHV= .400 CEHV= .800

*SECNO 320.980

** D/S FACE TEMPERANCE RD

320.98	6.46	616.66	0.00	0.00	616.72	.06	.12	.03	613.00
335.	66.	269.	0.	94.	125.	0.	50.	34.	618.00
1.24	.70	2.16	0.00	.080	.050	.080	.050	610.20	367.17
.000732	110.	110.	110.	2	0	0	0.00	108.59	475.76

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNO 321.020

3280 CROSS SECTION 321.02 EXTENDED 3.68 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
618.25	616.72	0.00	7.	328.	43.	36.	616.00	617.90

321.02	7.98	618.18	0.00	C.CC	618.18	.01	1.47	0.00	615.20
335.	110.	203.	22.	285.	215.	57.	50.	34.	614.10
1.26	.39	.94	.38	.080	.050	.080	.050	610.20	233.00
.000089	55.	55.	55.	0	0	4	0.00	138.35	371.35

*SECNO 322.00C

3280 CROSS SECTICN 322.00 EXTENDED 3.68 FEET

SECNO	DEPTH	ChSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLCBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 619.30 ELREA= 619.30

322.00	7.57	618.17	0.CC	0.00	618.24	.07	.01	.05	615.60

335.	0.	335.	0.	0.	157.	0.	51.	34.	612.00
1.27	0.00	2.13	0.00	.080	.050	.080	.050	610.60	319.00
.000496	30.	30.	30.	1	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNO 322.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.98	7.27	617.97	0.00	0.00	618.49	.52	.02	.22	610.80
335.	0.	335.	0.	0.	58.	0.	51.	34.	610.70
1.27	0.00	5.78	0.00	.080	.050	.080	.050	610.70	689.00
.005072	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.90	150.00	7.00	0.00	39.20	0.00	610.70	610.70

*SECNO 323.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
619.78	618.50	0.00	0.	335.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.02	8.71	619.41	0.00	0.00	619.78	.37	1.30	0.00	610.90
335.	0.	335.	0.	0.	69.	0.	51.	34.	610.90
1.27	0.00	4.86	0.00	.080	.050	.080	.050	610.70	346.00
.003070	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNO 323.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.10	9.08	619.88	0.00	0.00	619.90	.01	.01	.11	615.30
335.	0.	335.	0.	0.	377.	0.	51.	34.	616.90
1.28	0.00	.89	0.00	.080	.050	.080	.050	610.80	300.00
.000092	30.	30.	30.	2	0	0	0.00	66.00	366.00

CCHV= .150 CEHV= .350
*SECNO 324.000
3280 CROSS SECTION 324.00 EXTENDED 1.90 FEET

324.00	9.10	619.90	0.00	0.00	619.91	.01	.01	.00	615.60
335.	101.	181.	52.	288.	205.	186.	52.	35.	616.70
1.33	.35	.89	.28	.080	.050	.080	.050	610.80	100.00

.000073	120.	120.	120.	2	0	0	0.00	200.00	300.00

*SECNO 324.300
3280 CROSS SECTION 324.30 EXTENDED 1.42 FEET

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	XLCBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
324.30	8.61	619.91	0.00	C.CO	619.93	.01	.02	.00	616.10
335.	95.	197.	43.	245.	191.	146.	55.	35.	617.20
1.41	.39	1.03	.30	.080	.050	.080	.050	611.30	100.00
.000107	200.	200.	200.	0	0	0	0.00	200.00	300.00

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 1.93 FEET

** D/S FACE TEMPERANCE RD

324.48	8.23	619.93	0.00	0.00	619.94	.01	.01	.00	616.70
335.	57.	179.	98.	186.	194.	257.	57.	36.	615.00
1.46	.31	.92	.38	.080	.050	.080	.050	611.70	875.00
.000085	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 2.00 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.85	619.94	0.0C	282.	53.	31.	31.	617.00	618.80
324.52	8.30	620.00	0.00	C.CO	620.00	.01	.07	0.00	616.70
335.	59.	177.	99.	192.	196.	263.	58.	36.	615.00
1.48	.31	.90	.38	.080	.050	.080	.050	611.70	875.00
.000080	50.	50.	50.	0	0	5	0.00	180.00	1055.00

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED 1.80 FEET

324.60	8.30	620.00	0.00	0.00	620.01	.02	.00	.01	616.40
335.	107.	123.	104.	226.	71.	223.	58.	36.	616.40
1.48	.48	1.73	.47	.080	.030	.080	.050	611.70	875.00
.000181	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=X5 CARD= 619.998
3280 CROSS SECTION 324.65 EXTENDED 1.80 FEET

** WALK BRIDGE

324.65	8.30	620.00	0.00	0.00	620.02	.02	.00	.00	616.40
335.	107.	123.	104.	226.	71.	223.	58.	36.	616.40
1.48	.48	1.73	.47	.080	.030	.080	.050	611.70	875.00
.000181	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED 1.54 FEET

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	IOC	ICONT	CORAR	TOPWID	ENDST
325.00	7.94	620.04	0.00	0.00	620.05	.01	.03	.00	616.00
335.	110.	182.	42.	318.	184.	133.	61.	37.	617.80
1.58	.35	.99	.32	.080	.050	.080	.050	612.10	250.00
.000108	235.	235.	235.	0	0	0	0.00	225.00	475.00

CCHV= .200 CEHV= .400
*SECNO 325.980
3280 CROSS SECTION 325.98 EXTENDED 2.07 FEET

** D/S FACE WASHINGTON ST

325.98	7.96	620.06	0.00	0.00	620.07	.01	.02	.00	616.60
335.	95.	164.	76.	243.	158.	222.	64.	38.	617.10
1.65	.39	1.04	.34	.080	.050	.080	.050	612.10	200.00
.000117	175.	175.	175.	0	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COEJ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 326.020
3280 CROSS SECTION 326.02 EXTENDED 2.12 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
624.35	620.07	0.00	297.	39.	26.	26.	616.10	618.70

326.02	8.01	620.11	0.00	0.00	620.12	.01	.05	0.00	616.60
335.	95.	162.	77.	248.	159.	228.	64.	38.	617.10
1.66	.39	1.02	.34	.080	.050	.080	.050	612.10	200.00
.000111	34.	34.	34.	0	0	5	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 2.63 FEET

326.50	7.93	620.13	0.00	0.00	620.14	.01	.01	.00	616.50
335.	111.	206.	18.	313.	210.	54.	66.	39.	617.40
1.70	.36	.98	.33	.080	.050	.080	.050	612.20	213.59
.000103	110.	110.	110.	0	0	0	0.00	196.41	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.54 FEET

** D/S FACE PRIVATE DR

326.98	7.84	620.14	0.00	0.00	620.15	.01	.01	.00	616.60
335.	109.	208.	18.	300.	207.	52.	67.	40.	617.50
1.75	.36	1.01	.34	.080	.050	.080	.050	612.30	214.60
.000110	130.	130.	130.	0	0	0	0.00	195.40	410.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.58 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
632.98	620.15	0.00	316.	19.	16.	16.	615.20	616.80

327.02	7.87	620.17	0.00	0.00	620.18	.01	.03	0.00	616.60
335.	110.	207.	18.	306.	209.	53.	68.	40.	617.50
1.77	.36	.99	.34	.080	.050	.080	.050	612.30	214.17
.000107	43.	43.	43.	1	0	5	0.00	195.83	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 2.19 FEET

327.50	7.49	620.19	0.00	0.00	620.21	.01	.02	.00	617.00
335.	99.	220.	16.	252.	195.	45.	70.	41.	617.90
1.82	.39	1.13	.36	.080	.050	.080	.050	612.70	218.63
.000150	180.	180.	180.	0	0	0	0.00	191.37	410.00

CCHV= .300 CEHV= .500
*SECNO 327.980
3280 CROSS SECTION 327.98 EXTENDED 2.02 FEET

** D/S FACE LEWIS RD

327.98	7.03	620.23	0.00	0.00	620.23	.01	.02	.00	617.50
280.	60.	152.	68.	212.	176.	204.	73.	41.	617.00
1.92	.28	.86	.33	.080	.050	.080	.050	613.20	600.00
.000093	210.	210.	210.	0	0	0	0.00	215.00	815.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.020
3280 CROSS SECTION 328.02 EXTENDED 2.50 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.94	620.27	0.00	52.	229.	52.	52.	617.50	620.50

328.02	7.50	620.70	0.00	0.00	620.70	.00	.47	0.00	617.50
280.	68.	139.	72.	263.	191.	242.	73.	42.	617.00
1.94	.26	.73	.30	.080	.050	.080	.050	613.20	600.00
.000059	33.	33.	33.	0	0	3	0.00	215.00	815.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED .70 FEET

328.10	7.70	620.70	0.00	0.00	620.71	.01	.01	.00	618.60
280.	43.	162.	75.	152.	148.	202.	74.	42.	618.90
1.97	.29	1.10	.37	.080	.050	.080	.050	613.00	100.00

.000162	90.	90.	50.	0	0	0	0.00	250.00	350.00

*SECNO 329.000
3280 CROSS SECTION 329.00 EXTENDED 1.23 FEET

SECNO	DEPTH	CHSEL	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
329.00	7.03	621.03	0.00	0.00	621.05	.02	.33	.01	620.40
280.	30.	201.	50.	89.	136.	128.	88.	50.	620.90
2.31	.33	1.47	.39	.080	.050	.080	.050	614.00	125.00
.000379	1400.	1400.	1400.	3	0	0	0.00	250.00	375.00

*SECNO 329.100
3280 CROSS SECTION 329.10 EXTENDED 1.41 FEET

329.10	7.21	621.31	0.00	0.00	621.33	.02	.27	.00	620.50
280.	35.	188.	56.	107.	142.	150.	95.	55.	621.00
2.53	.33	1.33	.38	.080	.050	.080	.050	614.10	125.00
.000293	825.	825.	825.	2	0	0	0.00	250.00	375.00

*SECNO 329.250
WATER EL=X5 CARD= 621.310
3280 CROSS SECTION 329.25 EXTENDED 1.41 FEET

** PRIVATE DRIVE

329.25	7.21	621.31	0.00	0.00	621.33	.02	.00	.00	620.50
280.	35.	188.	56.	107.	142.	150.	95.	55.	621.00
2.53	.33	1.33	.38	.080	.050	.080	.050	614.10	125.00
.000293	1.	1.	1.	0	0	0	0.00	250.00	375.00

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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T1       HUD-FIA  F-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       FLAT CREEK  100 YEAR FLOW=450 CFS ENCROACHMENT OPTION

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       -1.        6.         0.         0.  0.000000       0.00       -1.0         0.    597.560      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     15.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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*PROF 2

CCHV=    .150 CEHV=    .350
*SECNO 312.100
 2800 NAT Q1=    117.90  WSEL=    597.56  ENC Q1=    117.90  WSEL=    597.66  RATIO=   .0000
 NAT Q1=    124.  RATIOS LOB,CH,RCB=   .0605   .9291   .0103  WSEL=    597.66
3280 CROSS SECTION    312.10 EXTENDED       .86 FEET

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


3470 ENCROACHMENT STATIONS=     277.0     326.0  TYPE=     4  TARGET=        .052
   312.10     6.76   597.56     0.00   597.56   597.72      .16     0.00     0.00   597.00
     450.       7.     443.       0.      11.     136.       0.       0.       0.    597.20
     0.00      .71     3.24     0.00     .060     .045     .060    0.000   590.80   276.99
  .001613     520.     520.     520.        0        0        0     0.00    49.01   326.00


CCHV=    .200 CEHV=    .400
*SECNO 312.980

3470 ENCROACHMENT STATIONS=     100.0     471.0  TYPE=     1  TARGET=     371.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      598.20 ELREA=      598.20

          **  D/S FACE MINX RD - CORPORATE BDRY

   312.98     6.88   597.78     0.00   597.76   597.94      .16      .22      .00   597.10
     450.       0.     450.       0.       0.     141.       0.       0.       0.    597.30
      .01     0.00     3.20     0.00     .060     .045     .060     .045   590.90   294.00
  .001506     142.     142.     142.        0        0        0     0.00    32.00   326.00


SPECIAL BRIDGE

SB  XK        XKCR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.30      2.70    350.00     14.61      0.00     89.10      0.00    590.90    590.90

*SECNO 313.020
3280 CROSS SECTION    313.02 EXTENDED       .44 FEET

PRESSURE FLOW

 EGPRS      EGLWC      H3       QWEIR      QPR       BAREA   TRAPEZOID      ELLC     ELTRD
                                                              AREA
   598.30    597.97     0.00        0.      450.       89.       89.      597.00    598.90


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      598.90 ELREA=      598.90
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   313.02      7.24    598.14      0.00    598.11    598.30       .16       .36      0.00    597.60
     450.        0.      450.        0.        0.      140.        0.        1.        0.     597.70
      .01      0.00      3.22      0.00      .060      .045      .060      .044    590.90    273.00
  .001468        17.       17.       17.         2         0         0      0.00     30.00    303.00


*SECNO 313.100
 2800 NAT Q1=      99.04  WSEL=    598.16  ENC Q1=     102.66  WSEL=    598.26  RATIO=  -.0365
 NAT Q1=    103.  RATIOS LOB,CH,ROB=    .0013    .9956    .0031  WSEL=    598.26

3470 ENCROACHMENT STATIONS=      273.0     303.0  TYPE=      4  TARGET=         .004
   313.10      6.79    598.19      0.00    598.16    598.39       .20       .07       .01    598.10
     450.        0.      450.        0.        0.      126.        0.        1.        0.     598.20
      .C2      0.00      3.57      0.00      .060      .045      .060      .044    591.40    273.00
  .002055        42.       42.       42.         2         0         0      0.00     29.98    302.98


CCHV=     .150 CEHV=     .350
*SECNO 313.200
 2800 NAT Q1=      93.88  WSEL=    599.68  ENC Q1=      96.68  WSEL=    599.78  RATIO=  -.0298
 NAT Q1=     99.  RATIOS LOB,CH,ROB=    .0074    .9789    .0138  WSEL=    599.78
3280 CROSS SECTION    313.20 EXTENDED        .11 FEET


   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QRCB      ALOB      ACH       ARCB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLCBR     ITRIAL    ICC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      273.0     303.0  TYPE=      4  TARGET=         .021
   313.20      6.91    599.71      0.00    599.68    599.9C       .19      1.51       .00    599.50
     45C.        0.      450.        0.        0.      130.        0.        3.        1.     599.60
      .07      0.CO      3.47      0.00      .08C      .050      .080      .049    592.80    273.00
  .002336       690.      690.      690.         2         0         0      0.00     30.00    303.00


*SECNO 313.300
 2800 NAT Q1=     121.47  WSEL=    600.98  ENC Q1=     121.47  WSEL=    601.08  RATIO=   .0000
 NAT Q1=    130.  RATIOS LOB,CH,ROB=    .1545    .8453    .0002  WSEL=    601.08

3470 ENCROACHMENT STATIONS=      116.1     255.0  TYPE=      4  TARGET=         .064
   313.30      6.84    601.04      0.00    600.98    601.16       .12      1.25       .01    600.30
     450.       41.      409.        0.       75.      142.        0.        5.        2.     601.00
      .14       .55      2.88      0.00      .080      .050      .080      .049    594.20    116.06
  .001441       690.      690.      690.         2         0         0      0.00    138.94    255.00


*SECNO 314.000
 2800 NAT Q1=     100.16  WSEL=    602.07  ENC Q1=     100.16  WSEL=    602.17  RATIO=  0.0000
 NAT Q1=    106.  RATIOS LOB,CH,ROB=    .0753    .9247  0.0000  WSEL=    602.17

3470 ENCROACHMENT STATIONS=      165.8     255.C  TYPE=      4  TARGET=         .058
   314.00      6.56    602.16      0.00    602.07    602.33       .17      1.16       .02    601.70
     450.        8.      442.        0.       19.      133.        0.        8.        4.     602.40
      .20       .40      3.33      0.00      .08C      .05C      .080      .049    595.60    165.81
  .002042       680.      680.      680.         1         0         0      0.00     88.88    254.69
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*SECNC 314.100
 2800 NAT Q1=     107.59  WSEL=     603.68  ENC Q1=     107.59  WSEL=     603.78  RATIO=  0.0000
 NAT Q1=     115.  RATIOS LOB,CH,ROB=    .1048    .8952  0.0000  WSEL=     603.78

3470 ENCROACHMENT STATIONS=      137.7      255.0  TYPE=      4  TARGET=         .060

   314.10      6.69    603.79      0.00    603.68    603.93       .14      1.60       .00    603.20
    450.       22.     428.         0.      44.      137.         0.       12.         6.     603.90
     .28       .49      3.12       0.00     .080      .050       .080      .050     597.10    137.73
  .001741     850.     850.       850.        2         0          0      0.00     117.13    254.86


*SECNO 314.200
 2800 NAT Q1=     111.87  WSEL=     605.11  ENC Q1=     111.87  WSEL=     605.21  RATIO=   .0000
 NAT Q1=     117.  RATIOS LOB,CH,ROB=    .0466    .9534  0.0000  WSEL=     605.21

3470 ENCROACHMENT STATIONS=      214.0      250.0  TYPE=      4  TARGET=         .042

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      603.80 ELREA=      606.20

   314.20      6.72    605.22      0.00    605.11    605.36       .15      1.43       .00    603.80
    450.        2.     448.         0.       3.      145.         0.       15.         7.     606.20
     .36       .66      3.09       0.00     .080      .050       .080      .050     598.50    213.96
  .001619     850.     850.       850.        2         0          0      0.00      34.12    248.08


*SECNO 315.000
 2800 NAT Q1=     108.29  WSEL=     606.53  ENC Q1=     108.29  WSEL=     606.63  RATIO=  0.0000
 NAT Q1=     113.  RATIOS LOB,CH,ROB=    .0391    .9609  0.0000  WSEL=     606.63
   SECNO     DEPTH     CWSEL     CRITS     WSELK      EG         HV         HL         OLOSS    BANK ELEV
   Q         VLOB      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=      215.9      250.0  TYPE=      4  TARGET=         .039

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      605.30 ELREA=      607.70

   315.00      6.63    606.63      0.00    606.53    606.79       .15      1.42       .00    605.30
    450.        0.     450.         0.       0.      143.         0.       18.         8.     607.70
     .43       .18      3.16       0.00     .080      .050       .080      .050     600.00    215.87
  .001725     850.     850.       850.        2         0          0      0.00      32.04    247.92


*SECNC 315.100
 2800 NAT Q1=     109.87  WSEL=     607.48  ENC Q1=     110.00  WSEL=     607.58  RATIO=  -.0012
 NAT Q1=     115.  RATIOS LOB,CH,ROB=    .0434    .9566  0.0000  WSEL=     607.58

3470 ENCROACHMENT STATIONS=      216.0      250.0  TYPE=      4  TARGET=         .043

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      606.20 ELREA=      608.60

   315.10      6.70    607.60      0.00    607.48    607.75       .15       .96       .00    606.20
    450.        0.     450.         0.       0.      145.         0.       19.         8.     608.60
     .48       0.00     3.11       0.00     .080      .050       .080      .050     600.90    216.00
  .001745     555.     555.       555.        2         0          0      0.00      32.05    248.05


*SECNO 315.200
 2800 NAT Q1=     101.34  WSEL=     608.47  ENC Q1=     103.51  WSEL=     608.57  RATIO=  -.0215
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 NAT Q1=    107.  RATIOS LOB,CH,RCB=   .0205   .9715   .0081  WSEL=    608.57
3280 CROSS SECTION    315.20 EXTENDED       .51 FEET


3470 ENCROACHMENT STATIONS=      224.0     255.2  TYPE=     4  TARGET=        .029
   315.20      7.31   608.61      0.00   608.47   608.77      .16      1.02      .00   608.00
      450.       C.      450.       0.       C.      140.       0.       21.       9.    608.30
      .53      0.00      3.22      0.00     .080     .050     .080     .050   601.30   223.96
  .001920      555.      555.      555.        2        0        0     0.00    31.24   255.20

*SECNO 315.900
 2800 NAT Q1=      89.81  WSEL=    609.69  ENC Q1=     92.92  WSEL=    609.79  RATIO=  -.0346
 NAT Q1=     93.  RATIOS LOB,CH,RCB=   .0042   .9958  0.0000  WSEL=    609.79
3280 CROSS SECTION    315.90 EXTENDED       .19 FEET


3470 ENCROACHMENT STATIONS=      224.0     255.2  TYPE=     4  TARGET=        .004
   315.90      6.99   609.79      0.00   609.69   609.97      .19      1.20      .01   609.50
      450.       C.      450.       0.       0.      130.       0.       23.       9.    609.80
      .57      0.00      3.47      0.00     .080     .050     .080     .050   602.80   223.96
  .002386      560.      560.      560.        1        0        0     0.00    31.21   255.17


CCHV=    .400 CEHV=    .800
*SECNO 315.980
3280 CROSS SECTION    315.98 EXTENDED       .60 FEET


3470 ENCROACHMENT STATIONS=      170.0     370.0  TYPE=     1  TARGET=     200.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      610.30 ELREA=      610.30


          **  D/S FACE CRABB RD

   315.98      7.40   610.10      0.00   610.02   610.20      .10      .20      .03   609.40
      370.       C.      370.       0.       0.      143.       0.       23.       9.    609.70
      .59      0.00      2.60      0.00     .080     .050     .080     .050   602.70   223.96
  .001184      117.      117.      117.        2        0        0     0.00    31.24   255.20


SPECIAL BRIDGE

SB  XK        XKCR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00      1.40       2.90     150.00       8.75       0.00      52.50       0.00     602.70     602.70

*SECNO 316.020
3280 CROSS SECTION    316.02 EXTENDED       1.33 FEET

   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       ARCB      VOL       TWA    LEFT/RIGHT
   TIME      VLCB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLCBL     XLCH      XLOBR     ITRIAL    ICC       ICONT     CORAR     TOPWID      ENDST
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PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.18	610.17	0.00	0.	370.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.70 ELREA= 611.70

316.02	8.43	611.13	0.00	611.05	611.18	.05	.98	0.00	609.10
370.	0.	370.	0.	0.	208.	0.	23.	9.	604.90
.59	0.00	1.78	0.00	.080	.050	.080	.050	602.70	247.00
.000325	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
2800 NAT Q1= 376.09 WSEL= 611.12 ENC Q1= 376.09 WSEL= 611.22 RATIO= .0000
NAT Q1= 389. RATIOS LOB,CH,ROB= .0250 .5297 .4453 WSEL= 611.22
3280 CROSS SECTION 316.10 EXTENDED 1.19 FEET

3470 ENCROACHMENT STATIONS= 239.5 343.6 TYPE= 4 TARGET= .033

316.10	8.29	611.19	0.00	611.12	611.20	.01	.01	.02	609.30
370.	3.	203.	164.	13.	204.	316.	24.	9.	605.10
.61	.23	.99	.52	.080	.050	.080	.050	602.90	239.52
.000098	50.	50.	50.	2	0	0	0.00	104.10	343.62

CCHV= .150 CEHV= .350
*SECNO 316.200
2800 NAT Q1= 222.59 WSEL= 611.11 ENC Q1= 222.59 WSEL= 611.21 RATIO= .0000
NAT Q1= 230. RATIOS LOB,CH,ROB= .1216 .8260 .0524 WSEL= 611.21

3470 ENCROACHMENT STATIONS= 12.8 88.4 TYPE= 4 TARGET= .034

316.20	9.18	611.18	0.00	611.11	611.22	.04	.01	.01	608.50
370.	40.	317.	13.	80.	190.	28.	24.	9.	608.50
.62	.50	1.67	.48	.080	.050	.080	.050	602.00	12.78
.000279	50.	50.	50.	1	0	0	0.00	75.58	88.36

*SECNO 316.250
WATER EL=X5 CARD= 611.261
2800 NAT Q1= 228.82 WSEL= 611.19 ENC Q1= 228.82 WSEL= 611.29 RATIO= .0000
NAT Q1= 237. RATIOS LOB,CH,ROB= .1260 .8184 .0555 WSEL= 611.29

3470 ENCROACHMENT STATIONS= 12.4 89.4 TYPE= 4 TARGET= .034

** WOOD BRIDGE

316.25	9.26	611.26	0.00	611.19	611.30	.04	.00	.00	608.50
370.	41.	314.	15.	83.	191.	30.	24.	9.	608.50
.62	.50	1.64	.48	.080	.050	.080	.050	602.00	12.36
.000266	1.	1.	1.	0	0	0	0.00	77.07	89.43

*SECNO 316.300
2800 NAT Q1= 122.01 WSEL= 611.26 ENC Q1= 122.01 WSEL= 611.36 RATIO= .0000
NAT Q1= 128. RATIOS LOB,CH,ROB= 0.0000 .9526 .0474 WSEL= 611.36

3280 CROSS SECTION 316.30 EXTENDED 1.33 FEET

3470 ENCRCACHMENT STATIONS= 410.0 446.8 TYPE= 4 TARGET= .047

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.90 ELREA= 610.60

316.30	7.83	611.33	0.00	611.26	611.41	.08	.10	.02	611.70
370.	0.	370.	0.	0.	158.	1.	26.	10.	610.60
.65	0.00	2.33	.30	.080	.050	.080	.050	603.50	410.81
.000937	220.	220.	220.	2	0	0	0.00	35.98	446.80

*SECNO 316.980

3265 DIVIDED FLOW

3280 CROSS SECTION 316.98 EXTENDED .66 FEET

SECNO	DEPTH	CHSEL	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= 340.0 516.0 TYPE= 1 TARGET= 176.000

** D/S FACE WOODSIDE DR

316.98	6.86	611.46	0.00	611.39	611.59	.13	.16	.02	612.80
370.	6.	364.	0.	14.	126.	0.	26.	10.	611.70
.65	.42	2.90	0.00	.080	.050	.080	.050	604.60	340.00
.001780	130.	130.	130.	2	0	0	0.00	67.78	445.53

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNC 317.020
3280 CROSS SECTION 317.02 EXTENDED 1.81 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
612.45	611.59	0.00	36.	331.	53.	53.	609.90	612.00

317.02	7.61	612.21	0.00	612.17	612.25	.04	.66	0.00	611.50
370.	90.	280.	0.	127.	157.	0.	26.	10.	613.60
.66	.71	1.78	0.00	.080	.050	.080	.050	604.60	310.00
.000541	28.	28.	28.	2	0	2	0.00	107.69	417.69

*SECNO 317.100
2800 NAT Q1= 150.77 WSEL= 612.19 ENC Q1= 150.77 WSEL= 612.29 RATIO= .0000
NAT Q1= 158. RATIOS LOB,CH,ROB= .2415 .7585 0.0000 WSEL= 612.29
3280 CROSS SECTION 317.10 EXTENDED 1.74 FEET

3470 ENCROACHMENT STATIONS= 321.5 420.0 TYPE= 4 TARGET= .044

317.10	7.53	612.23	0.00	612.19	612.28	.05	.02	.00	611.60
370.	75.	295.	0.	99.	155.	0.	26.	10.	613.70
.67	.76	1.90	0.00	.080	.050	.080	.050	604.70	321.54
.000631	40.	40.	40.	0	0	0	0.00	96.02	417.56

*SECNO 317.150
2800 NAT Q1= 160.84 WSEL= 612.34 ENC Q1= 160.84 WSEL= 612.44 RATIO= .0000
NAT Q1= 168. RATIOS LOB,CH,ROB= .2532 .7468 0.0000 WSEL= 612.44
3280 CROSS SECTION 317.15 EXTENDED 1.88 FEET

3470 ENCROACHMENT STATIONS= 320.8 420.0 TYPE= 4 TARGET= .043

317.15	7.69	612.39	0.00	612.34	612.43	.04	.15	.00	611.60
370.	80.	290.	0.	110.	160.	0.	28.	11.	613.70
.71	.73	1.82	0.00	.080	.050	.080	.050	604.70	320.75
.000555	250.	250.	250.	1	0	0	0.00	97.04	417.80

CCHV= .400 CEHV= .800
*SECNO 317.180

3470 ENCROACHMENT STATIONS= 1.0 250.0 TYPE= 1 TARGET= 249.000

** D/S FACE GRAVEL DRIVEWAY

317.18	7.72	612.42	0.00	612.37	612.47	.05	.03	.01	610.30
370.	10.	348.	12.	24.	181.	30.	28.	11.	610.30
.72	.41	1.92	.41	.080	.050	.080	.050	604.70	83.16
.000433	70.	70.	70.	0	0	0	0.00	100.53	183.69

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	CWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.14	612.49	.01	188.	183.	35.	35.	608.70	612.50

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  317.22      8.35   613.05      0.00   613.04   613.08       .04       .61      0.00   610.30
    370.       19.     328.       23.      50.     200.       62.       28.       11.    610.30
     .73       .37     1.64       .38     .080     .050      .080      .050   604.70    63.35
 .000278       30.      30.       30.        2        0         4      0.00   146.17   209.52


*SECNO 317.250
 2800 NAT Q1=     206.89  WSEL=     613.05  ENC Q1=     206.89  WSEL=     613.15  RATIO=    .0000
 NAT Q1=     214.  RATIOS LOB,CH,ROB=    .0461    .8964    .0574  WSEL=     613.15

3470 ENCROACHMENT STATIONS=      103.8      161.1  TYPE=      4  TARGET=          .034
  317.25      8.16   613.06      0.00   613.05   613.11       .05       .02       .01   610.50
    370.       11.     344.       15.      22.     194.       30.       29.       11.    610.50
     .74       .49     1.77       .49     .080     .050      .080      .050   604.90   103.84
 .000336       50.      50.       50.        0        0         0      0.00    57.22   161.05


CCHV=     .150 CEHV=     .350
*SECNO 317.270
 2800 NAT Q1=     197.13  WSEL=     613.14  ENC Q1=     197.13  WSEL=     613.24  RATIO=    .0000
 NAT Q1=     206.  RATIOS LOB,CH,ROB=    .0798    .8454    .0748  WSEL=     613.24

3470 ENCROACHMENT STATIONS=      103.0      208.7  TYPE=      4  TARGET=          .045
  317.27      7.45   613.15      0.00   613.14   613.20       .05       .09       .00   610.50
    370.       21.     331.       18.      37.     184.       53.       30.       11.    611.70
     .78       .57     1.80       .34     .080     .050      .080      .050   605.70   102.98
 .000378      250.     250.      250.        0        0         0      0.00   105.73   208.71


*SECNO 317.280

3470 ENCROACHMENT STATIONS=       20.0      270.0  TYPE=      1  TARGET=      250.000

          **  D/S FACE PRIVATE DR

  317.28      6.87   613.17      0.00   613.16   613.24       .06       .03       .01   611.10
    370.       19.     346.        5.      41.     167.       26.       31.       12.    612.30
     .79       .45     2.07       .20     .080     .050      .080      .050   606.30    80.05
 .000570       75.      75.       75.        0        0         0      0.00   158.57   238.62


SPECIAL BRIDGE

SB  XK        XKCR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.25      2.60    165.00     15.00      0.00     79.50      0.00    606.30    606.30

*SECNO 317.320
PRESSURE AND WEIR FLOW


 EGPRS      EGLWC       H3        QWEIR      QPR       BAREA   TRAPEZOID      ELLC      ELTRD
                                                                 AREA
  613.59    613.24      0.00       183.      189.       80.       79.       611.60    612.60


  317.32      6.92   613.22      0.00   613.21   613.28       .06       .05      0.00   611.10
    370.       20.     344.        7.      43.     168.       30.       31.       12.    612.30
     .79       .45     2.04       .22     .080     .050      .080      .050   606.30    79.17
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  .000548      15.      15.      15.        2        0        4     0.00   160.14   239.30

*SECNO 317.340
 2800 NAT Q1=     173.54  WSEL=     613.25  ENC Q1=     173.54  WSEL=     613.35  RATIO=  0.0000
 NAT Q1=     182.  RATIOS LOB,CH,ROB=    .0673    .8865    .0462  WSEL=     613.35
   SECNO    DEPTH    CRSEL    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    ICC      ICONT    CORAR    TOPWID     ENDST


3470 ENCROACHMENT STATIONS=     106.4     186.9  TYPE=     4  TARGET=          .046
   317.34     7.16   613.26     0.00   613.25   613.32      .06      .03      .00   610.90
    370.       16.      346.       7.      27.      175.      24.      31.      12.    612.10
     .80       .60     1.97       .31     .080     .050     .080     .050   606.10   106.41
  .000487      60.      60.      60.        0        0        0     0.00    80.50   186.90

*SECNO 317.400
 2800 NAT Q1=     134.73  WSEL=     613.37  ENC Q1=     137.20  WSEL=     613.47  RATIO=  -.0183
 NAT Q1=     140.  RATIOS LOB,CH,ROB=  0.0000    .9806    .0194  WSEL=     613.47

3470 ENCROACHMENT STATIONS=      75.0     109.0  TYPE=     4  TARGET=          .019
   317.40     6.99   613.39     0.00   613.37   613.47      .08      .15      .01   613.50
    370.        0.      370.       0.       0.      168.      0.      32.      12.    612.70
     .83      0.00     2.20      0.00     .080     .050     .080     .050   606.40    75.10
  .000782      240.     240.     240.        0        0        0     0.00    33.90   109.00

*SECNO 317.450
 WATER EL=X5 CARD=   613.642
 2800 NAT Q1=     148.36  WSEL=     613.62  ENC Q1=     148.69  WSEL=     613.72  RATIO=  -.0022
 NAT Q1=     154.  RATIOS LOB,CH,ROB=    .0001    .9630    .0368  WSEL=     613.72

3470 ENCROACHMENT STATIONS=      75.0     109.0  TYPE=     4  TARGET=          .037

          **  PRIVATE DRIVE ACROSS CREEK

   317.45     7.24   613.64     0.00   613.62   613.71      .07      .00      .00   613.50
    370.        0.      370.       0.       0.      176.      0.      32.      12.    612.70
     .83      0.00     2.10      0.00     .080     .050     .080     .050   606.40    75.00
  .000681       1.       1.       1.        0        0        0     0.00    34.00   109.00

*SECNO 318.000
 2800 NAT Q1=     163.74  WSEL=     613.91  ENC Q1=     163.74  WSEL=     614.01  RATIO=   .0000
 NAT Q1=     172.  RATIOS LOB,CH,ROB=    .0011    .6379    .3610  WSEL=     614.01
3280 CROSS SECTION    318.00 EXTENDED      2.66 FEET


3470 ENCROACHMENT STATIONS=     586.0     679.0  TYPE=     4  TARGET=          .047
   318.00     7.46   613.96     0.00   613.91   613.99      .04      .28      .00   613.90
    370.        0.      249.      121.       0.      139.      157.      35.      13.    611.60
     .92      0.00     1.79       .77     .080     .050     .080     .050   606.50   586.00
  .000541      460.     460.     460.        2        0        0     0.00    93.01   679.01


*SECNO 318.080
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3280 CROSS SECTION 318.08 EXTENDED 2.22 FEET

3470 ENCROACHMENT STATIONS= 515.0 686.0 TYPE= 1 TARGET= 171.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	7.01	614.01	0.00	613.97	614.06	.05	.06	.00	614.40
370.	0.	252.	118.	0.	126.	145.	35.	13.	612.10
.94	0.00	2.01	.81	.080	.050	.080	.050	607.00	586.86
.000738	100.	100.	100.	0	0	0	0.00	99.14	686.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.36 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.41	614.06	0.00	117.	251.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

318.12	7.16	614.16	0.00	614.13	614.20	.04	.14	0.00	614.40
370.	0.	247.	123.	0.	130.	155.	35.	13.	612.10
.94	0.00	1.91	.79	.080	.050	.080	.050	607.00	586.54
.CC0646	18.	18.	18.	2	0	2	0.00	99.46	686.00

*SECNO 318.150
2800 NAT Q1= 77.18 WSEL= 614.27 ENC Q1= 77.18 WSEL= 614.37 RATIO= .0000
NAT Q1= 83. RATIOS LOB,CH,RCB= .1092 .4497 .4411 WSEL= 614.37
3280 CROSS SECTION 318.15 EXTENDED 1.29 FEET

3470 ENCROACHMENT STATIONS= 566.1 673.3 TYPE= 4 TARGET= .069

318.15	7.29	614.29	0.00	614.27	614.39	.09	.17	.02	612.20
370.	28.	184.	158.	29.	57.	119.	36.	13.	612.20
.96	.95	3.25	1.33	.080	.050	.080	.050	607.00	566.12

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  .002526      15C.      150.      150.         2         0         0     0.00    107.13    673.25

*SECNO 318.16C
 WATER EL=X5 CARC=    614.304
 2800 NAT Q1=      77.74  WSEL=     614.28  ENC Q1=      77.74  WSEL=     614.38  RATIO=    .0000
 NAT Q1=      84.  RATIOS LOB,CH,RCB=    .1103    .4476    .4421  WSEL=     614.38
3280 CROSS SECTICN     318.16 EXTENDED       1.3C FEET


3470 ENCROACHMENT STATIONS=      565.7      673.3  TYPE=      4  TARGET=         .069

          **  ABANCONED BRIDGE - STEEL BEAMS ACROSS CREEK

   318.16      7.30    614.30      0.00    614.28    614.40       .09       .00       .00    612.20
     370.       28.      183.       159.       3C.       57.       119.       36.       13.     612.20
      .96       .94      3.23      1.33      .080      .050      .080      .050    607.00    565.69
  .002490        1.        1.        1.         0         0         0     0.00    107.63    673.32

*SECNO 318.200
 2800 NAT Q1=     131.57  WSEL=     614.35  ENC Q1=     131.57  WSEL=     614.45  RATIO=    .0000
 NAT Q1=     138.  RATIOS LOB,CH,ROB=  0.0000    .6782    .3218  WSEL=     614.45
3280 CROSS SECTICN     318.20 EXTENDED       2.19 FEET


3470 ENCROACHMENT STATIONS=      586.0      677.1  TYPE=      4  TARGET=         .050
3495 OVERBANK AREA ASSUMED NCN-EFFECTIVE,ELLEA=       614.80 ELREA=       612.50

   318.20      6.99    614.39      0.00    614.35    614.44       .05       .04       .01    614.80
     370.        0.      266.       104.        0.      125.       123.       36.       13.     612.50
      .96      0.CO      2.14       .84      .C80      .050      .080      .050    607.40    586.92
  .000839       30.       30.       30.         2         0         0     0.00     90.15    677.07

*SECNO 318.250
 WATER EL=X5 CARC=    614.589
 2800 NAT Q1=     145.21  WSEL=     614.55  ENC Q1=     145.21  WSEL=     614.65  RATIO=    .0000
 NAT Q1=     152.  RATIOS LOB,CH,ROB=  0.0000    .6593    .3407  WSEL=     614.65
3280 CROSS SECTICN     318.25 EXTENDED       2.39 FEET


3470 ENCROACHMENT STATIONS=      586.0      678.5  TYPE=      4  TARGET=         .C45

          **  PRIVATE DRIVE

   318.25      7.19    614.59      0.00    614.55    614.63       .05       .00       .00    614.80
     370.        0.      257.       113.        0.      131.       139.       36.       13.     612.50
      .96      0.00      1.97       .81      .080      .050      .080      .050    607.40    586.47
  .000687        1.        1.        1.         C         0         0     0.00     92.03    678.50

*SECNO 318.30C
 2800 NAT Q1=     134.11  WSEL=     614.78  ENC Q1=     134.11  WSEL=     614.88  RATIO=   C.0000
 NAT Q1=     140.  RATICS LOB,CH,ROB=  0.0000    .6758    .3242  WSEL=     614.88
3280 CROSS SECTICN     318.30 EXTENDED       2.22 FEET
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   SECNO     DEPTH     CHSEL     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=      586.0      678.6  TYPE=      4  TARGET=          .043
   318.30      7.03    614.83      0.00    614.78    614.88       .05       .24       .00    615.20
     370.        0.       263.       107.        0.       126.       129.       38.       14.     612.90
     1.02      0.00      2.09       .83      .080      .050      .080      .050    607.80    586.85
  .000802       325.      325.       325.         1         0         0      0.00     91.71    678.57

*SECNO 318.350
 2800 NAT Q1=     141.43  WSEL=     614.90  ENC Q1=     141.43  WSEL=     615.00  RATIO=    .0000
 NAT Q1=     148.  RATIOS LOB,CH,ROB=  0.0000    .6644    .3356  WSEL=     615.00
3280 CROSS SECTION     318.35 EXTENDED       2.23 FEET


3470 ENCROACHMENT STATIONS=      586.0      678.3  TYPE=      4  TARGET=          .046

          **  PRIVATE DRIVE

   318.35      7.03    614.83      0.00    614.90    614.88       .05       .00       .00    615.20
     370.        0.       263.       107.        0.       126.       128.       38.       14.     612.90
     1.02      0.00      2.09       .83      .080      .050      .080      .050    607.80    586.84
  .000800         1.        1.         1.         0         0         0      0.00     91.41    678.25

*SECNO 319.000
 2800 NAT Q1=      83.38  WSEL=     615.12  ENC Q1=      83.80  WSEL=     615.22  RATIO=   -.0051
 NAT Q1=      88.  RATIOS LOB,CH,ROB=  0.0000    .9552    .0448  WSEL=     615.22
3280 CROSS SECTION     319.00 EXTENDED        .05 FEET


3470 ENCROACHMENT STATIONS=      704.0      735.0  TYPE=      4  TARGET=          .045

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       616.90 ELREA=       614.50

   319.00      6.49    615.09      0.00    615.12    615.22       .13       .31       .03    616.10
     335.        0.       335.        0.        0.       115.        0.       40.       15.     614.50
     1.04      0.00      2.91      0.00      .080      .050      .080      .050    608.60    705.90
  .001815       275.      275.       275.         2         0         0      0.00     29.10    735.00

*SECNO 319.100
 2800 NAT Q1=     151.15  WSEL=     615.57  ENC Q1=     151.15  WSEL=     615.67  RATIO=    .0000
 NAT Q1=     157.  RATIOS LOB,CH,ROB=  0.0000    .8284    .1716  WSEL=     615.67
3280 CROSS SECTION     319.10 EXTENDED       1.69 FEET


3470 ENCROACHMENT STATIONS=      630.0      714.6  TYPE=      4  TARGET=          .038

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       616.90 ELREA=       614.10

   319.10      6.78    615.58      0.00    615.57    615.63       .05       .40       .01    616.90
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     335.        0.      291.       44.        0.      160.       77.       41.       15.    614.10
     1.12      0.00      1.82       .57      .080      .050      .080      .050    608.80    634.68
  .000522      450.      450.      450.         1         0         0      0.00     79.90    714.58

*SECNO 319.980
3280 CROSS SECTICN    319.98 EXTENDED       1.75 FEET


3470 ENCRCACHMENT STATIONS=      554.0      727.0  TYPE=      1  TARGET=      173.000

          **  D/S FACE CORL RD

   319.98      5.55    615.65      0.00    615.64    615.72       .07       .08       .01    610.40
     335.       24.      255.       57.       28.      109.       75.       42.       15.     610.30
     1.14       .84      2.35       .76      .080      .050      .080      .050    610.10    629.33
  .000654      140.      140.      140.         2         0         0      0.00     97.67    727.00


SPECIAL BRIDGE

SB  XK          XKCR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
     0.00        1.30        2.60         0.00     12.00        0.00        57.60       0.00      610.10      610.10

*SECNO 320.020
3280 CROSS SECTION    320.02 EXTENDED       2.04 FEET
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST

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PRESSURE AND WEIR FLOW
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EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.33	615.72	0.00	96.	238.	58.	58.	614.90	615.50

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   320.02      5.84    615.94      0.00    615.93    616.00       .05       .28      0.00    610.40
     335.       24.      246.       65.       31.      114.       95.       42.       15.     610.30
     1.14       .77      2.15       .69      .080      .050      .080      .050    610.10    628.74
  .000513       21.       21.       21.         2         0         2      0.00     98.26    727.00


*SECNO 320.100
 2800 NAT Q1=     103.84  WSEL=     615.95  ENC Q1=     103.84  WSEL=     616.05  RATIO=  0.0000
 NAT Q1=     109.  RATIOS LOB,CH,ROB=  0.0000    .8517    .1483  WSEL=     616.05
3280 CROSS SECTICN    320.10 EXTENDED       1.35 FEET


3470 ENCROACHMENT STATIONS=      535.0      624.3  TYPE=      4  TARGET=         .046

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      618.60 ELREA=      615.50
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320.10	6.15	615.95	0.00	615.95	616.04	.09	.03	.01	617.90
335.	0.	303.	32.	0.	122.	54.	42.	16.	615.50
1.15	0.00	2.48	.59	.080	.050	.080	.050	609.80	537.22
.001142	40.	40.	40.	2	0	0	0.00	87.09	624.31

*SECNO 320.900
2800 NAT Q1= 81.11 WSEL= 616.43 ENC Q1= 81.76 WSEL= 616.53 RATIO= -.0080
NAT Q1= 85. RATIOS LOB,CH,RCB= 0.0000 .9650 .0350 WSEL= 616.53

3470 ENCROACHMENT STATIONS= 5.0 36.0 TYPE= 4 TARGET= .035

320.90	6.78	616.48	0.00	616.43	616.62	.14	.57	.02	620.10
335.	0.	335.	0.	0.	111.	0.	44.	16.	615.70
1.18	0.00	3.02	0.00	.080	.050	.080	.050	609.70	10.73
.001805	400.	400.	400.	1	0	0	0.00	25.27	36.00

CCHV= .400 CEHV= .800
*SECNO 320.980

3470 ENCROACHMENT STATIONS= 330.0 510.0 TYPE= 1 TARGET= 180.000

** D/S FACE TEMPERANCE RD

320.98	6.52	616.72	0.00	616.66	616.77	.06	.12	.03	613.00
335.	68.	267.	0.	99.	126.	0.	44.	16.	618.00
1.20	.69	2.12	0.00	.080	.050	.080	.050	610.20	362.12
.000695	110.	110.	110.	2	0	0	0.00	113.74	475.86

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNO 321.020
3280 CROSS SECTION 321.02 EXTENDED 3.72 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
618.31	616.78	0.00	9.	326.	43.	36.	616.00	617.90

321.02	8.01	618.21	0.00	618.18	618.22	.01	1.45	0.00	615.20
335.	111.	202.	22.	288.	216.	58.	45.	16.	614.10
1.22	.39	.94	.38	.080	.050	.080	.050	610.20	233.00
.000087	55.	55.	55.	0	0	4	0.00	138.44	371.44

*SECNO 322.000
2800 NAT Q1= 150.41 WSEL= 618.17 ENC Q1= 153.65 WSEL= 618.27 RATIO= -.0215
NAT Q1= 154. RATIOS LOB,CH,RCB= 0.0000 1.0000 0.0000 WSEL= 618.27
3280 CROSS SECTION 322.00 EXTENDED 3.71 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV

Q	QLOB	QCH	QROB	ALCB	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= 319.0 343.0 TYPE= 4 TARGET= 0.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 619.30 ELREA= 619.30

322.00	7.61	618.21	0.00	618.17	618.28	.07	.01	.05	615.60
335.	0.	335.	0.	0.	158.	0.	45.	16.	612.00
1.22	0.00	2.12	0.00	.080	.050	.080	.050	610.60	319.00
.000670	30.	30.	30.	1	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNO 322.980

3470 ENCROACHMENT STATIONS= 550.0 800.0 TYPE= 1 TARGET= 250.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.98	7.31	618.01	0.00	617.97	618.53	.51	.03	.22	610.80
335.	0.	335.	0.	0.	58.	0.	45.	16.	610.70
1.23	0.00	5.74	0.00	.080	.050	.080	.050	610.70	689.00
.004987	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.90	150.00	7.00	0.00	39.20	0.00	610.70	610.70

*SECNO 323.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
619.83	618.54	0.00	0.	335.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 624.00 ELREA= 624.00

323.02	8.77	619.47	0.00	619.41	619.83	.36	1.30	0.00	610.90
335.	0.	335.	0.	0.	69.	0.	45.	16.	610.90
1.23	0.00	4.83	0.00	.080	.050	.080	.050	610.70	346.00
.003024	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNO 323.100
2800 NAT Q1= 349.64 WSEL= 619.88 ENC Q1= 359.85 WSEL= 619.98 RATIO= -.0292
NAT Q1= 360. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 619.98

3470 ENCROACHMENT STATIONS= 300.0 366.0 TYPE= 4 TARGET= 0.000

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3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      624.00 ELREA=      624.00

   323.10      9.13   619.93      0.00   619.88   619.94      .01      .01      .11   615.30
     335.        0.     335.        0.       0.     380.       0.      45.      16.    616.90
     1.24      0.00      .88      0.00     .080     .050     .080     .050   610.80   300.00
  .000103       30.      30.       30.        2        0        0     0.00    66.00   366.00


CCHV=     .150 CEHV=     .350
*SECNO 324.000
 2800 NAT Q1=     392.80  WSEL=     619.90  ENC Q1=     392.80  WSEL=     620.00  RATIO=    .0000
 NAT Q1=     408.  RATIOS LOB,CH,ROB=    .3059    .5332    .1609  WSEL=     620.00
3280 CROSS SECTION     324.00 EXTENDED       1.94 FEET


3470 ENCROACHMENT STATIONS=      110.9      277.2  TYPE=      4  TARGET=         .037
   324.00      9.15   619.95      0.00   619.90   619.95      .01      .01      .00   615.60
     335.       99.     187.       49.     269.     206.     159.      47.      17.    616.70
     1.29       .37      .91       .31     .080     .050     .080     .050   610.80   110.91
  .000076      120.     120.      120.        0        0        0     0.00   166.27   277.18


*SECNO 324.300
 2800 NAT Q1=     323.47  WSEL=     619.91  ENC Q1=     323.47  WSEL=     620.01  RATIO=    .0000
 NAT Q1=     337.  RATIOS LOB,CH,ROB=    .2880    .5767    .1353  WSEL=     620.01
3280 CROSS SECTION     324.30 EXTENDED       1.46 FEET


   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


3470 ENCROACHMENT STATIONS=      114.4      268.4  TYPE=      4  TARGET=         .040
   324.30      8.66   619.96      0.00   619.91   619.97      .01      .02      .00   616.10
     335.       93.     203.       39.     225.     193.     117.      49.      18.    617.20
     1.36       .41     1.05       .34     .080     .050     .080     .050   611.30   114.42
  .000112      200.     200.      200.        0        0        0     0.00   154.01   268.43


CCHV=     .400 CEHV=     .800
*SECNO 324.480
3280 CROSS SECTION     324.48 EXTENDED       1.97 FEET


3470 ENCROACHMENT STATIONS=      875.0     1055.0  TYPE=      1  TARGET=      180.000

          **  D/S FACE TEMPERANCE RD

   324.48      8.28   619.98      0.00   619.93   619.99      .01      .01      .00   616.70
     335.       58.     178.       99.     189.     195.     260.      51.      18.    615.00
     1.41       .31      .91       .38     .080     .050     .080     .050   611.70   875.00
  .000082      125.     125.      125.        0        0        0     0.00   180.00  1055.00
```

SPECIAL BRIDGE

SB	XK	XKCR	CCFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNC 324.520
3280 CROSS SECTION 324.52 EXTENDED 2.05 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.90	619.99	0.00	285.	53.	31.	31.	617.00	618.80

324.52	8.34	620.04	0.00	620.00	620.05	.01	.06	0.00	616.70
335.	59.	176.	99.	195.	198.	266.	52.	18.	615.00
1.43	.30	.89	.37	.080	.050	.080	.050	611.70	875.00
.000077	50.	50.	50.	0	0	6	0.00	180.00	1055.00

*SECNO 324.600
2800 NAT Q1= 248.73 WSEL= 620.00 ENC Q1= 248.73 WSEL= 620.10 RATIO= 0.0000
NAT Q1= 260. RATIOS LOB,CH,ROB= .3251 .3588 .3161 WSEL= 620.10
3280 CROSS SECTION 324.60 EXTENDED 1.85 FEET

3470 ENCROACHMENT STATIONS= 885.0 1042.8 TYPE= 4 TARGET= .045

324.60	8.34	620.04	0.00	620.00	620.06	.02	.00	.01	616.40
335.	106.	127.	102.	210.	72.	206.	52.	18.	616.40
1.44	.50	1.78	.50	.080	.030	.080	.050	611.70	884.96
.000189	13.	13.	13.	0	0	0	0.00	157.85	1042.81

*SECNO 324.650
WATER EL=X5 CARD= 620.044
2800 NAT Q1= 248.75 WSEL= 620.00 ENC Q1= 248.75 WSEL= 620.10 RATIO= .0000
NAT Q1= 261. RATIOS LOB,CH,ROB= .3251 .3586 .3162 WSEL= 620.10
3280 CROSS SECTION 324.65 EXTENDED 1.84 FEET

3470 ENCROACHMENT STATIONS= 885.1 1042.6 TYPE= 4 TARGET= .046

** WALK BRIDGE

324.65	8.34	620.04	0.00	620.00	620.07	.02	.00	.00	616.40
335.	105.	127.	102.	210.	72.	205.	52.	18.	616.40
1.44	.50	1.78	.50	.080	.030	.080	.050	611.70	885.12
.000190	1.	1.	1.	0	0	0	0.00	157.51	1042.63

*SECNC 325.000
2800 NAT Q1= 322.95 WSEL= 620.04 ENC Q1= 322.95 WSEL= 620.14 RATIO= C.0000
NAT Q1= 339. RATIOS LOB,CH,ROB= .3369 .5337 .1293 WSEL= 620.14
3280 CROSS SECTION 325.00 EXTENDED 1.59 FEET

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       ARCB      VOL       TWA    LEFT/RIGHT
   TIME      VLCB      VCH       VRCB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICCNT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      290.1      459.1  TYPE=      4  TARGET=         .047
   325.00      7.99    620.09      0.00    620.04    620.10       .01       .03       .00    616.00
     335.      109.      189.       37.      273.      186.      108.       55.       19.     617.80
     1.52       .40      1.02       .34      .080      .050      .080      .050    612.10    290.12
  .000113      235.      235.      235.         1         0         0      0.00    169.02    459.14

CCHV=    .200 CEHV=    .400
*SECNO 325.980
3280 CROSS SECTION     325.98 EXTENDED       1.62 FEET


3470 ENCROACHMENT STATIONS=      200.0      410.0  TYPE=      1  TARGET=      210.000

          **  D/S FACE WASHINGTON ST

   325.93      8.01    620.11      0.00    620.06    620.12       .01       .02       .00    616.60
     335.       95.      162.       77.      247.      159.      227.       57.       20.     617.10
     1.60       .39      1.02       .34      .080      .050      .080      .050    612.10    200.00
  .000112      175.      175.      175.         0         0         0      0.00    210.00    410.00

SPECIAL BRIDGE
.
SB  XK         XKOR       CDFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.70       2.60     210.00       6.57       0.00      26.28       0.00     612.10     612.10

*SECNO 326.020
3280 CROSS SECTION     326.02 EXTENDED       2.17 FEET

PRESSURE AND WEIR FLOW

 EGPRS       EGLWC       H3        QWEIR       QPR        BAREA    TRAPEZOID       ELLC       ELTRD
                                                                      AREA
   624.40     620.12       0.00       296.        39.        26.        26.       616.10     618.70


   326.02      8.06    620.16      0.00    620.11    620.17       .01       .05       0.00    616.60
     335.       96.      161.       78.      252.      160.      233.       58.       20.     617.10
     1.61       .38      1.00       .34      .080      .050      .080      .050    612.10    200.00
  .000106       34.       34.       34.         0         0         6      0.00    210.00    410.00

*SECNO 326.500
 2800 NAT Q1=     330.65  WSEL=     620.13  ENC Q1=     330.65  WSEL=     620.23  RATIO=    .0000
 NAT Q1=     344.  RATIOS LOB,CH,ROB=    .3401    .6056    .0543  WSEL=     620.23
3280 CROSS SECTION     326.50 EXTENDED       2.68 FEET
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3470 ENCROACHMENT STATIONS= 251.3 403.2 TYPE= 4 TARGET= .040

326.50	7.97	620.17	0.00	620.13	620.19	.01	.01	.00	616.50
335.	111.	212.	12.	286.	212.	36.	59.	21.	617.40
1.65	.39	1.00	.33	.080	.050	.080	.050	612.20	251.29
.000107	110.	110.	110.	0	0	0	0.00	151.93	403.22

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.59 FEET

3470 ENCROACHMENT STATIONS= 200.0 410.0 TYPE= 1 TARGET= 210.000

** D/S FACE PRIVATE DR

326.98	7.89	620.19	0.00	620.14	620.20	.01	.01	.00	616.60
335.	110.	207.	18.	308.	209.	53.	61.	21.	617.50
1.70	.36	.99	.34	.080	.050	.080	.050	612.30	214.03
.000106	130.	130.	130.	0	0	0	0.00	195.97	410.00

SPECIAL BRIDGE

SB	XK	XKOR	COEF	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.63 FEET

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	ICC	ICCNT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
633.03	620.20	0.00	316.	19.	16.	16.	615.20	616.80

327.02	7.92	620.22	0.00	620.17	620.23	.01	.03	0.00	616.60
335.	111.	206.	18.	314.	210.	54.	61.	21.	617.50
1.71	.36	.98	.33	.080	.050	.080	.050	612.30	213.53
.000102	43.	43.	43.	0	0	5	0.00	196.47	410.00

*SECNO 327.500
2800 NAT Q1= 273.87 WSEL= 620.19 ENC Q1= 273.87 WSEL= 620.29 RATIO= .0000
NAT Q1= 287. RATIOS LOB,CH,ROB= .3041 .6461 .0498 WSEL= 620.29
3280 CROSS SECTION 327.50 EXTENDED 2.24 FEET

3470 ENCROACHMENT STATIONS= 266.9 401.5 TYPE= 4 TARGET= .045

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   327.50      7.54    620.24      0.00    620.19    620.26       .01       .02       .00    617.00
     335.       98.      228.       10.      224.      197.       27.       63.       22.     617.90
     1.77       .44      1.15       .36      .080      .050      .080      .050    612.70    266.87
  .000156      180.      180.      180.         0         0         0      0.00    134.68    401.54

CCHV=    .300 CEHV=    .500
*SECNO 327.980
3280 CROSS SECTION    327.98 EXTENDED       2.07 FEET


3470 ENCROACHMENT STATIONS=      600.0      815.0  TYPE=      1  TARGET=      215.000

          **  D/S FACE LEWIS RD

   327.98      7.08    620.28      0.00    620.23    620.29       .01       .02       .00    617.50
     280.       61.      150.       69.      217.      177.      208.       66.       23.     617.00
     1.87       .28       .85       .33      .080      .050      .080      .050    613.20    600.00
  .000088      210.      210.      210.         0         0         0      0.00    215.00    815.00


SPECIAL BRIDGE

SB  XK         XKCR       CDFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.55       2.70     215.00     12.00       0.00      51.60       0.00     613.20     613.20

*SECNO 328.020
3280 CROSS SECTION    328.02 EXTENDED       2.52 FEET

PRESSURE AND WEIR FLOW

 EGPRS       EGLWC        H3        QWEIR       CPR        BAREA    TRAPEZOID       ELLC       ELTRD
                                                                       AREA
   620.99     620.32       0.00         60.      221.         52.         52.     617.50     620.50


   328.02      7.52    620.72      0.00    620.70    620.72       .00       .44      0.00    617.50
     280.       69.      139.       72.      265.      192.      243.       66.       23.     617.00
     1.88       .26       .73       .30      .080      .050      .080      .050    613.20    600.00
  .000058       33.       33.       33.         0         0         3      0.00    215.00    815.00

*SECNO 328.100
 2800 NAT Q1=     219.78  WSEL=     620.70  ENC Q1=     219.78  WSEL=     620.80  RATIO=    .0000
 NAT Q1=     233.  RATIOS LOB,CH,RCB=    .1651    .5616    .2733  WSEL=     620.80
3280 CROSS SECTION    328.10 EXTENDED        .72 FEET


3470 ENCROACHMENT STATIONS=      134.4      329.9  TYPE=      4  TARGET=         .056
   328.10      7.72    620.72      0.00    620.70    620.73       .01       .01       .00    618.60
     280.       39.      170.       71.      123.      148.      178.       68.       23.     618.90
     1.91       .32      1.15       .40      .080      .050      .080      .050    613.00    134.37
  .000177       90.       90.       90.         0         0         0      0.00    195.50    329.87

*SECNO 329.000
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 2800 NAT Q1=     143.78  WSEL=     621.03  ENC Q1=     143.78  WSEL=     621.13  RATIO=  0.0000
 NAT Q1=     154.  RATIOS LOB,CH,ROB=    .1175    .6914    .1912  WSEL=     621.13
3280 CROSS SECTION     329.00 EXTENDED       1.27 FEET

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


3470 ENCROACHMENT STATIONS=      152.5      357.5  TYPE=      4  TARGET=          .069
   329.00      7.07    621.07      0.00    621.03    621.10       .03       .36       .01    620.40
     280.       24.      211.       45.       67.      138.      112.       80.       30.     620.90
     2.22       .35      1.53       .41      .080      .050      .080      .050    614.00    152.47
  .000406     1400.     1400.     1400.         0         0         0      0.00    204.99    357.46

*SECNO 329.100
 2800 NAT Q1=     163.47  WSEL=     621.31  ENC Q1=     163.47  WSEL=     621.41  RATIO=  0.0000
 NAT Q1=     175.  RATIOS LOB,CH,ROB=    .1370    .6503    .2127  WSEL=     621.41
3280 CROSS SECTION     329.10 EXTENDED       1.47 FEET


3470 ENCROACHMENT STATIONS=      148.3      359.6  TYPE=      4  TARGET=          .066
   329.10      7.27    621.37      0.00    621.31    621.39       .02       .29       .00    620.50
     280.       30.      197.       53.       86.      144.      135.       86.       34.     621.00
     2.44       .35      1.37       .39      .080      .050      .080      .050    614.10    148.26
  .000308      825.      825.      825.         2         0         0      0.00    211.38    359.64
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*SECNO 329.250
 WATER EL=X5 CARD=   621.373
 2800 NAT Q1=     163.70  WSEL=     621.31  ENC Q1=     163.70  WSEL=     621.41  RATIO=   .0000
 NAT Q1=     175.  RATIOS LOB,CH,ROB=    .1372    .6498    .2130  WSEL=     621.41
3280 CROSS SECTION     329.25 EXTENDED       1.47 FEET


3470 ENCROACHMENT STATIONS=      148.2      359.7  TYPE=      4  TARGET=          .066

          **  PRIVATE DRIVE

   329.25      7.27    621.37      0.00    621.31    621.39       .02       .00       .00    620.50
     280.       30.      197.       53.       86.      144.      135.       86.       34.     621.00
     2.44       .35      1.37       .39      .080      .050      .080      .050    614.10    148.20
  .000307        1.        1.        1.         0         0         0      0.00    211.47    359.67
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100 yr.

00BREAK00

JOB NO. UM3603 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 19:12:59 11-29-79

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEE  TTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEE  TTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE               TT
MM MM    MM MM  NN NN       NN  EE               TT
MM  MMMMMM  MM  NN  NN      NN  EE               TT
MM   MMMM   MM  NN   NN     NN  EEEEEEEE         TT
MM    MM    MM  NN    NN    NN  EEEEEEEE         TT
MM          MM  NN     NN   NN  EE               TT
MM          MM  NN      NN  NN  EE               TT
MM          MM  NN       NNNN  EE               TT
MM          MM  NN        NNN  EE               TT
MM          MM  NN         NN  EEEEEEEEEEE      TT
MM          MM  NN          N  EEEEEEEEEEE      TT

XX        XX   SSSSSSSSS   NN          NN  LL
XX        XX  SSSSSSSSSSS  NNN         NN  LL
 XX      XX   SS         SS  NNNN       NN  LL
  XX    XX    SS             NN NN      NN  LL
   XX  XX      SSS           NN  NN     NN  LL
    XXXX        SSSSSSSSS    NN   NN    NN  LL
    XXXX         SSSSSSSSS   NN    NN   NN  LL
   XX  XX              SSS   NN     NN NN  LL
  XX    XX             SS   NN      NNNN  LL
 XX      XX   SS         SS  NN       NNN  LL
XX        XX  SSSSSSSSSSS  NN         NN  LLLLLLLLLLL
XX        XX   SSSSSSSSS   NN          N  LLLLLLLLLLL
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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
**************************************************

C
T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK 100 YEAR FLOW=450 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.       4.        0.        0.   .001700      0.00     -1.0       0.   591.720    0.000

NC      .060      .060      .045      .300      .500     0.000     0.000     0.000     0.000     0.000
QT     5.000   350.000   400.000   450.000   550.000   450.000     0.000     0.000     0.000     0.000

X1   301.000    10.000   448.000   477.000     0.000     0.000     0.000     0.000     0.000     0.000
GR   591.200   425.000   591.200   426.000   591.200   427.000   591.000   428.000   589.900   448.000
GR   585.900   462.000   585.200   465.000   584.900   468.000   591.300   477.000   591.500   500.000

          **  D/S FACE RAILROAD BRIDGE

X1   301.980    11.000   455.000   467.000   108.000   108.000   108.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   592.500   592.500     0.000
GR   592.000   423.000   591.900   424.000   591.400   425.000   590.900   426.000   589.900   448.000
GR   587.300   455.000   584.200   460.000   584.200   466.000   587.100   467.000   591.500   477.000
GR   591.600   498.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
SB     0.000     1.500     2.600    75.000    12.000     0.000    72.000     0.000   584.200   584.200

X1   302.020     0.000     0.000     0.000    42.000    42.000    42.000     0.000     0.000     0.000
X2     0.000     0.000     1.000   590.200   593.500     0.000     0.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   593.500   593.500     0.000

X1   302.500    11.000   448.000   477.000    40.000    40.000    40.000     0.000     0.000     0.000
GR   590.800   425.000   590.700   426.000   590.700   427.000   590.400   428.000   589.400   448.000
GR   586.800   457.000   585.400   462.000   584.700   465.000   584.400   468.000   589.900   477.000
GR   591.000   500.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

          **  D/S FACE ABANDONED RAILROAD BRIDGE

X1   302.980    10.000   516.000   535.000    40.000    40.000    40.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   593.300   593.300     0.000
GR   595.200   400.000   593.400   465.000   591.400   505.000   590.100   510.000   585.400   516.000
GR   584.600   535.000   585.100   554.000   591.400   568.000   593.900   590.000   596.000   620.000
SB     0.000     3.700     2.600   150.000    12.000     0.000    61.200     0.000   586.200   584.600

X1   303.020     0.000     0.000     0.000   453.000   453.000   453.000     0.000     1.600     0.000
X2     0.000     0.000     1.000   591.300   597.300     0.000     0.000     0.000     0.000     0.000
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X3	10.000	C.C00	0.000	C.C0C	0.000	J.000	0.000	597.30C	597.300	0.000
X1	303.500	1C.000	448.000	477.000	26.000	26.000	26.000	0.000	0.000	0.000
GR	592.400	425.000	592.4C0	426.00C	592.400	427.000	592.100	428.000	591.100	448.000
GR	588.500	457.000	586.200	462.000	586.200	474.000	592.500	477.000	592.700	500.000
NC	0.000	0.000	0.000	.10C	.300	0.000	0.000	0.000	0.000	0.000

** D/S FACE RAILROAD BRIDGE

X1	303.980	11.000	458.000	470.000	26.000	26.000	26.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.00C	0.000	0.000	0.000	596.600	596.600	0.000
GR	595.000	412.000	595.0CC	413.00C	595.000	444.000	590.000	450.000	586.400	458.000
GR	586.200	462.000	586.500	470.000	591.000	475.000	594.900	480.000	596.600	550.000
GR	598.000	60C.000	0.0C0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.900	175.000	12.000	0.000	74.400	0.00C	586.200	586.200
X1	304.020	0.000	0.000	0.000	34.000	34.000	34.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.400	598.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	C.000	0.000	0.00C	0.000	0.000	0.000	598.000	598.000	0.000
X1	304.500	10.000	448.000	477.00C	32.000	32.000	32.000	0.000	0.000	0.000
GR	592.400	425.000	592.400	426.000	592.400	427.000	592.100	428.000	591.100	448.000
GR	588.500	457.000	586.200	462.000	586.200	474.000	592.500	477.000	592.700	500.000
NC	0.000	0.000	0.000	.15C	.350	0.000	0.000	0.000	0.000	0.000

** D/S FACE TELEGRAPH RD

X1	304.980	10.000	522.000	570.000	32.000	32.000	32.000	0.00C	0.000	0.000
GR	595.000	400.000	593.5C0	5C0.000	592.500	522.000	590.500	528.000	586.500	537.000
GR	586.200	545.000	586.600	552.000	591.000	565.000	593.300	57C.000	595.000	650.000
SB	0.000	1.600	2.600	225.00C	10.000	0.000	57.000	0.000	586.200	586.200
X1	305.020	0.000	0.000	0.000	63.000	63.000	63.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	591.90C	595.000	0.000	0.000	0.000	0.000	0.000
X1	306.000	12.000	159.000	175.00C	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.500	0.000	0.000
GR	594.200	0.000	592.60C	100.000	593.400	154.000	589.300	159.000	586.700	162.000
GR	586.200	167.000	586.500	171.00C	589.900	175.000	590.500	180.000	591.800	200.000
GR	592.800	300.000	592.900	350.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	310.000	14.000	50.000	88.000	500.000	500.000	50C.C00	C.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	594.900	0.000	594.700	12.00C	594.400	20.000	594.300	27.000	594.100	50.000
GR	591.300	60.000	588.100	70.000	587.700	74.000	587.500	78.000	594.600	88.000
GR	594.000	1C0.000	593.600	150.000	594.000	200.000	594.500	325.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

** D/S FACE SUB STATION RD

X1	310.980	12.000	660.000	690.000	142.000	142.000	142.000	0.000	0.000	0.000
GR	595.100	500.000	595.100	600.000	595.100	655.000	594.900	660.000	590.000	662.000

GR	588.000	665.000	588.500	675.000	589.000	680.000	591.000	685.000	594.500	689.000
GR	595.100	690.000	595.800	800.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.500	2.600	300.000	13.000	0.000	83.200	0.000	588.000	588.000
X1	311.020	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	594.400	595.500	0.000	0.000	0.000	0.000	0.000
X1	311.100	10.000	158.000	187.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	595.300	0.000	595.100	50.000	594.100	100.000	594.000	158.000	592.400	159.000
GR	588.900	170.000	588.500	174.000	588.200	179.000	595.800	187.000	596.000	250.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	312.000	11.000	451.000	486.000	1200.000	1200.000	1200.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	597.300	199.000	597.300	200.000	597.200	300.000	596.400	400.000	596.700	451.000
GR	589.900	458.000	589.900	463.000	590.400	471.000	596.900	486.000	597.500	500.000
GR	598.700	600.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	312.100	11.000	294.000	326.000	520.000	520.000	520.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	596.700	251.000	596.700	252.000	596.700	253.000	597.000	294.000	591.200	303.000
GR	590.800	309.000	591.000	313.000	593.300	316.000	597.200	326.000	597.400	350.000
GR	597.500	361.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000

** D/S FACE MINX RD - CORPORATE BDRY

X1	312.980	11.000	294.000	326.000	142.000	142.000	142.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.200	598.200	0.000
GR	597.600	100.000	597.300	110.000	596.500	200.000	597.000	294.000	591.200	303.000
GR	590.800	309.000	591.000	313.000	593.300	316.000	597.200	326.000	597.900	400.000
GR	598.100	471.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.700	350.000	14.610	0.000	89.100	0.000	590.900	590.900
X1	313.020	12.000	273.000	303.000	16.500	16.500	16.500	0.000	-.500	0.000
X2	0.000	0.000	1.000	597.000	598.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.900	598.900	0.000
GR	598.400	75.000	598.400	100.000	598.200	259.000	598.100	273.000	591.800	287.000
GR	591.400	290.000	591.500	296.000	596.100	300.000	598.200	303.000	598.200	400.000
GR	598.200	418.000	598.200	428.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	313.100	12.000	273.000	303.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	598.400	75.000	598.400	100.000	598.200	259.000	598.100	273.000	591.800	287.000
GR	591.400	290.000	591.500	296.000	596.100	300.000	598.200	303.000	598.200	400.000
GR	598.200	418.000	598.200	428.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= .300 CEHV= .500
*SECNO 301.000
3280 CROSS SECTION 301.00 EXTENDED .47 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST
301.00	6.77	591.67	0.00	591.72	591.84	.17	0.00	0.00	589.90
450.	30.	418.	3.	26.	123.	6.	0.	0.	591.30
0.00	1.14	3.39	.43	.060	.045	.060	0.000	584.90	425.00
.001730	0.	0.	0.	0	0	3	0.00	75.00	500.00

*SECNO 301.980
3280 CROSS SECTION 301.98 EXTENDED .18 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.50 ELREA= 592.50

** D/S FACE RAILROAD BRIDGE

301.98	7.58	591.78	0.00	0.00	592.25	.47	.26	.15	587.30
450.	0.	450.	0.	0.	82.	0.	0.	0.	587.10
.01	0.00	5.50	0.00	.060	.045	.060	.045	584.20	455.00
.003730	108.	108.	108.	2	0	0	0.00	12.00	467.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNO 302.020
3280 CROSS SECTION 302.02 EXTENDED .69 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
592.69	592.25	0.00	0.	450.	72.	72.	590.20	593.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.50 ELREA= 593.50

302.02	8.08	592.28	0.00	0.00	592.69	.41	.44	0.00	587.30
450.	0.	450.	0.	0.	88.	0.	0.	0.	587.10
.01	0.00	5.12	0.00	.060	.045	.060	.044	584.20	455.00

.003032	42.	42.	42.	2	0	0	0.00	12.00	467.00

*SECNO 302.500
3280 CROSS SECTION 302.50 EXTENDED 1.98 FEET

302.50	8.38	592.78	0.00	0.00	592.83	.05	.03	.11	589.40
450.	60.	348.	43.	64.	174.	54.	1.	0.	589.90
.01	.93	2.00	.80	.060	.045	.060	.044	584.40	425.00
.000369	40.	40.	40.	2	0	0	0.00	75.00	500.00

*SECNO 302.980

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.30 ELREA= 593.30

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	8.15	592.75	0.00	0.00	592.90	.14	.02	.05	585.40
450.	0.	450.	0.	0.	147.	0.	1.	0.	584.60
.02	0.00	3.05	0.00	.060	.045	.060	.044	584.60	516.00
.000624	40.	40.	40.	2	0	0	0.00	19.00	535.00

SPECIAL BRIDGE

S8	XK	XKCR	COEQ	RDLEN	BWC	BHP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNO 303.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
595.86	594.50	0.00	0.	450.	61.	61.	591.30	597.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.30 ELREA= 597.30

303.02	9.56	595.76	0.00	0.00	595.86	.10	2.96	0.00	587.00
450.	0.	450.	0.	0.	174.	0.	2.	0.	586.20
.07	0.00	2.59	0.00	.060	.045	.060	.045	586.20	516.00
.000372	453.	453.	453.	2	0	0	0.00	19.00	535.00

*SECNO 303.500
3280 CROSS SECTION 303.50 EXTENDED 3.46 FEET

303.50	9.66	595.86	0.00	0.00	595.89	.03	.01	.02	591.10

450.	72.	333.	45.	96.	233.	75.	3.	0.	592.50
.07	.75	1.43	.60	.060	.045	.060	.045	586.20	425.00
.000144	26.	26.	26.	2	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNO 303.980
3280 CROSS SECTION 303.98 EXTENDED .72 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 596.60 ELREA= 596.60

** D/S FACE RAILROAD BRIDGE

303.98	9.52	595.72	0.00	0.00	595.96	.25	.01	.07	586.40
450.	0.	450.	0.	0.	113.	0.	3.	0.	586.50
.07	0.00	4.00	0.00	.060	.045	.060	.045	586.20	458.00
.001302	26.	26.	26.	2	0	0	0.00	12.00	470.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNO 304.020
3280 CROSS SECTION 304.02 EXTENDED 1.23 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
596.45	595.96	0.00	0.	450.	74.	74.	592.40	598.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 598.00

304.02	10.03	596.23	0.00	0.00	596.45	.22	.49	0.00	586.40
450.	0.	450.	0.	0.	119.	0.	3.	0.	586.50
.08	0.00	3.79	0.00	.060	.045	.060	.045	586.20	458.00
.001127	34.	34.	34.	2	0	0	0.00	12.00	470.00

*SECNO 304.500
3280 CROSS SECTION 304.50 EXTENDED 4.06 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST
304.50	10.26	596.46	0.00	0.00	596.48	.02	.01	.02	591.10
450.	77.	322.	50.	110.	250.	89.	3.	0.	592.50

.08	.71	1.29	.57	.060	.045	.060	.045	586.20	425.00
.000106	32.	32.	32.	2	0	0	0.00	75.00	500.00

CCHV= .150 CEHV= .350
*SECNO 304.980
3280 CROSS SECTION 304.98 EXTENDED 1.48 FEET

** D/S FACE TELEGRAPH RD

304.98	10.28	596.48	0.00	0.00	596.49	.01	.00	.00	592.50
450.	89.	308.	52.	300.	375.	187.	4.	1.	593.30
.10	.30	.82	.28	.060	.045	.060	.044	586.20	400.00
.000043	32.	32.	32.	0	0	0	0.00	250.00	650.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	225.00	10.00	0.00	57.00	0.00	586.20	586.20

*SECNO 305.020
3280 CROSS SECTION 305.02 EXTENDED 1.54 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.03	596.49	0.00	358.	92.	57.	57.	591.90	595.00

305.02	10.34	596.54	0.00	0.00	596.54	.01	.06	0.00	592.50
450.	91.	305.	54.	307.	378.	191.	5.	1.	593.30
.13	.30	.81	.28	.060	.045	.060	.044	586.20	400.00
.000041	63.	63.	63.	0	0	7	0.00	250.00	650.00

*SECNO 306.000
3280 CROSS SECTION 306.00 EXTENDED 3.64 FEET

306.00	10.34	596.54	0.00	0.00	596.54	.00	.00	.00	589.30
450.	133.	93.	224.	531.	150.	748.	6.	1.	589.90
.16	.25	.62	.30	.060	.045	.060	.044	586.20	0.00
.000021	50.	50.	50.	0	0	0	0.00	350.00	350.00

*SECNO 310.000
3280 CROSS SECTION 310.00 EXTENDED 2.06 FEET

310.00	9.06	596.56	0.00	0.00	596.56	.01	.02	.00	594.10
450.	35.	197.	218.	107.	233.	591.	20.	5.	594.60
.41	.33	.85	.37	.060	.045	.060	.045	587.50	0.00
.000065	500.	500.	500.	0	0	0	0.00	325.00	325.00

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED 1.46 FEET

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
	** D/S FACE SUB STATION RD								
310.98	8.57	596.57	0.00	0.00	596.59	.02	.01	.01	594.90
450.	105.	300.	46.	235.	203.	122.	22.	6.	595.10
.44	.45	1.48	.37	.060	.045	.060	.045	588.00	500.00
.000198	142.	142.	142.	0	0	0	0.00	300.00	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNO 311.020
3280 CROSS SECTION 311.02 EXTENDED 1.50 FEET

PRESSURE AND WEIR FLOW

EGPRS	ECLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.25	596.59	0.00	328.	124.	83.	83.	594.40	595.50
311.02	8.60	596.60	0.00	0.00	596.62	.02	.03	0.00	594.90
450.	107.	296.	47.	240.	204.	126.	22.	6.	595.10
.45	.44	1.45	.37	.060	.045	.060	.045	588.00	500.00
.000190	16.	16.	16.	2	0	7	0.00	300.00	800.00

*SECNO 311.100
3280 CROSS SECTION 311.10 EXTENDED 1.31 FEET

311.10	8.41	596.61	0.00	0.00	596.63	.02	.01	.00	594.00
450.	183.	254.	12.	319.	179.	45.	23.	7.	595.80
.46	.57	1.42	.28	.060	.045	.060	.045	588.20	0.00
.000199	50.	50.	50.	0	0	0	0.00	250.00	250.00

CCHV= .150 CEHV= .350
*SECNO 312.000

312.00	7.10	597.00	0.00	0.00	597.10	.10	.44	.03	596.70
450.	18.	432.	0.	46.	167.	0.	33.	12.	596.90
.59	.39	2.60	.10	.060	.045	.060	.045	589.90	324.82
.000897	1200.	1200.	1200.	2	0	0	0.00	163.55	488.37

*SECNC 312.100
3280 CROSS SECTICN 312.10 EXTENDED .86 FEET

312.10	6.76	597.56	0.00	0.00	597.70	.14	.59	.01	597.00
450.	23.	424.	3.	31.	136.	7.	36.	14.	597.20
.64	.75	3.11	.36	.060	.045	.060	.045	590.80	251.00
.001457	520.	520.	520.	2	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNC 312.980
3280 CROSS SECTION 312.98 EXTENDED .06 FEET

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BORY

312.98	6.86	597.76	0.00	0.00	597.92	.16	.21	.01	597.10
450.	0.	450.	0.	0.	140.	0.	36.	14.	597.30
.65	0.00	3.22	0.00	.060	.045	.060	.045	590.90	294.00
.001538	142.	142.	142.	2	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .41 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.28	597.95	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.90 ELREA= 598.90

313.02	7.21	598.11	0.00	0.00	598.28	.16	.35	0.00	597.60
450.	0.	450.	0.	0.	139.	0.	36.	14.	597.70
.65	0.00	3.24	0.00	.060	.045	.060	.045	590.90	273.00
.001493	17.	17.	17.	2	0	0	0.00	30.00	303.00

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*SECNO 313.100
   313.10      6.76    598.16      0.00      0.00    598.36       .20       .07       .01    598.10
    450.         0.       450.        0.        0.       126.        0.       36.       14.     598.20
     .66        .12      3.58      0.00      .060      .045      .060      .045    591.40    263.17
 .002065        42.       42.       42.         1         0         0      0.00     39.78    302.96
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1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100yr.

JOB NO. UM3626 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 19:45:02 11-29-79

Flot Crat
100, 10, 50, [illegible]
FLOWS

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                TT
MM MM    MM MM  NN NN       NN  EE                TT
MM  MMMM  MM    NN  NN      NN  EE                TT
MM   MM   MM    NN   NN     NN  EEEEEEEE          TT
MM        MM    NN    NN    NN  EEEEFEEE          TT
MM        MM    NN     NN   NN  EE                TT
MM        MM    NN      NN  NN  EE                TT
MM        MM    NN       NNNN  EE                TT
MM        MM    NN        NN   EEEEEEEEEEEE      TT
MM        MM    NN         N   EEEEEEEEEEEE      TT

XX        XX   SSSSSSSSS   NN        NN  LL
XX        XX  SSSSSSSSSSS  NNN       NN  LL
 XX      XX   SS        SS  NNNN      NN  LL
  XX    XX    SS            NN NN     NN  LL
   XX  XX     SSS           NN  NN    NN  LL
    XXXX       SSSSSSSS     NN   NN   NN  LL
    XXXX        SSSSSSSS    NN    NN  NN  LL
   XX  XX              SSS  NN     NN NN  LL
  XX    XX              SS  NN      NNNN  LL
 XX      XX   SS        SS  NN       NNN  LL
XX        XX  SSSSSSSSSSS  NN        NN  LLLLLLLLLLLL
XX        XX   SSSSSSSSS   NN         N  LLLLLLLLLLLL
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**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
**********************************************

C
T1       HUD-FIA  H-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       FLAT CREEK  100 YEAR FLOW=450 CFS

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       -1.         4.         0.         0.   0.000000       0.00      -1.0         0.    597.560      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

      0.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

NC       .060       .060       .045       .150       .350      0.000      0.000      0.000      0.000      0.000
QT      5.000    350.000    400.000    450.000    550.000    450.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      1.400      0.000      0.000      0.000      0.000

X1    312.100     11.000    294.000    326.000    520.000    520.000    520.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
GR    596.700    251.000    596.700    252.000    596.700    253.000    597.000    294.000    591.200    303.000
GR    590.800    309.000    591.000    313.000    593.300    316.000    597.200    326.000    597.400    350.000
GR    597.500    361.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
NC      0.000      0.000      0.000       .200       .400      0.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      7.100    100.000    471.000      0.000      0.000

          **  D/S FACE MINX RD - CORPORATE BDRY

X1    312.980     11.000    294.000    326.000    142.000    142.000    142.000      0.000       .100      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    598.200    598.200      0.000
GR    597.600    100.000    597.300    110.000    596.500    200.000    597.000    294.000    591.200    303.000
GR    590.800    309.000    591.000    313.000    593.300    316.000    597.200    326.000    597.900    400.000
GR    598.100    471.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
SB      0.000      1.300      2.700    350.000     14.610      0.000     89.100      0.000    590.900    590.900

X1    313.020     12.000    273.000    303.000     16.500     16.500     16.500      0.000      -.500      0.000
X2      0.000      0.000      1.000    597.000    598.900      0.000      0.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    598.900    598.900      0.000
GR    598.400     75.000    598.400    100.000    598.200    259.000    598.100    273.000    591.800    287.000
GR    591.400    290.000    591.500    296.000    596.100    300.000    598.200    303.000    598.200    400.000
GR    598.200    418.000    598.200    428.000      0.000      0.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      1.400      0.000      0.000      0.000      0.000

X1    313.100     12.000    273.000    303.000     42.000     42.000     42.000      0.000      0.000      0.000
GR    598.400     75.000    598.400    100.000    598.200    259.000    598.100    273.000    591.800    287.000
GR    591.400    290.000    591.500    296.000    596.100    300.000    598.200    303.000    598.200    400.000
GR    598.200    418.000    598.200    428.000      0.000      0.000      0.000      0.000      0.000      0.000
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NC	.080	.080	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	313.200	0.000	0.000	0.000	690.000	690.000	690.000	0.000	1.400	0.000
X1	313.300	10.000	224.000	255.000	690.000	690.000	690.000	0.000	-1.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	600.500	0.000	0.000
GR	602.500	0.000	601.500	100.000	601.900	200.000	601.700	224.000	596.700	234.000
GR	595.600	240.000	596.100	247.000	602.400	255.000	602.500	300.000	602.600	400.000
X1	314.000	0.000	0.000	0.000	680.000	680.000	680.000	0.000	1.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	601.900	0.000	0.000
X1	314.100	0.000	0.000	0.000	850.000	850.000	850.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.400	0.000	0.000
X1	314.200	15.000	216.000	250.000	850.000	850.000	850.000	0.000	-1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	610.500	0.000	608.100	75.000	607.100	100.000	606.000	200.000	605.300	216.000
GR	600.200	225.000	600.200	230.000	600.000	235.000	607.700	250.000	606.200	300.000
GR	606.400	337.000	606.500	400.000	608.800	500.000	609.400	550.000	609.100	600.000
X1	315.000	0.000	0.000	0.000	850.000	850.000	850.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	315.100	0.000	0.000	0.000	555.000	555.000	555.000	0.000	.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	315.200	10.000	246.000	290.000	555.000	555.000	555.000	.710	-1.500	0.000
GR	609.600	170.000	609.600	171.000	609.600	200.000	609.900	220.000	609.500	246.000
GR	603.200	257.000	602.800	261.000	603.100	267.000	609.800	290.000	609.900	370.000
X1	315.900	0.000	0.000	0.000	560.000	560.000	560.000	0.000	1.500	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	315.000	340.000	370.000	450.000	370.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	170.000	370.000	0.000	0.000

** D/S FACE CRABB RD

X1	315.980	0.000	0.000	0.000	117.000	117.000	117.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	610.300	610.300	0.000
SB	0.000	1.400	2.900	150.000	8.750	0.000	52.500	0.000	602.700	602.700
X1	316.020	16.000	247.000	277.000	33.000	33.000	33.000	0.000	-.200	0.000
X2	0.000	0.000	1.000	608.700	611.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.700	611.700	0.000
GR	612.600	160.000	612.600	161.000	612.600	162.000	612.600	163.000	612.600	173.000
GR	612.600	190.000	612.500	200.000	612.500	204.000	610.600	212.000	609.300	247.000
GR	603.000	253.000	602.900	254.000	603.100	256.000	605.100	277.000	605.400	300.000
GR	610.000	360.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000

X1	316.100	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	316.200	11.000	50.000	76.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	611.900	0.000	609.200	10.000	609.000	45.000	608.500	50.000	602.500	56.000
GR	602.400	62.000	602.000	65.000	603.000	70.000	608.500	76.000	610.800	107.000
GR	615.800	150.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

** WOOD BRIDGE

X1	316.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.050	.070	.080	.100	.080	0.000	0.000	0.000	0.000
X1	316.300	10.000	410.000	446.000	220.000	220.000	220.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.900	0.000	0.000
GR	610.000	340.000	609.900	371.000	611.900	389.000	611.900	400.000	611.700	410.000
GR	603.500	428.000	603.500	432.000	610.600	446.000	610.800	500.000	610.800	516.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	340.000	516.000	0.000	0.000

** D/S FACE WOODSIDE DR

X1	316.980	10.000	410.000	446.000	130.000	130.000	130.000	0.000	1.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.900	609.900	0.000
GR	610.000	340.000	609.900	371.000	611.900	389.000	611.900	400.000	611.700	410.000
GR	603.500	428.000	603.500	432.000	610.600	446.000	610.800	500.000	610.800	516.000
SB	0.000	1.300	2.800	100.000	10.000	0.000	53.000	0.000	604.600	604.600
X1	317.020	11.000	383.000	420.000	28.000	28.000	28.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	609.900	612.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
GR	610.500	310.000	609.200	352.000	611.800	359.000	612.000	373.000	611.600	383.000
GR	605.400	398.000	605.400	399.000	604.700	401.000	604.700	405.000	613.700	420.000
GR	615.000	490.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.100	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
X1	317.150	11.000	383.000	420.000	250.000	250.000	250.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.000	0.000	0.000
GR	610.500	310.000	609.200	352.000	611.800	359.000	612.000	373.000	611.600	383.000
GR	605.400	398.000	605.400	399.000	604.700	401.000	604.700	405.000	613.700	420.000
GR	614.700	490.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	1.000	250.000	0.000	0.000

** D/S FACE GRAVEL DRIVEWAY

X1	317.180	9.000	115.000	145.000	70.000	70.000	70.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.700	608.700	0.000
GR	615.000	1.000	611.900	100.000	610.300	115.000	604.700	123.000	604.700	135.000

GR	610.300	145.000	612.000	165.000	612.800	200.000	614.100	250.000	0.000	0.000
SB	1.250	1.600	2.800	150.000	9.340	.500	35.340	0.000	604.700	604.700
X1	317.220	0.000	0.000	0.000	30.000	30.000	30.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	608.700	612.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.500	612.500	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.250	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	317.270	11.000	120.000	150.000	250.000	250.000	250.000	0.000	-.300	0.000
GR	616.000	20.000	610.800	120.000	608.000	122.000	606.300	125.000	606.000	135.000
GR	606.500	140.000	608.000	145.000	612.000	150.000	612.500	155.000	612.700	236.000
GR	615.000	270.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	20.000	270.000	0.000	0.000

** D/S FACE PRIVATE DR

X1	317.280	0.000	0.000	0.000	75.000	75.000	75.000	0.000	.600	0.000
SB	0.000	1.250	2.600	165.000	15.000	0.000	79.500	0.000	606.300	606.300
X1	317.320	0.000	0.000	0.000	15.000	15.000	15.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	611.600	612.600	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	317.340	0.000	0.000	0.000	60.000	60.000	60.000	0.000	-.200	0.000
X1	317.400	11.000	75.000	109.000	240.000	240.000	240.000	0.000	0.000	0.000
GR	615.000	45.000	613.500	75.000	610.600	78.000	606.400	84.000	606.400	95.000
GR	609.000	103.000	612.000	106.000	612.700	109.000	613.200	150.000	613.900	200.000
GR	615.000	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

** PRIVATE DRIVE ACRCSS CREEK

X1	317.450	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.150	.200	.250	.350	.250	0.000	0.000	0.000	0.000
X1	318.000	15.000	586.000	616.000	460.000	460.000	460.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.800	515.000	619.800	516.000	618.800	528.000	617.200	535.000	614.100	541.000
GR	613.900	550.000	613.900	586.000	609.000	597.000	607.800	600.000	606.600	602.000
GR	606.500	604.000	606.600	607.000	611.600	616.000	611.300	685.000	611.300	686.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	515.000	686.000	0.000	0.000

** D/S FACE PRIVATE DRIVE

X1	318.080	0.000	0.000	0.000	100.000	100.000	100.000	0.000	.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.200	2.600	0.000	14.000	0.000	79.800	0.000	607.000	607.000

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X1   318.120     0.000     0.000     0.000    18.000    18.000    18.000     0.000     0.000     0.000
X2     0.000     0.000     1.000   612.700   613.300     0.000     0.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
BT     9.000     0.000   614.600     0.000    10.000   614.200     0.000    28.000   613.800     0.000
BT    29.000   614.500     0.000    42.000   615.500     0.000    52.000   614.900     0.000    53.000
BT   613.500     0.000   100.000   613.300     0.000   150.000   614.300     0.000     0.000     0.000
ET     0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1   318.150    13.000   597.000   605.000   150.000   150.000   150.000     0.000     -.300     0.000
GR   619.800   512.000   619.800   513.000   618.800   528.000   617.200   535.000   614.100   541.000
GR   613.900   550.000   613.900   586.000   612.500   597.000   607.700   597.100   607.300   601.000
GR   607.500   604.900   612.500   605.000   613.300   682.000     0.000     0.000     0.000     0.000

        **  ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

X1   318.160     0.000     0.000     0.000     1.000     1.000     1.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
X5    -5.000      .010      .010      .010      .020      .010     0.000     0.000     0.000     0.000

X1   318.200    15.000   586.000   616.000    30.000    30.000    30.000     0.000      .900     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR   619.800   515.000   619.800   516.000   618.800   528.000   617.200   535.000   614.100   541.000
GR   613.900   550.000   613.900   586.000   609.000   597.000   607.800   600.000   606.600   602.000
GR   606.500   604.000   606.600   607.000   611.600   616.000   611.300   685.000   611.300   686.000

        **  PRIVATE DRIVE

X1   318.250     0.000     0.000     0.000     1.000     1.000     1.000     0.000     0.000     0.000
X5    -5.000      .120      .150      .200      .250      .200     0.000     0.000     0.000     0.000

X1   318.300     0.000     0.000     0.000   325.000   325.000   325.000     0.000      .400     0.000

        **  PRIVATE DRIVE

X1   318.350     0.000     0.000     0.000     1.000     1.000     1.000     0.000     0.000     0.000
X5    -5.000      .080      .100      .120      .150     0.000     0.000     0.000     0.000     0.000
GT     5.000   265.000   315.000   335.000   390.000   335.000     0.000     0.000     0.000     0.000

X1   319.000    11.000   704.000   735.000   275.000   275.000   275.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000   616.900     0.000     0.000
GR   615.600   630.000   616.900   684.000   616.600   697.000   616.100   704.000   609.700   716.000
GR   608.600   717.000   608.700   720.000   608.800   722.000   610.200   727.000   614.500   735.000
GR   615.000   810.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1   319.100    16.000   630.000   667.000   450.000   450.000   450.000     0.000     0.000     0.000
X3    10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR   618.300   554.000   618.300   555.000   618.300   556.000   618.300   557.000   618.000   581.000
GR   617.700   590.000   617.400   599.000   617.500   614.000   616.900   630.000   615.500   635.000
GR   609.100   640.000   608.800   646.000   609.000   653.000   614.100   667.000   613.900   700.000
GR   613.900   727.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ET     0.000     0.000     0.000     0.000     0.000     7.100   554.000   727.000     0.000     0.000
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** D/S FACE CORL RD

X1	319.980	16.000	640.000	660.000	140.000	140.000	140.000	0.000	1.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	614.900	614.900	0.000
GR	618.300	554.000	618.300	555.000	618.300	556.000	618.300	557.000	618.000	581.000
GR	617.700	590.000	617.400	599.000	617.500	614.000	616.900	620.000	615.500	627.000
GR	609.100	640.000	608.800	650.000	609.000	660.000	614.100	680.000	613.900	700.000
GR	613.900	727.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.600	0.000	12.000	0.000	57.600	0.000	610.100	610.100
X1	320.020	0.000	0.000	0.000	21.000	21.000	21.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	614.900	615.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.500	615.500	0.000
BT	11.000	758.000	618.000	0.000	767.000	617.600	0.000	770.000	616.500	0.000
BT	774.000	616.500	0.000	774.100	617.800	0.000	789.900	617.600	0.000	790.000
BT	616.100	0.000	800.000	615.800	0.000	900.000	615.500	0.000	1000.000	615.900
BT	0.000	1200.000	618.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	320.100	16.000	535.000	565.000	40.000	40.000	40.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	618.600	0.000	0.000
GR	616.100	460.000	616.100	461.000	616.100	462.000	616.100	463.000	615.900	484.000
GR	615.400	490.000	618.200	500.000	618.600	516.000	618.100	532.000	617.900	535.000
GR	610.000	544.000	609.800	549.000	609.900	556.000	615.500	565.000	614.900	600.000
GR	614.600	640.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	320.900	9.000	5.000	36.000	400.000	400.000	400.000	0.000	0.000	0.000
GR	620.300	0.000	620.100	5.000	611.900	18.000	610.100	21.000	609.700	24.000
GR	610.100	29.000	615.700	36.000	616.500	100.000	616.700	180.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	330.000	510.000	0.000	0.000

** D/S FACE TEMPERANCE RD

X1	320.980	9.000	450.000	478.000	110.000	110.000	110.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	616.350	616.350	0.000
GR	616.900	330.000	616.700	365.000	615.500	425.000	613.000	450.000	610.200	455.000
GR	610.200	465.000	618.000	478.000	623.300	490.000	623.400	510.000	0.000	0.000
SB	0.000	1.650	2.700	0.000	6.160	0.000	42.530	0.000	610.200	610.200
X1	321.020	15.000	319.000	352.000	55.000	55.000	55.000	0.000	-.400	0.000
X2	0.000	0.000	1.000	616.000	617.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	617.900	617.900	0.000
BT	7.000	0.000	617.900	0.000	100.000	618.500	0.000	200.000	619.500	0.000
BT	300.000	620.700	0.000	400.000	621.700	0.000	460.000	622.800	0.000	510.000
BT	623.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	614.900	233.000	614.900	234.000	614.900	235.000	615.500	300.000	615.600	319.000
GR	610.600	327.000	610.600	331.000	610.700	337.000	612.000	343.000	614.500	352.000
GR	614.800	362.000	623.300	383.000	624.000	400.000	624.300	435.000	624.500	436.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	322.000	10.000	319.000	343.000	30.000	30.000	30.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	619.300	619.300	0.000
GR	616.000	99.000	615.500	100.000	614.700	200.000	615.500	300.000	615.600	319.000

GR	610.600	327.000	610.600	331.000	610.700	337.000	612.000	343.000	614.500	352.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	550.000	800.000	0.000	0.000

** D/S FACE RAILROAD BRIDGE

X1	322.980	10.000	689.000	697.000	20.000	20.000	20.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.000	620.000	0.000
GR	622.800	550.000	619.600	673.000	614.900	683.000	610.800	689.000	610.700	692.000
GR	610.700	695.000	610.700	697.000	616.500	700.000	618.200	706.000	623.900	800.000
SB	0.000	1.600	2.900	150.000	7.000	0.000	39.200	0.000	610.700	610.700
X1	323.020	9.000	346.000	354.000	33.000	33.000	33.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	616.300	624.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	624.000	624.000	0.000
GR	620.000	275.000	615.300	300.000	615.000	337.000	611.000	346.000	610.800	350.000
GR	611.000	354.000	616.900	366.000	618.600	400.000	621.200	500.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	323.100	9.000	300.000	366.000	30.000	30.000	30.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	624.000	624.000	0.000
GR	620.000	275.000	615.300	300.000	615.000	337.000	611.000	346.000	610.800	350.000
GR	611.000	353.000	616.900	366.000	618.600	400.000	621.200	500.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	324.000	11.000	189.000	217.000	120.000	120.000	120.000	0.000	0.000	0.000
GR	618.000	100.000	617.200	126.000	616.600	140.000	615.600	189.000	610.900	197.000
GR	610.800	200.000	611.100	202.000	614.100	216.000	616.700	217.000	617.500	260.000
GR	619.000	300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	324.300	0.000	0.000	0.000	200.000	200.000	200.000	0.000	.500	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	875.000	1055.000	0.000	0.000

** D/S FACE TEMPERANCE RD

X1	324.480	7.000	950.000	980.000	125.000	125.000	125.000	0.000	0.000	0.000
GR	618.200	875.000	616.700	950.000	612.600	960.000	611.700	965.000	612.100	969.000
GR	615.000	980.000	618.000	1055.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.650	2.600	180.000	5.920	0.000	31.380	0.000	611.700	611.700
X1	324.520	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	617.000	618.800	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	324.600	8.000	960.000	969.000	13.000	13.000	13.000	0.000	0.000	0.000
GR	618.200	875.000	616.700	950.000	616.400	960.000	612.600	960.100	611.700	965.000
GR	612.100	968.900	616.400	969.000	618.400	1055.000	0.000	0.000	0.000	0.000

** WALK BRIDGE

X1	324.650	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.001	.001	.002	.003	.002	0.000	0.000	0.000	0.000
NC	0.000	0.000	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	325.000	13.000	383.000	413.000	235.000	235.000	235.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	619.200	250.000	619.200	251.000	619.200	252.000	619.200	253.000	619.200	254.000
GR	616.000	383.000	612.200	393.000	612.100	396.000	612.400	402.000	617.800	413.000
GR	617.400	415.000	617.500	425.000	618.500	475.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	200.000	410.000	0.000	0.000

** D/S FACE WASHINGTON ST

X1	325.980	10.000	288.000	312.000	175.000	175.000	175.000	0.000	0.000	0.000
GR	618.000	200.000	616.700	283.000	616.600	288.000	613.200	295.000	612.200	296.000
GR	612.100	300.000	612.100	304.000	612.200	307.000	617.100	312.000	618.500	410.000
SB	0.000	1.700	2.600	210.000	6.570	0.000	26.280	0.000	612.100	612.100
X1	326.020	0.000	0.000	0.000	34.000	34.000	34.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	616.100	618.700	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	326.500	11.000	356.000	390.000	110.000	110.000	110.000	0.000	-.100	0.000
GR	621.400	200.000	619.500	222.000	618.700	265.000	617.300	300.000	616.600	356.000
GR	613.900	366.000	612.900	370.000	612.300	380.000	612.600	382.000	617.500	390.000
GR	617.600	410.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	200.000	410.000	0.000	0.000

** D/S FACE PRIVATE DR

X1	326.980	0.000	0.000	0.000	130.000	130.000	130.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.900	2.700	195.000	5.540	0.000	16.060	0.000	612.300	612.300
X1	327.020	0.000	0.000	0.000	43.000	43.000	43.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.200	616.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	327.500	0.000	0.000	0.000	180.000	180.000	180.000	0.000	.400	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	160.000	240.000	280.000	390.000	280.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	0.000	0.000	7.100	600.000	815.000	0.000	0.000

** D/S FACE LEWIS RD

X1	327.980	8.000	705.000	737.000	210.000	210.000	210.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.100	620.100	0.000
GR	618.900	600.000	617.500	705.000	613.700	715.000	613.200	721.000	613.200	727.000
GR	616.000	732.000	617.000	737.000	618.200	815.000	0.000	0.000	0.000	0.000
SB	0.000	1.550	2.700	215.000	12.000	0.000	51.600	0.000	613.200	613.200

X1	328.020	0.000	0.000	0.000	33.000	33.000	33.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	617.500	620.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	620.500	620.500	0.000
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000
X1	328.100	14.000	218.000	245.000	90.000	90.000	90.000	0.000	0.000	0.000
GR	620.000	100.000	619.500	139.000	619.500	140.000	619.000	184.000	619.600	206.000
GR	618.600	218.000	613.400	225.000	613.000	230.000	613.800	234.000	618.900	245.000
GR	618.700	269.000	618.500	300.000	618.500	325.000	620.000	350.000	0.000	0.000
X1	329.000	10.000	225.000	255.000	1400.000	1400.000	1400.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.100	125.000	620.100	151.000	620.100	200.000	620.400	225.000	614.200	233.000
GR	614.000	237.000	614.300	242.000	620.900	255.000	619.700	300.000	619.800	375.000
X1	329.100	0.000	0.000	0.000	825.000	825.000	825.000	0.000	.100	0.000

** PRIVATE DRIVE

X1	329.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.001	.001	.002	.004	.002	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*PROF 1

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .86 FEET

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
312.10	6.76	597.56	0.00	597.56	597.70	.14	0.00	0.00	597.00
450.	23.	424.	3.	31.	136.	7.	0.	0.	597.20
0.00	.75	3.11	.36	.060	.045	.060	0.000	590.80	251.00
.001457	520.	520.	520.	0	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED .07 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.86	597.76	0.00	0.00	597.92	.16	.21	.01	597.10
450.	0.	450.	0.	0.	140.	0.	1.	0.	597.30
.01	0.00	3.22	0.00	.060	.045	.060	.045	590.90	294.00
.001531	142.	142.	142.	0	0	0	0.00	32.00	326.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED .41 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.28	597.95	0.00	0.	450.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.90 ELREA= 598.90

313.02	7.21	598.11	0.00	0.00	598.28	.16	.35	0.00	597.60
450.	0.	450.	0.	0.	139.	0.	1.	0.	597.70

.01	0.00	3.24	0.00	.060	.045	.060	.044	590.90	273.00
.001493	17.	17.	17.	2	0	0	0.00	30.00	303.00

*SECNO 313.100

313.10	6.76	598.16	0.00	0.00	598.36	.20	.07	.01	598.10
450.	0.	450.	0.	0.	126.	0.	1.	0.	598.20
.02	.12	3.58	0.00	.060	.045	.060	.044	591.40	263.14
.002064	42.	42.	42.	1	0	0	0.00	39.82	302.96

CCHV= .150 CEHV= .350

*SECNO 313.200

3280 CROSS SECTION 313.20 EXTENDED .09 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
313.20	6.88	599.68	0.00	0.00	599.87	.18	1.50	.00	599.50
450.	1.	447.	2.	5.	129.	11.	3.	2.	599.60
.07	.16	3.46	.18	.080	.050	.080	.049	592.80	188.02
.002298	690.	690.	690.	2	0	0	0.00	239.98	428.00

*SECNO 313.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 600.50 ELREA= 601.00

313.30	6.78	600.98	0.00	0.00	601.08	.11	1.21	.01	600.30
450.	58.	392.	0.	120.	140.	0.	6.	6.	601.00
.15	.48	2.80	0.00	.080	.050	.080	.049	594.20	12.17
.001372	690.	690.	690.	2	0	0	0.00	242.80	254.97

*SECNO 314.000

314.00	6.47	602.07	0.00	0.00	602.22	.16	1.12	.02	601.70
450.	24.	426.	0.	59.	130.	0.	10.	10.	602.40
.21	.40	3.27	0.00	.080	.050	.080	.049	595.60	43.41
.002019	680.	680.	680.	2	0	0	0.00	211.17	254.58

*SECNO 314.100

314.10	6.58	603.68	0.00	0.00	603.82	.14	1.60	.00	603.20
450.	36.	414.	0.	81.	134.	0.	14.	14.	603.90
.29	.44	3.09	0.00	.080	.050	.080	.050	597.10	31.53
.001750	850.	850.	850.	2	0	0	0.00	223.19	254.73

*SECNO 314.200

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 603.80 ELREA= 606.20

314.20	6.61	605.11	0.00	0.00	605.25	.14	1.43	.00	603.80
450.	17.	433.	0.	32.	142.	0.	17.	17.	606.20

.37	.52	3.05	0.00	.060	.050	.080	.050	598.50	144.39
.001618	850.	850.	850.	2	0	0	0.00	103.49	250.00

*SECNO 315.000

3265 DIVIDED FLOW

SECNO	DEPTH	CHSEL	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	ICC	ICCNT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 605.30 ELREA= 607.70

315.00	6.53	606.53	0.00	0.00	606.68	.15	1.42	.00	605.30
450.	14.	436.	0.	27.	139.	0.	21.	19.	607.70
.45	.52	3.12	0.00	.080	.050	.080	.050	600.00	151.50
.001727	850.	850.	850.	1	0	0	0.00	96.23	250.00

*SECNO 315.100

3265 DIVIDED FLOW

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 606.20 ELREA= 608.60

315.10	6.58	607.48	0.00	0.00	607.62	.14	.94	.00	606.20
450.	15.	435.	0.	29.	141.	0.	23.	20.	608.60
.50	.52	3.09	0.00	.080	.050	.080	.050	600.90	148.32
.001678	555.	555.	555.	1	0	0	0.00	99.47	250.00

*SECNO 315.200

3280 CROSS SECTION 315.20 EXTENDED .37 FEET

315.20	7.17	608.47	0.00	0.00	608.64	.16	1.01	.01	608.00
450.	6.	443.	1.	16.	136.	7.	25.	22.	608.30
.55	.38	3.27	.20	.080	.050	.080	.050	601.30	170.00
.001972	555.	555.	555.	2	0	0	0.00	142.00	312.00

*SECNO 315.900

3265 DIVIDED FLOW

3280 CROSS SECTION 315.90 EXTENDED .09 FEET

315.90	6.89	609.69	0.00	0.00	609.89	.19	1.24	.01	609.50
450.	1.	449.	0.	3.	127.	0.	27.	23.	609.80
.59	.18	3.54	0.00	.080	.050	.080	.050	602.80	170.00
.002510	560.	560.	560.	2	0	0	0.00	65.60	254.94

CCHV= .400 CEHV= .800
*SECNO 315.980

3280 CROSS SECTION 315.98 EXTENDED .52 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 610.30 ELREA= 610.30

** D/S FACE CRABB RD

315.98	7.32	610.02	0.00	0.00	610.13	.11	.21	.03	609.40
370.	0.	370.	0.	0.	140.	0.	27.	23.	609.70
.60	0.00	2.64	0.00	.080	.050	.080	.050	602.70	223.96
.001250	117.	117.	117.	2	0	0	0.00	31.24	255.20

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNO 316.020
3280 CROSS SECTION 316.02 EXTENDED 1.25 FEET

SECNO	DEPTH	CHSEL	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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRC
611.10	610.09	0.00	0.	370.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.70 ELREA= 611.70

316.02	8.35	611.05	0.00	0.00	611.10	.05	.97	0.00	609.10
370.	0.	370.	0.	0.	206.	0.	27.	24.	604.90
.61	0.00	1.80	0.00	.080	.050	.080	.050	602.70	247.00
.000337	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
3280 CROSS SECTION 316.10 EXTENDED 1.12 FEET

316.10	8.22	611.12	0.00	0.00	611.13	.01	.01	.02	609.30
370.	8.	198.	164.	41.	202.	340.	28.	24.	605.10
.63	.20	.98	.48	.080	.050	.080	.050	602.90	209.82
.000097	50.	50.	50.	2	0	0	0.00	150.18	360.00

CCHV= .150 CEHV= .350
*SECNO 316.200

316.20	9.11	611.11	0.00	0.00	611.14	.04	.01	.01	608.50

370.	43.	309.	18.	89.	187.	46.	28.	24.	608.50
.64	.48	1.65	.39	.080	.050	.080	.050	602.00	2.94
.000276	50.	50.	50.	2	0	0	0.00	106.71	109.64

*SECNO 316.250
WATER EL=X5 CARD= 611.187

** WOOD BRIDGE

316.25	9.19	611.19	0.00	0.00	611.22	.03	.00	.00	608.50
370.	45.	306.	19.	93.	190.	48.	28.	24.	608.50
.64	.48	1.62	.40	.080	.050	.080	.050	602.00	2.64
.000261	1.	1.	1.	0	0	0	0.00	107.69	110.33

*SECNO 316.300
3280 CROSS SECTION 316.30 EXTENDED 1.25 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.90 ELREA= 610.60

316.30	7.76	611.26	0.00	0.00	611.34	.08	.10	.02	611.70
370.	0.	357.	13.	0.	156.	37.	30.	24.	610.60
.67	0.00	2.29	.37	.080	.050	.080	.050	603.50	411.00
.000920	220.	220.	220.	0	0	0	0.00	105.00	516.00

*SECNO 316.980
3265 DIVIDED FLOW

3280 CROSS SECTION 316.98 EXTENDED .29 FEET

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

** D/S FACE WOODSIDE DR

316.98	6.79	611.39	0.00	0.00	611.52	.14	.17	.02	612.80
370.	4.	366.	0.	11.	123.	0.	30.	25.	611.70
.68	.38	2.97	0.00	.080	.050	.080	.050	604.60	340.00
.001896	130.	130.	130.	2	0	0	0.00	66.75	445.38

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNO 317.020
3280 CROSS SECTION 317.02 EXTENDED 1.77 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
612.37	611.51	0.00	28.	339.	53.	53.	609.90	612.00

317.02	7.57	612.17	0.00	0.00	612.21	.04	.69	0.00	611.50
370.	89.	281.	0.	124.	156.	0.	30.	25.	613.60
.68	.71	1.80	0.00	.080	.050	.080	.050	604.60	310.00
.000562	28.	28.	28.	2	0	2	0.00	107.62	417.62

*SECNO 317.100
3280 CROSS SECTION 317.10 EXTENDED 1.69 FEET

317.10	7.49	612.19	0.00	0.00	612.24	.04	.02	.00	611.60
370.	86.	284.	0.	118.	153.	0.	30.	25.	613.70
.69	.73	1.85	0.00	.080	.050	.080	.050	604.70	310.00
.000602	40.	40.	40.	2	0	0	0.00	107.49	417.49

*SECNO 317.150
3280 CROSS SECTION 317.15 EXTENDED 1.84 FEET

317.15	7.64	612.34	0.00	0.00	612.38	.04	.14	.00	611.60
370.	91.	279.	0.	129.	158.	0.	32.	25.	613.70
.74	.70	1.76	0.00	.080	.050	.080	.050	604.70	310.00
.000529	250.	250.	250.	0	0	0	0.00	107.73	417.73

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	7.67	612.37	0.00	0.00	612.43	.06	.03	.01	610.30
370.	9.	349.	11.	23.	180.	28.	32.	25.	610.30
.75	.41	1.94	.41	.080	.050	.080	.050	604.70	84.67
.000448	70.	70.	70.	0	0	0	0.00	96.95	181.62

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

SECNO	DEPTH	CHSEL	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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.09	612.44	.01	183.	188.	35.	35.	608.70	612.50

317.22	8.34	613.04	C.CC	0.C0	613.C7	.04	.65	0.00	610.30
370.	18.	329.	23.	50.	200.	61.	33.	26.	610.30
.75	.37	1.64	.38	.080	.050	.080	.050	604.70	63.69
.000280	30.	30.	30.	2	0	4	0.00	145.43	209.12

*SECNO 317.25C

317.25	8.15	613.05	0.00	0.C0	613.C9	.04	.01	.00	610.50
370.	16.	335.	19.	41.	194.	50.	33.	26.	610.50
.76	.38	1.73	.38	.C8C	.050	.080	.050	604.90	69.49
.000320	50.	50.	50.	0	0	0	0.00	132.63	202.13

CCHV= .150 CEHV= .350

*SECNC 317.270

317.27	7.44	613.14	C.00	0.00	613.18	.04	.08	.00	610.50
370.	28.	318.	24.	67.	184.	77.	35.	27.	611.70
.81	.42	1.73	.31	.080	.050	.C80	.050	605.7C	69.39
.000352	250.	250.	250.	1	0	0	0.00	177.42	246.81

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	6.86	613.16	C.00	0.00	613.22	.06	.03	.01	611.10
370.	19.	347.	5.	41.	167.	24.	35.	27.	612.30
.82	.46	2.08	.20	.080	.050	.080	.050	606.30	8C.35
.000578	75.	75.	75.	0	0	0	0.00	158.05	238.40

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNO 317.32C

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.58	613.22	0.00	181.	191.	80.	79.	611.60	612.60

317.32	6.91	613.21	0.00	0.00	613.27	.06	.05	0.00	611.10
370.	19.	345.	6.	43.	168.	28.	35.	27.	612.30
.82	.45	2.05	.21	.080	.050	.080	.050	606.30	79.49
.000556	15.	15.	15.	2	0	4	0.00	159.57	239.06

*SECNO 317.340

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	XLCBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
317.34	7.15	613.25	0.00	0.00	613.30	.05	.03	.00	610.90
370.	23.	334.	13.	53.	175.	50.	36.	27.	612.10
.83	.44	1.91	.27	.080	.050	.080	.050	606.10	74.99
.000455	60.	60.	60.	0	0	0	0.00	167.53	242.52

*SECNO 317.400

317.40	6.97	613.37	0.00	0.00	613.45	.07	.14	.01	613.50
370.	0.	365.	5.	0.	167.	18.	37.	28.	612.70
.86	0.00	2.19	.28	.080	.050	.080	.050	606.40	75.13
.000754	240.	240.	240.	0	0	0	0.00	86.98	162.11

*SECNO 317.450
WATER EL=X5 CARD= 613.622

** PRIVATE DRIVE ACROSS CREEK

317.45	7.22	613.62	0.00	0.00	613.69	.06	.00	.00	613.50
370.	0.	359.	11.	0.	175.	34.	37.	28.	612.70
.86	.07	2.05	.32	.080	.050	.080	.050	606.40	72.56
.000622	1.	1.	1.	0	0	0	0.00	107.60	180.15

*SECNO 318.000
3280 CROSS SECTION 318.00 EXTENDED 2.61 FEET

318.00	7.41	613.91	0.00	0.00	613.95	.03	.26	.00	613.90
370.	0.	239.	131.	1.	137.	173.	40.	29.	611.60
.95	.03	1.74	.76	.080	.050	.080	.050	606.50	549.33
.000511	460.	460.	460.	2	0	0	0.00	136.67	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 2.17 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

** D/S FACE PRIVATE DRIVE

318.08	6.97	613.97	0.00	0.00	614.02	.05	.06	.01	614.40
370.	0.	254.	116.	0.	124.	142.	40.	29.	612.10
.97	0.00	2.05	.82	.080	.050	.080	.050	607.00	586.96
.000772	100.	100.	100.	0	0	0	0.00	99.04	686.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 2.33 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
614.37	614.02	0.00	110.	262.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.40 ELREA= 612.10

318.12	7.13	614.13	0.00	0.00	614.17	.04	.15	0.00	614.40
370.	0.	248.	122.	0.	129.	152.	40.	29.	612.10
.97	0.00	1.93	.80	.080	.050	.080	.050	607.00	586.62
.000666	18.	18.	18.	2	0	0	0.00	99.39	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED 1.27 FEET

318.15	7.27	614.27	0.00	0.00	614.35	.08	.17	.01	612.20
370.	36.	175.	159.	44.	56.	129.	41.	30.	612.20
.99	.81	3.09	1.24	.080	.050	.080	.050	607.00	540.09
.002298	150.	150.	150.	2	0	0	0.00	141.91	682.00

*SECNO 318.160
WATER EL=X5 CARD= 614.279
3280 CROSS SECTION 318.16 EXTENDED 1.28 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	7.28	614.28	0.00	0.00	614.36	.08	.00	.00	612.20
370.	36.	174.	160.	45.	57.	129.	41.	30.	612.20
.99	.81	3.08	1.24	.080	.050	.080	.050	607.00	540.07
.002265	1.	1.	1.	0	0	0	0.00	141.93	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 2.15 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.80 ELREA= 612.50

318.20	6.95	614.35	0.00	0.00	614.40	.05	.04	.00	614.80
370.	0.	255.	115.	0.	123.	140.	41.	30.	612.50
1.00	0.00	2.06	.82	.080	.050	.080	.050	607.40	587.02
.000791	30.	30.	30.	0	0	0	0.00	98.98	686.00

*SECNO 318.250
WATER EL=X5 CARD= 614.553
3280 CROSS SECTION 318.25 EXTENDED 2.35 FEET

** PRIVATE DRIVE

318.25	7.15	614.55	0.00	0.00	614.59	.04	.00	.00	614.80
370.	0.	247.	123.	0.	129.	154.	41.	30.	612.50
1.00	0.00	1.91	.79	.080	.050	.080	.050	607.40	586.56
.000649	1.	1.	1.	0	0	0	0.00	99.45	686.00

*SECNO 318.300
3280 CROSS SECTION 318.30 EXTENDED 2.19 FEET

SECNO	DEPTH	CHSEL	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	ICCNT	CORAR	TOPWID	ENDST
318.30	6.98	614.78	0.00	0.00	614.82	.05	.23	.00	615.20
370.	0.	253.	117.	0.	125.	143.	44.	31.	612.90
1.05	0.00	2.03	.82	.080	.050	.080	.050	607.80	586.93
.000761	325.	325.	325.	0	0	0	0.00	99.07	686.00

*SECNO 318.350
WATER EL=X5 CARD= 614.897
3280 CROSS SECTION 318.35 EXTENDED 2.30 FEET

** PRIVATE DRIVE

318.35	7.10	614.90	0.00	0.00	614.94	.04	.00	.00	615.20
370.	0.	249.	121.	0.	128.	150.	44.	31.	612.90
1.05	0.00	1.95	.80	.080	.050	.080	.050	607.80	586.68
.000684	1.	1.	1.	0	0	0	0.00	99.32	686.00

*SECNO 319.000
3280 CROSS SECTION 319.00 EXTENDED .12 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.90 ELREA= 614.50

319.00	6.52	615.12	0.00	0.00	615.24	.12	.27	.03	616.10
335.	0.	324.	11.	0.	116.	28.	45.	31.	614.50
1.08	0.00	2.80	.38	.080	.050	.080	.050	608.60	705.84
.001614	275.	275.	275.	2	0	0	0.00	104.16	810.00

*SECNO 319.100
3280 CROSS SECTION 319.10 EXTENDED 1.67 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.90 ELREA= 614.10

319.10	6.77	615.57	0.00	0.00	615.62	.04	.37	.01	616.90
335.	0.	281.	54.	0.	159.	97.	47.	32.	614.10
1.16	0.00	1.76	.56	.080	.050	.080	.050	608.80	634.74
.000491	450.	450.	450.	2	0	0	0.00	92.26	727.00

*SECNO 319.980
3280 CROSS SECTION 319.98 EXTENDED .44 FEET

** D/S FACE CORL RD

319.98	5.54	615.64	0.00	0.00	615.70	.07	.08	.01	610.40
335.	24.	255.	56.	28.	108.	74.	48.	33.	610.30
1.18	.84	2.36	.76	.080	.050	.080	.050	610.10	629.36
.000662	140.	140.	140.	2	0	0	0.00	97.64	727.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.020
3280 CROSS SECTION 320.02 EXTENDED .73 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
616.32	615.70	0.00	92.	240.	58.	58.	614.90	615.50

320.02	5.83	615.93	0.00	0.00	615.99	.06	.28	0.00	610.40
335.	24.	246.	65.	31.	114.	94.	48.	33.	610.30
1.18	.77	2.16	.69	.080	.050	.080	.050	610.10	628.76
.000517	21.	21.	21.	2	0	2	0.00	98.24	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED 1.36 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	6.15	615.95	0.00	0.00	616.02	.08	.03	.01	617.90

335.	0.	290.	45.	C.	123.	75.	48.	33.	615.50
1.19	0.00	2.36	.61	.080	.050	.080	.050	609.80	537.21
.001041	40.	40.	40.	0	0	0	0.00	102.79	640.00

*SECNC 320.900

320.90	6.73	616.43	0.00	0.00	616.57	.13	.52	.02	620.10
335.	0.	327.	8.	0.	110.	22.	50.	34.	615.70
1.23	0.00	2.98	.39	.080	.050	.080	.050	609.70	10.81
.001706	400.	400.	400.	2	0	0	0.00	83.97	94.78

CCHV= .400 CEHV= .800
*SECND 320.980

** D/S FACE TEMPERANCE RD

320.98	6.46	616.66	0.00	C.CO	616.72	.06	.12	.03	613.00
335.	66.	269.	0.	94.	125.	0.	50.	34.	618.00
1.24	.70	2.16	0.00	.080	.050	.080	.050	610.20	367.17
.000732	110.	110.	110.	2	0	0	0.00	108.59	475.76

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNO 321.020
3280 CROSS SECTION 321.02 EXTENDED 3.68 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
618.25	616.72	0.00	7.	328.	43.	36.	616.00	617.90

321.02	7.98	618.18	0.00	0.00	618.18	.01	1.47	0.00	615.20
335.	110.	203.	22.	285.	215.	57.	50.	34.	614.10
1.26	.39	.94	.38	.080	.050	.080	.050	610.20	233.00
.000089	55.	55.	55.	C	0	4	0.00	138.35	371.35

*SECNO 322.000
3280 CROSS SECTION 322.00 EXTENDED 3.68 FEET

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	ICCNT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 619.30 ELREA= 619.30

322.00	7.57	618.17	0.00	0.00	618.24	.07	.01	.05	615.60

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     335.       0.      335.       0.       0.      157.       0.      51.      34.    612.00
     1.27     0.00      2.13     0.00     .080      .050     .080     .050   610.60   319.00
  .000496      30.       30.      30.        1         0        0     0.00    24.00   343.00

CCHV=    .300 CEHV=    .500
*SECNO 322.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      620.00 ELREA=      620.00

          **  D/S FACE RAILROAD BRIDGE

   322.98     7.27   617.97     0.00     0.00   618.49      .52      .02      .22   610.80
     335.       0.     335.       0.       0.      58.       0.      51.      34.    610.70
     1.27     0.00     5.78     0.00     .080     .050     .080     .050   610.70   689.00
  .005072      20.      20.      20.        2        0        0     0.00     8.00   697.00


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.60      2.90    150.00      7.00      0.00     39.20      0.00    610.70    610.70

*SECNO 323.020
PRESSURE FLOW

 EGPRS      EGLWC       H3       QWEIR      QPR       BAREA   TRAPEZOID      ELLC      ELTRD
                                                                AREA
   619.78    618.50      0.00        0.      335.       39.       39.      616.30    624.00


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      624.00 ELREA=      624.00

   323.02     8.71   619.41     0.00     0.00   619.78      .37     1.30     0.00   610.90
     335.       0.     335.       0.       0.      69.       0.      51.      34.    610.90
     1.27     0.00     4.86     0.00     .080     .050     .080     .050   610.70   346.00
  .003070      33.      33.      33.        2        0        0     0.00     8.00   354.00

*SECNO 323.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      624.00 ELREA=      624.00

   323.10     9.08   619.88     0.00     0.00   619.90      .01      .01      .11   615.30
     335.       0.     335.       0.       0.     377.       0.      51.      34.    616.90
     1.28     0.00      .89     0.00     .080     .050     .080     .050   610.80   300.00
  .000092      30.      30.      30.        2        0        0     0.00    66.00   366.00

CCHV=    .150 CEHV=    .350
*SECNO 324.000
3280 CROSS SECTION    324.00 EXTENDED      1.90 FEET

   324.00     9.10   619.90     0.00     0.00   619.91      .01      .01      .00   615.60
     335.     101.     181.      52.     288.     205.     186.      52.      35.    616.70
     1.33      .35      .89      .28     .080     .050     .080     .050   610.80   100.00
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.000073	120.	120.	120.	2	0	0	0.00	200.00	300.00

*SECNO 324.300
3280 CROSS SECTION 324.30 EXTENDED 1.42 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
324.30	8.61	619.91	0.00	0.00	619.93	.01	.02	.00	616.10
335.	95.	197.	43.	245.	191.	146.	55.	35.	617.20
1.41	.39	1.03	.30	.080	.050	.080	.050	611.30	100.00
.000107	200.	200.	200.	0	0	0	0.00	200.00	300.00

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED 1.93 FEET

** D/S FACE TEMPERANCE RD

324.48	8.23	619.93	0.00	0.00	619.94	.01	.01	.00	616.70
335.	57.	179.	98.	186.	194.	257.	57.	36.	615.00
1.46	.31	.92	.38	.080	.050	.080	.050	611.70	875.00
.000085	125.	125.	125.	0	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 2.00 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
622.85	619.94	0.00	282.	53.	31.	31.	617.00	618.80

324.52	8.30	620.00	0.00	0.00	620.00	.01	.07	0.00	616.70
335.	59.	177.	99.	192.	196.	263.	58.	36.	615.00
1.48	.31	.90	.38	.080	.050	.080	.050	611.70	875.00
.000080	50.	50.	50.	0	0	5	0.00	180.00	1055.00

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED 1.80 FEET

324.60	8.30	620.00	0.00	0.00	620.01	.02	.00	.01	616.40
335.	107.	123.	104.	226.	71.	223.	58.	36.	616.40
1.48	.48	1.73	.47	.080	.030	.080	.050	611.70	875.00
.000181	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=X5 CARD= 619.998
3280 CROSS SECTION 324.65 EXTENDED 1.80 FEET

** WALK BRIDGE

324.65	8.30	620.00	0.00	0.00	620.02	.02	.00	.00	616.40
335.	107.	123.	104.	226.	71.	223.	58.	36.	616.40
1.48	.48	1.73	.47	.080	.030	.080	.050	611.70	875.00
.000181	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED 1.54 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	THA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
325.00	7.94	620.04	0.00	0.00	620.05	.01	.03	.00	616.00
335.	110.	182.	42.	318.	184.	133.	61.	37.	617.80
1.58	.35	.99	.32	.080	.050	.080	.050	612.10	250.00
.000108	235.	235.	235.	0	0	0	0.00	225.00	475.00

CCHV= .200 CEHV= .400
*SECNO 325.980
3280 CROSS SECTION 325.98 EXTENDED 2.07 FEET

** D/S FACE WASHINGTON ST

325.98	7.96	620.06	0.00	0.00	620.07	.01	.02	.00	616.60
335.	95.	164.	76.	243.	158.	222.	64.	38.	617.10
1.65	.39	1.04	.34	.080	.050	.080	.050	612.10	200.00
.000117	175.	175.	175.	0	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 326.020
3280 CROSS SECTION 326.02 EXTENDED 2.12 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
624.35	620.07	0.00	297.	39.	26.	26.	616.10	618.70

326.02	8.01	620.11	0.00	0.00	620.12	.01	.05	0.00	616.60
335.	95.	162.	77.	248.	159.	228.	64.	38.	617.10
1.66	.39	1.02	.34	.080	.050	.080	.050	612.10	200.00
.000111	34.	34.	34.	0	0	5	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 2.63 FEET

326.50	7.93	620.13	0.00	0.00	620.14	.01	.01	.00	616.50
335.	111.	206.	18.	313.	210.	54.	66.	39.	617.40
1.70	.36	.98	.33	.080	.050	.080	.050	612.20	213.59
.000103	110.	110.	110.	0	0	0	0.00	196.41	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 2.54 FEET

** D/S FACE PRIVATE DR

326.98	7.84	620.14	0.00	0.00	620.15	.01	.01	.00	616.60
335.	109.	208.	18.	300.	207.	52.	67.	40.	617.50
1.75	.36	1.01	.34	.080	.050	.080	.050	612.30	214.60
.000110	130.	130.	130.	0	0	0	0.00	195.40	410.00

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 2.58 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
632.98	620.15	0.00	316.	19.	16.	16.	615.20	616.80

327.02	7.87	620.17	0.00	0.00	620.18	.01	.03	0.00	616.60
335.	110.	207.	18.	306.	209.	53.	68.	40.	617.50
1.77	.36	.99	.34	.080	.050	.080	.050	612.30	214.17
.000107	43.	43.	43.	1	0	5	0.00	195.83	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 2.19 FEET

327.50	7.49	620.19	0.00	0.00	620.21	.01	.02	.00	617.00
335.	99.	220.	16.	252.	195.	45.	70.	41.	617.90
1.82	.39	1.13	.36	.080	.050	.080	.050	612.70	218.63
.000150	180.	180.	180.	0	0	0	0.00	191.37	410.00

CCHV= .300 CEHV= .500
*SECNO 327.980
3280 CROSS SECTION 327.98 EXTENDED 2.02 FEET

** D/S FACE LEWIS RD

327.98	7.03	620.23	0.00	0.00	620.23	.01	.02	.00	617.50
280.	60.	152.	68.	212.	176.	204.	73.	41.	617.00
1.92	.28	.86	.33	.080	.050	.080	.050	613.20	600.00
.000093	210.	210.	210.	0	0	0	0.00	215.00	815.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.020
3280 CROSS SECTION 328.02 EXTENDED 2.50 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.94	620.27	0.00	52.	229.	52.	52.	617.50	620.50

328.02	7.50	620.70	0.00	0.00	620.70	.00	.47	0.00	617.50
280.	68.	139.	72.	263.	191.	242.	73.	42.	617.00
1.94	.26	.73	.30	.080	.050	.080	.050	613.20	600.00
.000059	33.	33.	33.	0	0	3	0.00	215.00	815.00

*SECNO 328.100
3280 CROSS SECTION 328.10 EXTENDED .70 FEET

328.10	7.70	620.70	0.00	0.00	620.71	.01	.01	.00	618.60
280.	43.	162.	75.	152.	148.	202.	74.	42.	618.90
1.97	.29	1.10	.37	.080	.050	.080	.050	613.00	100.00

.000162	90.	90.	90.	0	0	0	0.00	250.00	350.00

*SECNO 329.000
3280 CROSS SECTION 329.00 EXTENDED 1.23 FEET

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
329.00	7.03	621.03	0.00	0.00	621.05	.02	.33	.01	620.40
280.	30.	201.	50.	89.	136.	128.	88.	50.	620.90
2.31	.33	1.47	.39	.080	.050	.080	.050	614.00	125.00
.000379	1400.	1400.	1400.	3	0	0	0.00	250.00	375.00

*SECNO 329.100
3280 CROSS SECTION 329.10 EXTENDED 1.41 FEET

329.10	7.21	621.31	0.00	0.00	621.33	.02	.27	.00	620.50
280.	35.	188.	56.	107.	142.	150.	95.	55.	621.00
2.53	.33	1.33	.38	.080	.050	.080	.050	614.10	125.00
.000293	825.	825.	825.	2	0	0	0.00	250.00	375.00

*SECNO 329.250
WATER EL=XS CARD= 621.310
3280 CROSS SECTION 329.25 EXTENDED 1.41 FEET

** PRIVATE DRIVE

329.25	7.21	621.31	0.00	0.00	621.33	.02	.00	.00	620.50
280.	35.	188.	56.	107.	142.	150.	95.	55.	621.00
2.53	.33	1.33	.38	.080	.050	.080	.050	614.10	125.00
.000293	1.	1.	1.	0	0	0	0.00	250.00	375.00

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  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  50,51,52
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T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK  10 YEAR FLOW=350 CFS

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          kSEL       FQ

      -1.        2.         0.         0.  0.000000       0.00       -1.0         0.    596.840    0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLOC      IBW        CHNIM      ITRACE

     2.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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*PROF 2

CCHV= .150 CEHV= .350
*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED .14 FEET

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLFA= 597.00 ELREA= 597.20

312.10	6.04	596.84	0.00	596.84	596.99	.15	0.00	0.00	597.00
350.	0.	350.	0.	0.	114.	0.	0.	0.	597.20
0.00	0.00	3.08	0.00	.060	.045	.060	0.000	590.80	294.25
.001739	520.	520.	520.	0	0	0	0.00	30.83	325.08

CCHV= .200 CEHV= .400
*SECNO 312.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.20 ELREA= 598.20

** D/S FACE MINX RD - CORPORATE BDRY

312.98	6.19	597.09	0.00	0.00	597.22	.14	.23	.00	597.10
350.	0.	350.	0.	0.	118.	0.	0.	0.	597.30
.01	0.00	2.96	0.00	.060	.045	.060	.045	590.90	294.02
.001565	142.	142.	142.	0	0	0	0.00	31.43	325.45

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BHC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
597.40	597.25	0.00	0.	350.	89.	89.	597.00	598.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.90 ELREA= 598.90

313.02	6.35	597.25	0.00	0.00	597.40	.15	.18	0.00	597.60
350.	0.	350.	0.	0.	113.	0.	0.	0.	597.70
.01	0.00	3.09	0.00	.060	.045	.060	.044	590.90	273.78
.001653	17.	17.	17.	2	0	0	0.00	28.58	302.36

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*SECNO 313.100
   313.10      5.91    597.31      0.00      0.00    597.49       .19       .08       .01    598.10
     350.        C.      350.        0.        C.     101.        0.        1.        0.     598.20
      .02      0.00      3.45      0.00      .060      .045      .C60      .044    591.40    274.74
  .002225        42.       42.       42.         0         0         0      0.00     27.00    3C1.74

CCHV=     .150 CEHV=     .350
*SECNO 313.200
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLCB      QCH       QRCB      ALCB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TIME      VLOB      VCH       VRCB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TCPWID      ENDST

   313.20      6.12    598.92      C.00      0.C0    599.09       .17      1.59       .00    599.50
     350.        0.      350.        0.        0.     107.        0.        2.        1.     599.60
      .C8      0.C0      3.28      C.00      .080      .050      .080      .049    592.80    274.29
  .002390       690.      690.      690.         2         0         0      0.00     27.73    302.03

*SECNO 313.300

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      600.50 ELREA=         0.00

   313.30      6.15    600.35      0.00      C.C0    600.48       .13      1.39       .01    600.30
     350.        0.      350.        0.        0.     121.        0.        4.        1.     601.00
      .14      0.0C      2.90      0.00      .080      .050      .080      .049    594.20    224.00
  .001716       690.      690.      690.         2         0         0      0.00     30.18    254.18

*SECNO 314.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      601.90 ELREA=         0.00

   314.00      5.98    601.58      0.00      0.00    601.72       .14      1.24       .00    601.70
     350.        0.      350.        0.        0.     116.        0.        6.        1.     602.40
      .21      0.C0      3.03      0.00      .080      .050      .080      .049    595.60    224.24
  .001940       680.      680.      680.         2         0         0      0.00     29.73    253.96

*SECNO 314.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      603.40 ELREA=         0.00

   314.10      6.08    603.18      0.00      0.00    603.32       .14      1.59       .00    603.20
     350.        C.      350.        0.        0.     119.        0.        8.        2.     603.90
      .29      0.00      2.95      0.00      .080      .050      .C80      .050    597.10    224.04
  .001810       850.      850.      850.         2         0         0      0.00     30.05    254.09

*SECNO 314.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      603.80 ELREA=       606.20

   314.20      6.10    604.60      0.00      0.00    604.71       .12      1.39       .00    603.80
     350.        3.      347.        0.        8.     126.        0.       11.        3.     606.20
      .37       .40      2.76      0.00      .080      .050      .080      .050    598.50    191.38
  .001490       850.      85C.      850.         2         0         0      0.00     55.50    246.87
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*SECNO 315.000

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 605.30 ELREA= 607.70

315.00	5.94	605.94	0.00	0.00	606.06	.13	1.35	.00	605.30
350.	2.	348.	0.	5.	121.	0.	13.	4.	607.70
.45	.36	2.88	0.00	.080	.050	.080	.050	600.00	201.48
.001690	850.	850.	850.	2	0	0	0.00	45.08	246.56

*SECNO 315.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 606.20 ELREA= 608.60

315.10	5.97	606.87	0.00	0.00	606.99	.13	.93	.00	606.20
350.	2.	348.	0.	5.	122.	0.	15.	4.	608.60
.51	.36	2.86	0.00	.080	.050	.080	.050	600.90	200.81
.001652	555.	555.	555.	2	0	0	0.00	45.81	246.62

*SECNO 315.200

315.20	6.55	607.85	0.00	0.00	607.99	.14	.99	.00	608.00
350.	0.	350.	0.	0.	116.	0.	16.	5.	608.30
.56	0.00	3.01	0.00	.080	.050	.080	.050	601.30	224.15
.001942	555.	555.	555.	2	0	0	0.00	29.95	254.10

*SECNO 315.900

315.90	6.24	609.04	0.00	0.00	609.21	.17	1.21	.01	609.50
350.	0.	350.	0.	0.	107.	0.	18.	5.	609.80
.61	0.00	3.26	0.00	.080	.050	.080	.050	602.80	224.53
.002413	560.	560.	560.	2	0	0	0.00	28.82	253.35

CCHV= .400 CEHV= .800

*SECNO 315.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 610.30 ELREA= 610.30

** D/S FACE CRABB RD

315.98	6.64	609.34	0.00	0.00	609.45	.11	.22	.02	609.40
315.	0.	315.	0.	0.	119.	0.	18.	5.	609.70
.62	0.00	2.65	0.00	.080	.050	.080	.050	602.70	224.03
.001477	117.	117.	117.	2	0	0	0.00	30.29	254.32

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.90	150.00	8.75	0.00	52.50	0.00	602.70	602.70

*SECNO 316.020
3280 CROSS SECTION 316.02 EXTENDED .27 FEET

SECNO	DEPTH	CRSEL	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	ICCNT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
610.12	609.41	0.00	0.	315.	53.	53.	608.70	611.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 611.70 ELREA= 611.70

316.02	7.37	610.07	0.00	0.00	610.12	.05	.67	0.00	609.10
315.	0.	315.	0.	0.	176.	0.	18.	5.	604.90
.62	0.00	1.79	0.00	.080	.050	.080	.050	602.70	247.00
.000396	33.	33.	33.	2	0	0	0.00	30.00	277.00

*SECNO 316.100
3280 CROSS SECTION 316.10 EXTENDED .13 FEET

316.10	7.24	610.14	0.00	0.00	610.15	.01	.01	.02	609.30
315.	1.	184.	130.	9.	172.	258.	18.	6.	605.10
.64	.12	1.07	.50	.080	.050	.080	.050	602.90	224.68
.000143	50.	50.	50.	1	0	0	0.00	135.32	360.00

CCHV= .150 CEHV= .350
*SECNO 316.200

316.20	8.13	610.13	0.00	0.00	610.17	.05	.01	.01	608.50
315.	17.	292.	6.	44.	162.	18.	19.	6.	608.50
.65	.39	1.80	.32	.080	.050	.080	.050	602.00	6.57
.000402	50.	50.	50.	2	0	0	0.00	91.34	97.92

*SECNO 316.250
WATER EL=XS CARD= 610.176

** WOOD BRIDGE

316.25	8.18	610.18	0.00	0.00	610.22	.05	.00	.00	608.50
315.	18.	291.	6.	47.	163.	19.	19.	6.	608.50
.65	.39	1.78	.32	.080	.050	.080	.050	602.00	6.39
.000387	1.	1.	1.	0	0	0	0.00	92.20	98.59

*SECNO 316.300
3280 CROSS SECTION 316.30 EXTENDED .29 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 611.90 ELREA= 0.00

316.30	6.79	610.29	0.00	0.00	610.39	.10	.15	.02	611.70
315.	C.	315.	0.	C.	123.	0.	20.	6.	610.60
.67	0.00	2.56	0.00	.080	.050	.080	.050	603.50	413.10
.001406	220.	220.	220.	2	0	0	0.00	32.28	445.38

*SECNO 316.980

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

** D/S FACE WOODSIDE DR

316.98	5.89	610.49	C.00	0.00	610.66	.17	.25	.02	612.80
315.	0.	315.	0.	0.	96.	0.	20.	6.	611.70
.68	0.00	3.29	0.00	.080	.050	.080	.050	604.60	415.07
.002739	130.	130.	130.	2	0	0	0.00	28.55	443.62

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.80	100.00	10.00	0.00	53.00	0.00	604.60	604.60

*SECNO 317.020

3280 CROSS SECTICN 317.02 EXTENDED .70 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
611.20	610.64	0.00	0.	315.	53.	53.	609.90	612.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 612.00 ELREA= 0.00

317.02	6.50	611.10	C.00	0.00	611.20	.11	.55	0.00	611.50
315.	0.	315.	0.	C.	120.	0.	20.	6.	613.60
.69	0.00	2.63	0.00	.080	.050	.080	.050	604.60	383.97
.001508	28.	28.	28.	2	0	0	0.00	31.86	415.83

*SECNO 317.100

3280 CROSS SECTION 317.10 EXTENDED .66 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 612.00 ELREA= 0.00

317.10	6.46	611.16	C.00	0.00	611.27	.11	.06	.00	611.60
315.	0.	315.	0.	0.	119.	0.	20.	6.	613.70
.69	C.00	2.66	0.00	.080	.050	.080	.050	604.70	384.07

.001552	40.	40.	40.	2	0	0	0.00	31.69	415.76

*SECNO 317.15C
3280 CROSS SECTION 317.15 EXTENDED 1.02 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 612.00 ELREA= 0.00

317.15	6.82	611.52	C.CO	C.00	611.61	.09	.34	.00	611.60
315.	0.	315.	0.	0.	130.	0.	21.	6.	613.70
.72	C.CO	2.42	0.00	.080	.050	.080	.050	604.70	383.20
.001205	250.	250.	250.	2	0	0	0.00	33.17	416.37

CCHV= .400 CEHV= .800
*SECNO 317.180

** D/S FACE GRAVEL DRIVEWAY

317.18	6.92	611.62	0.00	0.00	611.68	.06	.05	.01	610.30
315.	3.	309.	3.	8.	157.	10.	21.	6.	610.30
.73	.33	1.97	.33	.080	.C5C	.080	.050	604.70	102.67
.000552	7C.	70.	70.	0	0	0	0.00	57.81	160.48

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.60	2.80	150.00	9.34	.50	35.34	0.00	604.70	604.70

*SECNO 317.220

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.59	611.69	.01	71.	244.	35.	35.	608.70	612.50

317.22	8.07	612.77	0.00	0.00	612.81	.03	1.13	0.00	610.30
315.	12.	288.	15.	37.	192.	46.	21.	6.	610.30
.74	.33	1.50	.33	.080	.050	.080	.050	604.70	72.09
.000246	30.	30.	30.	2	0	4	0.00	126.77	198.86

*SECNO 317.250

317.25	7.89	612.79	0.00	0.00	612.82	.04	.01	.00	610.50
315.	1C.	292.	12.	30.	186.	37.	22.	7.	610.50
.75	.34	1.57	.34	.080	.050	.080	.050	604.90	77.84
.000279	50.	50.	50.	0	0	0	0.00	113.14	19C.98

CCHV= .150 CEHV= .350
*SECNO 317.270

317.27	7.16	612.86	0.00	0.00	612.90	.04	.08	.00	610.50
315.	20.	283.	12.	53.	175.	51.	23.	7.	611.70
.79	.37	1.62	.23	.080	.050	.080	.050	605.70	74.77
.000326	250.	250.	250.	0	0	0	0.00	167.91	242.68

*SECNO 317.280

** D/S FACE PRIVATE DR

317.28	6.58	612.88	0.00	0.00	612.93	.05	.03	.01	611.10
315.	12.	303.	0.	31.	158.	3.	24.	8.	612.30
.80	.39	1.91	.13	.080	.050	.080	.050	606.30	85.70
.000523	75.	75.	75.	0	0	0	0.00	103.15	188.85

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.25	2.60	165.00	15.00	0.00	79.50	0.00	606.30	606.30

*SECNO 317.320
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.18	612.93	0.00	107.	209.	80.	79.	611.60	612.60

317.32	6.66	612.96	0.00	0.00	613.01	.05	.08	0.00	611.10
315.	13.	301.	1.	33.	161.	7.	24.	8.	612.30
.81	.39	1.87	.12	.080	.050	.080	.050	606.30	84.19
.000493	15.	15.	15.	2	0	3	0.00	136.37	220.57

*SECNO 317.340

SECNO	DEPTH	CHSEL	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

317.34	6.90	613.00	0.00	0.00	613.04	.04	.03	.00	610.90
315.	16.	294.	5.	42.	168.	27.	24.	8.	612.10
.82	.39	1.75	.18	.080	.050	.080	.050	606.10	79.76
.000408	60.	60.	60.	0	0	0	0.00	159.08	238.84

*SECNO 317.400

317.40	6.71	613.11	0.00	0.00	613.17	.06	.12	.01	613.50
315.	0.	314.	1.	0.	158.	7.	25.	8.	612.70
.85	0.00	1.99	.16	.080	.050	.080	.050	606.40	75.41
.000661	240.	240.	240.	0	0	0	0.00	66.84	142.25

*SECNO 317.450
WATER EL=X5 CARD= 613.260

** PRIVATE DRIVE ACROSS CREEK

317.45	6.86	613.26	0.00	C.CC	613.32	.06	.00	.00	613.50
315.	0.	312.	3.	0.	163.	13.	25.	8.	612.70
.85	0.00	1.91	.21	.080	.050	.080	.050	606.40	75.25
.000592	1.	1.	1.	0	0	0	0.00	79.01	154.26

*SECNO 318.00C
3280 CROSS SECTION 318.00 EXTENDED 2.25 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 613.90 ELREA= 611.60

318.00	7.04	613.54	C.00	C.CC	613.57	.03	.25	.00	613.90
315.	0.	214.	1C1.	0.	126.	147.	27.	9.	611.60
.94	0.00	1.69	.69	.080	.050	.080	.050	606.50	586.79
.000520	46C.	460.	460.	0	0	0	0.00	99.21	686.00

*SECNO 318.080
3280 CROSS SECTION 318.08 EXTENDED 1.80 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 614.40 ELREA= 612.10

** C/S FACE PRIVATE DRIVE

318.08	6.60	613.60	0.00	0.00	613.64	.05	.06	.01	614.40
315.	0.	230.	85.	C.	113.	115.	28.	10.	612.10
.96	0.00	2.03	.74	.080	.050	.080	.050	607.00	587.80
.000821	10C.	100.	100.	0	0	0	0.00	98.20	686.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.60	0.00	14.00	0.00	79.80	0.00	607.00	607.00

*SECNO 318.120
3280 CROSS SECTION 318.12 EXTENDED 1.97 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
613.89	613.64	0.00	41.	273.	80.	80.	612.70	613.30

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.40 ELREA= 612.10

318.12	6.77	613.77	0.00	0.00	613.81	.04	.17	0.00	614.40
315.	0.	223.	92.	0.	118.	128.	28.	10.	612.10
.96	0.00	1.88	.72	.080	.050	.080	.050	607.00	587.41
.000683	18.	18.	18.	2	0	3	0.00	98.59	686.00

*SECNO 318.150
3280 CROSS SECTION 318.15 EXTENDED .92 FEET

318.15	6.92	613.92	0.00	0.00	614.02	.11	.18	.02	612.20
315.	17.	178.	120.	25.	54.	101.	29.	10.	612.20
.98	.70	3.33	1.18	.080	.050	.080	.050	607.00	540.78
.002843	150.	150.	150.	2	0	0	0.00	141.22	682.00

*SECNO 318.160
WATER EL=X5 CARD= 613.926
3280 CROSS SECTION 318.16 EXTENDED .93 FEET

** ABANDONED BRIDGE - STEEL BEAMS ACROSS CREEK

318.16	6.93	613.93	0.00	0.00	614.03	.10	.00	.00	612.20
315.	17.	177.	120.	25.	54.	102.	29.	10.	612.20
.98	.70	3.30	1.18	.080	.050	.080	.050	607.00	540.76
.002800	1.	1.	1.	0	0	0	0.00	141.24	682.00

*SECNO 318.200
3280 CROSS SECTION 318.20 EXTENDED 1.83 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 614.80 ELREA= 612.50

318.20	6.63	614.03	0.00	0.00	614.08	.05	.04	.01	614.80
315.	0.	228.	87.	0.	114.	118.	29.	10.	612.50
.99	0.00	2.00	.73	.080	.050	.080	.050	607.40	587.72
.000792	30.	30.	30.	2	0	0	0.00	98.28	686.00

*SECNO 318.250
WATER EL=X5 CARD= 614.152
3280 CROSS SECTION 318.25 EXTENDED 1.95 FEET

** PRIVATE DRIVE

318.25	6.75	614.15	0.00	0.00	614.19	.04	.00	.00	614.80
315.	0.	224.	91.	0.	118.	126.	29.	10.	612.50
.99	0.00	1.90	.72	.080	.050	.080	.050	607.40	587.45
.000698	1.	1.	1.	0	0	0	0.00	98.55	686.00

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*SECNC 318.30C
3280 CROSS SECTION     318.30 EXTENDED       1.79 FEET

   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QRCB      ALOB      ACH       ARCB      VOL       TWA    LEFT/RIGHT
   TIME      VLCB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLCBR     ITRIAL    IDC       ICCNT     CORAR     TOPWID      ENDST

   318.30      6.59    614.39      0.00      0.00    614.44      .05       .25       .00    615.20
     315.        C.      230.        85.        0.     113.      115.       31.       11.     612.90
     1.04      0.00      2.03       .74       .080     .050      .080      .050    607.80    587.81
  .000825       325.      325.      325.         0         0         0      0.00     98.19    686.00

*SECNO 318.35C
 WATER EL=X5 CARD=    614.474
3280 CROSS SECTION     318.35 EXTENDED       1.87 FEET

          **  PRIVATE DRIVE

   318.35      6.67    614.47      0.00      0.00    614.52      .05       .00       .00    615.20
     315.        0.      227.        88.        0.     116.      121.       31.       11.     612.90
     1.04      0.00      1.96       .73       .080     .050      .080      .050    607.80    587.63
  .000758         1.        1.        1.         0         0         0      0.00     98.37    686.00

*SECNO 319.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       616.90 ELREA=       614.50

   319.00      6.11    614.71      0.00      0.00    614.81      .10       .27       .02    616.10
     265.        0.      264.        1.        0.     104.        3.       32.       11.     614.50
     1.07      0.00      2.54       .16       .080     .050      .080      .050    608.60    706.60
  .001474       275.      275.      275.         2         0         0      0.00     60.39    766.99

*SECNO 319.100
3280 CROSS SECTION     319.10 EXTENDED       1.22 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       616.90 ELREA=       614.10

   319.10      6.33    615.13      0.00      0.00    615.16      .04       .34       .01    616.90
     265.        0.      234.        31.        0.     145.       70.       34.       12.     614.10
     1.15      0.00      1.62       .43       .080     .050      .080      .050    608.80    635.29
  .000456       450.      450.      450.         2         0         0      0.00     91.71    727.00

*SECNO 319.980

          **  D/S FACE CORL RD

   319.98      5.08    615.18      0.00      0.00    615.24      .06       .07       .01    610.40
     265.       18.      210.        38.       23.      99.       47.       34.       12.     610.30
     1.17       .76      2.11       .81       .080     .050      .080      .050    610.10    630.28
  .000598       140.      140.      140.         2         0         0      0.00     48.87    679.15
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SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BHC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	0.00	12.00	0.00	57.60	0.00	610.10	610.10

*SECNO 320.020
3280 CROSS SECTION 320.02 EXTENDED .36 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
615.61	615.30	0.00	2.	263.	58.	58.	614.90	615.50

320.02	5.46	615.56	0.00	0.00	615.61	.04	.36	0.00	610.40
265.	18.	203.	43.	27.	107.	69.	34.	12.	610.30
1.18	.68	1.91	.62	.080	.050	.080	.050	610.10	629.52
.000442	21.	21.	21.	2	0	4	0.00	97.48	727.00

*SECNO 320.100
3280 CROSS SECTION 320.10 EXTENDED .98 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 618.60 ELREA= 615.50

320.10	5.77	615.57	0.00	0.00	615.64	.07	.03	.01	617.90
265.	0.	244.	21.	0.	112.	46.	34.	13.	615.50
1.18	0.00	2.18	.45	.080	.050	.080	.050	609.80	537.65
.000973	40.	40.	40.	1	0	0	0.00	102.35	640.00

*SECNO 320.900

320.90	6.32	616.02	0.00	0.00	616.13	.11	.48	.01	620.10
265.	0.	264.	1.	0.	99.	4.	36.	13.	615.70
1.23	0.00	2.66	.21	.080	.050	.080	.050	609.70	11.47
.001495	400.	400.	400.	2	0	0	0.00	50.22	61.68

CCHV= .400 CEHV= .800
*SECNO 320.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 616.35 ELREA= 616.35

** D/S FACE TEMPERANCE RD

320.98	5.99	616.19	0.00	0.00	616.28	.09	.14	.01	613.00
265.	0.	265.	0.	0.	113.	0.	36.	13.	618.00

1.24	0.00	2.35	C.00	.080	.050	.080	.050	610.20	450.00
.001044	110.	110.	110.	2	0	0	C.00	24.98	474.98

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.70	0.00	6.16	0.00	42.53	0.00	610.20	610.20

*SECNC 321.020
3280 CROSS SECTICN 321.02 EXTENDED 2.65 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
617.19	616.24	0.00	C.	265.	43.	36.	616.00	617.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 617.90 ELREA= 617.90

321.02	6.95	617.15	0.00	C.00	617.19	.03	.91	0.00	615.20
265.	0.	265.	0.	C.	181.	0.	36.	13.	614.10
1.25	0.00	1.47	0.00	.080	.050	.080	.050	610.20	319.00
.000284	55.	55.	55.	2	0	0	0.00	33.00	352.00

*SECNO 322.000
3280 CROSS SECTION 322.00 EXTENDED 2.66 FEET

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	IOC	ICONT	CORAR	TCPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 619.30 ELREA= 619.30

322.00	6.56	617.16	C.00	0.00	617.22	.06	.01	.02	615.60
265.	0.	265.	0.	C.	133.	0.	36.	13.	612.00
1.25	0.00	2.00	0.00	.080	.050	.080	.050	610.60	319.00
.000526	30.	30.	30.	1	0	0	0.00	24.00	343.00

CCHV= .300 CEHV= .500
*SECNO 322.980

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.00 ELREA= 620.00

** D/S FACE RAILROAD BRIDGE

322.98	6.30	617.00	0.00	C.00	617.43	.43	.02	.19	610.80
265.	C.	265.	0.	0.	50.	0.	36.	13.	610.70
1.25	0.00	5.28	0.00	.080	.050	.080	.050	610.70	689.00

.004661	20.	20.	20.	2	0	0	0.00	8.00	697.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.90	150.00	7.00	0.00	39.20	0.00	610.70	610.70

*SECNO 323.020
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
618.13	617.44	0.00	C.	265.	39.	39.	616.30	624.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.02	7.08	617.78	C.00	C.CO	618.13	.35	.70	0.00	610.90
265.	0.	265.	0.	C.	56.	0.	36.	13.	610.90
1.26	0.CO	4.74	0.00	.080	.050	.080	.050	610.70	346.0C
.003328	33.	33.	33.	2	0	0	0.00	8.00	354.00

*SECNC 323.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 624.00 ELREA= 624.00

323.10	7.43	618.23	0.00	C.CO	618.25	.02	.01	.10	615.30
265.	0.	265.	0.	0.	268.	0.	36.	13.	616.90
1.26	0.CO	.99	0.00	.080	.050	.080	.050	610.80	300.00
.000179	30.	30.	30.	2	0	0	0.00	66.00	366.00

CCHV= .150 CEHV= .350
*SECNO 324.000
3280 CROSS SECTICN 324.00 EXTENDED .25 FEET

324.00	7.45	618.25	0.00	0.00	618.27	.02	.02	.00	615.60
265.	55.	195.	15.	141.	159.	57.	37.	14.	616.70
1.30	.39	1.23	.27	.080	.050	.080	.050	610.80	100.00
.000196	120.	120.	120.	2	0	0	0.00	180.03	280.03

*SECNC 324.300

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	ICC	ICCNT	CORAR	TOPWID	ENDST
324.30	6.99	618.29	0.00	0.00	618.32	.03	.05	.00	616.10
265.	43.	214.	8.	101.	146.	31.	39.	15.	617.20
1.34	.43	1.47	.25	.080	.050	.080	.050	611.30	106.87
.000315	200.	200.	200.	0	0	0	0.00	160.83	267.70

CCHV= .400 CEHV= .800
*SECNO 324.480
3280 CROSS SECTION 324.48 EXTENDED .33 FEET

** D/S FACE TEMPERANCE RD

324.48	6.64	618.34	0.00	0.00	618.36	.02	.03	.00	616.70
265.	18.	188.	59.	66.	146.	137.	40.	15.	615.00
1.38	.27	1.29	.43	.080	.050	.080	.050	611.70	875.00
.000241	125.	125.	125.	1	0	0	0.00	180.00	1055.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.65	2.60	180.00	5.92	0.00	31.38	0.00	611.70	611.70

*SECNO 324.520
3280 CROSS SECTION 324.52 EXTENDED 1.14 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
620.17	618.36	0.00	91.	175.	31.	31.	617.00	618.80

324.52	7.43	619.13	0.00	0.00	619.14	.01	.78	0.00	616.70
265.	34.	160.	71.	126.	170.	198.	40.	15.	615.00
1.40	.27	.94	.36	.080	.050	.080	.050	611.70	875.00
.000105	50.	50.	50.	0	0	4	0.00	180.00	1055.00

*SECNO 324.600
3280 CROSS SECTION 324.60 EXTENDED .93 FEET

324.60	7.42	619.12	0.00	0.00	619.16	.03	.00	.02	616.40
265.	71.	127.	67.	152.	63.	149.	40.	15.	616.40
1.40	.47	2.01	.45	.080	.030	.080	.050	611.70	875.00
.000286	13.	13.	13.	0	0	0	0.00	180.00	1055.00

*SECNO 324.650
WATER EL=X5 CARD= 619.125
3280 CROSS SECTION 324.65 EXTENDED .92 FEET

** WALK BRIDGE

324.65	7.42	619.12	0.00	0.00	619.16	.03	.00	.00	616.40
265.	71.	128.	67.	151.	63.	148.	40.	15.	616.40
1.40	.47	2.02	.45	.080	.030	.080	.050	611.70	875.00
.000287	1.	1.	1.	0	0	0	0.00	180.00	1055.00

*SECNO 325.000
3280 CROSS SECTION 325.00 EXTENDED .69 FEET

SECNO	DEPTH	CRSEL	CRWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLCBL	XLCH	XLCBR	ITRIAL	ICC	ICCNT	CORAR	TOPWID	ENDST
325.00	7.10	619.20	0.00	0.00	619.21	.01	.05	.01	616.00
265.	67.	176.	23.	205.	159.	80.	42.	16.	617.80
1.48	.32	1.11	.28	.080	.050	.080	.050	612.10	254.31
.000164	235.	235.	235.	0	0	0	0.00	220.69	475.00

CCHV= .200 CEHV= .400
*SECNO 325.980
3280 CROSS SECTION 325.98 EXTENDED 1.24 FEET

** D/S FACE WASHINGTON ST

325.98	7.13	619.23	0.00	0.00	619.24	.01	.03	.00	616.60
265.	63.	158.	43.	169.	138.	141.	44.	17.	617.10
1.54	.37	1.15	.31	.080	.050	.080	.050	612.10	200.00
.000171	175.	175.	175.	1	0	0	0.00	210.00	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	210.00	6.57	0.00	26.28	0.00	612.10	612.10

*SECNO 326.020
3280 CROSS SECTION 326.02 EXTENDED 1.33 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
621.92	619.24	0.00	212.	53.	26.	26.	616.10	618.70
326.02	7.22	619.32	0.00	0.00	619.34	.01	.09	0.00	616.60
265.	65.	154.	46.	178.	140.	150.	45.	17.	617.10
1.55	.37	1.10	.30	.080	.050	.080	.050	612.10	200.00
.000154	34.	34.	34.	1	0	5	0.00	210.00	410.00

*SECNO 326.500
3280 CROSS SECTION 326.50 EXTENDED 1.84 FEET

326.50	7.14	619.34	0.00	0.00	619.35	.01	.02	.00	616.50
265.	69.	184.	12.	205.	184.	38.	46.	18.	617.40

1.59	.34	1.00	.30	.080	.050	.080	.050	612.20	225.09
.000129	110.	110.	110.	0	0	0	0.00	184.91	410.00

CCHV= .400 CEHV= .800
*SECNO 326.980
3280 CROSS SECTION 326.98 EXTENDED 1.76 FEET

** D/S FACE PRIVATE DR

326.98	7.06	619.36	0.00	0.00	619.37	.01	.02	.00	616.60
265.	67.	187.	11.	194.	181.	36.	47.	18.	617.50
1.63	.35	1.03	.31	.080	.050	.080	.050	612.30	229.58
.000140	130.	130.	130.	0	0	0	0.00	180.42	410.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	2.70	195.00	5.54	0.00	16.06	0.00	612.30	612.30

*SECNO 327.020
3280 CROSS SECTION 327.02 EXTENDED 1.79 FEET

SECNO	DEPTH	CHSEL	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRC
627.39	619.37	0.00	248.	18.	16.	16.	615.20	616.80

327.02	7.08	619.38	0.00	0.00	619.40	.01	.03	0.00	616.60
265.	68.	186.	11.	198.	182.	37.	47.	19.	617.50
1.64	.34	1.02	.31	.080	.050	.080	.050	612.30	227.91
.000136	43.	43.	43.	1	0	6	0.00	182.09	410.00

*SECNO 327.500
3280 CROSS SECTION 327.50 EXTENDED 1.41 FEET

327.50	6.71	619.41	0.00	0.00	619.43	.02	.03	.00	617.00
265.	58.	198.	9.	153.	169.	29.	49.	19.	617.90
1.70	.38	1.17	.32	.080	.050	.080	.050	612.70	248.40
.000197	180.	180.	180.	0	0	0	0.00	161.60	410.00

CCHV= .300 CEHV= .500
*SECNO 327.980
3280 CROSS SECTION 327.98 EXTENDED 1.25 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.10 ELREA= 620.10

** D/S FACE LEWIS RD

327.98	6.25	619.45	0.00	0.00	619.47	.02	.04	.00	617.50
160.	0.	160.	0.	0.	151.	0.	50.	20.	617.00
1.75	0.00	1.06	0.00	.080	.050	.080	.050	613.20	705.00
.000177	210.	210.	210.	0	0	0	0.00	32.00	737.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.55	2.70	215.00	12.00	0.00	51.60	0.00	613.20	613.20

*SECNO 328.02C
3280 CROSS SECTION 328.02 EXTENDED 1.47 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
619.68	619.47	0.00	0.	160.	52.	52.	617.50	620.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.50 ELREA= 620.50

328.02	6.47	619.67	0.00	0.00	619.68	.02	.21	0.00	617.50
160.	0.	160.	0.	0.	158.	0.	50.	20.	617.00
1.76	0.00	1.01	0.00	.080	.050	.080	.050	613.20	705.00
.000152	33.	33.	33.	1	0	0	0.00	32.00	737.00

*SECNO 328.100

328.10	6.68	619.68	0.00	0.00	619.70	.01	.02	.00	618.60
160.	5.	129.	26.	36.	120.	96.	51.	20.	618.90
1.79	.15	1.08	.27	.080	.050	.080	.050	613.00	124.82
.000206	90.	90.	90.	0	0	0	0.00	219.87	344.70

*SECNO 329.000

3265 DIVIDED FLOW

3280 CROSS SECTION 329.00 EXTENDED .29 FEET

SECNO	DEPTH	CISEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 620.40 ELREA= 620.90

329.00	6.09	620.09	0.00	0.00	620.12	.03	.41	.01	620.40
160.	0.	160.	0.	0.	109.	0.	56.	24.	620.90
2.05	0.00	1.47	0.00	.080	.050	.080	.050	614.00	225.40
.000464	1400.	1400.	1400.	2	0	0	0.00	28.00	255.00

*SECNO 329.100

3265 DIVIDED FLOW

3280 CROSS SECTION 329.10 EXTENDED .52 FEET

329.10	6.32	620.42	0.00	0.00	620.45	.02	.32	.00	620.50
160.	2.	147.	11.	19.	116.	50.	59.	26.	621.00
2.25	.12	1.27	.22	.080	.050	.080	.050	614.10	125.00
.000331	825.	825.	825.	2	0	0	0.00	220.94	375.00

*SECNO 329.250
WATER EL=X5 CARD= 620.426

3265 DIVIDED FLOW

3280 CROSS SECTION 329.25 EXTENDED .53 FEET

** PRIVATE DRIVE

329.25	6.33	620.43	0.00	0.00	620.45	.02	.00	.00	620.50
160.	2.	147.	11.	19.	116.	51.	59.	26.	621.00
2.25	.12	1.27	.22	.080	.050	.080	.050	614.10	125.00
.000331	1.	1.	1.	0	0	0	0.00	221.06	375.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100 yr Summery

00BREAK00

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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

FLAT CREEK 100 YEAR FLO

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	14.57	3.11	174.75	117.90
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.72	16.13	3.24	147.05	112.04
312.980	142.00	0.00	0.00	590.90	450.00	597.76	0.00	597.92	15.31	3.22	139.89	115.00
312.980	142.00	0.00	0.00	590.90	450.00	597.78	0.00	597.94	15.06	3.20	140.60	115.95
313.020	16.50	598.90	597.00	590.90	450.00	598.11	0.00	598.28	14.93	3.24	138.94	116.47
313.020	16.50	598.90	597.00	590.90	450.00	598.14	0.00	598.30	14.68	3.22	139.67	117.46
313.100	42.00	0.00	0.00	591.40	450.00	598.16	0.00	598.36	20.64	3.58	126.01	99.04
313.100	42.00	0.00	0.00	591.40	450.00	598.19	0.00	598.39	20.55	3.57	126.17	99.26
313.200	690.00	0.00	0.00	592.80	450.00	599.68	0.00	599.87	22.98	3.46	145.51	93.88
313.200	690.00	0.00	0.00	592.80	450.00	599.71	0.00	599.90	23.36	3.47	129.86	93.11
313.300	690.00	0.00	0.00	594.20	450.00	600.98	0.00	601.08	13.72	2.80	260.16	121.47
313.300	690.00	0.00	0.00	594.20	450.00	601.04	0.00	601.16	14.41	2.88	216.50	118.54
314.000	680.00	0.00	0.00	595.60	450.00	602.07	0.00	602.22	20.19	3.27	189.25	100.16
314.000	680.00	0.00	0.00	595.60	450.00	602.16	0.00	602.33	20.42	3.33	152.30	99.59
314.100	850.00	0.00	0.00	597.10	450.00	603.68	0.00	603.82	17.50	3.09	215.04	107.59
314.100	850.00	0.00	0.00	597.10	450.00	603.79	0.00	603.93	17.41	3.12	180.95	107.84
314.200	850.00	0.00	0.00	598.50	450.00	605.11	0.00	605.25	16.18	3.05	174.35	111.87
314.200	850.00	0.00	0.00	598.50	450.00	605.22	0.00	605.36	16.19	3.09	148.05	111.84
315.000	850.00	0.00	0.00	600.00	450.00	606.53	0.00	606.68	17.27	3.12	166.54	108.29
315.000	850.00	0.00	0.00	600.00	450.00	606.63	0.00	606.79	17.25	3.16	142.72	108.33
315.100	555.00	0.00	0.00	600.90	450.00	607.48	0.00	607.62	16.78	3.09	169.96	109.87
315.100	555.00	0.00	0.00	600.90	450.00	607.60	0.00	607.75	17.45	3.11	144.73	107.73
315.200	555.00	0.00	0.00	601.30	450.00	608.47	0.00	608.64	19.72	3.27	158.58	101.34
315.200	555.00	0.00	0.00	601.30	450.00	608.61	0.00	608.77	19.20	3.22	139.73	102.69
315.900	560.00	0.00	0.00	602.80	450.00	609.69	0.00	609.89	25.10	3.54	129.86	89.81
315.900	560.00	0.00	0.00	602.80	450.00	609.79	0.00	609.97	23.86	3.47	129.82	92.13

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	315.980	117.00	0.00	0.00	602.70	370.00	610.02	0.00	610.13	12.50	2.64	140.21	104.66
	315.980	117.00	0.00	0.00	602.70	370.00	610.10	0.00	610.20	11.84	2.60	142.57	107.51
	316.020	33.00	611.70	608.70	602.70	370.00	611.05	0.00	611.10	3.37	1.80	205.60	201.60
	316.020	33.00	611.70	608.70	602.70	370.00	611.13	0.00	611.18	3.25	1.78	207.90	205.12
	316.100	50.00	0.00	0.00	602.90	370.00	611.12	0.00	611.13	.97	.98	582.91	376.09
	316.100	50.00	0.00	0.00	602.90	370.00	611.19	0.00	611.20	.98	.99	533.18	373.54
	316.200	50.00	0.00	0.00	602.00	370.00	611.11	0.00	611.14	2.76	1.65	321.87	222.59
	316.200	50.00	0.00	0.00	602.00	370.00	611.18	0.00	611.22	2.79	1.67	297.03	221.41
*	316.250	1.00	0.00	0.00	602.00	370.00	611.19	0.00	611.22	2.61	1.62	330.44	228.82
*	316.250	1.00	0.00	0.00	602.00	370.00	611.26	0.00	611.30	2.66	1.64	305.18	226.99
	316.300	220.00	0.00	0.00	603.50	370.00	611.26	0.00	611.34	9.20	2.29	192.27	122.01
	316.300	220.00	0.00	0.00	603.50	370.00	611.33	0.00	611.41	9.37	2.33	159.07	120.88
	316.980	130.00	0.00	0.00	604.60	370.00	611.39	0.00	611.52	18.96	2.97	134.14	84.96
	316.980	130.00	0.00	0.00	604.60	370.00	611.46	0.00	611.59	17.80	2.90	139.41	87.70
	317.020	28.00	612.00	609.90	604.60	370.00	612.17	0.00	612.21	5.62	1.80	280.09	156.14
	317.020	28.00	612.00	609.90	604.60	370.00	612.21	0.00	612.25	5.41	1.78	284.54	159.02
	317.100	40.00	0.00	0.00	604.70	370.00	612.19	0.00	612.24	6.02	1.85	271.67	150.77
	317.100	40.00	0.00	0.00	604.70	370.00	612.23	0.00	612.28	6.31	1.90	254.03	147.25
	317.150	250.00	0.00	0.00	604.70	370.00	612.34	0.00	612.38	5.29	1.76	287.32	160.84
	317.150	250.00	0.00	0.00	604.70	370.00	612.39	0.00	612.43	5.55	1.82	269.54	157.00
	317.180	70.00	0.00	0.00	604.70	370.00	612.37	0.00	612.43	4.48	1.94	230.63	174.90
	317.180	70.00	0.00	0.00	604.70	370.00	612.42	0.00	612.47	4.33	1.92	235.31	177.82
	317.220	30.00	612.50	608.70	604.70	370.00	613.04	0.00	613.07	2.80	1.64	310.53	221.01
	317.220	30.00	612.50	608.70	604.70	370.00	613.05	0.00	613.08	2.78	1.64	312.06	221.85
	317.250	50.00	0.00	0.00	604.90	370.00	613.05	0.00	613.09	3.20	1.73	285.25	206.89
	317.250	50.00	0.00	0.00	604.90	370.00	613.06	0.00	613.11	3.36	1.77	246.58	201.72
	317.270	250.00	0.00	0.00	605.70	370.00	613.14	0.00	613.18	3.52	1.73	327.49	197.13
	317.270	250.00	0.00	0.00	605.70	370.00	613.15	0.00	613.20	3.78	1.80	274.58	190.38
	317.280	75.00	0.00	0.00	606.30	370.00	613.16	0.00	613.22	5.78	2.08	231.98	153.94
	317.280	75.00	0.00	0.00	606.30	370.00	613.17	0.00	613.24	5.70	2.07	234.40	154.93
	317.320	15.00	612.60	611.60	606.30	370.00	613.21	0.00	613.27	5.56	2.05	239.07	156.87
	317.320	15.00	612.60	611.60	606.30	370.00	613.22	0.00	613.28	5.48	2.04	241.74	157.99
	317.340	60.00	0.00	0.00	606.10	370.00	613.25	0.00	613.30	4.55	1.91	277.34	173.54
	317.340	60.00	0.00	0.00	606.10	370.00	613.26	0.00	613.32	4.87	1.97	226.55	167.72
	317.400	240.00	0.00	0.00	606.40	370.00	613.37	0.00	613.45	7.54	2.19	185.10	134.73
	317.400	240.00	0.00	0.00	606.40	370.00	613.39	0.00	613.47	7.82	2.20	167.93	132.35
*	317.450	1.00	0.00	0.00	606.40	370.00	613.62	0.00	613.69	6.22	2.05	209.52	148.36
*	317.450	1.00	0.00	0.00	606.40	370.00	613.64	0.00	613.71	6.81	2.10	176.14	141.79

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	318.000	460.00	0.00	0.00	606.50	370.00	613.91	0.00	613.95	5.11	1.74	310.48	163.74
	318.000	460.00	0.00	0.00	606.50	370.00	613.96	0.00	613.99	5.41	1.79	295.67	159.13
	318.080	100.00	0.00	0.00	607.00	370.00	613.97	0.00	614.02	7.72	2.05	265.81	133.12
	318.080	100.00	0.00	0.00	607.00	370.00	614.01	0.00	614.06	7.38	2.01	270.42	136.19
	318.120	18.00	613.30	612.70	607.00	370.00	614.13	0.00	614.17	6.66	1.93	281.13	143.40
	318.120	18.00	613.30	612.70	607.00	370.00	614.16	0.00	614.20	6.46	1.91	284.30	145.57
	318.150	150.00	0.00	0.00	607.00	370.00	614.27	0.00	614.35	22.98	3.09	229.44	77.18
	318.150	150.00	0.00	0.00	607.00	370.00	614.29	0.00	614.39	25.26	3.25	204.49	73.62
*	318.160	1.00	0.00	0.00	607.00	370.00	614.28	0.00	614.36	22.65	3.08	230.86	77.74
*	318.160	1.00	0.00	0.00	607.00	370.00	614.30	0.00	614.40	24.90	3.23	205.94	74.15
	318.200	30.00	0.00	0.00	607.40	370.00	614.35	0.00	614.40	7.91	2.06	263.44	131.57
	318.200	30.00	0.00	0.00	607.40	370.00	614.39	0.00	614.44	8.39	2.14	248.14	127.77
*	318.250	1.00	0.00	0.00	607.40	370.00	614.55	0.00	614.59	6.49	1.91	283.78	145.21
*	318.250	1.00	0.00	0.00	607.40	370.00	614.59	0.00	614.63	6.87	1.97	269.59	141.20
	318.300	325.00	0.00	0.00	607.80	370.00	614.78	0.00	614.82	7.61	2.03	267.31	134.11
	318.300	325.00	0.00	0.00	607.80	370.00	614.83	0.00	614.88	8.02	2.09	254.22	130.67
*	318.350	1.00	0.00	0.00	607.80	370.00	614.90	0.00	614.94	6.84	1.95	278.23	141.43
	318.350	1.00	0.00	0.00	607.80	370.00	614.83	0.00	614.88	8.00	2.09	254.10	130.84
	319.000	275.00	0.00	0.00	608.60	335.00	615.12	0.00	615.24	16.14	2.80	143.52	83.38
	319.000	275.00	0.00	0.00	608.60	335.00	615.09	0.00	615.22	18.15	2.91	114.93	78.64
	319.100	450.00	0.00	0.00	608.80	335.00	615.57	0.00	615.62	4.91	1.76	256.31	151.15
	319.100	450.00	0.00	0.00	608.80	335.00	615.58	0.00	615.63	5.22	1.82	236.76	146.56
	319.980	140.00	0.00	0.00	610.10	335.00	615.64	0.00	615.70	6.62	2.36	210.28	130.17
	319.980	140.00	0.00	0.00	610.10	335.00	615.65	0.00	615.72	6.54	2.35	211.74	131.00
	320.020	21.00	615.50	614.90	610.10	335.00	615.93	0.00	615.99	5.17	2.16	239.33	147.34
	320.020	21.00	615.50	614.90	610.10	335.00	615.94	0.00	616.00	5.13	2.15	240.20	147.88
	320.100	40.00	0.00	0.00	609.80	335.00	615.95	0.00	616.02	10.41	2.36	197.26	103.84
	320.100	40.00	0.00	0.00	609.80	335.00	615.95	0.00	616.04	11.42	2.48	176.39	99.12
	320.900	400.00	0.00	0.00	609.70	335.00	616.43	0.00	616.57	17.06	2.98	131.22	81.11
	320.900	400.00	0.00	0.00	609.70	335.00	616.48	0.00	616.62	18.05	3.02	110.92	78.85
	320.980	110.00	0.00	0.00	610.20	335.00	616.66	0.00	616.72	7.32	2.16	218.19	123.83
	320.980	110.00	0.00	0.00	610.20	335.00	616.72	0.00	616.77	6.95	2.12	224.81	127.12
	321.020	55.00	617.90	616.00	610.20	335.00	618.18	0.00	618.18	.89	.94	556.87	354.16
	321.020	55.00	617.90	616.00	610.20	335.00	618.21	0.00	618.22	.87	.94	562.03	358.83
	322.000	30.00	0.00	0.00	610.60	335.00	618.17	0.00	618.24	4.96	2.13	157.07	150.41
	322.000	30.00	0.00	0.00	610.60	335.00	618.21	0.00	618.28	6.70	2.12	157.94	129.41
	322.980	20.00	0.00	0.00	610.70	335.00	617.97	0.00	618.49	50.72	5.78	57.99	47.04
	322.980	20.00	0.00	0.00	610.70	335.00	618.01	0.00	618.53	49.87	5.74	58.36	47.44

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	323.020	33.00	624.00	616.30	610.70	335.00	619.41	0.00	619.78	30.70	4.86	68.93	60.46
	323.020	33.00	624.00	616.30	610.70	335.00	619.47	0.00	619.83	30.24	4.83	69.33	60.92
	323.100	30.00	0.00	0.00	610.80	335.00	619.88	0.00	619.90	.92	.89	377.14	349.64
	323.100	30.00	0.00	0.00	610.80	335.00	619.93	0.00	619.94	1.03	.88	380.20	330.83
	324.000	120.00	0.00	0.00	610.80	335.00	619.90	0.00	619.91	.73	.89	679.21	392.80
	324.000	120.00	0.00	0.00	610.80	335.00	619.95	0.00	619.95	.76	.91	633.21	384.73
	324.300	200.00	0.00	0.00	611.30	335.00	619.91	0.00	619.93	1.07	1.03	582.50	323.47
	324.300	200.00	0.00	0.00	611.30	335.00	619.96	0.00	619.97	1.12	1.05	534.33	316.95
	324.480	125.00	0.00	0.00	611.70	335.00	619.93	0.00	619.94	.85	.92	636.54	363.20
	324.480	125.00	0.00	0.00	611.70	335.00	619.98	0.00	619.99	.82	.91	645.02	369.94
	324.520	50.00	618.80	617.00	611.70	335.00	620.00	0.00	620.00	.80	.90	650.58	374.39
	324.520	50.00	618.80	617.00	611.70	335.00	620.04	0.00	620.05	.77	.89	659.04	381.20
	324.600	13.00	0.00	0.00	611.70	335.00	620.00	0.00	620.01	1.81	1.73	520.08	248.73
	324.600	13.00	0.00	0.00	611.70	335.00	620.04	0.00	620.06	1.89	1.78	487.52	243.53
*	324.650	1.00	0.00	0.00	611.70	335.00	620.00	0.00	620.02	1.81	1.73	520.09	248.75
*	324.650	1.00	0.00	0.00	611.70	335.00	620.04	0.00	620.07	1.90	1.78	486.71	243.25
	325.000	235.00	0.00	0.00	612.10	335.00	620.04	0.00	620.05	1.08	.99	635.10	322.95
	325.000	235.00	0.00	0.00	612.10	335.00	620.09	0.00	620.10	1.13	1.02	565.98	315.06
	325.980	175.00	0.00	0.00	612.10	335.00	620.06	0.00	620.07	1.17	1.04	623.18	309.84
	325.980	175.00	0.00	0.00	612.10	335.00	620.11	0.00	620.12	1.12	1.02	633.81	317.06
	326.020	34.00	618.70	616.10	612.10	335.00	620.11	0.00	620.12	1.11	1.02	634.41	317.47
	326.020	34.00	618.70	616.10	612.10	335.00	620.16	0.00	620.17	1.06	1.00	644.89	324.67
	326.500	110.00	0.00	0.00	612.20	335.00	620.13	0.00	620.14	1.03	.98	576.75	330.65
	326.500	110.00	0.00	0.00	612.20	335.00	620.17	0.00	620.19	1.07	1.00	533.92	324.51
	326.980	130.00	0.00	0.00	612.30	335.00	620.14	0.00	620.15	1.10	1.01	559.61	318.75
	326.980	130.00	0.00	0.00	612.30	335.00	620.19	0.00	620.20	1.06	.99	569.28	325.45
	327.020	43.00	616.80	615.20	612.30	335.00	620.17	0.00	620.18	1.07	.99	566.88	323.77
	327.020	43.00	616.80	615.20	612.30	335.00	620.22	0.00	620.23	1.02	.98	577.70	331.32
	327.500	180.00	0.00	0.00	612.70	335.00	620.19	0.00	620.21	1.50	1.13	492.23	273.87
	327.500	180.00	0.00	0.00	612.70	335.00	620.24	0.00	620.26	1.56	1.15	448.29	268.56
	327.980	210.00	0.00	0.00	613.20	280.00	620.23	0.00	620.23	.93	.86	592.09	290.74
	327.980	210.00	0.00	0.00	613.20	280.00	620.28	0.00	620.29	.88	.85	602.86	297.97
	328.020	33.00	620.50	617.50	613.20	280.00	620.70	0.00	620.70	.59	.73	695.39	363.37
	328.020	33.00	620.50	617.50	613.20	280.00	620.72	0.00	620.72	.58	.73	699.71	366.56
	328.100	90.00	0.00	0.00	613.00	280.00	620.70	0.00	620.71	1.62	1.10	502.08	219.78
	328.100	90.00	0.00	0.00	613.00	280.00	620.72	0.00	620.73	1.77	1.15	448.44	210.63
	329.000	1400.00	0.00	0.00	614.00	280.00	621.03	0.00	621.05	3.79	1.47	353.69	143.78
	329.000	1400.00	0.00	0.00	614.00	280.00	621.07	0.00	621.10	4.06	1.53	316.29	138.95

	SECNO	XLCH	ELTRO	ELLC	ELMIN	Q	CWSEL	CRITS	EG	10K*S	VCH	AREA	.01K
	329.100	825.00	0.00	0.00	614.10	280.00	621.31	0.00	621.33	2.93	1.33	399.02	163.47
	329.100	825.00	0.00	0.00	614.10	280.00	621.37	0.00	621.39	3.08	1.37	364.89	159.67
*	329.250	1.00	0.00	0.00	614.10	280.00	621.31	0.00	621.33	2.93	1.33	399.53	163.70
*	329.250	1.00	0.00	0.00	614.10	280.00	621.37	0.00	621.39	3.07	1.37	365.43	159.90

FLAT CREEK 100 YEAR FLO

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	312.100	450.00	597.56	0.00	0.00	0.00	110.00	520.00
	312.100	450.00	597.56	0.00	0.00	0.00	49.01	520.00
	312.980	450.00	597.76	0.00	.20	0.00	32.00	142.00
	312.980	450.00	597.78	0.00	.22	.02	32.00	142.00
	313.020	450.00	598.11	0.00	.35	0.00	30.00	16.50
	313.020	450.00	598.14	0.00	.35	.02	30.00	16.50
	313.100	450.00	598.16	0.00	.05	0.00	39.82	42.00
	313.100	450.00	598.19	0.00	.05	.02	29.98	42.00
	313.200	450.00	599.68	0.00	1.52	0.00	239.98	690.00
	313.200	450.00	599.71	0.00	1.52	.03	30.00	690.00
	313.300	450.00	600.98	0.00	1.29	0.00	242.80	690.00
	313.300	450.00	601.04	0.00	1.33	.06	138.94	690.00
	314.000	450.00	602.07	0.00	1.09	0.00	211.17	680.00
	314.000	450.00	602.16	0.00	1.12	.10	88.88	680.00
	314.100	450.00	603.68	0.00	1.62	0.00	223.19	850.00
	314.100	450.00	603.79	0.00	1.63	.11	117.13	850.00
	314.200	450.00	605.11	0.00	1.43	0.00	103.49	850.00
	314.200	450.00	605.22	0.00	1.42	.10	34.12	850.00
	315.000	450.00	606.53	0.00	1.42	0.00	96.23	850.00
	315.000	450.00	606.63	0.00	1.42	.10	32.04	850.00
	315.100	450.00	607.48	0.00	.95	0.00	99.47	555.00
	315.100	450.00	607.60	0.00	.97	.12	32.05	555.00
	315.200	450.00	608.47	0.00	1.00	0.00	142.00	555.00
	315.200	450.00	608.61	0.00	1.01	.13	31.24	555.00
	315.900	450.00	609.69	0.00	1.22	0.00	65.60	560.00
	315.900	450.00	609.79	0.00	1.18	.09	31.21	560.00
	315.980	370.00	610.02	0.00	.33	0.00	31.24	117.00
	315.980	370.00	610.10	0.00	.31	.08	31.24	117.00
	316.020	370.00	611.05	0.00	1.03	0.00	30.00	33.00
	316.020	370.00	611.13	0.00	1.03	.08	30.00	33.00
	316.100	370.00	611.12	0.00	.07	0.00	150.18	50.00
	316.100	370.00	611.19	0.00	.06	.07	104.10	50.00
	316.200	370.00	611.11	0.00	-.01	0.00	106.71	50.00
	316.200	370.00	611.18	0.00	-.01	.07	75.58	50.00
*	316.250	370.00	611.19	0.00	.08	0.00	107.69	1.00

*	316.250	370.00	611.26	0.00	.08	.07	77.07	1.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKES	TOPWID	XLCH
	316.300	370.00	611.26	0.00	.07	0.00	105.00	220.00
	316.300	370.00	611.33	0.00	.07	.07	35.98	220.00
	316.980	370.00	611.39	0.00	.13	0.00	66.75	130.00
	316.980	370.00	611.46	0.00	.14	.08	67.78	130.00
	317.020	370.00	612.17	0.00	.79	0.00	107.62	28.00
	317.020	370.00	612.21	0.00	.75	.04	107.69	28.00
	317.100	370.00	612.19	0.00	.02	0.00	107.49	40.00
	317.100	370.00	612.23	0.00	.02	.04	96.02	40.00
	317.150	370.00	612.34	0.00	.15	0.00	107.73	250.00
	317.150	370.00	612.39	0.00	.15	.05	97.04	250.00
	317.180	370.00	612.37	0.00	.03	0.00	96.95	70.00
	317.180	370.00	612.42	0.00	.03	.05	100.53	70.00
	317.220	370.00	613.04	0.00	.67	0.00	145.43	30.00
	317.220	370.00	613.05	0.00	.63	.01	146.17	30.00
	317.250	370.00	613.05	0.00	.01	0.00	132.63	50.00
	317.250	370.00	613.06	0.00	.01	.01	57.22	50.00
	317.270	370.00	613.14	0.00	.09	0.00	177.42	250.00
	317.270	370.00	613.15	0.00	.09	.01	105.73	250.00
	317.280	370.00	613.16	0.00	.02	0.00	158.05	75.00
	317.280	370.00	613.17	0.00	.02	.02	158.57	75.00
	317.320	370.00	613.21	0.00	.05	0.00	159.57	15.00
	317.320	370.00	613.22	0.00	.05	.02	160.14	15.00
	317.340	370.00	613.25	0.00	.04	0.00	167.53	60.00
	317.340	370.00	613.26	0.00	.03	.01	80.50	60.00
	317.400	370.00	613.37	0.00	.12	0.00	86.98	240.00
	317.400	370.00	613.39	0.00	.13	.02	33.90	240.00
*	317.450	370.00	613.62	0.00	.25	0.00	107.60	1.00
*	317.450	370.00	613.64	0.00	.25	.02	34.00	1.00
	318.000	370.00	613.91	0.00	.29	0.00	136.67	460.00
	318.000	370.00	613.96	0.00	.31	.04	93.01	460.00
	318.080	370.00	613.97	0.00	.05	0.00	99.04	100.00
	318.080	370.00	614.01	0.00	.06	.05	99.14	100.00
	318.120	370.00	614.13	0.00	.16	0.00	99.39	18.00
	318.120	370.00	614.16	0.00	.14	.03	99.46	18.00
	318.150	370.00	614.27	0.00	.14	0.00	141.91	150.00
	318.150	370.00	614.29	0.00	.14	.02	107.13	150.00
*	318.160	370.00	614.28	0.00	.01	0.00	141.93	1.00
*	318.160	370.00	614.30	0.00	.01	.02	107.63	1.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	318.200	370.00	614.35	0.00	.07	0.00	98.98	30.00
	318.200	370.00	614.39	0.00	.09	.04	90.15	30.00
*	318.250	370.00	614.55	0.00	.20	0.00	99.45	1.00
*	318.250	370.00	614.59	0.00	.20	.04	92.03	1.00
	318.300	370.00	614.78	0.00	.22	0.00	99.07	325.00
	318.300	370.00	614.83	0.00	.24	.05	91.71	325.00
*	318.350	370.00	614.90	0.00	.12	0.00	99.32	1.00
	318.350	370.00	614.83	0.00	.00	-.07	91.41	1.00
	319.000	335.00	615.12	0.00	.22	0.00	104.16	275.00
	319.000	335.00	615.09	0.00	.26	-.03	29.10	275.00
	319.100	335.00	615.57	0.00	.46	0.00	92.26	450.00
	319.100	335.00	615.58	0.00	.50	.01	79.90	450.00
	319.980	335.00	615.64	0.00	.06	0.00	97.64	140.00
	319.980	335.00	615.65	0.00	.07	.02	97.67	140.00
	320.020	335.00	615.93	0.00	.30	0.00	98.24	21.00
	320.020	335.00	615.94	0.00	.29	.01	98.26	21.00
	320.100	335.00	615.95	0.00	.02	0.00	102.79	40.00
	320.100	335.00	615.95	0.00	.01	.00	87.09	40.00
	320.900	335.00	616.43	0.00	.49	0.00	83.97	400.00
	320.900	335.00	616.48	0.00	.53	.05	25.27	400.00
	320.980	335.00	616.66	0.00	.22	0.00	108.59	110.00
	320.980	335.00	616.72	0.00	.23	.06	113.74	110.00
	321.020	335.00	618.18	0.00	1.52	0.00	138.35	55.00
	321.020	335.00	618.21	0.00	1.50	.04	138.44	55.00
	322.000	335.00	618.17	0.00	-.01	0.00	24.00	30.00
	322.000	335.00	618.21	0.00	-.01	.04	24.00	30.00
	322.980	335.00	617.97	0.00	-.20	0.00	8.00	20.00
	322.980	335.00	618.01	0.00	-.19	.05	8.00	20.00
	323.020	335.00	619.41	0.00	1.45	0.00	8.00	33.00
	323.020	335.00	619.47	0.00	1.45	.05	8.00	33.00
	323.100	335.00	619.88	0.00	.47	0.00	66.00	30.00
	323.100	335.00	619.93	0.00	.46	.05	66.00	30.00
	324.000	335.00	619.90	0.00	.02	0.00	200.00	120.00
	324.000	335.00	619.95	0.00	.02	.05	166.27	120.00
	324.300	335.00	619.91	0.00	.02	0.00	200.00	200.00
	324.300	335.00	619.96	0.00	.02	.05	154.01	200.00
	324.480	335.00	619.93	0.00	.02	0.00	180.00	125.00
	324.480	335.00	619.98	0.00	.02	.05	180.00	125.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	324.520	335.00	620.00	0.00	.07	0.00	180.00	50.00
	324.520	335.00	620.04	0.00	.07	.05	180.00	50.00
	324.600	335.00	620.00	0.00	-.00	0.00	180.00	13.00
	324.600	335.00	620.04	0.00	-.00	.05	157.85	13.00
*	324.650	335.00	620.00	0.00	.00	0.00	180.00	1.00
*	324.650	335.00	620.04	0.00	.00	.05	157.51	1.00
	325.000	335.00	620.04	0.00	.05	0.00	225.00	235.00
	325.000	335.00	620.09	0.00	.05	.05	169.02	235.00
	325.980	335.00	620.06	0.00	.02	0.00	210.00	175.00
	325.980	335.00	620.11	0.00	.02	.05	210.00	175.00
	326.020	335.00	620.11	0.00	.05	0.00	210.00	34.00
	326.020	335.00	620.16	0.00	.05	.05	210.00	34.00
	326.500	335.00	620.13	0.00	.01	0.00	196.41	110.00
	326.500	335.00	620.17	0.00	.01	.05	151.93	110.00
	326.980	335.00	620.14	0.00	.01	0.00	195.40	130.00
	326.980	335.00	620.19	0.00	.01	.05	195.97	130.00
	327.020	335.00	620.17	0.00	.03	0.00	195.83	43.00
	327.020	335.00	620.22	0.00	.03	.05	196.47	43.00
	327.500	335.00	620.19	0.00	.02	0.00	191.37	180.00
	327.500	335.00	620.24	0.00	.02	.05	134.68	180.00
	327.980	280.00	620.23	0.00	.03	0.00	215.00	210.00
	327.980	280.00	620.28	0.00	.04	.05	215.00	210.00
	328.020	280.00	620.70	0.00	.47	0.00	215.00	33.00
	328.020	280.00	620.72	0.00	.44	.02	215.00	33.00
	328.100	280.00	620.70	0.00	.00	0.00	250.00	90.00
	328.100	280.00	620.72	0.00	.00	.02	195.50	90.00
	329.000	280.00	621.03	0.00	.33	0.00	250.00	1400.00
	329.000	280.00	621.07	0.00	.35	.05	204.99	1400.00
	329.100	280.00	621.31	0.00	.28	0.00	250.00	825.00
	329.100	280.00	621.37	0.00	.30	.06	211.38	825.00
*	329.250	280.00	621.31	0.00	.00	0.00	250.00	1.00
*	329.250	280.00	621.37	0.00	.00	.06	211.47	1.00

SUMMARY OF ERRORS

NOTE SECNO= 316.250 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 316.250 PROFILE= 2 WSEL BASED ON X5 CARD

NOTE SECNO= 317.450 PROFILE= 1 WSEL BASED ON X5 CARD

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NOTE      SECNO=  317.450  PROFILE= 2  WSEL BASED CN X5 CARD

NOTE      SECNO=  318.160  PROFILE= 1  WSEL BASED CN X5 CARD
NOTE      SECNO=  318.160  PROFILE= 2  WSEL BASED CN X5 CARD

NOTE      SECNO=  318.250  PROFILE= 1  WSEL BASED CN X5 CARD
NOTE      SECNO=  318.250  PROFILE= 2  WSEL BASED CN X5 CARD

NOTE      SECNO=  318.350  PROFILE= 1  WSEL BASED CN X5 CARD

NOTE      SECNO=  324.650  PROFILE= 1  WSEL BASED ON X5 CARD
NOTE      SECNO=  324.650  PROFILE= 2  WSEL BASED CN X5 CARD

NOTE      SECNO=  329.250  PROFILE= 1  WSEL BASED ON X5 CARD
NOTE      SECNO=  329.250  PROFILE= 2  WSEL BASED CN X5 CARD
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FLOODWAY DATA, FLAT CREEK 100 YEAR FLO
PROFILE NO. 2

STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
312.100	49.	147.	3.1	597.6	597.6	0.0
312.980	32.	141.	3.2	597.8	597.8	0.0
313.020	30.	140.	3.2	598.1	598.1	0.0
313.100	30.	126.	3.6	598.2	598.2	0.0
313.200	30.	130.	3.5	599.7	599.7	0.0
313.300	139.	216.	2.1	601.1	601.0	.1
314.000	89.	152.	3.0	602.2	602.1	.1
314.100	117.	181.	2.5	603.8	603.7	.1
314.200	34.	148.	3.0	605.2	605.1	.1
315.000	32.	143.	3.2	606.6	606.5	.1
315.100	32.	145.	3.1	607.6	607.5	.1
315.200	31.	140.	3.2	608.6	608.5	.1
315.900	31.	130.	3.5	609.8	609.7	.1
315.980	31.	143.	2.6	610.1	610.0	.1
316.020	30.	208.	1.8	611.2	611.1	.1
316.100	104.	533.	.7	611.2	611.1	.1
316.200	76.	297.	1.2	611.2	611.1	.1
316.250	77.	305.	1.2	611.3	611.2	.1
316.300	36.	159.	2.3	611.4	611.3	.1
316.980	68.	139.	2.7	611.5	611.4	.1
317.020	108.	285.	1.3	612.2	612.2	0.0
317.100	96.	254.	1.5	612.2	612.2	0.0
317.150	97.	270.	1.4	612.3	612.3	0.0
317.180	101.	235.	1.6	612.4	612.4	0.0
317.220	146.	312.	1.2	613.0	613.0	0.0
317.250	57.	247.	1.5	613.1	613.1	0.0
317.270	106.	275.	1.3	613.1	613.1	0.0
317.280	159.	234.	1.6	613.2	613.2	0.0
317.320	160.	242.	1.5	613.2	613.2	0.0
317.340	80.	227.	1.6	613.2	613.2	0.0
317.400	34.	168.	2.2	613.4	613.4	0.0
317.450	34.	176.	2.1	613.6	613.6	0.0
318.000	93.	296.	1.3	613.9	613.9	0.0
318.080	99.	270.	1.4	614.0	614.0	0.0
318.120	99.	284.	1.3	614.1	614.1	0.0
318.150	107.	204.	1.8	614.3	614.3	0.0
318.160	108.	206.	1.8	614.3	614.3	0.0
318.200	90.	248.	1.5	614.4	614.4	0.0
318.250	92.	270.	1.4	614.6	614.6	0.0
318.300	92.	254.	1.5	614.8	614.8	0.0
318.350	91.	254.	1.5	614.9	614.9	0.0
319.000	29.	115.	2.9	615.1	615.1	0.0
319.100	80.	237.	1.4	615.6	615.6	0.0
319.990	98.	212.	1.6	615.6	615.6	0.0
320.020	98.	240.	1.4	615.9	615.9	0.0
320.100	87.	176.	1.9	615.9	615.9	0.0
320.900	25.	111.	3.0	616.4	616.4	0.0
320.980	114.	225.	1.5	616.8	616.7	.1
321.020	138.	562.	.6	618.2	618.2	0.0
322.000	24.	158.	2.1	618.2	618.2	0.0

FLOODWAY DATA, FLAT CREEK 100 YEAR FLO
PROFILE NO. 2

STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
322.980	8.	58.	5.7	618.0	618.0	0.0
323.020	8.	69.	4.8	619.5	619.4	.1
323.100	66.	380.	.9	619.9	619.9	0.0
324.000	166.	633.	.5	619.9	619.9	0.0
324.300	154.	534.	.6	619.9	619.9	0.0
324.480	190.	645.	.5	619.9	619.9	0.0
324.520	180.	659.	.5	620.0	620.0	0.0
324.600	158.	488.	.7	620.0	620.0	0.0
324.650	158.	487.	.7	620.0	620.0	0.0
325.000	169.	566.	.6	620.0	620.0	0.0
325.980	210.	634.	.5	620.2	620.1	.1
326.020	210.	645.	.5	620.2	620.1	.1
326.500	152.	534.	.6	620.1	620.1	0.0
326.990	196.	569.	.6	620.2	620.1	.1
327.020	196.	578.	.6	620.3	620.2	.1
327.500	135.	448.	.7	620.3	620.2	.1
327.980	215.	603.	.5	620.3	620.2	.1
328.020	215.	700.	.4	620.7	620.7	0.0
328.100	195.	448.	.6	620.7	620.7	0.0
329.000	205.	316.	.9	621.0	621.0	0.0
329.100	211.	365.	.8	621.4	621.3	.1
329.250	211.	365.	.8	621.4	621.3	.1

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100yr Summary

00BREAK00

JOB NO. UM3941 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 21:36:01 11-29-79

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                    TT
MM MM    MM MM  NN NN       NN  EE                    TT
MM  MM  MM  MM  NN  NN      NN  EE                    TT
MM   MMMM   MM  NN   NN     NN  EEEEEEEE              TT
MM    MM    MM  NN    NN    NN  EEEEEEEE              TT
MM          MM  NN     NN   NN  EE                    TT
MM          MM  NN      NN  NN  EE                    TT
MM          MM  NN       NNNN  EE                    TT
MM          MM  NN        NNN  EE                    TT
MM          MM  NN         NN  EEEEEEEEEEEE          TT
MM          MM  NN          N  EEEEEEEEEEEE          TT


XX        XX   SSSSSSSSSS   NN        NN  LL
 XX      XX    SS         SS  NNNN      NN  LL
  XX    XX     SS             NN NN     NN  LL
   XX  XX      SSS            NN  NN    NN  LL
    XXXX        SSSSSSSSS     NN   NN   NN  LL
    XXXX          SSSSSSSSS   NN    NN  NN  LL
   XX  XX               SSS  NN     NN NN  LL
  XX    XX              SS   NN      NNNN  LL
 XX      XX    SS        SS  NN       NNN  LL
XX        XX   SSSSSSSSSSS  NN        NN  LLLLLLLLLLLL
XX        XX    SSSSSSSSS   NN         N  LLLLLLLLLLLL
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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

FLAT CREEK 100 YEAR FLO

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	14.57	3.11	174.75	117.90
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	24.62	3.11	174.75	90.69
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	7.14	3.11	174.75	168.42
312.980	142.00	0.00	0.00	590.90	450.00	597.76	0.00	597.92	15.31	3.22	139.89	115.00
312.980	142.00	0.00	0.00	590.90	450.00	597.90	0.00	598.05	23.44	3.12	144.22	92.94
312.980	142.00	0.00	0.00	590.90	450.00	597.65	0.00	597.82	8.12	3.30	136.51	157.92
313.020	16.50	598.90	597.00	590.90	450.00	598.11	0.00	598.28	14.93	3.24	138.94	116.47
313.020	16.50	598.90	597.00	590.90	450.00	598.26	0.00	598.41	22.83	3.14	143.28	94.18
313.020	16.50	598.90	597.00	590.90	450.00	598.00	0.00	598.17	7.95	3.32	135.42	159.58
313.100	42.00	0.00	0.00	591.40	450.00	598.16	0.00	598.36	20.64	3.58	126.01	99.04
313.100	42.00	0.00	0.00	591.40	450.00	598.35	0.00	598.53	29.16	3.37	162.83	83.33
313.100	42.00	0.00	0.00	591.40	450.00	598.01	0.00	598.22	11.30	3.72	120.84	133.87
313.200	690.00	0.00	0.00	592.80	450.00	599.68	0.00	599.87	22.98	3.46	145.51	93.88
313.200	690.00	0.00	0.00	592.80	450.00	600.14	0.00	600.24	21.11	2.72	295.35	97.94
313.200	690.00	0.00	0.00	592.80	450.00	598.96	0.00	599.23	18.78	4.17	108.03	103.84
313.300	690.00	0.00	0.00	594.20	450.00	600.98	0.00	601.08	13.72	2.80	260.16	121.47
313.300	690.00	0.00	0.00	594.20	450.00	601.35	0.00	601.41	13.82	2.28	383.12	121.06
313.300	690.00	0.00	0.00	594.20	450.00	600.18	0.00	600.42	15.70	3.89	115.69	113.58
314.000	680.00	0.00	0.00	595.60	450.00	602.07	0.00	602.22	20.19	3.27	189.25	100.16
314.000	680.00	0.00	0.00	595.60	450.00	602.46	0.00	602.56	20.71	2.68	282.30	98.89
314.000	680.00	0.00	0.00	595.60	450.00	601.33	0.00	601.60	18.83	4.16	108.22	103.70
314.100	850.00	0.00	0.00	597.10	450.00	603.68	0.00	603.82	17.50	3.09	215.04	107.59
314.100	850.00	0.00	0.00	597.10	450.00	604.09	0.00	604.17	17.34	2.50	323.50	108.07
314.100	850.00	0.00	0.00	597.10	450.00	602.90	0.00	603.16	17.89	4.08	110.26	106.38
314.200	850.00	0.00	0.00	598.50	450.00	605.11	0.00	605.25	16.18	3.05	174.35	111.87
314.200	850.00	0.00	0.00	598.50	450.00	605.59	0.00	605.68	18.15	2.61	233.89	105.63
314.200	850.00	0.00	0.00	598.50	450.00	604.33	0.00	604.55	14.95	3.82	120.64	116.40
315.000	850.00	0.00	0.00	600.00	450.00	606.53	0.00	606.68	17.27	3.12	166.54	108.29
315.000	850.00	0.00	0.00	600.00	450.00	607.11	0.00	607.21	17.78	2.59	237.26	106.73
315.000	850.00	0.00	0.00	600.00	450.00	605.67	0.00	605.91	17.00	3.99	114.19	109.13

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	315.100	555.00	0.00	0.00	600.90	450.00	607.48	0.00	607.62	16.78	3.09	169.96	109.87
	315.100	555.00	0.00	0.00	600.90	450.00	608.08	0.00	608.17	16.67	2.52	247.39	110.21
	315.100	555.00	0.00	0.00	600.90	450.00	606.60	0.00	606.84	16.52	3.95	115.56	110.70
	315.200	555.00	0.00	0.00	601.30	450.00	608.47	0.00	608.64	19.72	3.27	158.58	101.34
	315.200	555.00	0.00	0.00	601.30	450.00	609.05	0.00	609.14	18.54	2.64	239.29	104.52
	315.200	555.00	0.00	0.00	601.30	450.00	607.57	0.00	607.84	19.14	4.16	108.09	102.86
	315.900	560.00	0.00	0.00	602.80	450.00	609.69	0.00	609.89	25.10	3.54	129.86	89.81
	315.900	560.00	0.00	0.00	602.80	450.00	610.23	0.00	610.36	25.49	2.97	195.81	89.12
	315.900	560.00	0.00	0.00	602.80	450.00	608.74	0.00	609.06	24.38	4.56	98.76	91.13
	315.980	117.00	0.00	0.00	602.70	370.00	610.02	0.00	610.13	12.50	2.64	140.21	104.66
	315.980	117.00	0.00	0.00	602.70	370.00	610.53	0.00	610.59	11.42	2.10	252.04	109.47
	315.980	117.00	0.00	0.00	602.70	370.00	609.16	0.00	609.32	11.34	3.26	113.54	109.87
	316.020	33.00	611.70	608.70	602.70	370.00	611.05	0.00	611.10	3.37	1.80	205.60	201.60
	316.020	33.00	611.70	608.70	602.70	370.00	611.57	0.00	611.61	4.54	1.67	221.05	173.56
	316.020	33.00	611.70	608.70	602.70	370.00	610.17	0.00	610.24	2.54	2.07	179.12	232.03
	316.100	50.00	0.00	0.00	602.90	370.00	611.12	0.00	611.13	.97	.98	582.91	376.09
	316.100	50.00	0.00	0.00	602.90	370.00	611.63	0.00	611.63	1.18	.87	660.15	340.94
	316.100	50.00	0.00	0.00	602.90	370.00	610.25	0.00	610.26	.88	1.22	455.29	394.19
	316.200	50.00	0.00	0.00	602.00	370.00	611.11	0.00	611.14	2.76	1.65	321.87	222.59
	316.200	50.00	0.00	0.00	602.00	370.00	611.62	0.00	611.65	3.28	1.45	379.67	204.39
	316.200	50.00	0.00	0.00	602.00	370.00	610.22	0.00	610.29	2.53	2.07	233.24	232.66
*	316.250	1.00	0.00	0.00	602.00	370.00	611.19	0.00	611.22	2.61	1.62	330.44	228.82
*	316.250	1.00	0.00	0.00	602.00	370.00	611.70	0.00	611.73	3.13	1.42	387.77	209.20
*	316.250	1.00	0.00	0.00	602.00	370.00	610.30	0.00	610.36	2.39	2.02	240.74	239.47
	316.300	220.00	0.00	0.00	603.50	370.00	611.26	0.00	611.34	9.20	2.29	192.27	122.01
	316.300	220.00	0.00	0.00	603.50	370.00	611.80	0.00	611.85	9.61	1.91	250.58	119.38
	316.300	220.00	0.00	0.00	603.50	370.00	610.35	0.00	610.48	9.08	2.95	125.23	122.81
	316.980	130.00	0.00	0.00	604.60	370.00	611.39	0.00	611.52	18.96	2.97	134.14	84.96
	316.980	130.00	0.00	0.00	604.60	370.00	611.95	0.00	612.04	19.82	2.47	182.38	83.11
	316.980	130.00	0.00	0.00	604.60	370.00	610.45	0.00	610.68	19.21	3.91	94.57	84.41
	317.020	28.00	612.00	609.90	604.60	370.00	612.17	0.00	612.21	5.62	1.80	280.09	156.14
	317.020	28.00	612.00	609.90	604.60	370.00	612.45	0.00	612.49	7.44	1.65	310.39	135.66
	317.020	28.00	612.00	609.90	604.60	370.00	611.30	0.00	611.43	8.87	2.93	126.33	124.25
	317.100	40.00	0.00	0.00	604.70	370.00	612.19	0.00	612.24	6.02	1.85	271.67	150.77
	317.100	40.00	0.00	0.00	604.70	370.00	612.48	0.00	612.52	7.90	1.68	302.78	131.66
	317.100	40.00	0.00	0.00	604.70	370.00	611.33	0.00	611.47	9.29	2.98	124.15	121.39
	317.150	250.00	0.00	0.00	604.70	370.00	612.34	0.00	612.38	5.29	1.76	287.32	160.84
	317.150	250.00	0.00	0.00	604.70	370.00	612.67	0.00	612.70	6.72	1.59	323.51	142.72
	317.150	250.00	0.00	0.00	604.70	370.00	611.56	0.00	611.68	7.95	2.81	131.61	131.25
	317.180	70.00	0.00	0.00	604.70	370.00	612.37	0.00	612.43	4.48	1.94	230.63	174.90
	317.180	70.00	0.00	0.00	604.70	370.00	612.71	0.00	612.76	5.97	1.79	267.50	151.43
	317.180	70.00	0.00	0.00	604.70	370.00	611.66	0.00	611.74	3.63	2.29	177.80	194.33

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	317.220	30.00	612.50	608.70	604.70	370.00	613.04	0.00	613.07	2.80	1.64	310.53	221.01
	317.220	30.00	612.50	608.70	604.70	370.00	613.12	0.00	613.16	4.45	1.61	323.10	175.34
	317.220	30.00	612.50	608.70	604.70	370.00	612.89	0.00	612.93	1.53	1.71	289.67	299.11
	317.250	50.00	0.00	0.00	604.90	370.00	613.05	0.00	613.09	3.20	1.73	285.25	206.89
	317.250	50.00	0.00	0.00	604.90	370.00	613.14	0.00	613.18	5.05	1.68	297.83	164.58
	317.250	50.00	0.00	0.00	604.90	370.00	612.90	0.00	612.94	1.75	1.79	265.67	279.73
	317.270	250.00	0.00	0.00	605.70	370.00	613.14	0.00	613.18	3.52	1.73	327.49	197.13
	317.270	250.00	0.00	0.00	605.70	370.00	613.28	0.00	613.31	5.27	1.66	352.52	161.17
	317.270	250.00	0.00	0.00	605.70	370.00	612.94	0.00	612.99	2.05	1.85	293.53	258.51
	317.280	75.00	0.00	0.00	606.30	370.00	613.16	0.00	613.22	5.78	2.08	231.98	153.94
	317.280	75.00	0.00	0.00	606.30	370.00	613.31	0.00	613.37	8.56	1.98	256.79	126.48
	317.280	75.00	0.00	0.00	606.30	370.00	612.94	0.00	613.02	3.36	2.21	199.79	201.84
	317.320	15.00	612.60	611.60	606.30	370.00	613.21	0.00	613.27	5.56	2.05	239.07	156.87
	317.320	15.00	612.60	611.60	606.30	370.00	613.35	0.00	613.40	8.33	1.96	261.92	128.20
	317.320	15.00	612.60	611.60	606.30	370.00	613.04	0.00	613.10	3.14	2.16	212.32	208.73
	317.340	60.00	0.00	0.00	606.10	370.00	613.25	0.00	613.30	4.55	1.91	277.34	173.54
	317.340	60.00	0.00	0.00	606.10	370.00	613.40	0.00	613.45	6.69	1.81	304.19	143.04
	317.340	60.00	0.00	0.00	606.10	370.00	613.06	0.00	613.12	2.61	2.02	246.89	228.81
	317.400	240.00	0.00	0.00	606.40	370.00	613.37	0.00	613.45	7.54	2.19	185.10	134.73
	317.400	240.00	0.00	0.00	606.40	370.00	613.59	0.00	613.66	10.83	2.07	205.49	112.41
	317.400	240.00	0.00	0.00	606.40	370.00	613.13	0.00	613.21	4.38	2.32	166.62	176.79
*	317.450	1.00	0.00	0.00	606.40	370.00	613.62	0.00	613.69	6.22	2.05	209.52	148.36
*	317.450	1.00	0.00	0.00	606.40	370.00	613.84	0.00	613.90	8.81	1.93	235.44	124.65
*	317.450	1.00	0.00	0.00	606.40	370.00	613.38	0.00	613.45	3.67	2.18	185.90	193.11
	318.000	460.00	0.00	0.00	606.50	370.00	613.91	0.00	613.95	5.11	1.74	310.48	163.74
	318.000	460.00	0.00	0.00	606.50	370.00	614.22	0.00	614.25	6.46	1.57	353.93	145.61
	318.000	460.00	0.00	0.00	606.50	370.00	613.58	0.00	613.62	3.44	1.97	275.54	199.44
	318.080	100.00	0.00	0.00	607.00	370.00	613.97	0.00	614.02	7.72	2.05	265.81	133.12
	318.080	100.00	0.00	0.00	607.00	370.00	614.29	0.00	614.33	9.61	1.81	298.08	119.36
	318.080	100.00	0.00	0.00	607.00	370.00	613.60	0.00	613.67	5.48	2.37	230.23	158.12
	318.120	18.00	613.30	612.70	607.00	370.00	614.13	0.00	614.17	6.66	1.93	281.13	143.40
	318.120	18.00	613.30	612.70	607.00	370.00	614.39	0.00	614.42	8.82	1.75	307.53	124.55
	318.120	18.00	613.30	612.70	607.00	370.00	613.84	0.00	613.89	4.31	2.15	252.93	178.24
	318.150	150.00	0.00	0.00	607.00	370.00	614.27	0.00	614.35	22.98	3.09	229.44	77.18
	318.150	150.00	0.00	0.00	607.00	370.00	614.59	0.00	614.64	24.90	2.55	274.75	74.15
	318.150	150.00	0.00	0.00	607.00	370.00	613.90	0.00	614.05	19.49	3.93	178.23	83.81
*	318.160	1.00	0.00	0.00	607.00	370.00	614.28	0.00	614.36	22.65	3.08	230.86	77.74
*	318.160	1.00	0.00	0.00	607.00	370.00	614.60	0.00	614.65	24.57	2.54	276.17	74.64
*	318.160	1.00	0.00	0.00	607.00	370.00	613.91	0.00	614.06	19.43	3.93	178.50	83.94
	318.200	30.00	0.00	0.00	607.40	370.00	614.35	0.00	614.40	7.91	2.06	263.44	131.57
	318.200	30.00	0.00	0.00	607.40	370.00	614.66	0.00	614.69	9.89	1.83	294.92	117.65
	318.200	30.00	0.00	0.00	607.40	370.00	614.03	0.00	614.10	5.35	2.35	232.33	159.92

	SECNO	XLCH	ELTRD	FLLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
*	318.250	1.00	0.00	0.00	607.40	370.00	614.55	0.00	614.59	6.49	1.91	283.78	145.21
*	318.250	1.00	0.00	0.00	607.40	370.00	614.86	0.00	614.89	8.29	1.72	316.27	128.52
*	318.250	1.00	0.00	0.00	607.40	370.00	614.23	0.00	614.29	4.35	2.16	252.02	177.41
	318.300	325.00	0.00	0.00	607.80	370.00	614.78	0.00	614.82	7.61	2.03	267.31	134.11
	318.300	325.00	0.00	0.00	607.80	370.00	615.14	0.00	615.17	9.19	1.78	302.97	122.03
	318.300	325.00	0.00	0.00	607.80	370.00	614.38	0.00	614.45	5.60	2.39	228.16	156.34
*	318.350	1.00	0.00	0.00	607.80	370.00	614.90	0.00	614.94	6.84	1.95	278.23	141.43
*	318.350	1.00	0.00	0.00	607.80	370.00	615.26	0.00	615.29	8.28	1.71	316.50	128.62
*	318.350	1.00	0.00	0.00	607.80	370.00	614.50	0.00	614.56	4.97	2.28	239.29	166.00
	319.000	275.00	0.00	0.00	608.60	335.00	615.12	0.00	615.24	16.14	2.80	143.52	83.38
	319.000	275.00	0.00	0.00	608.60	335.00	615.54	0.00	615.62	17.70	2.37	187.91	79.63
	319.000	275.00	0.00	0.00	608.60	335.00	614.63	0.00	614.80	12.28	3.28	103.66	95.60
	319.100	450.00	0.00	0.00	608.80	335.00	615.57	0.00	615.62	4.91	1.76	256.31	151.15
	319.100	450.00	0.00	0.00	608.80	335.00	616.03	0.00	616.06	5.89	1.53	298.43	138.07
	319.100	450.00	0.00	0.00	608.80	335.00	615.04	0.00	615.10	3.90	2.11	206.52	169.73
	319.980	140.00	0.00	0.00	610.10	335.00	615.64	0.00	615.70	6.62	2.36	210.28	130.17
	319.980	140.00	0.00	0.00	610.10	335.00	616.11	0.00	616.16	7.58	2.05	256.52	121.72
	319.980	140.00	0.00	0.00	610.10	335.00	615.08	0.00	615.18	5.07	2.74	164.18	148.71
	320.020	21.00	615.50	614.90	610.10	335.00	615.93	0.00	615.99	5.17	2.16	239.33	147.34
	320.020	21.00	615.50	614.90	610.10	335.00	616.18	0.00	616.23	7.14	2.01	263.81	125.38
	320.020	21.00	615.50	614.90	610.10	335.00	615.65	0.00	615.72	3.21	2.35	211.66	187.07
	320.100	40.00	0.00	0.00	609.80	335.00	615.95	0.00	616.02	10.41	2.36	197.26	103.84
	320.100	40.00	0.00	0.00	609.80	335.00	616.21	0.00	616.27	13.60	2.14	223.44	90.85
	320.100	40.00	0.00	0.00	609.80	335.00	615.65	0.00	615.75	7.07	2.68	165.41	125.97
	320.900	400.00	0.00	0.00	609.70	335.00	616.43	0.00	616.57	17.06	2.98	131.22	81.11
	320.900	400.00	0.00	0.00	609.70	335.00	616.84	0.00	616.93	19.48	2.55	185.92	75.91
	320.900	400.00	0.00	0.00	609.70	335.00	615.96	0.00	616.14	12.28	3.42	100.57	95.61
	320.980	110.00	0.00	0.00	610.20	335.00	616.66	0.00	616.72	7.32	2.16	218.19	123.83
	320.980	110.00	0.00	0.00	610.20	335.00	617.04	0.00	617.09	8.70	1.88	269.59	113.61
	320.980	110.00	0.00	0.00	610.20	335.00	616.13	0.00	616.27	8.49	3.01	111.20	114.94
	321.020	55.00	617.90	616.00	610.20	335.00	618.18	0.00	618.18	.89	.94	556.87	354.16
	321.020	55.00	617.90	616.00	610.20	335.00	618.38	0.00	618.39	1.31	.90	585.49	292.55
	321.020	55.00	617.90	616.00	610.20	335.00	617.67	0.00	617.72	1.66	1.69	197.96	259.80
	322.000	30.00	0.00	0.00	610.60	335.00	618.17	0.00	618.24	4.96	2.13	157.07	150.41
	322.000	30.00	0.00	0.00	610.60	335.00	618.38	0.00	618.45	7.60	2.07	162.12	121.53
	322.000	30.00	0.00	0.00	610.60	335.00	617.67	0.00	617.75	3.11	2.31	145.12	189.90
	322.980	20.00	0.00	0.00	610.70	335.00	617.97	0.00	618.49	50.72	5.78	57.99	47.04
	322.980	20.00	0.00	0.00	610.70	335.00	618.20	0.00	618.69	78.76	5.59	59.89	37.75
	322.980	20.00	0.00	0.00	610.70	335.00	617.42	0.00	618.03	30.55	6.24	53.65	60.61
	323.020	33.00	624.00	616.30	610.70	335.00	619.41	0.00	619.78	30.70	4.86	68.93	60.46
	323.020	33.00	624.00	616.30	610.70	335.00	619.67	0.00	620.02	48.11	4.72	70.99	48.30
	323.020	33.00	624.00	616.30	610.70	335.00	618.82	0.00	619.24	18.12	5.22	64.14	78.71

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	323.100	30.00	0.00	0.00	610.80	335.00	619.88	0.00	619.90	.92	.89	377.14	349.64
	323.100	30.00	0.00	0.00	610.80	335.00	620.12	0.00	620.13	1.36	.85	392.71	287.63
	323.100	30.00	0.00	0.00	610.80	335.00	619.35	0.00	619.37	.62	.98	342.07	424.79
	324.000	120.00	0.00	0.00	610.80	335.00	619.90	0.00	619.91	.73	.89	679.21	392.80
	324.000	120.00	0.00	0.00	610.80	335.00	620.14	0.00	620.15	1.03	.83	727.29	330.61
	324.000	120.00	0.00	0.00	610.80	335.00	619.36	0.00	619.37	.55	1.04	572.17	452.13
	324.300	200.00	0.00	0.00	611.30	335.00	619.91	0.00	619.93	1.07	1.03	582.50	323.47
	324.300	200.00	0.00	0.00	611.30	335.00	620.16	0.00	620.17	1.48	.95	632.05	275.47
	324.300	200.00	0.00	0.00	611.30	335.00	619.37	0.00	619.39	.85	1.23	474.72	364.26
	324.480	125.00	0.00	0.00	611.70	335.00	619.93	0.00	619.94	.85	.92	636.54	363.20
	324.480	125.00	0.00	0.00	611.70	335.00	620.18	0.00	620.19	1.19	.86	681.93	307.61
	324.480	125.00	0.00	0.00	611.70	335.00	619.39	0.00	619.40	.66	1.09	538.76	413.75
	324.520	50.00	618.80	617.00	611.70	335.00	620.00	0.00	620.00	.80	.90	650.58	374.39
	324.520	50.00	618.80	617.00	611.70	335.00	620.24	0.00	620.25	1.13	.85	694.41	315.58
	324.520	50.00	618.80	617.00	611.70	335.00	619.54	0.00	619.55	.57	1.04	567.32	443.32
	324.600	13.00	0.00	0.00	611.70	335.00	620.00	0.00	620.01	1.81	1.73	520.08	248.73
	324.600	13.00	0.00	0.00	611.70	335.00	620.24	0.00	620.26	2.45	1.58	564.18	214.06
	324.600	13.00	0.00	0.00	611.70	335.00	619.53	0.00	619.56	1.41	2.10	437.20	281.98
*	324.650	1.00	0.00	0.00	611.70	335.00	620.00	0.00	620.02	1.81	1.73	520.09	248.75
*	324.650	1.00	0.00	0.00	611.70	335.00	620.24	0.00	620.26	2.45	1.58	564.32	214.14
*	324.650	1.00	0.00	0.00	611.70	335.00	619.54	0.00	619.57	1.41	2.10	436.87	281.71
	325.000	235.00	0.00	0.00	612.10	335.00	620.04	0.00	620.05	1.08	.99	635.10	322.95
	325.000	235.00	0.00	0.00	612.10	335.00	620.30	0.00	620.31	1.43	.90	693.73	279.81
	325.000	235.00	0.00	0.00	612.10	335.00	619.58	0.00	619.60	.84	1.19	530.75	366.09
	325.980	175.00	0.00	0.00	612.10	335.00	620.06	0.00	620.07	1.17	1.04	623.18	309.84
	325.980	175.00	0.00	0.00	612.10	335.00	620.32	0.00	620.33	1.57	.95	678.27	267.77
	325.980	175.00	0.00	0.00	612.10	335.00	619.60	0.00	619.61	.90	1.24	525.48	353.14
	326.020	34.00	618.70	616.10	612.10	335.00	620.11	0.00	620.12	1.11	1.02	634.41	317.47
	326.020	34.00	618.70	616.10	612.10	335.00	620.37	0.00	620.38	1.50	.93	688.21	273.25
	326.020	34.00	618.70	616.10	612.10	335.00	619.66	0.00	619.68	.84	1.21	539.08	365.00
	326.500	110.00	0.00	0.00	612.20	335.00	620.13	0.00	620.14	1.03	.98	576.75	330.65
	326.500	110.00	0.00	0.00	612.20	335.00	620.39	0.00	620.40	1.40	.90	628.64	282.90
	326.500	110.00	0.00	0.00	612.20	335.00	619.67	0.00	619.68	.75	1.13	488.64	387.96
	326.980	130.00	0.00	0.00	612.30	335.00	620.14	0.00	620.15	1.10	1.01	559.61	318.75
	326.980	130.00	0.00	0.00	612.30	335.00	620.41	0.00	620.41	1.50	.93	612.20	273.72
	326.980	130.00	0.00	0.00	612.30	335.00	619.68	0.00	619.70	.81	1.17	471.30	372.26
	327.020	43.00	616.80	615.20	612.30	335.00	620.17	0.00	620.18	1.07	.99	566.88	323.77
	327.020	43.00	616.80	615.20	612.30	335.00	620.44	0.00	620.45	1.45	.92	620.36	278.26
	327.020	43.00	616.80	615.20	612.30	335.00	619.71	0.00	619.73	.78	1.15	478.55	378.78
	327.500	180.00	0.00	0.00	612.70	335.00	620.19	0.00	620.21	1.50	1.13	492.23	273.87
	327.500	180.00	0.00	0.00	612.70	335.00	620.47	0.00	620.48	1.99	1.03	545.21	237.62
	327.500	180.00	0.00	0.00	612.70	335.00	619.73	0.00	619.75	1.13	1.32	405.20	315.31

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	327.980	210.00	0.00	0.00	613.20	280.00	620.23	0.00	620.23	.93	.86	592.09	290.74
	327.980	210.00	0.00	0.00	613.20	280.00	620.51	0.00	620.51	1.20	.78	653.29	256.07
	327.980	210.00	0.00	0.00	613.20	280.00	619.74	0.00	619.79	2.18	1.74	160.52	189.81
	328.020	33.00	620.50	617.50	613.20	280.00	620.70	0.00	620.70	.59	.73	695.39	363.37
	328.020	33.00	620.50	617.50	613.20	280.00	620.80	0.00	620.81	.91	.71	718.63	292.85
	328.020	33.00	620.50	617.50	613.20	280.00	620.42	0.00	620.45	1.45	1.54	181.94	232.27
	328.100	90.00	0.00	0.00	613.00	280.00	620.70	0.00	620.71	1.62	1.10	502.08	219.78
	328.100	90.00	0.00	0.00	613.00	280.00	620.81	0.00	620.82	2.41	1.04	529.85	180.50
	328.100	90.00	0.00	0.00	613.00	280.00	620.46	0.00	620.47	1.08	1.24	440.33	269.57
	329.000	1400.00	0.00	0.00	614.00	280.00	621.03	0.00	621.05	3.79	1.47	353.69	143.78
	329.000	1400.00	0.00	0.00	614.00	280.00	621.26	0.00	621.28	4.59	1.29	412.88	130.62
	329.000	1400.00	0.00	0.00	614.00	280.00	620.69	0.00	620.75	3.95	2.06	182.08	140.87
	329.100	825.00	0.00	0.00	614.10	280.00	621.31	0.00	621.33	2.93	1.33	399.02	163.47
	329.100	825.00	0.00	0.00	614.10	280.00	621.59	0.00	621.61	3.39	1.14	470.47	152.06
	329.100	825.00	0.00	0.00	614.10	280.00	620.98	0.00	621.01	2.31	1.60	316.56	184.30
*	329.250	1.00	0.00	0.00	614.10	280.00	621.31	0.00	621.33	2.93	1.33	399.53	163.70
*	329.250	1.00	0.00	0.00	614.10	280.00	621.60	0.00	621.61	3.38	1.14	470.98	152.26
*	329.250	1.00	0.00	0.00	614.10	280.00	620.98	0.00	621.01	2.30	1.60	317.06	184.56

FLAT CREEK 100 YEAR FLO

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
312.100	450.00	597.56	0.00	0.00	0.00	110.00	520.00
312.100	450.00	597.56	0.00	0.00	0.00	110.00	520.00
312.100	450.00	597.56	0.00	0.00	0.00	110.00	520.00
312.980	450.00	597.76	0.00	.20	0.00	32.00	142.00
312.980	450.00	597.90	0.00	.34	0.00	32.00	142.00
312.980	450.00	597.65	0.00	.09	0.00	32.00	142.00
313.020	450.00	598.11	0.00	.35	0.00	30.00	16.50
313.020	450.00	598.26	0.00	.36	0.00	30.00	16.50
313.020	450.00	598.00	0.00	.34	0.00	30.00	16.50
313.100	450.00	598.16	0.00	.05	0.00	39.82	42.00
313.100	450.00	598.35	0.00	.10	0.00	291.77	42.00
313.100	450.00	598.01	0.00	.01	0.00	29.52	42.00
313.200	450.00	599.68	0.00	1.52	0.00	239.98	690.00
313.200	450.00	600.14	0.00	1.78	0.00	353.00	690.00
313.200	450.00	598.96	0.00	.95	0.00	27.89	690.00
313.300	450.00	600.98	0.00	1.29	0.00	242.80	690.00
313.300	450.00	601.35	0.00	1.21	0.00	400.00	690.00
313.300	450.00	600.18	0.00	1.22	0.00	29.73	690.00
314.000	450.00	602.07	0.00	1.09	0.00	211.17	680.00
314.000	450.00	602.46	0.00	1.12	0.00	280.28	680.00
314.000	450.00	601.33	0.00	1.14	0.00	28.90	680.00
314.100	450.00	603.68	0.00	1.62	0.00	223.19	850.00
314.100	450.00	604.09	0.00	1.63	0.00	389.35	850.00
314.100	450.00	602.90	0.00	1.57	0.00	29.13	850.00
314.200	450.00	605.11	0.00	1.43	0.00	103.49	850.00
314.200	450.00	605.59	0.00	1.50	0.00	147.54	850.00
314.200	450.00	604.33	0.00	1.42	0.00	42.36	850.00
315.000	450.00	606.53	0.00	1.42	0.00	96.23	850.00
315.000	450.00	607.11	0.00	1.53	0.00	149.07	850.00
315.000	450.00	605.67	0.00	1.34	0.00	38.39	850.00
315.100	450.00	607.48	0.00	.95	0.00	99.47	555.00
315.100	450.00	608.08	0.00	.96	0.00	150.89	555.00
315.100	450.00	606.60	0.00	.94	0.00	39.27	555.00
315.200	450.00	608.47	0.00	1.00	0.00	142.00	555.00
315.200	450.00	609.05	0.00	.97	0.00	142.00	555.00
315.200	450.00	607.57	0.00	.97	0.00	28.93	555.00
315.900	450.00	609.69	0.00	1.22	0.00	65.60	560.00
315.900	450.00	610.23	0.00	1.19	0.00	142.00	560.00
315.900	450.00	608.74	0.00	1.17	0.00	27.71	560.00

	SECND	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	315.980	370.00	610.02	0.00	.33	0.00	31.24	117.00
	315.980	370.00	610.53	0.00	.30	0.00	142.00	117.00
	315.980	370.00	609.16	0.00	.42	0.00	29.61	117.00
	316.020	370.00	611.05	0.00	1.03	0.00	30.00	33.00
	316.020	370.00	611.57	0.00	1.04	0.00	30.00	33.00
	316.020	370.00	610.17	0.00	1.01	0.00	30.00	33.00
	316.100	370.00	611.12	0.00	.07	0.00	150.18	50.00
	316.100	370.00	611.63	0.00	.06	0.00	152.33	50.00
	316.100	370.00	610.25	0.00	.08	0.00	138.50	50.00
	316.200	370.00	611.11	0.00	-.01	0.00	106.71	50.00
	316.200	370.00	611.62	0.00	-.00	0.00	113.18	50.00
	316.200	370.00	610.22	0.00	-.02	0.00	93.04	50.00
*	316.250	370.00	611.19	0.00	.08	0.00	107.69	1.00
*	316.250	370.00	611.70	0.00	.08	0.00	114.05	1.00
*	316.250	370.00	610.30	0.00	.08	0.00	94.41	1.00
	316.300	370.00	611.26	0.00	.07	0.00	105.00	220.00
	316.300	370.00	611.80	0.00	.09	0.00	106.00	220.00
	316.300	370.00	610.35	0.00	.04	0.00	32.55	220.00
	316.980	370.00	611.39	0.00	.13	0.00	66.75	130.00
	316.980	370.00	611.95	0.00	.15	0.00	143.66	130.00
	316.980	370.00	610.45	0.00	.10	0.00	28.36	130.00
	317.020	370.00	612.17	0.00	.79	0.00	107.62	28.00
	317.020	370.00	612.45	0.00	.51	0.00	108.09	28.00
	317.020	370.00	611.30	0.00	.85	0.00	32.67	28.00
	317.100	370.00	612.19	0.00	.02	0.00	107.49	40.00
	317.100	370.00	612.48	0.00	.03	0.00	107.97	40.00
	317.100	370.00	611.33	0.00	.03	0.00	32.39	40.00
	317.150	370.00	612.34	0.00	.15	0.00	107.73	250.00
	317.150	370.00	612.67	0.00	.19	0.00	108.29	250.00
	317.150	370.00	611.56	0.00	.23	0.00	33.32	250.00
	317.180	370.00	612.37	0.00	.03	0.00	96.95	70.00
	317.180	370.00	612.71	0.00	.04	0.00	122.39	70.00
	317.180	370.00	611.66	0.00	.10	0.00	58.69	70.00
	317.220	370.00	613.04	0.00	.67	0.00	145.43	30.00
	317.220	370.00	613.12	0.00	.41	0.00	151.39	30.00
	317.220	370.00	612.89	0.00	1.23	0.00	134.95	30.00
	317.250	370.00	613.05	0.00	.01	0.00	132.63	50.00
	317.250	370.00	613.14	0.00	.02	0.00	139.15	50.00
	317.250	370.00	612.90	0.00	.01	0.00	121.26	50.00
	317.270	370.00	613.14	0.00	.09	0.00	177.42	250.00
	317.270	370.00	613.28	0.00	.13	0.00	182.15	250.00
	317.270	370.00	612.94	0.00	.05	0.00	170.78	250.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	317.280	370.00	613.16	0.00	.02	0.00	158.05	75.00
	317.280	370.00	613.31	0.00	.04	0.00	163.30	75.00
	317.280	370.00	612.94	0.00	.00	0.00	131.56	75.00
	317.320	370.00	613.21	0.00	.05	0.00	159.57	15.00
	317.320	370.00	613.35	0.00	.03	0.00	164.37	15.00
	317.320	370.00	613.04	0.00	.09	0.00	153.76	15.00
	317.340	370.00	613.25	0.00	.04	0.00	167.53	60.00
	317.340	370.00	613.40	0.00	.06	0.00	172.89	60.00
	317.340	370.00	613.06	0.00	.03	0.00	161.23	60.00
	317.400	370.00	613.37	0.00	.12	0.00	86.98	240.00
	317.400	370.00	613.59	0.00	.19	0.00	104.11	240.00
	317.400	370.00	613.13	0.00	.06	0.00	69.18	240.00
*	317.450	370.00	613.62	0.00	.25	0.00	107.60	1.00
*	317.450	370.00	613.84	0.00	.25	0.00	127.74	1.00
*	317.450	370.00	613.38	0.00	.25	0.00	87.64	1.00
	318.000	370.00	613.91	0.00	.29	0.00	136.67	460.00
	318.000	370.00	614.22	0.00	.38	0.00	145.23	460.00
	318.000	370.00	613.58	0.00	.20	0.00	99.26	460.00
	318.080	370.00	613.97	0.00	.05	0.00	99.04	100.00
	318.080	370.00	614.29	0.00	.07	0.00	99.77	100.00
	318.080	370.00	613.60	0.00	.03	0.00	98.23	100.00
	318.120	370.00	614.13	0.00	.16	0.00	99.39	18.00
	318.120	370.00	614.39	0.00	.10	0.00	99.98	18.00
	318.120	370.00	613.84	0.00	.24	0.00	98.75	18.00
	318.150	370.00	614.27	0.00	.14	0.00	141.91	150.00
	318.150	370.00	614.59	0.00	.20	0.00	142.52	150.00
	318.150	370.00	613.90	0.00	.06	0.00	141.21	150.00
*	318.160	370.00	614.28	0.00	.01	0.00	141.93	1.00
*	318.160	370.00	614.60	0.00	.01	0.00	142.54	1.00
*	318.160	370.00	613.91	0.00	.01	0.00	141.21	1.00
	318.200	370.00	614.35	0.00	.07	0.00	98.98	30.00
	318.200	370.00	614.66	0.00	.06	0.00	99.70	30.00
	318.200	370.00	614.03	0.00	.12	0.00	98.28	30.00
*	318.250	370.00	614.55	0.00	.20	0.00	99.45	1.00
*	318.250	370.00	614.86	0.00	.20	0.00	138.56	1.00
*	318.250	370.00	614.23	0.00	.20	0.00	98.73	1.00
	318.300	370.00	614.78	0.00	.22	0.00	99.07	325.00
	318.300	370.00	615.14	0.00	.28	0.00	99.88	325.00
	318.300	370.00	614.38	0.00	.15	0.00	98.18	325.00
*	318.350	370.00	614.90	0.00	.12	0.00	99.32	1.00
*	318.350	370.00	615.26	0.00	.12	0.00	138.64	1.00
*	318.350	370.00	614.50	0.00	.12	0.00	98.44	1.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
319.000	335.00	615.12	0.00	.22	0.00	104.16	275.00
319.000	335.00	615.54	0.00	.28	0.00	104.96	275.00
319.000	335.00	614.63	0.00	.13	0.00	49.43	275.00
319.100	335.00	615.57	0.00	.46	0.00	92.26	450.00
319.100	335.00	616.03	0.00	.48	0.00	93.88	450.00
319.100	335.00	615.04	0.00	.41	0.00	91.63	450.00
319.980	335.00	615.64	0.00	.06	0.00	97.64	140.00
319.980	335.00	616.11	0.00	.08	0.00	98.59	140.00
319.980	335.00	615.08	0.00	.04	0.00	48.26	140.00
320.020	335.00	615.93	0.00	.30	0.00	98.24	21.00
320.020	335.00	616.18	0.00	.07	0.00	98.74	21.00
320.020	335.00	615.65	0.00	.57	0.00	97.66	21.00
320.100	335.00	615.95	0.00	.02	0.00	102.79	40.00
320.100	335.00	616.21	0.00	.03	0.00	103.08	40.00
320.100	335.00	615.65	0.00	-.00	0.00	102.43	40.00
320.900	335.00	616.43	0.00	.49	0.00	83.97	400.00
320.900	335.00	616.84	0.00	.62	0.00	169.83	400.00
320.900	335.00	615.96	0.00	.31	0.00	45.27	400.00
320.980	335.00	616.66	0.00	.22	0.00	108.59	110.00
320.980	335.00	617.04	0.00	.21	0.00	146.41	110.00
320.980	335.00	616.13	0.00	.17	0.00	24.88	110.00
321.020	335.00	618.18	0.00	1.52	0.00	138.35	55.00
321.020	335.00	618.38	0.00	1.34	0.00	138.86	55.00
321.020	335.00	617.67	0.00	1.55	0.00	33.00	55.00
322.000	335.00	618.17	0.00	-.01	0.00	24.00	30.00
322.000	335.00	618.38	0.00	-.00	0.00	24.00	30.00
322.000	335.00	617.67	0.00	-.00	0.00	24.00	30.00
322.980	335.00	617.97	0.00	-.20	0.00	8.00	20.00
322.980	335.00	618.20	0.00	-.17	0.00	8.00	20.00
322.980	335.00	617.42	0.00	-.25	0.00	8.00	20.00
323.020	335.00	619.41	0.00	1.45	0.00	8.00	33.00
323.020	335.00	619.67	0.00	1.47	0.00	8.00	33.00
323.020	335.00	618.82	0.00	1.39	0.00	8.00	33.00
323.100	335.00	619.88	0.00	.47	0.00	66.00	30.00
323.100	335.00	620.12	0.00	.45	0.00	66.00	30.00
323.100	335.00	619.35	0.00	.54	0.00	66.00	30.00
324.000	335.00	619.90	0.00	.02	0.00	200.00	120.00
324.000	335.00	620.14	0.00	.02	0.00	200.00	120.00
324.000	335.00	619.36	0.00	.01	0.00	200.00	120.00
324.300	335.00	619.91	0.00	.02	0.00	200.00	200.00
324.300	335.00	620.16	0.00	.02	0.00	200.00	200.00
324.300	335.00	619.37	0.00	.01	0.00	196.69	200.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	324.480	335.00	619.93	0.00	.02	0.00	180.00	125.00
	324.480	335.00	620.18	0.00	.02	0.00	180.00	125.00
	324.480	335.00	619.39	0.00	.02	0.00	180.00	125.00
	324.520	335.00	620.00	0.00	.07	0.00	180.00	50.00
	324.520	335.00	620.24	0.00	.06	0.00	180.00	50.00
	324.520	335.00	619.54	0.00	.15	0.00	180.00	50.00
	324.600	335.00	620.00	0.00	-.00	0.00	180.00	13.00
	324.600	335.00	620.24	0.00	.00	0.00	180.00	13.00
	324.600	335.00	619.53	0.00	-.00	0.00	180.00	13.00
*	324.650	335.00	620.00	0.00	.00	0.00	180.00	1.00
*	324.650	335.00	620.24	0.00	.00	0.00	180.00	1.00
*	324.650	335.00	619.54	0.00	.00	0.00	180.00	1.00
	325.000	335.00	620.04	0.00	.05	0.00	225.00	235.00
	325.000	335.00	620.30	0.00	.05	0.00	225.00	235.00
	325.000	335.00	619.58	0.00	.05	0.00	225.00	235.00
	325.980	335.00	620.06	0.00	.02	0.00	210.00	175.00
	325.980	335.00	620.32	0.00	.03	0.00	210.00	175.00
	325.980	335.00	619.60	0.00	.02	0.00	210.00	175.00
	326.020	335.00	620.11	0.00	.05	0.00	210.00	34.00
	326.020	335.00	620.37	0.00	.05	0.00	210.00	34.00
	326.020	335.00	619.66	0.00	.06	0.00	210.00	34.00
	326.500	335.00	620.13	0.00	.01	0.00	196.41	110.00
	326.500	335.00	620.39	0.00	.02	0.00	199.45	110.00
	326.500	335.00	619.67	0.00	.01	0.00	191.15	110.00
	326.980	335.00	620.14	0.00	.01	0.00	195.40	130.00
	326.980	335.00	620.41	0.00	.02	0.00	198.49	130.00
	326.980	335.00	619.68	0.00	.01	0.00	190.10	130.00
	327.020	335.00	620.17	0.00	.03	0.00	195.83	43.00
	327.020	335.00	620.44	0.00	.03	0.00	198.97	43.00
	327.020	335.00	619.71	0.00	.03	0.00	190.54	43.00
	327.500	335.00	620.19	0.00	.02	0.00	191.37	180.00
	327.500	335.00	620.47	0.00	.03	0.00	194.55	180.00
	327.500	335.00	619.73	0.00	.02	0.00	178.65	180.00
	327.980	280.00	620.23	0.00	.03	0.00	215.00	210.00
	327.980	280.00	620.51	0.00	.04	0.00	215.00	210.00
	327.980	280.00	619.74	0.00	.02	0.00	32.00	210.00
	328.020	280.00	620.70	0.00	.47	0.00	215.00	33.00
	328.020	280.00	620.80	0.00	.30	0.00	215.00	33.00
	328.020	280.00	620.42	0.00	.67	0.00	32.00	33.00
	328.100	280.00	620.70	0.00	.00	0.00	250.00	90.00
	328.100	280.00	620.81	0.00	.01	0.00	250.00	90.00
	328.100	280.00	620.46	0.00	.04	0.00	250.00	90.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	329.000	280.00	621.03	0.00	.33	0.00	250.00	1400.00
	329.000	280.00	621.26	0.00	.45	0.00	250.00	1400.00
	329.000	280.00	620.69	0.00	.24	0.00	129.59	1400.00
	329.100	280.00	621.31	0.00	.28	0.00	250.00	825.00
	329.100	280.00	621.59	0.00	.33	0.00	250.00	825.00
	329.100	280.00	620.98	0.00	.28	0.00	249.12	825.00
*	329.250	280.00	621.31	0.00	.00	0.00	250.00	1.00
*	329.250	280.00	621.60	0.00	.00	0.00	250.00	1.00
*	329.250	280.00	620.98	0.00	.00	0.00	249.19	1.00

SUMMARY OF ERRORS

NOTE SECNO= 316.250 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 316.250 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 316.250 PROFILE= 3 WSEL BASED ON X5 CARD

NOTE SECNO= 317.450 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 317.450 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 317.450 PROFILE= 3 WSEL BASED ON X5 CARD

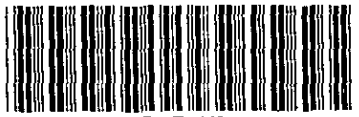
NOTE SECNO= 318.160 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 318.160 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 318.160 PROFILE= 3 WSEL BASED ON X5 CARD

NOTE SECNO= 318.250 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 318.250 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 318.250 PROFILE= 3 WSEL BASED ON X5 CARD

NOTE SECNO= 318.350 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 318.350 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 318.350 PROFILE= 3 WSEL BASED ON X5 CARD

NOTE SECNO= 324.650 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 324.650 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 324.650 PROFILE= 3 WSEL BASED ON X5 CARD

NOTE SECNO= 329.250 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 329.250 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 329.250 PROFILE= 3 WSEL BASED ON X5 CARD



1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 100yr. Summery

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  01
  MODIFICATION -  5C,51,52
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

FLAT CREEK 100 YEAR FLO

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	14.57	3.11	174.75	117.90
312.100	520.00	0.00	0.00	590.80	350.00	596.84	0.00	596.99	17.39	3.08	113.62	83.94
312.100	520.00	0.00	0.00	590.80	400.00	597.16	0.00	597.31	17.33	3.18	137.30	96.08
312.100	520.00	0.00	0.00	590.80	550.00	598.68	0.00	598.76	7.08	2.53	297.95	206.64
312.980	142.00	0.00	0.00	590.90	450.00	597.76	0.00	597.92	15.31	3.22	139.89	115.00
312.980	142.00	0.00	0.00	590.90	350.00	597.09	0.00	597.22	15.65	2.96	118.19	88.48
312.980	142.00	0.00	0.00	590.90	400.00	597.40	0.00	597.55	16.00	3.12	128.35	100.01
312.980	142.00	0.00	0.00	590.90	550.00	598.81	0.00	598.83	2.72	1.57	669.56	333.77
313.020	16.50	598.90	597.00	590.90	450.00	598.11	0.00	598.28	14.93	3.24	138.94	116.47
313.020	16.50	598.90	597.00	590.90	350.00	597.25	0.00	597.40	16.53	3.09	113.37	86.10
313.020	16.50	598.90	597.00	590.90	400.00	597.65	0.00	597.81	16.58	3.20	125.03	98.24
313.020	16.50	598.90	597.00	590.90	550.00	599.18	0.00	599.20	3.21	1.73	627.74	307.13
313.100	42.00	0.00	0.00	591.40	450.00	598.16	0.00	598.36	20.64	3.58	126.01	99.04
313.100	42.00	0.00	0.00	591.40	350.00	597.31	0.00	597.49	22.25	3.45	101.34	74.20
313.100	42.00	0.00	0.00	591.40	400.00	597.71	0.00	597.90	22.16	3.56	112.24	84.97
313.100	42.00	0.00	0.00	591.40	550.00	599.18	0.00	599.24	6.76	2.36	453.34	211.56
313.200	690.00	0.00	0.00	592.80	450.00	599.68	0.00	599.87	22.98	3.46	145.51	93.88
313.200	690.00	0.00	0.00	592.80	350.00	598.92	0.00	599.09	23.90	3.28	106.81	71.60
313.200	690.00	0.00	0.00	592.80	400.00	599.32	0.00	599.49	23.92	3.39	118.07	81.78
313.200	690.00	0.00	0.00	592.80	550.00	599.90	0.00	600.11	26.41	3.83	213.71	107.02
313.300	690.00	0.00	0.00	594.20	450.00	600.98	0.00	601.08	13.72	2.80	260.16	121.47
313.300	690.00	0.00	0.00	594.20	350.00	600.35	0.00	600.48	17.16	2.90	120.81	84.50
313.300	690.00	0.00	0.00	594.20	400.00	600.69	0.00	600.81	15.45	2.87	194.98	101.77
313.300	690.00	0.00	0.00	594.20	550.00	601.28	0.00	601.39	13.29	2.88	361.25	150.90
314.000	680.00	0.00	0.00	595.60	450.00	602.07	0.00	602.22	20.19	3.27	189.25	100.16
314.000	680.00	0.00	0.00	595.60	350.00	601.58	0.00	601.72	19.40	3.03	115.63	79.45
314.000	680.00	0.00	0.00	595.60	400.00	601.87	0.00	602.03	20.58	3.22	124.29	88.18
314.000	680.00	0.00	0.00	595.60	550.00	602.36	0.00	602.52	20.86	3.45	256.90	120.44
314.100	850.00	0.00	0.00	597.10	450.00	603.68	0.00	603.82	17.50	3.09	215.04	107.59
314.100	850.00	0.00	0.00	597.10	350.00	603.18	0.00	603.32	18.10	2.95	118.63	82.27
314.100	850.00	0.00	0.00	597.10	400.00	603.50	0.00	603.63	17.21	3.00	175.62	96.41
314.100	850.00	0.00	0.00	597.10	550.00	604.01	0.00	604.14	17.30	3.20	294.34	132.22

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	314.200	850.00	0.00	0.00	598.50	450.00	605.11	0.00	605.25	16.18	3.05	174.35	111.87
	314.200	850.00	0.00	0.00	598.50	350.00	604.60	0.00	604.71	14.90	2.76	133.26	90.69
	314.200	850.00	0.00	0.00	598.50	400.00	604.89	0.00	605.02	15.37	2.90	153.57	102.03
	314.200	850.00	0.00	0.00	598.50	550.00	605.48	0.00	605.63	17.67	3.31	218.27	130.82
	315.000	850.00	0.00	0.00	600.00	450.00	606.53	0.00	606.68	17.27	3.12	166.54	108.29
	315.000	850.00	0.00	0.00	600.00	350.00	605.94	0.00	606.06	16.90	2.88	125.45	85.13
	315.000	850.00	0.00	0.00	600.00	400.00	606.26	0.00	606.39	17.03	3.01	143.83	96.94
	315.000	850.00	0.00	0.00	600.00	550.00	606.98	0.00	607.14	17.70	3.31	218.02	130.72
	315.100	555.00	0.00	0.00	600.90	450.00	607.48	0.00	607.62	16.78	3.09	169.96	109.87
	315.100	555.00	0.00	0.00	600.90	350.00	606.87	0.00	606.99	16.52	2.86	126.79	86.12
	315.100	555.00	0.00	0.00	600.90	400.00	607.19	0.00	607.33	16.62	2.98	146.03	98.13
	315.100	555.00	0.00	0.00	600.90	550.00	607.94	0.00	608.09	16.58	3.23	228.52	135.09
	315.200	555.00	0.00	0.00	601.30	450.00	608.47	0.00	608.64	19.72	3.27	158.58	101.34
	315.200	555.00	0.00	0.00	601.30	350.00	607.85	0.00	607.99	19.42	3.01	116.29	79.41
	315.200	555.00	0.00	0.00	601.30	400.00	608.19	0.00	608.34	19.91	3.15	129.53	89.64
	315.200	555.00	0.00	0.00	601.30	550.00	608.91	0.00	609.08	18.89	3.40	219.81	126.54
	315.900	560.00	0.00	0.00	602.80	450.00	609.69	0.00	609.89	25.10	3.54	129.86	89.81
	315.900	560.00	0.00	0.00	602.80	350.00	609.04	0.00	609.21	24.13	3.26	107.25	71.25
	315.900	560.00	0.00	0.00	602.80	400.00	609.40	0.00	609.58	24.42	3.39	117.95	80.94
	315.900	560.00	0.00	0.00	602.80	550.00	610.10	0.00	610.32	25.75	3.81	177.49	108.38
	315.980	117.00	0.00	0.00	602.70	370.00	610.02	0.00	610.13	12.50	2.64	140.21	104.66
	315.980	117.00	0.00	0.00	602.70	315.00	609.34	0.00	609.45	14.77	2.65	119.08	81.97
	315.980	117.00	0.00	0.00	602.70	340.00	609.72	0.00	609.82	13.24	2.60	130.70	93.45
	315.980	117.00	0.00	0.00	602.70	450.00	610.47	0.00	610.56	10.65	2.62	243.34	137.90
	316.020	33.00	611.70	608.70	602.70	370.00	611.05	0.00	611.10	3.37	1.80	205.60	201.60
	316.020	33.00	611.70	608.70	602.70	315.00	610.07	0.00	610.12	3.96	1.79	176.26	158.36
	316.020	33.00	611.70	608.70	602.70	340.00	610.58	0.00	610.63	3.55	1.78	191.46	180.34
	316.020	33.00	611.70	608.70	602.70	450.00	611.86	0.00	611.87	.79	.97	728.21	506.14
	316.100	50.00	0.00	0.00	602.90	370.00	611.12	0.00	611.13	.97	.98	582.91	376.09
	316.100	50.00	0.00	0.00	602.90	315.00	610.14	0.00	610.15	1.43	1.07	439.13	263.82
	316.100	50.00	0.00	0.00	602.90	340.00	610.64	0.00	610.65	1.14	1.01	512.29	319.07
	316.100	50.00	0.00	0.00	602.90	450.00	611.87	0.00	611.88	.89	1.01	696.69	476.59
	316.200	50.00	0.00	0.00	602.00	370.00	611.11	0.00	611.14	2.76	1.65	321.87	222.59
	316.200	50.00	0.00	0.00	602.00	315.00	610.13	0.00	610.17	4.02	1.80	224.17	157.15
	316.200	50.00	0.00	0.00	602.00	340.00	610.63	0.00	610.67	3.26	1.71	272.70	188.44
	316.200	50.00	0.00	0.00	602.00	450.00	611.86	0.00	611.89	2.47	1.67	406.16	286.30
*	316.250	1.00	0.00	0.00	602.00	370.00	611.19	0.00	611.22	2.61	1.62	330.44	228.82
*	316.250	1.00	0.00	0.00	602.00	315.00	610.18	0.00	610.22	3.87	1.78	228.76	160.03
*	316.250	1.00	0.00	0.00	602.00	340.00	610.70	0.00	610.74	3.10	1.68	279.74	193.12
*	316.250	1.00	0.00	0.00	602.00	450.00	611.96	0.00	611.99	2.33	1.63	417.06	294.94
	316.300	220.00	0.00	0.00	603.50	370.00	611.26	0.00	611.34	9.20	2.29	192.27	122.01
	316.300	220.00	0.00	0.00	603.50	315.00	610.29	0.00	610.39	14.06	2.56	123.09	84.01
	316.300	220.00	0.00	0.00	603.50	340.00	610.79	0.00	610.88	11.53	2.43	143.87	100.14
	316.300	220.00	0.00	0.00	603.50	450.00	612.02	0.00	612.07	5.39	1.92	361.38	193.91

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
316.980	130.00	0.00	0.00	604.60	370.00	611.39	0.00	611.52	18.96	2.97	134.14	84.96
316.980	130.00	0.00	0.00	604.60	315.00	610.49	0.00	610.66	27.39	3.29	95.88	60.19
316.980	130.00	0.00	0.00	604.60	340.00	610.95	0.00	611.10	22.39	3.11	109.48	71.85
316.980	130.00	0.00	0.00	604.60	450.00	612.09	0.00	612.21	15.23	2.86	201.53	115.30
317.020	28.00	612.00	609.90	604.60	370.00	612.17	0.00	612.21	5.62	1.80	280.09	156.14
317.020	28.00	612.00	609.90	604.60	315.00	611.10	0.00	611.20	15.08	2.63	119.92	81.12
317.020	28.00	612.00	609.90	604.60	340.00	611.69	0.00	611.78	11.54	2.44	139.50	100.07
317.020	28.00	612.00	609.90	604.60	450.00	612.65	0.00	612.69	5.54	1.89	331.41	191.18
317.100	40.00	0.00	0.00	604.70	370.00	612.19	0.00	612.24	6.02	1.85	271.67	150.77
317.100	40.00	0.00	0.00	604.70	315.00	611.16	0.00	611.27	15.52	2.66	118.64	79.96
317.100	40.00	0.00	0.00	604.70	340.00	611.74	0.00	611.83	12.01	2.47	137.66	98.10
317.100	40.00	0.00	0.00	604.70	450.00	612.67	0.00	612.71	5.91	1.93	322.89	185.10
317.150	250.00	0.00	0.00	604.70	370.00	612.34	0.00	612.38	5.29	1.76	287.32	160.84
317.150	250.00	0.00	0.00	604.70	315.00	611.52	0.00	611.61	12.05	2.42	130.38	90.73
317.150	250.00	0.00	0.00	604.70	340.00	612.00	0.00	612.05	6.05	1.81	251.27	138.26
317.150	250.00	0.00	0.00	604.70	450.00	612.81	0.00	612.85	5.26	1.85	338.41	196.24
317.180	70.00	0.00	0.00	604.70	370.00	612.37	0.00	612.43	4.48	1.94	230.63	174.90
317.180	70.00	0.00	0.00	604.70	315.00	611.62	0.00	611.68	5.52	1.97	175.37	134.06
317.180	70.00	0.00	0.00	604.70	340.00	612.04	0.00	612.09	4.80	1.93	201.98	155.24
317.180	70.00	0.00	0.00	604.70	450.00	612.84	0.00	612.91	4.74	2.10	284.86	206.67
317.220	30.00	612.50	608.70	604.70	370.00	613.04	0.00	613.07	2.80	1.64	310.53	221.01
317.220	30.00	612.50	608.70	604.70	315.00	612.77	0.00	612.81	2.46	1.50	274.70	200.93
317.220	30.00	612.50	608.70	604.70	340.00	612.92	0.00	612.95	2.59	1.56	293.39	211.47
317.220	30.00	612.50	608.70	604.70	450.00	613.26	0.00	613.31	3.52	1.88	345.07	239.97
317.250	50.00	0.00	0.00	604.90	370.00	613.05	0.00	613.09	3.20	1.73	285.25	206.89
317.250	50.00	0.00	0.00	604.90	315.00	612.79	0.00	612.82	2.79	1.57	253.10	188.54
317.250	50.00	0.00	0.00	604.90	340.00	612.93	0.00	612.97	2.95	1.63	269.71	198.11
317.250	50.00	0.00	0.00	604.90	450.00	613.28	0.00	613.33	4.01	1.98	317.27	224.73
317.270	250.00	0.00	0.00	605.70	370.00	613.14	0.00	613.18	3.52	1.73	327.49	197.13
317.270	250.00	0.00	0.00	605.70	315.00	612.86	0.00	612.90	3.26	1.62	279.22	174.39
317.270	250.00	0.00	0.00	605.70	340.00	613.01	0.00	613.05	3.35	1.66	304.07	185.89
317.270	250.00	0.00	0.00	605.70	450.00	613.39	0.00	613.44	4.19	1.94	372.83	219.84
317.280	75.00	0.00	0.00	606.30	370.00	613.16	0.00	613.22	5.78	2.08	231.98	153.94
317.280	75.00	0.00	0.00	606.30	315.00	612.88	0.00	612.93	5.23	1.91	191.93	137.76
317.280	75.00	0.00	0.00	606.30	340.00	613.03	0.00	613.08	5.44	1.99	211.52	145.81
317.280	75.00	0.00	0.00	606.30	450.00	613.41	0.00	613.49	6.85	2.33	273.71	171.90
317.320	15.00	612.60	611.60	606.30	370.00	613.21	0.00	613.27	5.56	2.05	239.07	156.87
317.320	15.00	612.60	611.60	606.30	315.00	612.96	0.00	613.01	4.93	1.87	201.31	141.90
317.320	15.00	612.60	611.60	606.30	340.00	613.08	0.00	613.14	5.21	1.96	219.74	149.01
317.320	15.00	612.60	611.60	606.30	450.00	613.45	0.00	613.52	6.69	2.31	278.39	174.02
317.340	60.00	0.00	0.00	606.10	370.00	613.25	0.00	613.30	4.55	1.91	277.34	173.54
317.340	60.00	0.00	0.00	606.10	315.00	613.00	0.00	613.04	4.08	1.75	236.79	155.92
317.340	60.00	0.00	0.00	606.10	340.00	613.12	0.00	613.17	4.28	1.82	256.69	164.38
317.340	60.00	0.00	0.00	606.10	450.00	613.50	0.00	613.56	5.39	2.14	320.66	193.82

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	317.400	240.00	0.00	0.00	606.40	370.00	613.37	0.00	613.45	7.54	2.19	185.10	134.73
	317.400	240.00	0.00	0.00	606.40	315.00	613.11	0.00	613.17	6.61	1.99	164.71	122.54
	317.400	240.00	0.00	0.00	606.40	340.00	613.24	0.00	613.31	7.02	2.08	174.14	128.34
	317.400	240.00	0.00	0.00	606.40	450.00	613.64	0.00	613.74	9.05	2.48	211.82	149.61
*	317.450	1.00	0.00	0.00	606.40	370.00	613.62	0.00	613.69	6.22	2.05	209.52	148.36
*	317.450	1.00	0.00	0.00	606.40	315.00	613.26	0.00	613.32	5.92	1.91	175.98	129.44
*	317.450	1.00	0.00	0.00	606.40	340.00	613.44	0.00	613.50	6.05	1.97	191.35	138.22
*	317.450	1.00	0.00	0.00	606.40	450.00	613.99	0.00	614.07	6.81	2.24	255.50	172.43
	318.000	460.00	0.00	0.00	606.50	370.00	613.91	0.00	613.95	5.11	1.74	310.48	163.74
	318.000	460.00	0.00	0.00	606.50	315.00	613.54	0.00	613.57	5.20	1.69	273.37	138.15
	318.000	460.00	0.00	0.00	606.50	340.00	613.73	0.00	613.76	5.09	1.71	291.70	150.69
	318.000	460.00	0.00	0.00	606.50	450.00	614.31	0.00	614.34	5.21	1.86	366.72	197.22
	318.080	100.00	0.00	0.00	607.00	370.00	613.97	0.00	614.02	7.72	2.05	265.81	133.12
	318.080	100.00	0.00	0.00	607.00	315.00	613.60	0.00	613.64	8.21	2.03	228.94	109.90
	318.080	100.00	0.00	0.00	607.00	340.00	613.78	0.00	613.83	7.90	2.03	246.96	120.98
	318.080	100.00	0.00	0.00	607.00	450.00	614.36	0.00	614.41	7.88	2.15	305.24	160.27
	318.120	18.00	613.30	612.70	607.00	370.00	614.13	0.00	614.17	6.66	1.93	281.13	143.40
	318.120	18.00	613.30	612.70	607.00	315.00	613.77	0.00	613.81	6.83	1.88	246.24	120.53
	318.120	18.00	613.30	612.70	607.00	340.00	613.95	0.00	613.99	6.68	1.90	263.48	131.59
	318.120	18.00	613.30	612.70	607.00	450.00	614.49	0.00	614.54	7.01	2.06	321.19	169.92
	318.150	150.00	0.00	0.00	607.00	370.00	614.27	0.00	614.35	22.98	3.09	229.44	77.18
	318.150	150.00	0.00	0.00	607.00	315.00	613.92	0.00	614.02	28.43	3.33	179.47	59.07
	318.150	150.00	0.00	0.00	607.00	340.00	614.09	0.00	614.18	25.33	3.19	204.06	67.55
	318.150	150.00	0.00	0.00	607.00	450.00	614.64	0.00	614.71	20.24	3.01	282.74	100.03
*	318.160	1.00	0.00	0.00	607.00	370.00	614.28	0.00	614.36	22.65	3.08	230.86	77.74
*	318.160	1.00	0.00	0.00	607.00	315.00	613.93	0.00	614.03	28.00	3.30	180.88	59.53
*	318.160	1.00	0.00	0.00	607.00	340.00	614.10	0.00	614.19	24.96	3.17	205.47	68.06
*	318.160	1.00	0.00	0.00	607.00	450.00	614.66	0.00	614.73	19.72	2.97	285.59	101.35
	318.200	30.00	0.00	0.00	607.40	370.00	614.35	0.00	614.40	7.91	2.06	263.44	131.57
	318.200	30.00	0.00	0.00	607.40	315.00	614.03	0.00	614.08	7.92	2.00	232.31	111.94
	318.200	30.00	0.00	0.00	607.40	340.00	614.19	0.00	614.24	7.89	2.03	247.03	121.02
	318.200	30.00	0.00	0.00	607.40	450.00	614.72	0.00	614.77	8.20	2.18	300.82	157.12
*	318.250	1.00	0.00	0.00	607.40	370.00	614.55	0.00	614.59	6.49	1.91	283.78	145.21
*	318.250	1.00	0.00	0.00	607.40	315.00	614.15	0.00	614.19	6.98	1.90	244.12	119.20
*	318.250	1.00	0.00	0.00	607.40	340.00	614.34	0.00	614.38	6.74	1.90	262.45	130.92
*	318.250	1.00	0.00	0.00	607.40	450.00	614.97	0.00	615.01	6.53	2.01	331.90	176.16
	318.300	325.00	0.00	0.00	607.80	370.00	614.78	0.00	614.82	7.61	2.03	267.31	134.11
	318.300	325.00	0.00	0.00	607.80	315.00	614.39	0.00	614.44	8.25	2.03	228.59	109.69
	318.300	325.00	0.00	0.00	607.80	340.00	614.57	0.00	614.62	7.94	2.03	246.43	120.65
	318.300	325.00	0.00	0.00	607.80	450.00	615.19	0.00	615.24	7.66	2.13	308.45	162.58
*	318.350	1.00	0.00	0.00	607.80	370.00	614.90	0.00	614.94	6.84	1.95	278.23	141.43
*	318.350	1.00	0.00	0.00	607.80	315.00	614.47	0.00	614.52	7.58	1.96	236.42	114.44
*	318.350	1.00	0.00	0.00	607.80	340.00	614.67	0.00	614.72	7.21	1.96	255.85	126.64
*	318.350	1.00	0.00	0.00	607.80	450.00	615.34	0.00	615.39	6.68	2.03	328.42	174.13

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	1OK*S	VCH	AREA	.01K
319.000	275.00	0.00	0.00	608.60	335.00	615.12	0.00	615.24	16.14	2.80	143.52	83.38
319.000	275.00	0.00	0.00	608.60	265.00	614.71	0.00	614.81	14.74	2.54	107.63	69.03
319.000	275.00	0.00	0.00	608.60	315.00	614.91	0.00	615.03	17.50	2.84	122.30	75.30
319.000	275.00	0.00	0.00	608.60	390.00	615.55	0.00	615.66	14.13	2.76	188.36	103.74
319.100	450.00	0.00	0.00	608.80	335.00	615.57	0.00	615.62	4.91	1.76	256.31	151.15
319.100	450.00	0.00	0.00	608.80	265.00	615.13	0.00	615.16	4.56	1.62	215.05	124.10
319.100	450.00	0.00	0.00	608.80	315.00	615.39	0.00	615.43	5.07	1.76	239.23	139.84
319.100	450.00	0.00	0.00	608.80	390.00	615.98	0.00	616.02	4.89	1.81	293.94	176.35
319.980	140.00	0.00	0.00	610.10	335.00	615.64	0.00	615.70	6.62	2.36	210.28	130.17
319.980	140.00	0.00	0.00	610.10	265.00	615.18	0.00	615.24	5.98	2.11	169.22	108.33
319.980	140.00	0.00	0.00	610.10	315.00	615.45	0.00	615.52	6.83	2.34	192.48	120.51
319.980	140.00	0.00	0.00	610.10	390.00	616.04	0.00	616.11	6.42	2.43	249.77	153.89
320.020	21.00	615.50	614.90	610.10	335.00	615.93	0.00	615.99	5.17	2.16	239.33	147.34
320.020	21.00	615.50	614.90	610.10	265.00	615.56	0.00	615.61	4.42	1.91	202.94	126.10
320.020	21.00	615.50	614.90	610.10	315.00	615.83	0.00	615.88	4.98	2.09	229.18	141.16
320.020	21.00	615.50	614.90	610.10	390.00	616.17	0.00	616.23	5.79	2.35	262.50	162.14
320.100	40.00	0.00	0.00	609.80	335.00	615.95	0.00	616.02	10.41	2.36	197.26	103.84
320.100	40.00	0.00	0.00	609.80	265.00	615.57	0.00	615.64	9.73	2.18	158.28	84.95
320.100	40.00	0.00	0.00	609.80	315.00	615.84	0.00	615.92	10.25	2.32	186.64	98.41
320.100	40.00	0.00	0.00	609.80	390.00	616.19	0.00	616.27	11.10	2.51	221.56	117.04
320.900	400.00	0.00	0.00	609.70	335.00	616.43	0.00	616.57	17.06	2.98	131.22	81.11
320.900	400.00	0.00	0.00	609.70	265.00	616.02	0.00	616.13	14.95	2.66	103.46	68.53
320.900	400.00	0.00	0.00	609.70	315.00	616.32	0.00	616.45	16.58	2.90	122.24	77.36
320.900	400.00	0.00	0.00	609.70	390.00	616.70	0.00	616.85	18.00	3.15	163.48	91.93
320.980	110.00	0.00	0.00	610.20	335.00	616.66	0.00	616.72	7.32	2.16	218.19	123.83
320.980	110.00	0.00	0.00	610.20	265.00	616.19	0.00	616.28	10.44	2.35	112.76	82.03
320.980	110.00	0.00	0.00	610.20	315.00	616.53	0.00	616.59	7.19	2.12	205.35	117.47
320.980	110.00	0.00	0.00	610.20	390.00	616.94	0.00	617.00	7.66	2.27	254.72	140.87
321.020	55.00	617.90	616.00	610.20	335.00	618.18	0.00	618.18	.89	.94	556.87	354.16
321.020	55.00	617.90	616.00	610.20	265.00	617.15	0.00	617.19	2.84	1.47	180.76	157.30
321.020	55.00	617.90	616.00	610.20	315.00	617.91	0.00	617.92	.96	.95	520.40	321.95
321.020	55.00	617.90	616.00	610.20	390.00	618.52	0.00	618.54	.96	1.01	604.82	398.41
322.000	30.00	0.00	0.00	610.60	335.00	618.17	0.00	618.24	4.96	2.13	157.07	150.41
322.000	30.00	0.00	0.00	610.60	265.00	617.16	0.00	617.22	5.26	2.00	132.75	115.55
322.000	30.00	0.00	0.00	610.60	315.00	617.90	0.00	617.97	4.99	2.09	150.73	141.05
322.000	30.00	0.00	0.00	610.60	390.00	618.52	0.00	618.60	5.75	2.36	165.16	162.62
322.980	20.00	0.00	0.00	610.70	335.00	617.97	0.00	618.49	50.72	5.78	57.99	47.04
322.980	20.00	0.00	0.00	610.70	265.00	617.00	0.00	617.43	46.61	5.28	50.22	38.82
322.980	20.00	0.00	0.00	610.70	315.00	617.72	0.00	618.21	49.24	5.63	55.98	44.89
322.980	20.00	0.00	0.00	610.70	390.00	618.26	0.00	618.91	61.91	6.46	60.34	49.56
323.020	33.00	624.00	616.30	610.70	335.00	619.41	0.00	619.78	30.70	4.86	68.93	60.46
323.020	33.00	624.00	616.30	610.70	265.00	617.78	0.00	618.13	33.28	4.74	55.86	45.94
323.020	33.00	624.00	616.30	610.70	315.00	618.96	0.00	619.32	31.24	4.83	65.27	56.36
323.020	33.00	624.00	616.30	610.70	390.00	620.31	0.00	620.72	32.34	5.12	76.11	68.58

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	323.100	30.00	0.00	0.00	610.80	335.00	619.88	0.00	619.90	.92	.89	377.14	349.64
	323.100	30.00	0.00	0.00	610.80	265.00	618.23	0.00	618.25	1.79	.99	268.00	198.20
	323.100	30.00	0.00	0.00	610.80	315.00	619.42	0.00	619.43	1.07	.91	346.57	303.87
	323.100	30.00	0.00	0.00	610.80	390.00	620.83	0.00	620.85	.75	.89	439.82	451.17
	324.000	120.00	0.00	0.00	610.80	335.00	619.90	0.00	619.91	.73	.89	679.21	392.80
	324.000	120.00	0.00	0.00	610.80	265.00	618.25	0.00	618.27	1.96	1.23	357.04	189.10
	324.000	120.00	0.00	0.00	610.80	315.00	619.44	0.00	619.45	.93	.96	586.76	326.38
	324.000	120.00	0.00	0.00	610.80	390.00	620.85	0.00	620.85	.51	.80	869.05	548.09
	324.300	200.00	0.00	0.00	611.30	335.00	619.91	0.00	619.93	1.07	1.03	582.50	323.47
	324.300	200.00	0.00	0.00	611.30	265.00	618.29	0.00	618.32	3.15	1.47	277.37	149.38
	324.300	200.00	0.00	0.00	611.30	315.00	619.46	0.00	619.47	1.42	1.13	490.79	264.54
	324.300	200.00	0.00	0.00	611.30	390.00	620.86	0.00	620.87	.70	.91	771.56	465.29
	324.480	125.00	0.00	0.00	611.70	335.00	619.93	0.00	619.94	.85	.92	636.54	363.20
	324.480	125.00	0.00	0.00	611.70	265.00	618.34	0.00	618.36	2.41	1.29	349.76	170.72
	324.480	125.00	0.00	0.00	611.70	315.00	619.48	0.00	619.49	1.09	1.00	554.74	301.13
	324.480	125.00	0.00	0.00	611.70	390.00	620.87	0.00	620.88	.59	.84	805.86	507.76
	324.520	50.00	618.80	617.00	611.70	335.00	620.00	0.00	620.00	.80	.90	650.58	374.39
	324.520	50.00	618.80	617.00	611.70	265.00	619.13	0.00	619.14	1.05	.94	494.22	258.71
	324.520	50.00	618.80	617.00	611.70	315.00	619.59	0.00	619.60	.98	.96	577.69	318.00
	324.520	50.00	618.80	617.00	611.70	390.00	620.93	0.00	620.93	.57	.83	817.87	518.79
	324.600	13.00	0.00	0.00	611.70	335.00	620.00	0.00	620.01	1.81	1.73	520.08	248.73
	324.600	13.00	0.00	0.00	611.70	265.00	619.12	0.00	619.16	2.86	2.01	363.68	156.69
	324.600	13.00	0.00	0.00	611.70	315.00	619.59	0.00	619.61	2.40	1.93	447.01	203.17
	324.600	13.00	0.00	0.00	611.70	390.00	620.93	0.00	620.94	1.12	1.47	687.59	368.65
*	324.650	1.00	0.00	0.00	611.70	335.00	620.00	0.00	620.02	1.81	1.73	520.09	248.75
*	324.650	1.00	0.00	0.00	611.70	265.00	619.12	0.00	619.16	2.87	2.02	363.01	156.35
*	324.650	1.00	0.00	0.00	611.70	315.00	619.59	0.00	619.62	2.41	1.93	446.68	202.97
*	324.650	1.00	0.00	0.00	611.70	390.00	620.93	0.00	620.94	1.12	1.46	687.96	368.93
	325.000	235.00	0.00	0.00	612.10	335.00	620.04	0.00	620.05	1.08	.99	635.10	322.95
	325.000	235.00	0.00	0.00	612.10	265.00	619.20	0.00	619.21	1.64	1.11	444.34	207.23
	325.000	235.00	0.00	0.00	612.10	315.00	619.65	0.00	619.66	1.40	1.08	546.45	265.80
	325.000	235.00	0.00	0.00	612.10	390.00	620.96	0.00	620.96	.67	.86	841.25	476.32
	325.980	175.00	0.00	0.00	612.10	335.00	620.06	0.00	620.07	1.17	1.04	623.18	309.84
	325.980	175.00	0.00	0.00	612.10	265.00	619.23	0.00	619.24	1.71	1.15	448.14	202.62
	325.980	175.00	0.00	0.00	612.10	315.00	619.68	0.00	619.69	1.49	1.13	542.60	257.67
	325.980	175.00	0.00	0.00	612.10	390.00	620.97	0.00	620.98	.75	.91	813.16	450.17
	326.020	34.00	618.70	616.10	612.10	335.00	620.11	0.00	620.12	1.11	1.02	634.41	317.47
	326.020	34.00	618.70	616.10	612.10	265.00	619.32	0.00	619.34	1.54	1.10	468.02	213.63
	326.020	34.00	618.70	616.10	612.10	315.00	619.73	0.00	619.74	1.42	1.10	553.74	264.61
	326.020	34.00	618.70	616.10	612.10	390.00	621.02	0.00	621.03	.72	.89	824.10	458.95
	326.500	110.00	0.00	0.00	612.20	335.00	620.13	0.00	620.14	1.03	.98	576.75	330.65
	326.500	110.00	0.00	0.00	612.20	265.00	619.34	0.00	619.35	1.29	1.00	426.39	233.24
	326.500	110.00	0.00	0.00	612.20	315.00	619.75	0.00	619.76	1.26	1.04	503.47	281.14
	326.500	110.00	0.00	0.00	612.20	390.00	621.03	0.00	621.03	.70	.88	758.51	467.34

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	326.980	130.00	0.00	0.00	612.30	335.00	620.14	0.00	620.15	1.10	1.01	559.61	318.75
	326.980	130.00	0.00	0.00	612.30	265.00	619.36	0.00	619.37	1.40	1.03	411.12	224.21
	326.980	130.00	0.00	0.00	612.30	315.00	619.76	0.00	619.78	1.35	1.07	487.31	270.72
	326.980	130.00	0.00	0.00	612.30	390.00	621.04	0.00	621.04	.74	.90	739.57	452.27
	327.020	43.00	616.80	615.20	612.30	335.00	620.17	0.00	620.18	1.07	.99	566.88	323.77
	327.020	43.00	616.80	615.20	612.30	265.00	619.38	0.00	619.40	1.36	1.02	416.74	227.53
	327.020	43.00	616.80	615.20	612.30	315.00	619.79	0.00	619.81	1.31	1.05	494.12	275.09
	327.020	43.00	616.80	615.20	612.30	390.00	621.07	0.00	621.08	.72	.89	748.72	459.53
	327.500	180.00	0.00	0.00	612.70	335.00	620.19	0.00	620.21	1.50	1.13	492.23	273.87
	327.500	180.00	0.00	0.00	612.70	265.00	619.41	0.00	619.43	1.97	1.17	351.24	188.99
	327.500	180.00	0.00	0.00	612.70	315.00	619.82	0.00	619.84	1.87	1.20	421.95	230.61
	327.500	180.00	0.00	0.00	612.70	390.00	621.09	0.00	621.10	.96	.99	668.24	397.16
	327.980	210.00	0.00	0.00	613.20	280.00	620.23	0.00	620.23	.93	.86	592.09	290.74
	327.980	210.00	0.00	0.00	613.20	160.00	619.45	0.00	619.47	1.77	1.06	150.91	120.23
	327.980	210.00	0.00	0.00	613.20	240.00	619.86	0.00	619.89	3.05	1.46	163.96	137.50
	327.980	210.00	0.00	0.00	613.20	390.00	621.11	0.00	621.12	.82	.90	782.40	430.07
	328.020	33.00	620.50	617.50	613.20	280.00	620.70	0.00	620.70	.59	.73	695.39	363.37
	328.020	33.00	620.50	617.50	613.20	160.00	619.67	0.00	619.68	1.52	1.01	158.20	129.78
	328.020	33.00	620.50	617.50	613.20	240.00	620.35	0.00	620.38	2.26	1.33	179.92	159.71
	328.020	33.00	620.50	617.50	613.20	390.00	621.22	0.00	621.23	.75	.87	809.05	451.45
	328.100	90.00	0.00	0.00	613.00	280.00	620.70	0.00	620.71	1.62	1.10	502.08	219.78
	328.100	90.00	0.00	0.00	613.00	160.00	619.68	0.00	619.70	2.06	1.08	251.68	111.57
	328.100	90.00	0.00	0.00	613.00	240.00	620.39	0.00	620.40	1.77	1.10	422.59	180.28
	328.100	90.00	0.00	0.00	613.00	390.00	621.23	0.00	621.24	1.75	1.21	633.87	294.89
	329.000	1400.00	0.00	0.00	614.00	280.00	621.03	0.00	621.05	3.79	1.47	353.69	143.78
	329.000	1400.00	0.00	0.00	614.00	160.00	620.09	0.00	620.12	4.64	1.47	109.05	74.30
	329.000	1400.00	0.00	0.00	614.00	240.00	620.78	0.00	620.82	5.41	1.70	193.13	103.18
	329.000	1400.00	0.00	0.00	614.00	390.00	621.56	0.00	621.59	3.57	1.54	487.78	206.52
	329.100	825.00	0.00	0.00	614.10	280.00	621.31	0.00	621.33	2.93	1.33	399.02	163.47
	329.100	825.00	0.00	0.00	614.10	160.00	620.42	0.00	620.45	3.31	1.27	185.13	87.88
	329.100	825.00	0.00	0.00	614.10	240.00	621.12	0.00	621.14	2.81	1.26	352.47	143.27
	329.100	825.00	0.00	0.00	614.10	390.00	621.83	0.00	621.85	2.90	1.41	530.33	229.13
*	329.250	1.00	0.00	0.00	614.10	280.00	621.31	0.00	621.33	2.93	1.33	399.53	163.70
*	329.250	1.00	0.00	0.00	614.10	160.00	620.43	0.00	620.45	3.31	1.27	185.34	87.94
*	329.250	1.00	0.00	0.00	614.10	240.00	621.12	0.00	621.14	2.80	1.26	352.74	143.38
*	329.250	1.00	0.00	0.00	614.10	390.00	621.84	0.00	621.86	2.88	1.41	531.33	229.68

FLAT CREEK 100 YEAR FLO

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
312.100	450.00	597.56	0.00	0.00	0.00	110.00	520.00
312.100	350.00	596.84	0.00	0.00	0.00	30.83	520.00
312.100	400.00	597.16	0.00	0.00	0.00	74.90	520.00
312.100	550.00	598.68	0.00	0.00	0.00	110.00	520.00
312.980	450.00	597.76	0.00	.20	0.00	32.00	142.00
312.980	350.00	597.09	0.00	.25	0.00	31.43	142.00
312.980	400.00	597.40	0.00	.24	0.00	32.00	142.00
312.980	550.00	598.81	0.00	.13	0.00	371.00	142.00
313.020	450.00	598.11	0.00	.35	0.00	30.00	16.50
313.020	350.00	597.25	0.00	.16	0.00	28.58	16.50
313.020	400.00	597.65	0.00	.25	0.00	29.93	16.50
313.020	550.00	599.18	0.00	.37	0.00	353.00	16.50
313.100	450.00	598.16	0.00	.05	0.00	39.82	42.00
313.100	350.00	597.31	0.00	.06	0.00	27.00	42.00
313.100	400.00	597.71	0.00	.06	0.00	28.44	42.00
313.100	550.00	599.18	0.00	-.00	0.00	353.00	42.00
313.200	450.00	599.68	0.00	1.52	0.00	239.98	690.00
313.200	350.00	598.92	0.00	1.61	0.00	27.73	690.00
313.200	400.00	599.32	0.00	1.61	0.00	29.18	690.00
313.200	550.00	599.90	0.00	.72	0.00	353.00	690.00
313.300	450.00	600.98	0.00	1.29	0.00	242.80	690.00
313.300	350.00	600.35	0.00	1.43	0.00	30.18	690.00
313.300	400.00	600.69	0.00	1.38	0.00	213.90	690.00
313.300	550.00	601.28	0.00	1.39	0.00	400.00	690.00
314.000	450.00	602.07	0.00	1.09	0.00	211.17	680.00
314.000	350.00	601.58	0.00	1.23	0.00	29.73	680.00
314.000	400.00	601.87	0.00	1.18	0.00	30.33	680.00
314.000	550.00	602.36	0.00	1.08	0.00	241.44	680.00
314.100	450.00	603.68	0.00	1.62	0.00	223.19	850.00
314.100	350.00	603.18	0.00	1.60	0.00	30.05	850.00
314.100	400.00	603.50	0.00	1.63	0.00	204.53	850.00
314.100	550.00	604.01	0.00	1.64	0.00	305.42	850.00
314.200	450.00	605.11	0.00	1.43	0.00	103.49	850.00
314.200	350.00	604.60	0.00	1.41	0.00	55.50	850.00
314.200	400.00	604.89	0.00	1.39	0.00	82.78	850.00
314.200	550.00	605.48	0.00	1.47	0.00	137.36	850.00
315.000	450.00	606.53	0.00	1.42	0.00	96.23	850.00
315.000	350.00	605.94	0.00	1.34	0.00	45.08	850.00
315.000	400.00	606.26	0.00	1.37	0.00	71.02	850.00
315.000	550.00	606.98	0.00	1.50	0.00	137.19	850.00
315.100	450.00	607.48	0.00	.95	0.00	99.47	555.00
315.100	350.00	606.87	0.00	.93	0.00	45.81	555.00

315.100	400.00	607.19	0.00	.94	0.00	73.83	555.00
315.100	550.00	607.94	0.00	.96	0.00	144.12	555.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	315.200	450.00	608.47	0.00	1.00	0.00	142.00	555.00
	315.200	350.00	607.85	0.00	.98	0.00	29.95	555.00
	315.200	400.00	608.19	0.00	1.00	0.00	65.11	555.00
	315.200	550.00	608.91	0.00	.97	0.00	142.00	555.00
	315.900	450.00	609.69	0.00	1.22	0.00	65.60	560.00
	315.900	350.00	609.04	0.00	1.19	0.00	28.82	560.00
	315.900	400.00	609.40	0.00	1.22	0.00	30.15	560.00
	315.900	550.00	610.10	0.00	1.19	0.00	142.00	560.00
	315.980	370.00	610.02	0.00	.33	0.00	31.24	117.00
	315.980	315.00	609.34	0.00	.30	0.00	30.29	117.00
	315.980	340.00	609.72	0.00	.31	0.00	31.24	117.00
	315.980	450.00	610.47	0.00	.36	0.00	142.00	117.00
	316.020	370.00	611.05	0.00	1.03	0.00	30.00	33.00
	316.020	315.00	610.07	0.00	.73	0.00	30.00	33.00
	316.020	340.00	610.58	0.00	.86	0.00	30.00	33.00
	316.020	450.00	611.86	0.00	1.39	0.00	154.20	33.00
	316.100	370.00	611.12	0.00	.07	0.00	150.18	50.00
	316.100	315.00	610.14	0.00	.06	0.00	135.32	50.00
	316.100	340.00	610.64	0.00	.06	0.00	148.18	50.00
	316.100	450.00	611.87	0.00	.00	0.00	153.33	50.00
	316.200	370.00	611.11	0.00	-.01	0.00	106.71	50.00
	316.200	315.00	610.13	0.00	-.01	0.00	91.34	50.00
	316.200	340.00	610.63	0.00	-.01	0.00	100.06	50.00
	316.200	450.00	611.86	0.00	-.01	0.00	116.02	50.00
*	316.250	370.00	611.19	0.00	.08	0.00	107.69	1.00
*	316.250	315.00	610.18	0.00	.05	0.00	92.20	1.00
*	316.250	340.00	610.70	0.00	.07	0.00	101.26	1.00
*	316.250	450.00	611.96	0.00	.10	0.00	116.96	1.00
	316.300	370.00	611.26	0.00	.07	0.00	105.00	220.00
	316.300	315.00	610.29	0.00	.11	0.00	32.28	220.00
	316.300	340.00	610.79	0.00	.08	0.00	82.55	220.00
	316.300	450.00	612.02	0.00	.07	0.00	176.00	220.00
	316.980	370.00	611.39	0.00	.13	0.00	66.75	130.00
	316.980	315.00	610.49	0.00	.21	0.00	28.55	130.00
	316.980	340.00	610.95	0.00	.17	0.00	30.47	130.00
	316.980	450.00	612.09	0.00	.06	0.00	145.14	130.00
	317.020	370.00	612.17	0.00	.79	0.00	107.62	28.00
	317.020	315.00	611.10	0.00	.61	0.00	31.86	28.00
	317.020	340.00	611.69	0.00	.74	0.00	33.82	28.00
	317.020	450.00	612.65	0.00	.56	0.00	108.41	28.00
	317.100	370.00	612.19	0.00	.02	0.00	107.49	40.00
	317.100	315.00	611.16	0.00	.06	0.00	31.69	40.00
	317.100	340.00	611.74	0.00	.05	0.00	33.73	40.00
	317.100	450.00	612.67	0.00	.02	0.00	108.28	40.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	317.150	370.00	612.34	0.00	.15	0.00	107.73	250.00
	317.150	315.00	611.52	0.00	.36	0.00	33.17	250.00
	317.150	340.00	612.00	0.00	.27	0.00	107.17	250.00
	317.150	450.00	612.81	0.00	.14	0.00	108.52	250.00
	317.180	370.00	612.37	0.00	.03	0.00	96.95	70.00
	317.180	315.00	611.62	0.00	.10	0.00	57.81	70.00
	317.180	340.00	612.04	0.00	.03	0.00	71.15	70.00
	317.180	450.00	612.84	0.00	.03	0.00	132.42	70.00
	317.220	370.00	613.04	0.00	.67	0.00	145.43	30.00
	317.220	315.00	612.77	0.00	1.16	0.00	126.77	30.00
	317.220	340.00	612.92	0.00	.88	0.00	136.88	30.00
	317.220	450.00	613.26	0.00	.42	0.00	161.29	30.00
	317.250	370.00	613.05	0.00	.01	0.00	132.63	50.00
	317.250	315.00	612.79	0.00	.01	0.00	113.14	50.00
	317.250	340.00	612.93	0.00	.01	0.00	123.75	50.00
	317.250	450.00	613.28	0.00	.02	0.00	148.66	50.00
	317.270	370.00	613.14	0.00	.09	0.00	177.42	250.00
	317.270	315.00	612.86	0.00	.07	0.00	167.91	250.00
	317.270	340.00	613.01	0.00	.08	0.00	172.87	250.00
	317.270	450.00	613.39	0.00	.11	0.00	185.91	250.00
	317.280	370.00	613.16	0.00	.02	0.00	158.05	75.00
	317.280	315.00	612.88	0.00	.02	0.00	103.15	75.00
	317.280	340.00	613.03	0.00	.02	0.00	153.58	75.00
	317.280	450.00	613.41	0.00	.02	0.00	166.79	75.00
	317.320	370.00	613.21	0.00	.05	0.00	159.57	15.00
	317.320	315.00	612.96	0.00	.08	0.00	136.37	15.00
	317.320	340.00	613.08	0.00	.06	0.00	155.39	15.00
	317.320	450.00	613.45	0.00	.04	0.00	167.74	15.00
	317.340	370.00	613.25	0.00	.04	0.00	167.53	60.00
	317.340	315.00	613.00	0.00	.04	0.00	159.08	60.00
	317.340	340.00	613.12	0.00	.04	0.00	163.28	60.00
	317.340	450.00	613.50	0.00	.05	0.00	176.10	60.00
	317.400	370.00	613.37	0.00	.12	0.00	86.98	240.00
	317.400	315.00	613.11	0.00	.11	0.00	66.84	240.00
	317.400	340.00	613.24	0.00	.12	0.00	77.30	240.00
	317.400	450.00	613.64	0.00	.14	0.00	109.53	240.00
*	317.450	370.00	613.62	0.00	.25	0.00	107.60	1.00
*	317.450	315.00	613.26	0.00	.15	0.00	79.01	1.00
*	317.450	340.00	613.44	0.00	.20	0.00	92.04	1.00
*	317.450	450.00	613.99	0.00	.35	0.00	136.14	1.00
	318.000	370.00	613.91	0.00	.29	0.00	136.67	460.00
	318.000	315.00	613.54	0.00	.28	0.00	99.21	460.00
	318.000	340.00	613.73	0.00	.29	0.00	99.62	460.00
	318.000	450.00	614.31	0.00	.31	0.00	145.40	460.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	318.080	370.00	613.97	0.00	.05	0.00	99.04	100.00
	318.080	315.00	613.60	0.00	.05	0.00	98.20	100.00
	318.080	340.00	613.78	0.00	.05	0.00	98.61	100.00
	318.080	450.00	614.36	0.00	.05	0.00	99.93	100.00
	318.120	370.00	614.13	0.00	.16	0.00	99.39	18.00
	318.120	315.00	613.77	0.00	.18	0.00	98.59	18.00
	318.120	340.00	613.95	0.00	.17	0.00	98.99	18.00
	318.120	450.00	614.49	0.00	.13	0.00	140.15	18.00
	318.150	370.00	614.27	0.00	.14	0.00	141.91	150.00
	318.150	315.00	613.92	0.00	.14	0.00	141.22	150.00
	318.150	340.00	614.09	0.00	.14	0.00	141.56	150.00
	318.150	450.00	614.64	0.00	.15	0.00	142.63	150.00
*	318.160	370.00	614.28	0.00	.01	0.00	141.93	1.00
*	318.160	315.00	613.93	0.00	.01	0.00	141.24	1.00
*	318.160	340.00	614.10	0.00	.01	0.00	141.58	1.00
*	318.160	450.00	614.66	0.00	.02	0.00	142.67	1.00
	318.200	370.00	614.35	0.00	.07	0.00	98.98	30.00
	318.200	315.00	614.03	0.00	.11	0.00	98.28	30.00
	318.200	340.00	614.19	0.00	.09	0.00	98.61	30.00
	318.200	450.00	614.72	0.00	.05	0.00	99.83	30.00
*	318.250	370.00	614.55	0.00	.20	0.00	99.45	1.00
*	318.250	315.00	614.15	0.00	.12	0.00	98.55	1.00
*	318.250	340.00	614.34	0.00	.15	0.00	98.96	1.00
*	318.250	450.00	614.97	0.00	.25	0.00	143.55	1.00
	318.300	370.00	614.78	0.00	.22	0.00	99.07	325.00
	318.300	315.00	614.39	0.00	.24	0.00	98.19	325.00
	318.300	340.00	614.57	0.00	.23	0.00	98.60	325.00
	318.300	450.00	615.19	0.00	.23	0.00	100.00	325.00
*	318.350	370.00	614.90	0.00	.12	0.00	99.32	1.00
*	318.350	315.00	614.47	0.00	.08	0.00	98.37	1.00
*	318.350	340.00	614.67	0.00	.10	0.00	98.81	1.00
*	318.350	450.00	615.34	0.00	.15	0.00	142.45	1.00
	319.000	335.00	615.12	0.00	.22	0.00	104.16	275.00
	319.000	265.00	614.71	0.00	.24	0.00	60.39	275.00
	319.000	315.00	614.91	0.00	.24	0.00	90.03	275.00
	319.000	390.00	615.55	0.00	.21	0.00	104.96	275.00
	319.100	335.00	615.57	0.00	.46	0.00	92.26	450.00
	319.100	265.00	615.13	0.00	.41	0.00	91.71	450.00
	319.100	315.00	615.39	0.00	.48	0.00	91.91	450.00
	319.100	390.00	615.98	0.00	.42	0.00	93.71	450.00
	319.980	335.00	615.64	0.00	.06	0.00	97.64	140.00
	319.980	265.00	615.18	0.00	.06	0.00	48.87	140.00
	319.980	315.00	615.45	0.00	.06	0.00	97.26	140.00
	319.980	390.00	616.04	0.00	.06	0.00	98.45	140.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
320.020	335.00	615.93	0.00	.30	0.00	98.24	21.00
320.020	265.00	615.56	0.00	.38	0.00	97.48	21.00
320.020	315.00	615.83	0.00	.38	0.00	98.03	21.00
320.020	390.00	616.17	0.00	.13	0.00	98.72	21.00
320.100	335.00	615.95	0.00	.02	0.00	102.79	40.00
320.100	265.00	615.57	0.00	.01	0.00	102.35	40.00
320.100	315.00	615.84	0.00	.01	0.00	102.67	40.00
320.100	390.00	616.19	0.00	.02	0.00	103.05	40.00
320.900	335.00	616.43	0.00	.49	0.00	83.97	400.00
320.900	265.00	616.02	0.00	.45	0.00	50.22	400.00
320.900	315.00	616.32	0.00	.48	0.00	74.74	400.00
320.900	390.00	616.70	0.00	.52	0.00	169.62	400.00
320.980	335.00	616.66	0.00	.22	0.00	108.59	110.00
320.980	265.00	616.19	0.00	.17	0.00	24.98	110.00
320.980	315.00	616.53	0.00	.21	0.00	102.29	110.00
320.980	390.00	616.94	0.00	.24	0.00	146.24	110.00
321.020	335.00	618.18	0.00	1.52	0.00	138.35	55.00
321.020	265.00	617.15	0.00	.96	0.00	33.00	55.00
321.020	315.00	617.91	0.00	1.38	0.00	137.70	55.00
321.020	390.00	618.52	0.00	1.58	0.00	139.20	55.00
322.000	335.00	618.17	0.00	-.01	0.00	24.00	30.00
322.000	265.00	617.16	0.00	.01	0.00	24.00	30.00
322.000	315.00	617.90	0.00	-.01	0.00	24.00	30.00
322.000	390.00	618.52	0.00	-.01	0.00	24.00	30.00
322.980	335.00	617.97	0.00	-.20	0.00	8.00	20.00
322.980	265.00	617.00	0.00	-.16	0.00	8.00	20.00
322.980	315.00	617.72	0.00	-.19	0.00	8.00	20.00
322.980	390.00	618.26	0.00	-.25	0.00	8.00	20.00
323.020	335.00	619.41	0.00	1.45	0.00	8.00	33.00
323.020	265.00	617.78	0.00	.79	0.00	8.00	33.00
323.020	315.00	618.96	0.00	1.24	0.00	8.00	33.00
323.020	390.00	620.31	0.00	2.05	0.00	8.00	33.00
323.100	335.00	619.88	0.00	.47	0.00	66.00	30.00
323.100	265.00	618.23	0.00	.45	0.00	66.00	30.00
323.100	315.00	619.42	0.00	.46	0.00	66.00	30.00
323.100	390.00	620.83	0.00	.52	0.00	66.00	30.00
324.000	335.00	619.90	0.00	.02	0.00	200.00	120.00
324.000	265.00	618.25	0.00	.02	0.00	180.03	120.00
324.000	315.00	619.44	0.00	.02	0.00	200.00	120.00
324.000	390.00	620.85	0.00	.01	0.00	200.00	120.00
324.300	335.00	619.91	0.00	.02	0.00	200.00	200.00
324.300	265.00	618.29	0.00	.04	0.00	160.83	200.00
324.300	315.00	619.46	0.00	.02	0.00	198.86	200.00
324.300	390.00	620.86	0.00	.01	0.00	200.00	200.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	324.480	335.00	619.93	0.00	.02	0.00	180.00	125.00
	324.480	265.00	618.34	0.00	.05	0.00	180.00	125.00
	324.480	315.00	619.48	0.00	.02	0.00	180.00	125.00
	324.480	390.00	620.87	0.00	.01	0.00	180.00	125.00
	324.520	335.00	620.00	0.00	.07	0.00	180.00	50.00
	324.520	265.00	619.13	0.00	.79	0.00	180.00	50.00
	324.520	315.00	619.59	0.00	.11	0.00	180.00	50.00
	324.520	390.00	620.93	0.00	.06	0.00	180.00	50.00
	324.600	335.00	620.00	0.00	-.00	0.00	180.00	13.00
	324.600	265.00	619.12	0.00	-.00	0.00	180.00	13.00
	324.600	315.00	619.59	0.00	-.00	0.00	180.00	13.00
	324.600	390.00	620.93	0.00	-.00	0.00	180.00	13.00
*	324.650	335.00	620.00	0.00	.00	0.00	180.00	1.00
*	324.650	265.00	619.12	0.00	.00	0.00	180.00	1.00
*	324.650	315.00	619.59	0.00	.00	0.00	180.00	1.00
*	324.650	390.00	620.93	0.00	.00	0.00	180.00	1.00
	325.000	335.00	620.04	0.00	.05	0.00	225.00	235.00
	325.000	265.00	619.20	0.00	.08	0.00	220.69	235.00
	325.000	315.00	619.65	0.00	.06	0.00	225.00	235.00
	325.000	390.00	620.96	0.00	.03	0.00	225.00	235.00
	325.980	335.00	620.06	0.00	.02	0.00	210.00	175.00
	325.980	265.00	619.23	0.00	.03	0.00	210.00	175.00
	325.980	315.00	619.68	0.00	.03	0.00	210.00	175.00
	325.980	390.00	620.97	0.00	.01	0.00	210.00	175.00
	326.020	335.00	620.11	0.00	.05	0.00	210.00	34.00
	326.020	265.00	619.32	0.00	.09	0.00	210.00	34.00
	326.020	315.00	619.73	0.00	.06	0.00	210.00	34.00
	326.020	390.00	621.02	0.00	.05	0.00	210.00	34.00
	326.500	335.00	620.13	0.00	.01	0.00	196.41	110.00
	326.500	265.00	619.34	0.00	.02	0.00	184.91	110.00
	326.500	315.00	619.75	0.00	.01	0.00	192.04	110.00
	326.500	390.00	621.03	0.00	.01	0.00	206.85	110.00
	326.980	335.00	620.14	0.00	.01	0.00	195.40	130.00
	326.980	265.00	619.36	0.00	.02	0.00	180.42	130.00
	326.980	315.00	619.76	0.00	.02	0.00	191.07	130.00
	326.980	390.00	621.04	0.00	.01	0.00	205.79	130.00
	327.020	335.00	620.17	0.00	.03	0.00	195.83	43.00
	327.020	265.00	619.38	0.00	.03	0.00	182.09	43.00
	327.020	315.00	619.79	0.00	.03	0.00	191.48	43.00
	327.020	390.00	621.07	0.00	.04	0.00	206.30	43.00
	327.500	335.00	620.19	0.00	.02	0.00	191.37	180.00
	327.500	265.00	619.41	0.00	.03	0.00	161.60	180.00
	327.500	315.00	619.82	0.00	.03	0.00	183.62	180.00
	327.500	390.00	621.09	0.00	.01	0.00	201.73	180.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	327.980	280.00	620.23	0.00	.03	0.00	215.00	210.00
	327.980	160.00	619.45	0.00	.04	0.00	32.00	210.00
	327.980	240.00	619.86	0.00	.04	0.00	32.00	210.00
	327.980	390.00	621.11	0.00	.02	0.00	215.00	210.00
	328.020	280.00	620.70	0.00	.47	0.00	215.00	33.00
	328.020	160.00	619.67	0.00	.22	0.00	32.00	33.00
	328.020	240.00	620.35	0.00	.49	0.00	32.00	33.00
	328.020	390.00	621.22	0.00	.11	0.00	215.00	33.00
	328.100	280.00	620.70	0.00	.00	0.00	250.00	90.00
	328.100	160.00	619.68	0.00	.02	0.00	219.87	90.00
	328.100	240.00	620.39	0.00	.04	0.00	250.00	90.00
	328.100	390.00	621.23	0.00	.01	0.00	250.00	90.00
	329.000	280.00	621.03	0.00	.33	0.00	250.00	1400.00
	329.000	160.00	620.09	0.00	.41	0.00	28.00	1400.00
	329.000	240.00	620.78	0.00	.39	0.00	129.76	1400.00
	329.000	390.00	621.56	0.00	.33	0.00	250.00	1400.00
	329.100	280.00	621.31	0.00	.28	0.00	250.00	825.00
	329.100	160.00	620.42	0.00	.33	0.00	220.94	825.00
	329.100	240.00	621.12	0.00	.34	0.00	250.00	825.00
	329.100	390.00	621.83	0.00	.27	0.00	250.00	825.00
*	329.250	280.00	621.31	0.00	.00	0.00	250.00	1.00
*	329.250	160.00	620.43	0.00	.00	0.00	221.06	1.00
*	329.250	240.00	621.12	0.00	.00	0.00	250.00	1.00
*	329.250	390.00	621.84	0.00	.00	0.00	250.00	1.00

SUMMARY OF ERRORS

NOTE SECNO= 316.250 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 316.250 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 316.250 PROFILE= 3 WSEL BASED ON X5 CARD
NOTE SECNO= 316.250 PROFILE= 4 WSEL BASED ON X5 CARD

NOTE SECNO= 317.450 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 317.450 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 317.450 PROFILE= 3 WSEL BASED ON X5 CARD
NOTE SECNO= 317.450 PROFILE= 4 WSEL BASED ON X5 CARD

NOTE SECNO= 318.160 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 318.160 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 318.160 PROFILE= 3 WSEL BASED ON X5 CARD
NOTE SECNO= 318.160 PROFILE= 4 WSEL BASED ON X5 CARD

NOTE SECNO= 318.250 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 318.250 PROFILE= 2 WSEL BASED ON X5 CARD
NOTE SECNO= 318.250 PROFILE= 3 WSEL BASED ON X5 CARD
NOTE SECNO= 318.250 PROFILE= 4 WSEL BASED ON X5 CARD

NOTE SECNO= 318.350 PROFILE= 1 WSEL BASED ON X5 CARD
NOTE SECNO= 318.350 PROFILE= 2 WSEL BASED ON X5 CARD

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NOTE      SECNO=  318.350  PROFILE= 3  WSEL BASED ON X5 CARD
NOTE      SECNO=  318.350  PROFILE= 4  WSEL BASED ON X5 CARD

NOTE      SECNO=  324.650  PROFILE= 1  WSEL BASED ON X5 CARD
NOTE      SECNO=  324.650  PROFILE= 2  WSEL BASED ON X5 CARD
NOTE      SECNO=  324.650  PROFILE= 3  WSEL BASED ON X5 CARD
NOTE      SECNO=  324.650  PROFILE= 4  WSEL BASED ON X5 CARD

NOTE      SECNO=  329.250  PROFILE= 1  WSEL BASED ON X5 CARD
NOTE      SECNO=  329.250  PROFILE= 2  WSEL BASED ON X5 CARD
NOTE      SECNO=  329.250  PROFILE= 3  WSEL BASED ON X5 CARD
NOTE      SECNO=  329.250  PROFILE= 4  WSEL BASED ON X5 CARD
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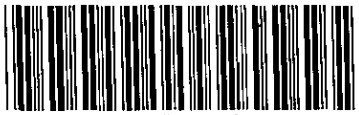

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: 500 yr.

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  C1
  MODIFICATION -  50,51,52
**************************************************

T1      HUD-FIA  H-4705
T2      BEDFORD  TOWNSHIP  FIS
T3      FLAT CREEK 500 YEAR FLOW=550 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.       5.        0.        0.    .001700      0.00     -1.0        0.    590.500     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     15.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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*PROF 4

CCHV= .300 CEHV= .500
*SECNO 301.000
3280 CROSS SECTION 301.00 EXTENDED .90 FEET

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	ICC	ICCNT	CORAR	TOPWID	ENDST
301.00	7.20	592.10	0.00	590.50	592.28	.18	0.00	0.00	589.90
550.	49.	488.	13.	36.	136.	16.	0.	0.	591.30
0.00	1.38	3.60	.79	.060	.045	.060	0.000	584.90	425.00
.001711	C.	0.	0.	0	0	4	0.00	75.00	500.00

*SECNO 301.980
3280 CROSS SECTION 301.98 EXTENDED .56 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 592.50 ELREA= 592.50

** D/S FACE RAILROAD BRIDGE

301.98	7.96	592.16	0.00	0.00	592.79	.63	.29	.22	587.30
550.	0.	550.	0.	0.	86.	0.	0.	0.	587.10
.00	0.00	6.37	0.00	.060	.045	.060	.045	584.20	455.00
.004758	108.	108.	108.	2	0	0	0.00	12.00	467.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	75.00	12.00	0.00	72.00	0.00	584.20	584.20

*SECNO 302.020
3280 CROSS SECTION 302.02 EXTENDED 1.41 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
593.52	592.79	0.00	0.	548.	72.	72.	590.20	593.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 593.50 ELREA= 593.50

302.02	8.81	593.01	0.00	0.00	593.51	.50	.72	0.00	587.30
550.	0.	550.	0.	0.	96.	0.	0.	0.	587.10
.01	0.00	5.70	0.00	.060	.045	.060	.044	584.20	455.00

.003462	42.	42.	42.	11	0	0	0.00	12.00	467.00

*SECNO 302.500
3280 CROSS SECTION 302.50 EXTENDED 2.83 FEET

302.50	9.23	593.63	0.00	0.00	593.68	.05	.03	.14	589.40
550.	85.	400.	65.	83.	199.	73.	1.	0.	589.90
.01	1.02	2.01	.88	.060	.045	.060	.044	584.40	425.00
.000315	40.	40.	40.	2	0	0	0.00	75.00	500.00

*SECNO 302.980

SECNO	DEPTH	CHSEL	CRIMS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

** D/S FACE ABANDONED RAILROAD BRIDGE

302.98	9.07	593.67	0.00	0.00	593.69	.02	.01	.01	585.40
550.	50.	246.	255.	102.	165.	266.	1.	0.	584.60
.02	.49	1.49	.96	.060	.045	.060	.044	584.60	455.25
.000115	40.	40.	40.	2	0	0	0.00	132.73	587.98

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.70	2.60	150.00	12.00	0.00	61.20	0.00	586.20	584.60

*SECNO 303.020
3280 CROSS SECTION 303.02 EXTENDED .75 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.31	595.44	0.00	48.	503.	61.	61.	591.30	597.30

303.02	11.34	597.54	0.00	0.00	597.55	.01	3.85	0.00	587.00
550.	107.	202.	241.	324.	208.	421.	9.	2.	586.20
.21	.33	.97	.57	.060	.045	.060	.045	586.20	400.00
.000036	453.	453.	453.	0	0	4	0.00	219.25	619.25

*SECNO 303.500
3280 CROSS SECTION 303.50 EXTENDED 5.14 FEET

303.50	11.33	597.53	0.00	0.00	597.56	.02	.00	.01	591.10
550.	104.	375.	71.	134.	281.	114.	9.	2.	592.50
.22	.77	1.33	.62	.060	.045	.060	.045	586.20	425.00
.000097	26.	26.	26.	0	0	0	0.00	75.00	500.00

CCHV= .100 CEHV= .300
*SECNC 303.980
3280 CROSS SECTION 303.98 EXTENDED 2.54 FEET

** D/S FACE RAILROAD BRIDGE

303.98	11.33	597.53	0.00	0.00	597.56	.04	.00	.00	586.40
550.	160.	269.	120.	186.	134.	208.	10.	2.	586.50
.22	.86	2.00	.58	.060	.045	.060	.045	586.20	412.00
.000147	26.	26.	26.	0	0	0	0.00	171.42	583.42

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.30	2.90	175.00	12.00	0.00	74.40	0.00	586.20	586.20

*SECNC 304.020
3280 CROSS SECTION 304.02 EXTENDED 3.29 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	WEIR	OPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
598.63	597.79	0.00	90.	465.	74.	74.	592.40	598.00

304.02	12.09	598.29	0.00	0.00	598.32	.02	.75	0.00	586.40
550.	162.	239.	150.	221.	144.	302.	10.	2.	586.50
.23	.73	1.66	.50	.060	.045	.060	.045	586.20	412.00
.000093	34.	34.	34.	2	0	0	0.00	188.00	600.00

*SECNO 304.500
3280 CROSS SECTION 304.50 EXTENDED 5.90 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
304.50	12.10	598.30	0.00	0.00	598.32	.02	.00	.00	591.10
550.	109.	365.	76.	152.	303.	131.	10.	2.	592.50
.24	.72	1.21	.58	.060	.045	.060	.045	586.20	425.00
.000072	32.	32.	32.	0	0	0	0.00	75.00	500.00

CCHV= .150 CEHV= .350
*SECNC 304.980
3280 CROSS SECTION 304.98 EXTENDED 3.31 FEET

** D/S FACE TELEGRAPH RD

304.98	12.12	598.32	0.00	0.00	598.32	.00	.00	.00	592.50
550.	153.	303.	94.	523.	463.	333.	11.	3.	593.30
.26	.29	.65	.28	.060	.045	.060	.044	586.20	400.00
.000020	32.	32.	32.	1	0	0	0.00	250.00	650.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	225.00	10.00	0.00	57.00	0.00	586.20	586.20

*SECNO 305.020
3280 CROSS SECTION 305.02 EXTENDED 3.37 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
600.63	598.32	0.00	464.	66.	57.	57.	591.90	595.00

305.02	12.17	598.37	0.00	0.00	598.37	.00	.05	0.00	592.50
550.	154.	301.	95.	531.	466.	338.	13.	3.	593.30
.29	.29	.65	.28	.060	.045	.060	.044	586.20	400.00
.000020	63.	63.	63.	0	0	6	0.00	250.00	650.00

*SECNO 306.000
3280 CROSS SECTION 306.00 EXTENDED 5.47 FEET

306.00	12.17	598.37	0.00	0.00	598.37	.00	.00	.00	589.30
550.	188.	86.	276.	822.	179.	1068.	15.	3.	589.90
.34	.23	.48	.26	.060	.045	.060	.044	586.20	0.00
.000010	50.	50.	50.	0	0	0	0.00	350.00	350.00

*SECNO 310.000
3280 CROSS SECTION 310.00 EXTENDED 3.88 FEET

310.00	10.88	598.38	0.00	0.00	598.38	.00	.01	.00	594.10
550.	56.	178.	315.	198.	302.	1023.	36.	7.	594.60
.69	.28	.59	.31	.060	.045	.060	.045	587.50	0.00
.000022	500.	500.	500.	0	0	0	0.00	325.00	325.00

CCHV= .400 CEHV= .800
*SECNO 310.980
3280 CROSS SECTION 310.98 EXTENDED 3.28 FEET

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QLH	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

** D/S FACE SUB STATION RD

310.98	10.38	598.38	0.00	0.00	598.39	.01	.00	.00	594.90
550.	205.	229.	116.	526.	258.	323.	40.	8.	595.10
.76	.39	.89	.36	.060	.045	.060	.045	588.00	500.00
.000052	142.	142.	142.	0	0	0	0.00	300.00	800.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	300.00	13.00	0.00	83.20	0.00	588.00	588.00

*SECNC 311.020
3280 CROSS SECTION 311.02 EXTENDED 3.33 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
599.40	598.39	0.00	437.	113.	83.	83.	594.40	595.50

311.02	10.42	598.42	0.00	0.00	598.43	.01	.04	0.00	594.90
550.	206.	227.	117.	533.	259.	327.	40.	8.	595.10
.77	.39	.88	.36	.060	.045	.060	.045	588.00	500.00
.000050	16.	16.	16.	0	0	6	0.00	300.00	800.00

*SECNO 311.100
3280 CROSS SECTION 311.10 EXTENDED 3.12 FEET

311.10	10.22	598.42	0.00	0.00	598.43	.01	.00	.00	594.00
550.	282.	213.	55.	606.	231.	159.	42.	9.	595.80
.79	.47	.92	.34	.060	.045	.060	.045	588.20	0.00
.000059	50.	50.	50.	0	0	0	0.00	250.00	250.00

CCHV= .150 CEHV= .350
*SECNC 312.000
3280 CROSS SECTION 312.00 EXTENDED 1.23 FEET

312.00	8.63	598.53	0.00	0.00	598.56	.02	.12	.01	596.70
550.	200.	331.	18.	404.	220.	63.	65.	17.	596.90
1.09	.50	1.50	.29	.060	.045	.060	.045	589.90	199.00
.000208	1200.	1200.	1200.	2	0	0	0.00	387.07	586.07

*SECNO 312.100
3280 CROSS SECTION 312.10 EXTENDED 1.98 FEET

312.10	7.88	598.68	0.00	0.00	598.76	.08	.18	.02	597.00

550.	77.	437.	37.	79.	172.	47.	71.	20.	597.20
1.16	.98	2.54	.79	.060	.045	.060	.045	590.80	251.00
.000711	520.	520.	520.	2	0	0	0.00	110.00	361.00

CCHV= .200 CEHV= .400
*SECNO 312.980
3280 CROSS SECTION 312.98 EXTENDED 1.11 FEET

SECAC	DEPTP	CHSEL	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

** D/S FACE MINX RD - CORPORATE BDRY

312.98	7.91	598.81	0.00	0.00	598.83	.02	.06	.01	597.10
550.	222.	273.	55.	359.	173.	136.	72.	21.	597.30
1.20	.62	1.58	.40	.060	.045	.060	.045	590.90	100.00
.000273	142.	142.	142.	2	0	0	0.00	371.00	471.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	350.00	14.61	0.00	89.10	0.00	590.90	590.90

*SECNO 313.020
3280 CROSS SECTION 313.02 EXTENDED 1.48 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	OPP	BAREA	TRAPEZOID AREA	ELLC	ELTRD
599.58	598.99	0.00	158.	394.	89.	89.	597.00	598.90

313.02	8.28	599.18	0.00	0.00	599.20	.03	.37	0.00	597.60
550.	149.	296.	105.	272.	171.	184.	72.	21.	597.70
1.20	.55	1.73	.57	.060	.045	.060	.045	590.90	75.00
.000321	17.	17.	17.	2	0	3	0.00	353.00	428.00

*SECNO 313.100
3280 CROSS SECTION 313.10 EXTENDED .98 FEET

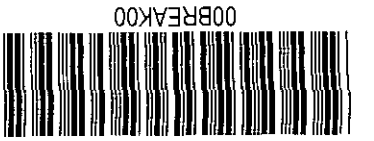
313.10	7.77	599.17	0.00	0.00	599.24	.06	.02	.01	598.10
550.	103.	369.	78.	174.	156.	123.	73.	22.	598.20
1.21	.59	2.37	.63	.060	.045	.060	.045	591.40	75.00
.000677	42.	42.	42.	1	0	0	0.00	353.00	428.00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: Report



FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 Bedford Twp. Monroe Co., Michigan

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Flat Creek

STUDY LIMITS: Minx Rd. - corporate limits (downstream limit) to confluence with North River (upstream limit)

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: McNamee, Porter and Seeley field crew 1/17/79 - 2/5/79

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on April 5, 1979

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps - 1"=1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n"	.045-.050
Overbank "n"	.06-.08
n values thru bridges	.013-.030
Contraction Coefficients	.1-.4
Expansion Coefficients	.3-.8

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review,please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 3

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS AND CALIBRATION:

See Table 2 for documentation of high water marks.

Only one high water mark was available, therefore Flat Creek could not be calibrated with this. It is reported in Table 2.

A sensitivity analysis was performed on the 100 year flow by raising and lowering all Manning "n" values by 30%. Water surface elevations in the major portion of the drain were within ±0.2 feet, thus indicating a good model.

Starting Conditions

Field information was obtained 3500 ft. downstream of the corporate limits of Bedford Twp. in order to establish a good starting elevation at the corporate limits. Normal depth was assumed for the starting elevation. The slope-area method was used to determine this starting elevation for all flows utilizing the same value of slope determined from the field surveyed profile. A convergence test was run on the 100 year flow by changing the starting elevation determined by the profile slope by approximately ±1.5 feet. The convergence test was run to just inside the corporate limits. Very close convergence occurred at the corporate limits, indicating a good model. The rest of the runs for the study limit were then made utilizing the computer results for starting elevations.

Designated Floodway

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcharge of 0.1 ft. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1"=1000' topographic map for floodway delineation).

Computer Outputs

Enclosed are complete computer outputs for (i) 100 year natural and 100 yr. designated floodway, (ii) 10, 50 and 500 yr flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

Comments

At Minx Rd. there is pressure flow during 500, 100 and 50 year floods. The bridge is modelled as a special bridge. The ELLC was lowered from 597.5 to 597 for the 10 year flow.

No discussion of the storage effect from first review profiles within Temperance are 4 ft lower based upon the 40% reduction in Q_{100}

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR MICHIGAN

JOB : HUD-FIA H-4705 SHEET NO
COMMUNITY : Bedford FILE NO
WATERCOURSE : Flat Creek COMPUTED BY DATE CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE	REMARKS
301	2	Valley Section - Overbanks modified to elimnate ineffective flow area and limit top width
301.98	4	D/S Face Railroad Bridge - Developed from Bridge Detail and 301
302.02	4	U/S Face Railroad Bridge - Repeat 301.98
302.5	4	Valley Section - Developed from 301, USGS Map, and Bridge Detail 302.98-303.02
302.98	2	D/S Face Abandoned Railroad Bridge - Modified Overbanks to account for effective flow area
303.02	3	U/S Face Abandoned Railroad Bridge - Repeat 302.98
303.5	4	Valley Section - Developed from 301, USGS Map, and Bridge Detail 303.98-304.02
303.98	2	D/S Face Railroad Bridge - Modified Overbanks to account for effective flow area
304.02	3	U/S Face Railroad Bridge - Repeat 303.98
304.5	4	Valley Section - Developed from 301, USGS Map, and Bridge Detail 304.98-305.02
304.98	2	D/S Face Telegraph Rd - Modified Overbanks to account for effective flow area
305.02	3	U/S Face Telegraph Rd - Repeat 304.98
306	2	Valley Section - Modified for 1 on 1 U/S expansion
310	2	Valley Section - Modified to eliminate ineffective flow area
310.98	2	D/S Face Sub Station Rd - Overbanks modified to account for effective flow area and top width
311.02	3	U/S Face Sub Station Rd - Repeat 310.98
311.1	1	Valley Section (Note - Flow limited to north side of Sub Station Rd

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR MICHIGAN

JOB : HUD-FIA H-4705 SHEET NO
COMMUNITY : Bedford FILE NO.
WATERCOURSE : Flat Creek DATE
COMPUTED BY CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
312		2	Valley Section - Modified to limit top width
312.1		2	Valley Section - Modified to limit top width
312.98		3	D/S Face Minx Rd - Corporate Bdry
313.02	A	3	U/S Face Minx Rd - Repeat 313.1 + 0.5'
313.1	B	2	Valley Section - Modified to eliminate ineffective flow areas and limit top width
313.2		3	Valley Section - Repeat 313.1 + 1.4'
313.3		3	Valley Section - Repeat 314 - 1.4'
314	C	2	Valley Section - Modified to eliminate ineffective flow area
314.1		3	Valley Section - Repeat 314 + 1.5'
314.2		3	Valley Section - Repeat 315 + 1.5'
315	D	1	Valley Section
315.1		3	Valley Section - Repeat 315 + 0.9'
315.2		3	Valley Section - Repeat 315.9 - 1.0'
315.9	E	2	Valley Section - Modified to eliminate ineffective flow area and limit top width
315.98		3	D/S Face Crabb Rd. - Repeat 315.9 - 0.1'
316.02	F	3	U/S Face Crabb Rd. - Repeat 316.1 - 0.2'
316.1	G	2	Valley Section - Modified to eliminate ineffective flow area and limit top width
316.2	H	2	Valley Section - Overbanks modified to include effective flow area
316.25		3	Woodbridge - Repeat 316.2 - Input loss w/X5
316.3	I	2	Valley Section - Modified to eliminate ineffective flow area and limit top width
316.98		3	D/S Face Woodside Dr. - Repeat 316.3 + 1.1'
317.02	J	3	U/S Face Woodside Dr. - Repeat 317.1 - 0.1'

JOB: HYD-FIA H-4705

COMMUNITY: Bedford

WATERCOURSE: Flat Creek

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section; partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE		REMARKS
317.1	K	2	Valley Section - Modified to eliminate ineffective flow area and limit top width
317.15		3	Valley Section - Repeat 317.1
317.18		2	D/S Face Gravel Driveway - Modified to include effective flow area and limit top width
	L		
317.22		3	U/S Face Gravel Driveway - Repeat 317.18
317.25		3	Valley Section - Repeat 317.18 + 0.2'
317.27		3	Valley Section - Repeat 317.28 - 0.6'
317.28		2	D/S Face Private Drive - Modified to include effective overbank flow area and limit top width
	M		
317.32		3	U/S Face Private Drive - Repeat 317.28
317.34		3	Valley Section - Repeat 317.28 - 0.2'
317.4	N	2	Valley Section - Overbanks modified to include effective flow area
317.45		3	Private Drive - Repeat 317.4 - Input Loss w/X5
318	O	2	Valley Section - Modified to limit top width
318.08		3	D/S Face Private Drive - Repeat 318 + 0.5'
318.12	P	3	U/S Face Private Drive - Repeat 318 + 0.5'
318.15	Q	4	Valley Section - Developed from 318 and Abandoned Bridge Section
318.16		4	Abandoned Bridge - Repeat 318.15 - Input Loss w/X5
318.2	R	4	Valley Section - Developed from 318 and Private Drive Detail
318.25		4	Private Drive - Repeat 318.2 - Input Loss w/X5
318.3	S	4	Valley Section - Developed from 318 and Private Drive Detail
318.35		4	Private Drive - Repeat 318.3 - Input Loss w/X5
319	T	2	Valley Section - Modified to limit top width
319.1	U	2	Valley Section - Modified to include effective overbank flow area and limit top width

COMMUNITY: Bedford

WATERCOURSE: Flat Creek

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE	REMARKS
319.98	4	D/S Face Corl Rd - Developed from 319.1 and Bridge Detail
V		
320.02	4	U/S Face Corl Rd - Repeat 319.98
320.1	W 2	Valley Section - Modified to include effective overbank flow and limit top width
320.9	X 2	Valley Section - Modified to include effective overbank flow
320.98	4	D/S Face Temperance Rd - Developed from 320.9 and Bridge Detail
Y		
321.02	4	U/S Face Temperance Rd - Developed From 322 and Bridge Detail
322	Z 2	Valley Section - Modified to limit top width
322.98	2	D/S Face Railroad Bridge - Bridge Detail modified to include effective overbank flow area
AA		
323.02	3	U/S Face Railroad Bridge - Repeat 323.1 - 0.1'
323.1	AB 2	Valley Section - Modified to include effective overbank flow area
324	AC 2	Valley Section - Modified to limit top width
324.3	3	Valley Section - Repeat 324 + 0.5'
324.48	2	D/S Face Temperance Rd - Bridge Detail modified to include effective overbank flow area
AD		
324.52	3	U/S Face Temperance Rd - Repeat 324.48
324.6	AE 2	Valley Section - Modified to include effective overbank flow area
324.65	3	Walk Bridge - Repeat 324.6 - Input Loss w/X5
325	AF 2	Valley Section - Modified to limit top width
325.98	2	D/S Face Washington St. - Modified to include effective overbank flow area
AG		
326.02	3	U/S Face Washington St. - Repeat 325.98

JOB : HUD-FIA H-4705

COMMUNITY : Bedford

WATERCOURSE : Flat Creek

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE		REMARKS
326.5		3	Valley Section - Repeat 326.98 - 0.1'
326.98		2	D/S Face Private Drive - Modified left
	AH		overbank to limit top width
327.02		3	U/S Face Private Drive - Repeat 326.98
327.5		3	Valley Section - Repeat 326.98 + 0.4'
327.98		2	D/S Face Lewis Rd - Modified overbanks
	AI		to include effective flow area and limit top width
328.02		3	U/S Face Lewis Rd - Repeat 327.98
328.1	AJ	2	Valley Section - Modified to eliminate ineffective
			flow area and limit top width
329	AK	2	Valley Section - Modified to limit top width
329.1	AL	2	Valley Section - Modified overbanks to
			include effective flow area by using
			329
329.25		3	Private Drive - Repeat 329.1 - Input loss w/ X5

JOB: HUD·FIA CONTRACT H·4705

COMMUNITY: ~~[illegible]~~ Bedford TWP WATERCOURSE: ~~[illegible]~~ Flat Creek

TABLE 2: HIGHWATER MARK DOCUMENTATION

DATE OF STORM: ~~[illegible]~~ PEAK DISCHARGE AT GAGE: ~~[illegible]~~ GAGE HT: ~~[illegible]~~

LOCATION	SOURCE	OBSERVED ELEVATION	COMPUTED ELEVATION	OBSERVED LESS COMPUTED	REMARKS
Private Drive - Cross Section M	Resident	612.8	10yr: 613.2 50yr: 613.9 100yr: 614.0 500yr: 614.6	-0.4 -1.1 -1.2 -1.8	Observed high water mark was reported to MPS field crew as occurring in the Fall of 1977

COMMUNITY: Bedford

WATERCOURSE: Flat Creek

TABLE 3 — XKOR CALCULATIONS

$XKOR = 1 + K_e + K_F \quad K_F = \frac{29 n l^2}{R^{4/3}} \quad R = \frac{A}{P}$

Cross Section Location	K_e	A	P	R	n	l	K_F	XKOR	REMARKS
301.98-302.02	.25	72	36	2	.022	42	.25	1.5	
302.98-303.02	0.3	61.2	34.2	1.79	.020	453	2.4	3.7	
303.98-304.02	0.1	74.4	36.4	2.04	.025	34	0.2	1.3	
304.98-305.02	0.2	57	31.4	1.82	.022	63	0.4	1.6	
310.98-311.02	0.4	83.2	38.8	2.14	.025	16	0.1	1.5	
312.98-313.02	0.2	89.1	40.2	2.22	.025	16.5	0.1	1.3	
315.98-316.02	0.3	52.5	29.5	1.78	.013	33	0.1	1.4	
316.98-317.02	0.1	53	30.6	1.73	.022	28	0.2	1.3	
317.18-317.22	0.5	35.34	33.68	1.05	.013	30	0.1	1.6	
317.28-317.32	0.15	79.5	40.6	1.96	.022	15	0.1	1.25	
318.08-318.12	0.1	79.8	39.4	2.03	.025	18	0.1	1.2	
319.98-320.02	0.15	57.6	33.6	1.71	.022	21	0.15	1.3	
320.98-321.02	0.5	42.53	26.12	1.63	.013	55	0.15	1.65	
322.98-323.02	0.3	39.2	25.2	1.56	.022	33	0.3	1.6	
324.48-324.52	0.5	31.38	22.44	1.40	.013	50	0.15	1.65	
325.98-326.02	0.25	26.28	21.14	1.24	.025	34	0.45	1.7	
326.98-327.02	0.5	16.06	16.88	0.95	.017	43	0.4	1.9	
327.98-328.02	0.3	51.6	32.6	1.58	.022	33	0.25	1.55	

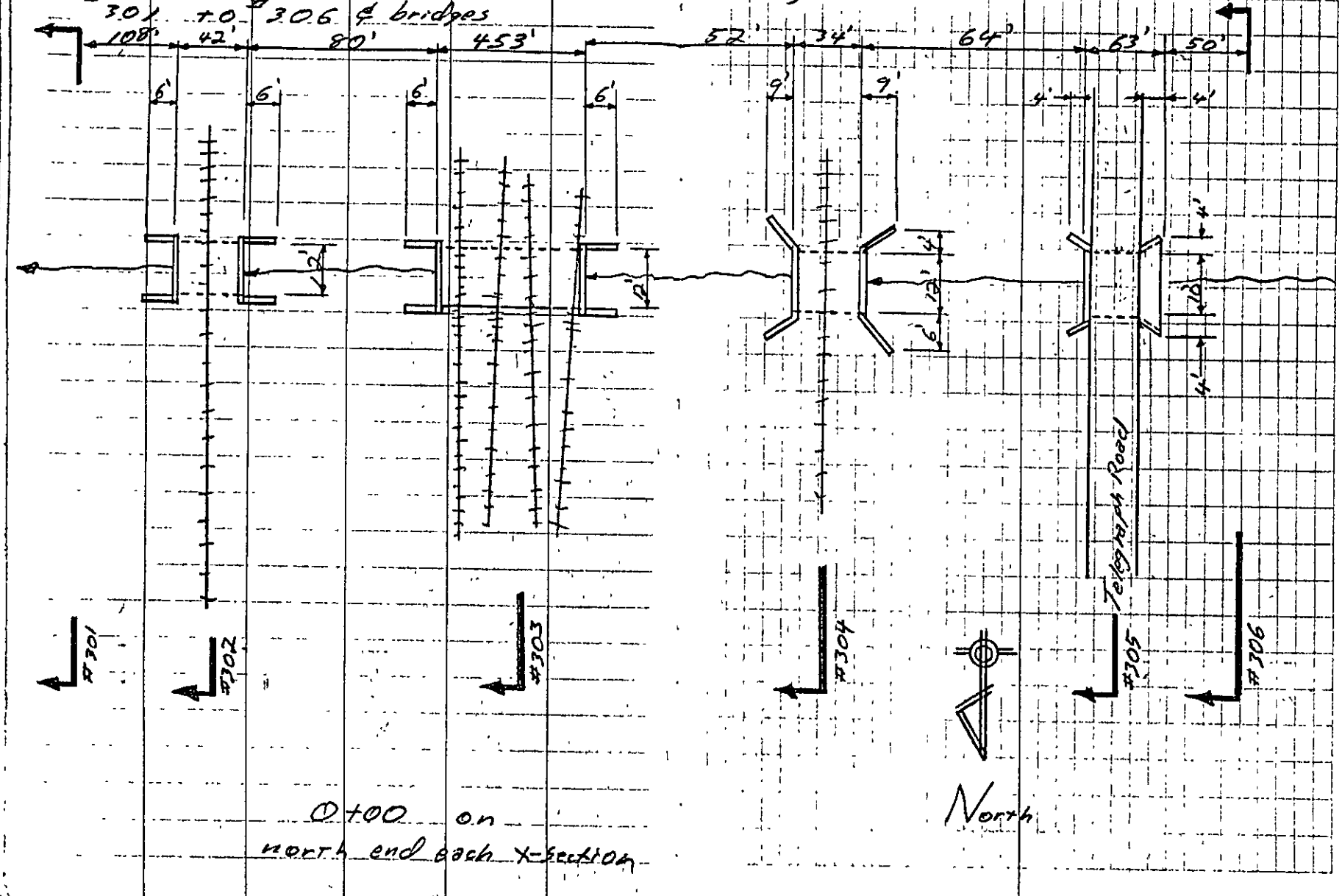
* Note: n value of .030 used at Walk Bridge section 324.65

472-E/28

Flat Creek

Location Sketch for x-sections #301 to #306 & bridges

1-31-79
cloudy -20°



0+00 on north end each x-section

472-F

29

Flat Creek

Bridge Faces

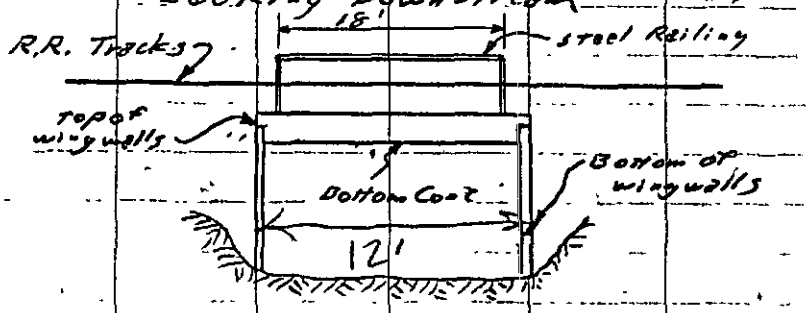
1-30-79

Pictures #23 to #29

Film 115

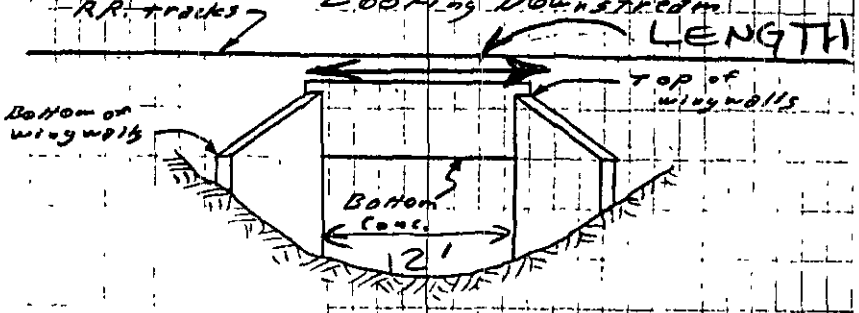
Bridge at X-section #302

Looking Downstream



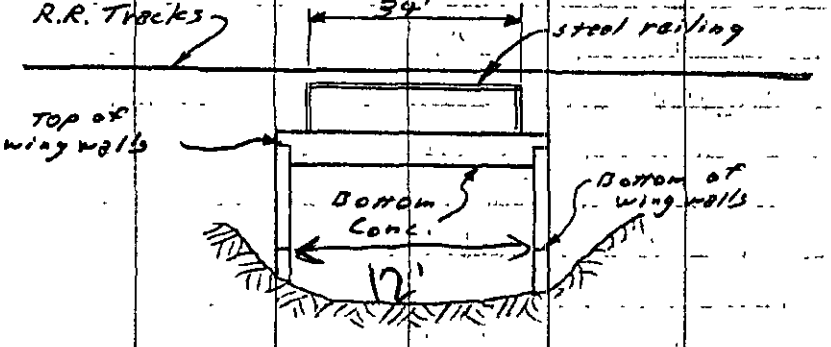
Bridge at X-section #304

Looking Downstream



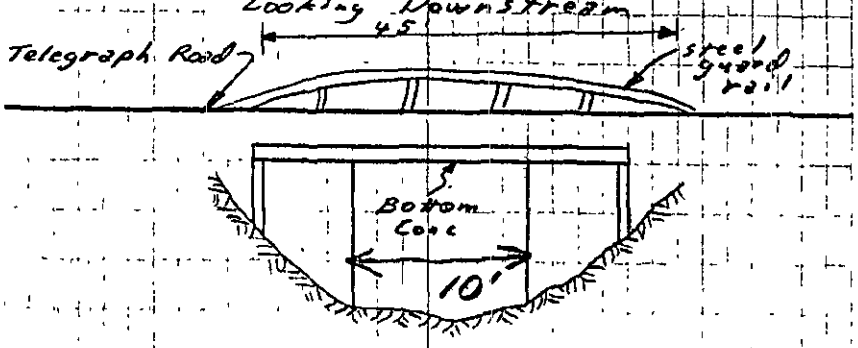
Bridge at X-section #303

Looking downstream



Bridge at X-section #305

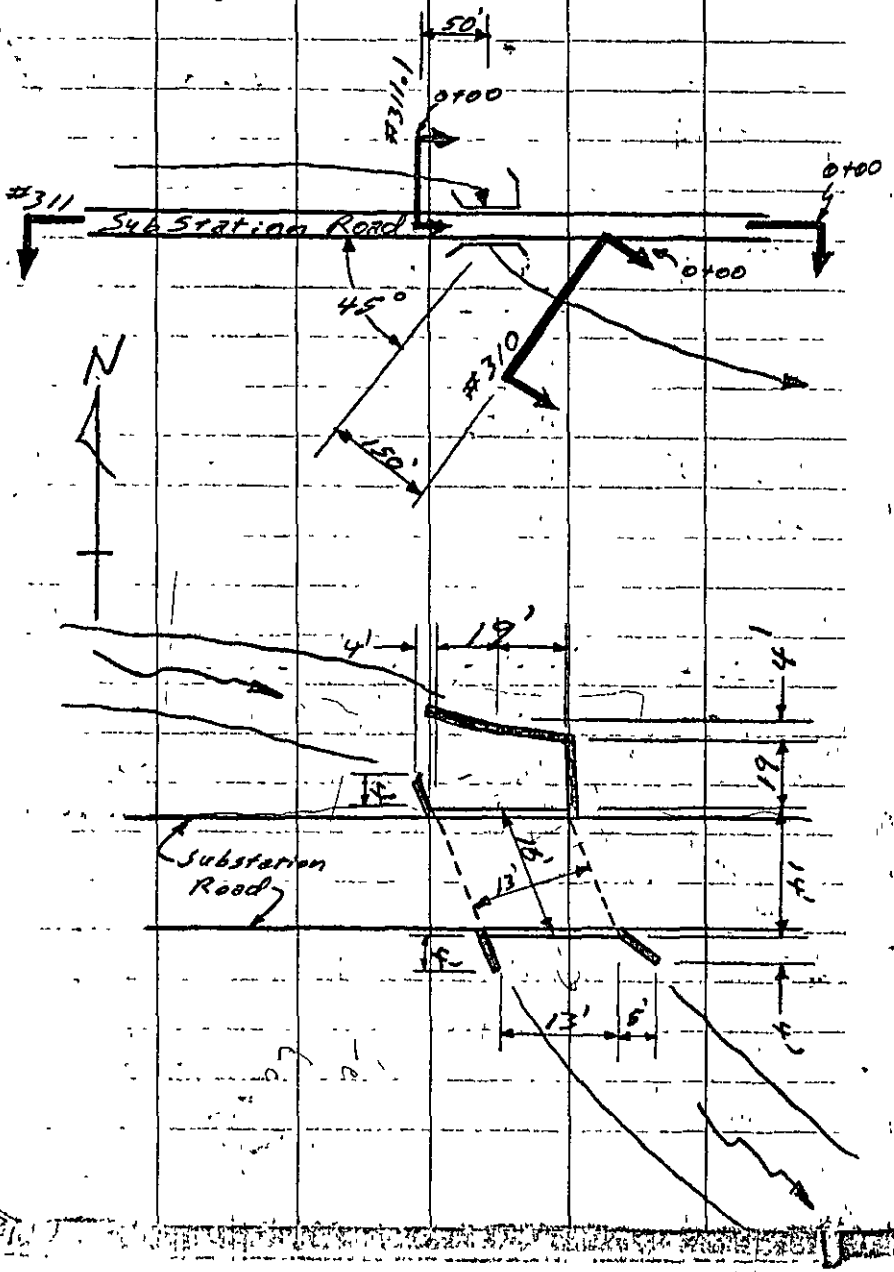
Looking Downstream



472-F
38

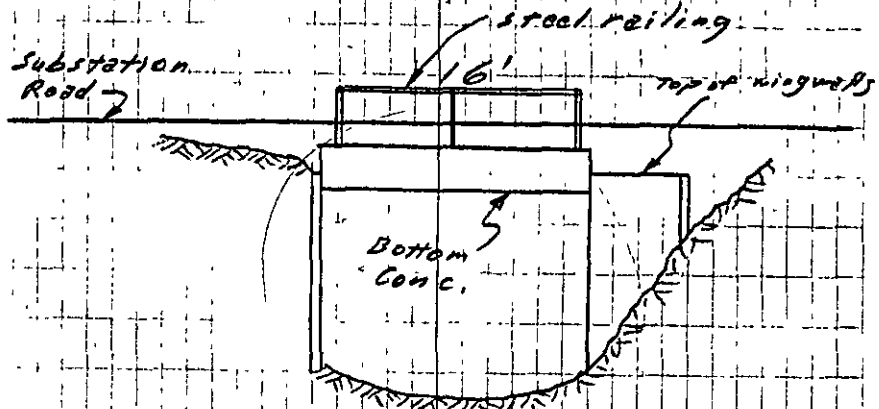
Flat Creek

X-Sections 310, 311, & 311A1 and bridge detail at Substation Road



2-1-79 D. Cain
J. Magnusen

Looking Downstream



X-Section #311 is on Page 26, this Book

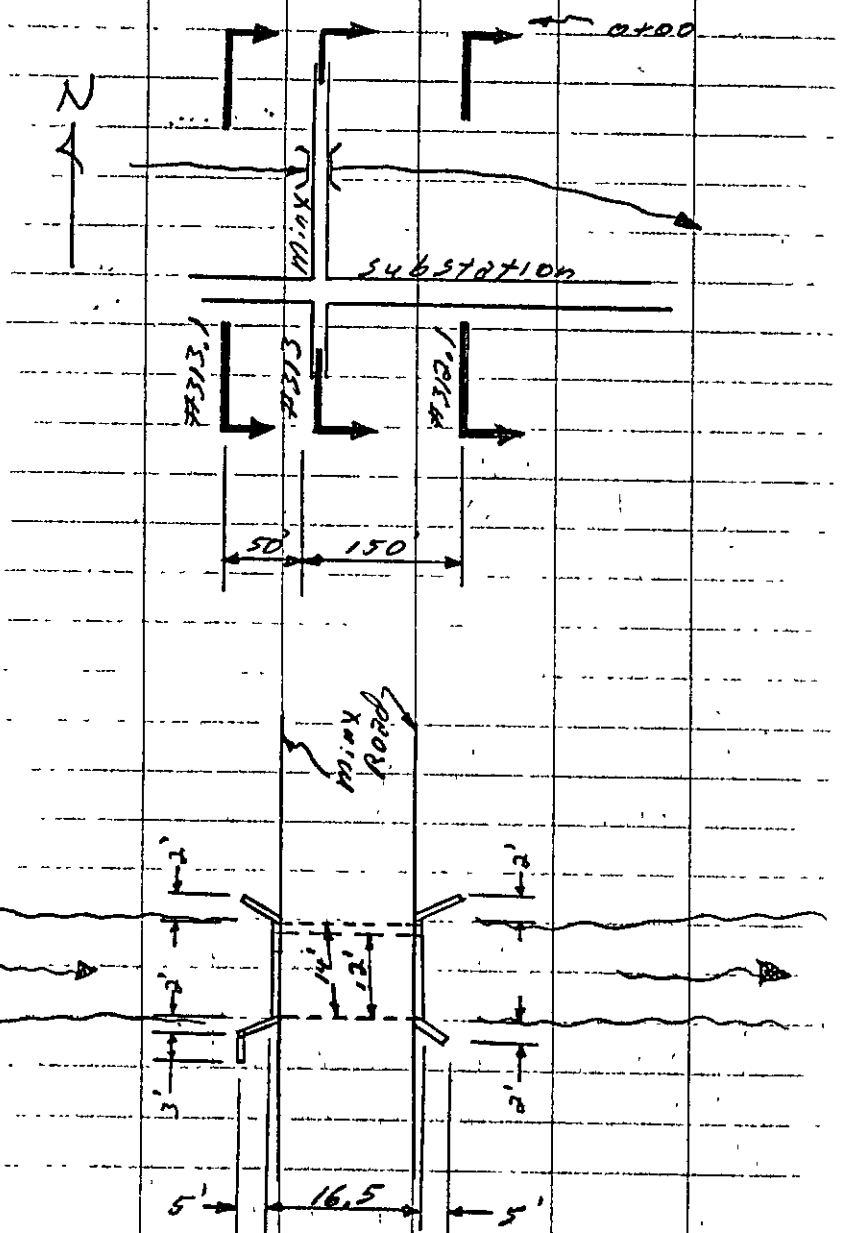
u/s steel guardrail on top of bridge 30' long .2' below top of u/s railing

472-F
43

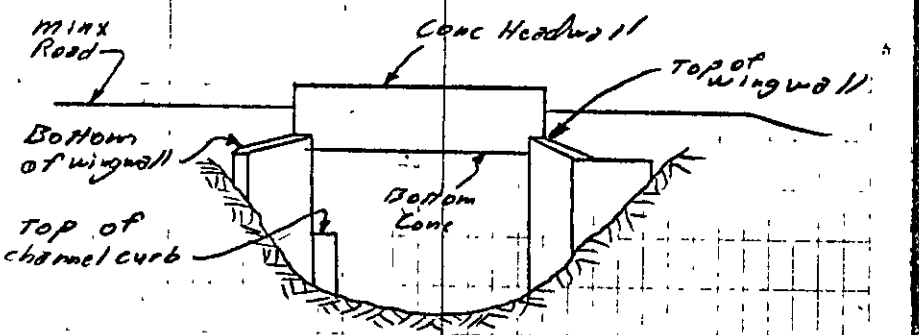
2-1-79 D. Cain
J. Magnuson

X-sections 312.1, 312.6 313.1

Flat Creek



Looking Downstream



Left ← → Right

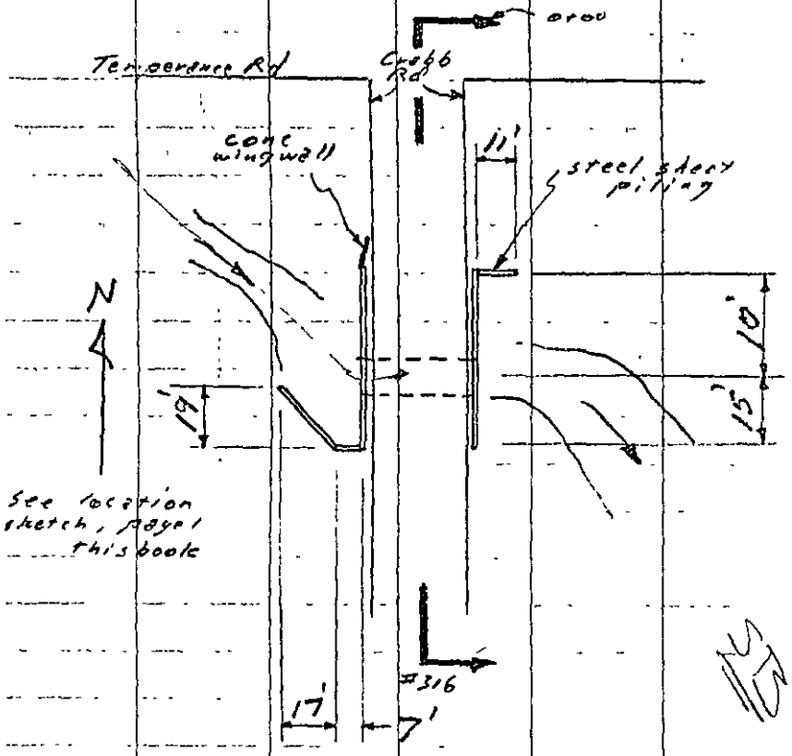
472-E
2

Flat Creek

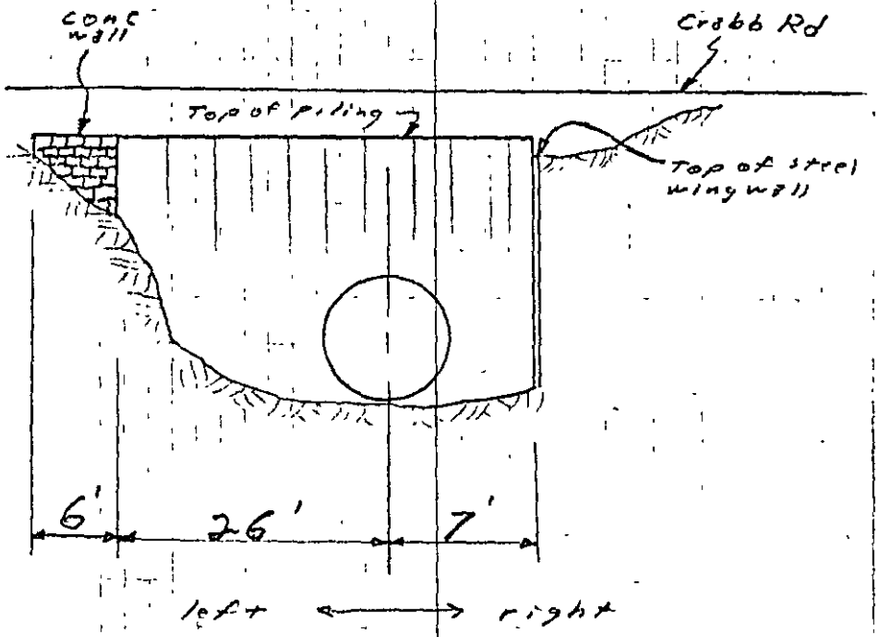
1-17-79

D. Cain
N. Shamart

X-Section 316 & bridge detail @ Crabb Rd.

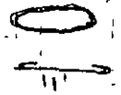


Looking Downstream

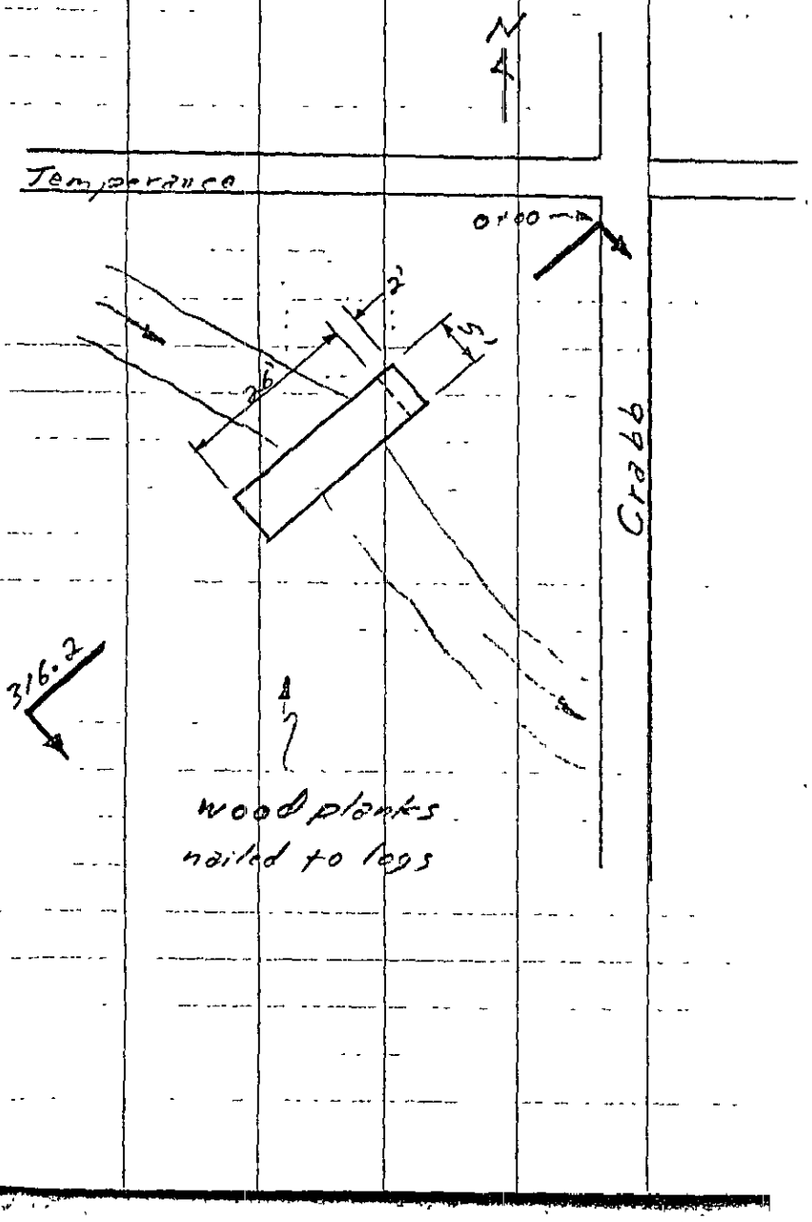


Culvert = 7'x11' ϕ RCP, 33' Long

Horizontal elliptical

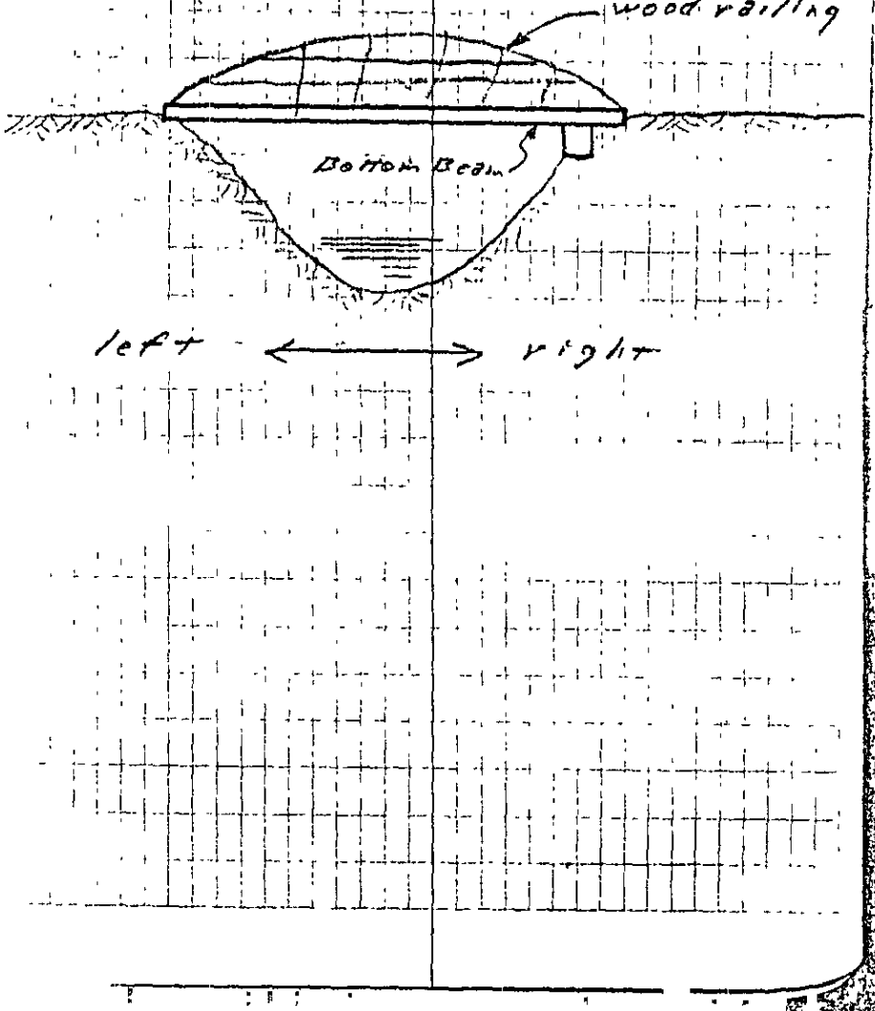


X-Section 316.2 and foot bridge Detail



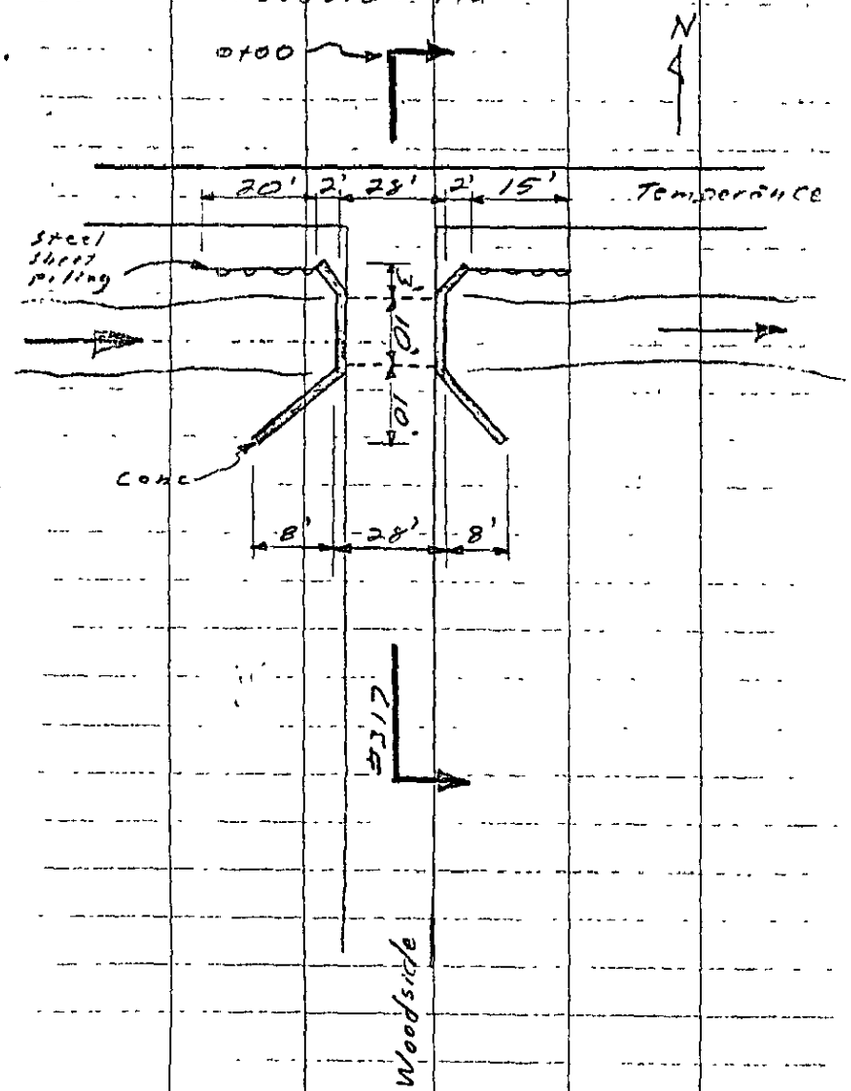
1-17-79 D. Cain
N. Shamart

472-E/5



Flat Creek

X-Section 317 and bridge detail at Woodside Rd



1-17-79

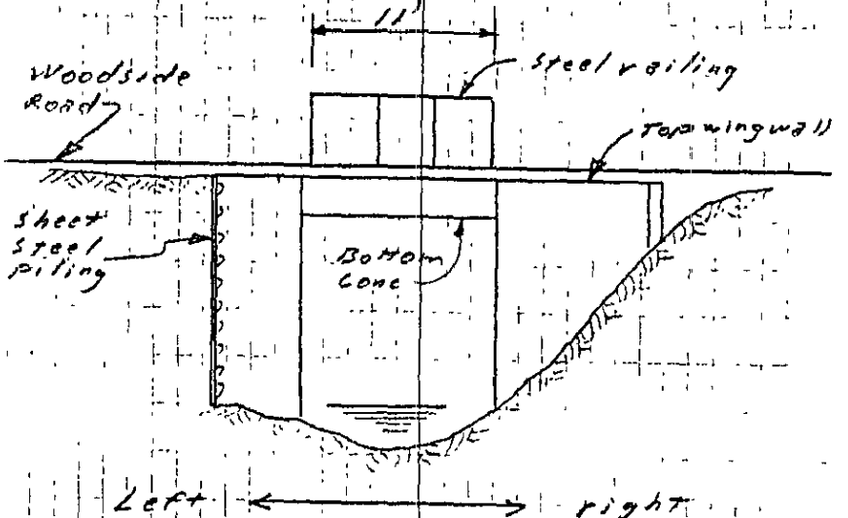
cloudy-windy 29°

D. Cain Φ

N. Shamart π

472-E/7

Looking Downstream

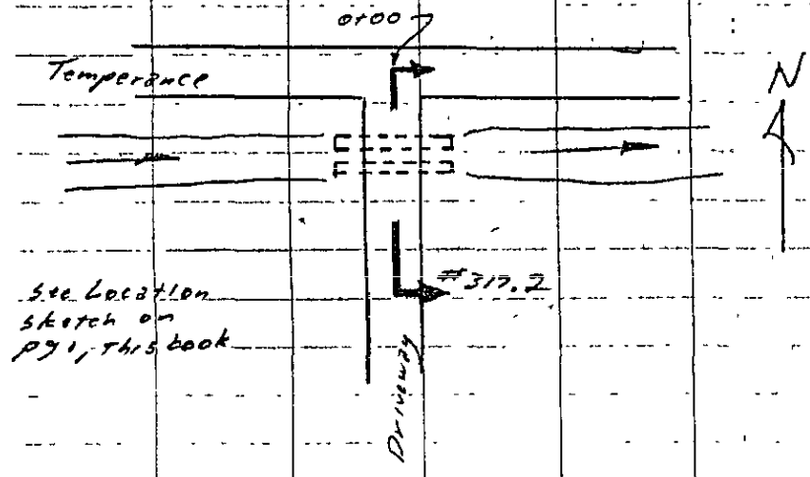


Flat Creek

X-section 317.2 ℄ bridge detail at Private driveway

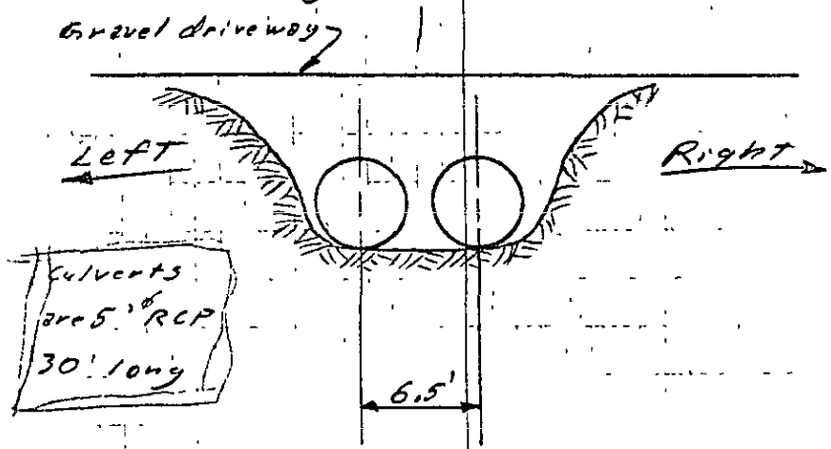
1-18-78 D. Cain ⊼ ⊠

Ptly Cloudy - 20° N. Shamart ϕ



See Location sketch on pg 1, this book

Looking Downstream

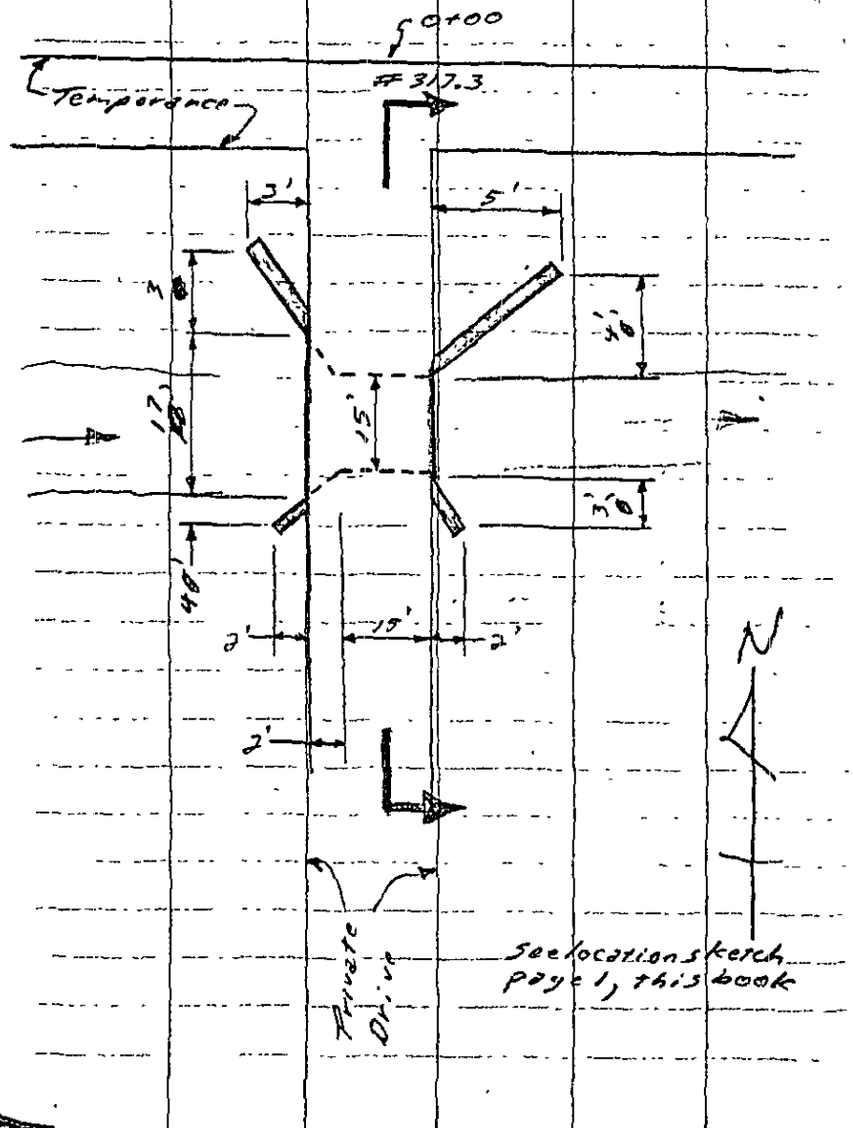


Culverts are 5' ϕ RCP 30' long

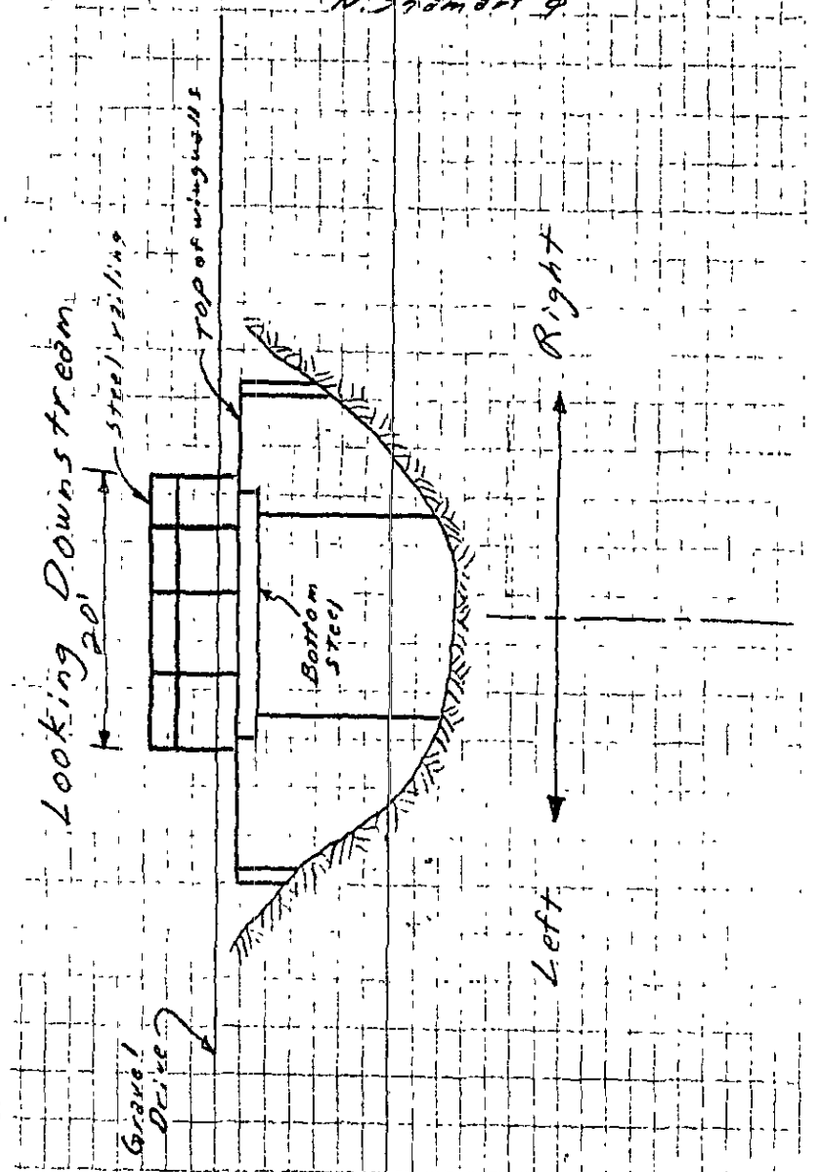
Sta	+S	HI	-S	Elev	Description
BM125				615.62	
	1.72	617.34			
			7.0	610.3	Ground 10' left of left culvert ℄
			12.4	604.9	Ground at left edge of left culvert
			12.6	604.7	Ground at ℄ left culvert
			12.5	604.8	Ground between culverts
			12.2	605.1	" at ℄ right culvert
			12.0	605.3	" at right edge of right culvert
			7.1	610.2	" 10' right of right culvert ℄
			11.7	605.6	Water surface
			13.6	603.7	Invert u/s both culverts

X-Section 317.3 & bridge detail at private Drive
Flat Creek

1-18-79 D. Cain ⊼ ⊼
N. Shamart ϕ

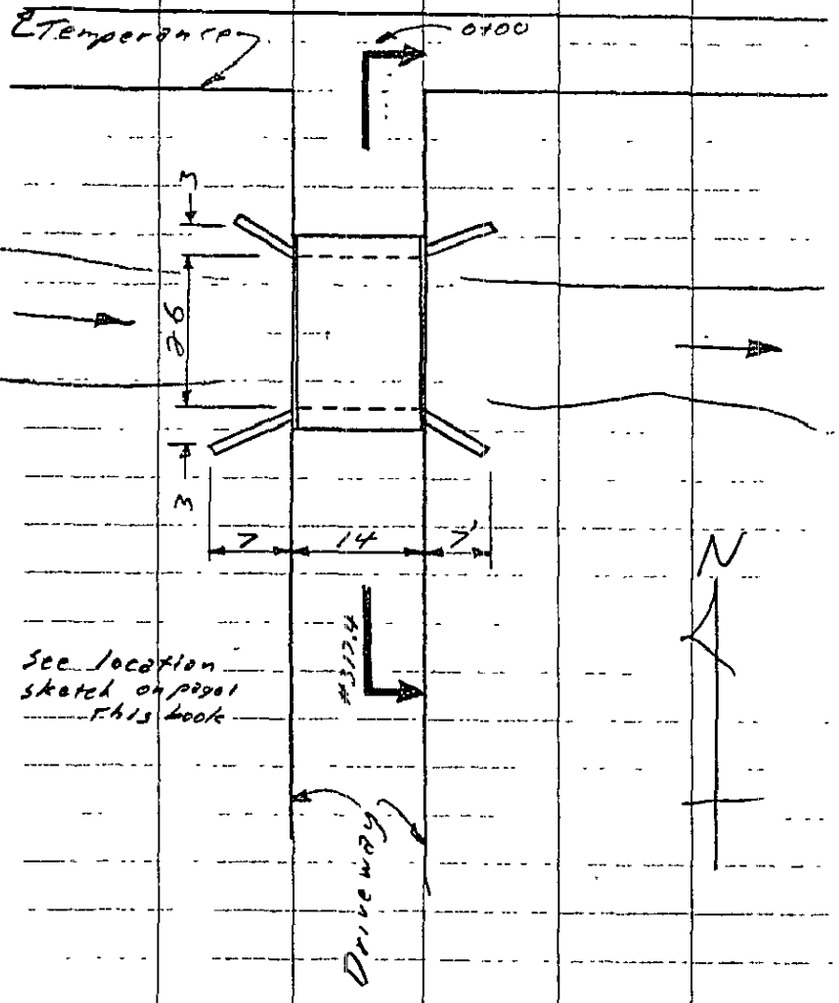


See location sketch page 1, this book

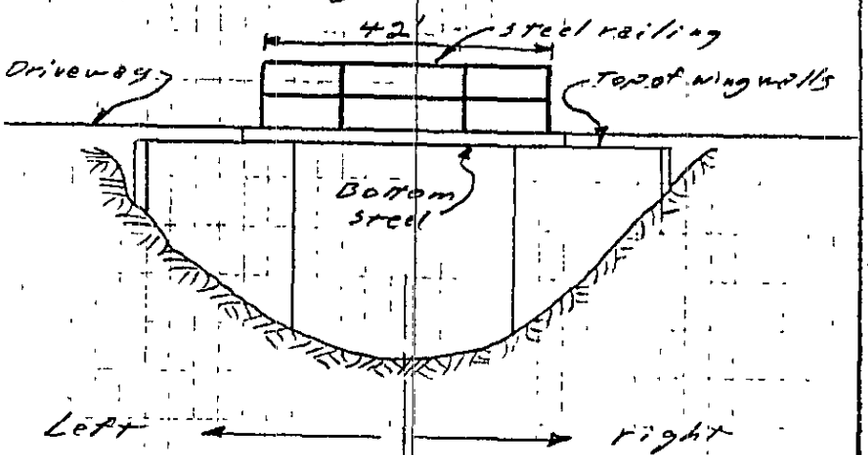


1-18-79

X-Section 317.4 and Bridge Detail at private drive
Flat Creek



Looking Downstream



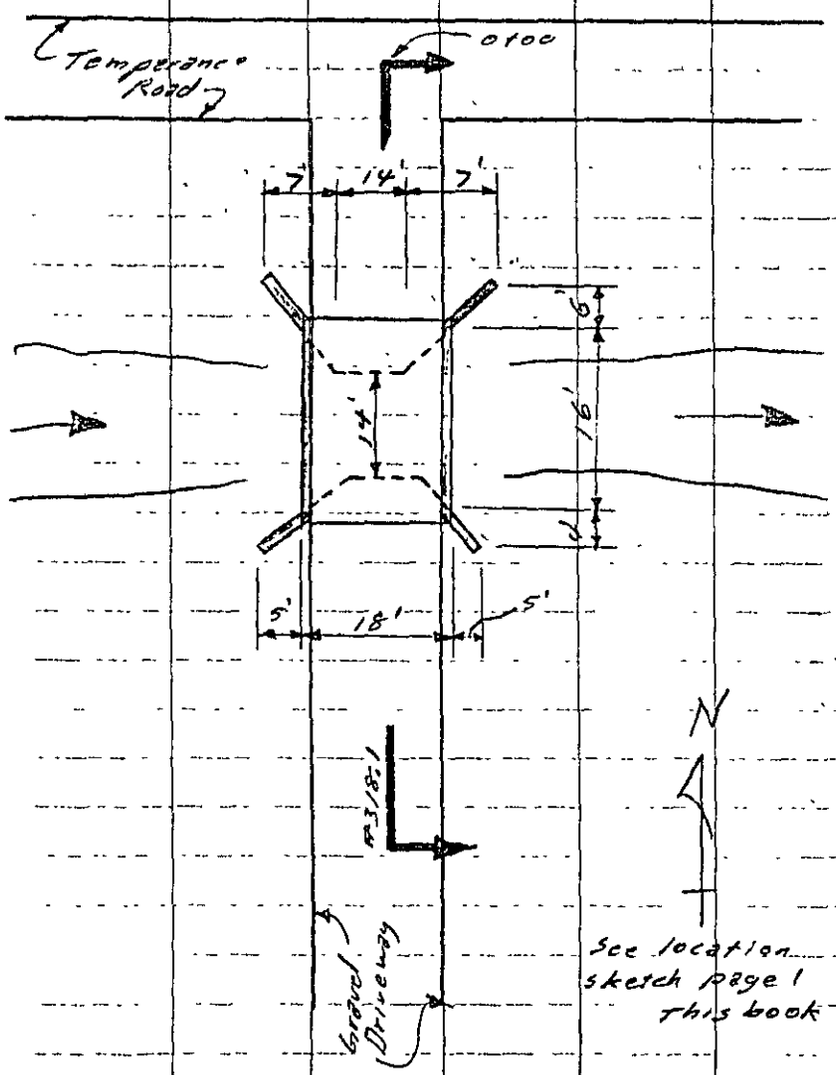
472-E
17

Flat Creek

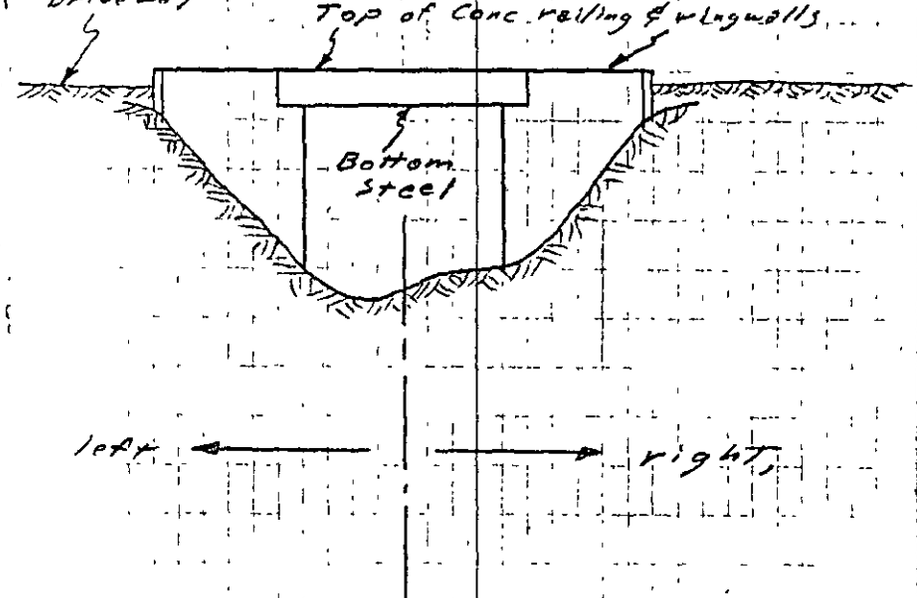
X-Section 318.1 and Driveway bridge detail

1-18-79 D. Cain

clear - 20° N. Shamrock



Looking Downstream



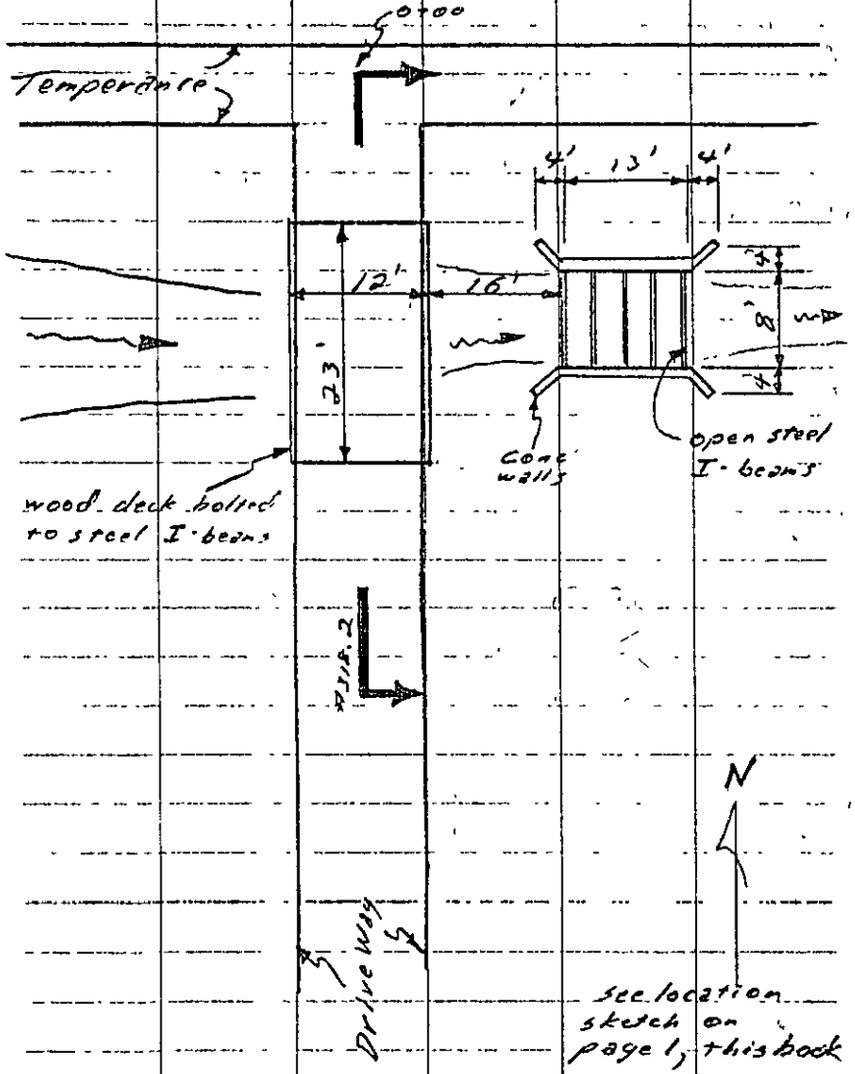
Flat Creek

X-section 318.2 & driveway bridge detail

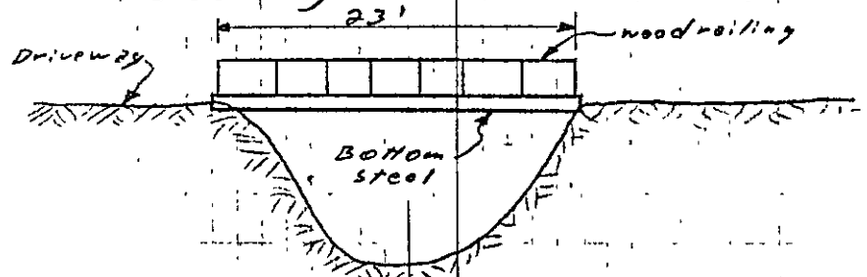
1-18-79

D. Cain

N. Shamart

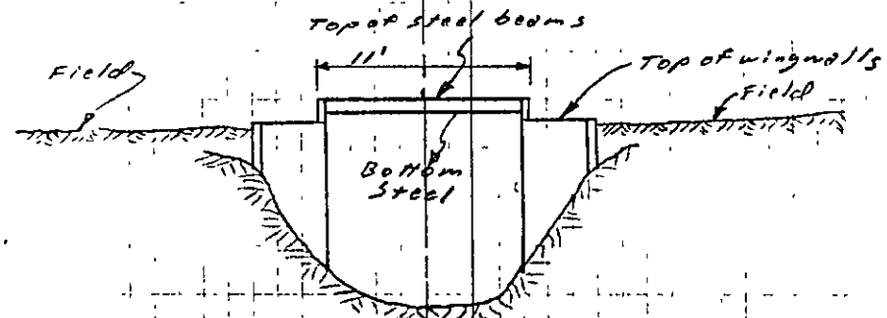


Looking Downstream



Bridge at 318.2

Left ← → Right



Abandoned Bridge

472-E/72

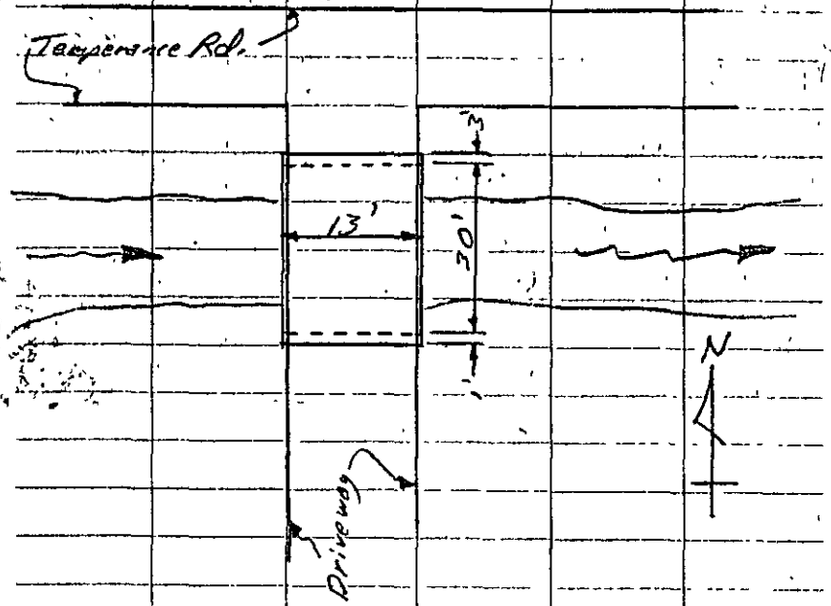
Flat Creek

X-Section 318.3 ℄ bridge detail

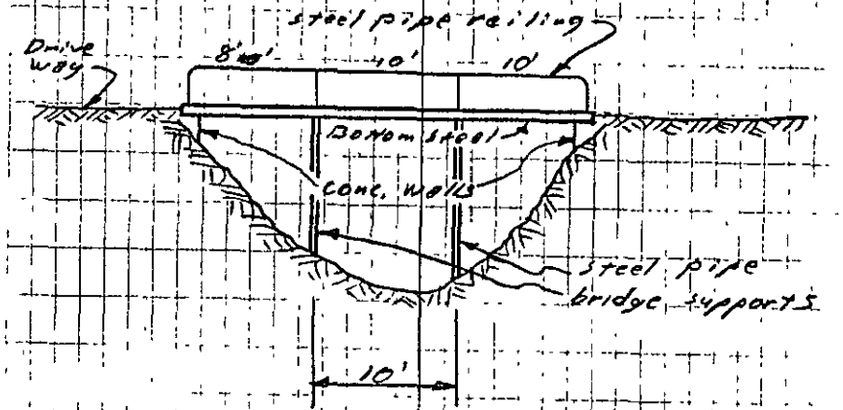
1-29-79 D. Cain

N. Shamart π

J. Magnuson ϕ



Looking Downstream



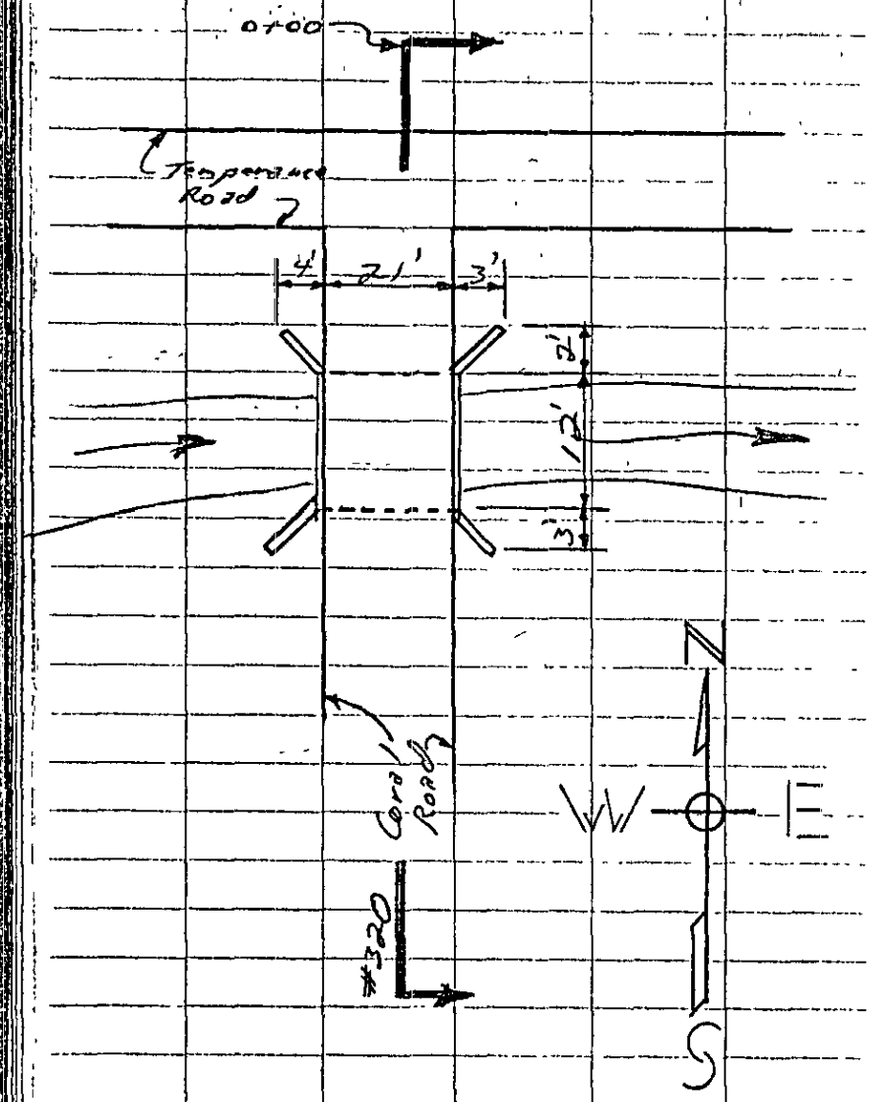
Sta	+S	HI	-S	Elev		Description
BM126		~~620.95~~		619.01		
	1.94	620.95				
			3.1	~~617.8~~	617.9	Top of steel railing
0+36			4.6	~~616.3~~	616.4	Top of bridge Deck at ℄
			5.5	~~615.4~~	615.5	Bottom steel on bridge
0+00			3.7	~~617.2~~	617.3	℄ Temperance Rd
0+10			3.9	~~617.0~~	617.1	S. edge Temperance Rd.

472-E/76

1-29-79 D. Cain
N. Shamart
J. Magnusen

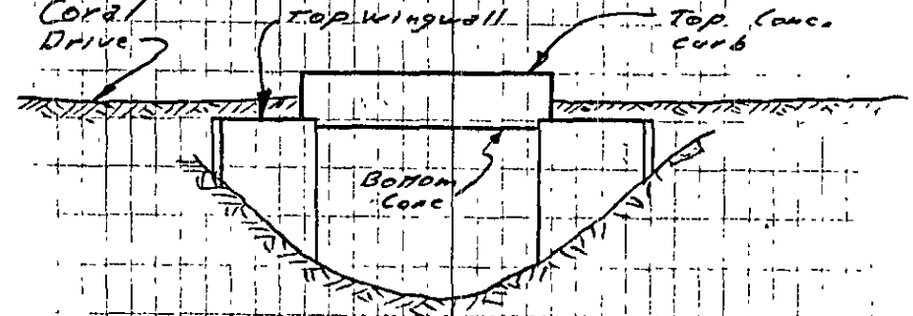
Flat Creek

X-section #320 & bridge detail
(see location sketch, page 1, this book)



CORL RD

Looking Downstream

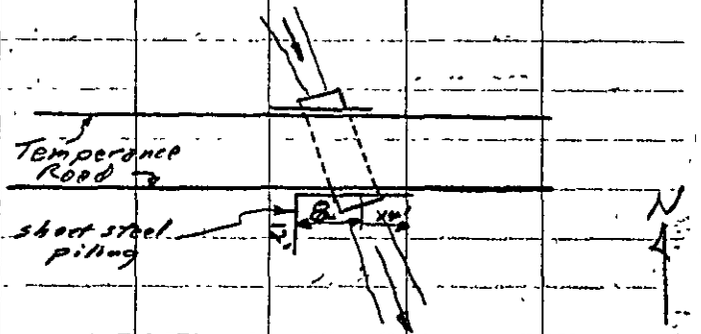


472-F/5

Flat Creek

Culvert Detail at X-section #321

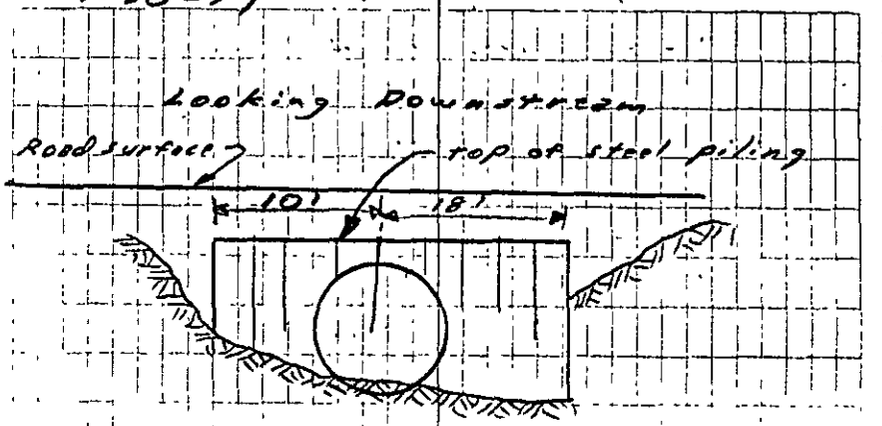
0/s from R.R. tracks



Culvert is 7.5' Dia., 55' long

1-30-79

Looking Downstream

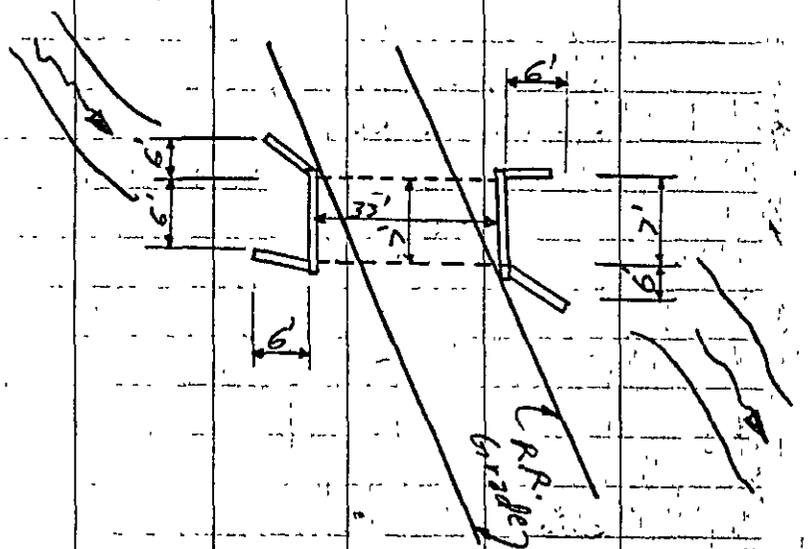


Picture #13 & 14

Film 115

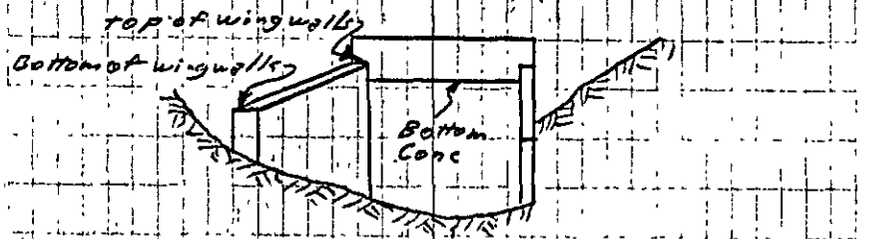
Flat Creek

R.R. Bridge Detail at X-section #323



1-30-79

Looking Downstream



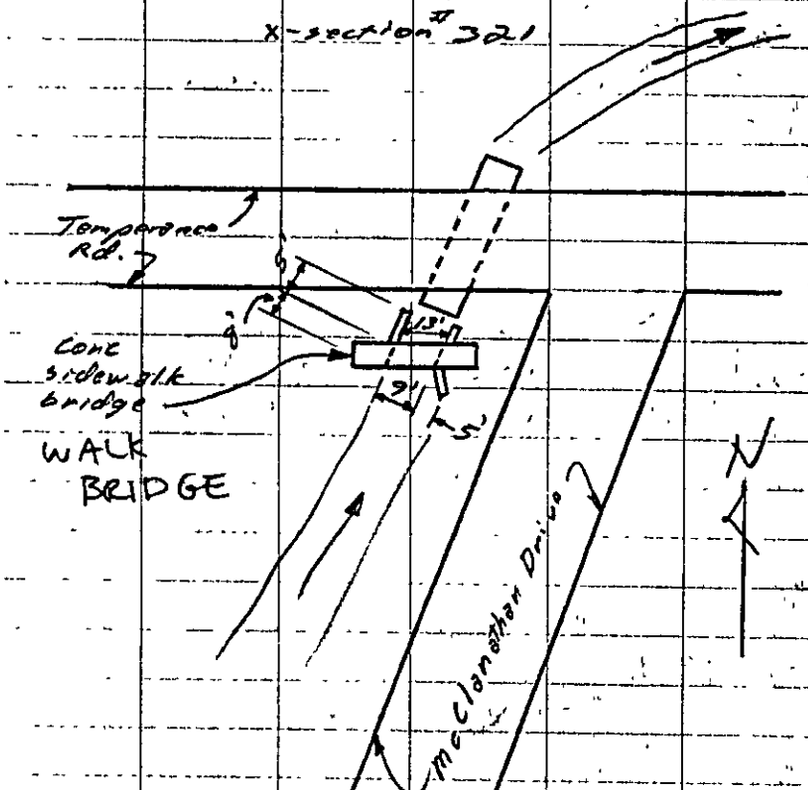
Pictures 15 & 16

Film 115

Flatfreek

X-section # 321, second culvert Detail (western most)

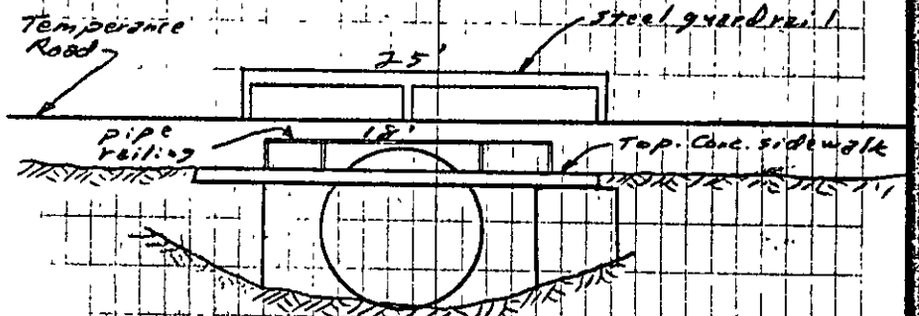
Located at Sta 9+65 on X-section # 321



Culvert is 7' Dia. & 50' long

1-30-79 D. Cain
ptly-Cldg N. Shamart
35° J. Magnusen

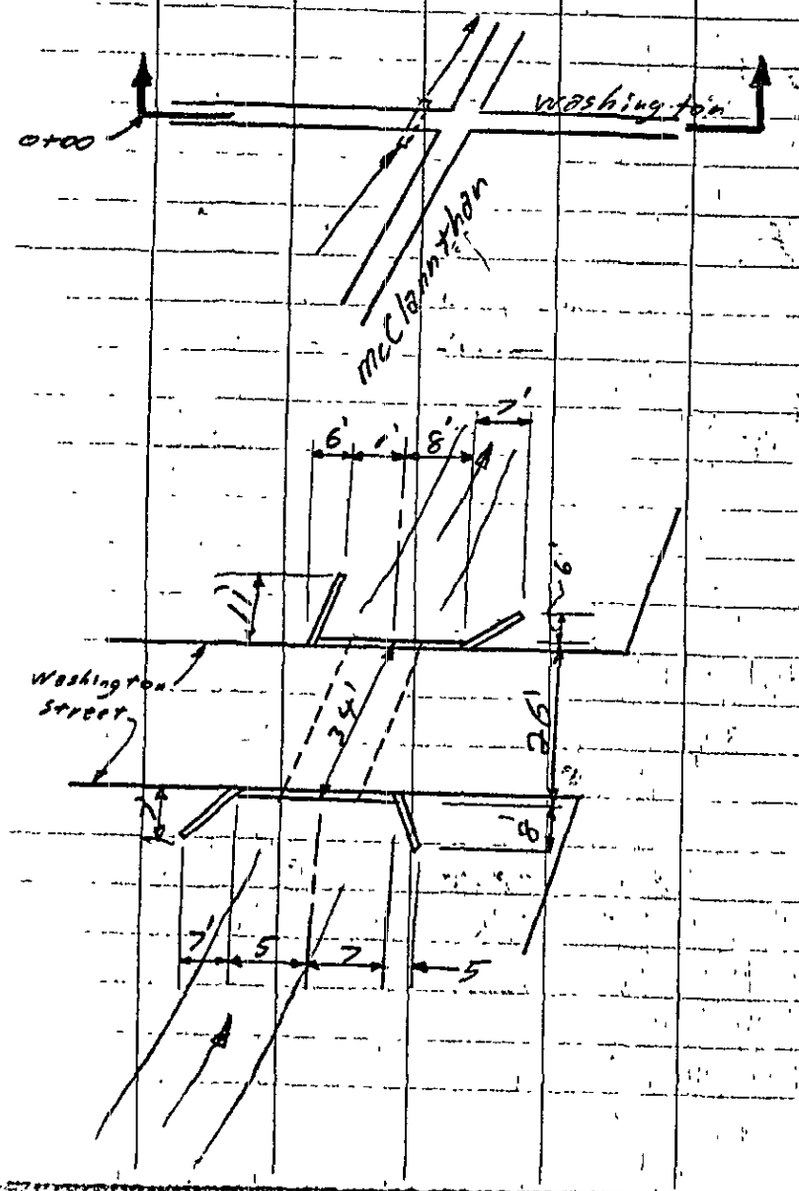
Looking Downstream



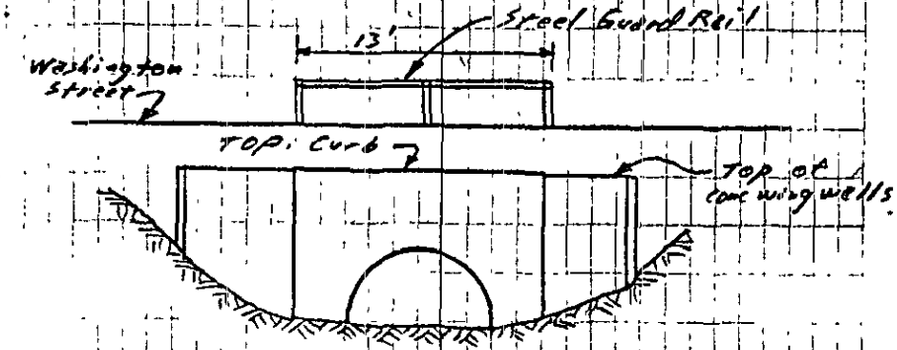
Pictures 17 & 18
Film 115

Flat Creek
X-Section #326 ℄
Bridge Detail

1-31-79 D. Cain T
cloudy - snowing N. Shahart ℄
20° J. Magnuson ℄



Looking Downstream

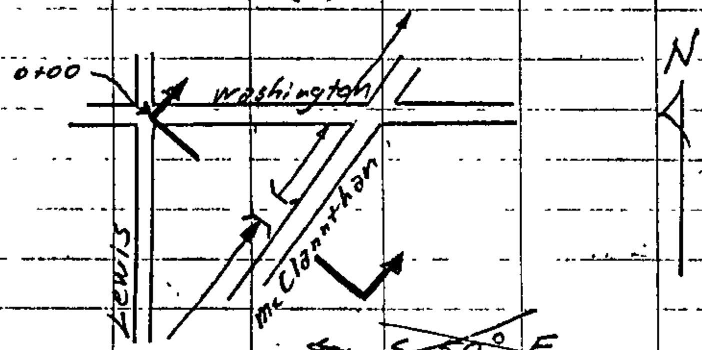


Culvert is ½ of 28½' Dia CMP ℄
34' Long

Picture #19
Film 115

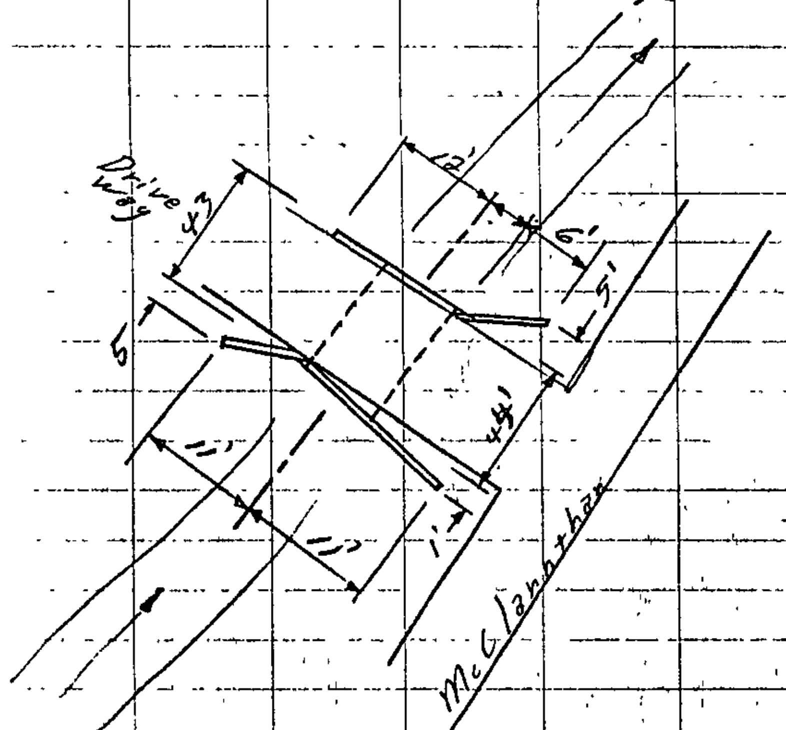
Flat Creek

X-section #327 & bridge detail



~~S 50° E~~

S 55° E - changed to hit bridge

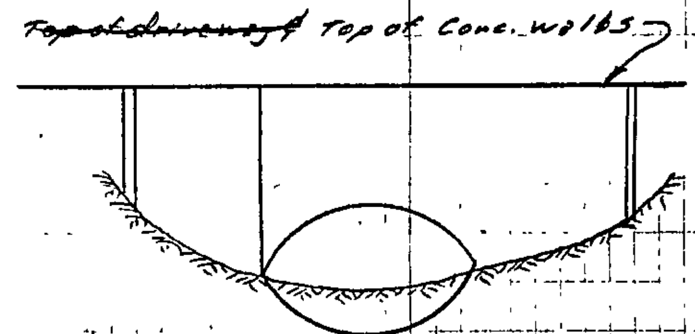


1-30-79

Ocean T
N. Shomart
J. Magnuson

477-F/19

Looking Downstream



Culvert is 7' wide x 4' tall? horizontal elliptical

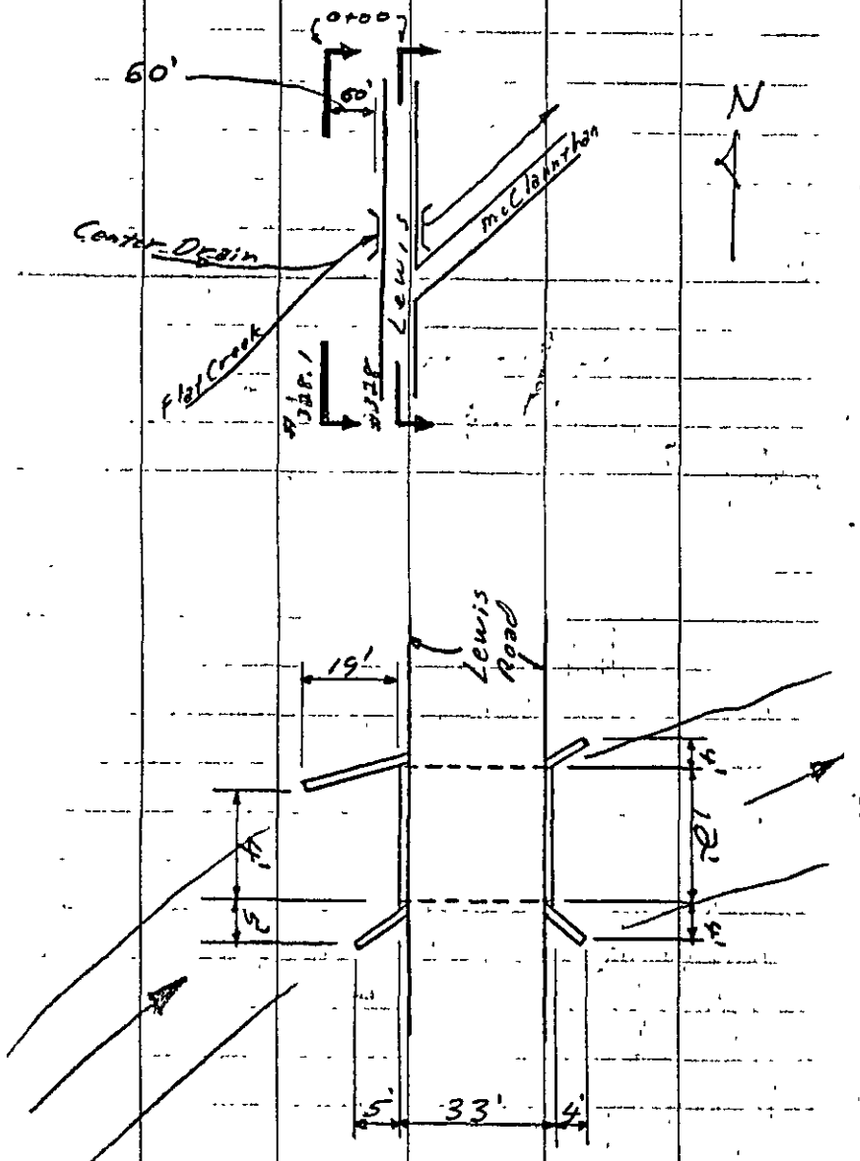
½ filled with dirt

Picture #20
Film 115

Flat Creek

X- sections 328 & 328.1 &

bridge detail



1-31-79

Cloudy - snowing

25°

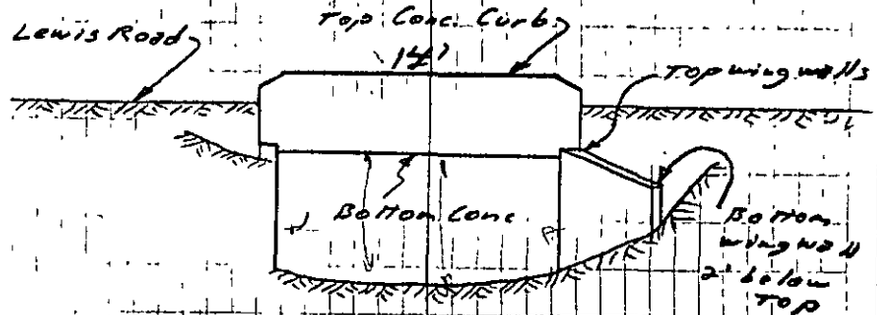
D. Cain

J. Magnusen

N. Shamart

4. 22

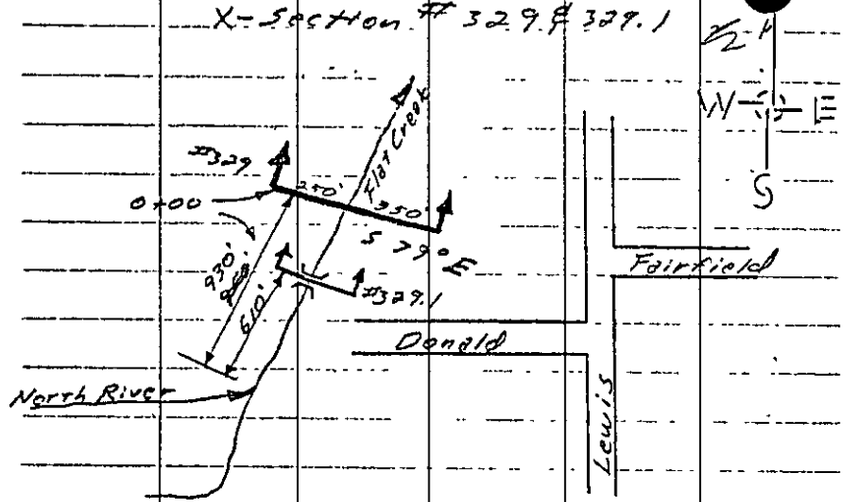
Looking Downstream



Pictures 21 & 22
Film 115

Flat Creek

X-Section # 329 & 329.1



2-5-79

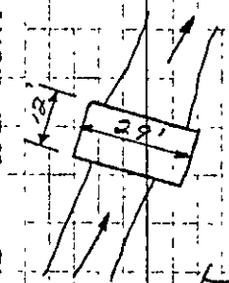
Clear - 5°

D. Cain

J. Magnusen ϕ

N. Shamart π ⊞

Bridge at x section 329.1 wood beams bolted to steel I-Beams



Looking D/S

Pictures 4 & 5
Film 11.6

Sta	+S	HI	-S	Elev
BM 132				626.30
	0.29	626.59		
TP1			5.62	620.97
	3.47	624.44		
TP2			3.84	620.60
	4.50	625.10		
TP3			5.60	619.50
	6.19	625.69		
0+00			5.0	620.7
1+00			5.7	620.0
2+00			5.6	620.1
2+25			5.3	620.4

Description

in woods

Top of the Bank

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: Summary

```
**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
  ERROR CORR -  C1
  MODIFICATION -  50,51,52
**************************************************
```

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

FLAT CREEK 100 YEAR FLOW

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
301.000	0.00	0.00	0.00	584.90	450.00	591.67	0.00	591.84	17.30	3.39	155.18	108.18
301.000	0.00	0.00	0.00	584.90	350.00	591.17	0.00	591.32	16.97	3.11	123.30	84.95
301.000	0.00	0.00	0.00	584.90	400.00	591.45	0.00	591.61	16.92	3.24	139.16	97.23
301.000	0.00	0.00	0.00	584.90	550.00	592.10	0.00	592.28	17.11	3.60	187.35	132.96
301.980	108.00	0.00	0.00	584.20	450.00	591.78	0.00	592.25	37.30	5.50	81.79	73.69
301.980	108.00	0.00	0.00	584.20	350.00	591.31	0.00	591.64	27.80	4.60	76.16	66.38
301.980	108.00	0.00	0.00	584.20	400.00	591.58	0.00	591.97	32.18	5.04	79.36	70.51
301.980	108.00	0.00	0.00	584.20	550.00	592.16	0.00	592.79	47.58	6.37	86.35	79.73
302.020	42.00	593.50	590.20	584.20	450.00	592.28	0.00	592.69	30.32	5.12	87.84	81.72
302.020	42.00	593.50	590.20	584.20	350.00	591.56	0.00	591.86	24.85	4.42	79.13	70.22
302.020	42.00	593.50	590.20	584.20	400.00	591.94	0.00	592.30	27.50	4.78	83.75	76.28
302.020	42.00	593.50	590.20	584.20	550.00	593.01	0.00	593.51	34.62	5.70	96.47	93.48
302.500	40.00	0.00	0.00	584.40	450.00	592.78	0.00	592.83	3.69	2.00	291.73	234.14
302.500	40.00	0.00	0.00	584.40	350.00	591.92	0.00	591.97	4.37	1.96	227.37	167.45
302.500	40.00	0.00	0.00	584.40	400.00	592.37	0.00	592.42	3.96	1.97	261.11	201.09
302.500	40.00	0.00	0.00	584.40	550.00	593.63	0.00	593.68	3.15	2.01	355.20	309.76
302.980	40.00	0.00	0.00	584.60	450.00	592.75	0.00	592.90	6.24	3.05	147.30	180.12
302.980	40.00	0.00	0.00	584.60	350.00	591.91	0.00	592.02	5.42	2.66	131.35	150.32
302.980	40.00	0.00	0.00	584.60	400.00	592.35	0.00	592.48	5.82	2.86	139.72	165.75
302.980	40.00	0.00	0.00	584.60	550.00	593.67	0.00	593.69	1.15	1.49	533.12	513.84
303.020	453.00	597.30	591.30	586.20	450.00	595.76	0.00	595.86	3.72	2.59	173.95	233.20
303.020	453.00	597.30	591.30	586.20	350.00	593.69	0.00	593.79	5.01	2.60	134.66	156.37
303.020	453.00	597.30	591.30	586.20	400.00	594.70	0.00	594.81	4.30	2.60	153.96	193.01
303.020	453.00	597.30	591.30	586.20	550.00	597.54	0.00	597.55	.36	.97	953.24	922.75
303.500	26.00	0.00	0.00	586.20	450.00	595.86	0.00	595.89	1.44	1.43	403.46	375.41
303.500	26.00	0.00	0.00	586.20	350.00	593.78	0.00	593.82	3.23	1.76	247.17	194.74
303.500	26.00	0.00	0.00	586.20	400.00	594.81	0.00	594.84	2.09	1.57	324.15	276.65
303.500	26.00	0.00	0.00	586.20	550.00	597.53	0.00	597.56	.97	1.33	529.36	558.30
303.980	26.00	0.00	0.00	586.20	450.00	595.72	0.00	595.96	13.02	4.00	112.59	124.71
303.980	26.00	0.00	0.00	586.20	350.00	593.65	0.00	593.90	15.62	3.99	87.82	88.54
303.980	26.00	0.00	0.00	586.20	400.00	594.67	0.00	594.91	14.23	4.00	99.98	106.05
303.980	26.00	0.00	0.00	586.20	550.00	597.53	0.00	597.56	1.47	2.00	527.99	453.72

SECND	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
304.020	34.00	598.00	592.40	586.20	450.00	596.23	0.00	596.45	11.27	3.79	118.77	134.03
304.020	34.00	598.00	592.40	586.20	350.00	593.87	0.00	594.10	14.41	3.87	90.39	92.20
304.020	34.00	598.00	592.40	586.20	400.00	595.02	0.00	595.25	12.69	3.84	104.24	112.31
304.020	34.00	598.00	592.40	586.20	550.00	598.29	0.00	598.32	.93	1.66	666.54	570.75
304.500	32.00	0.00	0.00	586.20	450.00	596.46	0.00	596.48	1.06	1.29	448.38	437.17
304.500	32.00	0.00	0.00	586.20	350.00	594.10	0.00	594.13	2.56	1.62	271.20	218.71
304.500	32.00	0.00	0.00	586.20	400.00	595.25	0.00	595.28	1.59	1.43	357.80	316.88
304.500	32.00	0.00	0.00	586.20	550.00	598.30	0.00	598.32	.72	1.21	586.04	650.13
304.980	32.00	0.00	0.00	586.20	450.00	596.48	0.00	596.49	.43	.82	861.11	688.79
304.980	32.00	0.00	0.00	586.20	350.00	594.12	0.00	594.14	1.69	1.29	315.74	269.62
304.980	32.00	0.00	0.00	586.20	400.00	595.27	0.00	595.29	.87	1.05	559.95	428.09
304.980	32.00	0.00	0.00	586.20	550.00	598.32	0.00	598.32	.20	.65	1318.40	1215.72
305.020	63.00	595.00	591.90	586.20	450.00	596.54	0.00	596.54	.41	.81	876.39	704.00
305.020	63.00	595.00	591.90	586.20	350.00	595.01	0.00	595.03	.83	1.00	495.88	383.26
305.020	63.00	595.00	591.90	586.20	400.00	595.52	0.00	595.53	.71	.97	621.04	474.57
305.020	63.00	595.00	591.90	586.20	550.00	598.37	0.00	598.37	.20	.65	1334.12	1236.31
306.000	50.00	0.00	0.00	586.20	450.00	596.54	0.00	596.54	.21	.62	1428.37	979.51
306.000	50.00	0.00	0.00	586.20	350.00	595.03	0.00	595.03	.50	.84	897.28	497.10
306.000	50.00	0.00	0.00	586.20	400.00	595.53	0.00	595.53	.39	.78	1071.99	639.33
306.000	50.00	0.00	0.00	586.20	550.00	598.37	0.00	598.37	.10	.48	2069.93	1741.84
310.000	500.00	0.00	0.00	587.50	450.00	596.56	0.00	596.56	.65	.85	930.96	556.76
310.000	500.00	0.00	0.00	587.50	350.00	595.06	0.00	595.09	2.55	1.39	444.30	219.24
310.000	500.00	0.00	0.00	587.50	400.00	595.56	0.00	595.57	1.64	1.19	604.91	312.10
310.000	500.00	0.00	0.00	587.50	550.00	598.38	0.00	598.38	.22	.59	1523.32	1161.97
310.980	142.00	0.00	0.00	588.00	450.00	596.57	0.00	596.59	1.98	1.48	560.06	320.08
310.980	142.00	0.00	0.00	588.00	350.00	595.11	0.00	595.18	6.05	2.20	160.80	142.27
310.980	142.00	0.00	0.00	588.00	400.00	595.58	0.00	595.65	5.09	2.13	268.06	177.21
310.980	142.00	0.00	0.00	588.00	550.00	598.38	0.00	598.39	.52	.89	1105.60	761.81
311.020	16.00	595.50	594.40	588.00	450.00	596.60	0.00	596.62	1.90	1.45	570.41	326.51
311.020	16.00	595.50	594.40	588.00	350.00	595.45	0.00	595.51	4.46	1.97	236.20	165.82
311.020	16.00	595.50	594.40	588.00	400.00	595.76	0.00	595.82	4.12	1.96	320.27	197.01
311.020	16.00	595.50	594.40	588.00	550.00	598.42	0.00	598.43	.50	.88	1118.86	774.91
311.100	50.00	0.00	0.00	588.20	450.00	596.61	0.00	596.63	1.99	1.42	542.38	318.72
311.100	50.00	0.00	0.00	588.20	350.00	595.49	0.00	595.54	4.33	1.85	288.21	168.15
311.100	50.00	0.00	0.00	588.20	400.00	595.80	0.00	595.84	3.98	1.83	345.86	200.57
311.100	50.00	0.00	0.00	588.20	550.00	598.42	0.00	598.43	.59	.92	996.10	715.49
312.000	1200.00	0.00	0.00	589.90	450.00	597.00	0.00	597.10	8.97	2.60	212.26	150.27
312.000	1200.00	0.00	0.00	589.90	350.00	596.21	0.00	596.31	9.75	2.51	139.38	112.10
312.000	1200.00	0.00	0.00	589.90	400.00	596.49	0.00	596.60	10.65	2.69	148.85	122.59
312.000	1200.00	0.00	0.00	589.90	550.00	598.53	0.00	598.56	2.08	1.50	687.14	381.76
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	14.57	3.11	174.75	117.90
312.100	520.00	0.00	0.00	590.80	350.00	596.84	0.00	596.99	17.41	3.08	113.57	83.89
312.100	520.00	0.00	0.00	590.80	400.00	597.16	0.00	597.31	17.31	3.18	137.43	96.16
312.100	520.00	0.00	0.00	590.80	550.00	598.68	0.00	598.76	7.11	2.54	297.54	206.29

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
312.980	142.00	0.00	0.00	590.90	450.00	597.76	0.00	597.92	15.38	3.22	139.69	114.73
312.980	142.00	0.00	0.00	590.90	350.00	597.09	0.00	597.22	15.66	2.96	118.17	88.46
312.980	142.00	0.00	0.00	590.90	400.00	597.40	0.00	597.55	16.08	3.12	128.14	99.75
312.980	142.00	0.00	0.00	590.90	550.00	598.81	0.00	598.83	2.73	1.58	668.32	333.01
313.020	16.50	598.90	597.00	590.90	450.00	598.11	0.00	598.28	14.93	3.24	138.93	116.46
313.020	16.50	598.90	597.00	590.90	350.00	597.25	0.00	597.40	16.54	3.09	113.33	86.06
313.020	16.50	598.90	597.00	590.90	400.00	597.65	0.00	597.81	16.60	3.20	124.99	98.19
313.020	16.50	598.90	597.00	590.90	550.00	599.18	0.00	599.20	3.21	1.73	627.26	306.84
313.100	42.00	0.00	0.00	591.40	450.00	598.16	0.00	598.36	20.65	3.58	126.00	99.04
313.100	42.00	0.00	0.00	591.40	350.00	597.31	0.00	597.49	22.27	3.45	101.31	74.17
313.100	42.00	0.00	0.00	591.40	400.00	597.70	0.00	597.90	22.18	3.56	112.20	84.93
313.100	42.00	0.00	0.00	591.40	550.00	599.17	0.00	599.24	6.77	2.37	452.86	211.33

FLAT CREEK 100 YEAR FLOW

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
301.000	450.00	591.67	0.00	0.00	-.05	75.00	0.00
301.000	350.00	591.17	0.00	0.00	-2.53	49.69	0.00
301.000	400.00	591.45	0.00	0.00	-2.25	69.69	0.00
301.000	550.00	592.10	0.00	0.00	1.60	75.00	0.00
301.980	450.00	591.78	0.00	.11	0.00	12.00	108.00
301.980	350.00	591.31	0.00	.14	0.00	12.00	108.00
301.980	400.00	591.58	0.00	.13	0.00	12.00	108.00
301.980	550.00	592.16	0.00	.06	0.00	12.00	108.00
302.020	450.00	592.28	0.00	.50	0.00	12.00	42.00
302.020	350.00	591.56	0.00	.25	0.00	12.00	42.00
302.020	400.00	591.94	0.00	.36	0.00	12.00	42.00
302.020	550.00	593.01	0.00	.84	0.00	12.00	42.00
302.500	450.00	592.78	0.00	.50	0.00	75.00	40.00
302.500	350.00	591.92	0.00	.36	0.00	75.00	40.00
302.500	400.00	592.37	0.00	.43	0.00	75.00	40.00
302.500	550.00	593.63	0.00	.62	0.00	75.00	40.00
302.980	450.00	592.75	0.00	-.03	0.00	19.00	40.00
302.980	350.00	591.91	0.00	-.01	0.00	19.00	40.00
302.980	400.00	592.35	0.00	-.02	0.00	19.00	40.00
302.980	550.00	593.67	0.00	.04	0.00	132.73	40.00
303.020	450.00	595.76	0.00	3.00	0.00	19.00	453.00
303.020	350.00	593.69	0.00	1.77	0.00	19.00	453.00
303.020	400.00	594.70	0.00	2.35	0.00	19.00	453.00
303.020	550.00	597.54	0.00	3.87	0.00	219.25	453.00
303.500	450.00	595.86	0.00	.11	0.00	75.00	26.00
303.500	350.00	593.78	0.00	.09	0.00	75.00	26.00
303.500	400.00	594.81	0.00	.10	0.00	75.00	26.00
303.500	550.00	597.53	0.00	-.01	0.00	75.00	26.00
303.980	450.00	595.72	0.00	-.15	0.00	12.00	26.00
303.980	350.00	593.65	0.00	-.13	0.00	12.00	26.00
303.980	400.00	594.67	0.00	-.14	0.00	12.00	26.00
303.980	550.00	597.53	0.00	-.01	0.00	171.42	26.00
304.020	450.00	596.23	0.00	.52	0.00	12.00	34.00
304.020	350.00	593.87	0.00	.21	0.00	12.00	34.00
304.020	400.00	595.02	0.00	.35	0.00	12.00	34.00
304.020	550.00	598.29	0.00	.77	0.00	188.00	34.00
304.500	450.00	596.46	0.00	.23	0.00	75.00	32.00
304.500	350.00	594.10	0.00	.23	0.00	75.00	32.00
304.500	400.00	595.25	0.00	.23	0.00	75.00	32.00
304.500	550.00	598.30	0.00	.01	0.00	75.00	32.00
304.980	450.00	596.48	0.00	.02	0.00	250.00	32.00
304.980	350.00	594.12	0.00	.02	0.00	150.65	32.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKKS	TOPWID	XLCH
305.020	450.00	596.54	0.00	.06	0.00	250.00	63.00
305.020	350.00	595.01	0.00	.90	0.00	250.00	63.00
305.020	400.00	595.52	0.00	.24	0.00	250.00	63.00
305.020	550.00	598.37	0.00	.05	0.00	250.00	63.00
306.000	450.00	596.54	0.00	.01	0.00	350.00	50.00
306.000	350.00	595.03	0.00	.01	0.00	350.00	50.00
306.000	400.00	595.53	0.00	.01	0.00	350.00	50.00
306.000	550.00	598.37	0.00	.00	0.00	350.00	50.00
310.000	450.00	596.56	0.00	.01	0.00	325.00	500.00
310.000	350.00	595.06	0.00	.04	0.00	325.00	500.00
310.000	400.00	595.56	0.00	.03	0.00	325.00	500.00
310.000	550.00	598.38	0.00	.01	0.00	325.00	500.00
310.980	450.00	596.57	0.00	.01	0.00	300.00	142.00
310.980	350.00	595.11	0.00	.04	0.00	191.03	142.00
310.980	400.00	595.58	0.00	.03	0.00	264.96	142.00
310.980	550.00	598.38	0.00	.00	0.00	300.00	142.00
311.020	450.00	596.60	0.00	.03	0.00	300.00	16.00
311.020	350.00	595.45	0.00	.35	0.00	245.34	16.00
311.020	400.00	595.76	0.00	.18	0.00	294.30	16.00
311.020	550.00	598.42	0.00	.04	0.00	300.00	16.00
311.100	450.00	596.61	0.00	.01	0.00	250.00	50.00
311.100	350.00	595.49	0.00	.04	0.00	186.67	50.00
311.100	400.00	595.80	0.00	.04	0.00	186.99	50.00
311.100	550.00	598.42	0.00	.00	0.00	250.00	50.00
312.000	450.00	597.00	0.00	.39	0.00	163.55	1200.00
312.000	350.00	596.21	0.00	.71	0.00	32.89	1200.00
312.000	400.00	596.49	0.00	.69	0.00	33.84	1200.00
312.000	550.00	598.53	0.00	.11	0.00	387.07	1200.00
312.100	450.00	597.56	0.00	.56	0.00	110.00	520.00
312.100	350.00	596.84	0.00	.63	0.00	30.82	520.00
312.100	400.00	597.16	0.00	.67	0.00	74.90	520.00
312.100	550.00	598.68	0.00	.14	0.00	110.00	520.00
312.980	450.00	597.76	0.00	.20	0.00	32.00	142.00
312.980	350.00	597.09	0.00	.25	0.00	31.43	142.00
312.980	400.00	597.40	0.00	.24	0.00	32.00	142.00
312.980	550.00	598.81	0.00	.13	0.00	371.00	142.00
313.020	450.00	598.11	0.00	.35	0.00	30.00	16.50
313.020	350.00	597.25	0.00	.16	0.00	28.58	16.50
313.020	400.00	597.65	0.00	.25	0.00	29.93	16.50
313.020	550.00	599.18	0.00	.37	0.00	353.00	16.50
313.100	450.00	598.16	0.00	.05	0.00	39.78	42.00
313.100	350.00	597.31	0.00	.06	0.00	27.00	42.00
313.100	400.00	597.70	0.00	.06	0.00	28.44	42.00
313.100	550.00	599.17	0.00	-.00	0.00	353.00	42.00

304.980	400.00	595.27	0.00	.02	0.00	250.00	32.00
304.980	550.00	598.32	0.00	.02	0.00	250.00	32.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Flat Creek

4) DOCUMENT TYPE: Summery 100 yr.

00BREAK00

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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

FLAT CREEK 100 YEAR FLOW

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
301.000	0.00	0.00	0.00	584.90	450.00	591.67	0.00	591.84	17.30	3.39	155.18	108.18
301.000	0.00	0.00	0.00	584.90	450.00	592.67	0.00	592.75	6.92	2.47	230.25	171.09
301.000	0.00	0.00	0.00	584.90	450.00	590.67	0.00	591.01	45.43	4.72	99.80	66.76
301.980	108.00	0.00	0.00	584.20	450.00	591.78	0.00	592.25	37.30	5.50	81.79	73.69
301.980	108.00	0.00	0.00	584.20	450.00	592.74	0.00	592.83	6.94	2.95	236.95	170.78
301.980	108.00	0.00	0.00	584.20	450.00	591.07	0.00	591.66	51.57	6.14	73.24	62.66
302.020	42.00	593.50	590.20	584.20	450.00	592.28	0.00	592.69	30.32	5.12	87.84	81.72
302.020	42.00	593.50	590.20	584.20	450.00	593.56	0.00	593.61	3.90	2.36	297.74	227.83
302.020	42.00	593.50	590.20	584.20	450.00	591.46	0.00	591.58	42.82	5.77	78.02	68.77
302.500	40.00	0.00	0.00	584.40	450.00	592.78	0.00	592.83	3.69	2.00	291.73	234.14
302.500	40.00	0.00	0.00	584.40	450.00	593.59	0.00	593.63	2.17	1.66	352.00	305.73
302.500	40.00	0.00	0.00	584.40	450.00	592.09	0.00	592.16	6.28	2.40	239.93	179.62
302.980	40.00	0.00	0.00	584.60	450.00	592.75	0.00	592.90	6.24	3.05	147.30	180.12
302.980	40.00	0.00	0.00	584.60	450.00	593.62	0.00	593.64	.79	1.23	525.81	506.51
302.980	40.00	0.00	0.00	584.60	450.00	592.07	0.00	592.24	8.35	3.35	134.30	155.71
303.020	453.00	597.30	591.30	586.20	450.00	595.76	0.00	595.86	3.72	2.59	173.95	233.20
303.020	453.00	597.30	591.30	586.20	450.00	596.64	0.00	596.73	2.81	2.36	190.82	268.63
303.020	453.00	597.30	591.30	586.20	450.00	595.05	0.00	595.17	4.77	2.80	160.60	206.13
303.500	26.00	0.00	0.00	586.20	450.00	595.86	0.00	595.89	1.44	1.43	403.46	375.41
303.500	26.00	0.00	0.00	586.20	450.00	596.74	0.00	596.75	.93	1.23	468.89	466.68
303.500	26.00	0.00	0.00	586.20	450.00	595.17	0.00	595.21	2.11	1.63	351.87	309.60
303.980	26.00	0.00	0.00	586.20	450.00	595.72	0.00	595.96	13.02	4.00	112.59	124.71
303.980	26.00	0.00	0.00	586.20	450.00	596.72	0.00	596.76	1.61	1.99	401.77	354.85
303.980	26.00	0.00	0.00	586.20	450.00	595.01	0.00	595.30	16.12	4.32	104.09	112.08
304.020	34.00	598.00	592.40	586.20	450.00	596.23	0.00	596.45	11.27	3.79	118.77	134.03
304.020	34.00	598.00	592.40	586.20	450.00	597.28	0.00	597.46	8.62	3.43	131.37	153.26
304.020	34.00	598.00	592.40	586.20	450.00	595.49	0.00	595.75	13.93	4.10	109.83	120.59
304.500	32.00	0.00	0.00	586.20	450.00	596.46	0.00	596.48	1.06	1.29	448.38	437.17
304.500	32.00	0.00	0.00	586.20	450.00	597.47	0.00	597.48	.67	1.10	524.03	549.95
304.500	32.00	0.00	0.00	586.20	450.00	595.75	0.00	595.78	1.52	1.46	395.28	364.60

SECNO	XLOF	ELTRD	ELLO	ELMIN	Q	CWSEL	CRITS	EG	LOK*S	VCH	AREA	.01K
304.980	32.00	0.00	0.00	586.20	450.00	596.48	0.00	596.49	.43	.82	861.11	688.79
304.980	32.00	0.00	0.00	586.20	450.00	597.48	0.00	597.49	.22	.64	1112.05	960.23
304.980	32.00	0.00	0.00	586.20	450.00	595.77	0.00	595.79	.73	1.01	685.34	527.19
305.020	63.00	595.00	591.90	586.20	450.00	596.54	0.00	596.54	.41	.81	876.39	704.00
305.020	63.00	595.00	591.90	586.20	450.00	597.53	0.00	597.53	.21	.63	1124.45	974.79
305.020	63.00	595.00	591.90	586.20	450.00	595.87	0.00	595.88	.67	.98	710.09	548.41
306.000	50.00	0.00	0.00	586.20	450.00	596.54	0.00	596.54	.21	.62	1428.37	979.51
306.000	50.00	0.00	0.00	586.20	450.00	597.53	0.00	597.54	.11	.47	1776.42	1370.61
306.000	50.00	0.00	0.00	586.20	450.00	595.88	0.00	595.89	.36	.77	1196.58	750.90
310.000	500.00	0.00	0.00	587.50	450.00	596.56	0.00	596.56	.65	.85	930.96	556.76
310.000	500.00	0.00	0.00	587.50	450.00	597.54	0.00	597.54	.27	.61	1250.97	860.07
310.000	500.00	0.00	0.00	587.50	450.00	595.91	0.00	595.92	1.33	1.12	720.05	390.42
310.980	142.00	0.00	0.00	588.00	450.00	596.57	0.00	596.59	1.98	1.48	560.06	320.08
310.980	142.00	0.00	0.00	588.00	450.00	597.55	0.00	597.55	.71	.97	854.39	533.87
310.980	142.00	0.00	0.00	588.00	450.00	595.93	0.00	595.99	4.28	2.03	368.99	217.55
311.020	16.00	595.50	594.40	588.00	450.00	596.60	0.00	596.62	1.90	1.45	570.41	326.51
311.020	16.00	595.50	594.40	588.00	450.00	597.58	0.00	597.59	.68	.95	866.85	544.25
311.020	16.00	595.50	594.40	588.00	450.00	596.00	0.00	596.05	3.92	1.96	390.10	227.26
311.100	50.00	0.00	0.00	588.20	450.00	596.61	0.00	596.63	1.99	1.42	542.38	318.72
311.100	50.00	0.00	0.00	588.20	450.00	597.58	0.00	597.59	.77	.98	785.87	511.81
311.100	50.00	0.00	0.00	588.20	450.00	596.03	0.00	596.07	3.86	1.85	396.60	229.04
312.000	1200.00	0.00	0.00	589.90	450.00	597.00	0.00	597.10	8.97	2.60	212.26	150.27
312.000	1200.00	0.00	0.00	589.90	450.00	597.74	0.00	597.78	3.79	1.86	404.86	231.12
312.000	1200.00	0.00	0.00	589.90	450.00	596.72	0.00	596.84	11.50	2.85	171.88	132.69
312.100	520.00	0.00	0.00	590.80	450.00	597.56	0.00	597.70	14.57	3.11	174.75	117.90
312.100	520.00	0.00	0.00	590.80	450.00	597.99	0.00	598.09	9.24	2.64	222.43	148.08
312.100	520.00	0.00	0.00	590.80	450.00	597.41	0.00	597.57	16.95	3.28	159.32	109.31
312.980	142.00	0.00	0.00	590.90	450.00	597.76	0.00	597.92	15.38	3.22	139.69	114.73
312.980	142.00	0.00	0.00	590.90	450.00	598.12	0.00	598.25	11.93	2.98	151.09	130.26
312.980	142.00	0.00	0.00	590.90	450.00	597.65	0.00	597.82	16.74	3.31	136.08	109.97
313.020	16.50	598.90	597.00	590.90	450.00	598.11	0.00	598.28	14.93	3.24	138.93	116.46
313.020	16.50	598.90	597.00	590.90	450.00	598.49	0.00	598.63	11.55	2.99	150.34	132.39
313.020	16.50	598.90	597.00	590.90	450.00	597.99	0.00	598.16	16.28	3.33	135.29	111.53
313.100	42.00	0.00	0.00	591.40	450.00	598.16	0.00	598.36	20.65	3.58	126.00	99.04
313.100	42.00	0.00	0.00	591.40	450.00	598.56	0.00	598.69	13.08	3.02	229.22	124.43
313.100	42.00	0.00	0.00	591.40	450.00	598.05	0.00	598.26	22.39	3.68	122.18	95.10

FLAT CREEK 100 YEAR FLOW

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CHSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
301.000	450.00	591.67	0.00	0.00	-.05	75.00	0.00
301.000	450.00	592.67	0.00	0.00	0.00	75.00	0.00
301.000	450.00	590.67	0.00	0.00	0.00	42.11	0.00
301.980	450.00	591.78	0.00	.11	0.00	12.00	108.00
301.980	450.00	592.74	0.00	.07	0.00	75.00	108.00
301.980	450.00	591.07	0.00	.40	0.00	12.00	108.00
302.020	450.00	592.28	0.00	.50	0.00	12.00	42.00
302.020	450.00	593.56	0.00	.82	0.00	75.00	42.00
302.020	450.00	591.46	0.00	.39	0.00	12.00	42.00
302.500	450.00	592.78	0.00	.50	0.00	75.00	40.00
302.500	450.00	593.59	0.00	.04	0.00	75.00	40.00
302.500	450.00	592.09	0.00	.63	0.00	75.00	40.00
302.980	450.00	592.75	0.00	-.03	0.00	19.00	40.00
302.980	450.00	593.62	0.00	.03	0.00	130.24	40.00
302.980	450.00	592.07	0.00	-.02	0.00	19.00	40.00
303.020	450.00	595.76	0.00	3.00	0.00	19.00	453.00
303.020	450.00	596.64	0.00	3.02	0.00	19.00	453.00
303.020	450.00	595.05	0.00	2.98	0.00	19.00	453.00
303.500	450.00	595.86	0.00	.11	0.00	75.00	26.00
303.500	450.00	596.74	0.00	.09	0.00	75.00	26.00
303.500	450.00	595.17	0.00	.12	0.00	75.00	26.00
303.980	450.00	595.72	0.00	-.15	0.00	12.00	26.00
303.980	450.00	596.72	0.00	-.01	0.00	142.72	26.00
303.980	450.00	595.01	0.00	-.17	0.00	12.00	26.00
304.020	450.00	596.23	0.00	.52	0.00	12.00	34.00
304.020	450.00	597.28	0.00	.56	0.00	12.00	34.00
304.020	450.00	595.49	0.00	.48	0.00	12.00	34.00
304.500	450.00	596.46	0.00	.23	0.00	75.00	32.00
304.500	450.00	597.47	0.00	.19	0.00	75.00	32.00
304.500	450.00	595.75	0.00	.27	0.00	75.00	32.00
304.980	450.00	596.48	0.00	.02	0.00	250.00	32.00
304.980	450.00	597.48	0.00	.01	0.00	250.00	32.00
304.980	450.00	595.77	0.00	.02	0.00	250.00	32.00
305.020	450.00	596.54	0.00	.06	0.00	250.00	63.00
305.020	450.00	597.53	0.00	.05	0.00	250.00	63.00
305.020	450.00	595.87	0.00	.10	0.00	250.00	63.00
306.000	450.00	596.54	0.00	.01	0.00	350.00	50.00
306.000	450.00	597.53	0.00	.00	0.00	350.00	50.00
306.000	450.00	595.88	0.00	.01	0.00	350.00	50.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
310.000	450.00	596.56	0.00	.01	0.00	325.00	500.00
310.000	450.00	597.54	0.00	.01	0.00	325.00	500.00
310.000	450.00	595.91	0.00	.03	0.00	325.00	500.00
310.980	450.00	596.57	0.00	.01	0.00	300.00	142.00
310.980	450.00	597.55	0.00	.00	0.00	300.00	142.00
310.980	450.00	595.93	0.00	.02	0.00	300.00	142.00
311.020	450.00	596.60	0.00	.03	0.00	300.00	16.00
311.020	450.00	597.58	0.00	.03	0.00	300.00	16.00
311.020	450.00	596.00	0.00	.06	0.00	300.00	16.00
311.100	450.00	596.61	0.00	.01	0.00	250.00	50.00
311.100	450.00	597.58	0.00	.00	0.00	250.00	50.00
311.100	450.00	596.03	0.00	.04	0.00	250.00	50.00
312.000	450.00	597.00	0.00	.39	0.00	163.55	1200.00
312.000	450.00	597.74	0.00	.15	0.00	320.59	1200.00
312.000	450.00	596.72	0.00	.69	0.00	125.71	1200.00
312.100	450.00	597.56	0.00	.56	0.00	110.00	520.00
312.100	450.00	597.99	0.00	.26	0.00	110.00	520.00
312.100	450.00	597.41	0.00	.70	0.00	100.78	520.00
312.980	450.00	597.76	0.00	.20	0.00	32.00	142.00
312.980	450.00	598.12	0.00	.12	0.00	32.00	142.00
312.980	450.00	597.65	0.00	.23	0.00	32.00	142.00
313.020	450.00	598.11	0.00	.35	0.00	30.00	16.50
313.020	450.00	598.49	0.00	.38	0.00	30.00	16.50
313.020	450.00	597.99	0.00	.34	0.00	30.00	16.50
313.100	450.00	598.16	0.00	.05	0.00	39.78	42.00
313.100	450.00	598.56	0.00	.06	0.00	353.00	42.00
313.100	450.00	598.05	0.00	.06	0.00	29.69	42.00

SUMMARY OF ERRORS

JOB NO. UM3607 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 20:36:47 11-29-79

Flat Check
100 % Floppy

PARAMETERS: ,ID=XSAL,PW=,ROUTE=NUBS

```
MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                    TT
MM MM    MM MM  NN NN       NN  EE                    TT
MM  MMM1  MM    NN  NN      NN  EE                    TT
MM   MM   MM    NN   NN     NN  EEEEEEEE              TT
MM         MM   NN    NN    NN  EEEEEEEE              TT
MM         MM   NN     NN   NN  EE                    TT
MM         MM   NN      NN NN  EE                    TT
MM         MM   NN       NNNN  EE                    TT
MM         MM   NN        NNN  EE                    TT
MM         MM   NN         NN  EEEEEEEEEEEE        TT
MM         MM   NN          N  EEEEEEEEEEEE        TT

XX        XX   SSSSSSSSS   NN         NN  LL
XX        XX  SSSSSSSSSSS  NNN        NN  LL
 XX      XX   SS         SS NNNN       NN  LL
  XX    XX    SS            NN NN      NN  LL
   XX  XX     SSS           NN  NN     NN  LL
    XXXX       SSSSSSSSS    NN   NN    NN  LL
    XXXX        SSSSSSSSS   NN    NN   NN  LL
   XX  XX             SSS  NN     NN NN  LL
  XX    XX             SS  NN      NNNN  LL
 XX      XX   SS        SS  NN       NNN  LL
XX        XX  SSSSSSSSSSS  NN        NN  LLLLLLLLLLLL
XX        XX   SSSSSSSSS   NN         N  LLLLLLLLLLLL
```

ELEVATION IN FEET (MSL)
640
635
630
625
620
615
610
605
600
595
STREAM DISTANCE IN FEET
9000
9500
10000
10500
11000
11500
12000
12500
13000
13500
14000
14500
15000
15500
16000
16500
17000
17500
18000
CRABB RD. WOODBRIDGE
WOODBRIDGE
GRAVEL DRIVEWAY
PRIVATE DRIVE
PRIVATE DRIVE
PRIVATE DRIVE
ABANDONED RAILROAD BRIDGE PRIVATE DRIVE
PRIVATE DRIVE
CORL ROAD
TEMPERANCE E. RD. ANN ARBOR RR.
TEMPERANCE RD. WALK BRIDGE
WASHINGTON RD.
PRIVATE DRIVE
LEWIS AVENUE
WOOD & STEEL WALK BRIDGE U/S LIMIT OF STUDY
E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL
LEGEND
500- YEAR FLOOD
100- YEAR FLOOD
50- YEAR FLOOD
10- YEAR FLOOD
STREAM BED
CROSS SECTION LOCATION
RECEIVED DEC 20 1978 WATER MANAGEMENT
PRINTED IN U.S.A.
FLOOD PROFILES
FLAT CREEK
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration
TOWNSHIP OF BEDFORD, MI (MONROE CO.)
015P
EXHIBIT

PRINTED IN U.S.A.

1059 SECTION
INCH

ELEVATION IN FEET (MSL)

560 565 570 575 580 585 590 595 600

STREAM DISTANCE IN FEET

0 500 1000 2000 3000

A B C D E F G

US-125

CHESAPEAKE & OHIO RAILROAD

LIMIT OF DETAILED STUDY

Indian Creek

LEGEND

500-YEAR FLOOD

100-YEAR FLOOD

50-YEAR FLOOD

10-YEAR FLOOD

STREAMBED

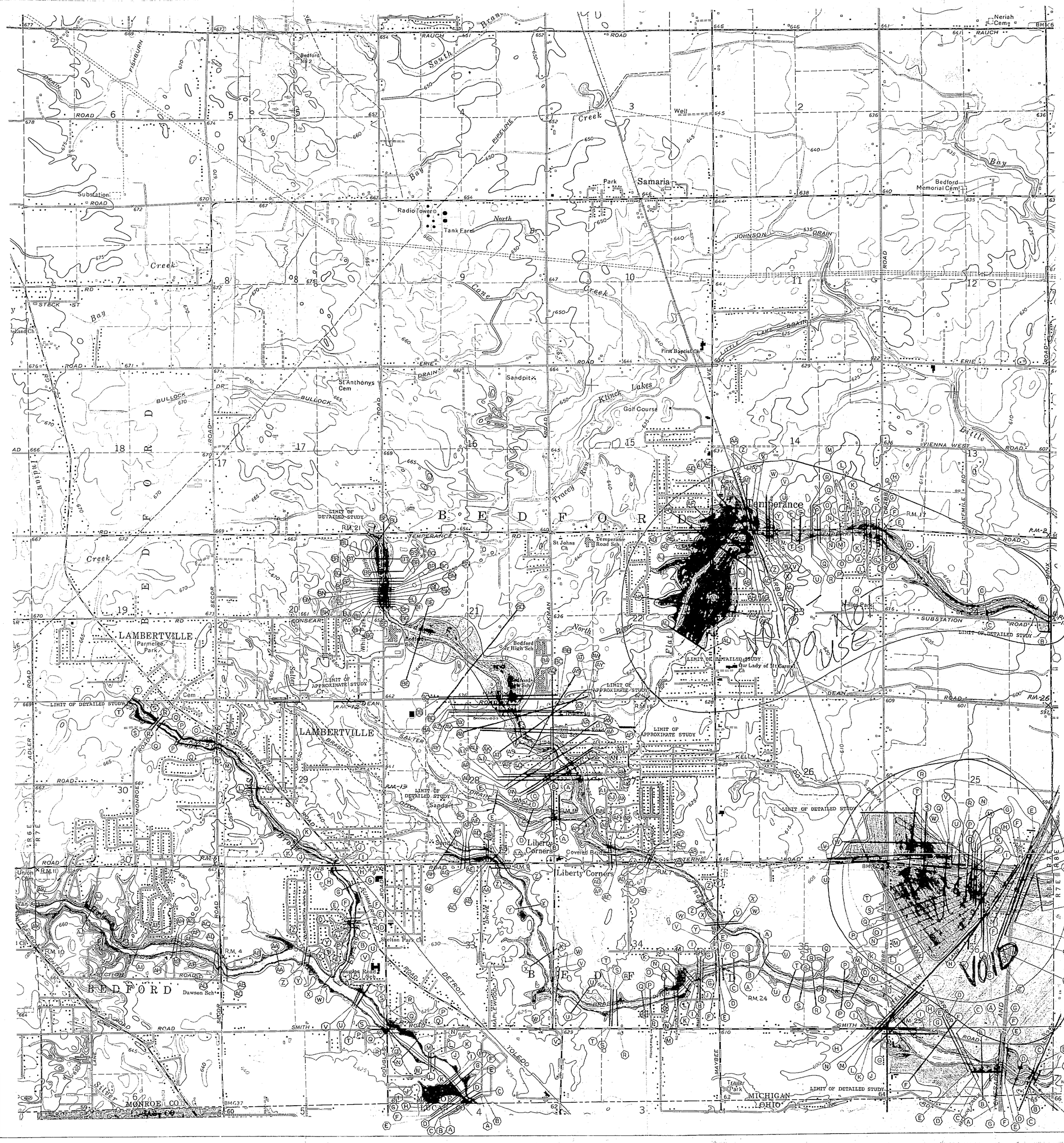
CROSS SECTION LOCATION

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF BEDFORD, MI
(MONROE CO.)

FLOOD PROFILES

HALFWAY CREEK (LOWER)



KEY TO MAP

500-year Flood Boundary
100-year Flood Boundary
FLOODWAY FRINGE
FLOODWAY
100-year Flood Boundary
500-year Flood Boundary
Elevation Reference Mark — RM7
Cross Section Line — A — A
Approximate 100-year Flood Boundary
Zone Designation — Zone A

NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations without regard to economic, legal, or political factors.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

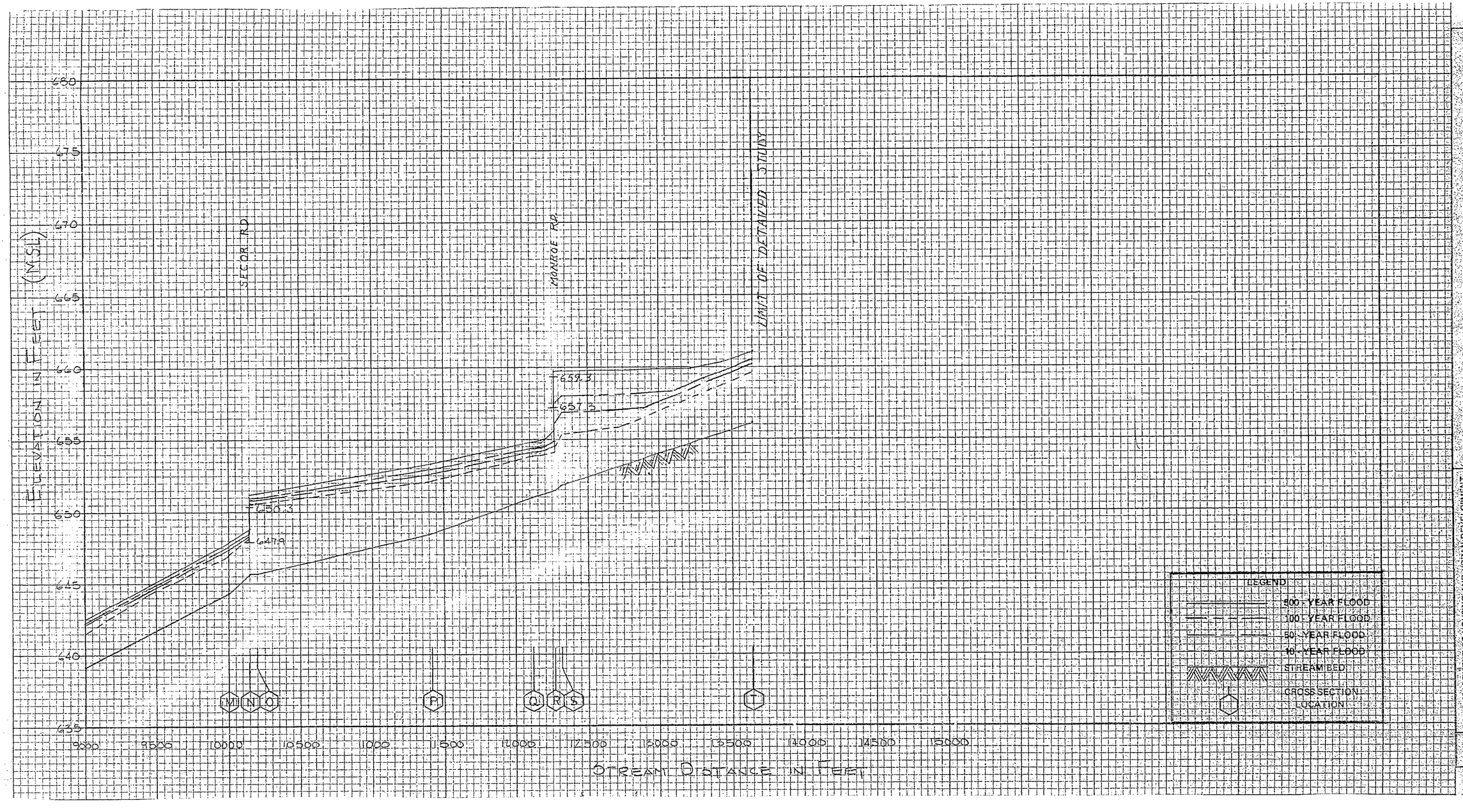
N

0 500 1000 2000 3000
SCALE 1" = 1000'

FLOOD HAZARD BOUNDARY MAP — FLOOD INSURANCE RATE MAP

TOWNSHIP OF BEDFORD
MICHIGAN
MONROE COUNTY

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



FLOOD PROFILES

SPRING BROOK

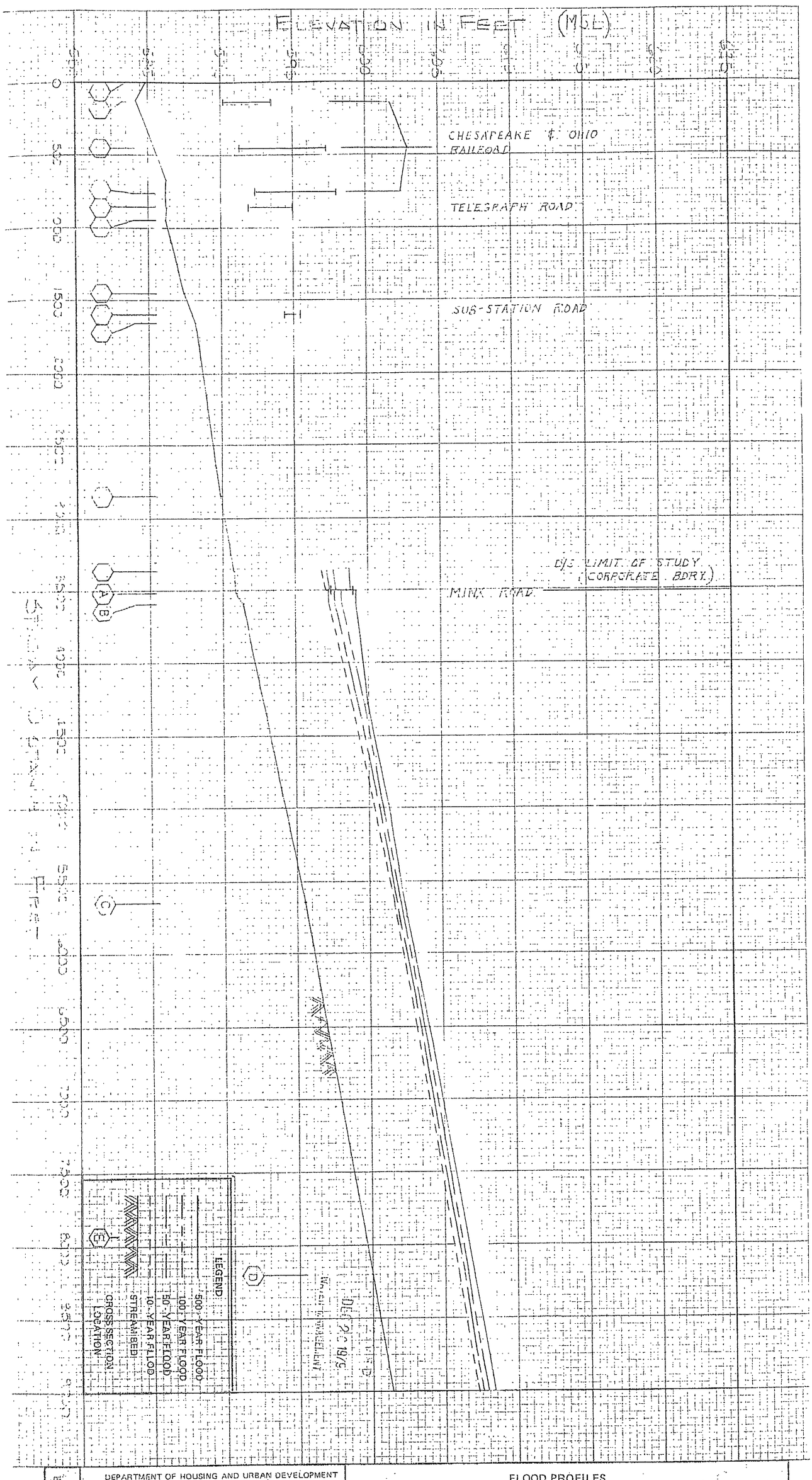
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF BEDFORD, MI
(MONROE CO)

NOSS SECTION
NE INCH
TZGEN CO.

PRINTED IN U.S.A.

"PERFECT" CROSS SECTION
10 X 10 = ONE INCH
EUGENE DIETZGEN CO.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF BEDFORD, MI
(MONROE CO.)

FLOOD PROFILES

FLAT CREEK

EXHIBIT 01 P

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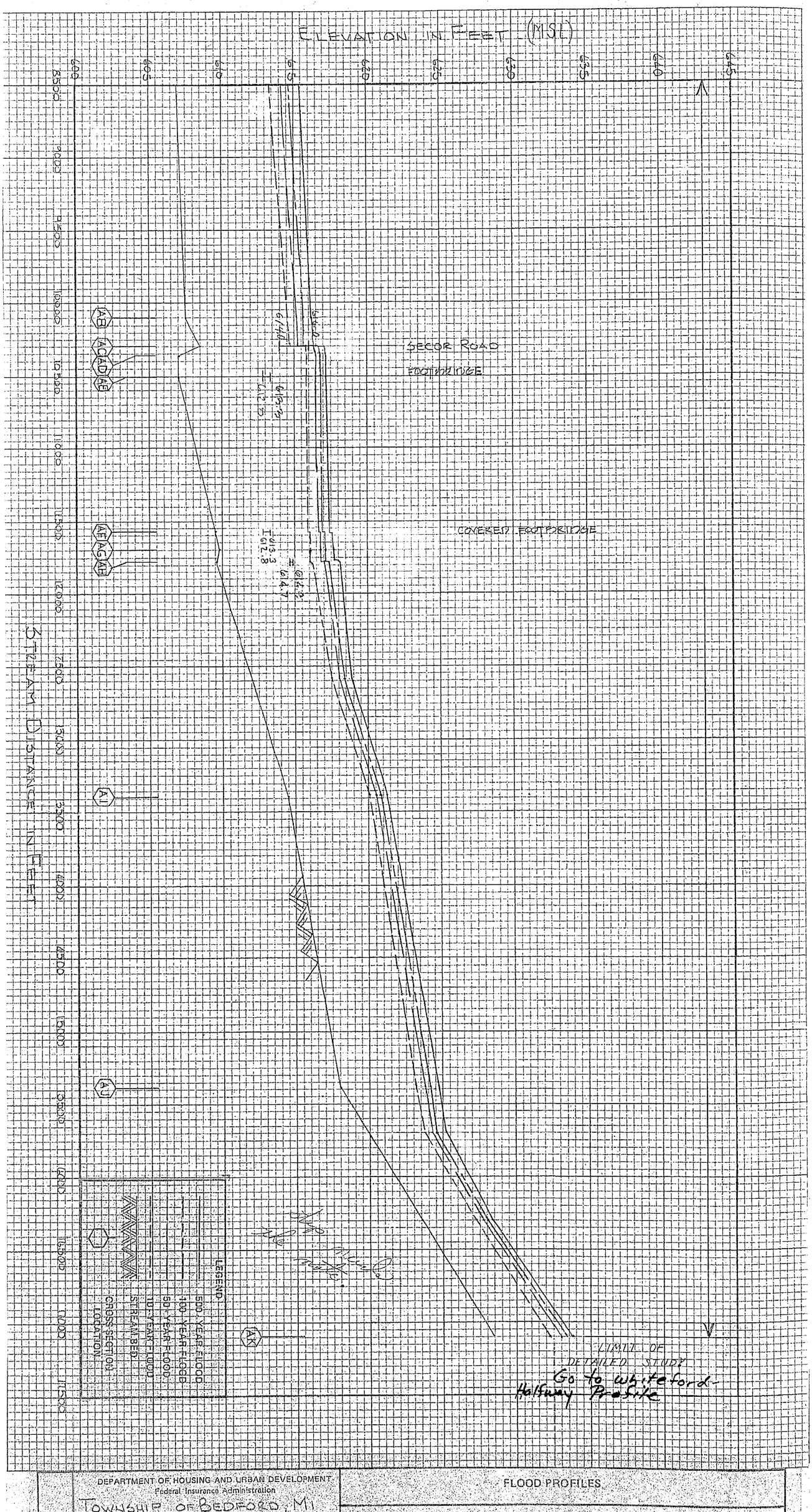

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF BEDFORD, MI
(MACOMB CO.)

FLOOD PROFILES

HALFWAY CREEK (upper)

KEY TO MAP

500-year Flood Boundary
100-year Flood Boundary
FLOODWAY FRINGE
FLOODWAY
100-year Flood Boundary
500-year Flood Boundary
Elevation Reference Mark — RM7
Cross Section Line — (A) (A)
Approximate 100-year Flood Boundary
Zone Designation — Zone A

NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations without regard to economic, legal, or political factors.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

N

0 500 1000 2000 3000
SCALE 1" = 1000'

FLOOD HAZARD BOUNDARY MAP — FLOOD INSURANCE RATE MAP

TOWNSHIP OF BEDFORD
MICHIGAN
MONROE COUNTY

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

VOID

HALFWAY CREEK (LOWER)

"PERFECT" CROSS SECTION
10 X 10 TO ONE INCH
EUGENE DIETZGEN CO.

KEY TO MAP

500-year Flood Boundary

100-year Flood Boundary

FLOODWAY FRINGE — FLOODWAY

100-year Flood Boundary

ZONE B

500-year Flood Boundary

Elevation Reference Mark — RM7

Cross Section Line — A — A

Approximate 100-year Flood Boundary

Zone Designation — Zone A

NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations without regard to economic, legal, or political factors.

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EXPLANATION OF ZONE DESIGNATIONS

A flood insurance map displays the zone designations for a community according to areas of designated flood hazards. The zone designations used by FIA are:

Zone	Explanation
A	Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods, no base flood elevations shown or FHF's determined.
A1-A30	Special Flood Hazard Areas inundated by the 100-year flood, determined by detailed methods; base flood elevations established, and zones assigned according to FHF's.
B	Area between Zones A1-A30 and the limits of the 500-year flood.

N

0 500 1000 2000 3000
SCALE 1" = 1000'

EXHIBIT 2

FLOOD HAZARD BOUNDARY MAP —
FLOOD INSURANCE RATE MAP

TOWNSHIP OF BEDFORD
MICHIGAN
MONROE COUNTY

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

RECEIVED
DEC 26 1979
WATER MANAGEMENT

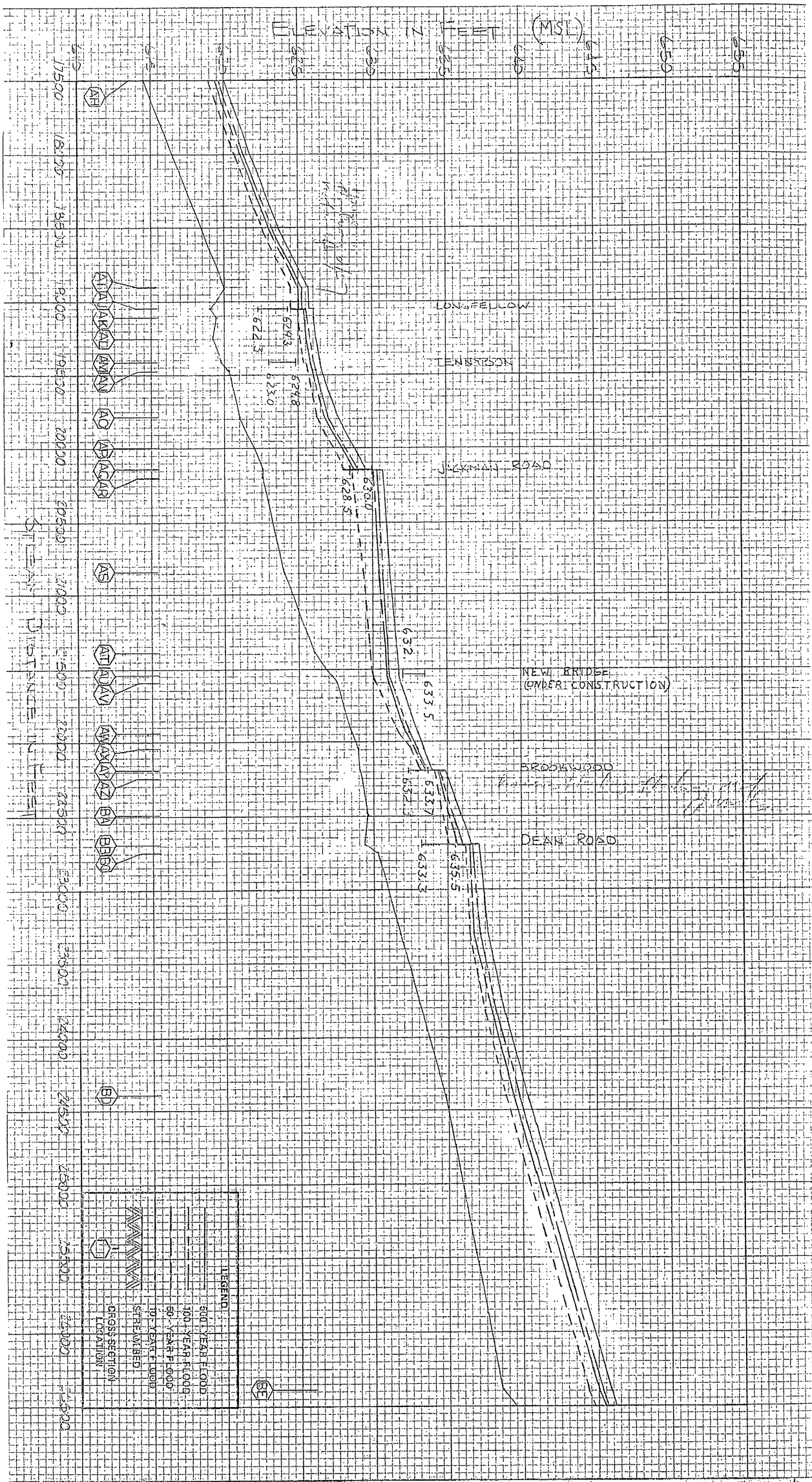
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

FLOOD PROFILES

TOWNSHIP OF BEDFORD, MI
(MONROE COUNTY)

HALEWAY CREEK (upper)

"PERFECT" CROSS SECTION
10 X 10 TO ONE INCH
EUGENE DIETZGEN CO.



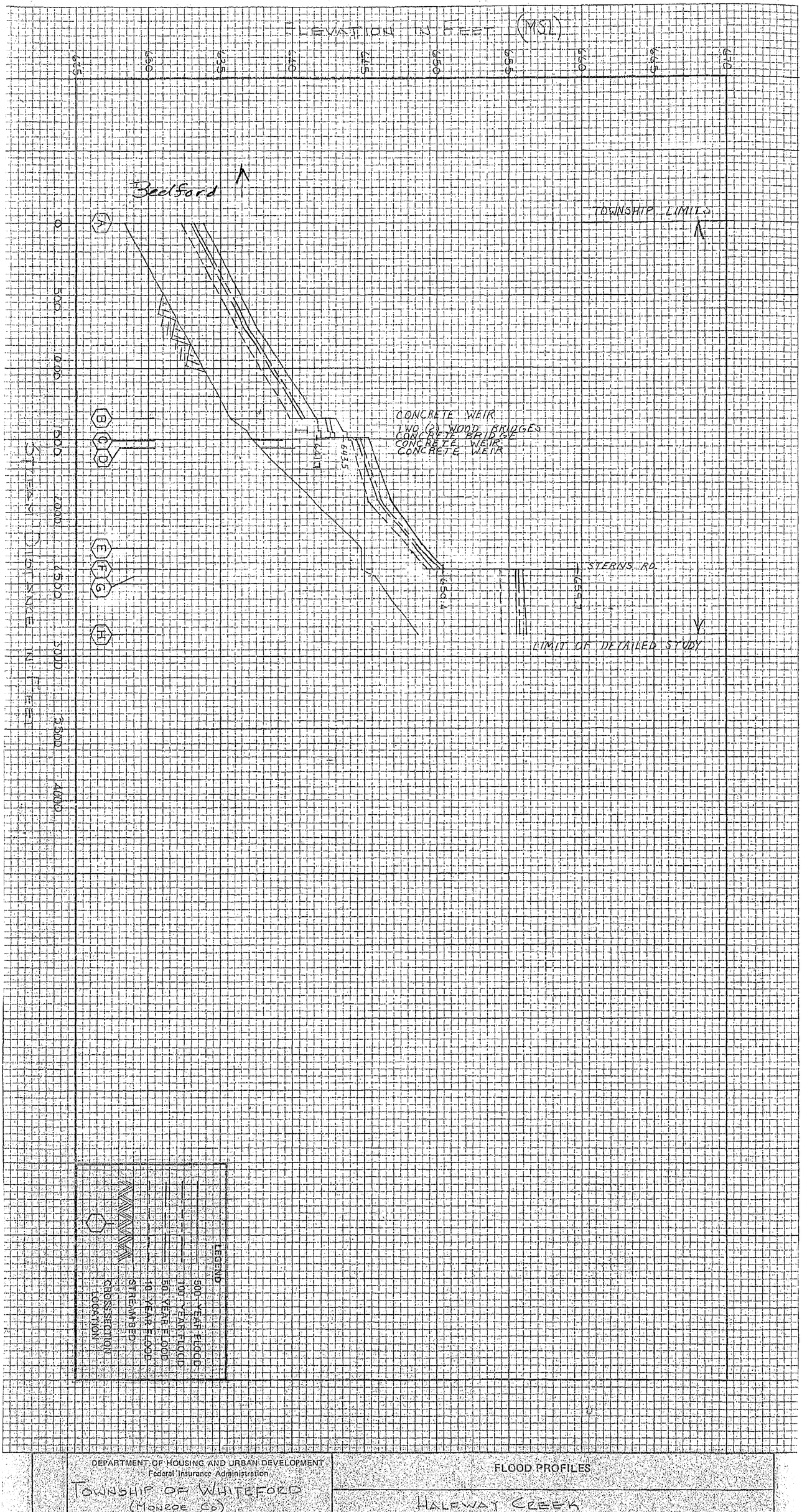
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF BEDFORD, MI
(MONROE CO)

FLOOD PROFILES

INDIAN CREEK

PRINTED IN U.S.A.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF WHITEFORD
(MONROE CO.)

FLOOD PROFILES

HALFWAY CREEK

FLOOD PROFILES

INDIAN CREEK

TOWNSHIP OF BEDFORD, MI.
(MONROE CO.)

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

PRINTED IN U.S.A.

KEY TO MAP

500-year Flood Boundary

100-year Flood Boundary

FLOODWAY FRINGE

FLOODWAY

100-year Flood Boundary

500-year Flood Boundary

Elevation Reference Mark BM7

Cross Section Line A A

Approximate 100-year Flood Boundary

Zone Designation Zone A

NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations without regard to economic, legal, or political factors.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

N

0 500 1000 2000 3000

SCALE 1" = 1000'

FLOOD HAZARD BOUNDARY MAP – FLOOD INSURANCE RATE MAP

TOWNSHIP OF WHITEFORD

MICHIGAN

MONROE COUNTY

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

FEDERAL INSURANCE ADMINISTRATION

"PERFECT" CROSS SECTION
10 X 10 — ONE INCH
EUGENE DIETZGEN CO.

INDIAN CREEK

FLOOD PROFILES

TOWNSHIP OF BEDFORD, MI
(Monroe Co.)

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

ELEVATION IN FEET (MSL)

615
610
605
600
595
590
585
580
575
570

CONFLUENCE W/ HALFWAY CREEK

ANN ARBOR RAILROAD

LAVOY RD.

DRIVEWAY

TELEGRAPH RD.

DRIVE #1

DRIVE #2

DRIVE #3

596.1
595.1
593.5
592.5
593.7
592.7
590.8
589.6
590.1
589.2
588.4
585.5

A B C D E F G H I J K L M N O P Q R S T

LEGEND
500 YEAR FLOOD
100 YEAR FLOOD
50 YEAR FLOOD
10 YEAR FLOOD
STREAMBED
CROSS SECTION LOCATION

0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 7000 7500 8000 8500

STREAM DISTANCE IN FEET

KEY TO MAP

500-year Flood Boundary
100-year Flood Boundary
FLOODWAY FRINGE
FLOODWAY
100-year Flood Boundary
500-year Flood Boundary
ZONE B
Elevation Reference Mark RM7
Cross Section Line A A
Approximate 100-year Flood Boundary
Zone Designation Zone A

NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations without regard to economic, legal, or political factors.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

EXPLANATION OF ZONE DESIGNATIONS

A flood insurance map displays the zone designations for a community according to areas of designated flood hazards. The zone designations used by FIA are:

Zone	Explanation
A	Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods, no base flood elevations shown or FHF's determined.
A1-A30	Special Flood Hazard Areas inundated by the 100-year flood, determined by detailed methods; base flood elevations established, and zones assigned according to FHF's.
B	Area between Zones A1-A30 and the limits of the 500-year flood.

N

0 500 1000 2000 3000
SCALE 1" = 1000'

EXHIBIT 2

FLOOD HAZARD BOUNDARY MAP — FLOOD INSURANCE RATE MAP

TOWNSHIP OF BEDFORD
MICHIGAN
MONROE COUNTY

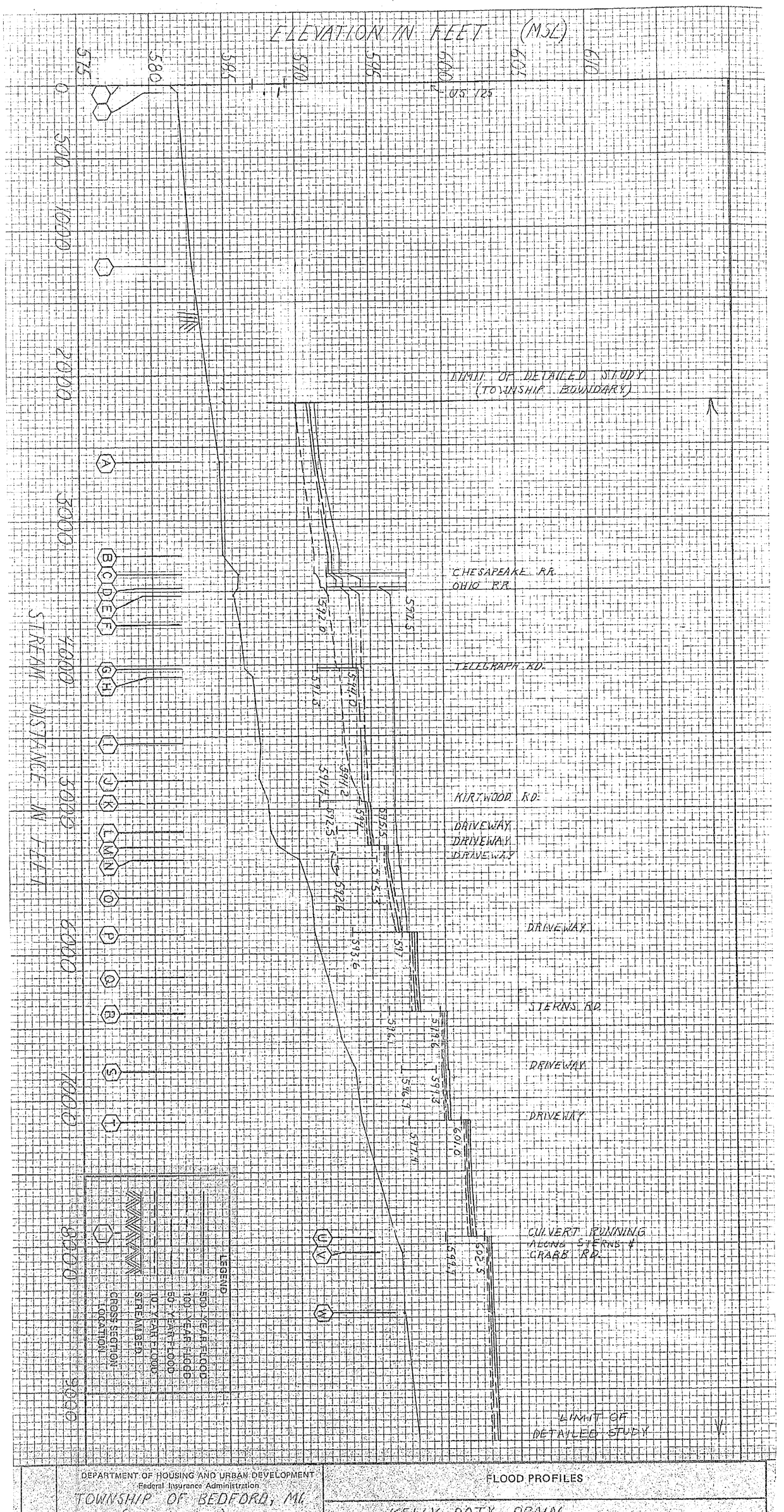
PRELIMINARY
DATE 12-21-79
McNAMEE, PORTER AND SEELEY

Rec'd Jan 7, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

PRINTED IN U.S.A.

PRINTED IN U.S.A.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration
TOWNSHIP OF BEDFORD, MI.
(MONROE CO.)

FLOOD PROFILES

KELLY-DOTY DRAIN

KEY TO MAP

500-year Flood Boundary

100-year Flood Boundary

FLOODWAY FRINGE — FLOODWAY

100-year Flood Boundary

500-year Flood Boundary

Elevation Reference Mark — RM7

Cross Section Line — A — A

Approximate 100-year Flood Boundary

Zone Designation — Zone A

NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations without regard to economic, legal, or political factors.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

N

0 500 1000 2000 3000
SCALE 1" = 1000'

FLOOD HAZARD BOUNDARY MAP — FLOOD INSURANCE RATE MAP

TOWNSHIP OF BEDFORD
MICHIGAN
MONROE COUNTY

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

PRELIMINARY
DATE OCT 17 1979
McNAMEE, PORTER AND SEELEY

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twps.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: 10yr and 50yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

HALFWAY CREEK - U/S END

	SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
10yr	501.000	1240.00	603.40	603.40	2494.65	603.40	687.51	0.00	0.00	603.40	-I	-I	603.40
50yr	501.000	1810.00	604.40	604.40	3608.23	604.40	711.42	0.00	0.00	604.40	0.00	0.00	604.40
	501.100	1240.00	603.40	603.40	2394.25	603.40	685.14	0.00	0.00	0.00	603.40	603.40	0.00
	501.100	1810.00	604.40	604.40	3489.81	604.41	709.05	0.00	0.00	0.00	604.40	604.40	0.00
	501.150	1240.00	603.42	603.42	2414.37	603.42	685.62	0.00	0.00	0.00	0.00	0.00	0.00
	501.150	1810.00	604.42	604.42	3513.56	604.43	709.53	0.00	0.00	0.00	0.00	0.00	0.00
	501.200	1240.00	603.42	603.42	2077.66	603.43	607.77	0.00	0.00	0.00	0.00	0.00	0.00
	501.200	1810.00	604.42	604.42	3067.71	604.43	612.38	0.00	0.00	0.00	0.00	0.00	0.00
	501.300	1240.00	603.27	603.27	266.88	603.69	59.85	0.00	0.00	0.00	0.00	0.00	0.00
	501.300	1810.00	604.20	604.20	353.69	604.80	63.72	0.00	0.00	0.00	0.00	0.00	0.00
	501.400	1240.00	603.90	603.90	793.90	603.93	312.93	0.00	0.00	0.00	0.00	0.00	0.00
	501.400	1810.00	605.06	605.05	1279.06	605.10	337.95	0.00	0.00	0.00	0.00	0.00	0.00
	501.450	1240.00	603.93	603.93	804.94	603.96	313.55	0.00	0.00	0.00	0.00	0.00	0.00
	501.450	1810.00	605.09	605.09	1293.28	605.13	338.66	0.00	0.00	0.00	0.00	0.00	0.00
	501.500	1240.00	603.95	603.95	647.59	603.98	297.53	0.00	0.00	0.00	0.00	0.00	0.00
	501.500	1810.00	605.11	605.11	1061.79	605.14	399.06	0.00	0.00	0.00	0.00	0.00	0.00
	501.580	1240.00	604.02	604.02	669.32	604.05	371.56	0.00	0.00	0.00	0.00	0.00	0.00
	501.580	1810.00	605.17	605.17	1085.04	605.20	399.56	0.00	0.00	0.00	0.00	0.00	0.00
	501.620	1240.00	604.10	604.10	446.80	604.16	372.83	0.00	0.00	0.00	0.00	0.00	0.00
	501.620	1810.00	605.25	605.25	822.46	605.30	402.69	0.00	0.00	0.00	0.00	0.00	0.00
	501.700	1240.00	604.14	604.14	331.64	604.24	367.68	0.00	0.00	0.00	0.00	0.00	0.00
	501.700	1810.00	605.28	605.28	654.84	605.34	390.42	0.00	0.00	0.00	0.00	0.00	0.00
	501.800	1240.00	604.26	604.26	411.96	604.32	313.47	0.00	0.00	0.00	0.00	0.00	0.00
	501.800	1810.00	605.34	605.34	713.33	605.39	334.54	0.00	0.00	0.00	0.00	0.00	0.00
	501.820	1240.00	604.28	604.28	416.66	604.34	313.72	0.00	0.00	0.00	0.00	0.00	0.00
	501.820	1810.00	605.42	605.42	738.82	605.47	335.25	0.00	0.00	0.00	0.00	0.00	0.00
	501.900	1240.00	604.33	604.33	442.96	604.38	315.45	0.00	0.00	0.00	0.00	0.00	0.00
	501.900	1810.00	605.45	605.45	759.07	605.50	329.88	0.00	0.00	0.00	0.00	0.00	0.00
	501.950	1240.00	604.86	604.86	397.33	604.93	314.39	0.00	0.00	0.00	0.00	0.00	0.00
	501.950	1810.00	605.85	605.85	653.28	605.92	345.86	0.00	0.00	0.00	0.00	0.00	0.00
	501.980	1240.00	604.99	604.99	206.87	605.29	210.70	0.00	0.00	0.00	0.00	0.00	0.00
	501.980	1810.00	605.94	605.94	357.38	606.19	251.54	0.00	0.00	0.00	0.00	0.00	0.00
	502.020	1240.00	605.75	605.75	322.92	605.89	243.87	0.00	0.00	0.00	0.00	0.00	0.00
	502.020	1810.00	606.37	606.37	444.80	606.55	264.16	0.00	0.00	0.00	0.00	0.00	0.00

502.100	1240.00	605.91	605.91	466.40	605.96	337.85	0.00	0.00	0.00	0.00	0.00	0.00
502.100	1810.00	606.56	606.56	651.63	606.63	355.78	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
503.000	1240.00	606.30	606.30	737.09	606.33	466.63	0.00	0.00	0.00	0.00	0.00	0.00
503.000	1810.00	607.01	607.01	1021.41	607.03	490.02	0.00	0.00	0.00	0.00	0.00	0.00
503.900	1240.00	606.65	606.65	208.76	606.97	97.27	0.00	0.00	0.00	0.00	0.00	0.00
503.900	1310.00	607.36	607.36	278.11	607.80	97.27	0.00	0.00	0.00	0.00	0.00	0.00
504.980	1080.00	607.03	607.03	469.61	607.12	95.55	0.00	0.00	0.00	0.00	0.00	0.00
504.980	1570.00	607.83	607.83	583.29	607.99	103.62	0.00	0.00	0.00	0.00	0.00	0.00
505.020	1080.00	610.16	610.16	990.78	610.20	127.08	0.00	0.00	0.00	0.00	0.00	0.00
505.020	1570.00	610.96	610.96	1157.60	611.02	135.09	0.00	0.00	0.00	0.00	0.00	0.00
506.100	1080.00	610.19	610.19	791.08	610.21	219.41	0.00	0.00	0.00	0.00	0.00	0.00
506.100	1570.00	611.00	611.00	1004.52	611.04	227.71	0.00	0.00	0.00	0.00	0.00	0.00
507.000	1080.00	610.34	610.34	1254.15	610.34	529.03	0.00	0.00	0.00	0.00	0.00	0.00
507.000	1570.00	611.19	611.19	1719.13	611.20	549.10	0.00	0.00	0.00	0.00	0.00	0.00
507.100	1080.00	610.34	610.34	983.82	610.36	386.59	0.00	0.00	0.00	0.00	0.00	0.00
507.100	1570.00	611.19	611.19	1337.45	611.21	400.18	0.00	0.00	0.00	0.00	0.00	0.00
507.150	1080.00	610.38	610.38	998.99	610.40	387.34	0.00	0.00	0.00	0.00	0.00	0.00
507.150	1570.00	611.24	611.24	1359.69	611.26	400.94	0.00	0.00	0.00	0.00	0.00	0.00
507.200	740.00	610.39	610.39	788.93	610.40	358.20	0.00	0.00	0.00	0.00	0.00	0.00
507.200	1060.00	611.26	611.26	1097.92	611.27	366.03	0.00	0.00	0.00	0.00	0.00	0.00
507.800	740.00	610.54	610.54	318.91	610.62	205.16	0.00	0.00	0.00	0.00	0.00	0.00
507.800	1060.00	611.42	611.42	466.01	611.50	241.55	0.00	0.00	0.00	0.00	0.00	0.00
507.850	740.00	610.57	610.57	321.88	610.65	205.77	0.00	0.00	0.00	0.00	0.00	0.00
507.850	1060.00	611.45	611.45	470.32	611.52	242.50	0.00	0.00	0.00	0.00	0.00	0.00
507.900	740.00	611.56	611.56	168.15	611.73	120.86	0.00	0.00	0.00	0.00	0.00	0.00
507.900	1060.00	612.38	612.38	251.42	612.54	147.96	0.00	0.00	0.00	0.00	0.00	0.00
507.980	740.00	611.80	611.80	122.61	612.17	65.62	0.00	0.00	0.00	0.00	0.00	0.00
507.980	1060.00	612.54	612.54	168.61	613.01	76.05	0.00	0.00	0.00	0.00	0.00	0.00
508.020	740.00	612.04	612.04	136.43	612.35	68.97	0.00	0.00	0.00	0.00	0.00	0.00
508.020	1060.00	613.33	613.33	228.71	613.63	87.32	0.00	0.00	0.00	0.00	0.00	0.00
508.100	740.00	612.44	612.44	338.39	612.48	205.10	0.00	0.00	0.00	0.00	0.00	0.00
508.100	1060.00	613.71	613.71	588.86	613.74	213.51	0.00	0.00	0.00	0.00	0.00	0.00
509.000	740.00	613.12	613.12	165.35	613.24	288.55	0.00	0.00	0.00	0.00	0.00	0.00
509.000	1060.00	614.12	614.12	350.83	614.18	303.01	0.00	0.00	0.00	0.00	0.00	0.00
509.900	740.00	614.58	614.58	370.98	614.62	240.00	0.00	0.00	0.00	0.00	0.00	0.00
509.900	1060.00	615.23	615.23	505.75	615.28	240.00	0.00	0.00	0.00	0.00	0.00	0.00
509.980	640.00	614.64	614.64	130.97	614.84	82.65	0.00	0.00	0.00	0.00	0.00	0.00
509.980	930.00	615.27	615.27	179.78	615.54	146.03	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
510.020	640.00	615.64	615.64	216.99	615.74	214.52	0.00	0.00	0.00	0.00	0.00	0.00
510.020	930.00	616.41	616.41	328.71	616.50	299.96	0.00	0.00	0.00	0.00	0.00	0.00
510.100	640.00	615.77	615.77	937.22	615.77	383.14	0.00	0.00	0.00	0.00	0.00	0.00
510.100	930.00	616.52	616.52	1245.73	616.53	391.00	0.00	0.00	0.00	0.00	0.00	0.00
510.200	640.00	615.77	615.77	825.53	615.78	376.53	0.00	0.00	0.00	0.00	0.00	0.00
510.200	930.00	616.53	616.53	1117.66	616.54	383.35	0.00	0.00	0.00	0.00	0.00	0.00
510.250	640.00	615.78	615.78	829.11	615.79	376.62	0.00	0.00	0.00	0.00	0.00	0.00
510.250	930.00	616.54	616.54	1121.78	616.55	383.43	0.00	0.00	0.00	0.00	0.00	0.00
510.900	640.00	615.91	615.91	269.48	615.94	274.46	0.00	0.00	0.00	0.00	0.00	0.00
510.900	930.00	616.68	616.68	432.52	616.70	281.46	0.00	0.00	0.00	0.00	0.00	0.00
510.980	640.00	615.95	615.95	241.54	615.98	273.08	0.00	0.00	0.00	0.00	0.00	0.00
510.980	930.00	616.71	616.71	395.73	616.74	280.00	0.00	0.00	0.00	0.00	0.00	0.00
510.990	640.00	616.02	616.02	448.29	616.04	277.33	0.00	0.00	0.00	0.00	0.00	0.00
510.990	930.00	616.80	616.80	643.02	616.82	284.69	0.00	0.00	0.00	0.00	0.00	0.00
511.000	640.00	616.05	616.05	385.32	616.07	274.63	0.00	0.00	0.00	0.00	0.00	0.00
511.000	930.00	616.83	616.83	570.11	616.86	282.08	0.00	0.00	0.00	0.00	0.00	0.00
511.100	640.00	616.05	616.05	172.17	616.15	268.69	0.00	0.00	0.00	0.00	0.00	0.00
511.100	930.00	616.84	616.84	304.95	616.91	276.31	0.00	0.00	0.00	0.00	0.00	0.00
511.150	640.00	616.25	616.25	201.41	616.33	270.59	0.00	0.00	0.00	0.00	0.00	0.00
511.150	930.00	617.14	617.14	365.53	617.19	279.19	0.00	0.00	0.00	0.00	0.00	0.00
511.500	640.00	617.53	617.53	114.24	617.66	219.45	0.00	0.00	0.00	0.00	0.00	0.00
511.500	930.00	618.07	618.07	167.50	618.20	254.76	0.00	0.00	0.00	0.00	0.00	0.00
512.000	640.00	620.03	620.03	114.71	620.17	219.81	0.00	0.00	0.00	0.00	0.00	0.00
512.000	930.00	620.56	620.56	165.63	620.70	253.65	0.00	0.00	0.00	0.00	0.00	0.00
513.000	640.00	623.20	623.20	213.60	623.23	254.98	0.00	0.00	0.00	0.00	0.00	0.00
513.000	930.00	623.81	623.81	304.40	623.85	268.40	0.00	0.00	0.00	0.00	0.00	0.00
513.500	640.00	623.72	623.72	80.54	623.88	211.50	0.00	0.00	0.00	0.00	0.00	0.00
513.500	930.00	624.33	624.33	134.56	624.46	231.85	0.00	0.00	0.00	0.00	0.00	0.00
513.800	640.00	627.44	627.44	80.53	627.72	143.37	0.00	0.00	0.00	0.00	0.00	0.00
513.800	930.00	627.82	627.82	104.19	628.20	164.99	0.00	0.00	0.00	0.00	0.00	0.00
514.000	640.00	632.34	632.34	83.39	632.55	116.14	0.00	0.00	0.00	0.00	0.00	0.00
514.000	930.00	632.99	632.99	129.52	633.23	128.03	0.00	0.00	0.00	0.00	0.00	0.00
514.500	640.00	636.28	636.28	87.67	636.92	64.38	0.00	0.00	0.00	0.00	0.00	0.00
514.500	930.00	636.81	636.81	119.61	637.66	78.08	0.00	0.00	0.00	0.00	0.00	0.00
515.000	640.00	639.82	639.82	77.52	640.66	26.58	0.00	0.00	0.00	0.00	0.00	0.00
515.000	930.00	640.61	640.61	112.55	641.65	70.56	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
515.100	640.00	641.02	641.02	65.66	641.81	77.93	0.00	0.00	0.00	0.00	0.00	0.00
515.100	930.00	641.51	641.51	94.59	642.44	86.85	0.00	0.00	0.00	0.00	0.00	0.00
515.150	640.00	641.72	641.72	186.90	641.93	90.70	0.00	0.00	0.00	0.00	0.00	0.00
515.150	930.00	642.26	642.26	234.64	642.57	100.69	0.00	0.00	0.00	0.00	0.00	0.00
515.200	640.00	641.76	641.76	92.79	642.15	130.32	0.00	0.00	0.00	0.00	0.00	0.00
515.200	930.00	642.39	642.39	144.26	642.77	205.41	0.00	0.00	0.00	0.00	0.00	0.00
515.250	640.00	641.96	641.96	105.23	642.29	90.95	0.00	0.00	0.00	0.00	0.00	0.00
515.250	930.00	642.59	642.59	152.96	642.97	93.23	0.00	0.00	0.00	0.00	0.00	0.00
515.280	640.00	642.01	642.01	96.23	642.60	72.35	0.00	0.00	0.00	0.00	0.00	0.00
515.280	930.00	642.61	642.61	132.63	643.34	83.22	0.00	0.00	0.00	0.00	0.00	0.00
515.320	640.00	643.92	643.92	243.38	644.04	107.16	0.00	0.00	0.00	0.00	0.00	0.00
515.320	930.00	644.47	644.47	303.57	644.65	150.06	0.00	0.00	0.00	0.00	0.00	0.00
515.400	640.00	643.86	643.86	123.55	644.12	94.01	0.00	0.00	0.00	0.00	0.00	0.00
515.400	930.00	644.40	644.40	163.47	644.73	104.58	0.00	0.00	0.00	0.00	0.00	0.00
515.450	640.00	643.84	643.84	103.17	644.13	93.62	0.00	0.00	0.00	0.00	0.00	0.00
515.450	930.00	644.39	644.39	143.16	644.74	104.38	0.00	0.00	0.00	0.00	0.00	0.00
515.470	640.00	643.90	643.90	126.88	644.15	94.97	0.00	0.00	0.00	0.00	0.00	0.00
515.470	930.00	644.45	644.45	167.94	644.76	105.65	0.00	0.00	0.00	0.00	0.00	0.00
515.500	640.00	644.06	644.05	183.24	644.27	95.33	0.00	0.00	0.00	0.00	0.00	0.00
515.500	930.00	644.61	644.61	233.73	644.90	105.40	0.00	0.00	0.00	0.00	0.00	0.00
515.550	640.00	644.04	644.04	137.97	644.30	96.86	0.00	0.00	0.00	0.00	0.00	0.00
515.550	930.00	644.59	644.59	186.47	644.93	106.83	0.00	0.00	0.00	0.00	0.00	0.00
515.570	640.00	644.12	644.12	187.38	644.32	96.22	0.00	0.00	0.00	0.00	0.00	0.00
515.570	930.00	644.67	644.67	237.99	644.94	106.18	0.00	0.00	0.00	0.00	0.00	0.00
515.850	640.00	645.15	645.15	56.56	645.49	152.09	0.00	0.00	0.00	0.00	0.00	0.00
515.850	930.00	645.86	645.86	111.93	646.09	165.39	0.00	0.00	0.00	0.00	0.00	0.00
515.900	640.00	648.41	648.41	67.29	648.66	156.57	0.00	0.00	0.00	0.00	0.00	0.00
515.900	930.00	648.57	648.57	79.02	648.97	160.09	0.00	0.00	0.00	0.00	0.00	0.00
515.980	640.00	649.29	649.29	66.29	649.87	64.63	0.00	0.00	0.00	0.00	0.00	0.00
515.980	930.00	649.78	649.78	87.07	650.61	78.48	0.00	0.00	0.00	0.00	0.00	0.00
516.020	640.00	654.34	654.34	554.00	654.36	235.83	0.00	0.00	0.00	0.00	0.00	0.00
516.020	930.00	655.50	655.50	784.34	655.52	321.48	0.00	0.00	0.00	0.00	0.00	0.00
516.100	640.00	654.34	654.34	409.80	654.37	320.35	0.00	0.00	0.00	0.00	0.00	0.00
516.100	930.00	655.51	655.51	663.20	655.53	330.48	0.00	0.00	0.00	0.00	0.00	0.00
517.000	640.00	654.50	654.50	122.67	654.64	116.93	0.00	0.00	0.00	0.00	0.00	0.00
517.000	930.00	655.62	655.62	205.90	655.75	210.80	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH C	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
501.000	1240.000	603.400	0.000	0.000	0.000	687.508	0.000	0.000

501.000	1810.000	604.400	1.000	0.000	0.000	711.423	-23.916	0.000
501.100	1240.000	603.401	0.000	.001	0.000	685.138	0.000	40.000
501.100	1810.000	604.401	1.000	.001	0.000	709.053	-23.916	40.000
501.150	1240.000	603.421	0.000	.020	0.000	685.616	0.000	1.000
501.150	1810.000	604.421	1.000	.020	0.000	709.532	-23.916	1.000
501.200	1240.000	603.422	0.000	.001	0.000	607.772	0.000	50.000
501.200	1810.000	604.422	1.000	.001	0.000	612.377	-4.604	50.000
501.300	1240.000	603.273	0.000	-.149	0.000	59.849	0.000	150.000
501.300	1810.000	604.203	.930	-.218	0.000	63.719	-3.870	150.000
501.400	1240.000	603.899	0.000	.626	0.000	312.926	0.000	150.000
501.400	1810.000	605.065	1.166	.862	0.000	337.950	-25.024	150.000
501.450	1240.000	603.929	0.000	.030	0.000	313.552	0.000	1.000
501.450	1810.000	605.095	1.166	.030	0.000	338.659	-25.107	1.000
501.500	1240.000	603.945	0.000	.017	0.000	297.526	0.000	60.000
501.500	1810.000	605.109	1.163	.014	0.000	399.055	-101.530	60.000
501.580	1240.000	604.019	0.000	.073	0.000	371.564	0.000	200.000
501.580	1810.000	605.167	1.148	.058	0.000	399.561	-27.997	200.000
501.620	1240.000	604.100	0.000	.081	0.000	372.833	0.000	160.000
501.620	1810.000	605.253	1.153	.086	0.000	402.687	-29.854	160.000
501.700	1240.000	604.142	0.000	.042	0.000	367.675	0.000	50.000
501.700	1810.000	605.279	1.137	.026	0.000	390.422	-22.747	50.000
501.800	1240.000	604.263	0.000	.121	0.000	313.468	0.000	65.000
501.800	1810.000	605.337	1.075	.058	0.000	334.537	-21.069	65.000
501.820	1240.000	604.283	0.000	.020	0.000	313.720	0.000	1.000
501.820	1810.000	605.417	1.135	.080	0.000	335.255	-21.534	1.000
501.900	1240.000	604.330	0.000	.047	0.000	315.455	0.000	50.000
501.900	1810.000	605.452	1.122	.034	0.000	329.878	-14.424	50.000
501.950	1240.000	604.858	0.000	.529	0.000	314.385	0.000	625.000
501.950	1810.000	605.848	.990	.396	0.000	345.864	-31.479	625.000
501.980	1240.000	604.988	0.000	.129	0.000	210.699	0.000	145.000
501.980	1810.000	605.940	.953	.092	0.000	251.541	-40.842	145.000
502.020	1240.000	605.750	0.000	.762	0.000	243.869	0.000	10.000
502.020	1810.000	606.372	.622	.432	0.000	264.160	-20.292	10.000
502.100	1240.000	605.905	0.000	.155	0.000	337.853	0.000	45.000
502.100	1810.000	606.560	.654	.188	0.000	355.785	-17.932	45.000
503.000	1240.000	606.304	0.000	.399	0.000	466.635	0.000	855.000
503.000	1810.000	607.005	.701	.445	0.000	490.023	-23.388	855.000
503.900	1240.000	606.648	0.000	.344	0.000	97.270	0.000	718.000
503.900	1810.000	607.357	.709	.352	0.000	97.271	-.000	718.000
504.980	1080.000	607.026	0.000	.378	0.000	95.547	0.000	53.000
504.980	1570.000	607.835	.809	.477	0.000	103.620	-8.073	53.000

505.020	1080.000	610.164	0.000	3.138	0.000	127.078	0.000	190.000
505.020	1570.000	610.960	.795	3.125	0.000	135.085	-8.008	190.000
506.100	1080.000	610.185	0.000	.021	0.000	219.412	0.000	71.000
506.100	1570.000	611.003	.818	.044	0.000	227.710	-8.297	71.000
507.000	1080.000	610.336	0.000	.150	0.000	529.031	0.000	1140.000
507.000	1570.000	611.189	.854	.186	0.000	549.101	-20.069	1140.000
507.100	1080.000	610.340	0.000	.005	0.000	386.588	0.000	100.000
507.100	1570.000	611.194	.854	.005	0.000	400.184	-13.596	100.000
507.150	1080.000	610.380	0.000	.040	0.000	387.343	0.000	1.000
507.150	1570.000	611.244	.864	.050	0.000	400.940	-13.597	1.000
507.200	740.000	610.392	0.000	.011	0.000	358.197	0.000	50.000
507.200	1060.000	611.258	.867	.014	0.000	366.027	-7.829	50.000
507.800	740.000	610.542	0.000	.150	0.000	205.159	0.000	1100.000
507.800	1060.000	611.416	.875	.158	0.000	241.547	-36.388	1100.000
507.850	740.000	610.572	0.000	.030	0.000	205.774	0.000	1.000
507.850	1060.000	611.446	.875	.030	0.000	242.496	-36.722	1.000
507.900	740.000	611.557	0.000	.986	0.000	120.857	0.000	1145.000
507.900	1060.000	612.376	.818	.929	0.000	147.958	-27.101	1145.000
507.980	740.000	611.799	0.000	.242	0.000	65.617	0.000	143.000
507.980	1060.000	612.541	.742	.165	0.000	76.049	-10.432	143.000
508.020	740.000	612.038	0.000	.239	0.000	68.971	0.000	15.000
508.020	1060.000	613.334	1.295	.793	0.000	87.318	-18.348	15.000
508.100	740.000	612.435	0.000	.397	0.000	205.101	0.000	42.000
508.100	1060.000	613.706	1.271	.372	0.000	213.508	-8.407	42.000
509.000	740.000	613.121	0.000	.686	0.000	288.547	0.000	838.000
509.000	1060.000	614.118	.997	.412	0.000	303.013	-14.466	838.000
509.900	740.000	614.583	0.000	1.461	0.000	240.001	0.000	1780.000
509.900	1060.000	615.233	.651	1.115	0.000	240.001	-.000	1780.000
509.980	640.000	614.638	0.000	.056	0.000	82.652	0.000	180.000
509.980	930.000	615.275	.636	.041	0.000	146.025	-63.374	180.000
510.020	640.000	615.645	0.000	1.006	0.000	214.519	0.000	39.000
510.020	930.000	616.405	.761	1.131	0.000	299.960	-85.441	39.000
510.100	640.000	615.767	0.000	.122	0.000	383.140	0.000	46.000
510.100	930.000	616.525	.758	.119	0.000	391.000	-7.860	46.000
510.200	640.000	615.773	0.000	.006	0.000	376.532	0.000	140.000
510.200	930.000	616.532	.759	.008	0.000	383.345	-6.813	140.000
510.250	640.000	615.783	0.000	.010	0.000	376.622	0.000	1.000
510.250	930.000	616.542	.759	.010	0.000	383.435	-6.813	1.000
510.900	640.000	615.908	0.000	.125	0.000	274.456	0.000	1000.000
510.900	930.000	616.675	.768	.133	0.000	281.459	-7.003	1000.000

510.980	640.000	615.949	0.000	.041	0.000	273.079	0.000	70.000
510.980	930.000	616.709	.760	.033	0.000	280.000	-6.921	70.000
510.990	640.000	616.023	0.000	.074	0.000	277.331	0.000	10.000
510.990	930.000	616.804	.781	.095	0.000	284.685	-7.354	10.000
511.000	640.000	616.048	0.000	.026	0.000	274.631	0.000	120.000
511.000	930.000	616.830	.782	.026	0.000	282.076	-7.444	120.000
511.100	640.000	616.052	0.000	.003	0.000	268.685	0.000	80.000
511.100	930.000	616.844	.792	.014	0.000	276.310	-7.625	80.000
511.150	640.000	616.252	0.000	.200	0.000	270.588	0.000	1.000
511.150	930.000	617.144	.892	.300	0.000	279.194	-8.606	1.000
511.500	640.000	617.531	0.000	1.280	0.000	219.449	0.000	800.000
511.500	930.000	618.068	.537	.924	0.000	254.757	-35.309	800.000
512.000	640.000	620.033	0.000	2.502	0.000	219.806	0.000	800.000
512.000	930.000	620.560	.527	2.492	0.000	253.647	-33.840	800.000
513.000	640.000	623.195	0.000	3.163	0.000	254.984	0.000	2000.000
513.000	930.000	623.812	.616	3.251	0.000	268.403	-13.419	2000.000
513.500	640.000	623.723	0.000	.528	0.000	211.499	0.000	320.000
513.500	930.000	624.325	.602	.513	0.000	231.850	-20.351	320.000
513.800	640.000	627.440	0.000	3.717	0.000	143.366	0.000	600.000
513.800	930.000	627.824	.384	3.499	0.000	164.993	-21.627	600.000
514.000	640.000	632.337	0.000	4.896	0.000	115.143	0.000	790.000
514.000	930.000	632.995	.658	5.171	0.000	128.026	-11.883	790.000
514.500	640.000	636.278	0.000	3.941	0.000	64.385	0.000	750.000
514.500	930.000	636.808	.531	3.814	0.000	78.076	-13.692	750.000
515.000	640.000	639.822	0.000	3.545	0.000	26.581	0.000	610.000
515.000	930.000	640.611	.789	3.803	0.000	70.557	-43.976	610.000
515.100	640.000	641.018	0.000	1.196	0.000	77.933	0.000	3.000
515.100	930.000	641.506	.488	.895	0.000	86.849	-8.915	3.000
515.150	640.000	641.719	0.000	.701	0.000	90.699	0.000	3.000
515.150	930.000	642.265	.546	.758	0.000	100.694	-9.994	3.000
515.200	640.000	641.763	0.000	.044	0.000	130.319	0.000	72.000
515.200	930.000	642.393	.630	.128	0.000	205.413	-75.095	72.000
515.250	640.000	641.963	0.000	.200	0.000	90.953	0.000	1.000
515.250	930.000	642.593	.630	.200	0.000	93.235	-2.282	1.000
515.280	640.000	642.011	0.000	.048	0.000	72.353	0.000	45.000
515.280	930.000	642.605	.594	.013	0.000	83.223	-10.870	45.000
515.320	640.000	643.918	0.000	1.906	0.000	107.158	0.000	14.000
515.320	930.000	644.468	.550	1.862	0.000	150.058	-42.900	14.000
515.400	640.000	643.856	0.000	-.062	0.000	94.012	0.000	4.000
515.400	930.000	644.403	.547	-.065	0.000	104.579	-10.566	4.000
515.450	640.000	643.840	0.000	-.016	0.000	93.622	0.000	.500

515.450	930.000	644.390	.550	-.013	0.000	104.383	-10.761	.500
515.470	640.000	643.904	0.000	.063	0.000	94.972	0.000	.500
515.470	930.000	644.450	.546	.060	0.000	105.653	-10.682	.500
515.500	640.000	644.064	0.000	.160	0.000	95.328	0.000	61.000
515.500	930.000	644.614	.549	.164	0.000	105.395	-10.068	61.000
515.550	640.000	644.039	0.000	-.025	0.000	96.861	0.000	1.000
515.550	930.000	644.591	.552	-.023	0.000	106.831	-9.970	1.000
515.570	640.000	644.120	0.000	.081	0.000	96.216	0.000	1.000
515.570	930.000	644.668	.548	.077	0.000	106.179	-9.963	1.000
515.850	640.000	645.147	0.000	1.028	0.000	152.087	0.000	400.000
515.850	930.000	645.863	.716	1.195	0.000	165.389	-13.302	400.000
515.900	640.000	648.406	0.000	3.259	0.000	156.568	0.000	294.000
515.900	930.000	648.565	.159	2.702	0.000	160.087	-3.519	294.000
515.980	640.000	649.287	0.000	.880	0.000	64.630	0.000	114.000
515.980	930.000	649.783	.496	1.218	0.000	78.477	-13.848	114.000
516.020	640.000	654.338	0.000	5.052	0.000	235.831	0.000	36.000
516.020	930.000	655.502	1.163	5.719	0.000	321.479	-85.647	36.000
516.100	640.000	654.343	0.000	.005	0.000	320.354	0.000	50.000
516.100	930.000	655.510	1.166	.008	0.000	330.482	-10.128	50.000
517.000	640.000	654.496	0.000	.153	0.000	116.933	0.000	400.000
517.000	930.000	655.624	1.127	.114	0.000	210.798	-93.865	400.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	110.787	0.000
2	0.000	0.000	119.816	9.029

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twps.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: 100 yr.

00BREAK00

JOB NO. UM1007 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 12:03:47 07-09-79

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                  TT
MM MM    MM MM  NN NN       NN  EE                  TT
MM  MMMM  MM MM  NN  NN     NN  EE                  TT
MM   MM   MM MM  NN   NN    NN  EEEEEEEE            TT
MM        MM MM  NN    NN   NN  EEEEEEEE            TT
MM        MM MM  NN     NN  NN  EE                  TT
MM        MM MM  NN      NNNN  EE                  TT
MM        MM MM  NN       NNN  EE                  TT
MM        MM MM  NN        NN  EEEEEEEEEEEE        TT
MM        MM MM  NN        N   EEEEEEEEEEEE        TT
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XX        XX   SSSSSSSSS   NN         NN  LL
XX        XX  SSSSSSSSSSS  NNN        NN  LL
 XX      XX   SS         SS NNNN      NN  LL
  XX    XX    SS            NN NN     NN  LL
   XX  XX     SSS           NN  NN    NN  LL
    XXXX       SSSSSSSSS    NN   NN   NN  LL
    XXXX         SSSSSSSSS  NN    NN  NN  LL
   XX  XX              SSS  NN     NN NN  LL
  XX    XX             SS  NN      NNNN  LL
 XX      XX   SS        SS  NN       NNN  LL
XX        XX  SSSSSSSSSSS  NN        NN  LLLLLLLLLLL
XX        XX   SSSSSSSSS   NN         N  LLLLLLLLLLL
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1   HUD-FIA H-4705
T2   BEDFORD
T3      HALFWAY CREEK - U/S END - 100 YEAR FLOW  Q=2100 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.        4.        0.        0.  0.000000      0.00      1.0       0.   604.900    0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000     0.000     0.000     0.000
NC       .040      .040      .035      .150      .350     0.000     0.000     0.000     0.000     0.000
QT      5.000  1240.000  1810.000  2100.000  2800.000  2100.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1    501.000    24.000   300.000   331.000     0.000     0.000     0.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    612.900     0.000   612.900    13.000   613.400    14.000   614.500    72.000   613.700    93.000
GR    615.500   100.000   612.400   136.000   607.900   168.000   607.200   178.000   605.300   188.000
GR    599.500   300.000   596.600   307.000   595.100   308.000   594.700   311.000   595.100   319.000
GR    596.500   321.000   599.000   324.000   602.000   331.000   599.800   344.000   599.200   400.000
GR    599.100   500.000   598.900   600.000   600.100   897.000   615.300   967.000     0.000     0.000

X1    501.100     0.000     0.000     0.000    40.000    40.000    40.000     0.000      .100     0.000

X1    501.150     0.000     0.000     0.000     1.000     1.000     1.000     0.000     0.000     0.000
X5     -5.000      .020      .020      .020      .020      .020     0.000     0.000     0.000     0.000

X1    501.200    16.000    82.000   128.000    50.000    50.000    50.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    613.800     0.000   612.600    30.000   608.900    47.000   601.300    82.000   599.300   100.000
GR    597.600   103.000   596.900   105.000   595.900   106.000   595.100   111.000   596.600   115.000
GR    597.900   117.000   601.900   128.000   600.900   137.000   598.600   300.000   599.600   400.000
GR    600.100   680.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
NC       .045      .045      .040      .400      .600     0.000     0.000     0.000     0.000     0.000

X1    501.300    19.000    88.000   116.000   150.000   150.000   150.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    615.500     0.000   614.400    45.000   610.400    53.000   607.700    57.000   606.200    67.000
GR    601.600    75.000   599.100    88.000   597.000    91.000   595.500    93.000   594.700    99.000
GR    595.700   102.000   597.500   104.000   597.700   108.000   599.400   116.000   600.000   124.000
GR    613.200   156.000   612.200   160.000   613.600   167.000   615.700   169.000     0.000     0.000

X1    501.400    15.000   354.000   393.000   150.000   150.000   150.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    616.900    21.000   605.900    85.000   603.200   120.000   599.200   291.000   600.500   330.000
GR    600.400   354.000   598.300   372.000   597.300   373.000   595.300   379.000   597.000   388.000
GR    597.300   389.000   600.000   393.000   604.800   431.000   606.800   452.000   614.500   483.000

X1    501.450     0.000     0.000     0.000     1.000     1.000     1.000     0.000     0.000     0.000
X5     -5.000      .030      .030      .030      .030      .030     0.000     0.000     0.000     0.000
NC       .060      .060      .045      .150      .350     0.000     0.000     0.000     0.000     0.000

X1    501.500    14.000   291.000   359.000    60.000    60.000    60.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    616.400     0.000   603.800    62.000   601.300   100.000   600.100   200.000   601.400   291.000
GR    599.900   300.000   596.400   331.000   596.100   336.000   597.800   340.000   599.100   341.000
GR    604.000   359.000   603.700   400.000   604.200   451.000   615.800   497.000     0.000     0.000
NC      0.000     0.000     0.000      .400      .800     0.000     0.000     0.000     0.000     0.000

X1    501.580     0.000     0.000     0.000   200.000   200.000   200.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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SB	0.000	2.000	2.900	375.000	4.710	0.000	28.270	0.000	596.100	596.100
X1	501.620	12.000	358.000	414.000	160.000	160.000	160.000	0.000	-.500	0.000
X2	0.000	0.000	1.000	602.100	602.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	602.700	602.700	0.000
GR	615.000	0.000	603.000	50.000	602.700	200.000	602.500	300.000	602.800	358.000
GR	598.700	380.000	597.900	384.000	596.700	392.000	596.600	395.000	599.900	400.000
GR	604.500	414.000	607.400	477.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	501.700	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	501.800	17.000	310.000	354.000	65.000	65.000	65.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	615.000	0.000	602.500	50.000	601.300	200.000	602.200	250.000	603.100	300.000
GR	604.000	310.000	603.000	317.000	597.700	328.000	597.200	330.000	596.500	336.000
GR	597.100	342.000	599.800	347.000	604.000	354.000	605.200	365.000	605.300	373.000
GR	610.700	400.000	611.400	440.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	501.820	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.020	.080	-.120	.120	.120	0.000	0.000	0.000	0.000
X1	501.900	22.000	370.000	420.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	617.700	0.000	615.900	36.000	605.800	86.000	604.300	100.000	601.700	137.000
GR	601.700	200.000	602.500	229.000	601.400	246.000	601.300	300.000	601.700	312.000
GR	602.900	321.000	603.000	370.000	598.300	380.000	596.400	384.000	596.500	389.000
GR	597.000	391.000	598.700	396.000	600.000	400.000	605.700	420.000	606.800	441.000
GR	611.900	464.000	613.800	500.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	501.950	21.000	300.000	331.000	625.000	625.000	625.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	606.500	0.000	602.800	100.000	601.500	170.000	603.400	200.000	603.500	221.000
GR	601.800	250.000	604.200	300.000	602.200	307.000	598.700	308.000	597.700	313.000
GR	596.900	317.000	597.200	326.000	598.100	328.000	601.600	331.000	602.900	340.000
GR	604.700	358.000	609.300	380.000	610.200	399.000	612.000	400.000	616.600	442.000
GR	617.300	454.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	501.980	16.000	340.000	400.000	145.000	145.000	145.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	602.400	602.400	0.000
GR	613.200	0.000	611.500	76.000	604.800	200.000	603.800	300.000	604.000	340.000
GR	602.400	350.000	601.100	351.000	599.300	353.000	598.800	354.000	596.900	365.000
GR	598.400	373.000	601.900	377.000	604.700	400.000	605.900	430.000	611.900	494.000
GR	616.300	522.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	250.000	14.000	0.000	107.800	1.630	597.500	597.500
X1	502.020	0.000	0.000	0.000	10.000	10.000	10.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	602.400	605.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.000	605.000	0.000
X1	502.100	16.000	318.000	358.000	45.000	45.000	45.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	615.600	0.000	606.300	100.000	602.900	200.000	603.800	300.000	604.400	318.000
GR	601.400	327.000	597.500	333.000	596.800	339.000	597.200	344.000	601.100	346.000
GR	603.200	358.000	603.000	400.000	606.000	451.000	615.400	484.000	616.700	500.000
GR	618.700	530.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	503.000	16.000	471.000	500.000	855.000	855.000	855.000	0.000	0.000	0.000

X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	612.000	0.000	608.100	33.000	607.300	100.000	604.700	167.000	603.300	300.000
GR	603.100	471.000	598.700	480.000	597.400	482.000	597.100	485.000	597.600	496.000
GR	604.100	500.000	603.900	574.000	615.200	660.000	620.800	761.000	622.100	800.000
GR	624.100	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	503.900	15.000	287.000	316.000	718.000	718.000	718.000	.710	0.000	0.000
GR	604.400	233.000	604.400	234.000	604.300	235.000	604.300	236.000	604.300	237.000
GR	603.400	287.000	602.000	297.000	597.000	305.000	597.100	308.000	603.900	316.000
GR	604.600	366.000	604.600	367.000	604.600	368.000	604.600	369.000	604.600	370.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	1080.000	1570.000	1900.000	2500.000	1900.000	0.000	0.000	0.000	0.000
X1	504.980	13.000	415.000	480.000	53.000	53.000	53.000	0.000	2.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.100	95.000	616.800	166.000	613.500	237.000	611.200	308.000	609.100	379.000
GR	602.000	415.000	597.300	435.000	597.300	460.000	602.000	480.000	609.000	515.000
GR	610.200	578.000	615.900	600.000	622.500	650.000	0.000	0.000	0.000	0.000
SB	0.000	2.100	2.600	0.000	17.500	0.000	87.500	0.000	599.300	599.300
X1	505.020	0.000	0.000	0.000	190.000	190.000	190.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	604.300	609.100	0.000	0.000	0.000	0.000	0.000
BT	15.000	0.000	620.100	0.000	95.000	620.100	0.000	166.000	616.800	0.000
BT	237.000	613.500	0.000	308.000	611.200	0.000	379.000	609.100	0.000	430.000
BT	609.500	0.000	439.000	609.500	0.000	441.000	609.500	0.000	462.000	609.500
BT	0.000	464.000	609.600	0.000	468.000	609.600	0.000	521.000	611.200	0.000
BT	600.000	615.900	0.000	6500.000	622.500	0.000	0.000	0.000	0.000	0.000
X1	506.100	12.000	449.000	483.000	71.000	71.000	71.000	.710	0.000	0.000
GR	618.400	0.000	616.600	54.000	617.600	100.000	615.900	167.000	606.500	300.000
GR	604.600	400.000	603.800	449.000	600.100	457.000	598.000	465.000	599.600	472.000
GR	605.200	483.000	609.900	557.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	507.000	18.000	609.000	644.000	1140.000	1140.000	1140.000	0.000	0.000	0.000
GR	626.900	0.000	627.100	75.000	624.300	100.000	618.300	200.000	613.300	244.000
GR	609.700	300.000	607.300	400.000	607.200	500.000	603.700	609.000	600.000	610.000
GR	599.400	619.000	599.400	620.000	600.600	625.000	602.500	629.000	606.300	644.000
GR	606.900	700.000	607.900	800.000	620.500	900.000	0.000	0.000	0.000	0.000
X1	507.100	13.000	375.000	407.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	623.700	0.000	610.500	57.000	607.800	79.000	607.200	200.000	607.100	300.000
GR	604.500	375.000	601.900	385.000	600.000	392.000	600.000	394.000	601.200	400.000
GR	604.800	407.000	609.800	439.000	615.400	500.000	0.000	0.000	0.000	0.000
X1	507.150	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.040	.050	.050	.060	.050	0.000	0.000	0.000	0.000
QT	5.000	740.000	1060.000	1270.000	1670.000	1270.000	0.000	0.000	0.000	0.000
X1	507.200	13.000	400.000	424.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	623.300	0.000	623.300	28.000	608.700	100.000	607.300	300.000	604.800	400.000
GR	602.000	404.000	601.900	414.000	600.000	418.000	602.100	420.000	604.100	424.000
GR	612.600	459.000	615.400	500.000	620.800	600.000	0.000	0.000	0.000	0.000
X1	507.800	13.000	306.000	333.000	1100.000	1100.000	1100.000	0.000	0.000	0.000
GR	615.000	0.000	610.600	150.000	610.100	161.000	608.900	212.000	608.600	250.000
GR	608.500	306.000	602.500	315.000	602.500	322.000	602.700	333.000	607.500	337.000
GR	609.200	338.000	609.800	350.000	613.300	379.000	0.000	0.000	0.000	0.000
X1	507.850	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000

X5	-5.000	.030	.030	.030	.040	.030	0.000	0.000	0.000	0.000
X1	507.900	13.000	230.000	244.000	1145.000	1145.000	1145.000	0.000	0.000	0.000
GR	632.300	0.000	627.500	32.000	625.300	46.000	622.200	86.000	614.300	124.000
GR	610.900	176.000	608.100	230.000	605.600	231.000	605.000	235.000	605.600	243.000
GR	607.100	244.000	611.400	284.000	616.000	366.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	507.980	16.000	337.000	368.000	143.000	143.000	143.000	0.000	0.000	0.000
GR	631.300	0.000	630.300	100.000	623.800	119.000	619.300	231.000	615.000	300.000
GR	609.200	337.000	609.100	337.100	607.600	347.000	606.000	353.000	606.500	360.000
GR	609.100	365.000	609.400	367.900	609.500	368.000	613.600	400.000	614.200	500.000
GR	614.800	554.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	125.000	17.000	0.000	146.500	1.150	606.000	606.000
X1	508.020	0.000	0.000	0.000	15.000	15.000	15.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	612.100	613.500	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	508.100	14.000	222.000	256.000	42.000	42.000	42.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	625.600	20.000	621.100	42.000	611.600	100.000	610.100	114.000	609.600	154.000
GR	609.200	200.000	609.600	222.000	607.000	225.000	604.700	232.000	606.900	242.000
GR	610.700	256.000	612.400	300.000	614.400	301.000	615.100	400.000	0.000	0.000
X1	509.000	14.000	300.000	361.000	838.000	838.000	838.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	628.400	0.000	628.400	34.000	612.900	78.000	612.200	200.000	612.000	300.000
GR	609.700	336.000	608.400	341.000	606.800	345.000	608.300	352.000	612.700	361.000
GR	614.500	382.000	622.500	400.000	624.600	420.000	628.200	500.000	0.000	0.000
NC	0.000	0.000	0.000	.350	.600	0.000	0.000	0.000	0.000	0.000
X1	509.900	12.000	123.000	160.000	1780.000	1780.000	1780.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	613.900	63.000	613.900	64.000	614.100	104.000	611.100	123.000	609.900	124.000
GR	607.500	140.000	609.900	153.000	612.500	160.000	611.800	300.000	611.800	301.000
GR	611.800	302.000	611.700	303.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
QT	5.000	640.000	930.000	1080.000	1460.000	1080.000	0.000	0.000	0.000	0.000
X1	509.980	13.000	800.000	850.000	180.000	180.000	180.000	0.000	0.000	0.000
GR	637.400	0.000	623.100	400.000	619.000	500.000	616.000	600.000	615.000	770.000
GR	613.500	800.000	610.000	815.000	608.500	816.000	608.500	825.000	609.900	826.000
GR	614.000	850.000	617.300	900.000	627.700	1200.000	0.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	280.000	15.000	0.000	90.000	0.000	609.300	609.300
X1	510.020	0.000	0.000	0.000	39.000	39.000	39.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.300	616.000	0.000	0.000	0.000	0.000	0.000
X1	510.100	13.000	430.000	447.000	46.000	46.000	46.000	0.000	0.000	0.000
GR	611.500	245.000	611.500	246.000	611.500	247.000	611.500	248.000	611.300	300.000
GR	612.300	400.000	610.700	430.000	607.100	440.000	610.200	447.000	611.700	500.000
GR	614.400	600.000	616.100	635.000	616.100	636.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	.035	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	510.200	10.000	504.000	522.000	140.000	140.000	140.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	633.300	137.000	613.300	213.000	611.400	400.000	612.800	504.000	608.800	504.100
GR	607.000	512.000	608.400	521.900	612.800	522.000	614.200	572.000	622.900	617.000
X1	510.250	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000

X5	-5.000	.010	.010	.010	.010	.010	0.000	0.000	0.000	0.000
NC	0.000	0.000	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	510.900	12.000	393.000	413.000	1000.000	1000.000	1000.000	0.000	-.200	0.000
GR	631.900	241.000	623.600	300.000	614.300	341.000	613.500	393.000	612.200	398.000
GR	609.600	400.000	609.500	402.000	610.300	407.000	612.400	409.000	613.800	413.000
GR	614.500	600.000	634.500	694.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	510.980	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.200	0.000
SB	0.000	1.500	2.500	0.000	8.180	0.000	27.000	0.000	609.500	609.500
X1	510.990	19.000	393.000	426.000	10.000	10.000	10.000	0.000	-.300	0.000
X2	0.000	0.000	1.000	612.800	613.300	0.000	0.000	0.000	0.000	0.000
BT	7.000	341.000	614.300	0.000	393.000	613.300	0.000	396.000	621.800	0.000
BT	420.000	621.800	0.000	426.000	614.200	0.000	500.000	613.500	0.000	600.000
BT	614.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	641.800	0.000	639.700	100.000	638.800	173.000	634.300	200.000	631.900	241.000
GR	623.600	300.000	614.300	341.000	613.300	393.000	609.900	396.000	609.800	410.000
GR	610.000	420.000	614.200	426.000	613.500	500.000	614.500	600.000	618.800	622.000
GR	628.000	658.000	634.500	694.000	638.400	735.000	639.500	763.000	0.000	0.000
X1	511.000	0.000	0.000	0.000	120.000	120.000	120.000	0.000	.300	0.000
X1	511.100	10.000	393.000	420.000	80.000	80.000	80.000	0.000	0.000	0.000
GR	631.900	241.000	623.600	300.000	615.100	341.000	615.000	393.000	610.300	403.000
GR	609.600	410.000	610.400	415.000	614.900	420.000	615.000	600.000	634.500	694.000
X1	511.150	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.200	.300	.300	.400	.300	0.000	0.000	0.000	0.000
NC	.085	.085	.055	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	511.500	19.000	264.000	283.000	800.000	800.000	800.000	0.000	-2.500	0.000
GR	646.200	0.000	645.900	34.000	637.500	100.000	631.900	166.000	619.300	197.000
GR	618.100	252.000	617.800	264.000	615.500	269.000	614.800	270.000	614.500	274.000
GR	615.000	281.000	618.000	283.000	618.000	300.000	619.800	400.000	621.000	476.000
GR	626.300	500.000	636.200	570.000	639.200	600.000	641.100	650.000	0.000	0.000
X1	512.000	0.000	0.000	0.000	800.000	800.000	800.000	0.000	2.500	0.000
X1	513.000	20.000	447.000	473.000	2000.000	2000.000	2000.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	654.300	0.000	651.300	42.000	648.400	68.000	641.300	100.000	631.400	180.000
GR	629.100	200.000	623.200	245.000	620.300	300.000	620.800	400.000	621.400	447.000
GR	618.700	449.000	618.100	459.000	618.600	466.000	621.400	473.000	623.200	500.000
GR	625.800	537.000	629.700	559.000	638.700	600.000	648.300	657.000	657.700	765.000
X1	513.500	0.000	0.000	0.000	320.000	320.000	320.000	0.000	1.800	0.000
X1	513.800	13.000	446.000	472.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	645.000	120.000	636.000	215.000	629.000	300.000	626.500	400.000	625.500	446.000
GR	623.900	450.000	623.500	459.000	623.500	470.000	625.500	472.000	628.000	515.000
GR	635.000	540.000	640.000	570.000	650.000	600.000	0.000	0.000	0.000	0.000
X1	514.000	19.000	461.000	510.000	790.000	790.000	790.000	0.000	0.000	0.000
GR	654.700	0.000	653.500	62.000	651.300	100.000	644.300	200.000	638.800	300.000
GR	632.400	395.000	630.100	461.000	629.200	465.000	628.400	472.000	629.100	480.000
GR	629.300	481.000	630.300	500.000	630.900	510.000	637.200	523.000	640.800	534.000
GR	657.400	578.000	658.600	600.000	661.900	674.000	662.700	700.000	0.000	0.000
NC	.055	.055	.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	514.500	12.000	457.000	485.000	750.000	750.000	750.000	0.000	0.000	0.000

GR	650.000	185.000	641.800	272.000	639.900	325.000	638.500	375.000	636.400	420.000
GR	635.000	457.000	632.700	460.000	632.500	472.000	632.700	480.000	635.500	485.000
GR	645.000	515.000	650.000	530.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	515.000	18.000	337.000	361.000	610.000	610.000	610.000	0.000	0.000	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	636.300	338.000
GR	635.700	346.000	635.800	358.000	640.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.100	18.000	337.000	361.000	3.000	3.000	3.000	0.000	0.000	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	638.100	338.000
GR	638.100	346.000	638.100	358.000	640.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.150	18.000	337.000	361.000	3.000	3.000	3.000	0.000	0.000	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	636.300	338.000
GR	635.700	346.000	635.800	358.000	640.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.200	13.000	273.000	309.000	72.000	72.000	72.000	0.000	0.000	0.000
GR	650.000	0.000	643.000	50.000	641.300	250.000	640.500	273.000	636.800	274.000
GR	636.800	284.000	640.600	285.000	640.600	300.000	636.800	301.000	636.800	308.000
GR	641.200	309.000	641.700	325.000	648.600	350.000	0.000	0.000	0.000	0.000
X1	515.250	13.000	273.000	309.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.200	.200	.200	.200	.200	0.000	0.000	0.000	0.000
GR	641.300	235.000	641.300	236.000	641.300	250.000	640.500	273.000	636.800	274.000
GR	636.800	284.000	640.600	285.000	640.600	300.000	636.800	301.000	636.800	308.000
GR	641.200	309.000	641.700	325.000	648.600	350.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	515.280	18.000	337.000	361.000	45.000	45.000	45.000	0.000	1.300	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	636.300	338.000
GR	635.700	346.000	635.800	351.000	640.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
SB	0.000	1.400	2.800	125.000	11.000	0.000	51.700	0.000	637.000	637.000
X1	515.320	0.000	0.000	0.000	14.000	14.000	14.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	641.700	643.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	643.500	643.500	0.000
X1	515.400	18.000	340.000	350.000	4.000	4.000	4.000	0.000	1.500	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	340.000	636.300	341.000
GR	635.700	346.000	635.800	349.000	640.000	350.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.450	18.000	340.000	350.000	.500	.500	.500	0.000	1.500	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	340.000	637.700	341.000
GR	637.700	346.000	637.700	349.000	640.000	350.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.470	18.000	340.000	350.000	.500	.500	.500	0.000	1.500	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	340.000	636.300	341.000
GR	635.700	346.000	635.800	349.000	640.000	350.000	650.000	377.000	651.300	400.000

GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.500	18.000	337.000	361.000	61.000	61.000	61.000	0.000	2.100	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	636.300	338.000
GR	635.700	346.000	635.800	351.000	640.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.550	18.000	337.000	361.000	1.000	1.000	1.000	0.000	2.100	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	638.000	338.000
GR	638.000	346.000	638.000	351.000	638.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
X1	515.570	18.000	337.000	361.000	1.000	1.000	1.000	0.000	2.100	0.000
GR	661.800	0.000	661.200	50.000	656.400	75.000	643.500	115.000	643.400	150.000
GR	643.200	200.000	643.100	250.000	640.100	300.000	639.800	337.000	636.300	338.000
GR	635.700	346.000	635.800	351.000	640.000	361.000	650.000	377.000	651.300	400.000
GR	657.500	465.000	657.700	500.000	658.200	582.000	0.000	0.000	0.000	0.000
NC	.060	.100	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	515.850	16.000	184.000	198.000	400.000	400.000	400.000	0.000	-3.100	0.000
GR	659.600	0.000	659.800	31.000	657.600	52.000	648.500	75.000	647.000	100.000
GR	647.200	184.000	645.100	185.000	644.800	189.000	645.100	196.000	647.100	198.000
GR	647.300	221.000	649.300	243.000	649.900	300.000	650.300	400.000	651.900	500.000
GR	652.100	600.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	515.900	0.000	0.000	0.000	294.000	294.000	294.000	0.000	3.100	0.000
X1	515.980	12.000	286.000	315.000	114.000	114.000	114.000	0.000	0.000	0.000
GR	658.800	0.000	657.300	100.000	656.000	180.000	650.500	250.000	648.200	286.000
GR	645.500	293.000	644.800	300.000	645.200	306.000	647.800	315.000	653.500	386.000
GR	655.400	500.000	656.700	600.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.700	0.000	8.000	0.000	44.800	0.000	644.800	644.800
X1	516.020	0.000	0.000	0.000	36.000	36.000	36.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	650.400	654.800	0.000	0.000	0.000	0.000	0.000
BT	9.000	0.000	658.800	0.000	200.000	655.500	0.000	294.000	655.000	0.000
BT	295.000	659.700	0.000	305.000	659.700	0.000	306.000	654.900	0.000	400.000
BT	654.800	0.000	500.000	655.400	0.000	600.000	656.700	0.000	0.000	0.000
NC	.080	.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	516.100	19.000	349.000	374.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	661.900	0.000	661.200	63.000	659.600	100.000	657.400	173.000	658.700	200.000
GR	659.500	235.000	654.300	280.000	652.900	300.000	652.000	315.000	650.900	335.000
GR	648.300	349.000	646.600	352.000	645.700	358.000	646.300	366.000	649.200	374.000
GR	649.800	389.000	652.100	398.000	652.600	500.000	653.900	600.000	0.000	0.000
NC	.100	.100	.055	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	517.000	16.000	382.000	404.000	400.000	400.000	400.000	0.000	0.000	0.000
GR	661.000	0.000	662.600	100.000	663.900	200.000	663.100	300.000	661.500	340.000
GR	658.100	363.000	653.500	382.000	648.700	390.000	648.800	394.000	648.700	398.000
GR	650.300	404.000	652.900	454.000	654.700	500.000	655.800	600.000	657.500	700.000
GR	658.500	800.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CCHV=     .150 CEHV=     .350
   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

        **  MICHIGAN - OHIO LINE

   501.00     10.20     604.90      0.00     604.90    604.91      .01       0.00      0.00     599.50
   2100.       101.      181.       1818.      282.      237.     3176.        0.        0.      602.00
    0.00        .36       .76        .57       .040      .035      .040     0.000    594.70     195.72
 .000025          0.        0.         0.         0         0         1      0.00    723.38     919.11

   501.10     10.10     604.90      0.00       0.00    604.91      .01       .00       .00      599.60
   2100.       99.       183.       1818.      271.      234.     3118.        3.        1.      602.10
     .02        .36       .78        .58       .040      .035      .040      .034    594.80     197.64
 .000026         40.       40.        40.         2         0         1      0.00    721.01     918.65

WATER EL=X5 CARD=    604.921

        **  FOOT BRIDGE ON GOLF COURSE

   501.15     10.12     604.92      0.00       0.00    604.93      .01       .00       .00      599.60
   2100.       99.       183.       1818.      273.      235.     3130.        3.        1.      602.10
     .02        .36       .78        .58       .040      .035      .040      .033    594.80     197.25
 .000026          1.        1.         1.         0         0         1      0.00    721.49     918.74

3280 CROSS SECTION     501.20 EXTENDED       4.82 FEET

   501.20      9.82     604.92      0.00       0.00    604.93      .01       .00       .00      601.30
   2100.       10.       222.       1868.       30.      280.     2877.        7.        1.      601.90
     .04        .32       .79        .65       .040      .035      .040      .034    595.10      65.32
 .000034         50.       50.        50.         2         0         1      0.00    614.68     680.00

CCHV=     .400 CEHV=     .600
   501.30      9.97     604.67      0.00       0.00    605.34      .66       .02       .39      599.10
   2100.       271.      1553.      276.        64.      216.       66.       13.        3.      599.40
     .05        4.21      7.19       4.16       .045      .040      .045      .037    594.70      69.65
 .002722         150.      150.       150.        ?         0         1      0.00     65.68     135.33

   501.40     10.33     605.63      0.00       0.00    605.66      .03       .07       .25      600.40
   2100.      1418.      563.       120.      1145.      299.      126.       17.        3.      600.00
     .08        1.24      1.89        .95       .045      .040      .045      .038    595.30      88.51
 .000182         150.      150.       150.         2         0         1      0.00    351.19     439.70

WATER EL=X5 CARD=    605.659
   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
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Starting WSELK from Toledo FIS — but checked by this state. Is it right?

SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC.	ICONT	CORAR	TOPWID	ENDST
** FOOT BRIDGE ON GOLF COURSE									
501.45	10.36	605.66	0.00	0.00	605.69	.03	.00	.00	600.40
2100.	1419.	561.	120.	1153.	300.	128.	17.	3.	600.00
.08	1.23	1.87	.94	.045	.040	.045	.038	595.30	88.12
.000178	1.	1.	1.	0	0	1	0.00	351.90	440.02
CCHV= .150 CEHV= .350									
501.50	9.57	605.67	0.00	0.00	605.70	.03	.01	.00	601.40
2100.	1200.	803.	96.	1073.	442.	167.	19.	4.	604.00
.09	1.12	1.82	.58	.060	.045	.060	.039	596.10	52.78
.000260	60.	60.	60.	2	0	1	0.00	404.06	456.84
CCHV= .400 CEHV= .800									
** D/S FACE OF CULVERT ON GOLF COURSE									
501.58	9.62	605.72	0.00	0.00	605.75	.03	.05	.00	601.40
2100.	1201.	800.	99.	1085.	445.	172.	27.	6.	604.00
.13	1.11	1.80	.58	.060	.045	.060	.041	596.10	52.53
.000251	200.	200.	200.	2	0	1	0.00	404.51	457.04

$V = Q/A = 800/28.27 = 28.3$

$V^2/2g = 12.4$

$3.02/3.12 = .97 \Rightarrow$ high sub.

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.00	2.90	375.00	4.71	0.00	28.27	0.00	596.10	596.10

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
777.09	605.75	0.00	2040.	59.	28.	602.10	602.70	30.00

light submergence
HEC-2 manual suggests
Normal Bridge routine.

501.62	9.72	605.82	0.00	0.00	605.86	.04	.11	0.00	602.30
2100.	1303.	780.	17.	1129.	354.	36.	33.	7.	604.00
.16	1.15	2.20	.47	.060	.045	.060	.042	596.10	36.16
.000402	160.	160.	160.	2	0	10	0.00	417.39	453.55
501.70	9.24	605.84	0.00	0.00	605.90	.06	.02	.01	602.80
2100.	1254.	837.	9.	975.	327.	20.	34.	8.	604.50
.17	1.29	2.56	.47	.060	.045	.060	.042	596.60	38.16
.000602	50.	50.	50.	2	0	1	0.00	405.00	443.16
CCHV= .150 CEHV= .350									
501.80	9.39	605.89	0.00	0.00	605.94	.05	.04	.00	604.00
2100.	1428.	660.	12.	1013.	268.	20.	36.	8.	604.00
.18	1.41	2.46	.60	.060	.045	.060	.042	596.50	36.46
.000548	65.	65.	65.	2	0	1	0.00	339.47	375.93

WATER EL=X5 CARD= 606.005

** FOOT BRIDGE ON GOLF COURSE

501.82	9.51	606.01	0.00	0.00	606.05	.05	.00	.00	604.00
2100.	1435.	651.	14.	1045.	274.	23.	36.	8.	604.00
.18	1.37	2.38	.61	.060	.045	.060	.042	596.50	35.98
.000499	1.	1.	1.	0	0	1	0.00	340.55	376.53

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
501.90	9.63	606.03	0.00	0.00	606.08	.04	.02	.00	603.00
2100.	1461.	639.	0.	1075.	286.	1.	38.	9.	605.70
.19	1.36	2.23	.16	.060	.045	.060	.042	596.40	84.84
.000479	50.	50.	50.	2	0	1	0.00	341.54	426.38
501.95	9.47	606.37	0.00	0.00	606.43	.06	.35	.01	604.20
2100.	1326.	655.	119.	923.	226.	90.	57.	14.	601.60
.28	1.44	2.90	1.32	.060	.045	.060	.043	596.90	3.47
.000662	625.	625.	625.	2	0	1	0.00	362.52	365.99

CCHV= .300 CEHV= .500

** D/S FACE OF HICKORY HILL

606.45 > 605.0

501.98	9.55	606.45	0.00	0.00	606.67	.22	.16	.08	604.00
2100.	643.	1414.	43.	342.	320.	36.	60.	15.	604.70
.29	1.88	4.42	1.20	.060	.045	.060	.043	596.90	169.49
.002073	145.	145.	145.	2	0	1	0.00	266.37	435.85

1.45 / 1.71 = .85 ⇒ low sub.

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	250.00	14.00	0.00	107.80	1.63	597.50	597.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
615.88	607.27	0.00	1640.	455.	108.	602.40	605.00	30.00

502.02	9.81	606.71	0.00	0.00	606.89	.18	.22	0.00	604.00
2100.	689.	1356.	55.	387.	335.	46.	60.	15.	604.70
.29	1.78	4.04	1.20	.060	.045	.060	.043	596.90	164.63
.001624	10.	10.	10.	2	0	4	0.00	274.02	438.65
502.10	10.10	606.90	0.00	0.00	606.97	.07	.05	.03	604.40
2100.	907.	777.	416.	638.	261.	284.	61.	15.	603.20

.30	1.42	2.97	1.47	.060	.045	.060	.043	596.80	93.52
.000759	45.	45.	45.	2	0	1	0.00	360.64	454.17

CCHV= .150 CEHV= .350

503.00	10.25	607.35	0.00	0.00	607.38	.03	.40	.01	603.10
2100.	1297.	530.	273.	1245.	243.	293.	90.	24.	604.10
.48	1.04	2.18	.93	.060	.045	.060	.044	597.10	96.02
.000318	855.	855.	855.	2	0	1	0.00	504.21	600.24

CCHV= .300 CEHV= .500

3280 CROSS SECTION 503.90 EXTENDED 3.29 FEET

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
503.90	10.69	607.69	0.00	0.00	608.18	.49	.57	.23	603.40
2100.	585.	1021.	494.	146.	146.	131.	108.	29.	603.90
.51	4.01	7.02	3.77	.060	.045	.060	.044	597.00	233.00
.004496	718.	718.	718.	2	0	1	0.00	97.27	330.27

CCHV= .400 CEHV= .800

** D/S FACE OF SMITH AND DOUGLAS INTERSECTION - 2 CIRCULAR CULVERTS

TW below ELTRD TW low ds side

504.98	8.89	608.19	0.00	0.00	608.39	.20	.09	.12	604.00
1900.	53.	1795.	52.	44.	484.	44.	109.	29.	604.00
.52	1.19	3.71	1.19	.060	.045	.060	.044	599.30	393.77
.000889	53.	53.	53.	3	0	1	0.00	107.16	500.93

D/S face 867

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.10	2.60	0.00	17.50	0.00	87.50	0.00	599.30	599.30

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
623.56	608.39	0.00	1043.	867.	88.	604.30	609.10	30.00

W.S. low

505.02	12.01	611.31	0.00	0.00	611.39	.08	3.00	0.00	604.00
1900.	123.	1655.	122.	136.	686.	136.	112.	29.	604.00
.54	.90	2.41	.90	.060	.045	.060	.044	599.30	372.01
.000235	190.	190.	190.	2	0	6	0.00	159.09	531.10

U/S face 867

3280 CROSS SECTION 506.10 EXTENDED 1.46 FEET

506.10	13.37	611.37	0.00	0.00	611.42	.05	.02	.01	603.80

Lw ≈ 122.1 ft

1900.	1053.	640.	207.	781.	256.	200.	114.	30.	605.20
.55	1.35	2.50	1.04	.060	.045	.060	.044	598.00	164.16
.000295	71.	71.	71.	2	0	1	0.00	231.31	395.47

CCHV= .150 CEHV= .350

507.00	12.19	611.59	0.00	0.00	611.60	.01	.18	.01	603.70
1900.	976.	449.	475.	1436.	335.	751.	163.	40.	606.30
.94	.68	1.34	.63	.060	.045	.060	.044	599.40	270.77
.000094	1140.	1140.	1140.	2	0	1	0.00	558.44	829.20

507.10	11.59	611.59	0.00	0.00	611.61	.02	.01	.00	604.50
1900.	1228.	556.	116.	1430.	308.	155.	168.	41.	604.80
.96	.86	1.81	.75	.060	.045	.060	.044	600.00	52.29
.000156	100.	100.	100.	2	0	1	0.00	406.23	458.52

WATER EL=X5 CARD= 611.642

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

** FOOT BRIDGE

507.15	11.64	611.64	0.00	0.00	611.66	.02	.00	.00	604.50
1900.	1231.	552.	117.	1446.	309.	157.	168.	41.	604.80
.96	.85	1.79	.74	.060	.045	.060	.044	600.00	52.07
.000151	1.	1.	1.	0	0	1	0.00	406.99	459.06

507.20	11.66	611.66	0.00	0.00	611.67	.01	.01	.00	604.80
1270.	882.	318.	70.	1312.	228.	117.	170.	42.	604.10
.98	.67	1.40	.60	.060	.045	.060	.044	600.00	85.45
.000102	50.	50.	50.	1	0	1	0.00	369.64	455.09

507.80	9.33	611.83	0.00	0.00	611.91	.08	.22	.02	608.50
1270.	518.	670.	82.	463.	224.	76.	201.	49.	602.70
1.12	1.12	2.99	1.08	.060	.045	.060	.044	602.50	107.80
.000533	1100.	1100.	1100.	2	0	1	0.00	259.08	366.88

Spring Brook Cr
no change in WSP

WATER EL=X5 CARD= 611.861

** FOOT BRIDGE

507.85	9.36	611.86	0.00	0.00	611.94	.08	.00	.00	608.50
1270.	521.	667.	82.	468.	225.	76.	201.	49.	602.70
1.12	1.11	2.97	1.07	.060	.045	.060	.044	602.50	107.02
.000523	1.	1.	1.	0	0	1	0.00	260.06	367.08

507.90	7.80	612.80	0.00	0.00	612.98	.17	1.00	.03	608.10
1270.	437.	477.	356.	206.	102.	160.	217.	55.	607.10
1.23	2.12	4.65	2.23	.060	.045	.060	.044	605.00	146.89
.001750	1145.	1145.	1145.	3	0	1	0.00	162.12	309.01

CCHV= .150 CEHV= .350

** D/S FACE OF KENILWORTH

507.98	6.93	612.93	0.00	0.00	613.47	.54	.37	.13	609.20
1270.	107.	1058.	105.	44.	166.	46.	218.	55.	609.50
1.23	2.40	6.38	2.28	.060	.045	.060	.044	606.00	313.19
.004163	143.	143.	143.	3	0	1	0.00	81.60	394.79

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	125.00	17.00	0.00	146.50	1.15	606.00	606.00

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
614.57	613.47	0.00	169.	1095.	147.	612.10	613.50	30.00

614.15
612.93
1.22

$Q = 2.6 \times 125 \times 0.5^{3/2}$

$Q = 170$ cfs

508.02	7.82	613.82	0.00	0.00	614.15	.33	.67	0.00	609.20
1270.	136.	988.	145.	68.	194.	77.	218.	55.	609.50
1.23	2.00	5.11	1.89	.060	.045	.060	.044	606.00	307.52
.002176	15.	15.	15.	2	0	2	0.00	129.25	436.77

CCHV= .300 CEHV= .500

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST
508.10	9.52	614.22	0.00	0.00	614.26	.04	.03	.09	609.60
1270.	680.	489.	101.	571.	237.	118.	219.	56.	610.70
1.24	1.19	2.07	.85	.060	.045	.060	.044	604.70	83.98
.000320	42.	42.	42.	3	0	1	0.00	216.93	300.91
509.00	7.80	614.60	0.00	0.00	614.66	.06	.39	.01	612.00
1270.	586.	670.	14.	505.	277.	21.	236.	61.	612.70
1.37	1.16	2.42	.67	.060	.045	.060	.045	606.80	73.16
.000738	838.	838.	838.	3	0	1	0.00	309.07	382.24

CCHV= .350 CEHV= .600

3280 CROSS SECTION 509.90 EXTENDED 3.92 FEET

509.90	8.13	615.63	0.00	0.00	615.68	.05	1.01	.00	611.10
1270.	110.	558.	601.	124.	237.	498.	270.	72.	612.50
1.66	.89	2.36	1.21	.060	.045	.060	.045	607.50	63.00
.000451	1780.	1780.	1780.	2	0	1	0.00	240.00	303.00

CCHV= .300 CEHV= .500

** D/S FACE OF SECOR RD

509.98	7.17	615.67	0.00	0.00	615.93	.26	.15	.10	613.50
1080.	88.	969.	23.	81.	226.	21.	272.	73.	614.00
1.68	1.09	4.30	1.08	.060	.045	.060	.045	608.50	656.06
.002413	180.	180.	180.	3	0	1	0.00	219.25	875.31

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	280.00	15.00	0.00	90.00	0.00	609.30	609.30

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
618.80	616.73	0.00	453.	628.	90.	615.30	616.00	30.00

510.02	8.13	616.63	0.00	0.00	616.73	.10	.80	0.00	613.50
1080.	244.	791.	45.	270.	274.	52.	272.	73.	614.00
1.68	.90	2.89	.86	.060	.045	.060	.045	608.50	578.98
.000844	39.	39.	39.	2	0	4	0.00	310.87	889.86

3280 CROSS SECTION 510.10 EXTENDED 5.26 FEET

510.10	9.66	616.76	0.00	0.00	616.76	.01	.01	.03	610.70
1080.	557.	136.	387.	948.	135.	732.	274.	73.	610.20
1.70	.59	1.00	.53	.060	.045	.060	.045	607.10	245.00
.000064	46.	46.	46.	2	0	1	0.00	391.00	636.00

CCHV= .300 CEHV= .500

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
510.20	9.77	616.77	0.00	0.00	616.77	.01	.01	.00	612.80
1080.	794.	202.	83.	1334.	161.	180.	279.	75.	612.80
1.76	.60	1.26	.46	.060	.035	.060	.044	607.00	199.83
.000079	140.	140.	140.	2	0	1	0.00	385.44	585.27

WATER EL=X5 CARD= 616.776

** FOOT BRIDGE

510.25	9.78	616.78	0.00	0.00	616.78	.01	.00	.00	612.80
1080.	795.	202.	84.	1337.	161.	181.	279.	75.	612.80
1.76	.59	1.25	.46	.060	.035	.060	.044	607.00	199.79
.000078	1.	1.	1.	0	0	1	0.00	385.53	585.32

510.90	7.62	616.92	0.00	0.00	616.95	.03	.16	.01	613.30
1080.	210.	238.	633.	185.	113.	571.	309.	82.	613.60
1.96	1.14	2.11	1.11	.060	.045	.060	.045	609.30	328.58
.000481	1000.	1000.	1000.	2	0	1	0.00	283.72	612.30

** COVERED FOOT BRIDGE

510.98	7.46	616.96	0.00	0.00	616.99	.03	.04	.00	613.50
1080.	208.	246.	626.	175.	109.	539.	310.	83.	613.80
1.98	1.19	2.25	1.16	.060	.045	.060	.045	609.50	329.28
.000566	70.	70.	70.	2	0	1	0.00	282.28	611.56

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.09	1.50	2.50	0.00	8.18	0.00	27.00	0.00	609.50	609.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
654.23	616.99	0.00	1009.	63.	27.	612.80	613.30	30.00

510.99	7.56	617.06	0.00	0.00	617.09	.02	.09	0.00	613.00
1080.	172.	392.	517.	206.	229.	617.	310.	83.	613.90
1.98	.83	1.71	.84	.060	.045	.060	.045	609.50	327.49
.000228	10.	10.	10.	2	0	8	0.00	287.16	614.65

511.00	7.29	617.09	0.00	0.00	617.12	.03	.03	.00	613.30
1080.	167.	410.	503.	188.	220.	566.	313.	84.	614.20
2.01	.89	1.87	.89	.060	.045	.060	.045	609.80	328.69
.000285	120.	120.	120.	2	0	1	0.00	284.57	613.26

511.10	7.51	617.11	0.00	0.00	617.18	.07	.04	.02	615.00
1080.	137.	450.	493.	117.	153.	399.	314.	84.	614.90
2.02	1.17	2.95	1.23	.060	.045	.060	.045	609.60	331.31
.000909	80.	80.	80.	2	0	1	0.00	278.86	610.17

WATER EL=X5 CARD= 617.409

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

** FOOT BRIDGE

511.15	7.81	617.41	0.00	0.00	617.46	.05	.00	.01	615.00
1080.	146.	415.	519.	136.	161.	457.	315.	84.	614.90
2.02	1.08	2.58	1.14	.060	.045	.060	.045	609.60	329.86
.000650	1.	1.	1.	0	0	1	0.00	281.75	611.61

CCHV= .200 CEHV= .400

511.50	6.33	618.33	0.00	0.00	618.46	.13	.97	.03	615.30
1080.	253.	430.	397.	154.	102.	274.	326.	89.	615.50
2.11	1.64	4.19	1.45	.085	.055	.085	.045	612.00	193.24
.002977	800.	800.	800.	3	0	1	0.00	271.83	465.07
512.00	6.28	620.78	0.00	0.00	620.92	.14	2.46	.00	617.80
1080.	252.	436.	392.	151.	102.	265.	336.	94.	618.00
2.19	1.67	4.30	1.48	.085	.055	.085	.046	614.50	193.36
.003166	800.	800.	800.	2	0	1	0.00	268.61	461.97
513.00	5.98	624.08	0.00	0.00	624.12	.04	3.19	.02	621.40
1080.	723.	317.	40.	625.	134.	54.	366.	107.	621.40
2.56	1.16	2.37	.74	.085	.055	.085	.047	618.10	238.26
.000956	2000.	2000.	2000.	3	0	1	0.00	274.30	512.57
513.50	4.69	624.59	0.00	0.00	624.73	.13	.57	.04	623.20
1080.	650.	417.	13.	361.	100.	14.	371.	109.	623.20
2.59	1.80	4.18	.90	.085	.055	.085	.047	619.90	252.85
.004370	320.	320.	320.	2	0	1	0.00	240.94	493.79
513.80	4.50	628.00	0.00	0.00	628.41	.41	3.57	.11	625.50
1080.	296.	683.	101.	137.	108.	54.	377.	111.	625.50
2.63	2.17	6.30	1.88	.085	.055	.085	.047	623.50	340.06
.008590	600.	600.	600.	2	0	1	0.00	174.92	514.97

** BEDFORD - WHITEFORD LINE

514.00	4.87	633.27	0.00	0.00	633.52	.25	5.07	.03	630.10
1080.	267.	805.	7.	139.	179.	6.	382.	114.	630.90
2.68	1.92	4.51	1.29	.085	.055	.085	.048	628.40	382.05
.004983	790.	790.	790.	4	0	1	0.00	132.84	514.89
514.50	4.55	637.05	0.00	0.00	637.98	.93	4.19	.27	635.00
1080.	136.	937.	7.	55.	113.	4.	386.	116.	635.50
2.71	2.49	8.26	1.75	.055	.035	.055	.047	632.50	406.00
.006291	750.	750.	750.	2	0	1	0.00	83.91	489.91

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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	ERDST
515.00	5.23	640.93	640.70	0.00	642.02	1.09	3.98	.06	639.80
1080.	87.	992.	1.	42.	114.	1.	389.	117.	640.00
2.73	2.07	8.72	1.20	.055	.035	.055	.047	635.70	286.09
.006776	610.	610.	610.	4	8	1	0.00	76.40	362.50

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

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
	** WEIR IN CREEK								
515.10	3.62	641.72	641.72	0.00	642.72	.99	.02	0.00	639.80
1080.	307.	767.	5.	88.	83.	2.	389.	117.	640.00
2.73	3.51	9.22	2.16	.055	.035	.055	.047	638.10	272.93
.009737	3.	3.	3.	30	19	1	0.00	90.82	363.76
515.15	6.80	642.50	0.00	0.00	642.85	.35	.01	.13	639.80
1080.	261.	813.	6.	143.	151.	5.	389.	117.	640.00
2.73	1.83	5.37	1.18	.055	.035	.055	.047	635.70	259.95
.001754	3.	3.	3.	5	0	1	0.00	105.06	365.01
515.20	5.89	642.69	0.00	0.00	643.03	.35	.18	.00	640.50
1080.	244.	797.	39.	154.	147.	22.	389.	118.	641.20
2.74	1.58	5.42	1.81	.055	.035	.055	.047	636.80	86.95
.003682	72.	72.	72.	4	0	1	0.00	241.62	328.57

WATER EL=X5 CARD= 642.885
3280 CROSS SECTION 515.25 EXTENDED 1.59 FEET

** CREEK SPLITS - 2 FOOT BRIDGES

515.25	6.09	642.89	0.00	0.00	643.29	.40	.00	.02	640.50
1080.	169.	860.	51.	69.	154.	26.	389.	118.	641.20
2.74	2.43	5.58	1.98	.055	.035	.055	.047	636.80	235.00
.003662	1.	1.	1.	0	0	1	0.00	94.29	329.29

CCHV= .300 CEHV= .500

** DRIVEWAY CULVERT (CREEK HAS COME TOGETHER JUST D/S OF HERE)

515.28	5.89	642.89	0.00	0.00	643.67	.78	.19	.19	641.10
1080.	190.	887.	3.	79.	114.	2.	390.	118.	641.30
2.74	2.40	7.76	1.47	.055	.035	.055	.047	637.00	275.19
.004999	45.	45.	45.	2	0	1	0.00	88.35	363.54

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.80	125.00	11.00	0.00	51.70	0.00	637.00	637.00

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
652.37	644.27	0.00	589.	499.	52.	641.70	643.50	30.00

515.32	7.71	644.71	0.00	0.00	644.91	.21	1.25	0.00	641.10
1080.	377.	693.	10.	237.	158.	9.	390.	118.	641.30
2.74	1.59	4.38	1.11	.055	.035	.055	.047	637.00	146.16
.001035	14.	14.	14.	2	0	4	0.00	220.30	366.46

should this be encroached to 125 ft due to weir I 220.30 > 125

515.40	7.44	644.64	0.00	0.00	645.00	.36	.01	.08	641.30
1080.	604.	448.	27.	205.	68.	13.	390.	118.	641.50
2.74	2.94	6.57	2.06	.055	.035	.055	.047	637.20	228.26
.003462	4.	4.	4.	2	0	1	0.00	130.23	358.49

** WEIR IN CREEK

515.45	5.43	644.63	0.00	0.00	645.01	.39	.00	.02	641.30
1080.	675.	374.	31.	204.	52.	13.	390.	118.	641.50
2.74	3.32	7.18	2.32	.055	.035	.055	.047	639.20	235.91
.004418	1.	1.	1.	5	0	1	0.00	122.54	358.45

515.47	7.49	644.69	643.56	0.00	645.03	.34	.00	.01	641.30
1080.	609.	443.	28.	212.	69.	14.	390.	118.	641.50
2.74	2.88	6.44	2.03	.055	.035	.055	.047	637.20	203.41
.003293	1.	1.	1.	11	11	1	0.00	155.21	358.62

515.50	7.05	644.85	0.00	0.00	645.18	.33	.14	.00	641.90
1080.	315.	758.	8.	163.	142.	6.	390.	118.	642.10
2.75	1.93	5.32	1.26	.055	.035	.055	.047	637.80	255.68
.001753	61.	61.	61.	2	0	1	0.00	109.73	365.41

** WEIR IN CREEK

515.55	4.73	644.83	0.00	0.00	645.20	.37	.00	.02	641.90
1080.	379.	670.	32.	161.	113.	15.	390.	118.	640.10
2.75	2.36	5.95	2.13	.055	.035	.055	.047	640.10	256.15
.002643	1.	1.	1.	4	0	1	0.00	111.15	367.31

515.57	7.11	644.91	0.00	0.00	645.22	.32	.00	.02	641.90
1080.	319.	753.	8.	167.	143.	6.	390.	118.	642.10
2.75	1.91	5.25	1.25	.055	.035	.055	.047	637.80	254.94
.001691	1.	1.	1.	4	0	1	0.00	110.55	365.49

515.85	4.48	646.18	0.00	0.00	646.39	.21	1.13	.03	644.10
1080.	671.	297.	111.	222.	57.	69.	393.	119.	644.00
2.78	3.02	5.21	1.61	.060	.050	.100	.047	641.70	73.03
.005713	400.	400.	400.	3	0	1	0.00	169.73	242.76

SECND	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
515.90	3.86	648.66	0.00	0.00	649.13	.46	2.61	.13	647.20
1080.	611.	374.	95.	154.	48.	44.	395.	120.	647.10
2.79	3.97	7.71	2.17	.060	.050	.100	.047	644.80	74.59
.015599	294.	294.	294.	3	0	1	0.00	161.37	235.96

** D/S FACE OF STERNS RD

515.93	5.20	650.00	0.00	0.00	650.94	.94	1.57	.24	648.20
1080.	65.	963.	53.	25.	117.	30.	396.	121.	647.80
2.80	2.55	8.20	1.75	.060	.050	.100	.047	644.80	297.88
.012300	114.	114.	114.	3	0	1	0.00	84.49	342.36

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.70	0.00	8.00	0.00	44.80	0.00	644.80	644.80

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
664.44	650.94	0.00	402.	679.	45.	650.40	654.80	30.00

516.02	10.87	655.67	0.00	0.00	655.70	.03	4.76	0.00	648.20
1080.	356.	490.	234.	398.	282.	498.	396.	121.	647.80
2.81	.90	1.74	.47	.060	.050	.100	.047	644.80	184.20
.000172	36.	36.	36.	2	0	7	0.00	336.55	520.75

3280 CROSS SECTION 516.10 EXTENDED 1.78 FEET

516.10	9.98	655.68	0.00	0.00	655.71	.03	.01	.00	648.30
1080.	194.	424.	463.	268.	223.	718.	398.	121.	649.20
2.82	.72	1.90	.64	.080	.050	.080	.047	645.70	268.04
.000234	50.	50.	50.	2	0	1	0.00	331.96	600.00

CCHV= .150 CEHV= .350

517.00	7.12	655.82	0.00	0.00	655.96	.15	.22	.04	653.50
1080.	9.	544.	528.	11.	132.	360.	405.	124.	650.30
2.86	.78	4.11	1.46	.100	.055	.100	.047	648.70	372.43

.002323	400.	400.	400.	3	0	1	0.00	228.56	600.99

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twps.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: 100 yr.

00BREAK00

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


T1   HUD-FIA H-4705
T2   BEDFORD
T3      HALFWAY CREEK - U/S END - 100 YEAR FLOW  Q=2100 CFS - ENCROACHMENT OPTIO

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     C         WSEL      FQ

      -1.        6.        0.        0.  0.000000      0.00       1.0        0.    604.900     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     2.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    4232.42  WSEL=     604.90  ENC Q1=    4232.42  WSEL=     605.00  RATIO=    .0000
 NAT Q1=    4363.  RATIOS LOB,CH,ROB=    .0488    .0856    .8656  WSEL=     605.00
   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


3470 ENCROACHMENT STATIONS=      226.3      892.6  TYPE=      4  TARGET=         .030

         **  MICHIGAN - OHIO LINE

   501.00    10.20   604.90     0.00   604.90   604.91      .01      0.00      0.00   599.50
    2100.      110.     183.     1807.     257.     237.    3102.       0.        0.    602.00
     0.00      .43      .77      .58      .040     .035     .040     0.000   594.70   226.27
  .000025       0.       0.       0.        0        0        1     0.00    666.28   892.55


 2800 NAT Q1=    4105.15  WSEL=     604.90  ENC Q1=    4105.15  WSEL=     605.00  RATIO=    .0000
 NAT Q1=    4234.  RATIOS LOB,CH,ROB=    .0479    .0864    .8657  WSEL=     605.00

3470 ENCROACHMENT STATIONS=      228.7      892.2  TYPE=      4  TARGET=         .030
   501.10    10.10   604.90     0.00   604.90   604.91      .01       .00       .00   599.60
    2100.      108.     185.     1807.     246.     234.    3045.       3.        1.    602.10
      .02      .44      .79      .59      .040     .035     .040      .034   594.80   228.74
  .000027       40.      40.      40.         2        0        1     0.00    663.50   892.24


 WATER EL=X5 CARD=   604.921
 2800 NAT Q1=    4130.69  WSEL=     604.92  ENC Q1=    4130.69  WSEL=     605.02  RATIO=    .0000
 NAT Q1=    4259.  RATIOS LOB,CH,ROB=    .0481    .0862    .8657  WSEL=     605.02

3470 ENCROACHMENT STATIONS=      228.2      892.3  TYPE=      4  TARGET=         .030

         **  FOOT BRIDGE ON GOLF COURSE

   501.15    10.22   605.02     0.00   604.92   605.03      .01       .00       .00   599.60
    2100.      110.     183.     1807.     256.     238.    3112.       3.        1.    602.10
      .02      .43      .77      .58      .040     .035     .040      .033   594.80   228.24
  .000025       1.       1.       1.        0        0        1     0.00    664.06   892.30


 2800 NAT Q1=    3620.65  WSEL=     604.92  ENC Q1=    3620.65  WSEL=     605.02  RATIO=    .0000
 NAT Q1=    3736.  RATIOS LOB,CH,ROB=    .0047    .1055    .8898  WSEL=     605.02
3280 CROSS SECTION     501.20 EXTENDED       4.92 FEET


   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


3470 ENCROACHMENT STATIONS=       82.0      663.0  TYPE=      4  TARGET=         .031
   501.20     9.92   605.02     0.00   604.92   605.03       .01       .00       .00   601.30
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   2100.       0.     228.    1872.       0.     285.    2848.       7.       1.    601.90
    .04       .00      .80      .66     .040     .035     .040     .034   595.10    82.00
.000034       50.      50.      50.        2        0        1     0.00   581.04   663.04


CCHV=    .400 CEHV=    .600
 2800 NAT Q1=     402.54  WSEL=     604.67  ENC Q1=     402.54  WSEL=     604.77  RATIO=    .0000
 NAT Q1=     413.  RATIOS LOB,CH,ROB=    .1311    .7359    .1331  WSEL=     604.77

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=       75.5     131.6  TYPE=      4  TARGET=         .026
   501.30     10.07   604.77      0.00   604.67   605.44      .66       .02       .39   599.10
    2100.      254.     1558.      288.      56.      219.      65.       13.       2.    599.40
      .05      4.54     7.12      4.43     .045     .040     .045     .037   594.70    75.46
 .002625       150.     150.      150.        2        0        1     0.00    56.10   131.56


 2800 NAT Q1=    1557.31  WSEL=     605.63  ENC Q1=    1557.31  WSEL=     605.73  RATIO=  0.0000
 NAT Q1=    1610.  RATIOS LOB,CH,ROB=    .6769    .2650    .0581  WSEL=     605.73

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      122.5     420.7  TYPE=      4  TARGET=         .032
   501.40     10.43   605.73      0.00   605.63   605.76      .03       .07       .25   600.40
    2100.     1416.      564.      120.    1123.      302.     110.       16.       3.    600.00
      .08      1.26     1.87      1.09     .045     .040     .045     .038   595.30   122.48
 .000175       150.     150.      150.        2        0        1     0.00   298.18   420.66


 WATER EL=X5 CARD=    605.756
 2800 NAT Q1=    1573.00  WSEL=     605.66  ENC Q1=    1573.00  WSEL=     605.76  RATIO=    .0000
 NAT Q1=    1625.  RATIOS LOB,CH,ROB=    .6774    .2641    .0585  WSEL=     605.76

3470 ENCROACHMENT STATIONS=      122.3     420.8  TYPE=      4  TARGET=         .032

         **  FOOT BRIDGE ON GOLF COURSE

   501.45     10.46   605.76      0.00   605.66   605.79      .03       .00       .00   600.40
    2100.     1417.      562.      121.    1131.      304.     111.       16.       3.    600.00
      .08      1.25     1.85      1.08     .045     .040     .045     .038   595.30   122.34
 .000172         1.       1.         1.        0        0        1     0.00   298.48   420.82


CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    1303.17  WSEL=     605.67  ENC Q1=    1303.17  WSEL=     605.77  RATIO=    .0000
 NAT Q1=    1348.  RATIOS LOB,CH,ROB=    .5721    .3793    .0486  WSEL=     605.77
   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


3470 ENCROACHMENT STATIONS=       73.6     419.2  TYPE=      4  TARGET=         .033
   501.50      9.67   605.77      0.00   605.67   605.80      .03       .01       .00   601.40
    2100.     1211.      817.       72.    1060.      449.     117.       19.       3.    604.00
      .09      1.14     1.82       .62     .060     .045     .060     .039   596.10    73.56
 .000255         60.      60.       60.        2        0        1     0.00   345.65   419.21
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CCHV=    .400 CEHV=    .800
 2800 NAT Q1=   1326.17  WSEL=    605.72  ENC Q1=   1326.17  WSEL=    605.82  RATIO=   0.0000
 NAT Q1=   1372.  RATIOS LOB,CH,ROB=   .5724   .3776   .0500  WSEL=    605.82

3470 ENCROACHMENT STATIONS=      73.4     420.1  TYPE=     4  TARGET=         .033

         **  D/S FACE OF CULVERT ON GOLF COURSE

   501.58      9.72   605.82      0.00   605.72   605.85      .03      .05      .00   601.40
    2100.     1212.     813.       75.    1071.     452.     122.      26.       5.    604.00
      .13      1.13     1.80       .62     .060     .045     .060     .041   596.10    73.43
  .000247      200.     200.      200.        2        0        1     0.00   346.68   420.11


SPECIAL BRIDGE

SB   XK          XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00        2.00       2.90     375.00       4.71       0.00      28.27       0.00     596.10     596.10

 2800 NAT Q1=   1047.46  WSEL=    605.82  ENC Q1=   1047.46  WSEL=    605.92  RATIO=   .0000
 NAT Q1=   1090.  RATIOS LOB,CH,ROB=   .6248   .3664   .0089  WSEL=    605.92
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      61.7     414.0  TYPE=     4  TARGET=         .039
   501.62      9.82   605.92      0.00   605.82   605.96      .04      .05      .01   602.30
    2100.     1311.     789.         0.    1096.     359.       0.      32.       6.    604.00
      .16      1.20     2.19       0.00     .060     .045     .060     .042   596.10    61.71
  .000408      160.     160.      160.        0        0       10     0.00   352.29   414.00


 2800 NAT Q1=    856.12  WSEL=    605.84  ENC Q1=    856.12  WSEL=    605.94  RATIO=   .0000
 NAT Q1=    895.  RATIOS LOB,CH,ROB=   .6027   .3922   .0050  WSEL=    605.94

3470 ENCROACHMENT STATIONS=      67.4     414.0  TYPE=     4  TARGET=         .043
   501.70      9.34   605.94      0.00   605.84   606.00      .06      .02      .01   602.80
    2100.     1249.     851.         0.     937.     333.       0.      33.       7.    604.50
      .16      1.33     2.56       0.00     .060     .045     .060     .042   596.60    67.37
  .000607       50.      50.       50.        2        0        1     0.00   346.63   414.00


CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    896.89  WSEL=    605.89  ENC Q1=    896.89  WSEL=    605.99  RATIO=   .0000
 NAT Q1=    932.  RATIOS LOB,CH,ROB=   .6829   .3106   .0064  WSEL=    605.99

3470 ENCROACHMENT STATIONS=      58.1     354.0  TYPE=     4  TARGET=         .038
   501.80      9.49   605.99      0.00   605.89   606.04      .05      .04      .00   604.00
    2100.     1438.     662.         0.     987.     273.       0.      35.       7.    604.00
      .17      1.46     2.43       0.00     .060     .045     .060     .042   596.50    58.12
  .000552       65.      65.       65.        2        0        1     0.00   295.87   354.00


 WATER EL=X5 CARD=   606.105
 2800 NAT Q1=    939.64  WSEL=    606.01  ENC Q1=    939.64  WSEL=    606.11  RATIO=   .0000
 NAT Q1=    976.  RATIOS LOB,CH,ROB=   .6863   .3064   .0073  WSEL=    606.11
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       ARCB      VOL       TWA     LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST
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3470 ENCROACHMENT STATIONS=      57.3      354.0  TYPE=      4  TARGET=         .037

        **  FOOT BRIDGE ON GOLF COURSE

   501.82      9.61    606.11      0.00    606.01    606.15       .05       .00       .00    604.00
    2100.     1448.      652.        0.     1020.      278.        0.       35.        7.     604.00
      .17      1.42      2.35      0.00      .060      .045      .060      .042    596.50     57.33
  .000504        1.        1.        1.         0         0         1      0.00    296.67    354.00


 2800 NAT Q1=     959.18  WSEL=     606.03  ENC Q1=     959.18  WSEL=     606.13  RATIO=     .0000
 NAT Q1=     996.  RATIOS LOB,CH,ROB=    .6982    .3016    .0002  WSEL=     606.13

3470 ENCROACHMENT STATIONS=      119.9      420.0  TYPE=      4  TARGET=         .037
   501.90      9.73    606.13      0.00    606.03    606.18       .04       .02       .00    603.00
    2100.     1450.      650.        0.     1037.      291.        0.       37.        8.     605.70
      .18      1.40      2.23       .01      .060      .045      .060      .042    596.40     119.85
  .000468        50.       50.       50.         2         0         1      0.00    300.15    420.00


 2800 NAT Q1=     816.43  WSEL=     606.37  ENC Q1=     816.43  WSEL=     606.47  RATIO=   0.0000
 NAT Q1=     850.  RATIOS LOB,CH,ROB=    .6357    .3067    .0576  WSEL=     606.47

3470 ENCROACHMENT STATIONS=       25.2      346.2  TYPE=      4  TARGET=         .039
   501.95      9.56    606.46      0.00    606.37    606.52       .06       .34       .01    604.20
    2100.     1361.      651.       88.      939.      229.       58.       55.       12.     601.60
      .27      1.45      2.84      1.52      .060      .045      .060      .043    596.90     25.23
  .000628       625.      625.      625.         2         0         1      0.00    320.97    346.20


CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     461.27  WSEL=     606.45  ENC Q1=     461.27  WSEL=     606.55  RATIO=     .0000
 NAT Q1=     484.  RATIOS LOB,CH,ROB=    .3148    .6624    .0228  WSEL=     606.55

3470 ENCROACHMENT STATIONS=      205.1      400.0  TYPE=      4  TARGET=         .046

        **  D/S FACE OF HICKORY HILL

   501.98      9.63    606.53      0.00    606.45    606.76       .23       .15       .09    604.00
    2100.      652.     1448.        0.      319.      324.        0.       58.       13.     604.70
      .29      2.04      4.46      0.00      .060      .045      .060      .043    596.90     205.08
  .002151       145.      145.      145.         2         0         1      0.00    194.92    400.00


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
     0.00        1.60        2.80       250.00      14.00        0.00       107.80        1.63      597.50      597.50

 2800 NAT Q1=     521.08  WSEL=     606.71  ENC Q1=     521.08  WSEL=     606.81  RATIO=     .0000
 NAT Q1=     545.  RATIOS LOB,CH,ROB=    .3357    .6360    .0283  WSEL=     606.81
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      202.2      407.3  TYPE=      4  TARGET=         .043
   502.02      9.89    606.79      0.00    606.71    606.98       .19       .02       .01    604.00
    2100.      686.     1392.       22.      360.      340.       14.       58.       13.     604.70
      .29      1.90      4.09      1.56      .060      .045      .060      .043    596.90     202.20
  .001635        10.       10.       10.         0         0         6      0.00    205.10    407.30
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 2800 NAT Q1=     762.04  WSEL=     606.90  ENC Q1=     762.04  WSEL=     607.00  RATIO=    .0000
 NAT Q1=     795.  RATIOS LOB,CH,ROB=    .4369    .3632    .1998  WSEL=     607.00
   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


3470 ENCROACHMENT STATIONS=      115.4      436.6  TYPE=      4  TARGET=         .042
   502.10     10.19    606.99      0.00    606.90    607.06      .07       .05       .04    604.40
    2100.      922.     767.      410.      642.      265.      270.       59.       13.     603.20
      .29      1.44     2.90      1.52      .060      .045      .060      .043    596.80    115.39
  .000707       45.      45.       45.         2         0         1      0.00    321.17    436.56


CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    1177.91  WSEL=     607.35  ENC Q1=    1177.91  WSEL=     607.45  RATIO=    .0000
 NAT Q1=    1226.  RATIOS LOB,CH,ROB=    .6212    .2471    .1317  WSEL=     607.45

3470 ENCROACHMENT STATIONS=      152.8      570.4  TYPE=      4  TARGET=         .040
   503.00     10.33    607.43      0.00    607.35    607.46      .03       .39       .01    603.10
    2100.     1320.     538.      242.     1213.      245.      241.       88.       20.     604.10
      .47      1.09     2.20      1.00      .060      .045      .060      .044    597.10    152.79
  .000318       855.     855.      855.         2         0         1      0.00    417.64    570.42


CCHV=    .300 CEHV=    .500
 2800 NAT Q1=     313.20  WSEL=     607.69  ENC Q1=     313.20  WSEL=     607.79  RATIO=  0.0000
 NAT Q1=     324.  RATIOS LOB,CH,ROB=    .2809    .4811    .2380  WSEL=     607.79
3280 CROSS SECTION     503.90 EXTENDED       3.36 FEET


3470 ENCROACHMENT STATIONS=      236.1      327.3  TYPE=      4  TARGET=         .032
   503.90     10.76    607.76      0.00    607.69    608.27      .52       .57       .24    603.40
    2100.      574.    1046.      480.      138.      147.      124.      105.       25.     603.90
      .50      4.16     7.12      3.87      .060      .045      .060      .044    597.00    236.07
  .004568       718.     718.      718.         2         0         1      0.00     91.21    327.28


CCHV=    .400 CEHV=    .800
 2800 NAT Q1=     637.23  WSEL=     608.19  ENC Q1=     637.23  WSEL=     608.29  RATIO=    .0000
 NAT Q1=     653.  RATIOS LOB,CH,ROB=    .0290    .9424    .0286  WSEL=     608.29

3470 ENCROACHMENT STATIONS=      402.3      492.4  TYPE=      4  TARGET=         .024

         **  D/S FACE OF SMITH AND DOUGLAS INTERSECTION - 2 CIRCULAR CULVERTS

   504.98      9.00    608.30      0.00    608.19    608.49      .20       .09       .13    604.00
    1900.       57.     1786.       56.       39.      491.       38.      106.       25.     604.00
      .51      1.49     3.64      1.49      .060      .045      .060      .044    599.30    402.34
  .000838       53.      53.       53.         3         0         1      0.00     90.01    492.35


SPECIAL BRIDGE

SB  XK          XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       2.10       2.60       0.00      17.50       0.00      87.50       0.00     599.30     599.30
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 2800 NAT Q1=    1238.71  WSEL=     611.31  ENC Q1=    1238.71  WSEL=     611.41  RATIO=    .0000
 NAT Q1=    1263.  RATIOS LOB,CH,ROB=    .0662    .8679    .0659  WSEL=     611.41
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   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


3470 ENCROACHMENT STATIONS=      384.2      510.0  TYPE=      4  TARGET=          .019
   505.02     12.12    611.42      0.00    611.31    611.50       .08       .07       .05    604.00
    1900.      132.     1638.      130.      135.      694.      133.      109.       25.     604.00
      .53       .98      2.36       .98      .060      .045      .060      .044    599.30    384.22
  .000222      190.      190.      190.         0         0         6      0.00    125.78    510.00


 2800 NAT Q1=    1105.50  WSEL=     611.37  ENC Q1=    1105.50  WSEL=     611.47  RATIO=    .0000
 NAT Q1=    1136.  RATIOS LOB,CH,ROB=    .5557    .3330    .1112  WSEL=     611.47
3280 CROSS SECTION     506.10 EXTENDED       1.57 FEET


3470 ENCROACHMENT STATIONS=      176.7      389.1  TYPE=      4  TARGET=          .027
   506.10     13.48    611.48      0.00    611.37    611.52       .05       .02       .01    603.80
    1900.     1061.      631.      208.      788.      258.      194.      111.       26.     605.20
      .54      1.35      2.44      1.07      .060      .045      .060      .044    598.00    176.72
  .000277       71.       71.       71.         2         0         1      0.00    212.37    389.10


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=    1960.34  WSEL=     611.59  ENC Q1=    1960.34  WSEL=     611.69  RATIO=    .0000
 NAT Q1=    2028.  RATIOS LOB,CH,ROB=    .5155    .2329    .2516  WSEL=     611.69

3470 ENCROACHMENT STATIONS=      315.4      795.5  TYPE=      4  TARGET=          .033
   507.00     12.29    611.69      0.00    611.59    611.70       .01       .17       .01    603.70
    1900.      986.      454.      460.     1407.      338.      696.      159.       35.     606.30
      .92       .70      1.34       .66      .060      .045      .060      .044    599.40    315.43
  .000093     1140.     1140.     1140.         2         0         1      0.00    480.11    795.55


 2800 NAT Q1=    1520.38  WSEL=     611.59  ENC Q1=    1520.38  WSEL=     611.69  RATIO=    .0000
 NAT Q1=    1568.  RATIOS LOB,CH,ROB=    .6493    .2887    .0620  WSEL=     611.69

3470 ENCROACHMENT STATIONS=       77.0      432.4  TYPE=      4  TARGET=          .030
   507.10     11.69    611.69      0.00    611.59    611.71       .02       .01       .00    604.50
    1900.     1231.      559.      109.     1411.      311.      125.      164.       36.     604.80
      .94       .87      1.80       .88      .060      .045      .060      .044    600.00     76.97
  .000153      100.      100.      100.         2         0         1      0.00    355.40    432.37


 WATER EL=XS CARD=    611.742
 2800 NAT Q1=    1544.04  WSEL=     611.64  ENC Q1=    1544.04  WSEL=     611.74  RATIO=    .0000
 NAT Q1=    1592.  RATIOS LOB,CH,ROB=    .6508    .2868    .0624  WSEL=     611.74

3470 ENCROACHMENT STATIONS=       76.5      432.5  TYPE=      4  TARGET=          .030

         **  FOOT BRIDGE

   507.15     11.74    611.74      0.00    611.64    611.76       .02       .00       .00    604.50
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   1900.     1235.      556.      110.     1428.      312.      126.      164.       36.    604.80
     .94       .87      1.78       .87      .060      .045      .060      .044   600.00     76.48
 .000148        1.        1.        1.         0         0         1      0.00   356.04    432.52


 2800 NAT Q1=    1257.08  WSEL=     611.66  ENC Q1=    1257.08  WSEL=     611.76  RATIO=    .0000
 NAT Q1=    1302.  RATIOS LOB,CH,ROB=    .6982    .2467    .0552  WSEL=     611.76
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      106.7      445.6  TYPE=      4  TARGET=          .035
   507.20     11.76    611.76      0.00    611.66    611.77       .01       .01       .00    604.80
    1270.      877.      317.       76.     1300.      231.      109.      166.       36.     604.10
      .96       .67      1.37       .70      .060      .045      .060      .044   600.00     106.70
 .000097        50.       50.       50.         1         0         1      0.00   338.94    445.63


 2800 NAT Q1=     550.22  WSEL=     611.83  ENC Q1=     550.22  WSEL=     611.93  RATIO=    .0000
 NAT Q1=     570.  RATIOS LOB,CH,ROB=    .4162    .5184    .0654  WSEL=     611.93

3470 ENCROACHMENT STATIONS=      158.3      345.1  TYPE=      4  TARGET=          .036
   507.80      9.42    611.92      0.00    611.83    612.01       .09       .21       .03    608.50
    1270.      524.      682.       64.      438.      226.       49.      196.       43.     602.70
     1.10      1.20      3.01      1.31      .060      .045      .060      .044   602.50     158.35
 .000532      1100.     1100.     1100.         2         0         1      0.00   186.78    345.13
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 WATER EL=X5 CARD=    611.952
 2800 NAT Q1=     555.19  WSEL=     611.86  ENC Q1=     555.19  WSEL=     611.96  RATIO=    .0000
 NAT Q1=     577.  RATIOS LOB,CH,ROB=    .4188    .5155    .0657  WSEL=     611.96

3470 ENCROACHMENT STATIONS=      159.0      344.6  TYPE=      4  TARGET=          .038

         **  FOOT BRIDGE

   507.85      9.46    611.96      0.00    611.86    612.05       .08       .00       .00    608.50
    1270.      527.      679.       63.      442.      227.       48.      196.       43.     602.70
     1.10      1.19      2.99      1.31      .060      .045      .060      .044   602.50     158.98
 .000522        1.        1.        1.         0         0         1      0.00   185.67    344.64


 2800 NAT Q1=     303.61  WSEL=     612.80  ENC Q1=     303.61  WSEL=     612.90  RATIO=    .0000
 NAT Q1=     317.  RATIOS LOB,CH,ROB=    .3488    .3681    .2830  WSEL=     612.90

3470 ENCROACHMENT STATIONS=      171.8      282.9  TYPE=      4  TARGET=          .041
   507.90      7.89    612.89      0.00    612.80    613.07       .18       .99       .03    608.10
    1270.      436.      482.      352.      191.      104.      144.      211.       47.     607.10
     1.20      2.28      4.65      2.45      .060      .045      .060      .044   605.00     171.83
 .001718      1145.     1145.     1145.         3         0         1      0.00   111.02    282.86


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     196.83  WSEL=     612.93  ENC Q1=     196.83  WSEL=     613.03  RATIO=    .0000
 NAT Q1=     204.  RATIOS LOB,CH,ROB=    .0868    .8274    .0857  WSEL=     613.03

3470 ENCROACHMENT STATIONS=      317.8      389.6  TYPE=      4  TARGET=          .037
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        **  D/S FACE OF KENILWORTH

   507.98      7.04    613.04      0.00    612.93    613.53       .49       .35       .11    609.20
    1270.       118.      1035.       117.       45.      169.       47.      212.       47.     609.50
     1.21      2.64      6.11      2.51      .060      .045      .060      .044    606.00    317.79
 .003731       143.       143.       143.         3         0         1      0.00     71.78    389.58


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
     0.00        1.40        2.60       125.00      17.00        0.00       146.50       1.15       606.00      606.00

 2800 NAT Q1=     272.23  WSEL=     613.82  ENC Q1=     272.23  WSEL=     613.92  RATIO=    .0000
 NAT Q1=     282.  RATIOS LOB,CH,ROB=    .1096    .7706    .1198  WSEL=     613.92
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   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


3470 ENCROACHMENT STATIONS=      311.7       395.8  TYPE=      4  TARGET=         .035
   508.02      7.92    613.92      0.00    613.82    614.23       .30       .04       .03    609.20
    1270.       148.       968.       154.        69.       197.        73.      212.       47.     609.50
     1.21      2.14      4.92      2.09      .060      .045      .060      .044    606.00    311.72
 .001976        15.        15.        15.         0         0         2      0.00     84.10    395.82

CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     709.97  WSEL=     614.22  ENC Q1=     709.97  WSEL=     614.32  RATIO=    .0000
 NAT Q1=     735.  RATIOS LOB,CH,ROB=    .5372    .3814    .0814  WSEL=     614.32

3470 ENCROACHMENT STATIONS=      102.8       291.0  TYPE=      4  TARGET=         .034
   508.10      9.59    614.29      0.00    614.22    614.33       .04       .03       .08    609.60
    1270.       680.       498.        92.       551.       239.       102.      213.       47.     610.70
     1.21      1.23      2.08       .90      .060      .045      .060      .044    604.70    102.80
 .000320        42.        42.        42.         3         0         1      0.00    188.20    291.00


 2800 NAT Q1=     467.49  WSEL=     614.60  ENC Q1=     467.49  WSEL=     614.70  RATIO=    .0000
 NAT Q1=     493.  RATIOS LOB,CH,ROB=    .4694    .5182    .0124  WSEL=     614.70

3470 ENCROACHMENT STATIONS=       99.1       361.0  TYPE=      4  TARGET=         .053
   509.00      7.88    614.68      0.00    614.60    614.74       .06       .39       .01    612.00
    1270.       586.       684.         0.       479.       282.         0.      229.       51.     612.70
     1.34      1.22      2.43      0.00      .060      .045      .060      .045    606.80     99.13
 .000761       838.       838.       838.         3         0         1      0.00    261.87    361.00


CCHV=     .350 CEHV=     .600
 2800 NAT Q1=     597.91  WSEL=     615.63  ENC Q1=     597.91  WSEL=     615.73  RATIO=    .0000
 NAT Q1=     623.  RATIOS LOB,CH,ROB=    .0900    .4331    .4768  WSEL=     615.73
3280 CROSS SECTION     509.90 EXTENDED       4.02 FEET


3470 ENCROACHMENT STATIONS=       84.2       297.4  TYPE=      4  TARGET=         .041
   509.90      8.22    615.72      0.00    615.63    615.77       .05      1.03       .00    611.10
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   1270.       91.      576.      603.       92.      240.      489.      261.       61.    612.50
    1.62       .99      2.40      1.23      .060      .045      .060      .045   607.50     84.22
 .000457    1780.     1780.     1780.         2         0         1      0.00   213.14    297.36


CCHV=    .300 CEHV=    .500
 2800 NAT Q1=     219.88  WSEL=     615.67  ENC Q1=     219.88  WSEL=     615.77  RATIO=    .0000
 NAT Q1=     232.  RATIOS LOB,CH,ROB=    .0929    .8837    .0234  WSEL=     615.77

3470 ENCROACHMENT STATIONS=      764.5      850.0  TYPE=      4  TARGET=         .051

         **  D/S FACE OF SECOR RD

   509.98      7.26   615.76      0.00   615.67   616.04       .27       .15       .11   613.50
    1080.        79.     1001.        0.       50.      230.         0.      263.       62.     614.00
     1.63      1.59      4.34      0.00      .060      .045      .060      .045   608.50    764.51
 .002501       180.      180.      180.         2         0         1      0.00    85.49    850.00


SPECIAL BRIDGE

SB  XK         XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.40       2.60     280.00     15.00       0.00      90.00       0.00     609.30     609.30

 2800 NAT Q1=     371.73  WSEL=     616.63  ENC Q1=     371.73  WSEL=     616.73  RATIO=    .0000
 NAT Q1=     392.  RATIOS LOB,CH,ROB=    .2406    .7156    .0438  WSEL=     616.73
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   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     ICC        ICONT      CORAR      TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      625.9      866.9  TYPE=      4  TARGET=         .052
   510.02      8.22   616.72      0.00   616.63   616.82       .10       .05       .05   613.50
    1080.       250.      788.       43.      261.      278.       37.      264.       62.     614.00
     1.64       .96      2.83      1.17      .060      .045      .060      .045   608.50    625.88
 .000793        39.       39.       39.         0         0         4      0.00   240.99    866.87


 2800 NAT Q1=    1348.72  WSEL=     616.76  ENC Q1=    1348.72  WSEL=     616.86  RATIO=    .0000
 NAT Q1=    1394.  RATIOS LOB,CH,ROB=    .5151    .1243    .3605  WSEL=     616.86
3280 CROSS SECTION     510.10 EXTENDED       5.34 FEET


3470 ENCROACHMENT STATIONS=      251.1      598.6  TYPE=      4  TARGET=         .032
   510.10      9.74   616.84      0.00   616.76   616.85       .01       .01       .03   610.70
    1080.       556.      139.       385.      931.      137.       688.      265.       62.     610.20
     1.66       .60      1.01       .56      .060      .045      .060      .045   607.10    251.15
 .000064        46.       46.       46.         2         0         1      0.00   347.45    598.59


CCHV=    .300 CEHV=    .500
 2800 NAT Q1=    1215.54  WSEL=     616.77  ENC Q1=    1215.54  WSEL=     616.87  RATIO=   0.0000
 NAT Q1=    1259.  RATIOS LOB,CH,ROB=    .7371    .1842    .0787  WSEL=     616.87

3470 ENCROACHMENT STATIONS=      217.2      563.4  TYPE=      4  TARGET=         .034
   510.20      9.85   616.85      0.00   616.77   616.86       .01       .01       .00   612.80
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   1080.      803.      205.       72.     1321.      163.      144.      270.       63.     612.80
    1.71       .61      1.26       .50      .060      .035      .060      .044   607.00     217.22
 .000078      140.      140.      140.         2         0         1      0.00   346.20     563.42


 WATER EL=X5 CARD=   616.862
 2800 NAT Q1=   1219.81  WSEL=    616.78  ENC Q1=   1219.81  WSEL=    616.88  RATIO=  0.0000
 NAT Q1=   1263.  RATIOS LOB,CH,ROB=   .7372   .1839   .0788  WSEL=    616.88

3470 ENCROACHMENT STATIONS=     217.2     563.5  TYPE=     4  TARGET=        .034

        **  FOOT BRIDGE

  510.25      9.88   616.88      0.00   616.78   616.88       .01       .00       .00   612.80
   1080.      803.      204.       73.     1328.      163.      145.      270.       63.     612.80
    1.71       .60      1.25       .50      .060      .035      .060      .044   607.00     217.20
 .000077        1.         1.        1.         0         0         1      0.00   346.28     563.47


 2800 NAT Q1=    492.48  WSEL=    616.92  ENC Q1=    492.48  WSEL=    617.02  RATIO=  0.0000
 NAT Q1=    519.  RATIOS LOB,CH,ROB=   .1950   .2152   .5898  WSEL=    617.02

3470 ENCROACHMENT STATIONS=     345.1     594.9  TYPE=     4  TARGET=        .052
  510.90      7.72   617.02      0.00   616.92   617.05       .03       .16       .01   613.30
   1080.      195.      244.      641.      160.      115.      559.      299.       70.     613.60
    1.91      1.21      2.13      1.15      .060      .045      .060      .045   609.30     345.09
 .000479     1000.     1000.     1000.         2         0         1      0.00   249.83     594.92


 2800 NAT Q1=    453.79  WSEL=    616.96  ENC Q1=    453.79  WSEL=    617.06  RATIO=  0.0000
 NAT Q1=    478.  RATIOS LOB,CH,ROB=   .1938   .2227   .5835  WSEL=    617.06
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       ARCB      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=     345.2     594.8  TYPE=     4  TARGET=        .051

        **  COVERED FOOT BRIDGE

  510.98      7.56   617.06      0.00   616.96   617.09       .04       .04       .00   613.50
   1080.      194.      252.      634.      152.      111.      530.      300.       70.     613.80
    1.93      1.27      2.26      1.20      .060      .045      .060      .045   609.50     345.19
 .000561       70.       70.       70.         2         0         1      0.00   249.57     594.76


SPECIAL BRIDGE

SB  XK          XKOR       COEQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.50       2.50       0.00       8.18       0.00      27.00       0.00     609.50     609.50

 2800 NAT Q1=    716.00  WSEL=    617.06  ENC Q1=    716.00  WSEL=    617.16  RATIO=  0.0000
 NAT Q1=    745.  RATIOS LOB,CH,ROB=   .1603   .3571   .4826  WSEL=    617.16
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=     344.3     596.2  TYPE=     4  TARGET=        .039
  510.99      7.66   617.16      0.00   617.06   617.19       .02       .00       .00   613.00
   1080.      160.      400.      521.      180.      232.      602.      300.       70.     613.90
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   1.93       .89      1.72       .86      .060      .045      .060      .045   609.50   344.35
 .000226      10.       10.       10.         0         0         8      0.00   251.90   596.24


 2800 NAT Q1=     639.79  WSEL=     617.09  ENC Q1=     639.79  WSEL=     617.19  RATIO=    .0000
 NAT Q1=     667.  RATIOS LOB,CH,ROB=    .1564    .3733    .4703  WSEL=     617.19

3470 ENCROACHMENT STATIONS=      345.2      595.2  TYPE=      4  TARGET=         .041
   511.00      7.39   617.19      0.00   617.09   617.22       .03       .03       .00   613.30
    1080.      155.      418.      507.      164.      223.      553.      303.       71.    614.20
     1.96       .95      1.88       .92      .060      .045      .060      .045   609.80   345.24
 .000282      120.      120.      120.         2         0         1      0.00   249.95   595.19


 2800 NAT Q1=     358.29  WSEL=     617.11  ENC Q1=     358.29  WSEL=     617.21  RATIO=    .0000
 NAT Q1=     379.  RATIOS LOB,CH,ROB=    .1296    .4054    .4650  WSEL=     617.21

3470 ENCROACHMENT STATIONS=      349.8      592.2  TYPE=      4  TARGET=         .056
   511.10      7.60   617.20      0.00   617.11   617.28       .07       .04       .02   615.00
    1080.      117.      463.      500.       94.      155.      389.      304.       72.    614.90
     1.97      1.25      2.99      1.29      .060      .045      .060      .045   609.60   349.77
 .000910       80.       80.       80.         2         0         1      0.00   242.46   592.23


 WATER EL=X5 CARD=    617.504
 2800 NAT Q1=     423.66  WSEL=     617.41  ENC Q1=     423.66  WSEL=     617.51  RATIO=    .0000
 NAT Q1=     447.  RATIOS LOB,CH,ROB=    .1378    .3748    .4874  WSEL=     617.51

3470 ENCROACHMENT STATIONS=      347.9      593.5  TYPE=      4  TARGET=         .052

         **  FOOT BRIDGE
   511.15      7.91   617.51      0.00   617.41   617.56       .05       .00       .01   615.00
    1080.      128.      426.      526.      111.      163.      445.      304.       72.    614.90
     1.97      1.15      2.61      1.18      .060      .045      .060      .045   609.60   347.89
 .000648         1.        1.        1.         0         0         1      0.00   246.04   593.93


CCHV=     .200 CEHV=     .400
 2800 NAT Q1=     197.94  WSEL=     618.33  ENC Q1=     197.94  WSEL=     618.43  RATIO=   0.0000
 NAT Q1=     211.  RATIOS LOB,CH,ROB=    .2372    .3857    .3771  WSEL=     618.43
   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


3470 ENCROACHMENT STATIONS=      205.8      397.4  TYPE=      4  TARGET=         .060
   511.50      6.42   618.42      0.00   618.33   618.55       .14       .96       .03   615.30
    1080.      246.      437.      397.      143.      104.      248.      315.       76.    615.50
     2.05      1.72      4.19      1.60      .085      .055      .085      .045   612.00   205.77
 .002911       800.      800.      800.         3         0         1      0.00   191.59   397.37


 2800 NAT Q1=     191.95  WSEL=     620.78  ENC Q1=     191.95  WSEL=     620.88  RATIO=    .0000
 NAT Q1=     204.  RATIOS LOB,CH,ROB=    .2360    .3916    .3724  WSEL=     620.88

3470 ENCROACHMENT STATIONS=      205.9      396.5  TYPE=      4  TARGET=         .060
   512.00      6.34   620.84      0.00   620.78   620.99       .15      2.43       .00   617.80
    1080.      243.      446.      391.      138.      103.      239.      324.       79.    618.00
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    2.13      1.77      4.34      1.64      .085      .055      .085      .046    614.50    205.95
 .003175      800.      800.      800.         2         0         1      0.00    190.57    396.52


 2800 NAT Q1=     349.22  WSEL=     624.08  ENC Q1=     349.22  WSEL=     624.18  RATIO=    .0000
 NAT Q1=     366.  RATIOS LOB,CH,ROB=    .6723    .2887    .0390  WSEL=     624.18

3470 ENCROACHMENT STATIONS=      255.7      484.3  TYPE=      4  TARGET=         .047
   513.00      6.03    624.13      0.00    624.08    624.18       .04      3.17       .02    621.40
    1080.      734.      320.       25.      619.      135.       27.      353.       89.     621.40
     2.49      1.19      2.37       .95      .085      .055      .085      .047    618.10    255.70
 .000945      2000.     2000.     2000.         3         0         1      0.00    228.59    484.28


 2800 NAT Q1=     163.37  WSEL=     624.59  ENC Q1=     163.37  WSEL=     624.69  RATIO=    .0000
 NAT Q1=     176.  RATIOS LOB,CH,ROB=    .6104    .3759    .0137  WSEL=     624.69

3470 ENCROACHMENT STATIONS=      288.0      473.0  TYPE=      4  TARGET=         .071
   513.50      4.75    624.65      0.00    624.59    624.79       .14       .57       .04    623.20
    1080.      660.      420.         0.      337.      101.         0.      358.       90.     623.20
     2.52      1.96      4.15      0.00      .085      .055      .085      .047    619.90    287.99
 .004534      320.      320.      320.         2         0         1      0.00    185.01    473.00


 2800 NAT Q1=     116.53  WSEL=     628.00  ENC Q1=     116.53  WSEL=     628.10  RATIO=    .0000
 NAT Q1=     124.  RATIOS LOB,CH,ROB=    .2843    .6163    .0994  WSEL=     628.10

3470 ENCROACHMENT STATIONS=      368.7      501.3  TYPE=      4  TARGET=         .063
   513.80      4.54    628.04      0.00    628.00    628.43       .39      3.55       .10    625.50
    1080.      299.      671.      110.      130.      110.       50.      363.       92.     625.50
     2.56      2.30      6.13      2.22      .085      .055      .085      .047    623.50    368.73
 .008019      600.      600.      600.         2         0         1      0.00    132.59    501.32


 2800 NAT Q1=     152.99  WSEL=     633.27  ENC Q1=     152.99  WSEL=     633.37  RATIO=    .0000
 NAT Q1=     162.  RATIOS LOB,CH,ROB=    .2547    .7380    .0073  WSEL=     633.37
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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=      406.0      510.0  TYPE=      4  TARGET=         .054

        **  BEDFORD - WHITEFORD LINE

   514.00      4.90    633.30      0.00    633.27    633.56       .26      5.10       .03    630.10
    1080.      267.      813.         0.      123.      180.         0.      368.       95.     630.90
     2.61      2.18      4.52      0.00      .085      .055      .085      .048    628.40    406.01
 .005305      790.      790.      790.         3         0         1      0.00    103.99    510.00


 2800 NAT Q1=     136.16  WSEL=     637.05  ENC Q1=     136.16  WSEL=     637.15  RATIO=    .0000
 NAT Q1=     143.  RATIOS LOB,CH,ROB=    .1351    .8580    .0069  WSEL=     637.15

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      430.3      485.0  TYPE=      4  TARGET=         .049
   514.50      4.69    637.19      0.00    637.05    638.09       .90      4.27       .26    635.00
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   1080.      135.      945.        0.       45.      117.        0.      372.       96.    635.50
    2.64      3.00      8.05      0.00     .055      .035      .055      .047   632.50   430.25
.006139      750.      750.      750.        2         0         1      0.00    54.75   485.00


 2800 NAT Q1=     131.20  WSEL=     640.93  ENC Q1=     131.20  WSEL=     641.03  RATIO=    .0000
 NAT Q1=     137.  RATIOS LOB,CH,ROB=    .0917   .9073   .0010  WSEL=     641.03

3470 ENCROACHMENT STATIONS=      316.0     361.0  TYPE=      4  TARGET=         .046
   515.00      5.30    641.00      0.00   640.93   642.16      1.17      3.97       .11   639.80
   1080.        56.      1024.        0.      23.      115.        0.      374.       97.   640.00
    2.66      2.41      8.88       .02     .055      .035      .055      .047   635.70   316.03
.006895      610.      610.      610.        2         0         1      0.00    44.97   361.00


 2800 NAT Q1=     109.45  WSEL=     641.72  ENC Q1=     109.45  WSEL=     641.82  RATIO=    .0000
 NAT Q1=     117.  RATIOS LOB,CH,ROB=    .2959   .6989   .0052  WSEL=     641.82
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY


3720 ASSUMED CRITICAL DEPTH

   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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=      300.7     361.0  TYPE=      4  TARGET=         .062

        **  WEIR IN CREEK

   515.10      3.62    641.72    641.72    641.72    642.88      1.15       .03      0.00   639.80
   1080.        276.      804.        0.      64.       83.        0.      374.       97.   640.00
    2.66      4.28      9.67      0.00     .055      .035      .055      .047   638.10   300.75
.011696         3.         3.         3.        30        19         1      0.00    60.25   361.00


 2800 NAT Q1=     257.85  WSEL=     642.50  ENC Q1=     257.85  WSEL=     642.60  RATIO=    .0000
 NAT Q1=     268.  RATIOS LOB,CH,ROB=    .2509   .7433   .0058  WSEL=     642.60

3301 HV CHANGED MORE THAN HVINS

   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


3470 ENCROACHMENT STATIONS=      280.5     361.0  TYPE=      4  TARGET=         .038
   515.15      7.06    642.76      0.00   642.50   643.06       .30       .01       .17   639.80
   1080.        296.      784.        0.     144.      157.        0.      374.       97.   640.00
    2.66      2.05      4.99      0.00     .055      .035      .055      .047   635.70   280.53
.001620         3.         3.         3.         5         0         1      0.00    80.47   361.00


 2800 NAT Q1=     177.99  WSEL=     642.69  ENC Q1=     177.99  WSEL=     642.79  RATIO=    .0000
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 NAT Q1=    191.  RATIOS LOB,CH,ROB=    .2445   .7169   .0387  WSEL=    642.79

3470 ENCROACHMENT STATIONS=      113.8      311.4  TYPE=      4  TARGET=          .066
   515.20      6.15    642.95      0.00    642.69    643.21       .26       .15       .01    640.50
    1080.      320.      752.       8.      194.      157.        4.      375.      97.     641.20
     2.67      1.65      4.80      1.99      .055      .035      .055      .047    636.80    113.79
  .002650       72.       72.       72.         3         0         1      0.00    197.58    311.36


 WATER EL=X5 CARD=   643.149
 2800 NAT Q1=    178.47  WSEL=    642.89  ENC Q1=    178.47  WSEL=    642.99  RATIO=    .0000
 NAT Q1=    188.  RATIOS LOB,CH,ROB=    .1625   .7873   .0502  WSEL=    642.99
3280 CROSS SECTION    515.25 EXTENDED       1.69 FEET


3470 ENCROACHMENT STATIONS=      242.6      317.7  TYPE=      4  TARGET=          .049

        **  CREEK SPLITS - 2 FOOT BRIDGES

   515.25      6.19    642.99      0.00    642.89    643.41       .43       .00       .07    640.50
    1080.      156.      891.      33.       60.      158.       14.      375.      97.     641.20
     2.67      2.59      5.65      2.27      .055      .035      .055      .047    636.80    242.61
  .003637         1.        1.        1.         0         0         1      0.00     75.13    317.74


CCHV=    .300 CEHV=    .500
 2800 NAT Q1=    152.75  WSEL=    642.89  ENC Q1=    152.75  WSEL=    642.99  RATIO=    .0000
 NAT Q1=    160.  RATIOS LOB,CH,ROB=    .1867   .8102   .0031  WSEL=    642.99
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3470 ENCROACHMENT STATIONS=      303.1      361.0  TYPE=      4  TARGET=          .046

        **  DRIVEWAY CULVERT (CREEK HAS COME TOGETHER JUST D/S OF HERE)

   515.28      5.99    642.99      0.00    642.89    643.80       .82       .20       .19    641.10
    1080.      170.      910.       0.       59.      117.        0.      375.      97.     641.30
     2.67      2.86      7.80      0.00      .055      .035      .055      .047    637.00    303.06
  .005312       45.       45.       45.         2         0         1      0.00     57.94    361.00


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.40        2.80      125.00       11.00        0.00       51.70        0.00     637.00      637.00

 2800 NAT Q1=    335.77  WSEL=    644.71  ENC Q1=    335.77  WSEL=    644.81  RATIO=    .0000
 NAT Q1=    350.  RATIOS LOB,CH,ROB=    .3602   .6299   .0099  WSEL=    644.81
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      259.6      361.0  TYPE=      4  TARGET=          .042
   515.32      7.81    644.81      0.00    644.71    645.00       .19       .03       .19    641.10
    1080.      408.      672.       0.      221.      160.        0.      375.      97.     641.30
     2.67      1.85      4.19      0.00      .055      .035      .055      .047    637.00    259.57
  .001089       14.       14.       14.         0         0         4      0.00    101.43    361.00


 2800 NAT Q1=    183.55  WSEL=    644.64  ENC Q1=    183.55  WSEL=    644.74  RATIO=    .0000
 NAT Q1=    193.  RATIOS LOB,CH,ROB=    .5692   .4045   .0263  WSEL=    644.74
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
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TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 257.2 350.7 TYPE= 4 TARGET= .049

515.40	7.54	644.74	0.00	644.64	645.08	.34	.01	.08	641.30
1080.	631.	443.	6.	211.	69.	2.	375.	97.	641.50
2.67	2.98	6.39	3.13	.055	.035	.055	.047	637.20	257.19
.003212	4.	4.	4.	2	0	1	0.00	93.47	350.65

2800 NAT Q1= 162.48 WSEL= 644.63 ENC Q1= 162.48 WSEL= 644.73 RATIO= 0.0000
NAT Q1= 172. RATIOS LOB,CH,ROB= .6329 .3379 .0292 WSEL= 644.73

3470 ENCROACHMENT STATIONS= 257.4 350.6 TYPE= 4 TARGET= .055

** WEIR IN CREEK

515.45	5.53	644.73	0.00	644.63	645.10	.38	.00	.02	641.30
1080.	703.	371.	6.	210.	53.	2.	375.	97.	641.50
2.67	3.35	6.99	3.53	.055	.035	.055	.047	639.20	257.40
.004088	1.	1.	1.	3	0	1	0.00	93.15	350.55

2800 NAT Q1= 188.20 WSEL= 644.69 ENC Q1= 188.20 WSEL= 644.79 RATIO= 0.0000
NAT Q1= 198. RATIOS LOB,CH,ROB= .5744 .3989 .0267 WSEL= 644.79

3470 ENCROACHMENT STATIONS= 256.7 350.6 TYPE= 4 TARGET= .050

515.47	7.59	644.79	643.56	644.69	645.12	.33	.00	.01	641.30
1080.	636.	438.	6.	216.	70.	2.	375.	97.	641.50
2.67	2.94	6.27	3.10	.055	.035	.055	.047	637.20	256.71
.003064	1.	1.	1.	9	11	1	0.00	93.90	350.62

2800 NAT Q1= 257.91 WSEL= 644.85 ENC Q1= 257.91 WSEL= 644.95 RATIO= .0000
NAT Q1= 268. RATIOS LOB,CH,ROB= .2991 .6935 .0075 WSEL= 644.95

3470 ENCROACHMENT STATIONS= 271.3 361.0 TYPE= 4 TARGET= .037

515.50	7.18	644.98	0.00	644.85	645.27	.29	.14	.01	641.90
1080.	348.	732.	0.	164.	145.	0.	376.	97.	642.10
2.68	2.12	5.04	0.00	.055	.035	.055	.047	637.80	271.34
.001744	61.	61.	61.	2	0	1	0.00	89.66	361.00

2800 NAT Q1= 210.08 WSEL= 644.83 ENC Q1= 210.08 WSEL= 644.93 RATIO= .0000
NAT Q1= 220. RATIOS LOB,CH,ROB= .3582 .6122 .0296 WSEL= 644.93

3470 ENCROACHMENT STATIONS= 265.8 362.4 TYPE= 4 TARGET= .047

** WEIR IN CREEK

515.55	4.85	644.95	0.00	644.83	645.30	.35	.00	.03	641.90
1080.	399.	663.	18.	166.	115.	6.	376.	97.	640.10
2.68	2.40	5.75	3.03	.055	.035	.055	.047	640.10	265.84
.002392	1.	1.	1.	3	0	1	0.00	96.51	362.35

2800 NAT Q1= 262.65 WSEL= 644.91 ENC Q1= 262.65 WSEL= 645.01 RATIO= .0000
NAT Q1= 274. RATIOS LOB,CH,ROB= .3036 .6887 .0077 WSEL= 645.01

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV

Q	QLOB	QCH	QROB	ALOB	ACH	ARGB	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= 272.2 361.0 TYPE= 4 TARGET= .041

515.57	7.24	645.04	0.00	644.91	645.32	.28	.00	.02	641.90
1080.	352.	728.	0.	166.	147.	0.	376.	97.	642.10
2.68	2.12	4.97	0.00	.055	.035	.055	.047	637.80	272.16
.001682	1.	1.	1.	4	0	1	0.00	88.84	361.00

2800 NAT Q1= 142.89 WSEL= 646.18 ENC Q1= 142.89 WSEL= 646.28 RATIO= .0000
NAT Q1= 154. RATIOS LOB,CH,ROB= .6272 .2670 .1058 WSEL= 646.28

3470 ENCROACHMENT STATIONS= 84.4 218.0 TYPE= 4 TARGET= .070

515.85	4.55	646.25	0.00	646.18	646.47	.23	1.13	.02	644.10
1080.	692.	307.	81.	218.	58.	43.	378.	98.	644.00
2.71	3.18	5.29	1.88	.060	.050	.100	.047	641.70	84.36
.005773	400.	400.	400.	3	0	1	0.00	133.62	217.98

2800 NAT Q1= 86.47 WSEL= 648.66 ENC Q1= 86.47 WSEL= 648.76 RATIO= .0000
NAT Q1= 95. RATIOS LOB,CH,ROB= .5780 .3314 .0907 WSEL= 648.76

3470 ENCROACHMENT STATIONS= 91.3 212.4 TYPE= 4 TARGET= .087

515.90	3.92	648.72	0.00	648.66	649.23	.51	2.62	.14	647.20
1080.	638.	386.	56.	150.	49.	23.	380.	99.	647.10
2.72	4.25	7.80	2.50	.060	.050	.100	.047	644.80	91.31
.015514	294.	294.	294.	2	0	1	0.00	121.05	212.36

2800 NAT Q1= 97.38 WSEL= 650.00 ENC Q1= 97.38 WSEL= 650.10 RATIO= 0.0000
NAT Q1= 102. RATIOS LOB,CH,ROB= .0656 .8823 .0521 WSEL= 650.10

3470 ENCROACHMENT STATIONS= 267.6 330.0 TYPE= 4 TARGET= .050

** D/S FACE OF STERNS RD

515.98	5.25	650.05	0.00	650.00	650.94	.89	1.52	.19	648.20
1080.	72.	953.	55.	23.	119.	25.	381.	99.	647.80
2.73	3.10	8.01	2.22	.060	.050	.100	.047	644.80	267.57
.011540	114.	114.	114.	3	0	1	0.00	62.40	329.96

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.70	0.00	8.00	0.00	44.80	0.00	644.80	644.80

2800 NAT Q1= 824.01 WSEL= 655.67 ENC Q1= 824.01 WSEL= 655.77 RATIO= .0000
NAT Q1= 848. RATIOS LOB,CH,ROB= .3310 .4482 .2208 WSEL= 655.77
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS= 192.7 449.6 TYPE= 4 TARGET= .029

516.02	10.92	655.72	0.00	655.67	655.75	.03	.02	.26	648.20
1080.	363.	485.	232.	400.	283.	468.	381.	99.	647.80
2.73	.91	1.71	.50	.060	.050	.100	.047	644.80	192.71
.000165	36.	36.	36.	0	0	7	0.00	256.84	449.55

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 2800 NAT Q1=    705.99  WSEL=    655.68  ENC Q1=    705.99  WSEL=    655.78  RATIO=  0.0000
 NAT Q1=    731.  RATIOS LOB,CH,ROB=   .1804   .3858   .4338  WSEL=    655.78
3280 CROSS SECTION    516.10 EXTENDED      1.83 FEET

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


3470 ENCROACHMENT STATIONS=     296.4     585.6  TYPE=     4  TARGET=        .034
   516.10    10.03   655.73     0.00   655.68   655.76     .03      .01      .00   648.30
    1080.     183.     431.     466.     231.     224.     702.     383.     100.   649.20
     2.75      .79     1.92      .66     .080     .050     .080     .047   645.70   296.35
  .000238      50.      50.      50.        2        0        1     0.00   289.27   585.62

CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    224.06  WSEL=    655.82  ENC Q1=    224.06  WSEL=    655.92  RATIO=   .0000
 NAT Q1=    234.  RATIOS LOB,CH,ROB=   .0085   .4949   .4966  WSEL=    655.92

3470 ENCROACHMENT STATIONS=     382.0     498.8  TYPE=     4  TARGET=        .043
   517.00     7.16   655.86     0.00   655.82   656.03     .16      .22      .05   653.50
    1080.       0.     561.     519.       C.     133.     307.     390.     102.   650.30
     2.78      .01     4.21     1.69     .100     .055     .100     .047   648.70   382.00
  .002406      400.     400.     400.        3        0        1     0.00   116.80   498.80
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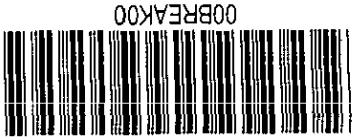
1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford Twps.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: 100 yr.



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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   MID-ETA H-4705
T2   REDFORD TWP CTS
T3   HALFWAY CREEK - D/S END - 100 YEAR FLOW  Q=2500 CFS

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.       4.        0.        0.  0.000000      0.00      1.0       0.   577.660     0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000     0.000     0.000     0.000
NC       .050      .100      .040      .300      .500     0.000     0.000     0.000     0.000     0.000
QT      5.000  1450.000  2150.000  2500.000  3250.000  2500.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1       .100    22.000   135.000   223.000     0.000     0.000     0.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    574.000   121.000   574.000   122.000   574.000   123.000   574.000   124.000   573.900   125.000
GR    576.400   135.000   572.500   141.000   568.700   160.000   567.800   170.000   567.900   175.000
GR    569.300   180.000   568.800   186.000   569.600   190.000   570.800   195.000   573.700   219.000
GR    576.400   223.000   576.300   230.000   574.200   231.000   575.100   232.000   579.400   233.000
GR    582.300   330.000   584.100   513.000     0.000     0.000     0.000     0.000     0.000     0.000

X1       .800    22.000   160.000   195.000   142.000   142.000   142.000     0.000      .800     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   589.000   589.000     0.000
GR    574.000   121.000   574.000   122.000   574.000   123.000   574.000   124.000   573.800   125.000
GR    576.400   135.000   572.500   141.000   568.700   160.000   567.800   170.000   567.900   175.000
GR    569.300   180.000   568.800   186.000   569.600   190.000   570.800   195.000   573.700   219.000
GR    576.400   223.000   576.300   230.000   574.200   231.000   575.100   232.000   579.400   233.000
GR    582.300   330.000   584.100   513.000     0.000     0.000     0.000     0.000     0.000     0.000
NC      0.000     0.000      .025     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1       .900    17.000  1480.000  1514.000     1.000     1.000     1.000     0.000     0.000     0.000
X3     10.000     0.000     1.000     0.000     0.000     0.000     0.000   589.000   589.000     0.000
QT     17.000     0.000   588.900     0.000   330.000   589.000     0.000   605.000   589.100     0.000
QT   1000.000   589.200     0.000  1300.000   589.000     0.000  1480.000   589.000   575.000  1480.100
QT    589.000   579.700  1488.000   589.000   579.700  1492.000   589.000   579.700  1500.000   589.000
QT    579.700  1509.000   589.000   579.700  1513.900   589.000   579.700  1514.000   589.000   575.000
QT   1710.000   589.000     0.000  2090.000   589.200     0.000  2965.000   589.400     0.000  3355.000
QT    590.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    588.900     0.000   589.000   330.000   589.100   605.000   589.200  1020.000   589.000  1300.000
GR    575.000  1480.000   568.600  1480.100   568.600  1488.000   569.300  1492.000   570.200  1500.000
GR    571.500  1509.000   573.300  1513.900   575.000  1514.000   589.000  1710.000   589.200  2090.000
GR    589.400  2965.000   590.000  3355.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      1.010     0.000     0.000     0.000    14.000    14.000    14.000     0.000     0.000     0.000
X3     1.000     0.000     0.000     0.000     0.000     0.000     1.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   589.000   589.000     0.000
NC       .050      .060      .040     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      1.020    10.000  1483.000  1518.000     1.000     1.000     1.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   589.000   589.000     0.000
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GR	581.000	1020.000	575.500	1250.000	572.900	1400.000	571.600	1472.000	569.000	1483.000
GR	569.600	1500.000	569.400	1518.000	572.000	1528.000	572.600	1615.000	581.900	2600.000
X1	1.100	10.000	1472.000	1528.000	27.000	27.000	27.000	0.000	1.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.800	586.800	0.000
GR	581.000	1020.000	575.500	1250.000	572.900	1400.000	571.600	1472.000	569.000	1483.000
GR	569.600	1500.000	569.400	1518.000	572.000	1528.000	572.600	1615.000	581.900	2600.000
X1	1.100	10.000	1483.000	1518.000	29.000	29.000	29.000	0.000	1.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.800	586.900	0.000
GR	581.000	1020.000	575.500	1250.000	572.900	1400.000	571.600	1472.000	569.000	1483.000
GR	569.600	1500.000	569.400	1518.000	572.000	1528.000	572.600	1615.000	581.900	2600.000
MC	1.000	0.000	.025	.100	.500	0.000	0.000	0.000	0.000	0.000
X1	1.100	14.000	1495.000	1530.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.800	586.900	0.000
RT	14.000	0.000	586.700	0.000	375.000	587.000	0.000	605.000	586.600	0.000
RT	1250.000	586.900	0.000	1495.000	586.900	576.500	1495.100	586.900	580.200	1510.000
RT	586.900	580.200	1520.000	586.900	580.300	1529.900	586.900	580.300	1530.000	586.900
RT	576.500	1760.000	587.200	0.000	2000.000	587.400	0.000	2400.000	588.000	0.000
RT	3200.000	589.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	586.700	0.000	587.000	375.000	586.600	605.000	586.900	1250.000	576.500	1495.000
GR	572.200	1495.100	570.500	1510.000	571.300	1520.000	574.500	1529.900	576.500	1530.000
GR	587.200	1760.000	597.400	2000.000	588.000	2400.000	589.000	3200.000	0.000	0.000
X1	1.210	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.800	586.900	0.000
MC	.080	.080	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	1.220	11.000	1532.000	1567.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.800	586.900	0.000
GR	583.100	808.000	582.000	1250.000	578.400	1320.000	573.800	1510.000	570.900	1532.000
GR	571.500	1550.000	571.100	1567.000	573.000	1617.000	575.400	1760.000	583.500	1830.000
GR	585.100	2020.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	1.300	11.000	1510.000	1630.000	41.000	41.000	41.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.800	586.800	0.000
GR	583.100	808.000	582.000	1250.000	578.400	1320.000	573.800	1510.000	571.100	1520.000
GR	571.500	1550.000	571.200	1570.000	573.000	1617.000	573.000	1630.000	583.500	1830.000
GR	585.100	2020.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	1.350	11.000	1510.000	1617.000	368.000	368.000	368.000	-.100	0.000	0.000
GR	583.100	808.000	582.000	1250.000	578.400	1320.000	573.800	1510.000	571.100	1520.000
GR	571.500	1550.000	571.200	1570.000	573.000	1617.000	575.400	1760.000	583.500	1830.000
GR	585.100	2020.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	1.380	9.000	1510.000	1617.000	150.000	150.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	578.500	578.500	0.000
GR	581.900	1250.000	578.300	1320.000	573.700	1510.000	570.700	1520.000	570.400	1550.000
GR	571.700	1570.000	572.900	1617.000	575.300	1760.000	583.400	1830.000	0.000	0.000
SR	1.250	1.500	2.900	500.000	29.300	1.300	227.000	0.000	570.400	570.400
X1	1.420	0.000	0.000	0.000	18.000	18.000	18.000	0.000	0.000	0.000
X2	1.000	0.000	1.000	578.500	580.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	580.000	580.000	0.000
X1	1.420	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MC	.085	.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	1.450	19.000	902.000	942.000	141.000	141.000	141.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	585.000	400.000	584.300	500.000	583.400	585.000	577.100	665.000	574.400	680.000
GR	576.500	800.000	575.000	902.000	572.900	903.000	572.100	904.000	570.300	912.000
GR	571.700	928.000	572.100	931.000	573.800	941.000	575.300	942.000	574.000	1000.000
GR	575.300	1132.000	584.600	1154.000	585.300	1170.000	587.000	1300.000	0.000	0.000
NR	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	2.000	0.000	0.000	0.000	1700.000	1700.000	1700.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NR	0.000	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	3.000	15.000	623.000	659.000	1875.000	1875.000	1875.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	580.600	441.000	580.600	444.000	580.600	445.000	579.000	500.000	576.800	600.000
GR	577.000	623.000	573.500	627.000	572.800	640.000	571.500	644.000	571.000	650.000
GR	572.500	653.000	577.400	659.000	576.300	687.000	575.900	800.000	576.200	845.000
NR	.060	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	3.100	9.000	88.000	133.000	1050.000	1050.000	1050.000	0.000	0.000	0.000
GR	579.600	73.000	579.400	88.000	575.800	103.000	573.200	106.000	572.200	110.000
GR	571.400	118.000	573.100	126.000	578.200	133.000	579.100	148.000	0.000	0.000
NR	.065	.065	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	3.980	17.000	380.000	408.000	126.000	126.000	126.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	584.000	584.000	0.000
GR	583.500	0.000	588.800	100.000	587.800	200.000	585.800	300.000	579.000	365.000
GR	577.200	375.000	576.200	380.000	571.900	390.000	572.300	397.000	572.700	407.000
GR	574.500	408.000	576.300	420.000	580.000	430.000	584.800	500.000	585.600	600.000
GR	586.700	700.000	589.100	800.000	0.000	0.000	0.000	0.000	0.000	0.000
SR	.000	1.500	2.700	0.000	28.000	.010	281.600	.450	572.300	572.300
X1	4.020	0.000	0.000	0.000	48.000	48.000	48.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	581.100	584.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	585.300	584.800	0.000
BT	17.000	0.000	589.500	0.000	100.000	588.800	0.000	200.000	587.800	0.000
BT	300.000	585.800	0.000	365.000	585.400	0.000	380.000	585.300	0.000	380.100
BT	585.300	0.000	390.000	585.200	0.000	397.000	585.100	0.000	407.000	585.100
BT	0.000	415.900	585.000	0.000	416.000	585.000	0.000	430.000	585.000	0.000
BT	500.000	584.800	0.000	600.000	585.600	0.000	700.000	586.700	0.000	800.000
BT	580.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NR	.060	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	4.100	15.000	166.000	195.000	26.000	26.000	26.000	0.000	0.000	0.000
GR	578.600	140.000	578.400	141.000	578.200	142.000	578.000	143.000	577.900	144.000
GR	575.200	166.000	573.500	167.000	572.000	172.000	572.100	182.000	573.300	187.000
GR	576.100	195.000	579.400	206.000	581.100	220.000	581.200	221.000	581.300	222.000
NR	.100	.085	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	5.000	22.000	393.000	405.000	500.000	500.000	500.000	0.000	0.000	0.000
GR	590.100	0.000	590.200	33.000	584.700	50.000	583.300	93.000	581.500	133.000
GR	590.400	225.000	580.300	287.000	578.300	348.000	576.500	383.000	574.600	390.000
GR	575.700	392.000	572.500	395.000	571.500	400.000	573.600	403.000	578.300	405.000
GR	578.800	409.000	592.000	486.000	591.100	592.000	590.000	672.000	587.500	705.000
GR	591.200	750.000	591.700	800.000	0.000	0.000	0.000	0.000	0.000	0.000
NR	.080	.080	0.000	.400	.600	0.000	0.000	0.000	0.000	0.000
X1	5.100	15.000	619.000	702.000	420.000	420.000	420.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.000	586.000	0.000
GR	593.500	0.000	593.100	15.000	589.800	21.000	590.700	23.000	589.500	50.000

GR	581.600	63.000	578.300	200.000	578.100	400.000	578.800	609.000	574.700	619.000
GR	573.900	696.000	574.500	702.000	579.800	710.000	579.600	800.000	590.700	1200.000
NC	0.000	0.000	0.000	.250	.450	0.000	0.000	0.000	0.000	0.000
XI	5.980	14.000	579.000	607.000	106.000	106.000	106.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	586.000	586.000	0.000
GR	582.400	534.000	582.300	535.000	579.100	572.000	578.200	579.000	574.800	579.100
GR	573.900	585.000	573.400	591.000	573.400	598.000	574.200	604.000	577.000	607.000
GR	577.500	608.500	580.400	611.000	583.300	651.000	583.400	652.000	0.000	0.000
SR	1.250	1.600	2.800	300.000	28.000	3.000	175.000	0.000	573.400	573.400
XI	5.020	0.000	0.000	0.000	88.000	88.000	88.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	580.400	594.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	594.000	594.000	0.000
NC	.100	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
XI	6.200	11.000	575.000	612.000	39.000	39.000	39.000	0.000	0.000	0.000
GR	578.500	534.000	578.600	535.000	578.500	575.000	574.800	578.000	573.800	590.000
GR	573.300	595.000	573.900	599.000	574.800	601.000	575.500	607.000	577.700	612.000
GR	577.800	645.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
OT	5.000	1290.000	1900.000	2200.000	2900.000	2200.000	0.000	0.000	0.000	0.000
XI	7.000	19.000	914.000	950.000	567.000	567.000	567.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	580.000	567.000	579.900	688.000	578.800	783.000	579.100	880.000	579.900	914.000
GR	575.400	922.000	574.500	926.000	574.500	930.000	574.700	933.000	575.400	936.000
GR	574.600	939.000	578.900	941.000	580.300	950.000	579.300	980.000	580.700	1125.000
GR	581.400	1177.000	581.300	1201.000	594.300	1212.000	594.500	1227.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .309 CEHV= .501
3280 CROSS SECTION .10 EXTENDED 3.66 FEET

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	XLOBI	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
.10	9.96	577.65	0.00	577.66	577.90	.24	0.00	0.00	576.40
2500.	69.	2423.	8.	40.	610.	15.	0.	0.	576.40
0.00	1.69	3.97	.55	.050	.040	.100	0.000	567.80	121.00
.000900	1.	0.	0.	0	0	1	0.00	111.60	232.60

1645 INT SEC ADDED BY RAISING SEC .99, -.400FT AND MULTIPLYING BY 1.464

3280 CROSS SECTION 1.01 EXTENDED 3.21 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 582.70 ELREA= 582.70

1.01	9.41	577.61	0.00	0.00	578.11	.50	.08	.13	569.10
2500.	0.	2500.	0.	0.	441.	0.	1.	0.	571.20
.00	0.00	5.68	0.00	.050	.040	.100	.039	568.20	178.08
.001427	71.	71.	71.	2	0	1	0.00	51.23	229.31

1645 INT SEC ADDED BY RAISING SEC 1.01, .400FT AND MULTIPLYING BY .683

3280 CROSS SECTION .98 EXTENDED 2.60 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

.98	8.80	577.40	0.00	0.00	578.64	1.24	.16	.37	569.50
2500.	0.	2500.	0.	0.	280.	0.	1.	0.	571.60
.01	0.00	8.94	0.00	.050	.040	.100	.039	568.60	160.00
.004121	71.	71.	71.	2	0	1	0.00	35.00	195.00

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	XLOBI	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

NORMAL BRIDGE,NRD=17 MIN ELTRD= 588.90 MAX ELLC= 579.70

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

.99	8.58	577.19	0.00	0.00	578.85	1.66	.00	.21	575.00
2500.	0.	2500.	0.	0.	242.	0.	1.	0.	575.00
.01	0.00	10.34	0.00	.050	.025	.100	.039	568.60	1480.00
.003182	1.	1.	1.	2	0	1	-33.79	34.00	1544.71

NORMAL BRIDGE,NRD=17 MIN ELTRD= 588.90 MAX ELLC= 579.70

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

1.01	8.70	577.33	0.00	0.00	578.91	1.61	.04	.01	575.00
2500.	0.	2500.	0.	0.	245.	0.	2.	0.	575.00
.01	0.00	10.29	0.00	.050	.025	.100	.038	568.60	1480.00
.003042	14.	14.	14.	2	0	1	-37.03	34.00	1546.15

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

1.02	9.41	578.21	0.00	0.00	579.12	.92	.00	.21	569.00
2500.	0.	2500.	0.	0.	326.	0.	2.	0.	569.40
.01	0.00	7.68	0.00	.060	.040	.060	.037	568.60	1483.00
.002396	1.	1.	1.	3	0	1	0.00	35.00	1518.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.80

1.19	8.20	578.70	0.00	0.00	579.28	.58	.06	.10	573.50
2500.	0.	2500.	0.	0.	409.	0.	2.	0.	573.90
.01	0.00	6.11	0.00	.060	.040	.060	.038	570.50	1472.00
.002038	27.	27.	27.	3	0	1	0.00	56.00	1528.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.90

1.19	7.89	578.39	0.00	0.00	579.77	1.38	.09	.40	570.90
2500.	0.	2500.	0.	0.	266.	0.	2.	0.	571.30
.01	0.00	8.41	0.00	.060	.040	.060	.038	570.50	1483.00
.004582	29.	29.	29.	2	0	1	0.00	35.00	1518.00

CCHV= .100 CEHV= .500

SECNO	DEPTH	QUSEL	CRTWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNP	WTN	ELMIN	SSTA
SLOPE	XLOB1	XLC4	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

NORMAL BRIDGE,NRD=14 MIN ELTRD= 586.60 MAX ELLC= 580.30

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.90

1.19	7.63	578.13	0.00	0.00	580.03	1.90	.00	.26	576.50
2500.	0.	2500.	0.	0.	226.	0.	2.	0.	576.50
.01	0.00	11.07	0.00	.060	.025	.060	.037	570.50	1495.00

.003845	1.	1.	1.	2	0	1	-28.77	35.00	1565.12

NORMAL BRIDGE,NRD=14 MIN ELTRD= 586.60 MAX ELLC= 580.30

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.90

1.21	7.78	578.28	0.00	0.00	580.10	1.82	.06	.01	576.50
2500.	0.	2500.	0.	0.	231.	0.	2.	0.	576.50
.01	0.00	10.82	0.00	.060	.025	.060	.037	570.50	1495.00
.003590	16.	16.	16.	2	0	1	-34.25	35.00	1568.32

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.90

1.22	8.51	579.01	0.00	0.00	580.17	1.16	.00	.07	570.90
2500.	0.	2510.	0.	0.	289.	0.	2.	0.	571.10
.01	0.00	8.64	0.00	.080	.055	.080	.036	570.50	1532.00
.016579	1.	1.	1.	3	0	1	0.00	35.00	1567.00

3301 HV CHANGED MORE THAN HVINS

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.80

1.30	9.84	580.24	0.00	0.00	580.33	.09	.05	.11	573.70
2500.	0.	2500.	0.	0.	1038.	0.	3.	0.	572.90
.01	0.00	2.41	0.00	.080	.055	.080	.039	570.40	1510.00
.000466	41.	41.	41.	2	0	1	0.00	120.00	1769.80
1.35	9.90	580.40	0.00	0.00	580.42	.02	.09	.01	573.80
2500.	487.	1306.	707.	857.	949.	995.	19.	3.	573.00
.11	.57	1.39	.71	.080	.055	.080	.048	570.50	1281.05
.000142	368.	368.	368.	2	0	1	0.00	522.19	1803.24

CCHV= .300 CEHV= .500

SECND	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	OLOB	OCH	OROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNI	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IOC	ICONT	CORAR	TOPWID	ENDST
1.38	10.02	580.42	0.00	0.00	580.44	.02	.02	.00	573.70
2500.	488.	1315.	697.	885.	981.	1018.	29.	5.	572.90
.15	.55	1.34	.68	.080	.055	.080	.049	570.40	1278.68
.000129	150.	150.	150.	2	0	1	0.00	525.61	1804.29

SPECIAL BRIDGE

SR	XK	XKOR	CDEO	RDIEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.50	2.90	500.00	29.30	1.30	227.00	0.00	570.40	570.40

PRESSURE AND WEIR FLOW

ERRPS	ERLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
593.25	590.44	.11	1385.	1114.	227.	578.50	580.00	30.00
1.47	10.57	580.97	0.00	0.00	580.99	.01	.54	0.00	573.70
2500.	524.	1268.	708.	1016.	1041.	1123.	30.	5.	572.90
.16	.52	1.22	.63	.080	.055	.080	.049	570.40	1267.92
.000099	18.	18.	18.	1	0	4	0.00	541.16	1809.07
1.43	10.57	580.97	0.00	0.00	580.99	.01	.00	.00	573.70
2500.	524.	1269.	707.	1014.	1040.	1122.	30.	5.	572.90
.16	.52	1.22	.63	.080	.055	.080	.049	570.40	1268.06
.000099	1.	1.	1.	0	0	1	0.00	540.95	1809.01
1.45	10.69	580.99	0.00	0.00	581.00	.01	.02	.00	575.00
2500.	1105.	518.	878.	1596.	377.	1243.	40.	7.	575.30
.21	.69	1.37	.71	.085	.055	.085	.050	570.30	615.59
.000143	141.	141.	141.	2	0	1	0.00	529.87	1145.46
CCHV=	.150 CEHV=	.350							
2.00	10.92	581.22	0.00	0.00	581.23	.01	.23	.00	575.00
2500.	1110.	509.	880.	1662.	387.	1290.	168.	28.	575.30
.79	.67	1.32	.68	.085	.055	.085	.053	570.30	612.67
.000127	1700.	1700.	1700.	2	0	1	0.00	533.34	1146.01

3280 CROSS SECTION 3.00 EXTENDED 5.39 FEET

3.00	10.59	591.59	0.00	0.00	581.63	.04	.39	.01	577.00
2500.	463.	635.	1402.	580.	304.	1003.	281.	48.	577.40
1.15	.80	2.09	1.40	.085	.055	.065	.054	571.00	441.00
.000394	1875.	1875.	1875.	2	0	1	0.00	404.00	845.00

3280 CROSS SECTION 3.10 EXTENDED 3.62 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
3.10	10.81	582.21	0.00	0.00	582.78	.57	.97	.19	579.40
2500.	145.	2157.	198.	48.	339.	53.	309.	54.	578.20
1.20	3.00	5.35	3.71	.060	.055	.060	.054	571.40	73.00
.004121	1050.	1050.	1050.	2	0	1	0.00	75.00	148.00

CCHV= .300 CEHV= .500

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

3.98	10.60	582.50	0.00	0.00	583.87	1.37	.69	.40	576.20
2500.	0.	2500.	0.	0.	266.	0.	310.	54.	574.50
1.20	0.00	9.39	0.00	.065	.055	.065	.054	571.90	380.00
.007653	126.	126.	126.	2	0	1	0.00	28.00	408.00

SPECIAL BRIDGE

SR	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	2.70	0.00	28.00	.01	281.60	.45	572.30	572.30

PRESSURE FLOW

EGRRS	EGLWC	H3	OWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
584.34	583.87	.00	0.	2500.	282.	581.10	584.80	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 585.30 ELREA= 584.80

4.02	11.24	583.14	0.00	0.00	584.34	1.20	.47	0.00	576.20
2500.	0.	2500.	0.	0.	284.	0.	310.	54.	574.50
1.20	0.00	8.80	0.00	.065	.055	.065	.054	571.90	380.00
.006287	48.	48.	48.	3	0	1	0.00	28.00	408.00

B

3280 CROSS SECTION 4.10 EXTENDED 5.80 FEET

4.10	12.40	584.40	0.00	0.00	584.68	.29	.07	.27	575.20
2500.	685.	1587.	228.	197.	328.	138.	310.	54.	576.10
1.21	3.47	4.84	1.66	.060	.055	.100	.054	572.00	140.00
.001372	26.	26.	26.	3	0	1	0.00	82.00	222.00

C

"modified for 1 on 1 u/s ..."

CCHV= .200 CEHV= .400

5.00	13.67	585.17	0.00	0.00	585.21	.04	.48	.05	575.70
2500.	1913.	424.	162.	1577.	144.	145.	325.	57.	578.30
1.30	1.21	2.94	1.12	.100	.055	.085	.054	571.50	48.54
.000718	500.	500.	500.	3	0	1	0.00	397.63	446.17

D

distribution ? OB.

CCHV= .400 CEHV= .600

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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.00 ELREA= 586.00

5.10	11.47	585.37	0.00	0.00	585.48	.11	.23	.04	574.70
2500.	0.	2500.	0.	0.	919.	0.	338.	59.	574.50
1.34	0.00	2.72	0.00	.080	.055	.080	.054	573.90	619.00
.000417	420.	420.	420.	2	0	1	0.00	83.00	702.00

CCHV= .250 CEHV= .450
3280 CROSS SECTION 5.38 EXTENDED 2.58 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.00 ELREA= 586.00

5.88	11.58	594.98	0.00	0.00	586.00	1.02	.11	.41	578.20
2500.	0.	2500.	0.	0.	308.	0.	340.	59.	577.00
1.34	0.00	8.11	0.00	.080	.055	.080	.054	573.40	579.00
.005775	106.	106.	106.	2	0	1	0.00	28.00	607.00

SPECIAL BRIDGE

SP	XK	XKOR	COEQ	BOLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.90	300.00	28.00	3.00	175.00	0.00	573.40	573.40

3280 CROSS SECTION 6.02 EXTENDED 7.14 FEET

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPP	BAREA	ELLC	ELTRD	CLASS
590.05	586.35	.43	0.	2500.	175.	580.40	594.00	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

6.02	16.14	599.54	0.00	0.00	590.05	.51	4.05	0.00	578.20
2500.	0.	2500.	0.	0.	436.	0.	341.	59.	577.00
1.35	0.00	5.73	0.00	.080	.055	.080	.054	573.40	579.00
.002107	88.	88.	88.	2	0	1	0.00	28.00	607.00

3280 CROSS SECTION 6.20 EXTENDED 12.32 FEET

6.20	16.82	590.12	0.00	0.00	590.18	.07	.02	.11	578.50
2500.	559.	1431.	512.	474.	568.	408.	342.	59.	577.70
1.35	1.18	2.52	1.25	.100	.055	.100	.054	573.30	534.00
.000240	39.	39.	39.	2	0	1	0.00	111.00	645.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 7.00 EXTENDED 10.22 FEET

SECNO	DEPTH	CWSEL	CRTWS	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

7.00	15.73	590.23	0.00	0.00	590.23	.00	.04	.01	579.90
2200.	984.	350.	866.	2707.	480.	2519.	388.	63.	580.30
1.73	.36	.73	.34	.100	.055	.100	.054	574.50	667.00

.020025	567.	567.	567.	2	0	1	0.00	541.55	1208.55

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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   HUD-FIA H-4705
T2   BEDFORD TWP EIS
T3   HALFWAY CREEK - D/S END - 100 YEAR FLOW  Q=2500 CFS ENCROACHMENT OPTION

J1   ICHECK     INQ       NINV      IDTP      STRT      METRIC    HVINS     Q         WSEL      FQ
       -1.       6.        0.        0.  0.000000      0.00      1.0         0.    577.660     0.000

J2   NPROF     IPLOT     PRFVS     XSECV     XSECH     EN        ALLDC     IBW       CHNIM     ITRACE
     2.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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CCHV=     .300 CEHV=     .500
 2800 NAT GL=     833.15  WSEL=     577.66  ENC GL=     833.15  WSEL=     577.76  RATIO=    .0000
 NAT GL=     854.  RATIOS LOB,CH,ROB=    .0281    .9683    .0036  WSEL=     577.76
3280 CROSS SECTION        .10 EXTENDED       3.66 FEET

   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


3470 ENCROACHMENT STATIONS=      131.0      223.0  TYPE=      4  TARGET=         .025
      .10      9.96    577.66      0.00    577.66    577.92       .26      0.00      0.00    576.40
    2500.       10.    2490.        0.         7.      610.        0.        0.        0.    576.40
     0.00      1.23      4.08      0.00      .050      .040      .100     0.000    567.80    130.96
  .000968        0.        0.        0.         0         0         1      0.00     92.04    223.00

 2800 NAT GL=     389.45  WSEL=     577.40  ENC GL=     396.79  WSEL=     577.50  RATIO=   -.0188
 NAT GL=     397.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     577.50
3280 CROSS SECTION        .08 EXTENDED       2.63 FEET


3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=      160.0      195.0  TYPE=      4  TARGET=         0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      589.00 ELREA=      589.00

      .00      8.83    577.43      0.00    577.40    578.66      1.23       .26       .49    569.50
    2500.        0.    2500.        0.        0.      281.        0.        1.        0.    571.60
      .00      0.00      8.93      0.00      .050      .040      .100      .040    568.60    160.00
  .004735       142.      142.      142.         3         0         1      0.00     35.00    195.00

 2800 NAT GL=     443.22  WSEL=     577.19  ENC GL=     452.85  WSEL=     577.29  RATIO=   -.0217
 NAT GL=     453.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     577.29

NORMAL BRIDGE,NRD=17 MIN ELTRD=   588.90 MAX ELLC=   579.70

3470 ENCROACHMENT STATIONS=     1480.0     1514.0  TYPE=      4  TARGET=         0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      589.00 ELREA=      589.00

      .00      8.63    577.23      0.00    577.19    578.88      1.64       .00       .21    575.00
    2500.        0.    2500.        0.        0.      243.        0.        1.        0.    575.00
      .00      0.00     13.29      0.00      .050      .025      .100      .039    568.60   1480.00
  .003133        1.        1.        1.         3         0         1     -.23     34.00   1514.00

 2800 NAT GL=     453.24  WSEL=     577.30  ENC GL=     463.11  WSEL=     577.40  RATIO=   -.0218
 NAT GL=     463.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     577.40
   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	IOC	ICONT	CORAR	TOPWID	ENDST

NORMAL BRIDGE,NRD=17 MIN ELTRD= 588.90 MAX ELLC= 579.70

3470 ENCROACHMENT STATIONS= 1480.0 1514.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

1.01	8.73	577.33	0.00	577.30	578.93	1.60	.04	.01	575.00
2500.	0.	2500.	0.	0.	246.	0.	2.	0.	575.00
.00	0.00	10.15	0.00	.050	.025	.100	.038	568.60	1480.00
.003001	14.	14.	14.	2	0	1	-.24	34.00	1514.00

2800 NAT QI= 510.73 WSEL= 578.21 ENC QI= 519.56 WSEL= 578.31 RATIO= -.0173
NAT QI= 520. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 578.31

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1483.0 1519.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

1.02	9.63	579.23	0.00	578.21	579.14	.91	.00	.21	569.00
2500.	0.	2500.	0.	0.	326.	0.	2.	0.	569.40
.00	0.00	7.66	0.00	.060	.040	.060	.038	568.60	1483.00
.002953	1.	1.	1.	3	0	1	0.00	35.00	1518.00

2800 NAT QI= 552.81 WSEL= 579.70 ENC QI= 566.01 WSEL= 578.80 RATIO= -.0220
NAT QI= 566. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 578.80

3470 ENCROACHMENT STATIONS= 1472.0 1528.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.80

1.19	9.24	579.74	0.00	578.70	579.31	.57	.07	.10	573.50
2500.	0.	2500.	0.	0.	411.	0.	2.	0.	573.90
.01	0.00	6.08	0.00	.060	.040	.060	.038	570.50	1472.00
.002140	27.	27.	27.	3	0	1	0.00	56.00	1528.00

2800 NAT QI= 368.91 WSEL= 578.39 ENC QI= 376.62 WSEL= 578.49 RATIO= -.0209
NAT QI= 377. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 578.49

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS= 1483.0 1519.0 TYPE= 4 TARGET= 0.000

```
OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      586.80 ELREA=      586.90

     1.18      7.94    578.44      0.00    578.39    579.80      1.36      .09      .39   570.90
   2500.         0.   2500.         0.        0.      267.         0.      2.        0.    571.30
     .01      0.00      8.35      0.00      .060      .040      .060      .038   570.50  1483.00
 .005471       29.       29.       29.         2         0         1      0.00    35.00  1518.00


CCHV=     .100 CEHV=     .500
 2800 NAT GL=     403.17  WSEL=     578.13  ENC GL=     412.73  WSEL=     578.23  RATIO=  -.0237
 NAT GL=     413.  RATIOS L3B,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     578.23

3301 HV CHANGED MORE THAN 4VINS


NORMAL BRIDGE,NRD=14 MIN ELTRD=  586.60 MAX ELLC=  580.30


3470 ENCROACHMENT STATIONS=     1495.0     1530.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      586.80 ELREA=      586.90

     1.19      7.68    578.18      0.00    578.13    580.06      1.87      .00      .26   576.50
   2500.         0.   2500.         0.        0.      228.         0.      2.        0.    576.50
     .01      0.00     10.99      0.00      .060      .025      .060      .038   570.50  1495.00
 .003752        1.        1.        1.         2         0         1     -.17    35.00  1530.00


 2800 NAT GL=     417.83  WSEL=     578.28  ENC GL=     427.87  WSEL=     578.38  RATIO=  -.0240
 NAT GL=     428.  RATIOS L3B,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     578.38

NORMAL BRIDGE,NRD=14 MIN ELTRD=  586.60 MAX ELLC=  580.30


3470 ENCROACHMENT STATIONS=     1495.0     1530.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      586.80 ELREA=      586.90

     1.21      7.83    578.33      0.00    578.28    580.12      1.80      .06      .01   576.50
   2500.         0.   2500.         0.        0.      232.         0.      2.        0.    576.50
     .01      0.00     10.75      0.00      .060      .025      .060      .037   570.50  1495.00
 .003509       15.       16.       16.         2         0         1     -.18    35.00  1530.00


 2800 NAT GL=     309.21  WSEL=     579.01  ENC GL=     314.28  WSEL=     579.11  RATIO=  -.0197
 NAT GL=     314.  RATIOS L3B,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     579.11

3301 HV CHANGED MORE THAN 4VINS

   SECNO      DEPTH     CHSEL     CRIWS     WSELK      EG        HV        HL       OLOSS    BANK ELEV
   0          QLOB      QCH       QROB      ALOB       ACH       AROB      VOL      TWA    LEFT/RIGHT
   TIME       VLOB      VCH       VROB      XNI        XNCH      XNR       WTN      ELMIN       SSTA
   SLOPE      XLOB1     XLCH      XLOBR     ITRIAL     IDC       ICONT     CORAR    TOPWID      ENDST


3470 ENCROACHMENT STATIONS=     1532.0     1567.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      586.80 ELREA=      586.90
```

1.22	8.54	579.04	0.00	579.01	580.19	1.15	.01	.06	570.90
2500.	0.	2500.	0.	0.	290.	0.	2.	0.	571.10
.01	0.00	8.61	0.00	.080	.055	.080	.037	570.50	1532.00
.009007	1.	1.	1.	3	0	1	0.00	35.00	1567.00

2800 NAT Q1= 1157.49 WSEL= 580.24 ENC Q1= 1179.09 WSEL= 580.34 RATIO= -.0187
NAT Q1= 1179. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 580.34

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1510.0 1630.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.80 ELREA= 586.80

1.30	9.86	580.26	0.00	580.24	580.35	.09	.05	.11	573.70
2500.	0.	2500.	0.	0.	1040.	0.	3.	0.	572.90
.01	0.00	2.40	0.00	.080	.055	.080	.039	570.40	1510.00
.030479	41.	41.	41.	2	0	1	0.00	120.00	1630.00

2800 NAT Q1= 2097.96 WSEL= 580.40 ENC Q1= 2097.96 WSEL= 580.50 RATIO= .0000
NAT Q1= 2152. RATIOS LOB,CH,ROB= .1978 .5187 .2835 WSEL= 580.50

3470 ENCROACHMENT STATIONS= 1328.6 1773.2 TYPE= 4 TARGET= .025

1.35	9.93	581.43	0.00	580.40	580.45	.02	.09	.01	573.80
2500.	482.	1316.	702.	804.	951.	947.	19.	2.	573.00
.11	.60	1.39	.74	.080	.055	.080	.048	570.50	1328.62
.000143	368.	368.	368.	2	0	1	0.00	444.62	1773.24

CCHV= .300 CEHV= .500
2800 NAT Q1= 2201.44 WSEL= 580.42 ENC Q1= 2201.44 WSEL= 580.52 RATIO= 0.0000
NAT Q1= 2257. RATIOS LOB,CH,ROB= .1978 .5226 .2797 WSEL= 580.52

3470 ENCROACHMENT STATIONS= 1327.9 1774.9 TYPE= 4 TARGET= .025

1.39	10.05	580.45	0.00	580.42	580.47	.02	.02	.00	573.70
2500.	480.	1325.	694.	827.	984.	972.	28.	4.	572.90
.15	.58	1.35	.71	.080	.055	.080	.049	570.40	1327.90
.000130	150.	150.	150.	2	0	1	0.00	446.98	1774.87

SPECIAL BRIDGE

SR XX	XKOR	COEO	RDIEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.50	2.90	500.00	29.30	1.30	227.00	0.00	570.40	570.40

2900 NAT Q1= 2517.57 WSEL= 580.97 ENC Q1= 2517.57 WSEL= 581.07 RATIO= .0000
NAT Q1= 2573. RATIOS LOB,CH,ROB= .2120 .5043 .2836 WSEL= 581.07
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	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= 1323.7 1784.4 TYPE= 4 TARGET= .021

1.42	10.60	581.00	0.00	580.97	581.01	.01	.00	.00	573.70

```
    2500.      511.     1277.      712.      939.     1042.     1091.       29.        4.     572.90
     .15       .54      1.22       .65       .080      .055      .080      .049    570.40    1323.72
 .000099       18.       19.       18.         0         0         4      0.00    460.69    1784.40

 2900 NAT Q1=    2513.33  WSEL=     580.97  ENC Q1=    2513.33  WSEL=     581.07  RATIO=    .0000
 NAT Q1=    2573.  RATIOS LOB,CH,ROB=    .2120    .5043    .2836  WSEL=     581.07

3470 ENCROACHMENT STATIONS=     1324.5     1782.4  TYPE=      4  TARGET=          .023
     1.43     10.60    581.00      0.00    580.97    581.01       .01       .00       .00    573.70
     2500.      511.     1278.      711.      937.     1042.     1085.       29.        4.     572.90
      .15       .55      1.23       .66       .080      .055      .080      .049    570.40    1324.48
 .000107        1.        1.        1.         0         0         1      0.00    457.94    1782.42

 2900 NAT Q1=    2092.05  WSEL=     580.99  ENC Q1=    2092.05  WSEL=     581.09  RATIO=    .0000
 NAT Q1=    2145.  RATIOS LOB,CH,ROB=    .4429    .2056    .3515  WSEL=     581.09

3470 ENCROACHMENT STATIONS=      662.3     1128.6  TYPE=      4  TARGET=          .025
     1.45     10.71    581.01      0.00    580.99    581.03       .01       .02       .00    575.00
     2500.     1103.      528.      869.     1516.      378.     1190.       39.        6.     575.30
      .20       .73      1.40       .73       .085      .055      .085      .050    570.30     662.26
 .000147       141.      141.      141.         2         0         1      0.00    466.37    1128.63

CCHV=     .150 CEHV=     .350
 2900 NAT Q1=    2214.67  WSEL=     581.22  ENC Q1=    2214.67  WSEL=     581.32  RATIO=    .0000
 NAT Q1=    2269.  RATIOS LOB,CH,ROB=    .4452    .2022    .3526  WSEL=     581.32

3470 ENCROACHMENT STATIONS=      656.3     1129.0  TYPE=      4  TARGET=          .024
     2.00     10.95    581.25      0.00    581.22    581.26       .01       .24       .00    575.00
     2500.     1113.      518.      869.     1595.      388.     1236.      162.       24.     575.30
      .77       .70      1.34       .70       .085      .055      .085      .053    570.30     656.27
 .000139      1700.     1700.     1700.         2         0         1      0.00    472.73    1129.00

 2900 NAT Q1=    1259.26  WSEL=     581.59  ENC Q1=    1259.26  WSEL=     581.69  RATIO=    .0000
 NAT Q1=    1299.  RATIOS LOB,CH,ROB=    .1883    .2512    .5605  WSEL=     581.69
3280 CROSS SECTION       3.00 EXTENDED       5.43 FEET

3470 ENCROACHMENT STATIONS=      482.9      940.1  TYPE=      4  TARGET=          .031
     3.00     10.63    581.63      0.00    581.59    581.67       .04       .40       .01    577.00
     2500.      450.      649.     1401.      523.      306.      984.      270.       42.     577.40
     1.11       .86      2.12      1.42       .085      .055      .065      .054    571.00     482.89
 .000405      1875.     1875.     1875.         2         0         1      0.00    357.24     840.14

 2900 NAT Q1=     389.45  WSEL=     582.21  ENC Q1=     389.45  WSEL=     582.31  RATIO=    .0000
 NAT Q1=     399.  RATIOS LOB,CH,ROB=    .0591    .8600    .0809  WSEL=     582.31
3280 CROSS SECTION       3.10 EXTENDED       3.67 FEET


3301 HV CHANGED MORE THAN HVTNS

   SECND      DEPTH     CWSEL     CRTWS     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      XLOB1     XLCH      XLOBR     ITRIAL     IDC       ICONT     CORAR    TOPWID      ENDST
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3470 ENCROACHMENT STATIONS=       76.2      145.7  TYPE=      4  TARGET=        .025
     3.10     10.87    582.27      0.00    582.21    582.85      .59       .99       .19    579.40
    2500.      130.     2192.      178.       38.      342.      47.      297.       47.    578.20
     1.16      3.45      6.41      3.81      .060      .055     .060      .054    571.40     76.15
  .004160     1050.     1050.     1050.         2         0         1      0.00     69.54    145.70

CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     285.78  WSEL=     582.50  ENC Q1=     290.37  WSEL=     582.60  RATIO=  -.0161
 NAT Q1=     290.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     582.60

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=      380.0      408.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       584.00 ELREA=       584.00

     3.98     10.70    582.60      0.00    582.50    583.94     1.34       .72       .38    576.20
    2500.        0.     2500.        0.        0.      269.       0.      298.       47.    574.50
     1.17      0.00      9.29      0.00      .065      .055     .065      .054    571.90    380.00
  .008199      126.      126.      126.         2         0         1      0.00     28.00    408.00


SPECIAL BRIDGE

SB   XK        XKOR      COEQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
      .90       1.50      2.70      0.00      28.00       .01    281.60       .45    572.30    572.30

 2800 NAT Q1=     315.29  WSEL=     583.14  ENC Q1=     319.99  WSEL=     583.24  RATIO=  -.0149
 NAT Q1=     320.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     583.24
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      380.0      408.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       585.30 ELREA=       584.80

     4.02     11.34    583.24      0.00    583.14    584.42     1.18       .36       .05    576.20
    2500.        0.     2500.        0.        0.      287.       0.      299.       47.    574.50
     1.17      0.00      8.72      0.00      .065      .055     .065      .054    571.90    380.00
  .006783       48.       48.       48.         0         0         1      0.00     28.00    408.00

 2800 NAT Q1=     674.85  WSEL=     584.40  ENC Q1=     674.85  WSEL=     584.50  RATIO=   .0000
 NAT Q1=     587.  RATIOS LOB,CH,ROB=   .2751   .6326   .0923  WSEL=     584.50
3280 CROSS SECTION       4.10 EXTENDED       5.85 FEET


3301 HV CHANGED MORE THAN HVINS

   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS   BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBI     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST
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3470 ENCROACHMENT STATIONS=      141.9      217.6  TYPE=      4  TARGET=         .018
     4.10     12.45    584.45      0.00    584.40    584.75       .30       .07       .26    575.20
  2500.      675.     1610.       215.      187.      329.      124.      299.       48.     576.10
     1.17      3.61      4.89      1.73      .060      .055      .100      .054    572.00    141.94
  .001339       26.       26.       26.         3         0         1      0.00     75.62    217.57

CCHV=     .200 CEHV=     .400
 2800 NAT QI=     933.22  WSEL=     585.17  ENC QI=     933.22  WSEL=     585.27  RATIO=     .0000
 NAT QI=     961.  RATIOS LOB,CH,ROB=     .7674     .1671     .0655  WSEL=     585.27

3470 ENCROACHMENT STATIONS=       97.9      435.5  TYPE=      4  TARGET=         .029
     5.00     13.74    585.24      0.00    585.17    585.28       .04       .48       .05    575.70
  2500.     1902.      423.       175.     1535.      145.      137.      313.       50.     578.30
     1.26      1.24      2.92      1.28      .100      .055      .085      .054    571.50     97.90
  .000707       500.      500.      500.         3         0         1      0.00    337.59    435.50

CCHV=     .400 CEHV=     .600
 2800 NAT QI=    1224.21  WSEL=     585.37  ENC QI=    1243.92  WSEL=     585.47  RATIO=    -.0161
 NAT QI=    1244.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     585.47

3470 ENCROACHMENT STATIONS=      619.0      702.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      586.00 ELREA=      586.00

     5.10     11.55    585.45      0.00    585.37    585.56       .11       .24       .04    574.70
  2500.        0.      2500.        0.        0.      926.        0.      326.       52.     574.50
     1.32      0.00      2.72      0.00      .080      .055      .080      .054    573.90    619.00
  .000471       420.      420.      420.         3         0         1      0.00     83.00    702.00

CCHV=     .250 CEHV=     .450
 2800 NAT QI=     328.93  WSEL=     584.98  ENC QI=     333.36  WSEL=     585.08  RATIO=    -.0134
 NAT QI=     333.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     585.08
3290 CROSS SECTION       5.98 EXTENDED       2.68 FEET


3301 HV CHANGED MORE THAN 4VINS


3470 ENCROACHMENT STATIONS=      579.0      607.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      586.00 ELREA=      586.00

     5.99     11.68    585.09      0.00    584.98    586.08      1.00       .12       .40    578.20
  2500.        0.      2500.        0.        0.      311.        0.      328.       52.     577.00
     1.31      0.00      2.03      0.00      .080      .055      .080      .054    573.40    579.00
  .005625       106.      106.      106.         2         0         1      0.00     28.00    607.00


SPECIAL BRIDGE

SR   XK         XKOR       COEO       RDIEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     1.25       1.60       2.80     300.00      28.00       3.00     175.00       0.00     573.40     573.40

 2800 NAT QI=     544.65  WSEL=     589.54  ENC QI=     549.62  WSEL=     589.64  RATIO=    -.0091
 NAT QI=     550.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     589.64
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 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION       6.02 EXTENDED       7.24 FEET

   SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS     BANK ELEV
   O          OLOB       OCH        OROB       ALOB       ACH        AROB       VOL        TWA     LEFT/RIGHT
   TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN       SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IOC        ICONT      CORAR      TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      579.0      607.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      594.00 ELREA=      594.00

      6.02      16.24     589.64       0.00     589.54     590.14       .50        .28        .12     578.20
    2500.          0.       2500.         0.         0.       439.         0.       329.        52.      577.00
      1.31       0.00       5.70       0.00       .080       .055       .080       .054     573.40     579.00
  .002069         88.         88.         88.          0          0          1       0.00      28.00     607.00


 2800 NAT QI=    1584.30  WSEL=     590.12  ENC QI=    1584.30  WSEL=     590.22  RATIO=    .0000
 NAT QI=    1504.  RATIOS LOB,CH,ROB=    .2235    .5715    .2050  WSEL=     590.22
3280 CROSS SECTION       6.20 EXTENDED      12.41 FEET


3470 ENCROACHMENT STATIONS=      535.9      644.0  TYPE=      4  TARGET=         .012
      6.20      16.91     590.21       0.00     590.12     590.27       .07        .02        .11     578.50
    2500.       550.       1446.       504.       456.       571.       399.       330.        52.      577.70
      1.32       1.21       2.53       1.26       .100       .055       .100       .054     573.30     535.90
  .000252         39.         39.         39.          2          0          1       0.00     108.13     644.03

CCHV=     .150 CEHV=     .350
 2800 NAT QI=    4360.92  WSEL=     590.23  ENC QI=    4360.92  WSEL=     590.33  RATIO=    .0000
 NAT QI=    4429.  RATIOS LOB,CH,ROB=    .4472    .1587    .3941  WSEL=     590.33
3280 CROSS SECTION       7.00 EXTENDED      10.32 FEET


3470 ENCROACHMENT STATIONS=      673.0     1197.0  TYPE=      4  TARGET=         .015
      7.00      15.82     590.32       0.00     590.23     590.32       .00        .04        .01     579.90
    2200.       989.       353.       858.      2668.       483.      2472.       375.        56.      580.30
      1.69        .37        .73        .35       .100       .055       .100       .054     574.50     673.01
  .000025         567.        567.        567.         2          0          1       0.00     523.94    1196.95
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twp.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: 100 yr. Convergence

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 yr. Convergence

FWAY CREEK - D/S END - 1

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
.100	2500.00	577.66	577.66	833.15	577.90	111.60	0.00	0.00	577.66	-I	-I	577.66
.100	2500.00	579.16	579.16	1172.78	579.31	111.94	0.00	0.00	579.16	0.00	0.00	579.16
.100	2500.00	576.16	576.16	541.71	576.58	87.28	0.00	0.00	576.16	0.00	0.00	576.16
.980	2500.00	577.40	577.40	389.46	578.64	35.00	0.00	0.00	0.00	577.66	577.66	0.00
.980	2500.00	578.93	578.93	511.94	579.80	35.00	0.00	0.00	0.00	579.16	579.16	0.00
.980	2500.00	575.93	575.93	281.62	577.79	35.00	0.00	0.00	0.00	576.16	576.16	0.00
.990	2500.00	577.19	577.19	443.22	578.85	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	2500.00	578.81	578.81	609.05	579.92	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	2500.00	575.56	575.56	294.45	578.36	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	577.30	577.30	453.24	578.91	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	578.85	578.85	612.77	579.94	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	576.95	576.95	419.31	578.73	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	578.21	578.21	510.73	579.12	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	579.32	579.32	611.11	580.05	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	578.03	578.03	495.22	578.98	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	578.70	578.70	553.81	579.28	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	579.73	579.73	684.87	580.18	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	578.54	578.54	534.26	579.15	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	578.39	578.39	368.91	579.77	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	579.49	579.49	457.61	580.54	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	578.22	578.22	355.47	579.66	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	578.13	578.13	403.17	580.03	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	579.34	579.34	526.28	580.69	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	577.93	577.93	383.59	579.96	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	578.28	578.28	417.83	580.10	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	579.39	579.39	532.39	580.73	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	578.12	578.12	401.66	580.03	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	579.01	579.01	308.21	580.17	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	579.80	579.80	356.89	580.77	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	578.93	578.93	302.94	580.11	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.24	580.24	1157.49	580.33	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.81	580.81	1286.11	580.89	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.18	580.18	1144.40	580.27	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.40	580.40	2097.96	580.42	522.19	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.95	580.95	2405.34	580.97	537.62	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.35	580.35	2067.42	580.37	520.60	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.42	580.42	2201.44	580.44	525.61	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.97	580.97	2511.95	580.98	540.89	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.37	580.37	2170.62	580.39	524.03	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
1.420	2500.00	580.97	580.97	2517.57	580.99	541.16	0.00	0.00	0.00	0.00	0.00	0.00
1.420	2500.00	581.23	581.23	2669.67	581.24	548.28	0.00	0.00	0.00	0.00	0.00	0.00
1.420	2500.00	580.95	580.95	2505.80	580.97	540.60	0.00	0.00	0.00	0.00	0.00	0.00
1.430	2500.00	580.97	580.97	2513.33	580.99	540.95	0.00	0.00	0.00	0.00	0.00	0.00
1.430	2500.00	581.23	581.23	2665.69	581.24	548.10	0.00	0.00	0.00	0.00	0.00	0.00
1.430	2500.00	580.95	580.95	2501.55	580.97	540.39	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	580.99	580.99	2092.05	581.00	529.87	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	581.24	581.24	2226.67	581.25	533.67	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	580.97	580.97	2081.63	580.98	529.57	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.22	581.22	2214.67	581.23	533.34	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.45	581.45	2338.67	581.46	536.76	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.20	581.20	2205.15	581.21	533.07	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.59	581.59	1259.26	581.63	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.78	581.78	1334.01	581.81	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.58	581.58	1253.62	581.62	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	582.21	582.21	385.45	582.78	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	582.32	582.32	400.00	582.87	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	582.21	582.21	388.69	582.77	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	582.50	582.50	285.78	583.87	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	582.58	582.58	289.41	583.93	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	582.50	582.50	285.52	583.87	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	583.14	583.14	315.29	584.34	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	583.24	583.24	320.15	584.42	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	583.13	583.13	314.94	584.33	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	584.40	584.40	674.85	584.68	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	584.47	584.47	684.31	584.75	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	584.39	584.39	674.18	584.68	82.00	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.17	585.17	933.22	585.21	397.63	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.23	585.23	948.87	585.27	398.14	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.17	585.17	932.12	585.21	397.59	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	585.37	585.37	1224.21	585.48	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	585.42	585.42	1233.75	585.53	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	585.36	585.36	1223.54	585.48	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	584.98	584.98	328.93	586.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	585.04	585.04	331.37	586.05	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	584.98	584.98	328.76	586.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	589.54	589.54	544.65	590.05	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	589.60	589.60	547.59	590.11	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	589.54	589.54	544.44	590.05	28.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
6.200	2500.00	590.12	590.12	1584.30	590.18	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2500.00	590.17	590.17	1594.84	590.24	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2500.00	590.11	590.11	1583.56	590.18	111.00	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.23	590.23	4360.92	590.23	541.55	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.28	590.28	4396.73	590.28	541.60	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.22	590.22	4358.40	590.22	541.55	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
.100	2500.000	577.660	0.000	0.000	0.000	111.595	0.000	0.000
.100	2500.000	579.160	1.500	0.000	0.000	111.944	-.349	0.000
.100	2500.000	576.160	-3.000	0.000	0.000	87.275	24.320	0.000
.980	2500.000	577.399	0.000	-.261	0.000	35.000	0.000	71.000
.980	2500.000	578.925	1.526	-.235	0.000	35.000	-.000	71.000
.980	2500.000	575.927	-2.998	-.233	0.000	35.000	0.000	71.000
.990	2500.000	577.192	0.000	-.207	0.000	34.000	0.000	1.000
.990	2500.000	578.813	1.621	-.112	0.000	34.000	0.000	1.000
.990	2500.000	575.562	-3.251	-.365	0.000	34.000	0.000	1.000
1.010	2500.000	577.297	0.000	.105	0.000	34.000	0.000	14.000
1.010	2500.000	578.848	1.551	.035	0.000	34.000	0.000	14.000
1.010	2500.000	576.946	-1.901	1.384	0.000	34.000	0.000	14.000
1.020	2500.000	578.208	0.000	.911	0.000	35.000	0.000	1.000
1.020	2500.000	579.324	1.116	.476	0.000	35.000	0.000	1.000
1.020	2500.000	578.030	-1.293	1.084	0.000	35.000	0.000	1.000
1.100	2500.000	578.704	0.000	.496	0.000	56.000	0.000	27.000
1.100	2500.000	579.732	1.029	.409	0.000	56.000	0.000	27.000
1.100	2500.000	578.543	-1.189	.513	0.000	56.000	0.000	27.000
1.180	2500.000	578.391	0.000	-.313	0.000	35.000	0.000	29.000
1.180	2500.000	579.485	1.094	-.247	0.000	35.000	0.000	29.000
1.180	2500.000	578.218	-1.267	-.325	0.000	35.000	0.000	29.000
1.190	2500.000	578.131	0.000	-.260	0.000	35.000	0.000	1.000
1.190	2500.000	579.337	1.206	-.148	0.000	35.000	0.000	1.000
1.190	2500.000	577.928	-1.409	-.290	0.000	35.000	0.000	1.000
1.210	2500.000	578.284	0.000	.153	0.000	35.000	0.000	16.000
1.210	2500.000	579.395	1.111	.058	0.000	35.000	0.000	16.000
1.210	2500.000	578.120	-1.274	.192	0.000	35.000	0.000	16.000
1.220	2500.000	579.013	0.000	.729	0.000	35.000	0.000	1.000
1.220	2500.000	579.801	.789	.407	0.000	35.000	0.000	1.000
1.220	2500.000	578.925	-.876	.805	0.000	35.000	0.000	1.000
1.300	2500.000	580.238	0.000	1.225	0.000	120.000	0.000	41.000
1.300	2500.000	580.814	.577	1.013	0.000	120.000	0.000	41.000
1.300	2500.000	580.178	-.637	1.252	0.000	120.000	0.000	41.000
1.350	2500.000	580.403	0.000	.166	0.000	522.193	0.000	368.000
1.350	2500.000	580.953	.549	.138	0.000	537.621	-15.428	368.000
1.350	2500.000	580.347	-.606	.169	0.000	520.599	1.593	368.000

1.380	2500.000	580.425	0.000	.021	0.000	525.605	0.000	150.000
1.380	2500.000	580.969	.544	.016	0.000	540.889	-15.284	150.000
1.380	2500.000	580.369	-.600	.022	0.000	524.030	1.575	150.000
1.420	2500.000	580.971	0.000	.547	0.000	541.156	0.000	18.000
1.420	2500.000	581.226	.254	.257	0.000	548.285	-7.128	18.000
1.420	2500.000	580.951	-.274	.583	0.000	540.596	.560	18.000
1.430	2500.000	580.971	0.000	.000	0.000	540.955	0.000	1.000
1.430	2500.000	581.226	.254	.000	0.000	548.101	-7.146	1.000
1.430	2500.000	580.951	-.274	.000	0.000	540.393	.562	1.000
1.450	2500.000	580.991	0.000	.020	0.000	529.873	0.000	141.000
1.450	2500.000	581.243	.252	.017	0.000	533.673	-3.800	141.000
1.450	2500.000	580.971	-.272	.020	0.000	529.574	.299	141.000
2.000	2500.000	581.221	0.000	.230	0.000	533.338	0.000	1700.000
2.000	2500.000	581.448	.227	.205	0.000	536.755	-3.417	1700.000
2.000	2500.000	581.204	-.244	.232	0.000	533.072	.266	1700.000
3.000	2500.000	581.593	0.000	.372	0.000	404.001	0.000	1875.000
3.000	2500.000	581.781	.187	.333	0.000	404.001	-.000	1875.000
3.000	2500.000	581.579	-.202	.376	0.000	404.001	.000	1875.000
3.100	2500.000	582.215	0.000	.621	0.000	75.001	0.000	1050.000
3.100	2500.000	582.320	.106	.540	0.000	75.001	-.000	1050.000
3.100	2500.000	582.207	-.114	.628	0.000	75.001	.000	1050.000
3.980	2500.000	582.504	0.000	.290	0.000	28.000	0.000	126.000
3.980	2500.000	582.583	.079	.263	0.000	28.000	0.000	126.000
3.980	2500.000	582.499	-.084	.292	0.000	28.000	0.000	126.000
4.020	2500.000	583.138	0.000	.633	0.000	28.000	0.000	48.000
4.020	2500.000	583.240	.103	.657	0.000	28.000	0.000	48.000
4.020	2500.000	583.130	-.110	.631	0.000	28.000	0.000	48.000
4.100	2500.000	584.395	0.000	1.258	0.000	82.001	0.000	26.000
4.100	2500.000	584.472	.077	1.232	0.000	82.001	-.000	26.000
4.100	2500.000	584.390	-.082	1.259	0.000	82.001	.000	26.000
5.000	2500.000	585.172	0.000	.777	0.000	397.631	0.000	500.000
5.000	2500.000	585.229	.057	.757	0.000	398.139	-.508	500.000
5.000	2500.000	585.168	-.061	.779	0.000	397.595	.036	500.000
5.100	2500.000	585.368	0.000	.196	0.000	83.000	0.000	420.000
5.100	2500.000	585.420	.052	.191	0.000	83.000	0.000	420.000
5.100	2500.000	585.365	-.055	.197	0.000	83.000	0.000	420.000
5.980	2500.000	584.981	0.000	-.388	0.000	28.000	0.000	106.000
5.980	2500.000	585.036	.055	-.385	0.000	28.000	0.000	106.000
5.980	2500.000	584.977	-.059	-.388	0.000	28.000	0.000	106.000
6.020	2500.000	589.541	0.000	4.560	0.000	28.000	0.000	88.000
6.020	2500.000	589.600	.059	4.564	0.000	28.000	0.000	88.000
6.020	2500.000	589.537	-.063	4.560	0.000	28.000	0.000	88.000
6.200	2500.000	590.117	0.000	.577	0.000	111.002	0.000	39.000
6.200	2500.000	590.172	.055	.572	0.000	111.002	-.000	39.000
6.200	2500.000	590.113	-.058	.577	0.000	111.002	.000	39.000

7.000	2200.000	590.225	0.000	.108	0.000	541.552	0.000	567.000
7.000	2200.000	590.279	.053	.107	0.000	541.597	-.045	567.000
7.000	2200.000	590.222	-.057	.108	0.000	541.549	.003	567.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	63.321	0.000
2	0.000	0.000	63.718	.397
3	0.000	0.000	63.266	-.054

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: 100 yr. flow

00BREAK00

DS Halfway 100 yr. Flow Sensitivity

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

EWAY CREEK - D/S END - 1

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWTD	STENCL	STENCR	WSELK	#	#	WSELK
.100	2500.00	577.56	577.56	832.69	577.90	111.59	0.00	0.00	577.00	-I	-I	577.00
.100	2500.00	578.77	578.77	829.81	578.94	111.85	0.00	0.00	577.00	0.00	0.00	577.00
.100	2500.00	576.40	576.40	825.85	576.79	88.00	0.00	0.00	577.00	0.00	0.00	577.00
.980	2500.00	577.40	577.40	389.29	578.64	35.00	0.00	0.00	0.00	577.00	577.00	0.00
.980	2500.00	578.63	578.63	374.90	579.56	35.00	0.00	0.00	0.00	577.00	577.00	0.00
.980	2500.00	575.87	575.87	396.55	577.77	35.00	0.00	0.00	0.00	577.00	577.00	0.00
.990	2500.00	577.19	577.19	442.98	578.85	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	2500.00	578.51	578.51	443.53	579.69	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	2500.00	575.56	575.56	420.64	578.35	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	577.29	577.29	453.02	578.91	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	578.58	578.58	449.10	579.74	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	576.82	576.82	580.94	578.67	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	578.21	578.21	510.63	579.12	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	579.11	579.11	454.82	579.87	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	577.98	577.98	701.31	578.94	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	578.70	578.70	553.67	579.28	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	579.56	579.56	509.68	580.03	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	578.46	578.46	748.43	579.08	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	578.39	578.39	368.82	579.77	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	579.35	579.35	343.46	580.44	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	578.06	578.06	491.10	579.57	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	578.13	578.13	403.03	580.03	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	579.20	579.20	393.46	580.60	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	577.74	577.74	522.44	579.89	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	578.28	578.28	417.71	580.10	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	579.30	579.30	402.05	580.67	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	577.85	577.85	534.95	579.94	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	579.01	579.01	308.17	580.17	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	579.73	579.73	271.17	580.71	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	578.80	578.80	422.32	580.03	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.24	580.24	1157.39	580.33	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.79	580.79	994.34	580.87	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.07	580.07	1602.38	580.16	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.40	580.40	2097.72	580.42	522.18	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.97	580.97	1858.96	580.99	538.17	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.20	580.20	2840.99	580.22	516.44	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.42	580.42	2201.21	580.44	525.59	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	581.00	581.00	1945.89	581.01	541.73	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.21	580.21	2978.52	580.23	519.59	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSE_	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
1.429	2500.00	580.97	580.97	2517.48	580.99	541.15	0.00	0.00	0.00	0.00	0.00	0.00
1.429	2500.00	581.25	581.25	2064.54	581.26	548.94	0.00	0.00	0.00	0.00	0.00	0.00
1.429	2500.00	580.90	580.90	3534.21	580.91	539.07	0.00	0.00	0.00	0.00	0.00	0.00
1.439	2500.00	580.97	580.97	2513.24	580.99	540.95	0.00	0.00	0.00	0.00	0.00	0.00
1.439	2500.00	581.25	581.25	2061.49	581.26	548.76	0.00	0.00	0.00	0.00	0.00	0.00
1.439	2500.00	580.90	580.90	3528.05	580.91	538.87	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	580.99	580.99	2091.97	581.00	529.87	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	581.28	581.28	1726.73	581.29	534.17	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	580.91	580.91	2926.85	580.92	528.63	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.22	581.22	2214.60	581.23	533.34	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.61	581.61	1867.06	581.62	539.14	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.03	581.03	3017.48	581.04	530.45	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.59	581.59	1259.22	581.63	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	582.12	582.12	1132.76	582.14	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.23	581.23	1599.38	581.27	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	582.21	582.21	389.44	582.78	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	583.02	583.02	364.32	583.46	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	581.38	581.38	443.72	582.16	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	582.50	582.50	285.78	583.87	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	583.50	583.50	255.72	584.62	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	581.41	581.41	338.53	583.16	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	583.14	583.14	315.29	584.34	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	584.99	584.99	504.25	585.23	143.57	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	581.57	581.57	348.38	583.25	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	584.40	584.40	674.85	584.68	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	585.04	585.04	581.78	585.29	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	583.30	583.30	780.67	583.69	82.00	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.17	585.17	933.21	585.21	397.63	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.89	585.89	876.86	585.92	404.02	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	584.09	584.09	948.98	584.17	371.18	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	585.37	585.37	1224.21	585.48	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	586.10	586.10	3865.14	586.10	978.70	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	584.24	584.24	1466.75	584.39	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	584.98	584.98	328.93	586.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	585.62	585.62	274.61	586.53	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	583.71	583.71	391.54	585.01	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	589.54	589.54	544.65	590.05	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	590.22	590.22	445.20	590.69	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	588.17	588.17	681.37	588.78	28.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	FG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
6.200	2500.00	590.12	590.12	1584.30	590.18	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2500.00	590.76	590.76	1315.72	590.82	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2500.00	588.84	588.84	1923.73	588.93	111.00	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.23	590.23	4360.90	590.23	541.55	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.88	590.88	3696.77	590.88	542.10	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	588.96	588.96	5067.10	588.96	540.48	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH O	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
.100	2500.000	577.658	0.000	0.000	0.000	111.595	0.000	0.000
.100	2500.000	578.766	1.108	0.000	0.000	111.852	-.258	0.000
.100	2500.000	576.399	-2.367	0.000	0.000	87.997	23.598	0.000
.980	2500.000	577.397	0.000	-.261	0.000	35.000	0.000	71.000
.980	2500.000	578.631	1.234	-.135	0.000	35.000	-.000	71.000
.980	2500.000	575.868	-2.763	-.531	0.000	35.000	0.000	71.000
.990	2500.000	577.190	0.000	-.207	0.000	34.000	0.000	1.000
.990	2500.000	578.508	1.318	-.123	0.000	34.000	0.000	1.000
.990	2500.000	575.562	-2.946	-.306	0.000	34.000	0.000	1.000
1.010	2500.000	577.295	0.000	.105	0.000	34.000	0.000	14.000
1.010	2500.000	578.577	1.282	.069	0.000	34.000	0.000	14.000
1.010	2500.000	576.820	-1.757	1.258	0.000	34.000	0.000	14.000
1.020	2500.000	578.207	0.000	.912	0.000	35.000	0.000	1.000
1.020	2500.000	579.105	.898	.528	0.000	35.000	0.000	1.000
1.020	2500.000	577.982	-1.124	1.162	0.000	35.000	0.000	1.000
1.100	2500.000	578.703	0.000	.496	0.000	56.000	0.000	27.000
1.100	2500.000	579.563	.860	.457	0.000	56.000	0.000	27.000
1.100	2500.000	578.457	-1.106	.476	0.000	56.000	0.000	27.000
1.180	2500.000	578.390	0.000	-.313	0.000	35.000	0.000	29.000
1.180	2500.000	579.353	.963	-.210	0.000	35.000	0.000	29.000
1.180	2500.000	578.064	-1.288	-.393	0.000	35.000	0.000	29.000
1.190	2500.000	578.130	0.000	-.260	0.000	35.000	0.000	1.000
1.190	2500.000	579.197	1.068	-.155	0.000	35.000	0.000	1.000
1.190	2500.000	577.739	-1.458	-.325	0.000	35.000	0.000	1.000
1.210	2500.000	578.283	0.000	.153	0.000	35.000	0.000	16.000
1.210	2500.000	579.303	1.020	.106	0.000	35.000	0.000	16.000
1.210	2500.000	577.846	-1.457	.106	0.000	35.000	0.000	16.000
1.220	2500.000	579.012	0.000	.730	0.000	35.000	0.000	1.000
1.220	2500.000	579.731	.719	.428	0.000	35.000	0.000	1.000
1.220	2500.000	578.805	-.926	.959	0.000	35.000	0.000	1.000
1.300	2500.000	590.237	0.000	1.225	0.000	120.000	0.000	41.000
1.300	2500.000	580.787	.550	1.056	0.000	120.000	0.000	41.000
1.300	2500.000	580.071	-.716	1.266	0.000	120.000	0.000	41.000
1.350	2500.000	580.403	0.000	.166	0.000	522.180	0.000	368.000
1.350	2500.000	580.972	.569	.185	0.000	538.168	-15.988	368.000
1.350	2500.000	580.198	-.774	.127	0.000	516.436	5.744	368.000

1.380	2500.000	580.424	0.000	.021	0.000	525.593	0.000	150.000
1.380	2500.000	580.999	.575	.027	0.000	541.731	-16.138	150.000
1.380	2500.000	580.211	-.788	.012	0.000	519.591	6.002	150.000
1.420	2500.000	580.971	0.000	.547	0.000	541.152	0.000	18.000
1.420	2500.000	581.249	.278	.250	0.000	548.941	-7.789	18.000
1.420	2500.000	580.897	-.352	.686	0.000	539.072	2.080	18.000
1.430	2500.000	580.971	0.000	.000	0.000	540.951	0.000	1.000
1.430	2500.000	581.249	.278	.000	0.000	548.758	-7.808	1.000
1.430	2500.000	580.897	-.352	.000	0.000	538.865	2.085	1.000
1.450	2500.000	580.991	0.000	.020	0.000	529.871	0.000	141.000
1.450	2500.000	581.277	.286	.027	0.000	534.175	-4.304	141.000
1.450	2500.000	580.908	-.368	.011	0.000	528.629	1.242	141.000
2.000	2500.000	581.221	0.000	.230	0.000	533.336	0.000	1700.000
2.000	2500.000	581.607	.386	.330	0.000	539.144	-5.808	1700.000
2.000	2500.000	581.029	-.578	.121	0.000	530.450	2.887	1700.000
3.000	2500.000	581.593	0.000	.372	0.000	404.001	0.000	1875.000
3.000	2500.000	582.116	.522	.509	0.000	404.001	-.000	1875.000
3.000	2500.000	581.229	-.887	.200	0.000	404.001	.000	1875.000
3.100	2500.000	582.215	0.000	.621	0.000	75.001	0.000	1050.000
3.100	2500.000	583.023	.809	.908	0.000	75.001	-.000	1050.000
3.100	2500.000	581.383	-1.640	.154	0.000	75.000	.000	1050.000
3.980	2500.000	582.504	0.000	.290	0.000	28.000	0.000	126.000
3.980	2500.000	583.499	.995	.476	0.000	28.000	0.000	126.000
3.980	2500.000	581.412	-2.087	.029	0.000	28.000	0.000	126.000
4.020	2500.000	583.138	0.000	.633	0.000	28.000	0.000	48.000
4.020	2500.000	584.988	1.851	1.489	0.000	143.574	-115.574	48.000
4.020	2500.000	581.566	-3.422	.154	0.000	28.000	0.000	48.000
4.100	2500.000	584.395	0.000	1.258	0.000	82.001	0.000	26.000
4.100	2500.000	585.043	.648	.055	0.000	82.001	-.000	26.000
4.100	2500.000	583.302	-1.741	1.736	0.000	82.000	.000	26.000
5.000	2500.000	585.172	0.000	.777	0.000	397.630	0.000	500.000
5.000	2500.000	585.888	.716	.945	0.000	404.019	-6.389	500.000
5.000	2500.000	584.091	-1.797	.789	0.000	371.176	26.454	500.000
5.100	2500.000	585.368	0.000	.196	0.000	83.000	0.000	420.000
5.100	2500.000	586.102	.733	.213	0.000	978.696	-895.696	420.000
5.100	2500.000	584.245	-1.857	.153	0.000	83.000	0.000	420.000
5.980	2500.000	584.980	0.000	-.388	0.000	28.000	0.000	106.000
5.980	2500.000	585.617	.636	-.485	0.000	28.000	0.000	106.000
5.980	2500.000	583.709	-1.908	-.536	0.000	28.000	.000	106.000
6.020	2500.000	589.541	0.000	4.560	0.000	28.000	0.000	88.000
6.020	2500.000	590.218	.678	4.602	0.000	28.000	0.000	88.000
6.020	2500.000	588.166	-2.053	4.457	0.000	28.000	.000	88.000
6.200	2500.000	590.117	0.000	.577	0.000	111.002	0.000	39.000
6.200	2500.000	590.761	.644	.542	0.000	111.003	-.000	39.000
6.200	2500.000	588.844	-1.916	.679	0.000	111.002	.000	39.000

7.000	2200.000	590.225	0.000	.108	0.000	541.552	0.000	567.000
7.000	2200.000	590.876	.651	.116	0.000	542.103	-.551	567.000
7.000	2200.000	588.960	-1.916	.116	0.000	540.481	1.070	567.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE END	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	63.320	0.000
2	0.000	0.000	69.404	6.083
3	0.000	0.000	62.819	-.502

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twps.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: Report

00BREAK00

FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 BEDFORD TWP FIS, MONROE CO., MICHIGAN

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Halfway Creek (lower portion)

STUDY LIMITS: Corporate boundary of Bedford Twp. with Erie Twp. (downstream limit) to confluence with Indian Creek (upstream limit).

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: 11/28/78 - 12/4/78 - McNamee, Porter & Seeley field crew

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on 4/5/79

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps 1" = 1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n" 0.04 - 0.055
Overbank "n" 0.05 - 0.10
n values thru bridges .012 - .030
Contraction Coefficients 0.1 - 0.4
Expansion Coefficients 0.3 - 0.6

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review, please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS & CALIBRATION

No high water information was available, therefore an actual calibration run could not be made.

A sensitivity analysis was performed on the 100 year flow by raising and lowering all Manning n values by 30%. Water surface elevations differed from +1.3 to -1.6 feet, although most differences were less than ±0.7 feet.

STARTING CONDITIONS

The model was started at normal depth about 4500* feet downstream of the corporate boundary, which was obtained by using the slope-area method in the HEC-2 program. The slope used was obtained from the profile developed by the field survey. A convergence test was performed on the 100 year flow by changing the starting elevation obtained from the original slope by ±1.5 feet. The convergence test showed the model to be good. Convergence occurred near the Erie-Bedford boundary, about 4500 feet from the starting point. The slope area method was used to obtain starting elevations for the other flows by utilizing the original slope.

The Toledo FIS went to the U/S side of the railroad bridge just D/S of the Toledo-Bedford boundary. This study goes to within a short distance D/S of the railroad bridge. The elevations compare faborably taking into account some loss thru the bridge, thus indicating reasonable starting elevations for this study.

	Toledo FIS	Model	Diff
10	586.1	584.6	1.5
50	589.6	588.2	1.6
100	591	590.2	0.8
500	594.1	594.4	-0.3

DESIGNATED FLOODWAY

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcahrge of 0.1 ft. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1"=1000' topographic map for floodway delineation).

COMPUTER OUTPUTS

Enclosed are complete computer outputs for (i) 100 year natural and 100 year designated floodway, (ii) 10, 50 and 500 year flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

COMMENTS

The 10 year model was changed slightly. The RR bridge at x-sections 1.38 to 1.42 was going to low flow while using the special bridge routine. However, the bridge does not a pier. A loss was calculated and input on the X5 card for this flow. At US-25 (x-section 3.98-4.02), for the 10 year flow, the low chord was lowered from 581.1 to 580, while keeping the area the same.

McNAMEE, PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB : HUD-FLA H-4705 SHEET NO
COMMUNITY : BEDFORD FILE NO
COMPUTED BY WATERCOURSE : HALFWAY CREEK - LOWER PORTION DATE CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
0.1		2	Valley Section - modified for 1 on 4 (D/S) expansion from bridge
0.98		4	Valley Section just D/S NYCRR - Repeat 0.1 + 0.8 - modified for Bridge Opening Width
0.99		4	D/S FACE OF NYCRR BRIDGE - Repeat 1.01
1.01		2	U/S FACE OF NYCRR BRIDGE - modified for Bridge Opening Width
1.02		4	Valley Section just U/S NYCRR - Repeat 1.1 + 1.9 with additional modif. for bridge opening width
1.1	C	2	Valley Section - modified for 1 on 4 D/S expansion from bridge
1.18		4	Valley Section just D/S NYCRR - Repeat 1.1 with additional modification for bridge opening width
1.19		3	D/S Face of NYCRR Bridge - Repeat 1.21
1.21		1	U/S Face of NYCRR Bridge
1.22		4	Valley Section just U/S NYCRR - Repeat 1.3 + 0.1 with additional modification For Bridge Opening Width
1.3		2	Valley Section - modified for 1 on 1 U/S expansion From Bridge
1.35		3	Valley Section - Repeat 1.3
1.38		4	D/S Face of RR Bridge - Developed from 1.3 and Bridge Detail
1.42		3	U/S Face of RR Bridge - Repeat 1.38
1.45		3	Valley Section - Repeat 2.0
2.0		1	Valley Section
3.0		1	Valley Section
3.1	A	2	Valley Section - modified for 1 on 4 U/S expan'
3.98		4	D/S Face of US-25 Repeat 4.02
4.02	B	2	U/S Face of US-25 Modified Channel as if Bridge was not there - *channel opening = bridge opening
4.1	C	2	Valley Section - modified for 1 on 1 U/S expansi
5.0	D	1	Valley Section

McNAMEE, POPTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO.
COMMUNITY: Bedford FILE NO.
WATERCOURSE: Halfway Creek - Lower Portion
COMPUTED BY DATE CHK BY DATE

TABLE 1. - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

Section No.	Section Type		REMARKS
5.1	E	1	Valley Section - modified for 1 on 4 D/s expansion
5.48		4	D/S Face of RR Bridge - Repeat 6.02
6.02	F	2	U/S Face of RR Bridge - Modified Channel as it Bridge was not there - *channel opening = bridge opening
6.2	C	2	Valley Section + modified for 1 on 1 u/s dep
7.0		1	Valley Section

JOB · MUD-FIA H-4705

COMMUNITY : BEDFORD

WATERCOURSE : HALFWAY CREEK - LOWER PORTION

Table 2 - XKOR CALCULATIONS

$XKOR = 1 + K_e + K_F$ $\quad K_F = \frac{29n^2l}{R^{4/3}}$ $\quad R = A/P$

Cross Section Location	K_e	A	P	R	n	l	K_F	XKOR	REMARKS
1.38 - 1.42	0.4	227	88.4	2.57	.03	18	0.1	1.54 / 1.5	
3.98 - 4.02	0.4	281.6	73.6	3.83	.025	48 53.5	0.1	1.5	
5.98 - 6.02	0.3	175	64	2.73	.020	88	0.3	1.6	

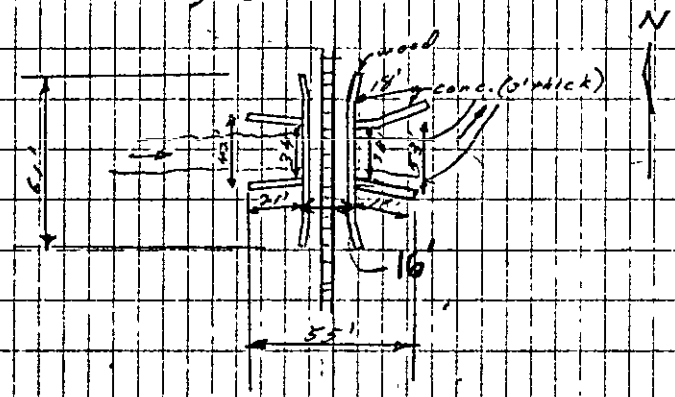
Halfway Creek
(Lower)

DCC
G. Alspach
J. Oneill

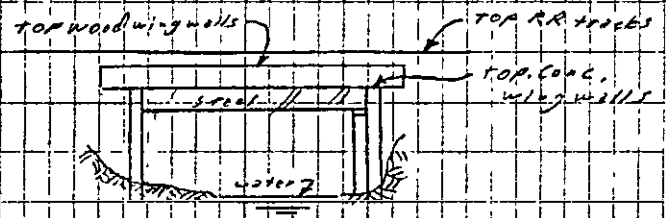
472-A
59

cloudy, windy
25°

Bridge @ Section #1



Section looking downstream



RR Bridge #1

2nd RR Bridge

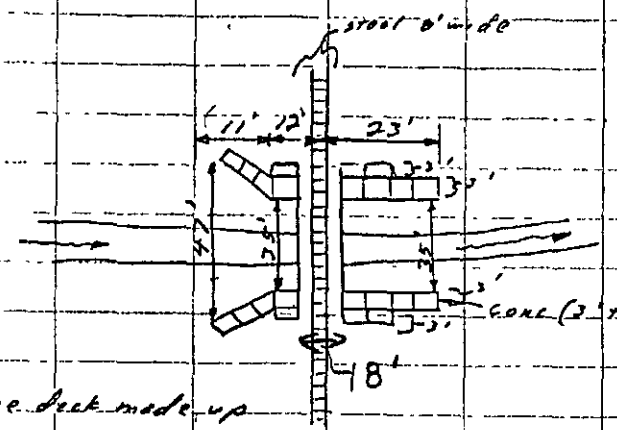
472-A
60

Bedford Township

11-25-75 cont.

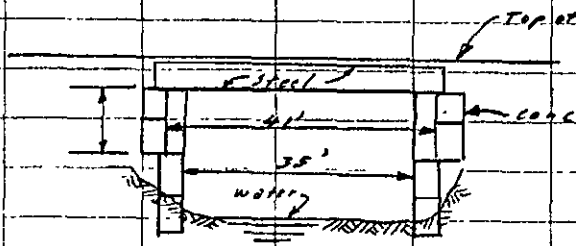
Bridge detail - RR

bridge @ section # 4.2



bridge deck made up of ties supported by steel

Section looking downstream



- Halfway Creek
Cont.

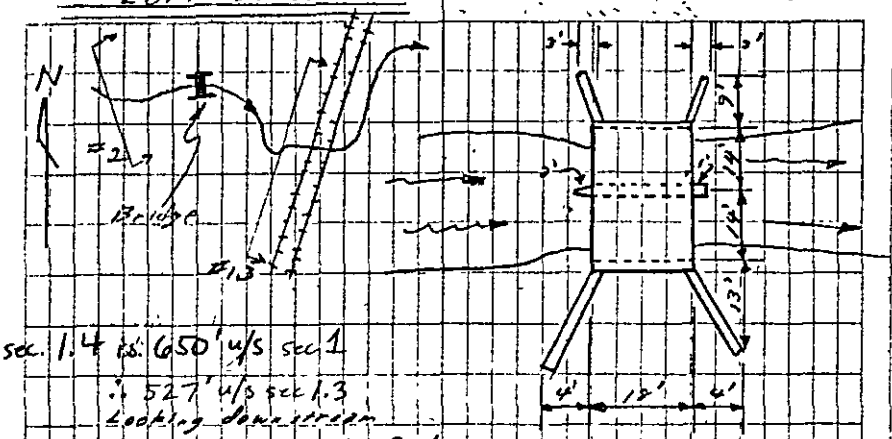
on small bridge
tions 1.3 & 2

-S	Elev.
	585.53
.95	583.98
.29	578.11

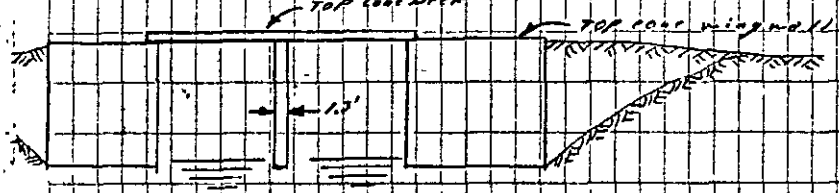
Oct 1991
J. Oneill, &
N. Shamart II

472-A
75

Lotus Drive



sec. 1.4 is 650' u/s sec 1
∴ 527' u/s sec 1.3
Looking downstream



Left

35'
-4.0
579.0
Grd @ wingwall

23'
-11.0
572.0
Grd @ inside wingwall

15'
-13.5
569.2

7'
-12.9
570.1

0

Creek

0'
-12.7
570.3

Small Bridge

right

7'
-12.3
570.7
Grd @ inside wingwall

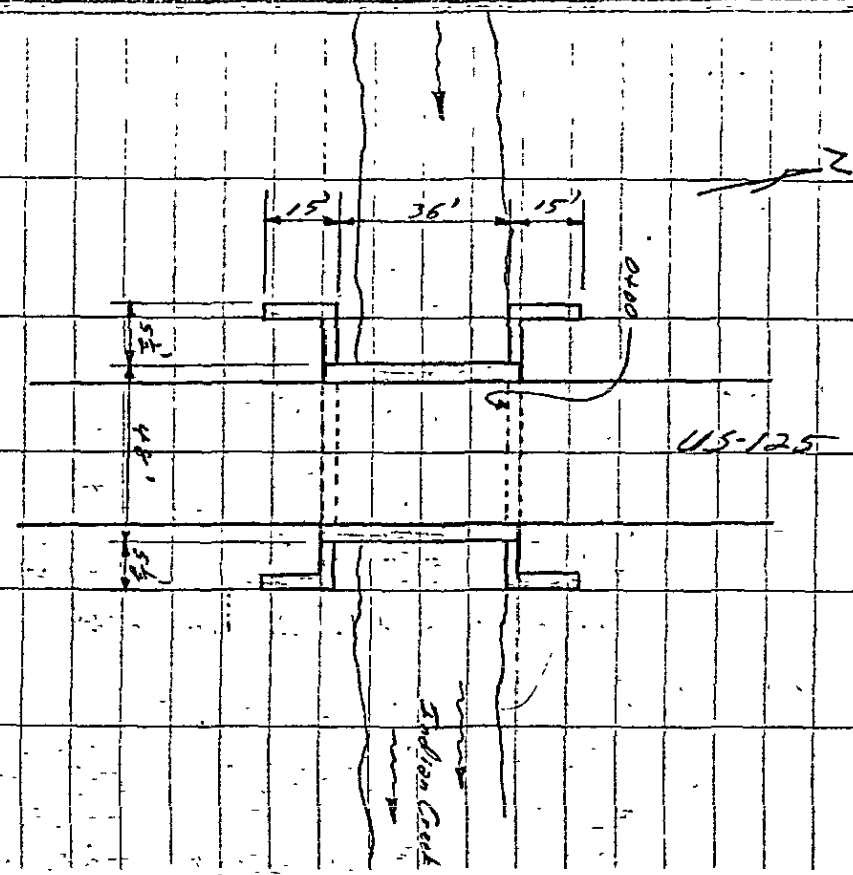
14'
-12.3
570.7

18'
-11.6'
571.4
Grd @ wingwall

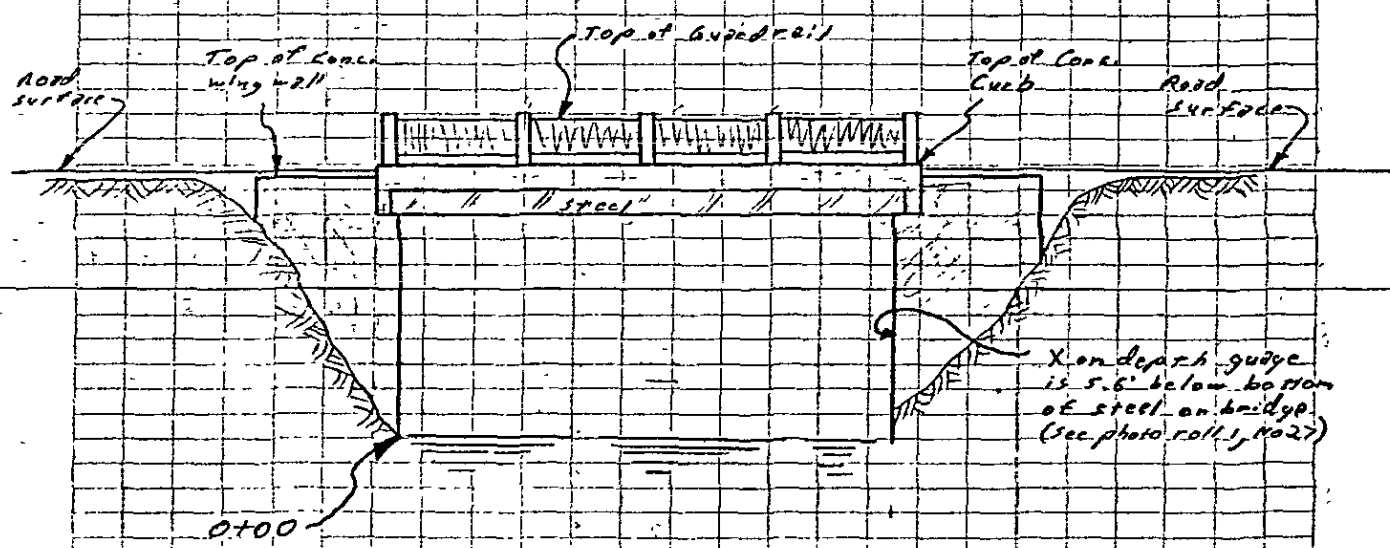
25'
-11.0
572.0

35'
-4.8'
578.2

Bedford Township - Indian Creek
12-1-78 Cont.
Bridge Detail @ US-125



(Left) Looking Downstream (right)

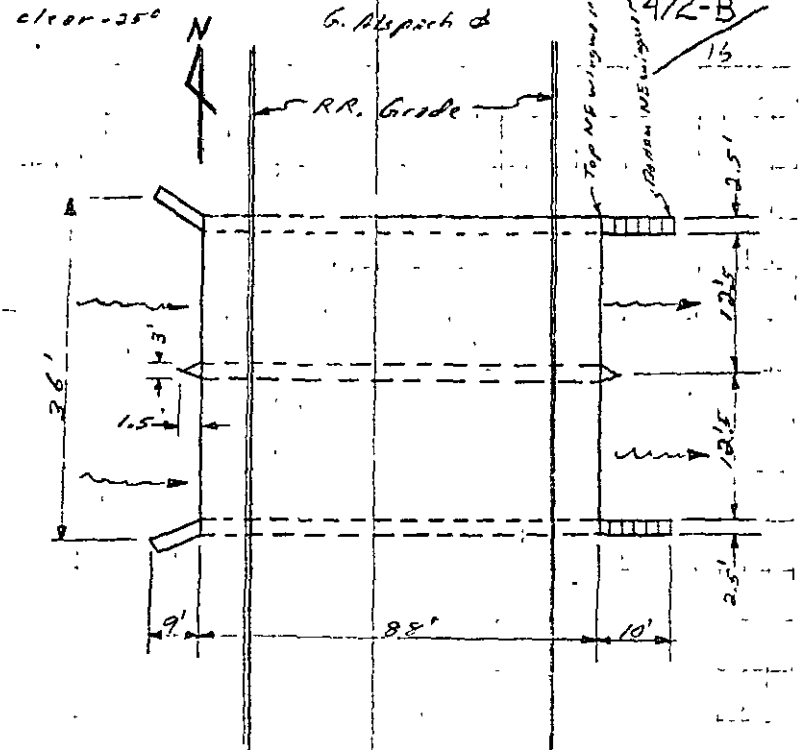


472-B/6

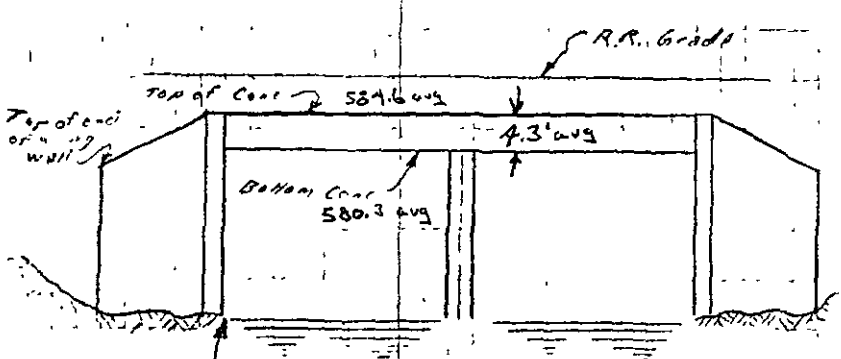
12-5-78
clear-25°

Dec 7 [illegible]
G. Alspach ⌀

472-B
15



Looking down stream



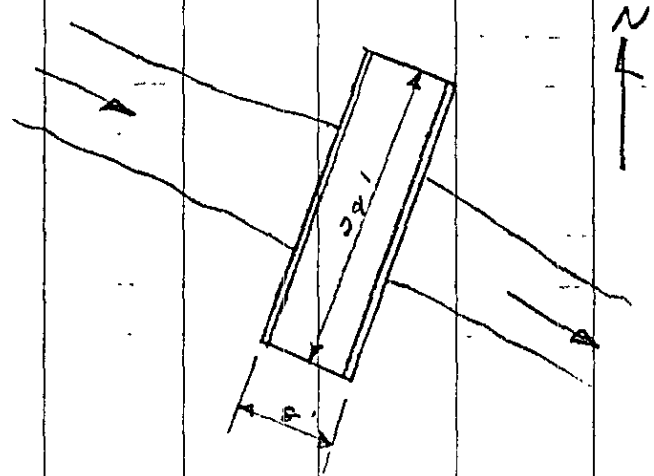
left ← 0+00 → right

0+00 = 5+77 on x-section #6

RR Bridge
Chesapeake + Ohio

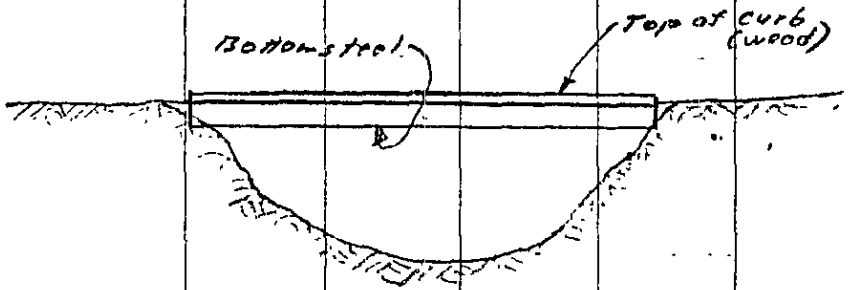
Halfway Creek
X-sections 501.1 & 501.2
& bridge detail @ 501.1

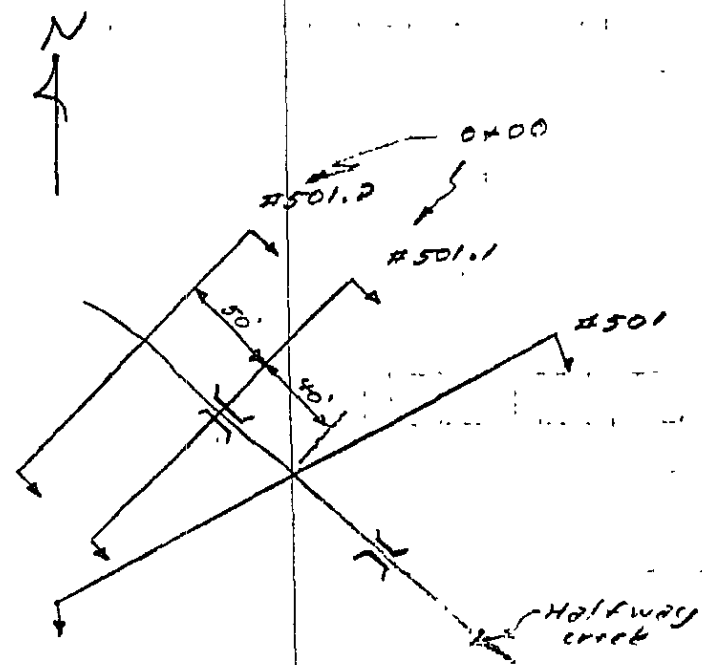
1-3-79



FOOTBRIDGE ON GOLFCOURSE

Looking Downstream



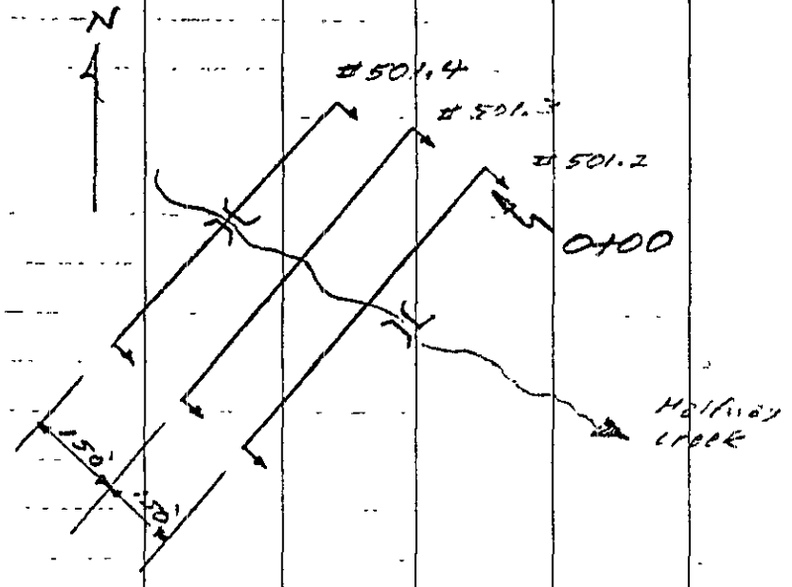


X-sections 501.1 & 501.2 are totally on a grass golf course

X-section #501 is U/S section for southeast bridge and D/S section for northwest bridge

Halfway Creek (upper)

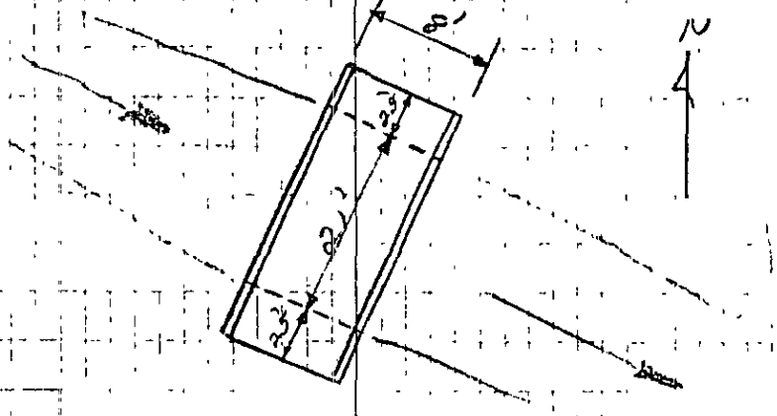
Holiday Creek
X-sections 501.3, 501.4 &
Bridge Detail @ 501.4



X-sections 501.3 & 501.4
are on grass golf course

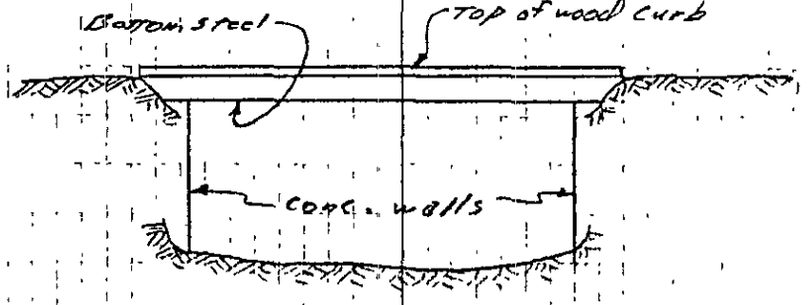
1-4-77

47-C
77

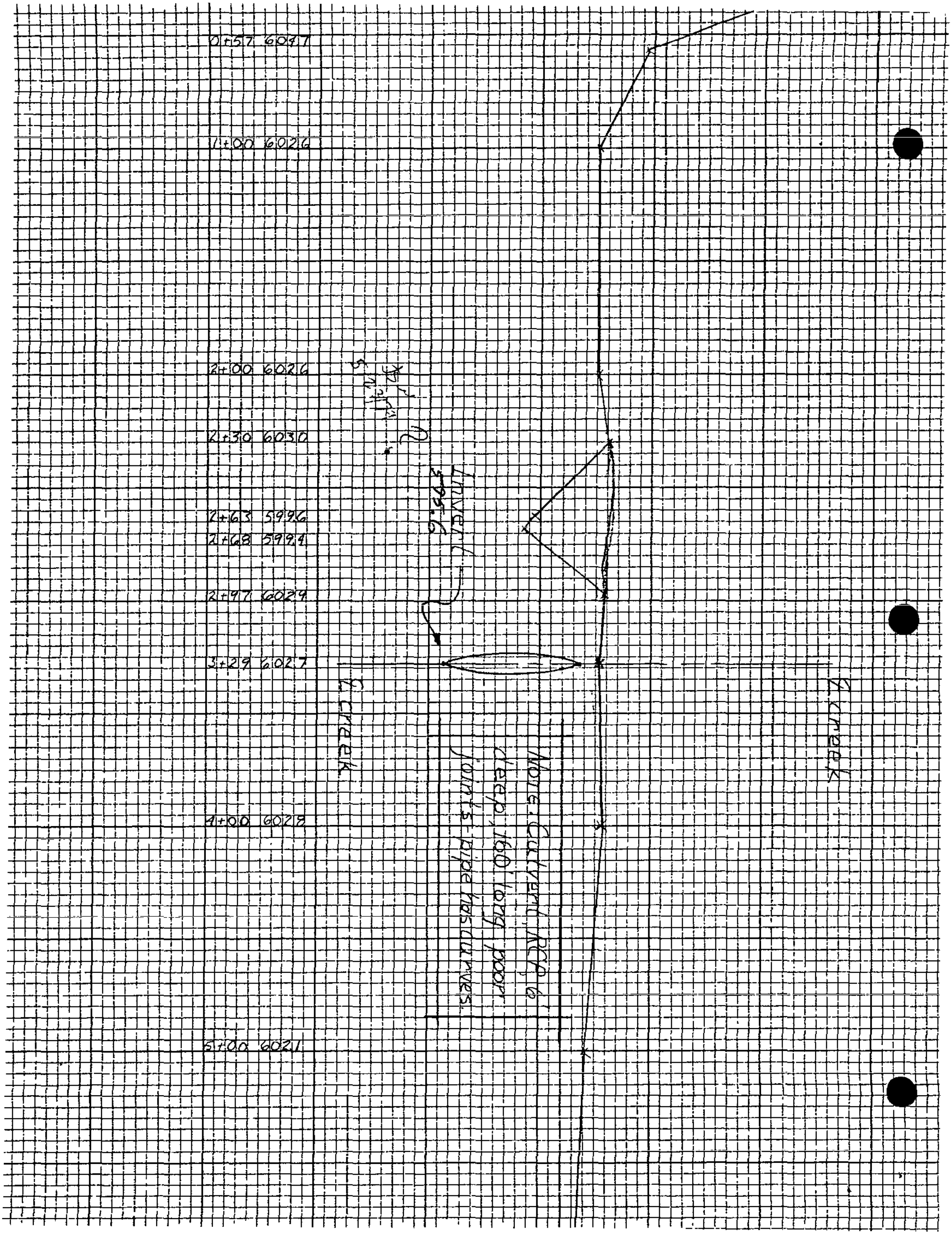


Bridge @ # 501.4

Looking downstream



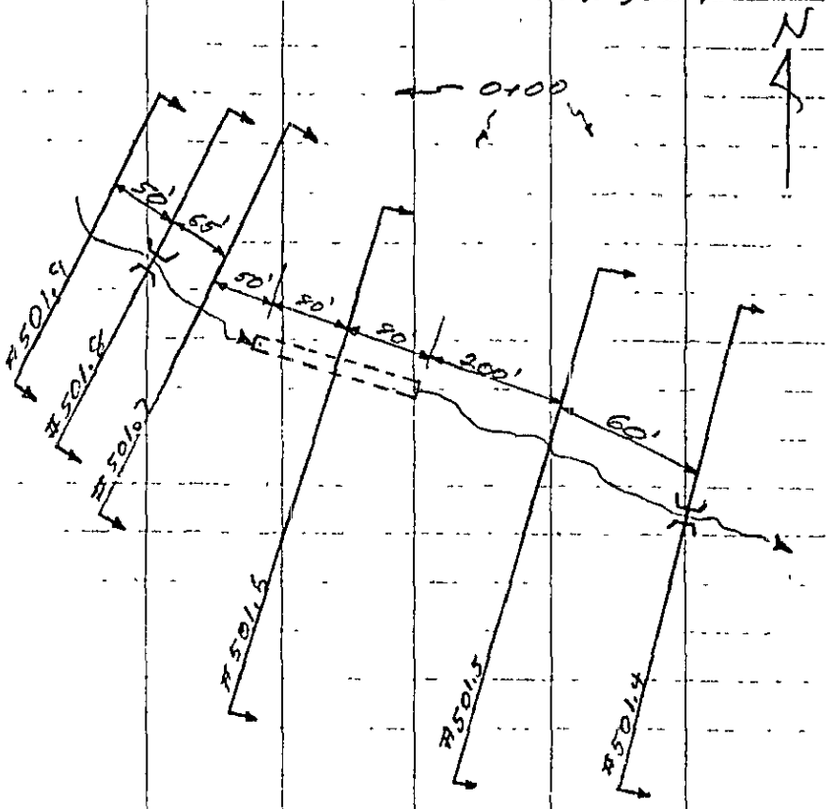
FOOTBRIDGE ON GOLF COURSE


0+57 6047
1+00 6026
2+00 6026
2+30 6030
2+63 5996
2+68 5994
2+97 6029
3+29 6027
4+00 6028
5+00 6021
Invert 595.6
℄ creek
℄ creek
Note: Culvert, RCP 6' deep, 160' long poor joints - pipe has curves.

Hattaway Creek

X-Sections 501.5, 501.6, 501.7 501.8 and 501.9 locations

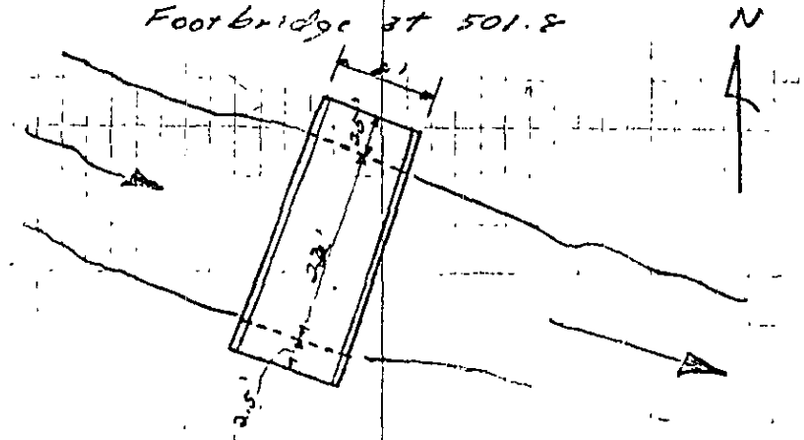
Continued from FD 472C page 79



1-4-79

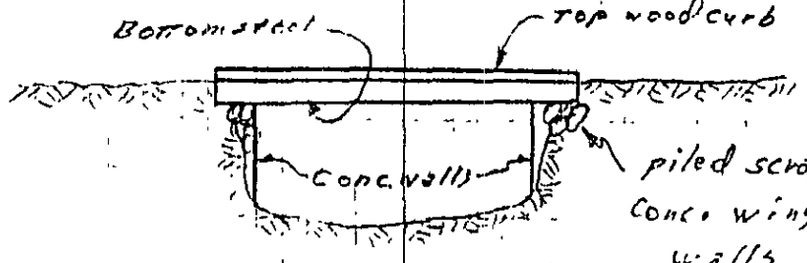
FOOTBRIDGE ON GOLF COURSE

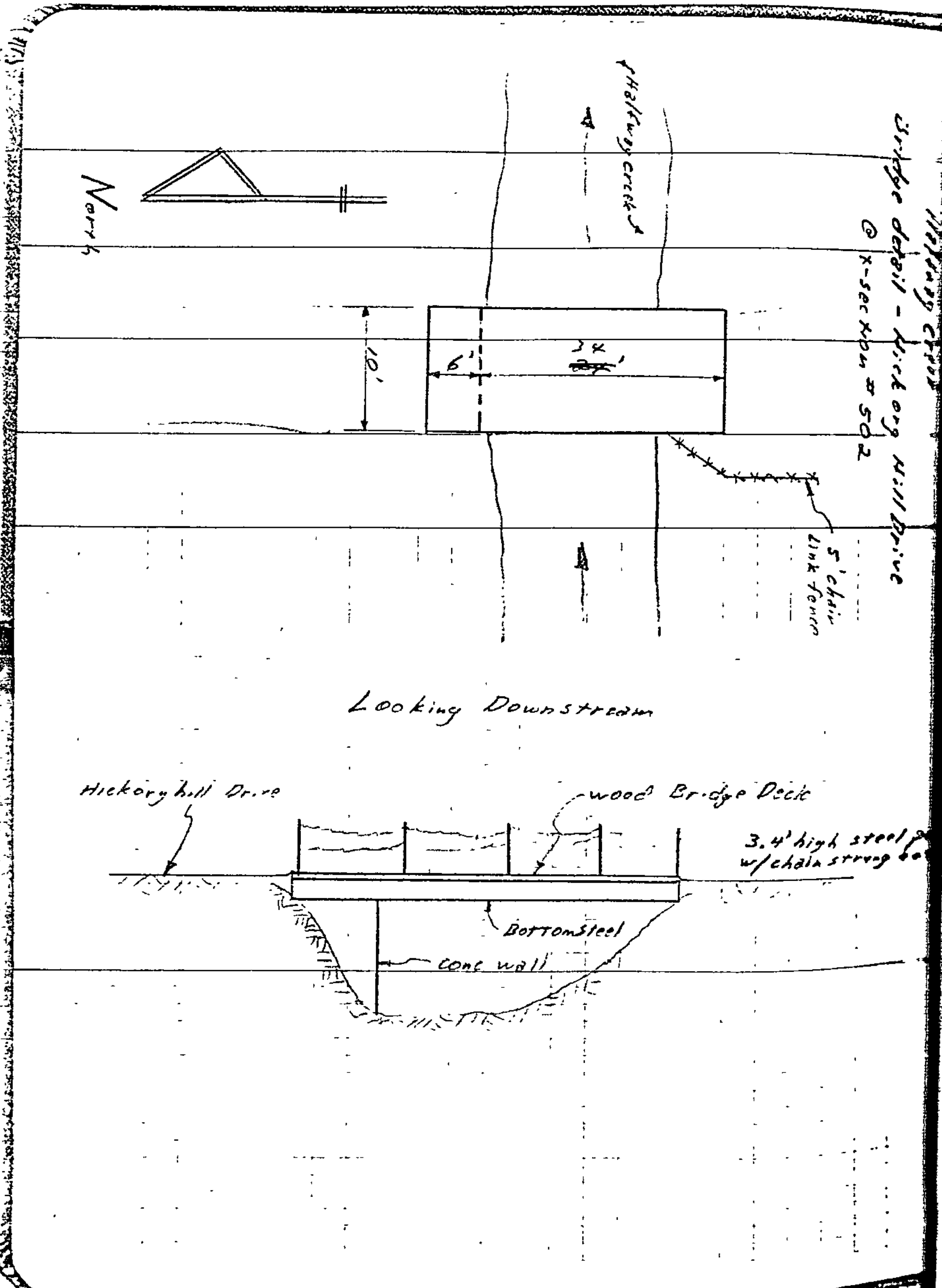
(Culvert at X-section 501.6 is 6 'ø RCP, 160' long Poor joints - pipe has curves)

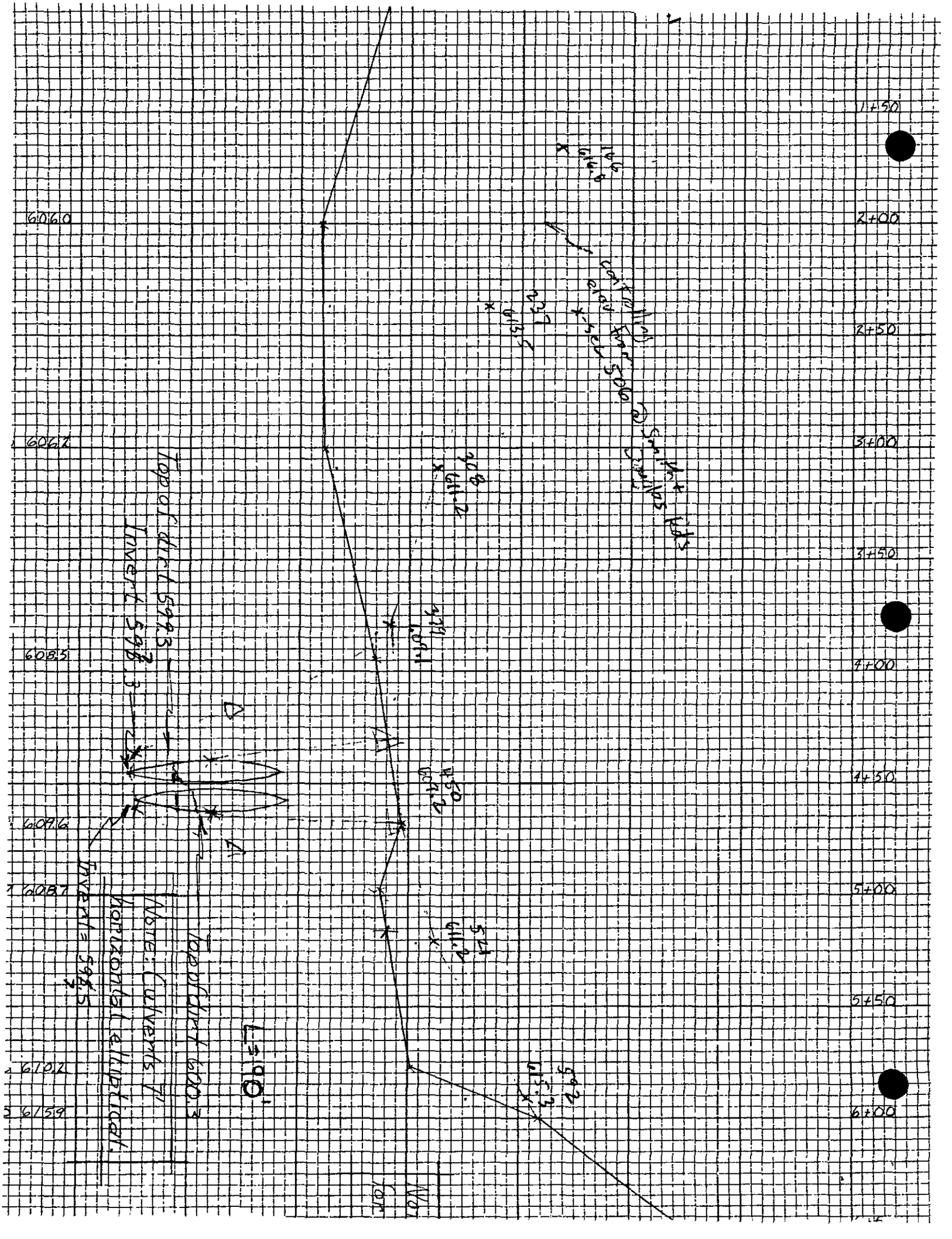


conc. walls are 6' long

Looking Downstream




Halfway Creek
Bridge detail - Hickory Hill Drive
@ x-section # 502
North
Halfway creek
10'
6'
34'
5' chain link fence
Looking Downstream
Hickory hill Drive
wood Bridge Deck
3.4' high steel
w/chain strung
Bottom steel
conc wall

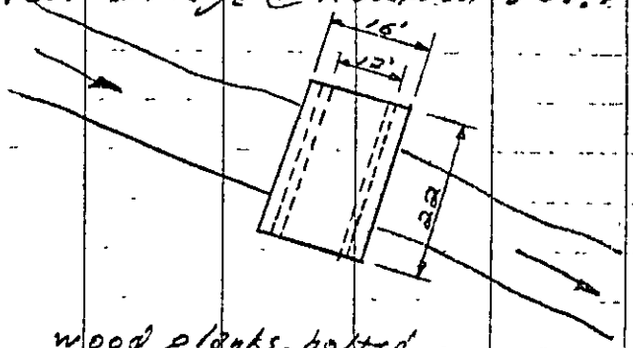


1+50
2+00
2+50
3+00
3+50
4+00
4+50
5+00
5+50
6+00
6060
6062
6085
6096
6087
6102
6159
Top of dirt 599.3
Invert 598.3
Top of dirt 600.3
Invert = 598.5
Note: Culverts 7' horizontal elliptical.
L = 90'

Sta	+s	-s	Elev	Description
		623.82		
4+24		19.7	609.1'	
4+20		21.7	602.1'	in brush
4+18		23.8	600.0'	
4+14		21.9	601.9'	Creek
4+04		21.8	602.0'	
4+00		19.0	604.8'	end brush, start plowed field
3+00		16.5	607.3'	
1+00		15.1	608.7'	
TP				end plowed field, start lawn
0+28		0.50	623.32	
	6.33	629.65'		
BM 152		3.87	625.78'	

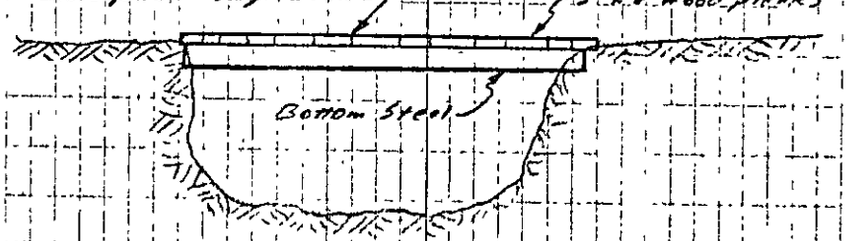
Reduced 1-23-79 gal each

FOOT Bridge @ X-section 507.1

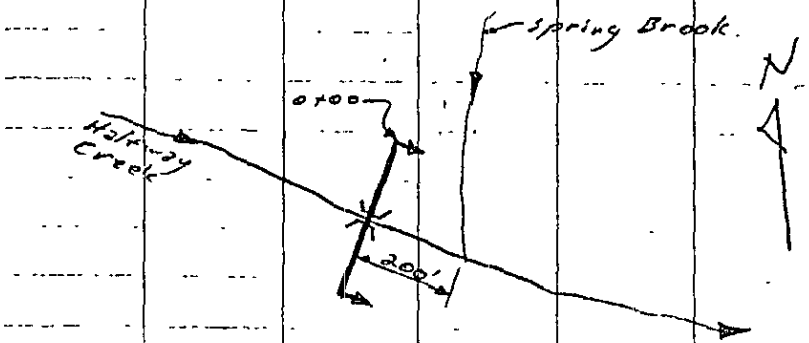


wood planks bolted to steel beams

Looking Downstream



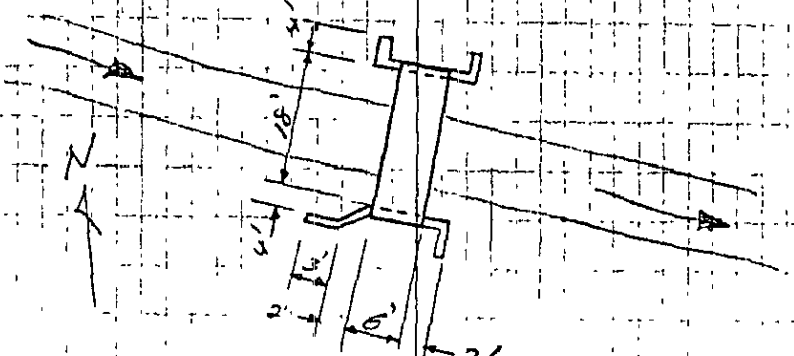
Halfway Creek
X-Section #507.8 ℄ bridge



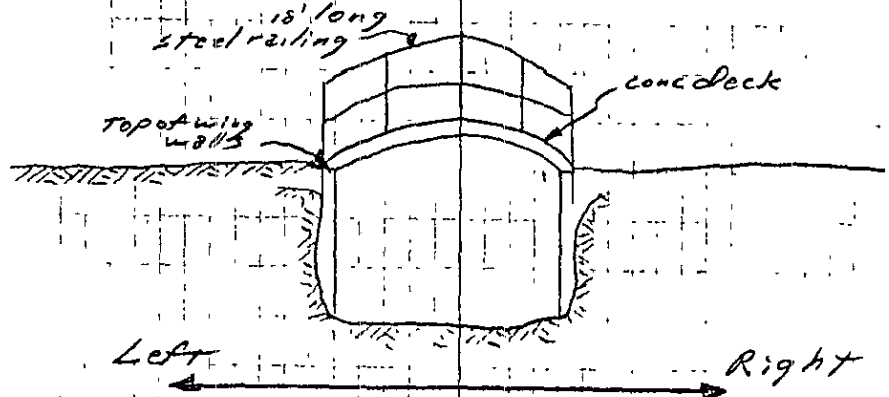
1-23-79

D. Cain
N. Shamont ##
J. Magnuson ℄

472-E
37



Looking Downstream



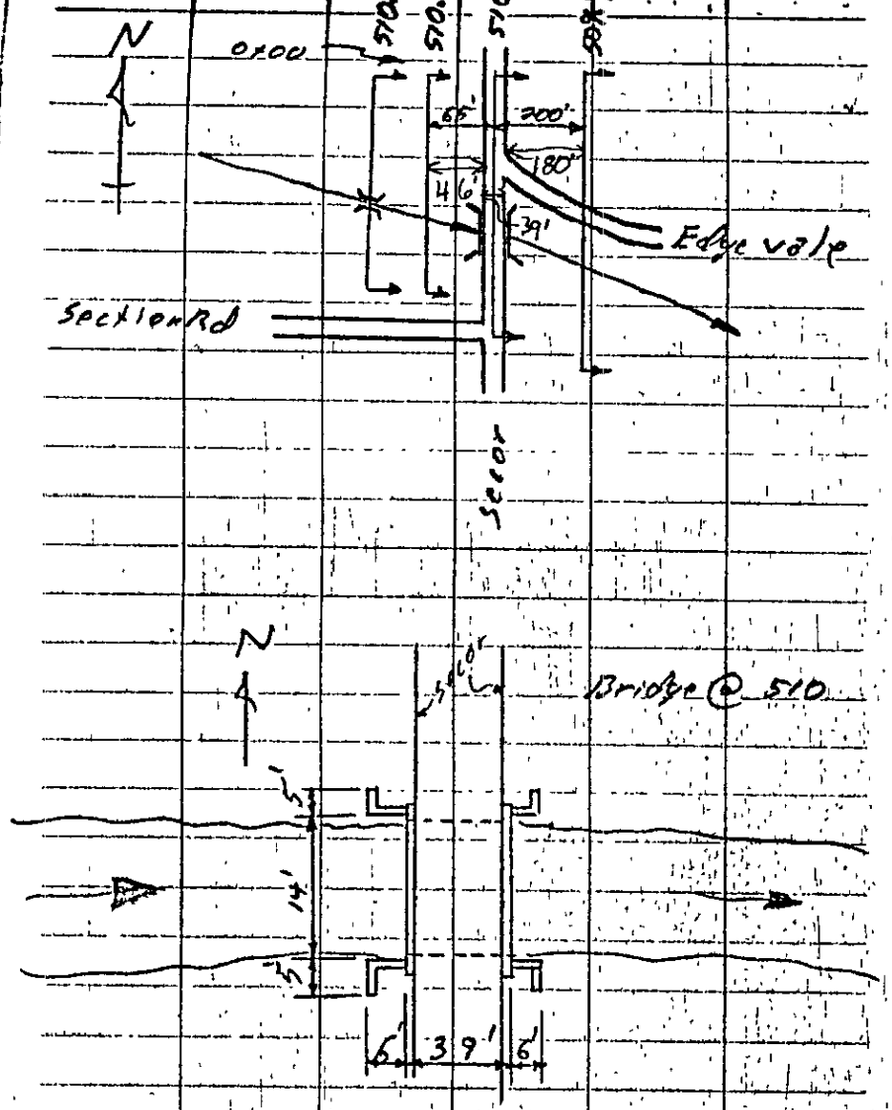
Deck is 0.7' thick throughout

Looking Downstream
Cone wall
Bottom Conc. on bridge
Bottom of wingwall
Top wingwall
Kentwood Road
Conc. railing
8'
8'
8'4"
Bridge Drawing Kentwood Rd
X-section = 50'
Kentwood
15'
5'
5'4"
3'
North
Plotted by
D. Cain

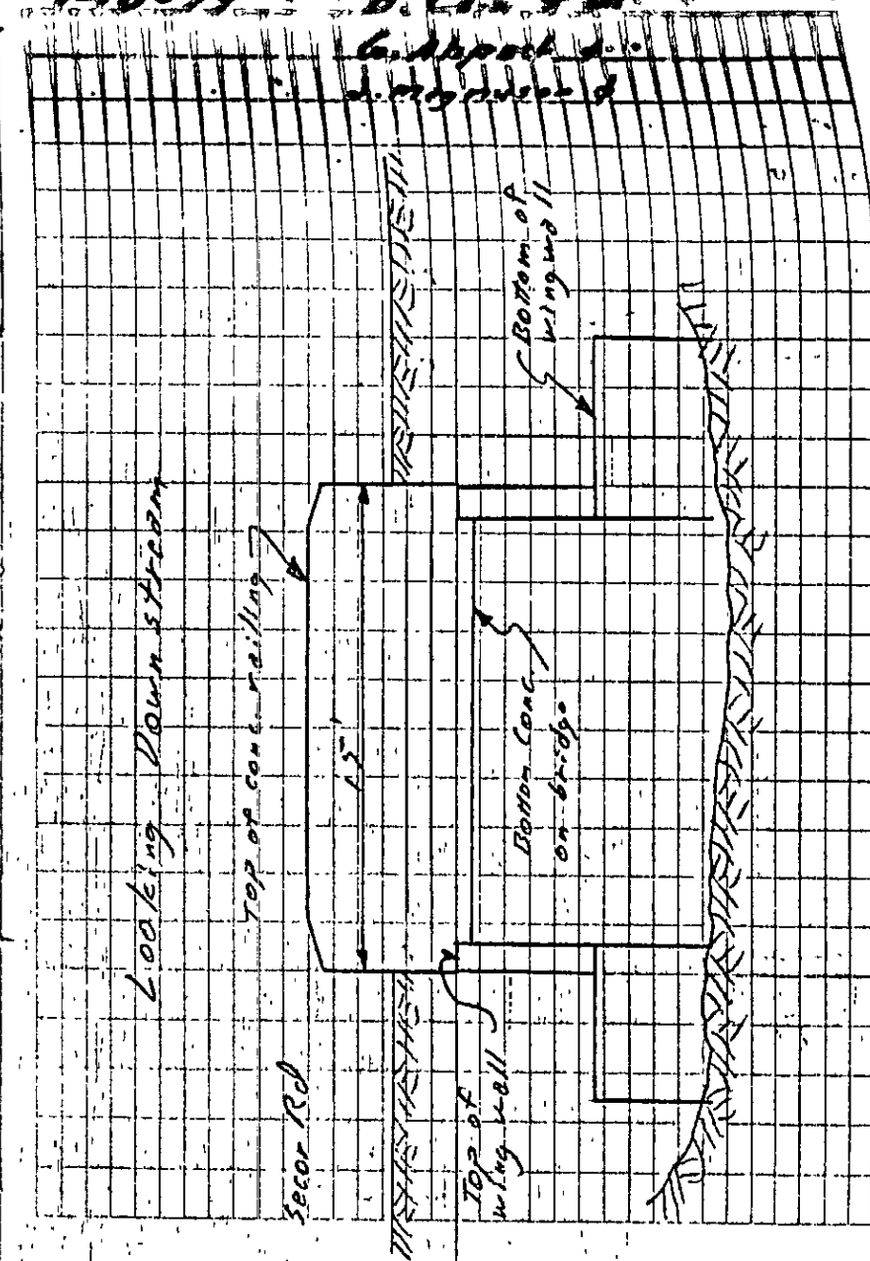
[illegible] Creek

[illegible] Sections 509.9, 510, & 510.1

510.2 and Bridge Detail @ Secor Rd

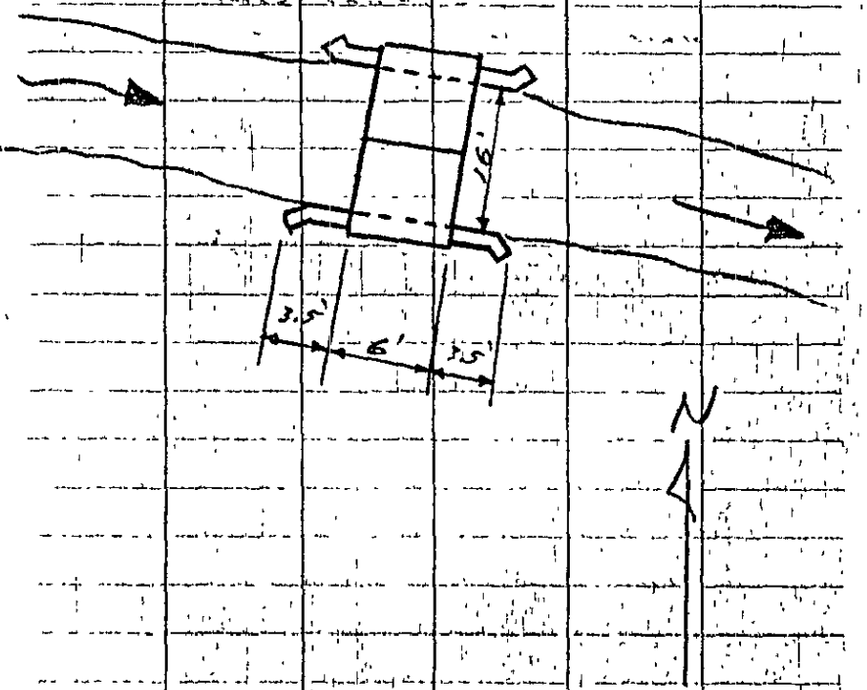


[illegible]



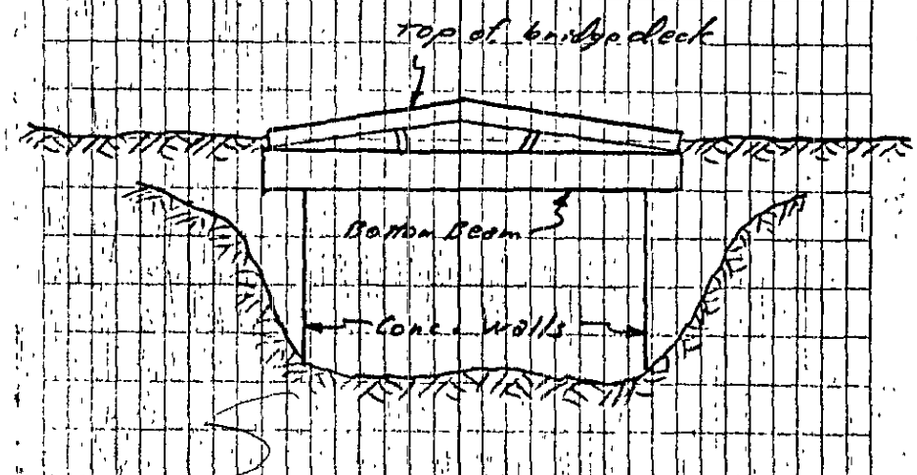
Sta	+S	HI	-S	Elev		Description
		640.33				
	4.09	644.42				
BM 92			4.54	639.88	639.89	.01 Low

Bridge Detail at x-section 510.2



Looking Downstream

Bridge - wood sitting on Conc walls



Half way Creek / bridge at x-section # 510.9

Sta	+S	HI	-S	Elev
0+16		618.8	6.4	612.4'
0+20			5.0	613.8'
TP			5.48	613.36'
	5.28	618.64'		
BM 177			3.93	614.71'

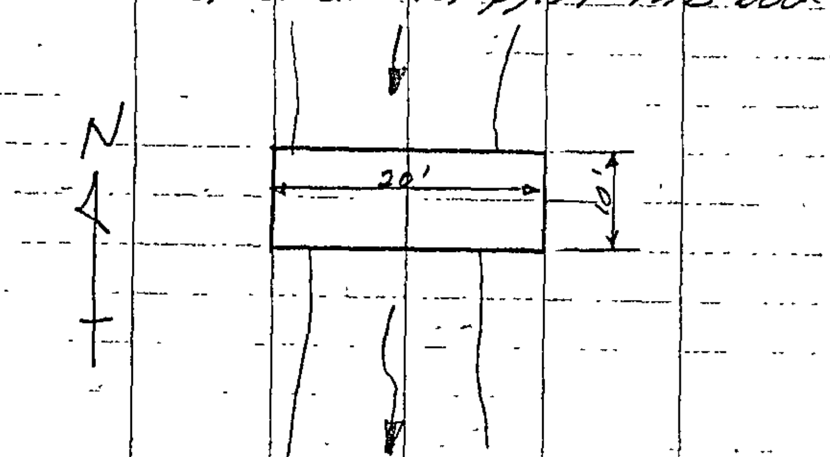
1-22-79

4/72

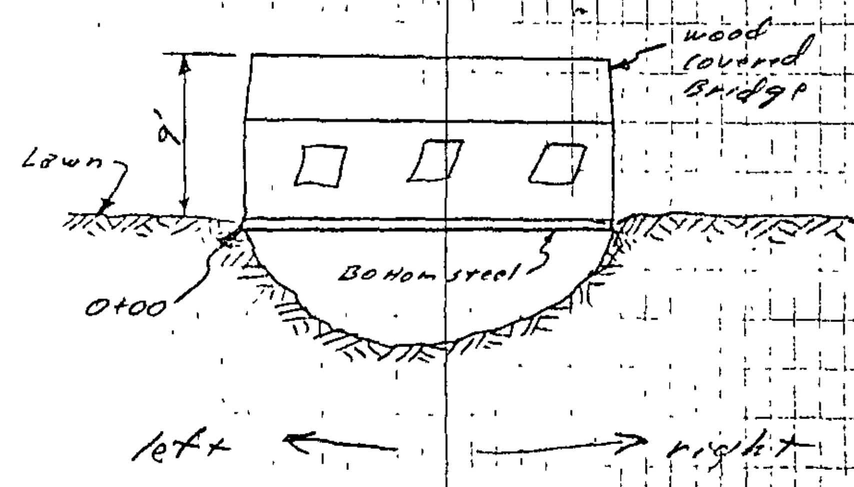
Description
ground shots (creek bottom)
" "

Δ = .01

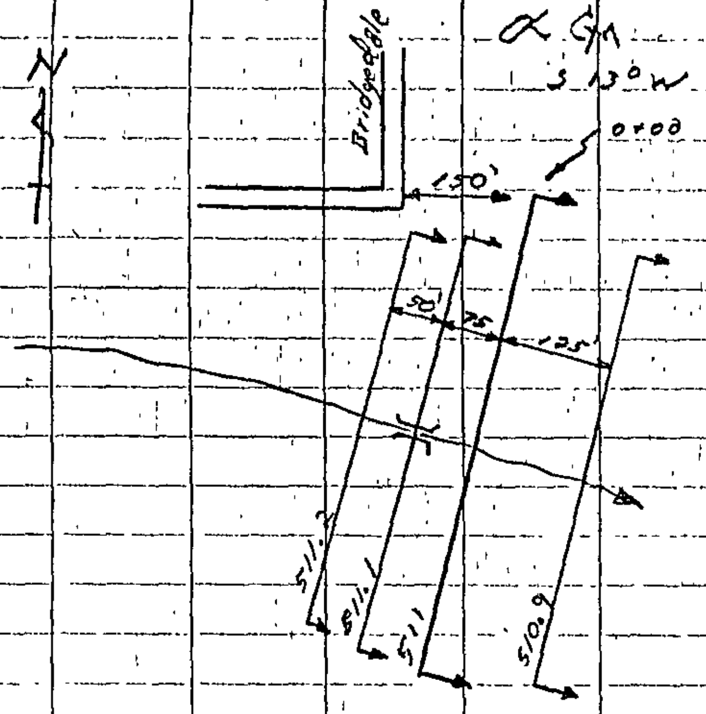
Bridge at x-section # 510.9
see location sketch pg. 54 this book



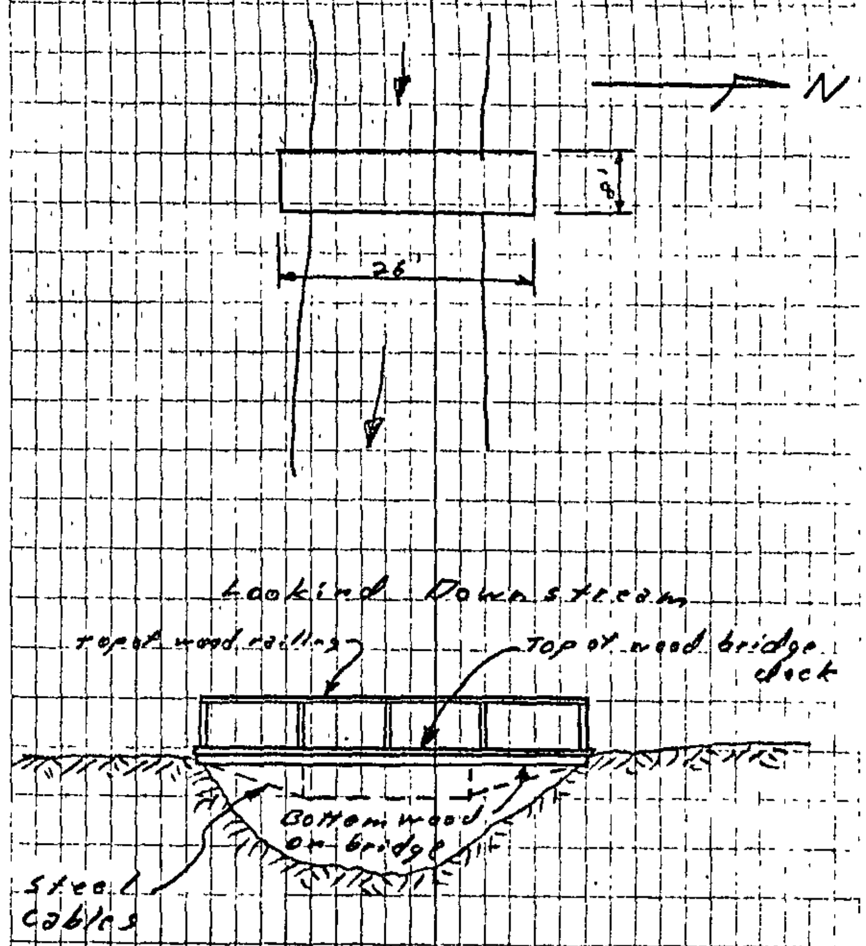
Looking downstream



X-Sections 510.9, 511, 511.1, and
and Bridge Detail @ 511.1



N. Shamart. ...
G. Alspach



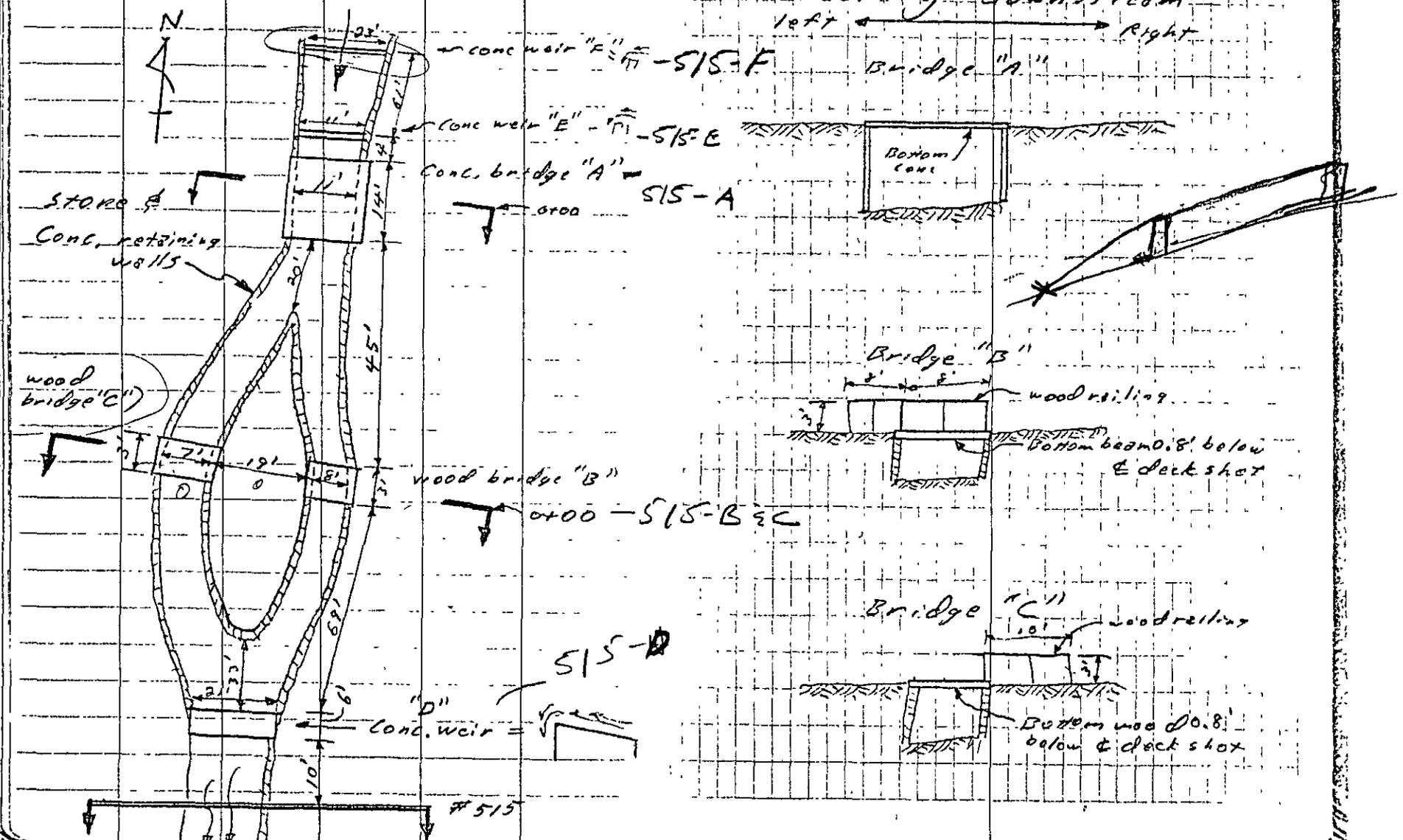
Bridges & pond 4/s at
X-section #515
Halfway Creek

1-29-79

472E

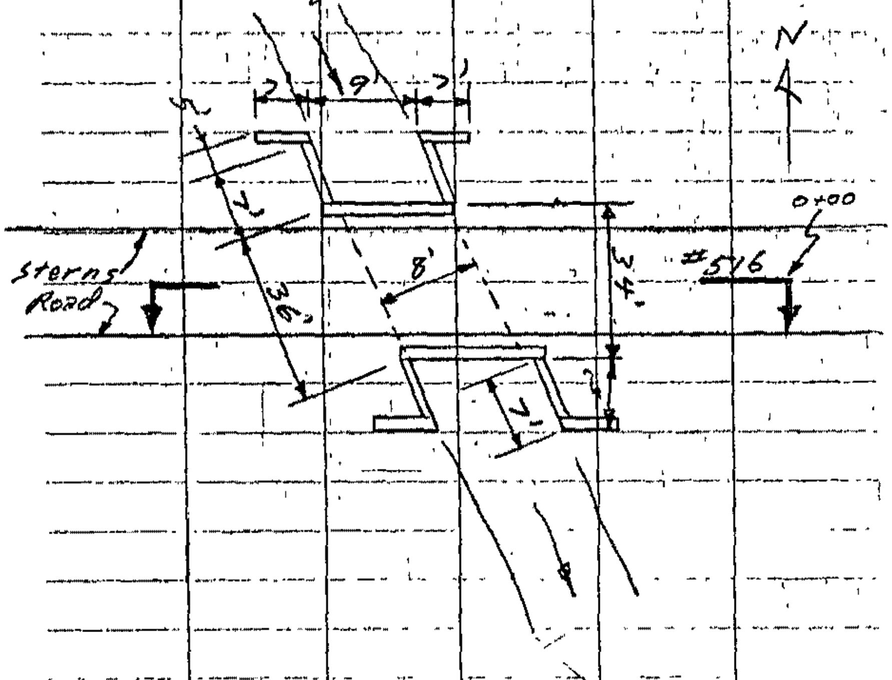
(Extended X-sections very similar to #515)

Looking downstream
left ⟷ Right

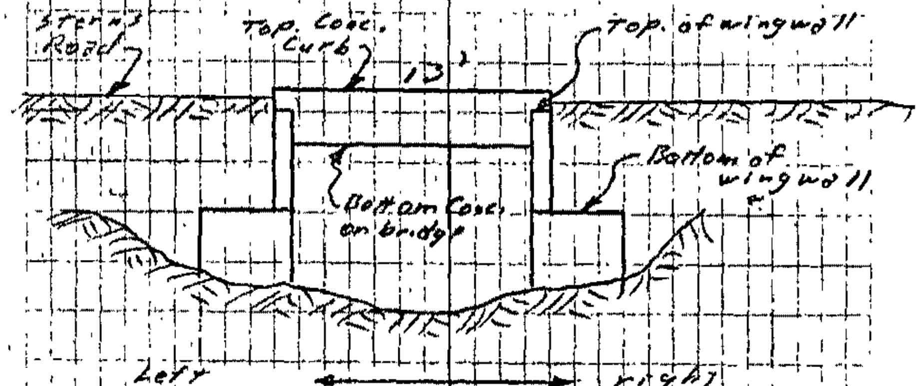


Halfway Creek
X-Section 516 and
Bridge Detail @ Sterns Rd

1-16-77 D. Cain T. Al
cloudy -5° N. Shamart φ



Looking Downstream



Sta	+S	HI	-S	Elev	Description
BM102				654.92'	
	4.73	659.65'			
			0.0	659.7'	√ Top of conc curb
			6.7	653.0'	Top of wing walls
			9.4	650.3'	Bottom of wing walls
			9.3	650.4'	Bottom Conc on bridge
			11.5	648.2'	Ground @ outside left wingwall
			~~13.0~~ 14.2	645.5'	Ground @ inside left wingwall

FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 BEDFORD TWP FIS, MONROE CO., MICHIGAN & Whiteford Twp. FIS, Monroe Co., Michigan

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Halfway Creek (upper portion) Bedford + Whiteford

STUDY LIMITS: Corporate boundary of Bedford Twp. with Sylvania Twp. (downstream limit) to 400' upstream of Sterns Road in Whiteford Twp. (upstream limit)

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: 1/3/79 - 1/23/79 - McNamee, Porter & Seeley field crew

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on 4/5/79

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps 1" = 1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n"	0.035 - 0.10
Overbank "n"	0.04 - 0.055
n values thru bridges	.013 - .030
Contraction Coefficients	0.15 - 0.4
Expansion Coefficients	0.35 - 0.8

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review, please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS & CALIBRATIONS

There was no high water information available therefore, a calibration test was not possible.

Starting Conditions

Starting conditions were available from the Toledo FIS. The study went to the Sylvania-Bedford Twp. boundary, which is where this model starts. Thus, the elevations obtained for the 10, 50, 100, and 500 year flows from the upstream limit of the Toledo FIS were used for this model's starting elevations for the respective flows.

Designated Floodway

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcharge of 0.1 feet. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1" = 1000' topographic map for floodway delineation.)

Computer Outputs

Enclosed are complete computer outputs for (i) 100 year natural and 100 year designated floodway and (ii) 10, 50 and 500 year flood plain elevations for your review.

Comments

At Secor Road (X-sections 509.98-510.02) and at Sterns Road (X-sections 515.98-516.02) the elevations of the low chords (ELLC) were lowered from 615.3 to 614 and from 650.4 to 649, respectively (keeping the respective areas the same also) for the 10 and 50 year floods. The portion of the Halfway Creek lying within the study limit for the Whiteford Twp. is also included in this model. The boundary between Bedford Twp. and Whiteford Twp. is located at cross section 514 (AK).

McNAMEE, PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
COMPUTER WATERCOURSE: Halfway Creek - Upper Portion DATE CHK BY

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

Section No.		Section Type	Remarks
501	A	1	Valley Section - Michigan-Ohio Line
501.1	B	3	Valley Section - Repeat 501 + 0.1
501.15		3	Foot Bridge - Repeat 501 + 0.1 Input Loss w/ X5
501.2	C	1	Valley Section
501.3	D	1	Valley Section
501.4	E	2	Valley Section w/ Foot Bridge - modified channel as if foot bridge was not there
501.45		3	Foot Bridge - Repeat 501.4 Input Loss w/ X5
501.5	F	1	Valley Section
501.58	G	3	D/S Face Golf course Culvert - Repeat of 501.5
501.62		3	u/s Face Golf course Culvert - Repeat 501.7 - 0.5
501.7	H	2	Valley Section - Left Overbank extended per USGS T.00
501.8	I	2	Valley Section w/ Footbridge - modified channel as if Footbridge was not there and extended left overbank per USGS
501.82		3	Footbridge - Repeat 501.8 Input Loss w/ X5
501.9	J	1	Valley Section
501.95	K	1	Valley Section
501.98	L	3	D/S Face Hickory Hill - Repeat 502.02
502.012		2	U/S Face Hickory Hill - Channel modified at banks and depression in right bank removed (ineffective area option)
502.1	M	1	Valley Section
503	N	1	Valley Section
503.9	O	2	Valley Section - modified for Ven 4 D/S expansion
504.98	P, Q, R	4	D/S Face of Smith-Douglas Rd Intersection. Developed from u/s, D/S, & Bridge Field Surveyed Sections

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Halfway Creek - Upper Portion
COMPUTED BY DATE CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE		REMARKS
505.02		3	U/S Face of Smith-Douglas Intersection Repeat of 504.98
506.1	S	1	Valley Section
507	T	1	Valley Section
507.1	U	2	Valley Section w/ Footbridge - modified channel as if footbridge was not there
507.15		3	Footbridge - Repeat 507.1 Input Loss w/ X5
507.2	V	1	Valley Section
507.8	W	2	Valley Section w/ Footbridge - modified channel as if Footbridge was not there Extended left overbank per X-section 507
507.185		3	Footbridge - Repeat 507.8 Input Loss w/ X5
507.9	X	1	Valley Section
507.98		3	D/S face Kenilworth - Repeat 508.02
508.02	Y	2	U/S Face Kenilworth - Modified channel as if bridge was not there
508.1	Z	2	Valley Section - Took out depression in left overbank area as it is ineffective flow area
509	AA	2	Valley Section - Ineffective area taken out of left overbank area
509.9	AB	1	Valley Section - modified for long D/S expansion
509.98		3	D/S Face Secor Rd - Repeat 510.02
510.02	AC	2	U/S Face Secor Rd - Modified channel as if bridge was not there
510.1	AD	2	Valley Section - modified for long U/S expansion
510.2	AE	2	Valley Section w/ Footbridge - channel modified as if footbridge was not there
510.25		3	Footbridge - Repeat 510.2 Input Loss w/ X5

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Halfway Creek - Upper Portion
COMPUTED BY DATE CHECKED BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
510.9		4	Valley Section - Channel Developed from footbridge section 510.98 - Overbanks Developed from 511
510.98	AF	4	D/S Face of Footbridge - Repeat 510.9 -0.2
510.99		4	u/s Face of Footbridge - Developed from 510.98 and 511 -0.3
511	AG	1	Valley Section
511.1	AH	2	Valley Section w/ Footbridge - Channel modified as if Footbridge was not there
511.15		3	Footbridge - Repeat 511.1 Input Loss u/s XS
511.5		3	Valley Section - Repeat 512 -2.5
512	AI	1	Valley Section
513	AJ	1	Valley Section
513.5		3	Valley Section Repeat 513+1.8
513.8		4	Valley Section Developed from 513+514
514	AK+A*	1	Valley Section - @ Bedford-Whiteford Bdry
514.5		4	Valley Section Developed from 514+515
515	B*	1	Valley Section - just D/S of weir
515.1		4	Weir across Creek - Repeat of 515 w/ Channel Bottom modified to Weir height
515.15		3	Valley Section just u/s of weir - Repeat 515
515.2	C*	14	Divided channel (i.e. river splits and flows around small island then rejoins again - two footbridges connect island) - Developed from footbridge section + 515
515.25		13	Footbridge - Repeat 515.2 w/ Loss Input u/s modified for 1 on 4 D/S expansion
515.28	D*	14	D/S Face Private Drive Culvert - Developed from 515 and Culvert Detail

* Halfway Creek - Whiteford Twp

McNAMEE, PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Halfway Creek - Upper Portion
COMPUTED BY DATE CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
515.32		3	U/S Face Private Drive Culvert - Repeat 515.2
515.4		4	Valley Section just D/S of Weir - Developed from 515 and Weir Detail
515.45		4	Weir across Creek - Repeat of 515.4 w/ Channel Bottom modified to weir height
515.47		3	Valley Section just U/S Weir - Repeat 515.4
515.5		4	Valley Section just D/S of Weir - Developed from 515 and Weir Detail
515.55		4	Weir Across Creek - Repeat 515.5 w/ Channel Bottom modified to weir height
515.57		3	Valley Section just U/S Weir - Repeat 515.5
515.85		3	Valley Section - Repeat 515.9 - 3.1
515.9	E*	1	Valley Section
515.98		3	D/S Face of Sterns Rd - Repeat 516.02
516.02	F*	2	U/S Face of Sterns Rd - Modified channel as if bridge was not there
516.1	G*	1	Valley Section
517	H*	1	Valley Section

* Halfway Creek - Whiteford Twp

JOB: HUD-FIA H-4705

COMMUNITY: BEDFORD

WATERCOURSE: HALFWAY CREEK – UPPER PORTION

TABLE - 2 – XKOR CALCULATIONS

$XKOR = 1 + K_e + K_F$ $\quad K_F = \frac{29n^2l}{R^{4/3}}$ $\quad R = A/P$

Cross Section Location	K_e	A	P	R	n	l	K_F	XKOR	Remarks
501.58-501.62	0.5	28.27	21.42	1.32	.013	160	0.5	2.0	
501.98 - 502.02	0.5	107.8	62.71	1.72	.030	10	0.1	1.6	
504.98 - 505.02	0.5	87.5	45	1.94	.014	190	0.6	2.1	
507.98 - 508.02	0.3	146.5	66.59	2.2	.020	15	0.1	1.4	
509.98 - 510.02	0.3	90	42	2.14	.020	39	0.1	1.4	
510.98 - 510.99	0.3	27	22.96	1.17	.025	10	0.2	1.5	
515.28 - 515.32	0.3	51.70	31.4	1.65	.013	14	0.1	1.4	
515.98 - 516.02	0.3	44.8	27.2	1.65	.025	36	0.3	1.6	

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twps

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: Summery

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

Summary

CWAY CREEK - D/S END - 5

SECTION	DISCHARGE	CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
.100	2500.00	577.66	577.66	833.15	577.90	111.60	0.00	0.00	577.66	-I	-I	577.66
.100	2500.00	577.66	577.66	803.34	577.92	92.04	130.96	223.00	577.66	0.00	0.00	577.66
.100	1450.00	575.74	575.74	480.14	575.91	86.00	0.00	0.00	577.66	590.23	590.23	577.66
.100	2150.00	577.10	577.10	718.39	577.31	111.46	0.00	0.00	577.66	0.00	0.00	577.66
.100	3250.00	578.74	578.74	1072.57	579.03	111.85	0.00	0.00	577.66	0.00	0.00	577.66
.980	2500.00	577.40	577.40	389.46	578.64	35.00	0.00	0.00	0.00	577.66	577.66	0.00
.980	2500.00	577.43	577.43	363.29	578.66	35.00	160.00	195.00	577.40	577.66	577.66	577.40
.980	1450.00	575.70	575.70	266.53	576.37	35.00	0.00	0.00	0.00	577.66	577.66	0.00
.980	2150.00	576.91	576.91	352.94	577.95	35.00	0.00	0.00	0.00	577.66	577.66	0.00
.980	3250.00	578.31	578.31	461.57	580.00	35.00	0.00	0.00	0.00	577.66	577.66	0.00
.990	2500.00	577.19	577.19	443.22	578.85	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	2500.00	577.23	577.23	446.64	578.88	34.00	1480.00	1514.00	577.19	577.40	577.40	577.19
.990	1450.00	575.57	575.57	295.27	576.51	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	2150.00	576.73	576.73	399.16	578.14	34.00	0.00	0.00	0.00	0.00	0.00	0.00
.990	3250.00	578.04	578.04	527.82	580.28	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	577.30	577.30	453.24	578.91	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2500.00	577.33	577.33	456.33	578.93	34.00	1480.00	1514.00	577.30	577.19	577.19	577.30
1.010	1450.00	575.63	575.63	300.22	576.55	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	2150.00	576.82	576.82	407.05	578.19	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.010	3250.00	578.20	578.20	544.47	580.36	34.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	578.21	578.21	510.73	579.12	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2500.00	578.23	578.23	459.61	579.14	35.00	1483.00	1518.00	578.21	577.30	577.30	578.21
1.020	1450.00	576.17	576.17	344.56	576.67	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	2150.00	577.59	577.59	457.92	578.37	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.020	3250.00	579.44	579.44	620.87	580.64	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	578.70	578.70	553.81	579.28	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2500.00	578.74	578.74	539.31	579.31	56.00	1472.00	1528.00	578.70	578.21	578.21	578.70
1.100	1450.00	576.32	576.32	291.35	576.75	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	2150.00	577.97	577.97	466.38	578.50	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.100	3250.00	580.19	580.19	746.03	580.87	56.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	578.39	578.39	368.91	579.77	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2500.00	578.44	578.44	337.99	579.80	35.00	1483.00	1518.00	578.39	578.70	578.70	578.39
1.180	1450.00	576.17	576.17	210.40	577.10	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	2150.00	577.71	577.71	316.75	578.94	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.180	3250.00	579.78	579.78	482.52	581.44	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	578.13	578.13	403.17	580.03	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2500.00	578.18	578.18	408.11	580.06	35.00	1495.00	1530.00	578.13	578.39	578.39	578.13
1.190	1450.00	575.89	575.89	207.52	577.39	34.96	0.00	0.00	0.00	0.00	0.00	0.00
1.190	2150.00	577.44	577.44	337.95	579.21	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.190	3250.00	579.52	579.52	546.37	581.70	35.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	FG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
1.210	2500.00	578.28	578.28	417.83	580.10	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2500.00	578.33	578.33	422.03	580.12	35.00	1495.00	1530.00	578.28	578.13	578.13	578.28
1.210	1450.00	576.13	576.13	225.54	577.48	34.97	0.00	0.00	0.00	0.00	0.00	0.00
1.210	2150.00	577.61	577.61	353.04	579.28	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.210	3250.00	579.65	579.65	560.38	581.76	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	579.01	579.01	308.21	580.17	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2500.00	579.04	579.04	279.38	580.19	35.00	1532.00	1567.00	579.01	578.28	578.28	579.01
1.220	1450.00	576.82	576.82	197.20	577.54	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	2150.00	578.33	578.33	268.16	579.35	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.220	3250.00	580.40	580.40	394.43	581.83	35.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.24	580.24	1157.49	580.33	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2500.00	580.26	580.26	1142.37	580.35	120.00	1510.00	1630.00	580.24	579.01	579.01	580.24
1.300	1450.00	577.60	577.60	636.04	577.66	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	2150.00	579.41	579.41	981.30	579.49	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.300	3250.00	581.91	581.91	1543.87	582.01	120.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.40	580.40	2097.96	580.42	522.19	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2500.00	580.43	580.43	2080.55	580.45	444.62	1328.62	1773.24	580.40	580.24	580.24	580.40
1.350	1450.00	577.77	577.77	930.62	577.79	434.38	0.00	0.00	0.00	0.00	0.00	0.00
1.350	2150.00	579.57	579.57	1673.81	579.59	498.89	0.00	0.00	0.00	0.00	0.00	0.00
1.350	3250.00	582.08	582.08	3101.93	582.10	598.98	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.42	580.42	2201.44	580.44	525.61	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2500.00	580.45	580.45	2194.15	580.47	446.98	1327.90	1774.88	580.42	580.40	580.40	580.42
1.380	1450.00	577.80	577.80	652.44	577.86	107.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	2150.00	579.60	579.60	1769.65	579.62	502.40	0.00	0.00	0.00	0.00	0.00	0.00
1.380	3250.00	582.09	582.09	3221.54	582.11	568.72	0.00	0.00	0.00	0.00	0.00	0.00
1.420	2500.00	580.97	580.97	2517.57	580.99	541.16	0.00	0.00	0.00	0.00	0.00	0.00
1.420	2500.00	581.00	581.00	2507.76	581.01	460.69	1323.72	1784.40	580.97	580.42	580.42	580.97
1.420	1450.00	577.80	577.80	653.34	577.87	107.03	0.00	0.00	0.00	0.00	0.00	0.00
1.420	2150.00	580.59	580.59	2297.21	580.60	530.43	0.00	0.00	0.00	0.00	0.00	0.00
1.420	3250.00	582.25	582.25	3331.46	582.26	570.11	0.00	0.00	0.00	0.00	0.00	0.00
1.430	2500.00	580.97	580.97	2513.33	580.99	540.95	0.00	0.00	0.00	0.00	0.00	0.00
1.430	2500.00	581.00	581.00	2505.18	581.01	457.94	1324.48	1782.43	580.97	580.97	580.97	580.97
1.430	1450.00	578.40	578.40	1229.27	578.42	468.80	0.00	0.00	0.00	0.00	0.00	0.00
1.430	2150.00	580.59	580.59	2293.76	580.60	530.26	0.00	0.00	0.00	0.00	0.00	0.00
1.430	3250.00	582.25	582.25	3326.05	582.26	570.05	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	580.99	580.99	2092.05	581.00	529.87	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2500.00	581.01	581.01	2058.65	581.03	466.37	662.26	1128.63	580.99	580.97	580.97	580.99
1.450	1450.00	578.43	578.43	943.68	578.44	491.20	0.00	0.00	0.00	0.00	0.00	0.00
1.450	2150.00	580.61	580.61	1894.85	580.62	524.10	0.00	0.00	0.00	0.00	0.00	0.00
1.450	3250.00	582.27	582.27	2811.77	582.28	549.10	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	FG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
2.000	2500.00	581.22	581.22	2214.67	581.23	533.34	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2500.00	581.25	581.25	2199.40	581.26	472.73	656.27	1129.00	581.22	580.99	580.99	581.22
2.000	1450.00	578.78	578.78	1077.14	578.79	496.58	0.00	0.00	0.00	0.00	0.00	0.00
2.000	2150.00	580.82	580.82	2000.76	580.83	527.23	0.00	0.00	0.00	0.00	0.00	0.00
2.000	3250.00	582.48	582.48	2944.10	582.50	552.37	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.59	581.59	1259.26	581.63	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2500.00	581.63	581.63	1241.62	581.67	357.24	482.89	840.14	581.59	581.22	581.22	581.59
3.000	1450.00	579.37	579.37	534.93	579.41	357.59	0.00	0.00	0.00	0.00	0.00	0.00
3.000	2150.00	581.16	581.16	1094.82	581.20	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.000	3250.00	582.82	582.82	1785.05	582.86	404.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	582.21	582.21	389.45	582.78	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2500.00	582.27	582.27	387.62	582.85	69.54	76.15	145.70	582.21	581.59	581.59	582.21
3.100	1450.00	580.61	580.61	245.30	580.97	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	2150.00	581.80	581.80	349.02	582.29	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.100	3250.00	583.25	583.25	498.44	583.94	75.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	582.50	582.50	285.78	583.87	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2500.00	582.60	582.60	276.09	583.94	28.00	380.00	408.00	582.50	582.21	582.21	582.50
3.980	1450.00	580.96	580.96	217.36	581.62	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	2150.00	582.10	582.10	267.52	583.21	28.00	0.00	0.00	0.00	0.00	0.00	0.00
3.980	3250.00	584.01	584.01	703.21	584.38	171.49	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	583.14	583.14	315.29	584.34	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2500.00	583.24	583.24	303.54	584.42	28.00	380.00	408.00	583.14	582.50	582.50	583.14
4.020	1450.00	580.96	580.96	217.37	581.62	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	2150.00	582.43	582.43	282.57	583.46	28.00	0.00	0.00	0.00	0.00	0.00	0.00
4.020	3250.00	585.95	585.95	1079.07	586.01	324.90	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	584.40	584.40	674.85	584.68	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2500.00	584.45	584.45	670.76	584.75	75.62	141.94	217.57	584.40	583.14	583.14	584.40
4.100	1450.00	581.59	581.59	371.09	581.81	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	2150.00	583.48	583.48	567.35	583.75	82.00	0.00	0.00	0.00	0.00	0.00	0.00
4.100	3250.00	585.79	585.79	954.63	586.13	82.00	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.17	585.17	933.22	585.21	397.63	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2500.00	585.24	585.24	943.69	585.28	337.59	97.90	435.50	585.17	584.40	584.40	585.17
5.000	1450.00	582.53	582.53	368.81	582.61	320.86	0.00	0.00	0.00	0.00	0.00	0.00
5.000	2150.00	584.31	584.31	714.86	584.36	379.24	0.00	0.00	0.00	0.00	0.00	0.00
5.000	3250.00	586.59	586.59	1362.72	586.63	410.27	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	585.37	585.37	1224.21	585.49	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2500.00	585.45	585.45	1151.33	585.56	83.00	619.00	702.00	585.37	585.17	585.17	585.37
5.100	1450.00	582.81	582.81	792.75	582.87	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.100	2150.00	584.53	584.53	1076.59	584.63	83.00	0.00	0.00	0.00	0.00	0.00	0.00
5.100	3250.00	586.67	586.67	5655.40	586.68	1000.03	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
5.980	2500.00	584.98	584.98	328.93	586.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2500.00	585.08	585.08	333.32	586.08	28.00	579.00	607.00	584.98	585.37	585.37	584.98
5.980	1450.00	582.62	582.62	229.47	583.18	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	2150.00	584.21	584.21	295.52	585.09	28.00	0.00	0.00	0.00	0.00	0.00	0.00
5.980	3250.00	586.49	586.49	749.22	586.84	118.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	589.54	589.54	544.65	590.05	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2500.00	589.64	589.64	549.57	590.14	28.00	579.00	607.00	589.54	584.98	584.98	589.54
6.020	1450.00	583.91	583.91	282.48	584.33	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	2150.00	587.46	587.46	443.05	587.96	28.00	0.00	0.00	0.00	0.00	0.00	0.00
6.020	3250.00	594.27	594.27	2258.05	594.33	118.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2500.00	590.12	590.12	1584.30	590.18	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2500.00	590.21	590.21	1592.46	590.27	108.13	535.90	644.03	590.12	589.54	589.54	590.12
6.200	1450.00	584.38	584.38	643.04	584.45	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	2150.00	588.03	588.03	1202.32	588.10	111.00	0.00	0.00	0.00	0.00	0.00	0.00
6.200	3250.00	594.28	594.28	2467.32	594.34	111.00	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.23	590.23	4360.92	590.23	541.55	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2200.00	590.32	590.32	4380.24	590.32	523.94	673.01	1196.95	590.23	590.12	590.12	590.23
7.000	1290.00	584.57	584.57	1284.53	584.58	536.77	0.00	0.00	0.00	0.00	0.00	0.00
7.000	1900.00	588.16	588.16	3065.05	588.16	539.80	0.00	0.00	0.00	0.00	0.00	0.00
7.000	2900.00	594.37	594.37	7480.97	594.37	550.19	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH O	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
.100	2500.000	577.660	0.000	0.000	0.000	111.595	0.000	0.000
.100	2500.000	577.660	0.000	0.000	0.000	92.043	19.552	0.000
.100	1450.000	575.739	-1.921	0.000	0.000	86.005	25.591	0.000
.100	2150.000	577.095	1.356	0.000	0.000	111.464	.131	0.000
.100	3250.000	578.739	1.644	0.000	0.000	111.846	-.251	0.000
.080	2500.000	577.399	0.000	-.261	0.000	35.000	0.000	71.000
.080	2500.000	577.434	.035	-.226	0.000	35.000	-.000	71.000
.080	1450.000	575.701	-1.733	-.038	0.000	35.000	-.000	71.000
.080	2150.000	576.911	1.210	-.184	0.000	35.000	-.000	71.000
.080	3250.000	578.311	1.400	-.428	0.000	35.000	0.000	71.000
.000	2500.000	577.192	0.000	-.207	0.000	34.000	0.000	1.000
.000	2500.000	577.231	.039	-.203	0.000	34.000	0.000	1.000
.000	1450.000	575.571	-1.660	-.130	0.000	34.000	0.000	1.000
.000	2150.000	576.731	1.160	-.180	0.000	34.000	0.000	1.000
.000	3250.000	578.038	1.306	-.273	0.000	34.000	0.000	1.000
1.010	2500.000	577.297	0.000	.105	0.000	34.000	0.000	14.000
1.010	2500.000	577.332	.035	.101	0.000	34.000	0.000	14.000
1.010	1450.000	575.630	-1.702	.059	0.000	34.000	0.000	14.000
1.010	2150.000	576.816	1.187	.085	0.000	34.000	0.000	14.000
1.010	3250.000	578.204	1.387	.166	0.000	34.000	0.000	14.000
1.020	2500.000	578.208	0.000	.911	0.000	35.000	0.000	1.000
1.020	2500.000	578.231	.023	.899	0.000	35.000	0.000	1.000
1.020	1450.000	576.170	-2.061	.540	0.000	35.000	0.000	1.000
1.020	2150.000	577.590	1.420	.774	0.000	35.000	0.000	1.000
1.020	3250.000	579.438	1.847	1.234	0.000	35.000	0.000	1.000
1.100	2500.000	578.704	0.000	.496	0.000	56.000	0.000	27.000

1.100	2500.000	578.735	.032	.504	0.000	56.000	0.000	27.000
1.100	1450.000	576.323	-2.412	.154	0.000	56.000	0.000	27.000
1.100	2150.000	577.969	1.546	.379	0.000	56.000	0.000	27.000
1.100	3250.000	580.188	2.219	.751	0.000	56.000	0.000	27.000
1.180	2500.000	578.391	0.000	-.313	0.000	35.000	0.000	29.000
1.180	2500.000	578.438	.047	-.298	0.000	35.000	0.000	29.000
1.180	1450.000	576.173	-2.265	-.151	0.000	35.000	0.000	29.000
1.180	2150.000	577.707	1.535	-.262	0.000	35.000	0.000	29.000
1.180	3250.000	579.777	2.070	-.411	0.000	35.000	0.000	29.000
1.190	2500.000	578.131	0.000	-.260	0.000	35.000	0.000	1.000
1.190	2500.000	578.184	.053	-.253	0.000	35.000	0.000	1.000
1.190	1450.000	575.889	-2.295	-.283	0.000	34.956	.044	1.000
1.190	2150.000	577.445	1.555	-.262	0.000	35.000	0.000	1.000
1.190	3250.000	579.523	2.078	-.254	0.000	35.000	0.000	1.000
1.210	2500.000	578.284	0.000	.153	0.000	35.000	0.000	16.000
1.210	2500.000	578.329	.045	.144	0.000	35.000	0.000	16.000
1.210	1450.000	576.132	-2.197	.242	0.000	34.973	.027	16.000
1.210	2150.000	577.611	1.479	.167	0.000	35.000	0.000	16.000
1.210	3250.000	579.655	2.044	.132	0.000	35.000	0.000	16.000
1.220	2500.000	579.013	0.000	.729	0.000	35.000	0.000	1.000
1.220	2500.000	579.042	.029	.713	0.000	35.000	0.000	1.000
1.220	1450.000	576.821	-2.221	.689	0.000	35.000	0.000	1.000
1.220	2150.000	578.328	1.507	.716	0.000	35.000	0.000	1.000
1.220	3250.000	580.396	2.068	.741	0.000	35.000	0.000	1.000
1.300	2500.000	580.238	0.000	1.225	0.000	120.000	0.000	41.000
1.300	2500.000	580.261	.023	1.220	0.000	120.000	0.000	41.000
1.300	1450.000	577.598	-2.663	.777	0.000	120.000	0.000	41.000
1.300	2150.000	579.409	1.811	1.081	0.000	120.000	0.000	41.000
1.300	3250.000	581.907	2.498	1.511	0.000	120.000	0.000	41.000
1.350	2500.000	580.403	0.000	.166	0.000	522.193	0.000	368.000
1.350	2500.000	580.427	.023	.166	0.000	444.624	77.569	368.000
1.350	1450.000	577.768	-2.658	.170	0.000	434.379	87.813	368.000
1.350	2150.000	579.574	1.805	.165	0.000	498.888	23.304	368.000
1.350	3250.000	582.078	2.504	.171	0.000	598.980	-76.788	368.000
1.380	2500.000	580.425	0.000	.021	0.000	525.605	0.000	150.000
1.380	2500.000	580.448	.024	.022	0.000	446.976	78.629	150.000
1.380	1450.000	577.797	-2.652	.028	0.000	107.000	418.605	150.000
1.380	2150.000	579.599	1.802	.025	0.000	502.397	23.208	150.000
1.380	3250.000	582.095	2.496	.017	0.000	568.718	-43.113	150.000
1.420	2500.000	580.971	0.000	.547	0.000	541.156	0.000	18.000
1.420	2500.000	580.995	.024	.547	0.000	460.687	80.469	18.000
1.420	1450.000	577.802	-3.193	.005	0.000	107.000	434.156	18.000
1.420	2150.000	580.590	2.788	.992	0.000	530.429	10.727	18.000
1.420	3250.000	582.248	1.658	.154	0.000	570.114	-28.957	18.000
1.430	2500.000	580.971	0.000	.000	0.000	540.955	0.000	1.000
1.430	2500.000	580.995	.024	.000	0.000	457.940	83.015	1.000
1.430	1450.000	578.402	-2.593	.600	0.000	468.796	72.159	1.000
1.430	2150.000	580.591	2.188	.000	0.000	530.258	10.697	1.000
1.430	3250.000	582.248	1.658	.000	0.000	570.046	-29.091	1.000
1.450	2500.000	580.991	0.000	.020	0.000	529.873	0.000	141.000
1.450	2500.000	581.014	.023	.019	0.000	466.370	63.503	141.000

1.450	1450.000	578.429	-2.585	.027	0.000	491.285	38.588	141.000
1.450	2150.000	580.608	2.179	.017	0.000	524.102	5.771	141.000
1.450	3250.000	582.267	1.659	.019	0.000	549.096	-19.223	141.000
2.000	2500.000	581.221	0.000	.230	0.000	533.338	0.000	1700.000
2.000	2500.000	581.251	.030	.237	0.000	472.732	60.607	1700.000
2.000	1450.000	578.782	-2.469	.353	0.000	496.580	36.758	1700.000
2.000	2150.000	580.816	2.034	.208	0.000	527.233	6.105	1700.000
2.000	3250.000	582.485	1.669	.218	0.000	552.374	-19.036	1700.000
3.000	2500.000	581.593	0.000	.372	0.000	404.001	0.000	1875.000
3.000	2500.000	581.632	.039	.381	0.000	357.242	46.759	1875.000
3.000	1450.000	579.366	-2.266	.584	0.000	357.589	46.412	1875.000
3.000	2150.000	581.163	1.796	.347	0.000	404.001	.000	1875.000
3.000	3250.000	582.823	1.661	.339	0.000	404.001	-.000	1875.000
3.100	2500.000	582.215	0.000	.621	0.000	75.001	0.000	1050.000
3.100	2500.000	582.265	.051	.633	0.000	69.540	5.460	1050.000
3.100	1450.000	580.611	-1.654	1.245	0.000	75.000	.000	1050.000
3.100	2150.000	581.799	1.188	.636	0.000	75.001	.000	1050.000
3.100	3250.000	583.253	1.454	.429	0.000	75.001	-.000	1050.000
3.980	2500.000	582.504	0.000	.290	0.000	28.000	0.000	126.000
3.980	2500.001	582.603	.099	.338	0.000	28.000	0.000	126.000
3.980	1450.000	580.959	-1.644	.348	0.000	28.000	0.000	126.000
3.980	2150.000	582.104	1.144	.305	0.000	28.000	0.000	126.000
3.980	3250.000	584.015	1.911	.762	0.000	171.485	-143.485	126.000
4.020	2500.000	583.138	0.000	.633	0.000	28.000	0.000	48.000
4.020	2500.000	583.236	.099	.633	0.000	28.000	0.000	48.000
4.020	1450.000	580.960	-2.276	.000	0.000	28.000	0.000	48.000
4.020	2150.000	582.434	1.475	.331	0.000	28.000	0.000	48.000
4.020	3250.000	585.847	3.413	1.833	0.000	324.899	-296.899	48.000
4.100	2500.000	584.395	0.000	1.258	0.000	82.001	0.000	26.000
4.100	2500.000	584.452	.056	1.215	0.000	75.624	6.377	26.000
4.100	1450.000	581.582	-2.870	.622	0.000	82.000	.001	26.000
4.100	2150.000	583.485	1.903	1.050	0.000	82.000	.000	26.000
4.100	3250.000	585.786	2.301	-.062	0.000	82.001	-.000	26.000
5.000	2500.000	585.172	0.000	.777	0.000	397.631	0.000	500.000
5.000	2500.000	585.238	.065	.786	0.000	337.594	60.036	500.000
5.000	1450.000	582.528	-2.710	.946	0.000	320.864	76.767	500.000
5.000	2150.000	584.312	1.784	.828	0.000	379.245	18.386	500.000
5.000	3250.000	586.589	2.277	.903	0.000	410.273	-12.642	500.000
5.100	2500.000	585.368	0.000	.196	0.000	83.000	0.000	420.000
5.100	2500.000	585.448	.080	.211	0.000	83.000	0.000	420.000
5.100	1450.000	582.807	-2.641	.279	0.000	83.000	0.000	420.000
5.100	2150.000	584.534	1.727	.222	0.000	83.000	0.000	420.000
5.100	3250.000	586.671	2.136	.082	0.000	1000.028	-917.028	420.000
5.980	2500.000	584.981	0.000	-.388	0.000	28.000	0.000	106.000
5.980	2500.000	585.080	.099	-.369	0.000	28.000	0.000	106.000
5.980	1450.000	582.623	-2.457	-.184	0.000	28.000	0.000	106.000
5.980	2150.000	584.214	1.591	-.321	0.000	28.000	0.000	106.000
5.980	3250.000	586.491	2.277	-.180	0.000	118.001	-90.001	106.000
6.020	2500.000	589.541	0.000	4.560	0.000	28.000	0.000	88.000
6.020	2500.000	589.640	.099	4.560	0.000	28.000	0.000	88.000
6.020	1450.000	583.907	-5.733	1.284	0.000	28.000	0.000	88.000

6.020	2150.000	587.461	3.554	3.247	0.000	28.000	0.000	88.000
6.020	3250.000	594.266	6.805	7.775	0.000	118.002	-90.002	88.000
6.200	2500.000	590.117	0.000	.577	0.000	111.002	0.000	39.000
6.200	2500.000	590.207	.089	.567	0.000	108.133	2.869	39.000
6.200	1450.000	584.376	-5.830	.469	0.000	111.001	.001	39.000
6.200	2150.000	588.027	3.651	.566	0.000	111.002	.000	39.000
6.200	3250.000	594.279	6.251	.013	0.000	111.003	-.001	39.000
7.000	2200.000	590.225	0.000	.108	0.000	541.552	0.000	567.000
7.000	2200.000	590.316	.091	.109	0.000	523.939	17.613	567.000
7.000	1290.000	584.573	-5.744	.196	0.000	536.766	4.786	567.000
7.000	1900.000	588.156	3.583	.128	0.000	539.800	1.752	567.000
7.000	2900.000	594.369	6.214	.091	0.000	550.188	-8.637	567.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE END	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	63.321	0.000
2	4.000	.015	56.279	-7.041
3	0.000	0.000	57.049	-6.271
4	0.000	0.000	62.575	-.745
5	0.000	0.000	71.813	8.492

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford and Whiteford twps.

3) WATERCOURSE: Halfway Creek (Upper and Lower)

4) DOCUMENT TYPE: Summery

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

HALFWAY CREEK - U/S END

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
501.000	2100.00	604.90	604.90	4232.42	604.91	723.38	0.00	0.00	604.90	-I	-I	604.90
501.000	2100.00	604.90	604.90	4192.39	604.91	666.28	226.27	892.55	604.90	0.00	0.00	604.90
501.000	2800.00	605.70	605.70	5334.18	605.71	736.89	0.00	0.00	605.70	655.82	655.82	605.70
501.100	2100.00	604.90	604.90	4105.15	604.91	721.01	0.00	0.00	0.00	604.90	604.90	0.00
501.100	2100.00	604.90	604.90	4065.12	604.91	663.50	228.74	892.24	604.90	604.90	604.90	604.90
501.100	2800.00	605.70	605.70	5190.34	605.71	735.92	0.00	0.00	0.00	605.70	605.70	0.00
501.150	2100.00	604.92	604.92	4130.69	604.93	721.49	0.00	0.00	0.00	0.00	0.00	0.00
501.150	2100.00	605.02	605.02	4217.01	605.03	664.06	228.24	892.30	604.92	604.90	604.90	604.92
501.150	2800.00	605.72	605.72	5219.25	605.73	736.11	0.00	0.00	0.00	0.00	0.00	0.00
501.200	2100.00	604.92	604.92	3620.65	604.93	614.68	0.00	0.00	0.00	0.00	0.00	0.00
501.200	2100.00	605.02	605.02	3627.87	605.03	581.04	82.00	663.04	604.92	604.92	604.92	604.92
501.200	2800.00	605.72	605.72	4582.41	605.73	618.36	0.00	0.00	0.00	0.00	0.00	0.00
501.300	2100.00	604.67	604.67	402.54	605.34	65.68	0.00	0.00	0.00	0.00	0.00	0.00
501.300	2100.00	604.77	604.77	409.84	605.44	56.10	75.46	131.56	604.67	604.92	604.92	604.67
501.300	2800.00	605.38	605.38	481.42	606.29	68.61	0.00	0.00	0.00	0.00	0.00	0.00
501.400	2100.00	605.63	605.63	1557.31	605.66	351.19	0.00	0.00	0.00	0.00	0.00	0.00
501.400	2100.00	605.73	605.73	1586.53	605.76	298.18	122.48	420.66	605.63	604.67	604.67	605.63
501.400	2800.00	606.67	606.67	2146.75	606.71	370.18	0.00	0.00	0.00	0.00	0.00	0.00
501.450	2100.00	605.66	605.66	1573.00	605.69	351.90	0.00	0.00	0.00	0.00	0.00	0.00
501.450	2100.00	605.76	605.76	1603.32	605.79	298.48	122.34	420.82	605.66	605.63	605.63	605.66
501.450	2800.00	606.70	606.70	2165.61	606.74	370.69	0.00	0.00	0.00	0.00	0.00	0.00
501.500	2100.00	605.67	605.67	1303.17	605.70	404.06	0.00	0.00	0.00	0.00	0.00	0.00
501.500	2100.00	605.77	605.77	1314.58	605.80	345.65	73.56	419.21	605.67	605.66	605.66	605.67
501.500	2800.00	606.72	606.72	1814.79	606.75	413.35	0.00	0.00	0.00	0.00	0.00	0.00
501.580	2100.00	605.72	605.72	1326.17	605.75	404.51	0.00	0.00	0.00	0.00	0.00	0.00
501.580	2100.00	605.82	605.82	1336.88	605.85	346.68	73.43	420.11	605.72	605.67	605.67	605.72
501.580	2800.00	606.77	606.77	1839.59	606.80	413.77	0.00	0.00	0.00	0.00	0.00	0.00
501.620	2100.00	605.82	605.82	1047.46	605.86	417.39	0.00	0.00	0.00	0.00	0.00	0.00
501.620	2100.00	605.92	605.92	1039.87	605.96	352.29	61.71	414.00	605.82	605.72	605.72	605.82
501.620	2800.00	606.88	606.88	1538.54	606.92	444.92	0.00	0.00	0.00	0.00	0.00	0.00
501.700	2100.00	605.84	605.84	856.12	605.90	405.00	0.00	0.00	0.00	0.00	0.00	0.00
501.700	2100.00	605.94	605.94	852.01	606.00	346.63	67.37	414.00	605.84	605.82	605.82	605.84
501.700	2800.00	606.90	606.90	1304.31	606.95	432.42	0.00	0.00	0.00	0.00	0.00	0.00
501.800	2100.00	605.89	605.89	896.89	605.94	339.47	0.00	0.00	0.00	0.00	0.00	0.00
501.800	2100.00	605.99	605.99	893.92	606.04	295.87	58.12	354.00	605.89	605.84	605.84	605.89
501.800	2800.00	606.93	606.93	1299.71	606.98	348.88	0.00	0.00	0.00	0.00	0.00	0.00
501.820	2100.00	606.01	606.01	939.64	606.05	340.55	0.00	0.00	0.00	0.00	0.00	0.00
501.820	2100.00	606.11	606.11	935.57	606.15	296.67	57.33	354.00	606.01	605.89	605.89	606.01
501.820	2800.00	607.05	607.05	1350.24	607.10	349.95	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
501.900	2100.00	606.03	606.03	959.18	606.08	341.54	0.00	0.00	0.00	0.00	0.00	0.00
501.900	2100.00	606.13	606.13	970.22	606.18	300.15	119.85	420.00	606.03	606.01	606.01	606.03
501.900	2800.00	607.08	607.08	1377.94	607.12	362.56	0.00	0.00	0.00	0.00	0.00	0.00
501.950	2100.00	606.37	606.37	816.43	606.43	362.52	0.00	0.00	0.00	0.00	0.00	0.00
501.950	2100.00	606.46	606.46	838.14	606.52	320.97	25.23	346.20	606.37	606.03	606.03	606.37
501.950	2800.00	607.36	607.36	1187.59	607.43	370.74	0.00	0.00	0.00	0.00	0.00	0.00
501.980	2100.00	606.45	606.45	461.27	606.67	266.37	0.00	0.00	0.00	0.00	0.00	0.00
501.980	2100.00	606.53	606.53	452.79	606.76	194.92	205.08	400.00	606.45	606.37	606.37	606.45
501.980	2800.00	607.42	607.42	704.74	607.62	294.83	0.00	0.00	0.00	0.00	0.00	0.00
502.020	2100.00	606.71	606.71	521.08	606.89	274.02	0.00	0.00	0.00	0.00	0.00	0.00
502.020	2100.00	606.79	606.79	519.28	606.98	205.10	202.20	407.30	606.71	606.45	606.45	606.71
502.020	2800.00	607.65	607.65	770.34	607.82	301.51	0.00	0.00	0.00	0.00	0.00	0.00
502.100	2100.00	606.90	606.90	762.04	606.97	360.64	0.00	0.00	0.00	0.00	0.00	0.00
502.100	2100.00	606.99	606.99	789.80	607.06	321.17	115.39	436.56	606.90	606.71	606.71	606.90
502.100	2800.00	607.82	607.82	1100.65	607.89	373.75	0.00	0.00	0.00	0.00	0.00	0.00
503.000	2100.00	607.35	607.35	1177.91	607.38	504.21	0.00	0.00	0.00	0.00	0.00	0.00
503.000	2100.00	607.43	607.43	1177.07	607.46	417.64	152.79	570.43	607.35	606.90	606.90	607.35
503.000	2800.00	608.22	608.22	1637.61	608.25	574.93	0.00	0.00	0.00	0.00	0.00	0.00
503.900	2100.00	607.69	607.69	313.20	608.18	97.27	0.00	0.00	0.00	0.00	0.00	0.00
503.900	2100.00	607.76	607.76	310.72	608.27	91.21	236.07	327.28	607.69	607.35	607.35	607.69
503.900	2800.00	608.48	608.48	405.04	609.08	97.27	0.00	0.00	0.00	0.00	0.00	0.00
504.980	1900.00	608.19	608.19	637.23	608.39	107.16	0.00	0.00	0.00	0.00	0.00	0.00
504.980	1900.00	608.30	608.30	656.46	608.49	90.01	402.34	492.35	608.19	607.69	607.69	608.19
504.980	2500.00	609.05	609.05	781.15	609.32	115.86	0.00	0.00	0.00	0.00	0.00	0.00
505.020	1900.00	611.31	611.31	1238.71	611.39	159.09	0.00	0.00	0.00	0.00	0.00	0.00
505.020	1900.00	611.42	611.42	1273.94	611.50	125.78	384.22	510.00	611.31	608.19	608.19	611.31
505.020	2500.00	611.83	611.83	1371.64	611.95	204.42	0.00	0.00	0.00	0.00	0.00	0.00
506.100	1900.00	611.37	611.37	1105.50	611.42	231.31	0.00	0.00	0.00	0.00	0.00	0.00
506.100	1900.00	611.48	611.48	1140.93	611.52	212.37	176.72	389.10	611.37	611.31	611.31	611.37
506.100	2500.00	611.93	611.93	1276.71	612.00	237.06	0.00	0.00	0.00	0.00	0.00	0.00
507.000	1900.00	611.59	611.59	1960.34	611.60	558.44	0.00	0.00	0.00	0.00	0.00	0.00
507.000	1900.00	611.69	611.69	1973.27	611.70	480.11	315.43	795.55	611.59	611.37	611.37	611.59
507.000	2500.00	612.20	612.20	2365.75	612.22	572.93	0.00	0.00	0.00	0.00	0.00	0.00
507.100	1900.00	611.59	611.59	1520.38	611.61	406.23	0.00	0.00	0.00	0.00	0.00	0.00
507.100	1900.00	611.69	611.69	1537.81	611.71	355.40	76.97	432.37	611.59	611.59	611.59	611.59
507.100	2500.00	612.21	612.21	1826.58	612.24	415.62	0.00	0.00	0.00	0.00	0.00	0.00
507.150	1900.00	611.64	611.64	1544.04	611.66	406.99	0.00	0.00	0.00	0.00	0.00	0.00
507.150	1900.00	611.74	611.74	1561.54	611.76	356.04	76.48	432.52	611.64	611.59	611.59	611.64
507.150	2500.00	612.27	612.27	1857.62	612.30	416.53	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
507.200	1270.00	611.66	611.66	1257.08	611.67	369.64	0.00	0.00	0.00	0.00	0.00	0.00
507.200	1270.00	611.76	611.76	1286.56	611.77	338.94	106.70	445.63	611.66	611.64	611.64	611.66
507.200	1670.00	612.29	612.29	1533.71	612.31	375.43	0.00	0.00	0.00	0.00	0.00	0.00
507.800	1270.00	611.83	611.83	550.22	611.91	259.08	0.00	0.00	0.00	0.00	0.00	0.00
507.800	1270.00	611.92	611.92	550.43	612.01	186.78	158.35	345.13	611.83	611.66	611.66	611.83
507.800	1670.00	612.49	612.49	703.77	612.58	286.89	0.00	0.00	0.00	0.00	0.00	0.00
507.850	1270.00	611.86	611.86	555.19	611.94	260.06	0.00	0.00	0.00	0.00	0.00	0.00
507.850	1270.00	611.96	611.96	556.11	612.05	185.67	158.98	344.65	611.86	611.83	611.83	611.86
507.850	1670.00	612.53	612.53	712.44	612.62	288.33	0.00	0.00	0.00	0.00	0.00	0.00
507.900	1270.00	612.80	612.80	303.61	612.98	162.12	0.00	0.00	0.00	0.00	0.00	0.00
507.900	1270.00	612.89	612.89	306.43	613.07	111.02	171.83	282.86	612.80	611.86	611.86	612.80
507.900	1670.00	613.50	613.50	402.00	613.68	185.05	0.00	0.00	0.00	0.00	0.00	0.00
507.980	1270.00	612.93	612.93	196.83	613.47	81.60	0.00	0.00	0.00	0.00	0.00	0.00
507.980	1270.00	613.04	613.04	207.93	613.53	71.78	317.79	389.58	612.93	612.80	612.80	612.93
507.980	1670.00	613.56	613.56	248.03	614.22	90.55	0.00	0.00	0.00	0.00	0.00	0.00
508.020	1270.00	613.82	613.82	272.23	614.15	129.25	0.00	0.00	0.00	0.00	0.00	0.00
508.020	1270.00	613.92	613.92	285.69	614.23	84.10	311.72	395.82	613.82	612.93	612.93	613.82
508.020	1670.00	614.54	614.54	358.63	614.89	227.98	0.00	0.00	0.00	0.00	0.00	0.00
508.100	1270.00	614.22	614.22	709.97	614.26	216.93	0.00	0.00	0.00	0.00	0.00	0.00
508.100	1270.00	614.29	614.29	709.54	614.33	188.20	102.80	291.00	614.22	613.82	613.82	614.22
508.100	1670.00	614.96	614.96	902.92	615.01	300.75	0.00	0.00	0.00	0.00	0.00	0.00
509.000	1270.00	614.60	614.60	467.49	614.66	309.07	0.00	0.00	0.00	0.00	0.00	0.00
509.000	1270.00	614.68	614.68	460.48	614.74	261.87	99.13	361.00	614.60	614.22	614.22	614.60
509.000	1670.00	615.33	615.33	672.57	615.39	312.78	0.00	0.00	0.00	0.00	0.00	0.00
509.900	1270.00	615.63	615.63	597.91	615.68	240.00	0.00	0.00	0.00	0.00	0.00	0.00
509.900	1270.00	615.72	615.72	594.11	615.77	213.14	84.22	297.36	615.63	614.60	614.60	615.63
509.900	1670.00	616.29	616.29	769.08	616.34	240.00	0.00	0.00	0.00	0.00	0.00	0.00
509.980	1080.00	615.67	615.67	219.88	615.93	219.25	0.00	0.00	0.00	0.00	0.00	0.00
509.980	1080.00	615.76	615.76	215.95	616.04	85.49	764.51	850.00	615.67	615.63	615.63	615.67
509.980	1460.00	616.34	616.34	317.71	616.59	296.99	0.00	0.00	0.00	0.00	0.00	0.00
510.020	1080.00	616.63	616.63	371.73	616.73	310.87	0.00	0.00	0.00	0.00	0.00	0.00
510.020	1080.00	616.72	616.72	383.59	616.82	240.99	625.88	866.87	616.63	615.67	615.67	616.63
510.020	1460.00	617.05	617.05	462.72	617.17	331.22	0.00	0.00	0.00	0.00	0.00	0.00
510.100	1080.00	616.76	616.76	1348.72	616.76	391.00	0.00	0.00	0.00	0.00	0.00	0.00
510.100	1080.00	616.84	616.84	1345.47	616.85	347.45	251.15	598.59	616.76	616.63	616.63	616.76
510.100	1460.00	617.20	617.20	1555.72	617.21	391.00	0.00	0.00	0.00	0.00	0.00	0.00
510.200	1080.00	616.77	616.77	1215.54	616.77	385.44	0.00	0.00	0.00	0.00	0.00	0.00
510.200	1080.00	616.85	616.85	1219.04	616.86	346.20	217.22	563.42	616.77	616.76	616.76	616.77
510.200	1460.00	617.21	617.21	1413.30	617.23	389.46	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
510.250	1080.00	616.78	616.78	1219.81	616.78	385.53	0.00	0.00	0.00	0.00	0.00	0.00
510.250	1080.00	616.88	616.88	1228.87	616.88	346.28	217.20	563.48	616.78	616.77	616.77	616.78
510.250	1460.00	617.22	617.22	1417.87	617.24	389.55	0.00	0.00	0.00	0.00	0.00	0.00
510.900	1080.00	616.92	616.92	492.48	616.95	283.72	0.00	0.00	0.00	0.00	0.00	0.00
510.900	1080.00	617.02	617.02	493.36	617.05	249.83	345.09	594.92	616.92	616.78	616.78	616.92
510.900	1460.00	617.42	617.42	620.77	617.45	288.19	0.00	0.00	0.00	0.00	0.00	0.00
510.980	1080.00	616.96	616.96	453.79	616.99	282.28	0.00	0.00	0.00	0.00	0.00	0.00
510.980	1080.00	617.06	617.06	456.00	617.09	249.57	345.19	594.76	616.96	616.92	616.92	616.96
510.980	1460.00	617.45	617.45	579.29	617.50	286.80	0.00	0.00	0.00	0.00	0.00	0.00
510.990	1080.00	617.06	617.06	716.00	617.09	287.16	0.00	0.00	0.00	0.00	0.00	0.00
510.990	1080.00	617.16	617.16	718.46	617.19	251.90	344.35	596.25	617.06	616.96	616.96	617.06
510.990	1460.00	617.59	617.59	873.70	617.62	292.14	0.00	0.00	0.00	0.00	0.00	0.00
511.000	1080.00	617.09	617.09	639.79	617.12	284.57	0.00	0.00	0.00	0.00	0.00	0.00
511.000	1080.00	617.19	617.19	642.85	617.22	249.95	345.24	595.19	617.09	617.06	617.06	617.09
511.000	1460.00	617.62	617.62	791.73	617.66	289.61	0.00	0.00	0.00	0.00	0.00	0.00
511.100	1080.00	617.11	617.11	358.29	617.18	278.86	0.00	0.00	0.00	0.00	0.00	0.00
511.100	1080.00	617.20	617.20	357.97	617.28	242.46	349.77	592.24	617.11	617.09	617.09	617.11
511.100	1460.00	617.64	617.64	478.65	617.72	284.01	0.00	0.00	0.00	0.00	0.00	0.00
511.150	1080.00	617.41	617.41	423.66	617.46	281.75	0.00	0.00	0.00	0.00	0.00	0.00
511.150	1080.00	617.51	617.51	424.11	617.56	246.04	347.89	593.93	617.41	617.11	617.11	617.41
511.150	1460.00	618.04	618.04	579.40	618.10	287.87	0.00	0.00	0.00	0.00	0.00	0.00
511.500	1080.00	618.33	618.33	197.94	618.46	271.83	0.00	0.00	0.00	0.00	0.00	0.00
511.500	1080.00	618.42	618.42	200.18	618.55	191.59	205.77	397.37	618.33	617.41	617.41	618.33
511.500	1460.00	618.92	618.92	281.23	619.05	286.14	0.00	0.00	0.00	0.00	0.00	0.00
512.000	1080.00	620.78	620.78	191.95	620.92	268.61	0.00	0.00	0.00	0.00	0.00	0.00
512.000	1080.00	620.84	620.84	191.67	620.99	190.57	205.95	396.52	620.78	618.33	618.33	620.78
512.000	1460.00	621.26	621.26	257.16	621.41	285.03	0.00	0.00	0.00	0.00	0.00	0.00
513.000	1080.00	624.08	624.08	349.22	624.12	274.30	0.00	0.00	0.00	0.00	0.00	0.00
513.000	1080.00	624.13	624.13	351.24	624.18	228.59	255.70	484.29	624.08	620.78	620.78	624.08
513.000	1460.00	624.69	624.69	461.13	624.73	287.61	0.00	0.00	0.00	0.00	0.00	0.00
513.500	1080.00	624.59	624.59	163.37	624.73	240.94	0.00	0.00	0.00	0.00	0.00	0.00
513.500	1080.00	624.65	624.65	160.39	624.79	185.01	287.99	473.00	624.59	624.08	624.08	624.59
513.500	1460.00	625.19	625.19	240.22	625.32	259.17	0.00	0.00	0.00	0.00	0.00	0.00
513.800	1080.00	628.00	628.00	116.53	628.41	174.92	0.00	0.00	0.00	0.00	0.00	0.00
513.800	1080.00	628.04	628.04	120.60	628.43	132.59	368.73	501.32	628.00	624.59	624.59	628.00
513.800	1460.00	628.37	628.37	147.68	628.87	191.31	0.00	0.00	0.00	0.00	0.00	0.00
514.000	1080.00	633.27	633.27	152.99	633.52	132.84	0.00	0.00	0.00	0.00	0.00	0.00
514.000	1080.00	633.30	633.30	148.27	633.56	103.99	406.01	510.00	633.27	628.00	628.00	633.27
514.000	1460.00	633.88	633.88	210.09	634.17	143.21	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
514.500	1080.00	637.05	637.05	136.16	637.98	83.91	0.00	0.00	0.00	0.00	0.00	0.00
514.500	1080.00	637.19	637.19	137.84	638.09	54.75	430.25	485.00	637.05	633.27	633.27	637.05
514.500	1460.00	637.60	637.60	180.22	638.69	97.43	0.00	0.00	0.00	0.00	0.00	0.00
515.000	1080.00	640.93	640.93	131.20	642.02	76.40	0.00	0.00	0.00	0.00	0.00	0.00
515.000	1080.00	641.00	641.00	130.07	642.16	44.97	316.03	361.00	640.93	637.05	637.05	640.93
515.000	1460.00	641.60	641.60	177.39	642.80	88.50	0.00	0.00	0.00	0.00	0.00	0.00
515.100	1080.00	641.72	641.72	109.45	642.72	90.82	0.00	0.00	0.00	0.00	0.00	0.00
515.100	1080.00	641.72	641.72	99.86	642.88	60.25	300.75	361.00	641.72	640.93	640.93	641.72
515.100	1460.00	642.20	642.20	146.42	643.34	99.56	0.00	0.00	0.00	0.00	0.00	0.00
515.150	1080.00	642.50	642.50	257.85	642.85	105.06	0.00	0.00	0.00	0.00	0.00	0.00
515.150	1080.00	642.76	642.76	268.33	643.06	80.47	280.53	361.00	642.50	641.72	641.72	642.50
515.150	1460.00	643.04	643.04	314.98	643.49	114.79	0.00	0.00	0.00	0.00	0.00	0.00
515.200	1080.00	642.69	642.69	177.99	643.03	241.62	0.00	0.00	0.00	0.00	0.00	0.00
515.200	1080.00	642.95	642.95	209.78	643.21	197.58	113.79	311.37	642.69	642.50	642.50	642.69
515.200	1460.00	643.48	643.48	308.86	643.70	284.86	0.00	0.00	0.00	0.00	0.00	0.00
515.250	1080.00	642.89	642.89	178.47	643.29	94.29	0.00	0.00	0.00	0.00	0.00	0.00
515.250	1080.00	642.99	642.99	179.08	643.41	75.13	242.61	317.74	642.89	642.69	642.69	642.89
515.250	1460.00	643.68	643.68	257.42	644.10	97.16	0.00	0.00	0.00	0.00	0.00	0.00
515.280	1080.00	642.89	642.89	152.75	643.67	88.35	0.00	0.00	0.00	0.00	0.00	0.00
515.280	1080.00	642.99	642.99	148.18	643.80	57.94	303.06	361.00	642.89	642.89	642.89	642.89
515.280	1460.00	643.66	643.66	218.76	644.45	102.57	0.00	0.00	0.00	0.00	0.00	0.00
515.320	1080.00	644.71	644.71	335.77	644.91	220.30	0.00	0.00	0.00	0.00	0.00	0.00
515.320	1080.00	644.81	644.81	327.31	645.00	101.43	259.57	361.00	644.71	642.89	642.89	644.71
515.320	1460.00	645.26	645.26	429.17	645.50	253.80	0.00	0.00	0.00	0.00	0.00	0.00
515.400	1080.00	644.64	644.64	183.55	645.00	130.23	0.00	0.00	0.00	0.00	0.00	0.00
515.400	1080.00	644.74	644.74	190.55	645.08	93.47	257.19	350.66	644.64	644.71	644.71	644.64
515.400	1460.00	645.22	645.22	250.35	645.56	245.74	0.00	0.00	0.00	0.00	0.00	0.00
515.450	1080.00	644.63	644.63	162.48	645.01	122.54	0.00	0.00	0.00	0.00	0.00	0.00
515.450	1080.00	644.73	644.73	168.91	645.10	93.15	257.40	350.55	644.63	644.64	644.64	644.63
515.450	1460.00	645.21	645.21	229.17	645.57	245.69	0.00	0.00	0.00	0.00	0.00	0.00
515.470	1080.00	644.69	644.69	188.20	645.03	155.21	0.00	0.00	0.00	0.00	0.00	0.00
515.470	1080.00	644.79	644.79	195.12	645.12	93.90	256.71	350.62	644.69	644.63	644.63	644.69
515.470	1460.00	645.25	645.25	254.49	645.58	245.91	0.00	0.00	0.00	0.00	0.00	0.00
515.500	1080.00	644.85	644.85	257.91	645.18	109.73	0.00	0.00	0.00	0.00	0.00	0.00
515.500	1080.00	644.98	644.98	258.59	645.27	89.66	271.34	361.00	644.85	644.69	644.69	644.85
515.500	1460.00	645.36	645.36	315.64	645.78	182.00	0.00	0.00	0.00	0.00	0.00	0.00
515.550	1080.00	644.83	644.83	210.08	645.20	111.15	0.00	0.00	0.00	0.00	0.00	0.00
515.550	1080.00	644.95	644.95	220.83	645.30	96.51	265.84	362.36	644.83	644.85	644.85	644.83
515.550	1460.00	645.35	645.35	267.33	645.81	179.56	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
515.570	1080.00	644.91	644.91	262.65	645.22	110.55	0.00	0.00	0.00	0.00	0.00	0.00
515.570	1080.00	645.04	645.04	263.36	645.32	88.84	272.16	361.00	644.91	644.83	644.83	644.91
515.570	1460.00	645.42	645.42	322.79	645.83	195.58	0.00	0.00	0.00	0.00	0.00	0.00
515.850	1080.00	646.18	646.18	142.89	646.39	169.73	0.00	0.00	0.00	0.00	0.00	0.00
515.850	1080.00	646.25	646.25	142.15	646.47	133.62	84.36	217.98	646.18	644.91	644.91	646.18
515.850	1460.00	646.85	646.85	220.42	647.04	240.28	0.00	0.00	0.00	0.00	0.00	0.00
515.900	1080.00	648.66	648.66	86.47	649.13	161.37	0.00	0.00	0.00	0.00	0.00	0.00
515.900	1080.00	648.72	648.72	86.71	649.23	121.05	91.31	212.36	648.66	646.18	646.18	648.66
515.900	1460.00	648.95	648.95	110.50	649.52	165.17	0.00	0.00	0.00	0.00	0.00	0.00
515.980	1080.00	650.00	650.00	97.38	650.94	84.49	0.00	0.00	0.00	0.00	0.00	0.00
515.980	1080.00	650.05	650.05	100.54	650.94	62.40	267.57	329.97	650.00	648.66	648.66	650.00
515.980	1460.00	650.44	650.44	121.17	651.66	96.81	0.00	0.00	0.00	0.00	0.00	0.00
516.020	1080.00	655.67	655.67	824.01	655.70	336.55	0.00	0.00	0.00	0.00	0.00	0.00
516.020	1080.00	655.72	655.72	839.64	655.75	256.84	192.71	449.55	655.67	650.00	650.00	655.67
516.020	1460.00	656.00	656.00	906.83	656.04	366.37	0.00	0.00	0.00	0.00	0.00	0.00
516.100	1080.00	655.68	655.68	705.99	655.71	331.96	0.00	0.00	0.00	0.00	0.00	0.00
516.100	1080.00	655.73	655.73	700.39	655.76	289.27	296.35	585.62	655.68	655.67	655.67	655.68
516.100	1460.00	656.02	656.02	795.16	656.06	334.90	0.00	0.00	0.00	0.00	0.00	0.00
517.000	1080.00	655.82	655.82	224.06	655.96	228.56	0.00	0.00	0.00	0.00	0.00	0.00
517.000	1080.00	655.86	655.86	220.16	656.03	116.80	382.00	498.80	655.82	655.68	655.68	655.82
517.000	1460.00	656.22	656.22	267.69	656.41	253.89	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
501.000	2100.000	604.900	0.000	0.000	0.000	723.381	0.000	0.000
501.000	2100.000	604.900	0.000	0.000	0.000	666.276	57.105	0.000
501.000	2800.000	605.700	.800	0.000	0.000	736.895	-13.514	0.000
501.100	2100.000	604.901	0.000	.001	0.000	721.011	0.000	40.000
501.100	2100.000	604.901	.000	.001	0.000	663.503	57.507	40.000
501.100	2800.000	605.701	.800	.001	0.000	735.917	-14.907	40.000
501.150	2100.000	604.921	0.000	.020	0.000	721.489	0.000	1.000
501.150	2100.000	605.021	.100	.120	0.000	664.064	57.425	1.000
501.150	2800.000	605.721	.700	.020	0.000	736.115	-14.626	1.000
501.200	2100.000	604.921	0.000	.001	0.000	614.679	0.000	50.000
501.200	2100.000	605.021	.100	.000	0.000	581.038	33.640	50.000
501.200	2800.000	605.721	.700	.000	0.000	618.362	-3.684	50.000
501.300	2100.000	604.675	0.000	-.247	0.000	65.682	0.000	150.000
501.300	2100.000	604.774	.100	-.247	0.000	56.096	9.586	150.000
501.300	2800.000	605.378	.603	-.343	0.000	68.608	-2.926	150.000
501.400	2100.000	605.629	0.000	.954	0.000	351.190	0.000	150.000
501.400	2100.000	605.726	.097	.952	0.000	298.178	53.011	150.000
501.400	2800.000	606.675	.949	1.297	0.000	370.181	-18.991	150.000
501.450	2100.000	605.659	0.000	.030	0.000	351.901	0.000	1.000
501.450	2100.000	605.759	.100	.033	0.000	298.482	53.418	1.000
501.450	2800.000	606.705	.946	.030	0.000	370.685	-18.785	1.000

501.500	2100.000	605.672	0.000	.013	0.000	404.062	0.000	60.000
501.500	2100.000	605.772	.099	.012	0.000	345.650	58.412	60.000
501.500	2800.000	606.718	.947	.013	0.000	413.354	-9.292	60.000
501.580	2100.000	605.724	0.000	.052	0.000	404.514	0.000	200.000
501.580	2100.000	605.823	.098	.051	0.000	346.679	57.835	200.000
501.580	2800.000	606.766	.943	.048	0.000	413.770	-9.256	200.000
501.620	2100.000	605.821	0.000	.096	0.000	417.389	0.000	160.000
501.620	2100.000	605.919	.098	.096	0.000	352.292	65.097	160.000
501.620	2800.000	606.884	.965	.118	0.000	444.917	-27.528	160.000
501.700	2100.000	605.842	0.000	.021	0.000	404.999	0.000	50.000
501.700	2100.000	605.941	.099	.022	0.000	346.625	58.374	50.000
501.700	2800.000	606.901	.960	.017	0.000	432.417	-27.418	50.000
501.800	2100.000	605.885	0.000	.043	0.000	339.470	0.000	65.000
501.800	2100.000	605.985	.100	.045	0.000	295.875	43.595	65.000
501.800	2800.000	606.931	.945	.030	0.000	348.875	-9.405	65.000
501.820	2100.000	606.005	0.000	.120	0.000	340.549	0.000	1.000
501.820	2100.000	606.105	.100	.120	0.000	296.667	43.881	1.000
501.820	2800.000	607.051	.945	.120	0.000	349.955	-9.406	1.000
501.900	2100.000	606.034	0.000	.029	0.000	341.542	0.000	50.000
501.900	2100.000	606.133	.099	.028	0.000	300.146	41.396	50.000
501.900	2800.000	607.075	.942	.025	0.000	362.555	-21.013	50.000
501.950	2100.000	606.372	0.000	.337	0.000	362.524	0.000	625.000
501.950	2100.000	606.460	.088	.326	0.000	320.967	41.557	625.000
501.950	2800.000	607.364	.904	.289	0.000	370.740	-8.216	625.000
501.980	2100.000	606.449	0.000	.077	0.000	266.368	0.000	145.000
501.980	2100.000	606.527	.079	.068	0.000	194.923	71.445	145.000
501.980	2800.000	607.424	.897	.060	0.000	294.828	-28.460	145.000
502.020	2100.000	606.710	0.000	.261	0.000	274.025	0.000	10.000
502.020	2100.000	606.789	.079	.261	0.000	205.097	68.927	10.000
502.020	2800.000	607.653	.864	.229	0.000	301.514	-27.490	10.000
502.100	2100.000	606.901	0.000	.191	0.000	360.645	0.000	45.000
502.100	2100.000	606.994	.094	.206	0.000	321.168	39.477	45.000
502.100	2800.000	607.820	.826	.168	0.000	373.750	-13.105	45.000
503.000	2100.000	607.348	0.000	.447	0.000	504.215	0.000	855.000
503.000	2100.000	607.426	.078	.431	0.000	417.637	86.578	855.000
503.000	2800.000	608.222	.797	.402	0.000	574.930	-70.715	855.000
503.900	2100.000	607.686	0.000	.338	0.000	97.271	0.000	718.000
503.900	2100.000	607.755	.069	.329	0.000	91.213	6.057	718.000
503.900	2800.000	608.478	.723	.256	0.000	97.271	-.000	718.000
504.980	1900.000	608.186	0.000	.500	0.000	107.156	0.000	53.000
504.980	1900.000	608.298	.112	.543	0.000	90.006	17.149	53.000
504.980	2500.000	609.050	.752	.572	0.000	115.858	-8.703	53.000
505.020	1900.000	611.307	0.000	3.121	0.000	159.093	0.000	190.000
505.020	1900.000	611.419	.112	3.121	0.000	125.779	33.314	190.000
505.020	2500.000	611.832	.413	2.782	0.000	204.422	-45.329	190.000

506.100	1900.000	611.368	0.000	.061	0.000	231.313	0.000	71.000
506.100	1900.000	611.476	.108	.057	0.000	212.373	18.940	71.000
506.100	2500.000	611.927	.451	.095	0.000	237.056	-5.743	71.000
507.000	1900.000	611.587	0.000	.219	0.000	558.436	0.000	1140.000
507.000	1900.000	611.687	.100	.211	0.000	480.114	78.321	1140.000
507.000	2500.000	612.204	.516	.277	0.000	572.932	-14.496	1140.000
507.100	1900.000	611.592	0.000	.005	0.000	406.233	0.000	100.000
507.100	1900.000	611.692	.100	.005	0.000	355.404	50.830	100.000
507.100	2500.000	612.209	.517	.005	0.000	415.620	-9.387	100.000
507.150	1900.000	611.642	0.000	.050	0.000	406.989	0.000	1.000
507.150	1900.000	611.742	.100	.050	0.000	356.038	50.951	1.000
507.150	2500.000	612.269	.527	.060	0.000	416.528	-9.539	1.000
507.200	1270.000	611.659	0.000	.017	0.000	369.638	0.000	50.000
507.200	1270.000	611.759	.100	.018	0.000	338.935	30.703	50.000
507.200	1670.000	612.291	.531	.022	0.000	375.433	-5.795	50.000
507.800	1270.000	611.831	0.000	.172	0.000	259.082	0.000	1100.000
507.800	1270.000	611.922	.091	.163	0.000	186.783	72.299	1100.000
507.800	1670.000	612.488	.566	.197	0.000	286.886	-27.804	1100.000
507.850	1270.000	611.861	0.000	.030	0.000	260.058	0.000	1.000
507.850	1270.000	611.961	.100	.039	0.000	185.669	74.390	1.000
507.850	1670.000	612.528	.567	.040	0.000	288.331	-28.273	1.000
507.900	1270.000	612.803	0.000	.942	0.000	162.122	0.000	1145.000
507.900	1270.000	612.891	.088	.930	0.000	111.023	51.099	1145.000
507.900	1670.000	613.496	.604	.968	0.000	185.055	-22.933	1145.000
507.980	1270.000	612.932	0.000	.129	0.000	81.602	0.000	143.000
507.980	1270.000	613.038	.105	.146	0.000	71.784	9.818	143.000
507.980	1670.000	613.563	.525	.067	0.000	90.546	-8.943	143.000
508.020	1270.000	613.819	0.000	.886	0.000	129.245	0.000	15.000
508.020	1270.000	613.924	.105	.886	0.000	84.100	45.145	15.000
508.020	1670.000	614.538	.614	.975	0.000	227.982	-98.737	15.000
508.100	1270.000	614.224	0.000	.405	0.000	216.928	0.000	42.000
508.100	1270.000	614.293	.070	.369	0.000	188.196	28.732	42.000
508.100	1670.000	614.960	.667	.422	0.000	300.752	-83.824	42.000
509.000	1270.000	614.604	0.000	.380	0.000	309.074	0.000	838.000
509.000	1270.000	614.678	.074	.385	0.000	261.866	47.208	838.000
509.000	1670.000	615.332	.654	.371	0.000	312.777	-3.703	838.000
509.900	1270.000	615.626	0.000	1.022	0.000	240.001	0.000	1780.000
509.900	1270.000	615.721	.094	1.043	0.000	213.135	26.865	1780.000
509.900	1670.000	616.286	.566	.955	0.000	240.001	-.000	1780.000
509.980	1080.000	615.670	0.000	.044	0.000	219.246	0.000	180.000
509.980	1080.000	615.761	.091	.041	0.000	85.486	133.760	180.000
509.980	1460.000	616.344	.582	.057	0.000	296.990	-77.745	180.000
510.020	1080.000	616.630	0.000	.960	0.000	310.871	0.000	39.000
510.020	1080.000	616.721	.091	.960	0.000	240.992	69.879	39.000
510.020	1460.000	617.050	.328	.706	0.000	331.221	-20.350	39.000
510.100	1080.000	616.757	0.000	.127	0.000	391.000	0.000	46.000

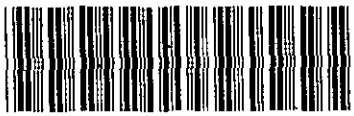
510.100	1080.000	616.844	.086	.122	0.000	347.448	43.552	46.000
510.100	1460.000	617.202	.358	.152	0.000	391.000	-.000	46.000
510.200	1080.000	616.766	0.000	.009	0.000	385.442	0.000	140.000
510.200	1080.000	616.852	.086	.009	0.000	346.199	39.243	140.000
510.200	1460.000	617.214	.361	.012	0.000	389.459	-4.017	140.000
510.250	1080.000	616.776	0.000	.010	0.000	385.532	0.000	1.000
510.250	1080.000	616.876	.100	.024	0.000	346.278	39.254	1.000
510.250	1460.000	617.224	.348	.010	0.000	389.549	-4.017	1.000
510.900	1080.000	616.924	0.000	.148	0.000	283.723	0.000	1000.000
510.900	1080.000	617.022	.097	.146	0.000	249.833	33.890	1000.000
510.900	1460.000	617.415	.394	.192	0.000	288.191	-4.468	1000.000
510.980	1080.000	616.959	0.000	.034	0.000	282.277	0.000	70.000
510.980	1080.000	617.056	.097	.034	0.000	249.575	32.702	70.000
510.980	1460.000	617.455	.399	.039	0.000	286.795	-4.518	70.000
510.990	1080.000	617.064	0.000	.105	0.000	287.162	0.000	10.000
510.990	1080.000	617.161	.097	.105	0.000	251.895	35.266	10.000
510.990	1460.000	617.587	.426	.132	0.000	292.141	-4.979	10.000
511.000	1080.000	617.092	0.000	.028	0.000	284.573	0.000	120.000
511.000	1080.000	617.189	.097	.028	0.000	249.951	34.622	120.000
511.000	1460.000	617.621	.432	.034	0.000	289.610	-5.038	120.000
511.100	1080.000	617.109	0.000	.017	0.000	278.862	0.000	80.000
511.100	1080.000	617.204	.095	.015	0.000	242.463	36.399	80.000
511.100	1460.000	617.643	.439	.022	0.000	284.014	-5.152	80.000
511.150	1080.000	617.409	0.000	.300	0.000	281.748	0.000	1.000
511.150	1080.000	617.509	.100	.305	0.000	246.038	35.710	1.000
511.150	1460.000	618.043	.534	.400	0.000	287.866	-6.118	1.000
511.500	1080.000	618.328	0.000	.919	0.000	271.832	0.000	800.000
511.500	1080.000	618.418	.090	.909	0.000	191.591	80.241	800.000
511.500	1460.000	618.923	.505	.880	0.000	286.142	-14.309	800.000
512.000	1080.000	620.778	0.000	2.451	0.000	268.608	0.000	800.000
512.000	1080.000	620.842	.064	2.424	0.000	190.571	78.037	800.000
512.000	1460.000	621.263	.421	2.340	0.000	285.027	-16.419	800.000
513.000	1080.000	624.083	0.000	3.304	0.000	274.305	0.000	2000.000
513.000	1080.000	624.135	.052	3.292	0.000	228.586	45.719	2000.000
513.000	1460.000	624.686	.552	3.423	0.000	287.606	-13.302	2000.000
513.500	1080.000	624.594	0.000	.511	0.000	240.936	0.000	320.000
513.500	1080.000	624.645	.052	.511	0.000	185.010	55.925	320.000
513.500	1460.000	625.191	.545	.504	0.000	259.168	-18.232	320.000
513.800	1080.000	627.999	0.000	3.405	0.000	174.916	0.000	600.000
513.800	1080.000	628.039	.040	3.394	0.000	132.588	42.327	600.000
513.800	1460.000	628.373	.334	3.182	0.000	191.308	-16.392	600.000
514.000	1080.000	633.272	0.000	5.273	0.000	132.841	0.000	790.000
514.000	1080.000	633.301	.029	5.262	0.000	103.988	28.854	790.000
514.000	1460.000	633.885	.584	5.512	0.000	143.211	-10.369	790.000
514.500	1080.000	637.047	0.000	3.775	0.000	83.906	0.000	750.000
514.500	1080.000	637.192	.145	3.891	0.000	54.749	29.157	750.000

514.500	1460.000	637.601	.409	3.716	0.000	97.431	-13.526	750.000
515.000	1080.000	640.934	0.000	3.887	0.000	76.404	0.000	610.000
515.000	1080.000	640.996	.062	3.804	0.000	44.973	31.431	610.000
515.000	1460.000	641.597	.601	3.996	0.000	88.503	-12.099	610.000
515.100	1080.000	641.724	0.000	.790	0.000	90.824	0.000	3.000
515.100	1080.000	641.722	-.002	.726	0.000	60.251	30.573	3.000
515.100	1460.000	642.202	.481	.606	0.000	99.561	-8.737	3.000
515.150	1080.000	642.505	0.000	.781	0.000	105.058	0.000	3.000
515.150	1080.000	642.758	.253	1.037	0.000	80.466	24.593	3.000
515.150	1460.000	643.038	.279	.835	0.000	114.792	-9.733	3.000
515.200	1080.000	642.685	0.000	.180	0.000	241.622	0.000	72.000
515.200	1080.000	642.949	.264	.191	0.000	197.575	44.046	72.000
515.200	1460.000	643.476	.527	.439	0.000	284.861	-43.239	72.000
515.250	1080.000	642.885	0.000	.200	0.000	94.294	0.000	1.000
515.250	1080.000	642.985	.100	.036	0.000	75.131	19.164	1.000
515.250	1460.000	643.676	.691	.200	0.000	97.161	-2.867	1.000
515.280	1080.000	642.886	0.000	.001	0.000	88.352	0.000	45.000
515.280	1080.000	642.987	.101	.001	0.000	57.936	30.416	45.000
515.280	1460.000	643.664	.678	-.012	0.000	102.567	-14.216	45.000
515.320	1080.000	644.710	0.000	1.824	0.000	220.297	0.000	14.000
515.320	1080.000	644.811	.101	1.824	0.000	101.428	118.869	14.000
515.320	1460.000	645.264	.454	1.600	0.000	253.795	-33.499	14.000
515.400	1080.000	644.642	0.000	-.068	0.000	130.228	0.000	4.000
515.400	1080.000	644.742	.100	-.069	0.000	93.468	36.760	4.000
515.400	1460.000	645.219	.477	-.046	0.000	245.741	-115.513	4.000
515.450	1080.000	644.628	0.000	-.014	0.000	122.540	0.000	.500
515.450	1080.000	644.727	.099	-.015	0.000	93.152	29.388	.500
515.450	1460.000	645.212	.485	-.006	0.000	245.689	-123.149	.500
515.470	1080.000	644.692	0.000	.064	0.000	155.214	0.000	.500
515.470	1080.000	644.790	.098	.064	0.000	93.903	61.311	.500
515.470	1460.000	645.251	.460	.038	0.000	245.910	-90.696	.500
515.500	1080.000	644.852	0.000	.160	0.000	109.731	0.000	61.000
515.500	1080.000	644.978	.126	.188	0.000	89.660	20.071	61.000
515.500	1460.000	645.364	.385	.113	0.000	182.005	-72.274	61.000
515.550	1080.000	644.831	0.000	-.021	0.000	111.153	0.000	1.000
515.550	1080.000	644.950	.119	-.028	0.000	96.513	14.640	1.000
515.550	1460.000	645.346	.396	-.017	0.000	179.558	-68.404	1.000
515.570	1080.000	644.907	0.000	.076	0.000	110.549	0.000	1.000
515.570	1080.000	645.042	.136	.092	0.000	88.841	21.708	1.000
515.570	1460.000	645.422	.380	.076	0.000	195.582	-85.033	1.000
515.850	1080.000	646.181	0.000	1.274	0.000	169.730	0.000	400.000
515.850	1080.000	646.246	.065	1.204	0.000	133.621	36.109	400.000
515.850	1460.000	646.847	.601	1.424	0.000	240.282	-70.552	400.000
515.900	1080.000	648.660	0.000	2.479	0.000	161.370	0.000	294.000
515.900	1080.000	648.725	.065	2.479	0.000	121.047	40.323	294.000
515.900	1460.000	648.950	.225	2.103	0.000	165.174	-3.805	294.000

515.980	1080.000	649.997	0.000	1.336	0.000	84.488	0.000	114.000
515.980	1080.000	650.049	.053	1.324	0.000	62.399	22.089	114.000
515.980	1460.000	650.435	.386	1.485	0.000	96.812	-12.324	114.000
516.020	1080.000	655.670	0.000	5.673	0.000	336.551	0.000	36.000
516.020	1080.000	655.723	.053	5.673	0.000	256.837	79.714	36.000
516.020	1460.000	656.002	.279	5.566	0.000	366.368	-29.816	36.000
516.100	1080.000	655.680	0.000	.010	0.000	331.960	0.000	50.000
516.100	1080.000	655.731	.052	.009	0.000	289.268	42.692	50.000
516.100	1460.000	656.018	.287	.017	0.000	334.898	-2.938	50.000
517.000	1080.000	655.816	0.000	.136	0.000	228.558	0.000	400.000
517.000	1080.000	655.863	.047	.131	0.000	116.800	111.758	400.000
517.000	1460.000	656.218	.355	.200	0.000	253.890	-25.332	400.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	123.769	0.000
2	4.000	.043	101.619	-22.150
3	0.000	0.000	132.219	8.450



1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: 100 yr.

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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       HUD-FIA   H-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       INDIAN   CREEK  100 YEAR FLOW  Q=1020 CFS - ENCROACHMENT OPTION

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       -1.        6.         0.         0.  0.000000       0.00       1.0         0.    579.440      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     15.000      0.000     -1.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    183.52  WSEL=    579.44  ENC Q1=    183.52  WSEL=    579.54  RATIO=  0.0000
 NAT Q1=    201.  RATIOS LOB,CH,ROB=   .0873   .5176   .3950  WSEL=    579.54
3280 CROSS SECTION      6.20 EXTENDED       .94 FEET

   SECND      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS     BANK ELEV
   0          OLOB       OCH        ORCB       ALOB       ACH        ARCB       VOL        TWA    LEFT/RIGHT
   TIME       VLOB       VCH        VRCB       XNL        XNCH       XNR        WTN        ELMIN       SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     ICC        ICONT      CORAR      TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      491.4      779.3  TYPE=      4  TARGET=          .086
     6.20       6.14    579.44       0.00    579.44    579.66       .22       0.00       0.00     578.50
   1020.         69.      573.       378.       67.       118.      233.         0.         0.      577.70
     0.00       1.04      4.85       1.62      .065      .045      .065      0.000     573.30     491.43
 .003264         0.         0.         0.         0         0         1       0.00     287.92     779.35

 2800 NAT Q1=    150.60  WSEL=    581.39  ENC Q1=    150.60  WSEL=    581.49  RATIO=   .0000
 NAT Q1=    160.  RATIOS LOB,CH,ROB=   .0163   .8949   .0889  WSEL=    581.49

3470 ENCROACHMENT STATIONS=      294.0      394.1  TYPE=      4  TARGET=          .057
     7.00       6.05    581.45       0.00    581.39    581.83       .38       2.12       .06     580.30
   1020.         0.       953.        67.        0.       186.       45.         4.         2.      580.40
     .03         .02      5.12       1.48      .065      .045      .065      .045     575.40     294.00
 .004598         550.      550.       550.         2         0         1       0.00     100.10     394.10

 2800 NAT Q1=    119.20  WSEL=    583.87  ENC Q1=    119.20  WSEL=    583.97  RATIO=  0.0000
 NAT Q1=    125.  RATIOS LOB,CH,ROB=   .3501   .6499  0.0000  WSEL=    583.97
3280 CROSS SECTION      7.10 EXTENDED      2.34 FEET


3470 ENCROACHMENT STATIONS=      653.5      724.0  TYPE=      4  TARGET=          .047

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      581.60 ELREA=      585.50

     7.10       6.54    583.94       0.00    583.87    584.47       .53       2.59       .05     581.60
   1020.        328.      692.         0.       95.       103.        0.         6.         3.      585.50
     .05         3.46      6.69       0.00      .065      .045      .065      .045     577.30     653.52
 .007392         450.      450.       450.         2         0         1       0.00      66.73     720.26


 2800 NAT Q1=     67.30  WSEL=    585.78  ENC Q1=     68.43  WSEL=    585.88  RATIO=  -.0169
 NAT Q1=     68.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    585.88
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY


3720 ASSUMED CRITICAL DEPTH

3280 CROSS SECTION      7.98 EXTENDED      3.98 FEET
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 700.0 708.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA= 587.50 ELREA= 587.50

** D/S FACE ANN ARBOR RAILROAD

7.99	8.28	585.78	585.78	585.78	589.79	4.01	1.86	0.00	577.50
1020.	0.	1020.	0.	0.	63.	0.	7.	3.	578.20
.06	0.00	16.08	0.00	.065	.045	.065	.045	577.50	700.00
.038748	130.	130.	130.	30	11	1	0.00	8.00	708.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	200.00	10.67	0.00	64.00	0.00	577.50	577.50

PRESS FLOW BECAUSE EGLWC OF 591.77 EXCEEDS 1.5 DEPTH
2800 NAT Q1= 92.19 WSEL= 589.82 ENC Q1= 93.14 WSEL= 589.92 RATIO= -.0103
NAT Q1= 93. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 589.92
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION 8.08 EXTENDED 8.12 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 669.0 677.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA= 596.10 ELREA= 596.10

8.08	12.32	589.82	0.00	589.82	591.70	1.88	.85	.32	578.70
1020.	0.	1020.	0.	0.	93.	0.	7.	3.	578.60
.06	0.00	11.00	0.00	.065	.045	.065	.045	577.50	669.00
.013953	39.	39.	39.	0	0	1	0.00	8.00	677.00

2800 NAT Q1= 1302.03 WSEL= 591.97 ENC Q1= 1303.03 WSEL= 592.07 RATIO= 0.0000
NAT Q1= 1322. RATIOS LOB,CH,ROB= .3619 .0981 .5401 WSEL= 592.07
3280 CROSS SECTION 8.10 EXTENDED 11.18 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 613.0 729.2 TYPE= 4 TARGET= .014
8.10 14.28 591.98 0.00 591.97 591.99 .01 .01 .28 578.90

```
    1020.      366.      102.      552.      538.       80.      699.        8.        4.     577.70
      .07       .58      1.27       .79      .080      .050      .080      .045    577.70    613.03
  .000063       50.       50.       50.         2         0         1      0.00    116.18    729.22


CCHV=     .150 CFHV=     .350
 2800 NAT Q1=    2810.66  WSEL=     592.01  ENC Q1=    2810.66  WSEL=     592.11  RATIO=  0.0000
 NAT Q1=    2875.  RATIOS LOB,CH,ROB=    .4597    .0960    .4443  WSEL=     592.11

3470 ENCROACHMENT STATIONS=      517.9      977.2  TYPE=      4  TARGET=          .022
     8.20      9.41    592.01      0.00    592.01    592.02       .00       .03       .00    584.20
    1020.      465.       99.      456.     1733.      218.     1688.       64.       10.    584.40
     1.04       .27       .45       .27      .080      .050      .080      .047    582.60    517.91
  .000013     1000.     1000.     1000.         2         0         1      0.00    459.24    977.15


 2800 NAT Q1=    1465.77  WSEL=     592.03  ENC Q1=    1465.77  WSEL=     592.13  RATIO=    .0000
 NAT Q1=    1510.  RATIOS LOB,CH,ROB=  0.0000    .3764    .6236  WSEL=     592.13

3470 ENCROACHMENT STATIONS=      210.0      627.8  TYPE=      4  TARGET=          .029
     8.30      7.64    592.04      0.00    592.03    592.05       .00       .03       .00    594.40
    1020.        0.      395.      625.        0.      671.     1459.      147.       22.    586.60
     1.75      0.00       .59       .43      .080      .050      .080      .048    584.40    231.59
  .000051     1250.     1250.     1250.         2         0         1      0.00    396.23    627.82


CCHV=     .300 CFHV=     .500
 2800 NAT Q1=    1423.80  WSEL=     592.04  ENC Q1=    1423.80  WSEL=     592.14  RATIO=    .0000
 NAT Q1=    1467.  RATIOS LOB,CH,ROB=  0.0000    .3759    .6241  WSEL=     592.14
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA      LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      210.0      627.6  TYPE=      4  TARGET=          .030

         **  D/S FACE LAVOY RD

     8.98      7.55    592.05      0.00    592.04    592.05       .00       .00       .00    594.50
    1020.        0.      395.      625.        0.      657.     1433.      151.       23.    586.70
     1.79      0.00       .60       .44      .080      .050      .080      .048    584.50    232.55
  .000054       70.       70.       70.         2         0         1      0.00    395.05    627.60


SPECIAL BRIDGE

SB  XK        XKCR      COEQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.40      2.60      0.00     23.50      0.00    110.45      0.00    584.50    584.50

 2800 NAT Q1=    1871.81  WSEL=     592.36  ENC Q1=    1871.81  WSEL=     592.46  RATIO=    .0000
 NAT Q1=    1920.  RATIOS LOB,CH,ROB=    .8885    .1115    .0000  WSEL=     592.46
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION       9.02 EXTENDED       5.07 FEET


3470 ENCROACHMENT STATIONS=      237.5      667.0  TYPE=      4  TARGET=          .025
     9.02      7.87    592.37      0.00    592.36    592.37       .00       .00       .00    585.90
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1020.	903.	117.	0.	2546.	195.	0.	155.	24.	587.30
1.85	.35	.60	.00	.080	.050	.080	.048	584.50	237.47
.000031	83.	83.	83.	0	0	4	0.00	429.53	667.00

2800 NAT Q1= 1970.49 WSEL= 592.37 ENC Q1= 1970.49 WSEL= 592.47 RATIO= .0000
NAT Q1= 2021. RATIOS LOB,CH,ROB= .8892 .1108 .0000 WSEL= 592.47
3280 CROSS SECTION 9.10 EXTENDED 5.27 FEET

3470 ENCROACHMENT STATIONS= 237.2 667.0 TYPE= 4 TARGET= .025

9.10	8.07	592.37	0.00	592.37	592.37	.00	.00	.00	585.70
1020.	904.	116.	0.	2628.	200.	0.	158.	24.	587.10
1.89	.34	.58	.00	.080	.050	.060	.048	584.30	237.23
.000028	50.	50.	50.	2	0	1	0.00	429.77	667.00

CCHV= .150 CEHV= .350
2800 NAT Q1= 635.89 WSEL= 592.37 ENC Q1= 635.89 WSEL= 592.47 RATIO= .0000
NAT Q1= 657. RATIOS LOB,CH,ROB= .3539 .3198 .3263 WSEL= 592.47
3280 CROSS SECTION 9.20 EXTENDED 4.27 FEET

3470 ENCROACHMENT STATIONS= 412.9 578.3 TYPE= 4 TARGET= .032

9.20	8.07	592.37	0.00	592.37	592.40	.03	.02	.01	587.60
1020.	358.	338.	324.	334.	175.	320.	171.	26.	587.80
1.95	1.07	1.93	1.01	.065	.045	.065	.048	584.30	412.88
.000270	300.	300.	300.	0	0	1	0.00	165.38	578.26

CCHV= .300 CEHV= .500
2800 NAT Q1= 462.17 WSEL= 592.40 ENC Q1= 462.17 WSEL= 592.50 RATIO= 0.0000
NAT Q1= 475. RATIOS LOB,CH,ROB= .2618 .4755 .2627 WSEL= 592.50
3280 CROSS SECTION 9.21 EXTENDED 5.10 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 446.0 542.1 TYPE= 4 TARGET= .027

** D/S FACE DRIVEWAY

9.21	8.40	592.40	0.00	592.40	592.48	.07	.05	.02	587.30
1020.	276.	490.	254.	184.	183.	175.	173.	27.	587.50
1.97	1.50	2.68	1.45	.065	.045	.065	.048	584.00	445.95
.000490	145.	145.	145.	2	0	1	0.00	96.10	542.05

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.40	2.60	100.00	27.30	1.30	114.40	0.00	584.00	584.00

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 2800 NAT Q1=    478.00  WSEL=    592.52  ENC Q1=    478.00  WSEL=    592.62  RATIO=  0.0000
 NAT Q1=    491.  RATIOS LOB,CH,ROB=   .2629   .4723   .2648  WSEL=    592.62
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      9.22 EXTENDED      5.23 FEET


3470 ENCROACHMENT STATIONS=     445.9     542.1  TYPE=     4  TARGET=       .026
     9.22      9.53   592.53      0.00   592.52   592.60      .07      .00      .00   587.30
   1020.       278.     486.      256.     189.     186.     180.     173.      27.    587.50
     1.97      1.47     2.61      1.43     .065     .045     .065     .048   584.00   445.91
  .000457       10.      10.       10.        0        0        7     0.00    96.19   542.10


 2800 NAT Q1=    292.46  WSEL=    592.46  ENC Q1=    299.46  WSEL=    592.56  RATIO=  -.0239
 NAT Q1=    299.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    592.56

3470 ENCROACHMENT STATIONS=     253.0     294.0  TYPE=     4  TARGET=       0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      593.00 ELREA=      593.00

     9.30      8.17   592.47      0.00   592.46   592.69      .22      .02      .08   587.00
   1020.         0.    1020.        0.       0.     272.        0.     174.      27.    589.40
     1.97      0.00     3.76      0.00     .065     .045     .065     .048   584.30   253.00
  .001266       25.      25.       25.        2        0        1     0.00    41.00   294.00


CCHV=    .150 CSHV=    .350
 2800 NAT Q1=    226.98  WSEL=    592.42  ENC Q1=    231.46  WSEL=    592.52  RATIO=  -.0197
 NAT Q1=    231.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    592.52

3470 ENCROACHMENT STATIONS=     257.0     281.0  TYPE=     4  TARGET=       0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      593.00 ELREA=      593.00


        **  D/S FACE TELEGRAPH RD

     9.39      8.45   592.45      0.00   592.42   592.90      .45      .13      .08   584.90
   1020.         0.    1020.        0.       0.     189.        0.     174.      27.    585.40
     1.97      0.00     5.41      0.00     .065     .045     .065     .048   584.00   257.00
  .002479       75.      75.       75.        2        0        1     0.00    24.00   281.00


SPECIAL BRIDGE

SB  XK          XKOR       COEO       ROLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     1.25       1.40       2.60     250.00      24.00       1.80      97.68      0.00     584.00     584.00

 PRESS FLOW BECAUSE EGLWC OF    594.98  EXCEEDS 1.5 DEPTH
 2800 NAT Q1=    217.56  WSEL=    594.34  ENC Q1=    221.80  WSEL=    594.44  RATIO=  -.0195
 NAT Q1=    222.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    594.44
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   SECNO      DEPTH      QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA    LEFT/RIGHT
   Q          VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN        SSTA
   TIME       XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID       ENDST
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3470 ENCROACHMENT STATIONS=      224.0      248.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      595.10 ELREA=      595.10

     9.42      10.37     594.37       0.00     594.34     594.81       .45       .27       .00     588.50
   1020.          0.    1020.          0.         0.       190.         0.       175.       27.      588.20
     1.98       0.00       5.37       0.00       .065       .045       .065       .048    584.00    224.00
  .002561       106.       106.       106.          0          0          1       0.00     24.00     248.00


 2800 NAT Q1=     566.21  WSEL=     594.92  ENC Q1=     566.21  WSEL=     594.92  RATIO=     .0000
 NAT Q1=     580.  RATIOS LOB,CH,ROB=    .3018    .3642    .3340  WSEL=     594.92
3280 CROSS SECTION       9.50 EXTENDED       5.45 FEET


3470 ENCROACHMENT STATIONS=      192.6      284.5  TYPE=      4  TARGET=         .023
     9.50      11.94     594.84       0.00     594.82     594.90       .06       .03       .06     586.60
   1020.       303.       382.       335.       212.       152.       217.       175.       27.      587.70
     1.99       1.43       2.51       1.55       .060       .045       .060       .048    583.50    192.59
  .000335        40.        40.        40.          2          0          1       0.00     91.90     284.49


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     921.74  WSEL=     595.13  ENC Q1=     921.74  WSEL=     595.23  RATIO=     .0000
 NAT Q1=     956.  RATIOS LOB,CH,ROB=    .5995    .1916    .2089  WSEL=     595.23

3470 ENCROACHMENT STATIONS=     1123.0     1404.3  TYPE=      4  TARGET=         .035
     9.61       7.75     595.15       0.00     595.13     595.16       .01       .25       .01     591.00
   1020.       613.       199.       209.       836.       165.       279.       203.       33.      590.00
     2.44        .73       1.20        .75       .060       .045       .060       .047    587.40   1123.00
  .000122       1340.      1340.      1340.          3          0          1       0.00    281.32   1404.32


 2800 NAT Q1=     611.25  WSEL=     595.18  ENC Q1=     611.25  WSEL=     595.28  RATIO=     .0000
 NAT Q1=     642.  RATIOS LOB,CH,ROB=    .4825    .1333    .3842  WSEL=     595.28

3470 ENCROACHMENT STATIONS=       73.9      387.3  TYPE=      4  TARGET=         .048
     9.62       7.71     595.21       0.00     595.18     595.22       .02       .06       .00     591.00
   1020.       438.       137.       395.       538.        85.       426.       212.       35.      590.20
     2.52        .91       1.61        .93       .060       .045       .060       .047    587.50    73.75
  .000266       320.       320.       320.          2          0          1       0.00    313.53    387.28


CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     618.92  WSEL=     595.21  ENC Q1=     618.92  WSEL=     595.31  RATIO=    C.0000
 NAT Q1=     650.  RATIOS LOB,CH,ROB=    .4830    .1326    .3844  WSEL=     595.31
   SECNO      DEPTH      QWSEL      QRIWS      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      YLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3470 ENCROACHMENT STATIONS=       73.3      387.5  TYPE=      4  TARGET=         .048

        **  D/S FACE DRIVE #1

     9.68       7.73     595.23       0.00     595.21     595.25       .02       .02       .00     591.00
   1020.       489.       136.       395.       542.        85.       430.       214.       36.      590.20
     2.55        .90       1.59        .92       .060       .045       .060       .047    587.50    73.33
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.000260	90.	90.	90.	2	0	1	0.00	314.15	387.48

SPECIAL BRIDGE

SR	XK	XKOR	CCEO	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	310.00	.50	0.00	9.90	2.00	587.50	587.50

2800 NAT Q1= 640.10 WSEL= 595.27 ENC Q1= 640.10 WSEL= 595.37 RATIO= .0000
NAT Q1= 669. RATIOS LOB,CH,ROB= .4839 .1311 .3850 WSEL= 595.37
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS= 70.6 389.1 TYPE= 4 TARGET= .043

9.72	7.79	595.29	0.00	595.27	595.31	.02	.01	.00	591.00
1020.	490.	135.	395.	556.	86.	439.	215.	36.	590.20
2.55	.88	1.56	.90	.060	.045	.060	.047	587.50	70.64
.000246	20.	20.	20.	0	0	9	0.00	318.47	389.10

2800 NAT Q1= 610.06 WSEL= 595.28 ENC Q1= 610.06 WSEL= 595.38 RATIO= 0.0000
NAT Q1= 641. RATIOS LOB,CH,ROB= .4825 .1334 .3841 WSEL= 595.38

3470 ENCROACHMENT STATIONS= 73.8 387.2 TYPE= 4 TARGET= .048

9.75	7.70	595.30	0.00	595.28	595.32	.02	.01	.00	591.10
1020.	498.	137.	395.	537.	85.	426.	216.	36.	590.30
2.57	.91	1.61	.93	.060	.045	.060	.047	587.60	73.82
.000268	40.	40.	40.	2	0	1	0.00	313.43	387.25

CCHV= .150 CEHV= .350
2800 NAT Q1= 281.93 WSEL= 595.56 ENC Q1= 281.93 WSEL= 595.66 RATIO= .0000
NAT Q1= 297. RATIOS LOB,CH,ROB= .5473 .3437 .1090 WSEL= 595.66

3470 ENCROACHMENT STATIONS= 1104.9 1276.6 TYPE= 4 TARGET= .051

9.84	6.57	595.57	0.00	595.56	595.65	.07	.31	.02	592.00
1020.	555.	370.	95.	362.	127.	66.	227.	39.	592.00
2.65	1.53	2.92	1.43	.075	.055	.075	.048	589.00	1104.93
.001391	600.	600.	600.	2	0	1	0.00	171.66	1276.59

2800 NAT Q1= 401.43 WSEL= 595.78 ENC Q1= 401.43 WSEL= 595.88 RATIO= .0000
NAT Q1= 425. RATIOS LOB,CH,ROB= .4598 .2649 .2754 WSEL= 595.88

3470 ENCROACHMENT STATIONS= 109.5 415.7 TYPE= 4 TARGET= .057

9.85	6.81	595.81	0.00	595.78	595.84	.03	.19	.01	591.00
1020.	467.	288.	265.	424.	150.	293.	230.	40.	593.00
2.69	1.10	1.92	.90	.075	.055	.075	.048	589.00	109.54
.000689	200.	200.	200.	2	0	1	0.00	306.15	415.69

2800 NAT Q1= 416.75 WSEL= 595.85 ENC Q1= 416.75 WSEL= 595.95 RATIO= 0.0000
NAT Q1= 441. RATIOS LOB,CH,ROB= .4599 .2614 .2787 WSEL= 595.95

SECNO	DEPTH	QLSEL	QRIVS	WSELK	EG	FV	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= 108.7 418.0 TYPE= 4 TARGET= .055

** C/S FACE DRIVE #2

9.89	6.88	595.88	0.00	595.85	595.91	.03	.07	.00	591.00
1020.	467.	294.	270.	435.	153.	305.	232.	41.	593.00
2.71	1.07	1.86	.88	.075	.055	.075	.048	589.00	108.67
.000634	100.	100.	100.	2	0	1	0.00	309.33	417.99

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB XK	XKCR	COEQ	BOLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.40	2.60	375.00	.50	0.00	26.25	2.00	589.00	589.00

2800 NAT Q1= 431.48 WSEL= 595.91 ENC Q1= 431.48 WSEL= 596.01 RATIO= .0000
NAT Q1= 456. RATIOS LOB,CH,ROB= .4600 .2582 .2818 WSEL= 596.01
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS= 107.9 419.8 TYPE= 4 TARGET= .054

9.92	6.94	595.94	0.00	595.91	595.97	.02	.01	.00	591.00
1020.	466.	280.	274.	446.	155.	317.	232.	41.	593.00
2.72	1.05	1.81	.87	.075	.055	.075	.048	589.00	107.94
.000590	20.	20.	20.	0	0	7	0.00	311.86	419.80

2800 NAT Q1= 328.92 WSEL= 595.96 ENC Q1= 328.92 WSEL= 596.06 RATIO= .0000
NAT Q1= 351. RATIOS LOB,CH,ROB= .4591 .2848 .2561 WSEL= 596.06

3470 ENCROACHMENT STATIONS= 113.8 407.6 TYPE= 4 TARGET= .062

9.93	6.50	596.00	0.00	595.96	596.03	.04	.06	.01	591.50
1020.	468.	311.	242.	371.	140.	240.	234.	42.	593.50
2.73	1.26	2.22	1.01	.075	.055	.075	.048	589.50	113.82
.001015	80.	80.	80.	2	0	1	0.00	293.80	407.62

CCHV= .150 CEHV= .350
2800 NAT Q1= 218.69 WSEL= 596.28 ENC Q1= 218.69 WSEL= 596.38 RATIO= 0.0000
NAT Q1= 233. RATIOS LOB,CH,ROB= .3427 .2108 .4465 WSEL= 596.38

3470 ENCROACHMENT STATIONS= 1141.1 1343.8 TYPE= 4 TARGET= .060

9.94	5.23	596.33	0.00	596.28	596.41	.08	.36	.02	593.00
1020.	332.	228.	460.	231.	67.	209.	238.	43.	592.00
2.76	1.44	3.42	2.20	.075	.055	.075	.048	591.10	1141.07
.002237	250.	250.	250.	3	0	1	0.00	202.77	1343.84

2800 NAT Q1= 352.31 WSEL= 596.65 ENC Q1= 352.31 WSEL= 596.75 RATIO= .0000
NAT Q1= 371. RATIOS LOB,CH,ROB= .3150 .1017 .5834 WSEL= 596.75

3470 ENCROACHMENT STATIONS= 60.6 292.8 TYPE= 4 TARGET= .051

9.95	5.02	596.72	0.00	596.65	596.75	.03	.33	.01	593.00
1020.	314.	109.	597.	262.	52.	451.	241.	45.	593.00
2.82	1.20	2.08	1.32	.075	.055	.075	.048	591.70	60.60
.000854	250.	250.	250.	2	0	1	0.00	232.16	292.76

CCHV= .300 CEHV= .500
2800 NAT Q1= 366.46 WSEL= 596.73 ENC Q1= 366.46 WSEL= 596.83 RATIO= .0000
NAT Q1= 386. RATIOS LOB,CH,ROB= .3166 .1007 .5827 WSEL= 596.83

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

3470 ENCROACHMENT STATIONS= 59.9 293.2 TYPE= 4 TARGET= .050

** D/S FACE DRIVE #3

9.95	5.09	596.79	0.00	596.73	596.82	.03	.07	.00	593.00
1020.	316.	108.	596.	270.	53.	462.	243.	45.	593.00
2.83	1.17	2.02	1.29	.075	.055	.075	.048	591.70	59.89
.000783	90.	90.	90.	2	0	1	0.00	233.26	293.16

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	265.00	.50	0.00	2.50	2.00	591.70	591.70

2800 NAT Q1= 382.22 WSEL= 596.81 ENC Q1= 382.22 WSEL= 596.91 RATIO= .0000
NAT Q1= 402. RATIOS LOB,CH,ROB= .3184 .0996 .5820 WSEL= 596.91
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS= 59.3 293.5 TYPE= 4 TARGET= .048

9.97	5.18	596.88	0.00	596.81	596.90	.03	.02	.00	593.00
1020.	318.	106.	595.	279.	54.	474.	243.	45.	593.00
2.84	1.14	1.96	1.26	.075	.055	.075	.048	591.70	59.32
.000725	20.	20.	20.	2	0	9	0.00	234.18	293.50

2800 NAT Q1= 394.50 WSEL= 596.87 ENC Q1= 394.50 WSEL= 596.97 RATIO= 0.0000
NAT Q1= 414. RATIOS LOB,CH,ROB= .3197 .0989 .5814 WSEL= 596.97

3470 ENCROACHMENT STATIONS= 58.9 293.8 TYPE= 4 TARGET= .048

9.99	5.24	596.94	0.00	596.87	596.97	.03	.06	.00	593.00
1020.	320.	106.	595.	286.	55.	483.	245.	46.	593.00
2.86	1.12	1.92	1.23	.075	.055	.075	.049	591.70	58.90
.000689	90.	90.	90.	2	0	1	0.00	234.86	293.76

CCHV= .150 CEHV= .350
2800 NAT Q1= 191.98 WSEL= 597.29 ENC Q1= 191.98 WSEL= 597.39 RATIO= .0000
NAT Q1= 208. RATIOS LOB,CH,ROB= .7390 .1143 .1467 WSEL= 597.39

3470 ENCROACHMENT STATIONS= 148.3 346.5 TYPE= 4 TARGET= .078

9.99	4.76	597.36	0.00	597.29	597.40	.04	.43	.01	594.40
695.	527.	85.	83.	362.	34.	64.	252.	48.	594.70
2.95	1.46	2.51	1.30	.065	.050	.065	.049	592.60	148.28
.001313	500.	500.	500.	2	0	1	0.00	198.18	346.46

2800 NAT Q1= 177.94 WSEL= 598.00 ENC Q1= 177.94 WSEL= 598.10 RATIO= .0000
NAT Q1= 193. RATIOS LOB,CH,ROB= .7407 .1187 .1406 WSEL= 598.10

3470 ENCROACHMENT STATIONS= 148.9 344.9 TYPE= 4 TARGET= .078

10.00	4.67	598.07	0.00	598.00	598.11	.04	.70	.00	595.20
695.	527.	88.	80.	346.	33.	59.	257.	50.	595.50

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    3.03      1.52      2.65      1.37      .065      .050      .065      .049    593.40    148.95
 .001515      500.      500.      500.         2         0         1      0.00    195.94    344.89

 2800 NAT QI=     200.77  WSEL=     598.95  ENC QI=     200.77  WSEL=     599.05  RATIO=    .0000
 NAT QI=     217.  RATIOS LOB,CH,ROB=    .7390    .1120    .1500  WSEL=     599.05
   SECNO     DEPTH     CLSEL     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    ICC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      147.3      347.8  TYPE=      4  TARGET=         .074
    10.01      4.82    599.02      0.00    598.95    599.06       .04       .94       .00    596.00
      695.      527.       83.       85.      372.       34.       67.      265.       54.     596.30
     3.16      1.42      2.43      1.26      .065      .050      .065      .049    594.20    147.34
 .001208      700.      700.      700.         2         0         1      0.00    200.49    347.83

 2800 NAT QI=     136.51  WSEL=     600.09  ENC QI=     136.51  WSEL=     600.19  RATIO=    .0000
 NAT QI=     146.  RATIOS LOB,CH,ROB=    .3574    .3176    .3250  WSEL=     600.19

3470 ENCROACHMENT STATIONS=      184.3      312.5  TYPE=      4  TARGET=         .066
    10.04      5.04    600.14      0.00    600.09    600.25       .10      1.17       .02    597.80
      695.      250.      225.      220.      127.       64.      118.      271.       56.     597.50
     3.24      1.97      3.54      1.87      .065      .050      .065      .049    595.10    184.30
 .002453      700.      700.      700.         2         0         1      0.00    128.18    312.49

 2800 NAT QI=     186.07  WSEL=     601.47  ENC QI=     186.07  WSEL=     601.57  RATIO=    .0000
 NAT QI=     197.  RATIOS LOB,CH,ROB=    .3677    .2840    .3482  WSEL=     601.57

3470 ENCROACHMENT STATIONS=      177.1      326.3  TYPE=      4  TARGET=         .057
    10.05      5.48    601.48      0.00    601.47    601.54       .06      1.29       .01    598.70
      695.      256.      200.      239.      160.       71.      159.      277.       58.     598.40
     3.34      1.40      2.83      1.50      .065      .050      .065      .049    596.00    177.10
 .001364      720.      720.      720.         2         0         1      0.00    149.22    326.32

 2800 NAT QI=      53.07  WSEL=     602.98  ENC QI=      53.07  WSEL=     603.08  RATIO=    .0000
 NAT QI=      59.  RATIOS LOB,CH,ROB=    .3047    .4597    .2356  WSEL=     603.08
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

   SECNO     DEPTH     CLSEL     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    ICC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      201.4      292.6  TYPE=      4  TARGET=         .098
    10.10      3.90    603.00    603.00    602.98    603.60       .60       .27      0.00    601.80
      695.      188.      358.      150.       50.       45.       43.      277.       59.     601.50
     3.35      3.76      7.87      3.50      .065      .050      .065      .049    599.10    201.41
 .019094       80.       80.       80.         30        14         1      0.00     91.17    292.58
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CCHV=     .400 CEHV=     .300
 2800 NAT Q1=     368.02  WSEL=     603.79  ENC Q1=     368.02  WSEL=     603.89  RATIO=  0.0000
 NAT Q1=     383.  RATIOS LOB,CH,ROB=    .3992    .2305    .3703  WSEL=     603.89
3280 CROSS SECTION      10.18 EXTENDED       2.74 FEET


3301 HV CHANGED MORE THAN HVINS

   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

.

3470 ENCROACHMENT STATIONS=      174.9      315.4  TYPE=      4  TARGET=         .039

         **  D/S FACE PRIVATE DRIVEWAY

    10.19      7.74    603.94      0.00    603.79    603.97       .02       .14       .23    599.60
      695.      281.      162.      252.      264.       96.      239.      278.       59.     599.30
     3.33      1.06      1.70      1.05      .065      .050      .065      .049    596.90    174.90
 .000329       140.      140.      140.         4         0         1      0.00    140.53    315.42


SPECIAL BRIDGE

SB   XK         XKOR       COEQ       ROLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.60       2.60     150.00       4.07       0.00      19.15       0.00     596.90     596.90

 2800 NAT Q1=     504.01  WSEL=     605.71  ENC Q1=     504.01  WSEL=     605.81  RATIO=  0.0000
 NAT Q1=     519.  RATIOS LOB,CH,ROB=    .7142    .2258    .0600  WSEL=     605.81
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      10.22 EXTENDED        .07 FEET


3470 ENCROACHMENT STATIONS=      332.1      480.5  TYPE=      4  TARGET=         .030
    10.22      8.57    605.87      0.00    605.71    605.89       .02       .00       .00    599.20
      695.      494.      155.       45.      575.      104.       59.      279.       59.     598.90
     3.39       .86      1.49       .76      .065      .050      .065      .049    596.90    332.09
 .000171        17.       17.       17.         0         0         6      0.00    148.45    480.54


 2800 NAT Q1=     325.21  WSEL=     605.72  ENC Q1=     325.21  WSEL=     605.82  RATIO=   .0000
 NAT Q1=     339.  RATIOS LOB,CH,ROB=    .6799    .2645    .0555  WSEL=     605.82

3470 ENCROACHMENT STATIONS=      347.0      476.6  TYPE=      4  TARGET=         .039
    10.30      7.78    605.88      0.00    605.72    605.91       .03       .01       .01    600.40
      695.      468.      185.       42.      405.       89.       38.      279.       59.     600.10
     3.39      1.15      2.09      1.11      .065      .050      .065      .049    598.10    346.97
 .000417        42.       42.       42.         2         0         1      0.00    129.66    476.63


 2800 NAT Q1=     281.15  WSEL=     605.78  ENC Q1=     281.15  WSEL=     605.88  RATIO=   .0000
 NAT Q1=     294.  RATIOS LOB,CH,ROB=    .6661    .2797    .0543  WSEL=     605.88

3470 ENCROACHMENT STATIONS=      348.4      475.5  TYPE=      4  TARGET=         .042
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    10.35      7.43    605.93      0.00    605.78    605.97       .04       .05       .01    600.80
     695.      458.      196.       41.      364.      84.       32.      281.       60.     600.50
     3.41      1.26      2.33      1.25      .065      .050      .065      .049    598.50    348.40
  .000556       110.      110.      110.         2         0         1      0.00    127.14    475.53


 2800 NAT QI=     132.22  WSEL=     605.85  ENC QI=     132.22  WSEL=     605.95  RATIO=    .0000
 NAT Q1=     139.  RATIOS LOB,CH,RCB=    .5649    .4351   0.0000  WSEL=     605.95

3470 ENCROACHMENT STATIONS=       71.6      170.0  TYPE=       4  TARGET=         .052

         **  D/S FACE LEWIS RD

    10.38      6.99    605.99      0.00    605.85    606.12       .13       .08       .07    602.80
     695.      393.      312.       0.      180.      87.       0.      281.       60.     606.80
     3.42      2.13      3.59      0.00      .065      .050      .065      .049    599.00     71.61
  .002591        80.       80.       80.         2         0         1      0.00     94.36    165.98


SPECIAL BRIDGE

SB  XK          XKOR       COEO       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     1.05       1.60       2.60     125.00      18.00       2.00      83.08       0.00     599.00     599.00

 2800 NAT QI=     229.75  WSEL=     607.26  ENC QI=     229.75  WSEL=     607.36  RATIO=    .0000
 NAT Q1=     241.  RATIOS LOB,CH,RCB=    .6508    .3492    .0000  WSEL=     607.36
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      10.42 EXTENDED        .30 FEET
    SECNO      DEPTH      CHSEL      CRIWS      WSELK      EG         HV         HL         OLOSS    BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        ARCB       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=       63.0      170.0  TYPE=       4  TARGET=         .046
    10.42      8.10    607.40      0.00    607.26    607.46       .05       .16       .03    603.10
     695.      442.      253.       0.      284.      113.       0.      282.       60.     607.10
     3.44      1.56      2.23       .01       .065      .050      .065      .049    599.30     62.96
  .000873       112.      112.      112.         0         0         0      0.00    107.04    170.00


 2800 NAT QI=     173.25  WSEL=     607.32  ENC QI=     173.25  WSEL=     607.42  RATIO=    .0000
 NAT Q1=     181.  RATIOS LOB,CH,RCB=    .6159    .3841    .0000  WSEL=     607.42
3280 CROSS SECTION      10.45 EXTENDED        .06 FEET


3470 ENCROACHMENT STATIONS=       64.3      170.0  TYPE=       4  TARGET=         .045
    10.45      7.86    607.46      0.00    607.32    607.52       .07       .06       .01    603.40
     695.      418.      277.       0.      261.      107.       0.      283.       60.     607.40
     3.44      1.60      2.59       .01       .080      .055      .080      .049    599.60     64.25
  .001532        50.       50.       50.         2         0         1      0.00    105.75    170.00


CCHV=     .150  CEHV=     .350
 2800 NAT QI=     324.13  WSEL=     607.95  ENC QI=     324.13  WSEL=     608.05  RATIO=    .0000
 NAT QI=     337.  RATIOS LOB,CH,RCB=    .3803    .2789    .3407  WSEL=     608.05
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3470 ENCROACHMENT STATIONS=      274.6      417.5  TYPE=      4  TARGET=          .038
    11.00      6.97    608.07      0.00    607.95    608.09       .03       .56       .01    603.40
     695.      261.      199.      236.      255.      111.      244.      291.       62.    603.40
     3.61      1.02      1.79       .97      .080      .055      .080      .049    601.10    274.61
  .000442      750.      750.      750.         3         0         1      0.00    142.85    417.46

 2800 NAT Q1=     230.57  WSEL=     608.66  ENC Q1=     230.57  WSEL=     608.76  RATIO=    .0000
 NAT Q1=     242.  RATIOS LOB,CH,ROB=    .3741    .3053    .3206  WSEL=     608.76

3470 ENCROACHMENT STATIONS=      275.6      413.8  TYPE=      4  TARGET=          .046
    11.50      6.15    608.75      0.00    608.66    608.79       .04       .70       .01    604.90
     695.      256.      218.      221.      203.       96.      186.      305.       66.    604.90
     3.82      1.26      2.28      1.19      .080      .055      .080      .050    602.60    275.62
  .000881     1150.     1150.     1150.         3         0         1      0.00    138.22    413.83

 2800 NAT Q1=     208.61  WSEL=     609.46  ENC Q1=     208.61  WSEL=     609.56  RATIO=  0.0000
 NAT Q1=     219.  RATIOS LOB,CH,ROB=    .3719    .3141    .3141  WSEL=     609.56

3470 ENCROACHMENT STATIONS=      276.0      412.1  TYPE=      4  TARGET=          .049
    11.90      5.93    609.53      0.00    609.46    609.58       .05       .78       .00    605.90
     695.      254.      226.      216.      189.       91.      170.      314.       69.    605.90
     3.95      1.34      2.47      1.27      .080      .055      .080      .050    603.60    276.02
  .001094      800.      800.      800.         2         0         1      0.00    136.07    412.10

CCHV=     .400 CFHV=     .800
 2800 NAT Q1=     117.41  WSEL=     609.68  ENC Q1=     117.41  WSEL=     609.78  RATIO=    .0000
 NAT Q1=     124.  RATIOS LOB,CH,ROB=    .2220    .4298    .3482  WSEL=     609.78
3280 CROSS SECTION      11.98 EXTENDED       2.64 FEET

   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    ICC       ICCNT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=      310.6      405.7  TYPE=      4  TARGET=          .057

         **  D/S FACE STERNS RD

    11.98      5.24    609.74      0.00    609.68    609.89       .14       .23       .08    606.80
     695.      149.      309.      237.       69.       78.      122.      315.       69.    606.80
     3.96      2.17      3.95      1.94      .080      .055      .080      .050    604.50    310.58
  .003433      130.      130.      130.         2         0         1      0.00     95.17    405.74


SPECIAL BRIDGE

SP  XK        XKOR      COEQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.30      2.60    100.00     10.15      0.00     45.67      0.00    604.50    604.50

 2800 NAT Q1=     150.20  WSEL=     612.70  ENC Q1=     150.20  WSEL=     612.80  RATIO=    .0000
 NAT Q1=     156.  RATIOS LOB,CH,ROB=    .0982    .6294    .2724  WSEL=     612.80
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      12.02 EXTENDED       1.57 FEET
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3470 ENCROACHMENT STATIONS=      99.0      154.0  TYPE=      4  TARGET=          .035
    12.02      8.27   612.77      0.00   612.70   612.97       .20       .10       .05   608.70
    695.       61.      452.      182.      35.      106.      92.      315.       69.    606.50
     3.97      1.74      4.27      1.99      .080      .055      .080      .050   604.50    99.03
  .002160      36.       36.       36.         0         0         4      0.00    54.97   153.99

 2800 NAT Q1=     100.92  WSEL=     613.06  ENC Q1=     100.92  WSEL=     613.16  RATIO=    .0000
 NAT Q1=     105.  RATIOS LOB,CH,ROB=    .0618    .7138    .2244  WSEL=     613.16

3470 ENCROACHMENT STATIONS=      102.3      144.7  TYPE=      4  TARGET=          .042
    12.10      7.23   613.13      0.00   613.06   613.51       .39       .40       .15   610.10
    695.       40.      509.      146.      19.      90.       56.      316.       69.    607.90
     3.97      2.11      5.63      2.60      .080      .055      .080      .050   605.90   102.34
  .004660     130.      130.      130.         2         0         1      0.00    42.37   144.70

 2800 NAT Q1=     109.08  WSEL=     613.44  ENC Q1=     109.08  WSEL=     613.54  RATIO=  0.0000
 NAT Q1=     114.  RATIOS LOB,CH,ROB=    .0676    .6932    .2392  WSEL=     613.54

3470 ENCROACHMENT STATIONS=      101.8      162.6  TYPE=      4  TARGET=          .042

        **  D/S FACE SENECA RD

    12.18      7.41   613.51      0.00   613.44   613.84       .32       .30       .02   610.30
    695.       43.      490.      161.      21.      93.       74.      316.       69.    608.10
     3.98      2.02      5.27      2.18      .080      .055      .080      .050   606.10   101.79
  .003907      70.       70.       70.         2         0         1      0.00    60.79   162.58
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SPECIAL BRIDGE

SR   XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.33        2.60      120.00        7.93        0.00       26.97        0.00     606.10      606.10

 2800 NAT Q1=     358.14  WSEL=     613.92  ENC Q1=     358.14  WSEL=     614.02  RATIO=    .0000
 NAT Q1=     373.  RATIOS LOB,CH,ROB=    .1578    .2078    .6344  WSEL=     614.02
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      12.22 EXTENDED       3.30 FEET

    SECNO       DEPTH       CHSEL       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=       41.8      225.5  TYPE=      4  TARGET=          .040
    12.22      7.90   614.00      0.00   613.92   614.02       .02       .03       .12   607.60
    695.       99.      151.      445.      125.      76.      505.      317.       69.    606.50
     3.99      .80       1.98      .88       .080      .055      .080      .050   606.10    41.83
  .000381      34.       34.       34.         0         0         5      0.00   183.63   225.46

 2800 NAT Q1=     240.17  WSEL=     613.96  ENC Q1=     240.17  WSEL=     614.06  RATIO=  0.0000
 NAT Q1=     253.  RATIOS LOB,CH,ROB=    .1361    .2515    .6124  WSEL=     614.06
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3280 CROSS SECTION 12.30 EXTENDED 2.44 FEET

3470 ENCROACHMENT STATIONS= 49.3 224.1 TYPE= 4 TARGET= .050

12.30	7.04	614.04	0.00	613.96	614.08	.04	.04	.02	608.50
695.	81.	184.	430.	78.	68.	387.	318.	70.	607.40
4.00	1.03	2.72	1.11	.080	.055	.080	.050	607.00	49.27
.000847	80.	80.	80.	2	0	1	0.00	174.86	224.13

CCHV= .150 CEHV= .350
2800 NAT Q1= 134.52 WSEL= 615.38 ENC Q1= 134.52 WSEL= 615.48 RATIO= .0000
NAT Q1= 144. RATIOS LOB,CH,ROB= .2763 .5820 .1417 WSEL= 615.48
3280 CROSS SECTION 12.40 EXTENDED .14 FEET

3470 ENCROACHMENT STATIONS= 13.6 189.9 TYPE= 4 TARGET= .064

12.40	7.54	615.44	0.00	615.38	615.56	.12	1.45	.03	612.80
695.	197.	412.	86.	160.	117.	70.	328.	74.	613.40
4.12	1.23	3.52	1.22	.080	.055	.080	.051	607.90	13.58
.002501	1070.	1070.	1070.	2	0	1	0.00	176.28	189.86

CCHV= .400 CEHV= .800
2800 NAT Q1= 229.74 WSEL= 615.70 ENC Q1= 229.74 WSEL= 615.80 RATIO= .0000
NAT Q1= 242. RATIOS LOB,CH,ROB= .3477 .4510 .2014 WSEL= 615.80
3280 CROSS SECTION 12.48 EXTENDED .95 FEET

3470 ENCROACHMENT STATIONS= 8.6 213.4 TYPE= 4 TARGET= .051

** D/S FACE BRIDGEWAY RD

12.48	8.34	615.74	0.00	615.70	615.79	.05	.20	.03	612.30
695.	242.	322.	131.	250.	137.	144.	330.	75.	612.90
4.14	.97	2.34	.91	.080	.055	.080	.051	607.40	8.62
.000899	140.	140.	140.	2	0	1	0.00	204.74	213.36

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDIEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.51	2.60	250.00	6.79	0.00	25.12	0.00	607.40	607.40

2800 NAT Q1= 349.08 WSEL= 615.77 ENC Q1= 349.08 WSEL= 615.87 RATIO= .0000
NAT Q1= 363. RATIOS LOB,CH,ROB= .5319 .1241 .3440 WSEL= 615.87
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

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	IOC	ICONT	CCRAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 80.8 304.8 TYPE= 4 TARGET= .038

12.52	8.41	615.81	0.00	615.77	615.83	.02	.01	.01	607.90
695.	365.	87.	243.	409.	41.	290.	330.	75.	607.80

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    4.15       .89      2.12       .84      .080      .055      .080      .051    607.40     80.81
 .000382       23.       23.       23.         0         0         8      0.00    224.01    304.82


 2800 NAT Q1=     169.58  WSEL=     615.78  ENC Q1=     169.58  WSEL=     615.88  RATIO=   0.0000
 NAT Q1=     179.  RATIOS LOB,CH,ROB=    .4880    .1806    .3314  WSEL=     615.88

3470 ENCROACHMENT STATIONS=      107.7      257.0  TYPE=       4  TARGET=         .051
    12.60       6.92    615.82       0.00    615.78    615.89       .07       .02       .04    609.40
      695.       332.       129.       234.       219.        34.       142.       331.        75.     609.30
     4.15       1.51       3.84       1.64       .080       .055       .080       .051    608.90    107.66
 .001639         25.        25.        25.          2          0          1      0.00    149.38    257.04


 2800 NAT Q1=     107.24  WSEL=     616.89  ENC Q1=     107.24  WSEL=     616.99  RATIO=    .0000
 NAT Q1=     114.  RATIOS LOB,CH,ROB=    .4384    .2303    .3312  WSEL=     616.99

3470 ENCROACHMENT STATIONS=      120.0      225.8  TYPE=       4  TARGET=         .059
    12.70       6.12    616.92       0.00    616.89    617.11       .19      1.12       .09    611.30
      695.       309.       167.       218.       142.        29.        79.       334.        76.     611.20
     4.19       2.18       5.68       2.75       .080       .055       .080       .051    610.80    119.98
 .004245        450.       450.       450.          3          0          1      0.00    105.77    225.76


 2800 NAT Q1=     145.69  WSEL=     618.39  ENC Q1=     145.69  WSEL=     618.49  RATIO=   0.0000
 NAT Q1=     158.  RATIOS LOB,CH,ROB=    .2688    .3352    .3960  WSEL=     618.49

3470 ENCROACHMENT STATIONS=      293.7      490.9  TYPE=       4  TARGET=         .076
    12.90       5.82    618.42       0.00    618.39    618.50       .08      1.35       .04    614.30
      695.       186.       243.       266.       109.        73.       224.       337.        78.     615.70
     4.25       1.70       3.33       1.19       .080       .055       .080       .051    612.60    293.71
 .002222        450.       450.       450.          2          0          1      0.00    197.18    490.90


CCHV=    .150 CEHV=    .350
 2800 NAT Q1=      82.44  WSEL=     619.58  ENC Q1=      82.44  WSEL=     619.68  RATIO=    .0000
 NAT Q1=      90.  RATIOS LOB,CH,ROB=    .2707    .4445    .2848  WSEL=     619.68

3470 ENCROACHMENT STATIONS=      295.1      460.5  TYPE=       4  TARGET=         .084
    13.00       5.07    619.57       0.00    619.59    619.68       .11      1.17       .01    616.20
      490.       134.       220.       136.        78.        61.       120.       341.        79.     617.60
     4.30       1.71       3.62       1.13       .080       .055       .080       .051    614.50    295.14
 .003329        450.       450.       450.          3          0          1      0.00    165.37    460.51


 2800 NAT Q1=      83.05  WSEL=     621.37  ENC Q1=      83.05  WSEL=     621.47  RATIO=    .0000
 NAT Q1=      89.  RATIOS LOB,CH,ROB=    .2704    .4461    .2835  WSEL=     621.47
   SECNO      DEPTH      CWSEL      CRIWS      WSELK       EG         HV         HL       OLOSS    BANK ELEV
   0          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=      294.0      463.1  TYPE=       4  TARGET=         .071
    13.05       5.03    621.33       0.00    621.37    621.45       .12      1.76       .00    618.00
      490.       134.       225.       131.        77.        60.       116.       344.        81.     619.40
     4.36       1.73       3.74       1.13       .080       .055       .080       .051    616.30    293.96
 .003599        510.       510.       510.          2          0          1      0.00    169.12    463.08
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 2800 NAT Q1=      75.08  WSEL=     623.26  ENC Q1=      75.08  WSEL=     623.36  RATIO=    .0000
 NAT Q1=      82.  RATIOS LOB,CH,ROB=    .0839    .7018    .2143  WSEL=     623.36

3470 ENCROACHMENT STATIONS=       84.7      222.9  TYPE=      4  TARGET=          .087
    13.06      5.07   623.27      0.00   623.26   623.50       .23      2.01       .04   620.90
      490.       27.      368.       95.       14.       84.       82.      346.       83.   620.80
     4.40      1.98      4.38      1.16      .080      .055      .080      .051   618.20    84.66
  .004350       510.      510.      510.         1         0         1      0.00   138.26   222.91


 2800 NAT Q1=      85.98  WSEL=     625.21  ENC Q1=      85.98  WSEL=     625.31  RATIO=    .0000
 NAT Q1=      94.  RATIOS LOB,CH,ROB=    .0898    .6541    .2560  WSEL=     625.31

3470 ENCROACHMENT STATIONS=       83.2      242.8  TYPE=      4  TARGET=          .083
    13.10      5.25   625.25      0.00   625.21   625.42       .17      1.92       .01   622.70
      490.       29.      343.      117.       18.       88.      111.      349.       85.   622.60
     4.44      1.68      3.91      1.06      .080      .055      .080      .051   620.00    83.24
  .003276       510.      510.      510.         2         0         1      0.00   159.53   242.77


CCHV=     .400  CEHV=     .800
 2800 NAT Q1=     230.69  WSEL=     625.51  ENC Q1=     230.69  WSEL=     625.61  RATIO=    .0000
 NAT Q1=     244.  RATIOS LOB,CH,ROB=    .5064    .3540    .1396  WSEL=     625.61
3280 CROSS SECTION      13.18 EXTENDED       1.75 FEET


3470 ENCROACHMENT STATIONS=        6.4      192.5  TYPE=      4  TARGET=          .055

         **  D/S FACE LONGFELLOW RD

    13.18      6.56   625.56      0.00   625.51   625.58       .02       .10       .06   621.70
      490.       251.      180.       59.       316.      109.       99.       349.       85.   623.10
     4.47       .79      1.65       .60       .080      .055      .080      .051   619.00     6.35
  .000449       100.      100.      100.         2         0         1      0.00   186.15   192.51


SPECIAL BRIDGE

SB  XK         XKOR       CCEQ       ROLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       1.81       2.60     200.00       3.93       0.00      12.97       0.00     619.00     619.00

 2800 NAT Q1=     244.54  WSEL=     625.60  ENC Q1=     244.54  WSEL=     625.70  RATIO=   0.0000
 NAT Q1=     257.  RATIOS LOB,CH,ROB=    .5081    .3468    .1450  WSEL=     625.70
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      13.22 EXTENDED       1.85 FEET

   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     ICC        ICONT      CORAR      TOPWID      ENDST


3470 ENCROACHMENT STATIONS=        5.4      196.4  TYPE=      4  TARGET=          .047
    13.22      6.65   625.65      0.00   625.60   625.67       .02       .03       .00   621.70
      490.       251.      175.       63.       329.      111.      110.      350.       86.   623.10
     4.49       .76      1.58       .57       .080      .055      .080      .051   619.00     5.42
  .000399        60.       60.       60.         9         0        10      0.00   191.03   196.45
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 2800 NAT Q1=     195.57  WSEL=     625.62  ENC Q1=     195.57  WSEL=     625.72  RATIO=  0.0000
 NAT Q1=     208.  RATIOS LOB,CH,ROB=    .4996    .3789    .1215  WSEL=     625.72
3280 CROSS SECTION      13.30 EXTENDED       1.47 FEET


3470 ENCROACHMENT STATIONS=        6.8      186.1  TYPE=      4  TARGET=         .058
    13.30      6.27   625.67      0.00   625.62   625.70       .03       .02       .01   622.10
      490.      248.      193.      50.      284.      103.      77.      351.      86.    623.50
     4.49       .87      1.87      .64      .080      .055      .080      .051   619.40     6.78
  .010620       40.       40.       40.         2         0         1      0.00   179.32   186.10


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=      86.48  WSEL=     625.73  ENC Q1=      86.48  WSEL=     625.83  RATIO=   .0000
 NAT Q1=      95.  RATIOS LOB,CH,ROB=    .1652    .7362    .0986  WSEL=     625.83
3280 CROSS SECTION      14.30 EXTENDED        .39 FEET


3470 ENCROACHMENT STATIONS=      235.6      413.2  TYPE=      4  TARGET=         .092
    14.00      6.58   625.78      0.00   625.73   625.91       .13       .18       .04   624.70
      490.       70.      380.      40.       77.      117.      44.      352.      86.    624.70
     4.51       .91      3.25      .92      .080      .055      .080      .051   619.20   235.58
  .003044      150.      150.      150.         2         0         1      0.00   177.66   413.24


CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     154.40  WSEL=     626.00  ENC Q1=     154.40  WSEL=     626.10  RATIO=  0.0000
 NAT Q1=     163.  RATIOS LOB,CH,ROB=    .2105    .7436    .0459  WSEL=     626.10

3470 ENCROACHMENT STATIONS=       53.4      176.1  TYPE=      4  TARGET=         .051

         **  D/S FACE TENNYSON RD

    14.99      6.34   626.04      0.00   626.00   626.11       .07       .18       .02   624.40
      490.       99.      371.      21.      126.      157.      21.      353.      87.    623.10
     4.52       .78      2.36      1.00      .080      .055      .080      .051   619.70    53.39
  .000976      110.      110.      110.         2         0         1      0.00   122.69   176.08


SPECIAL BRIDGE

SB  XK         XKOR       COEO       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       1.80       2.70     150.00       3.77       0.00      12.44       0.00     619.70     619.70

 2800 NAT Q1=     164.49  WSEL=     626.12  ENC Q1=     164.49  WSEL=     626.22  RATIO=  0.0000
 NAT Q1=     173.  RATIOS LOB,CH,ROB=    .2250    .7272    .0479  WSEL=     626.22
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS     BANK ELEV
   Q          OLOB       OCH        QROB       ALOB       ACH        AROB       VOL        TWA     LEFT/RIGHT
   TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN       SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     ICC        ICONT      CORAR      TOPWID      ENDST


3470 ENCROACHMENT STATIONS=       47.8      177.2  TYPE=      4  TARGET=         .050
    15.02      6.46   626.16      0.00   626.12   626.22       .06       .05       .00   624.40
      490.      107.      361.      22.      141.      161.      24.      353.      87.    623.10
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    4.53       .76      2.24       .94      .080      .055      .080      .051    619.70     47.79
 .000853       60.       60.       60.         0         0         7      0.00    129.36    177.15


 2800 NAT QI=     121.15  WSEL=     626.16  ENC QI=     121.15  WSEL=     626.26  RATIO=    .0000
 NAT QI=     128.  RATIOS LOB,CH,ROB=    .1532    .8087    .0381  WSEL=     626.26

3470 ENCROACHMENT STATIONS=       75.9      172.0  TYPE=      4  TARGET=         .054
    15.10      5.90    626.20      0.00    626.16    626.31       .11       .05       .04    625.00
      490.       61.       416.       13.       71.       143.       11.       353.       87.     623.70
     4.54       .86      2.91      1.25      .080      .055      .080      .051    620.30     75.89
 .001683       40.       40.       40.         2         0         1      0.00     96.12    172.01


CCHV=     .150 CEHV=     .350
 2800 NAT QI=      56.96  WSEL=     627.02  ENC QI=      56.96  WSEL=     627.12  RATIO=    .0000
 NAT QI=      60.  RATIOS LOB,CH,ROB=    .0830    .9170    .0000  WSEL=     627.12

3470 ENCROACHMENT STATIONS=      149.5      197.0  TYPE=      4  TARGET=         .058
    16.00      6.07    627.07      0.00    627.02    627.40       .32      1.01       .07    625.80
      490.       29.       461.        0.        18.       98.        0.       355.       88.     627.10
     4.56      1.65      4.69      0.00      .080      .055      .080      .051    621.00    149.48
 .007221       330.      330.      330.         2         0         1      0.00     47.45    196.92


 2800 NAT QI=      76.32  WSEL=     628.23  ENC QI=      76.32  WSEL=     628.33  RATIO=    .0000
 NAT QI=      81.  RATIOS LOB,CH,ROB=    .1088    .8158    .0754  WSEL=     628.33
3280 CROSS SECTION      16.10 EXTENDED        .16 FEET


3470 ENCROACHMENT STATIONS=        9.3       80.9  TYPE=      4  TARGET=         .063
    16.10      6.26    628.26      0.00    628.23    628.48       .22      1.06       .02    626.00
      490.       54.       412.       24.       34.       103.       21.       355.       88.     627.10
     4.57      1.56      4.01      1.15      .080      .055      .080      .051    622.00      9.27
 .004078       200.      200.      200.         2         0         1      0.00     71.59     80.86


CCHV=     .200 CEHV=     .400
 2800 NAT QI=      71.95  WSEL=     628.74  ENC QI=      71.95  WSEL=     628.84  RATIO=    .0000
 NAT QI=      77.  RATIOS LOB,CH,ROB=    .1024    .8315    .0661  WSEL=     628.84
3280 CROSS SECTION      16.98 EXTENDED        .07 FEET


3470 ENCROACHMENT STATIONS=       10.0       78.0  TYPE=      4  TARGET=         .064

         **  D/S FACE JACKMAN RD

    16.98      6.17    628.77      0.00    628.74    629.00       .24       .52       .01    626.60
      490.       51.       419.       20.       32.       100.       17.       356.       88.     627.70
     4.53      1.60      4.18      1.16      .080      .055      .080      .051    622.60     10.01
 .004589       120.      120.      120.         2         0         1      0.00     68.01     78.02


SPECIAL BRIDGE

SB  XK         XKOR       COEQ       BOLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.40       2.60     215.00       8.00       0.00      47.20       0.00     622.60     622.60
```

```
 2800 NAT Q1=     206.27  WSEL=     630.27  ENC Q1=     206.27  WSEL=     630.37  RATIO=    .0000
 NAT Q1=     218.  RATIOS LOB,CH,ROB=    .5149    .3618    .1232  WSEL=     630.37
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      17.02 EXTENDED       1.00 FEET

   SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         CLOSS    BANK ELEV
   Q          QLOB       QCH        QROB       ALOB       ACH        ARCB       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=        70.9       243.6  TYPE=      4  TARGET=          .055
    17.02      7.70    630.30      0.00    630.27    630.33       .03       .03       .04    625.40
      490.      252.      190.       48.      260.       99.       89.      356.       88.     628.70
      4.59       .97      1.91       .54      .080      .055      .080      .051    622.60     70.93
   .000601       26.       26.       26.         0         0         4      0.00    172.71    243.64

 2800 NAT Q1=     208.81  WSEL=     630.29  ENC Q1=     208.81  WSEL=     630.39  RATIO=    .0000
 NAT Q1=     221.  RATIOS LOB,CH,ROB=    .5149    .3598    .1253  WSEL=     630.39
3280 CROSS SECTION      17.10 EXTENDED       1.02 FEET

3470 ENCROACHMENT STATIONS=        70.5       244.5  TYPE=      4  TARGET=          .055
    17.10      7.72    630.32      0.00    630.29    630.35       .03       .02       .00    625.40
      490.      253.      188.       49.      262.      100.       91.      356.       88.     628.70
      4.60       .96      1.89       .54      .080      .055      .080      .051    622.60     70.53
   .000585       37.       37.       37.         2         0         1      0.00    173.96    244.49


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     191.65  WSEL=     630.67  ENC Q1=     191.65  WSEL=     630.77  RATIO=    .0000
 NAT Q1=     202.  RATIOS LOB,CH,ROB=    .2320    .3305    .4375  WSEL=     630.77

3470 ENCROACHMENT STATIONS=       289.9       398.6  TYPE=      4  TARGET=          .050
    18.00      6.71    630.71      0.00    630.67    630.76       .05       .40       .01    625.70
      490.      115.      168.      208.       87.       69.      168.      362.       90.     625.50
      4.70      1.31      2.44      1.24      .070      .050      .060      .051    624.00     289.94
   .000653       650.      650.      650.         3         0         1      0.00    108.71     398.65


 2800 NAT Q1=     205.62  WSEL=     631.01  ENC Q1=     205.62  WSEL=     631.11  RATIO=    .0000
 NAT Q1=     214.  RATIOS LOB,CH,ROB=    .0899    .4277    .4824  WSEL=     631.11

3470 ENCROACHMENT STATIONS=       117.3       197.6  TYPE=      4  TARGET=          .039
    18.90      4.95    631.05      0.00    631.01    631.10       .05       .34       .00    626.10
      490.       44.      211.      235.       50.      104.      153.      366.       92.     626.10
      4.80       .88      2.03      1.54      .070      .050      .060      .051    626.10     117.31
   .000551       560.      560.      560.         3         0         1      0.00     80.24     197.56


CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     120.86  WSEL=     631.07  ENC Q1=     125.88  WSEL=     631.17  RATIO=   -.0415
 NAT Q1=     126.  RATIOS LOB,CH,ROB=   0.0000   1.0000   0.0000  WSEL=     631.17

3470 ENCROACHMENT STATIONS=       135.0       180.0  TYPE=      4  TARGET=          0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=       633.00 ELREA=       633.00
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** D/S FACE NEW BRIDGE UNDER CONSTRUCTION

18.99	3.91	631.11	0.00	631.07	631.23	.12	.10	.04	629.60
490.	0.	490.	0.	0.	175.	0.	367.	92.	627.20
4.81	0.00	2.80	0.00	.070	.050	.060	.051	627.20	135.00
.001595	110.	110.	110.	2	0	1	0.00	45.00	180.00

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.60	125.00	45.50	1.50	211.20	0.00	627.20	627.20

SECND	DEPTH	CLSEL	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	ICCNT	CORAR	TOPWID	ENDST

CLASS A LOW FLOW

BRIDGE W.S.= 631.10 BRIDGE VELOCITY= 2.86

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
631.24	631.30	.01	0.	490.	211.	631.00	633.50	1.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 633.50 ELREA= 633.50

19.09	3.98	631.18	0.00	631.08	631.30	.12	.07	0.00	627.20
490.	0.	490.	0.	0.	179.	0.	367.	92.	627.20
4.81	0.00	2.74	0.00	.070	.050	.060	.051	627.20	145.00
.001355	37.	37.	37.	0	0	1	0.00	45.00	190.00

3649 NUMBER SECTIONS EXCEED LIMIT
2800 MAT Q1= 100.08 WSEL= 631.16 ENC Q1= 100.08 WSEL= 631.26 RATIO= .0000
MAT Q1= 105. RATIOS LOB,CH,ROB= .0125 .8869 .1006 WSEL= 631.26

3470 ENCROACHMENT STATIONS= 148.0 195.5 TYPE= 4 TARGET= .051

19.10	3.75	631.25	0.00	631.16	631.40	.14	.09	.01	627.50
490.	0.	446.	44.	0.	143.	26.	367.	92.	627.50
4.82	.01	3.13	1.70	.080	.055	.080	.051	627.50	148.00
.002299	50.	50.	50.	2	0	1	0.00	47.52	195.52

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
2800 MAT Q1= 63.67 WSEL= 632.40 ENC Q1= 63.67 WSEL= 632.50 RATIO= .0000
MAT Q1= 71. RATIOS LOB,CH,ROB= .3443 .6089 .0468 WSEL= 632.50
3280 CROSS SECTION 20.00 EXTENDED .76 FEET

3470 ENCROACHMENT STATIONS= 172.6 295.0 TYPE= 4 TARGET= .105

20.09	3.96	632.46	0.00	632.40	632.65	.18	1.24	.01	631.40

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     490.      159.      331.        0.      102.       82.        0.      368.       93.    631.90
     4.85      1.56      4.05       .01      .080      .055      .080      .051   628.50   172.61
  .006129      350.      350.      350.         2         0         1      0.00   122.39   295.00

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=      45.88  WSEL=     633.00  ENC Q1=      45.88  WSEL=     633.10  RATIO=   0.0000
 NAT Q1=      50.  RATIOS LOB,CH,ROB=  0.0000   .8984   .1016  WSEL=     633.10
3280 CROSS SECTION      20.10 EXTENDED        .17 FEET


3470 ENCROACHMENT STATIONS=        9.0       46.9  TYPE=      4  TARGET=          .077
    20.10      4.17   633.07      0.00   633.00   633.57       .50       .81       .11   633.10
     490.        0.      469.       21.       0.       81.       11.      369.       93.    632.00
     4.85      0.00      5.80      1.89      .080      .055      .080      .051   628.90      9.02
  .011327      100.      100.      100.         2         0         1      0.00    37.90     46.92

  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .200 CEHV=     .400
 2800 NAT Q1=      90.21  WSEL=     634.03  ENC Q1=      90.21  WSEL=     634.13  RATIO=    .0000
 NAT Q1=      97.  RATIOS LOB,CH,ROB=    .0033   .6844   .3123  WSEL=     634.13
3280 CROSS SECTION      20.98 EXTENDED       1.02 FEET

   SECND      DEPTH     CHSEL     CRIWS     WSELK      EG        HV        HL       OLOSS    BANK ELEV
   Q          QLOB      QCH       QROB      ALOB       ACH       AROP      VOL      TWA    LEFT/RIGHT
   TIME       VLOB      VCH       VROB      XNL        XNCH      XNR       WTN      ELMIN       SSTA
   SLOPE      XLOBL     XLCH      XLOBR     ITRIAL     IDC       ICCNT     CORAR    TOPWID      ENDST
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3470 ENCROACHMENT STATIONS=        9.0      121.1  TYPE=      4  TARGET=          .067

         **  D/S FACE BROOKWOOD RD

    20.99      5.03   634.13      0.00   634.03   634.27       .14       .62       .07   633.30
     490.        0.      359.      131.       0.      103.      109.      369.       93.    632.20
     4.86       .01      3.49      1.20      .080      .055      .080      .051   629.10      9.00
  .002975      120.      120.      120.         2         0         1      0.00   112.12   121.12

  3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB   XK         XKOB       COEQ       BDLEN      BWC        PWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.30       2.60     150.00       5.71       0.00      18.28       0.00     629.10     629.10

 2800 NAT Q1=      95.69  WSEL=     634.55  ENC Q1=      95.69  WSEL=     634.65  RATIO=    .0000
 NAT Q1=     102.  RATIOS LOB,CH,ROB=    .2289   .6346   .1365  WSEL=     634.65
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=       68.5      169.4  TYPE=      4  TARGET=          .058
    21.02      5.54   634.64      0.00   634.55   634.78       .14       .08       .00   630.70
     490.      105.      312.       73.       74.       86.       60.      369.       93.    632.10
     4.87      1.43      3.65      1.20      .080      .055      .080      .051   629.10     68.53
  .002360       32.       32.       32.         0         0         6      0.00    99.82   168.35
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  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=      97.69  WSEL=     634.68  ENC Q1=      97.69  WSEL=     634.78  RATIO=   0.0000
 NAT Q1=    104.  RATIOS LOB,CH,ROB=    .2330    .6284    .1387  WSEL=     634.78

3470 ENCROACHMENT STATIONS=       67.1      169.9  TYPE=      4  TARGET=          .059
    21.10      5.56    634.76      0.00    634.68    634.90       .14       .12       .00    630.80
      490.       106.       311.        73.        76.        86.        62.       370.        93.     632.20
     4.87       1.41       3.61       1.19       .080       .055       .080       .051    629.20     67.11
  .002300        50.        50.        50.          2          0          1       0.00    101.82    168.93


  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .150 CEHV=     .350
 2800 NAT Q1=      97.60  WSEL=     635.36  ENC Q1=      97.60  WSEL=     635.46  RATIO=    .0000
 NAT Q1=    105.  RATIOS LOB,CH,ROB=    .3881    .4778    .1341  WSEL=     635.46
3280 CROSS SECTION      22.00 EXTENDED       1.39 FEET



3470 ENCROACHMENT STATIONS=       53.1      166.0  TYPE=      4  TARGET=          .067
    22.00      5.79    635.39      0.00    635.36    635.51       .11       .60       .00    633.00
      490.       178.       247.        66.       123.        70.        52.       371.        94.     633.00
     4.90       1.44       3.53       1.25       .080       .055       .080       .051    629.60     53.10
  .002547        250.       250.       250.          2          0          1       0.00    112.92    166.01


  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     138.70  WSEL=     635.69  ENC Q1=     138.70  WSEL=     635.79  RATIO=    .0000
 NAT Q1=    147.  RATIOS LOB,CH,ROB=    .4139    .4018    .1842  WSEL=     635.79
3280 CROSS SECTION      22.98 EXTENDED       1.94 FEET
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   SECNO      DEPTH      CHSEL      CRIWS      WSELK      EG         HV         HL         OLOSS    BANK ELEV
   Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        THA    LEFT/RIGHT
   TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     ICC        ICONT      CORAR      TOPWID     ENDST


3470 ENCROACHMENT STATIONS=       50.3      174.8  TYPE=      4  TARGET=          .056

         **  D/S FACE DEAN RD

    22.99      6.33    635.73      0.00    635.69    635.79       .06       .27       .02    632.80
      490.       199.       210.        81.       164.        78.        80.       372.        94.     632.80
     4.92       1.21       2.71       1.02       .080       .055       .080       .052    629.40     50.31
  .001304        150.       150.       150.          2          0          1       0.00    124.50    174.81


  3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB  XK         XKOR       COEQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.70       2.60     100.00       5.00       0.00      19.44       0.00    629.40     629.40

 2800 NAT Q1=     342.82  WSEL=     636.75  ENC Q1=     342.82  WSEL=     636.85  RATIO=    .0000
 NAT Q1=    356.  RATIOS LOB,CH,ROB=    .3332    .3578    .3090  WSEL=     636.85
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      23.02 EXTENDED       3.79 FEET
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3470 ENCROACHMENT STATIONS=      214.7      371.0  TYPE=      4  TARGET=          .036
    23.07      7.39    636.79      0.00    636.75    636.80       .01       .02       .02    632.60
     490.      161.      183.      146.      245.      147.      233.      372.       94.     633.60
     4.94       .66      1.24       .63       .080      .055      .080      .052    629.40    214.65
  .000213       52.       52.       52.         0         0         6      0.00    156.36    371.01

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=      229.31  WSEL=      636.75  ENC Q1=      229.31  WSEL=      636.85  RATIO=    .0000
 NAT Q1=      241.  RATIOS LOB,CH,RCB=    .3141    .4025    .2833  WSEL=      636.85
3280 CROSS SECTION      23.10 EXTENDED       2.89 FEET


3470 ENCROACHMENT STATIONS=      216.2      369.2  TYPE=      4  TARGET=          .048
    23.10      6.49    636.79      0.00    636.75    636.82       .02       .01       .01    633.50
     490.      151.      209.      130.      183.      125.      168.      373.       94.     634.50
     4.94       .82      1.67       .77       .080      .055      .080      .052    630.30    216.21
  .000482       24.       24.       24.         2         0         1      0.00    153.00    369.22

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=      120.44  WSEL=      637.17  ENC Q1=      120.44  WSEL=      637.27  RATIO=    .0000
 NAT Q1=      129.  RATIOS LOB,CH,RCB=    .2699    .5033    .2268  WSEL=      637.27
3280 CROSS SECTION      23.20 EXTENDED       1.84 FEET


3470 ENCROACHMENT STATIONS=      219.7      364.8  TYPE=      4  TARGET=          .068
    23.20      5.44    637.24      0.00    637.17    637.31       .07       .45       .04    635.00
     490.      129.      266.       95.      111.       98.       92.      378.       96.     636.00
     5.02      1.16      2.71      1.03       .080      .055      .080      .052    631.80    219.69
  .001729       550.      550.      550.         3         0         1      0.00    145.12    364.81

  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=      .150 CEHV=      .350
 2800 NAT Q1=       95.39  WSEL=      638.26  ENC Q1=       95.39  WSEL=      638.36  RATIO=    .0000
 NAT Q1=      100.  RATIOS LOB,CH,RCB=    .2437    .4763    .2800  WSEL=      638.36
   SECNO      DEPTH      CWSEL      CRITS      WSELK      EG         HV         HL         CLOSS    BANK ELEV
   Q          QLOB       QCH        QROB       ALOB       ACH        ARCB       VOL        TWA    LEFT/RIGHT
   TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN        SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     ICC        ICCNT      CORAR      TOPWID       ENDST


3470 ENCROACHMENT STATIONS=      226.2      299.5  TYPE=      4  TARGET=          .048
    23.90      5.02    638.32      0.00    638.26    638.45       .13      1.12       .02    633.60
     490.      119.      232.      139.       73.       62.       72.      381.       98.     634.10
     5.08      1.63      3.76      1.95       .080      .055      .080      .052    633.30    226.19
  .002435       550.      550.      550.         2         0         1      0.00     73.27    299.46

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       94.23  WSEL=      639.73  ENC Q1=       94.23  WSEL=      639.83  RATIO=    .0000
 NAT Q1=       99.  RATIOS LOB,CH,RCB=    .2418    .4785    .2797  WSEL=      639.83

3470 ENCROACHMENT STATIONS=      225.9      299.7  TYPE=      4  TARGET=          .044
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   24.00      4.92    639.72      0.00    639.73    639.86      .14      1.41       .00    635.10
    490.       116.     235.       139.      69.       60.       69.      383.       99.     635.60
    5.13      1.68      3.89      2.00      .080      .055      .080      .052    634.80    225.93
 .002684       550.     550.      550.         2         0         1      0.00     73.73    299.66

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT QI=     109.13  WSEL=     641.33  ENC QI=     109.13  WSEL=     641.43  RATIO=    .0000
 NAT QI=     115.  RATIOS LOB,CH,ROB=    .2623    .4551    .2826  WSEL=     641.43
3280 CROSS SECTION      24.10 EXTENDED        .01 FEET


3470 ENCROACHMENT STATIONS=      222.7      300.2  TYPE=      4  TARGET=         .050
    24.10      5.21    641.31      0.00    641.33    641.42      .11      1.56       .00    636.40
    490.       125.     225.       140.      82.       64.       77.      387.      100.     636.90
    5.21      1.51      3.50      1.82      .080      .055      .080      .052    636.10    222.75
 .002009       675.     675.      675.         2         0         1      0.00     77.45    300.20

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT QI=      66.90  WSEL=     643.26  ENC QI=      66.90  WSEL=     643.36  RATIO=    .0000
 NAT QI=      71.  RATIOS LOB,CH,ROB=    .0330    .8890    .0780  WSEL=     643.36

3470 ENCROACHMENT STATIONS=      518.9      574.3  TYPE=      4  TARGET=         .054
    24.90      5.86    643.26      0.00    643.26    643.62      .37      2.11       .09    642.30
    490.         5.     447.        37.       5.       88.       27.      389.      101.     641.70
    5.25      1.13      5.07      1.40      .080      .050      .080      .052    637.40    518.82
 .005532       675.     675.      675.         2         0         1      0.00     55.50    574.32

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT QI=     102.74  WSEL=     644.57  ENC QI=     102.74  WSEL=     644.67  RATIO=   0.0000
 NAT QI=     110.  RATIOS LOB,CH,ROB=    .1086    .7545    .1369  WSEL=     644.67
3280 CROSS SECTION      24.95 EXTENDED        .17 FEET


3470 ENCROACHMENT STATIONS=      473.8      587.5  TYPE=      4  TARGET=         .062
    24.95      6.58    644.58      0.00    644.57    644.74      .16      1.09       .03    642.90
    490.        47.     378.        65.       52.      105.       58.      391.      101.     642.30
    5.28       .90      3.61      1.13      .080      .050      .080      .052    638.00    473.82
 .002236       325.     325.      325.         2         0         1      0.00    113.66    587.48

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT QI=     110.36  WSEL=     645.28  ENC QI=     110.36  WSEL=     645.38  RATIO=   0.0000
 NAT QI=     118.  RATIOS LOB,CH,ROB=    .1224    .7314    .1462  WSEL=     645.38
3280 CROSS SECTION      25.00 EXTENDED        .28 FEET


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


3470 ENCROACHMENT STATIONS=      471.0      589.4  TYPE=      4  TARGET=         .061
    25.00      6.68    645.28      0.00    645.28    645.42      .14       .68       .00    643.50
    490.        53.     368.        69.       60.      107.       63.      392.      102.     642.90
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    5.31       .88      3.43      1.10      .080      .050      .080      .052    638.60    470.99
 .001962       325.     325.      325.        2         0         1      0.00    117.41    588.40


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       84.63  WSEL=     645.36  ENC Q1=      84.63  WSEL=     645.46  RATIO=    .0000
 NAT Q1=      90.  RATIOS LOB,CH,ROB=    .0690    .8225    .1085  WSEL=     645.46

3470 ENCROACHMENT STATIONS=       484.3      585.2  TYPE=       4  TARGET=          .055
    25.02      6.26    645.36      0.00    645.36    645.59       .22       .14       .03    644.00
     490.       31.      406.       54.       33.       98.       45.      392.      102.     643.40
     5.31       .93      4.15      1.20      .080      .050      .080      .052    639.10    484.29
 .003240        55.      55.       55.         2         0         1      0.00    100.92    585.21


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       65.46  WSEL=     645.53  ENC Q1=      65.46  WSEL=     645.63  RATIO=    .0000
 NAT Q1=      69.  RATIOS LOB,CH,ROB=    .0302    .8946    .0752  WSEL=     645.63

3470 ENCROACHMENT STATIONS=       522.9      573.3  TYPE=       4  TARGET=          .054
    25.05      5.82    645.52      0.00    645.53    645.90       .39       .26       .06    644.60
     490.        2.      452.       36.        2.       87.       25.      393.      103.     644.00
     5.32       1.19      5.17      1.42      .080      .050      .080      .052    639.70    522.86
 .005842        60.      60.       60.         2         0         1      0.00     50.39    573.25


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       51.48  WSEL=     646.23  ENC Q1=      51.67  WSEL=     646.33  RATIO=   -.0037
 NAT Q1=      55.  RATIOS LOB,CH,ROB=    .0071    .9481    .0448  WSEL=     646.33

3470 ENCROACHMENT STATIONS=       525.0      549.0  TYPE=       4  TARGET=          .052
    25.10      5.43    646.23      0.00    646.23    646.84       .61       .86       .08    645.70
     490.        0.      490.        0.        0.       78.        0.      393.      103.     645.10
     5.32       .02      6.25       .02      .080      .050      .080      .052    640.80    525.00
 .009852       115.     115.      115.         2         0         1      0.00     23.00    548.00


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.08  WSEL=     647.29  ENC Q1=      50.60  WSEL=     647.38  RATIO=   -.0103
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0056    .9527    .0417  WSEL=     647.38

3470 ENCROACHMENT STATIONS=       525.0      549.0  TYPE=       4  TARGET=          .047
    25.15      5.46    647.36      0.00    647.28    647.95       .60      1.12       .00    646.80
     490.        0.      490.        0.        0.       79.        0.      393.      103.     646.20
     5.33       .02      6.19       .02      .080      .050      .080      .052    641.90    525.00
 .009584       115.     115.      115.         2         0         1      0.00     23.00    548.00


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.08  WSEL=     649.38  ENC Q1=      50.62  WSEL=     648.48  RATIO=   -.0107
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0056    .9526    .0418  WSEL=     648.48
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICCNT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=       525.0      548.0  TYPE=       4  TARGET=          .047
    25.20      5.46    648.46      0.00    648.38    649.06       .60      1.10       .00    647.90
     490.        0.      490.        0.        0.       79.        0.      393.      103.     647.30
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    5.33       .02       6.19       .02       .080       .050       .080       .052    643.00    525.00
 .009584       115.      115.       115.         0          0          1       0.00     23.00    548.00

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.11  WSEL=     649.48  ENC Q1=       50.64  WSEL=     649.58  RATIO=  -.0106
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0057    .9525    .0418  WSEL=     649.58

3470 ENCROACHMENT STATIONS=       525.0      548.0  TYPE=       4  TARGET=          .047
    25.25       5.46    649.56       0.00    649.48    650.16       .60       1.10       .00    649.00
     490.         0.      490.         0.        0.       79.         0.       394.      103.     648.40
     5.34       .02       6.19       .02       .080       .050       .080       .052    644.10    525.00
 .009564       115.      115.       115.         0          0          1       0.00     23.00    548.00

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.13  WSEL=     650.58  ENC Q1=       50.63  WSEL=     650.68  RATIO=  -.0100
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0057    .9526    .0418  WSEL=     650.68

3470 ENCROACHMENT STATIONS=       525.0      548.0  TYPE=       4  TARGET=          .047
    25.30       5.46    650.66       0.00    650.59    651.26       .59       1.10       .00    650.10
     490.         0.      490.         0.        0.       79.         0.       394.      103.     649.50
     5.34       .02       6.19       .02       .080       .050       .080       .052    645.20    525.00
 .009547       115.      115.       115.         0          0          1       0.00     23.00    548.00

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.12  WSEL=     651.68  ENC Q1=       50.61  WSEL=     651.78  RATIO=  -.0097
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0056    .9527    .0417  WSEL=     651.78

3470 ENCROACHMENT STATIONS=       525.0      548.0  TYPE=       4  TARGET=          .047
    25.35       5.46    651.76       0.00    651.68    652.36       .59       1.10       .00    651.20
     490.         0.      490.         0.        0.       79.         0.       394.      103.     650.60
     5.35       .02       6.19       .02       .080       .050       .080       .052    646.30    525.00
 .009551       115.      115.       115.         0          0          1       0.00     23.00    548.00

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.09  WSEL=     652.78  ENC Q1=       50.60  WSEL=     652.88  RATIO=  -.0101
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0056    .9527    .0417  WSEL=     652.88

3470 ENCROACHMENT STATIONS=       525.0      548.0  TYPE=       4  TARGET=          .047
    25.40       5.46    652.86       0.00    652.78    653.45       .60       1.10       .00    652.30
     490.         0.      490.         0.        0.       79.         0.       394.      103.     651.70
     5.35       .02       6.19       .02       .080       .050       .080       .052    647.40    525.00
 .009569       115.      115.       115.         0          0          1       0.00     23.00    548.00

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=       50.08  WSEL=     653.88  ENC Q1=       50.61  WSEL=     653.98  RATIO=  -.0107
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0056    .9526    .0417  WSEL=     653.98
   SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS     BANK ELEV
   Q          QLOB       QCH        QROB       ALCB       ACH        AROB       VOL        TWA     LEFT/RIGHT
   TIME       VLOB       VCH        VROB       XML        XNCH       XNR        WTN        ELMIN       SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID      ENDST

3470 ENCROACHMENT STATIONS=       525.0      548.0  TYPE=       4  TARGET=          .047
    25.45       5.46    653.96       0.00    653.88    654.56       .60       1.10       .00    653.40
     490.         0.      490.         0.        0.       79.         0.       394.      103.     652.80
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    5.36      .02      6.19      .02      .080      .050      .080      .052    648.50    525.00
  .009579     115.     115.      115.        0         0         1      0.00     23.00    548.00


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=      50.10  WSEL=    654.98  ENC Q1=      50.64  WSEL=    655.08  RATIO=  -.0108
 NAT Q1=      53.  RATIOS LOB,CH,ROB=    .0057    .9525    .0418  WSEL=    655.08

3470 ENCROACHMENT STATIONS=      525.0      548.0  TYPE=      4  TARGET=         .047
    25.90      5.46    655.06      0.00    654.98    655.66       .60      1.10       .00    654.50
    490.        0.      490.        0.        0.       79.        0.      395.      103.     653.90
    5.35       .02      6.19       .02      .080      .050      .080      .052    649.60    525.00
  .009573     115.     115.      115.        0         0         1      0.00     23.00    548.00


  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     101.09  WSEL=    656.08  ENC Q1=     101.09  WSEL=    656.18  RATIO=  0.0000
 NAT Q1=     108.  RATIOS LOB,CH,ROB=    .0054    .6147    .3799  WSEL=    656.18
3280 CROSS SECTION      25.99 EXTENDED       1.79 FEET


3470 ENCROACHMENT STATIONS=      161.0      251.5  TYPE=      4  TARGET=         .067

        **  D/S FACE DOUGLAS RD

    25.98      5.39    656.19      0.00    656.08    656.30       .11       .50       .15    655.80
    490.        0.      322.      168.        0.      103.      119.      395.      103.     654.10
    5.37       .01      3.11      1.41      .080      .050      .080      .052    650.80    161.00
  .002307     120.     120.      120.         2         0         1      0.00     90.89    251.89


  3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR   XK         XKOR       COEQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.50       2.60      125.00       5.40       0.00      17.28       0.00     650.80     650.80

 2800 NAT Q1=     169.48  WSEL=    656.98  ENC Q1=     169.48  WSEL=    656.98  RATIO=    .0000
 NAT Q1=     179.  RATIOS LOB,CH,ROB=    .0593    .5325    .4081  WSEL=    656.98
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      26.02 EXTENDED       2.60 FEET


3470 ENCROACHMENT STATIONS=      130.6      259.6  TYPE=      4  TARGET=         .056
    26.02      6.20    657.00      0.00    656.88    657.04       .05       .05       .02    655.80
    490.       17.      275.      198.       31.      128.      188.      395.      103.     654.10
    5.38       .54      2.14      1.05      .080      .050      .080      .052    650.80    130.60
  .000821      36.       36.       36.         0         0         6      0.00    129.02    259.62


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     175.38  WSEL=    656.94  ENC Q1=     175.38  WSEL=    657.04  RATIO=    .0000
 NAT Q1=     186.  RATIOS LOB,CH,ROB=    .0633    .5275    .4091  WSEL=    657.04
3280 CROSS SECTION      26.10 EXTENDED       2.66 FEET


   SECNO     DEPTH     OWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
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Q	QLOB	QCH	QROB	ALCB	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= 128.1 259.7 TYPE= 4 TARGET= .055

26.10	6.26	657.06	0.00	656.94	657.10	.04	.06	.00	655.80
490.	19.	273.	198.	36.	130.	192.	396.	104.	654.10
5.39	.54	2.09	1.03	.080	.050	.080	.052	650.80	128.10
.000767	70.	70.	70.	2	0	1	0.00	131.63	259.73

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
2800 NAT Q1= 177.83 WSEL= 656.97 ENC Q1= 177.83 WSEL= 657.07 RATIO= .0000
NAT Q1= 189. RATIOS LOB,CH,ROB= .0650 .5255 .4095 WSEL= 657.07
3280 CROSS SECTION 26.18 EXTENDED 2.68 FEET

3470 ENCROACHMENT STATIONS= 127.2 259.8 TYPE= 4 TARGET= .054

** D/S FACE PRIVATE DRIVE #1

26.18	6.28	657.08	0.00	656.97	657.12	.04	.02	.00	655.80
490.	20.	271.	198.	37.	131.	194.	396.	104.	654.10
5.40	.54	2.07	1.02	.080	.050	.080	.052	650.80	127.20
.000747	30.	30.	30.	2	0	1	0.00	132.57	259.77

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEO	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	150.00	7.00	0.00	23.80	0.00	650.80	650.80

2800 NAT Q1= 115.20 WSEL= 656.97 ENC Q1= 115.20 WSEL= 657.07 RATIO= 0.0000
NAT Q1= 123. RATIOS LOB,CH,ROB= .0893 .5744 .3363 WSEL= 657.07
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION 26.22 EXTENDED 1.29 FEET

3470 ENCROACHMENT STATIONS= 195.0 305.8 TYPE= 4 TARGET= .065

26.22	6.29	657.09	0.00	656.97	657.19	.10	.01	.05	654.60
490.	31.	294.	165.	31.	93.	135.	396.	104.	654.50
5.40	.99	3.18	1.22	.080	.050	.080	.052	650.80	194.97
.001710	13.	13.	13.	0	0	8	0.00	110.79	305.75

3649 NUMBER SECTIONS EXCEED LIMIT
2800 NAT Q1= 115.16 WSEL= 657.08 ENC Q1= 115.16 WSEL= 657.18 RATIO= .0000
NAT Q1= 124. RATIOS LOB,CH,ROB= .0902 .5730 .3369 WSEL= 657.18
3280 CROSS SECTION 26.30 EXTENDED 1.29 FEET

3470 ENCROACHMENT STATIONS= 196.6 305.1 TYPE= 4 TARGET= .071

26.30	6.29	657.19	0.00	657.08	657.29	.10	.10	.00	654.70

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     490.       30.      295.      165.       29.       93.      135.      397.      104.    654.60
    5.41      1.00      3.19      1.23      .080      .050      .080      .052    650.90   196.65
 .001725       60.       60.       60.         2         0         1      0.00    108.49   305.13

  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .200 CFHV=     .400
 2800 NAT Q1=      94.12  WSEL=     657.19  ENC Q1=      94.12  WSEL=     657.29  RATIO=    .0000
 NAT Q1=     101.  RATIOS LOB,CH,ROB=    .0610    .6259    .3131  WSEL=     657.29
3280 CROSS SECTION      26.38 EXTENDED        .99 FEET

   SECND     DEPTH     CWSEL     CRITS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         OLOB      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=      209.0      304.8  TYPE=      4  TARGET=         .068

         **  D/S FACE PRIVATE DRIVE #2

    26.33      5.99    657.29      0.00    657.19    657.44       .15       .13       .02    655.10
      490.       14.      322.      154.       11.       86.      114.      397.      104.    655.00
     5.41      1.21      3.73      1.35      .080      .050      .080      .052    651.30   209.04
 .002587       60.       60.       60.         2         0         1      0.00     95.80   304.85

  3649 NUMBER SECTIONS EXCEED LIMIT
SPECIAL BRIDGE

SB  XK         XKCR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.50       2.60     125.00       5.70       0.00      22.80       0.00     651.30     651.30

 2800 NAT Q1=     180.94  WSEL=     657.38  ENC Q1=     180.94  WSEL=     657.48  RATIO=    .0000
 NAT Q1=     191.  RATIOS LOB,CH,ROB=    .1442    .3544    .5014  WSEL=     657.48
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      26.42 EXTENDED        3.78 FEET


3470 ENCROACHMENT STATIONS=      160.8      303.8  TYPE=      4  TARGET=         .054
    26.42      6.18    657.48      0.00    657.38    657.52       .04       .02       .02    654.30
      490.       61.      185.      243.       88.       85.      226.      397.      104.    655.00
     5.42       .70      2.18      1.08      .080      .050      .080      .052    651.30   160.84
 .000746       18.       18.       18.         0         0         6      0.00    148.01   308.84

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     136.74  WSEL=     657.42  ENC Q1=     136.74  WSEL=     657.52  RATIO=    .0000
 NAT Q1=     146.  RATIOS LOB,CH,ROB=    .1042    .3918    .5040  WSEL=     657.52
3280 CROSS SECTION      26.50 EXTENDED        3.32 FEET


3470 ENCROACHMENT STATIONS=      175.7      308.3  TYPE=      4  TARGET=         .061
    26.50      5.72    657.52      0.00    657.42    657.58       .06       .05       .01    654.80
      490.       39.      207.      244.       49.       77.      190.      397.      104.    655.50
     5.42       .79      2.70      1.28      .080      .050      .080      .052    651.80   175.73
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  .001314      50.      50.      50.        2        0        1     0.00   132.62   308.35


  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     182.28  WSEL=     657.53  ENC Q1=     183.28  WSEL=     657.63  RATIO=    .0000
 NAT Q1=     194.  RATIOS LOB,CH,ROB=    .1125   .4892   .3983  WSEL=     657.63
3280 CROSS SECTION     27.00 EXTENDED      3.34 FEET


3470 ENCROACHMENT STATIONS=      281.2      431.1  TYPE=      4  TARGET=        .055
    27.00     5.94   657.64     0.00   657.53   657.68      .04      .09      .00   656.20
    490.      44.      254.     192.     73.      128.     190.     398.     105.    655.20
    5.44      .61      1.98     1.01     .080     .050     .080     .052   651.70   281.24
  .000711     100.     100.     100.       2        0        1     0.00   149.89   431.13


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     147.54  WSEL=     657.58  ENC Q1=     147.54  WSEL=     657.68  RATIO=    .0000
 NAT Q1=     157.  RATIOS LOB,CH,ROB=    .0842   .5195   .3964  WSEL=     657.68
3280 CROSS SECTION     27.09 EXTENDED      2.98 FEET

   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    ICC       ICONT     CORAR     TOPWID      ENDST

3470 ENCROACHMENT STATIONS=      288.1      430.8  TYPE=      4  TARGET=        .061
    27.09     5.58   657.68     0.00   657.58   657.74      .05      .05      .01   656.60
    490.      28.      271.     191.     46.      117.     166.     399.     105.    655.60
    5.45      .61      2.31     1.15     .080     .050     .080     .052   652.10   288.15
  .001097     60.      60.      60.        2        0        1     0.00   142.67   430.82


  3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR  XK        XKOR      COEQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.35      2.60    150.00      7.00      0.00     23.10      0.00    652.10    652.10

 2800 NAT Q1=     207.75  WSEL=     657.66  ENC Q1=     207.75  WSEL=     657.76  RATIO=    .0000
 NAT Q1=     220.  RATIOS LOB,CH,ROB=    .1471   .3694   .4836  WSEL=     657.76
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION     27.12 EXTENDED      3.66 FEET


3470 ENCROACHMENT STATIONS=      123.8      302.3  TYPE=      4  TARGET=        .055
    27.12     5.66   657.76     0.00   657.66   657.79      .03      .01      .00   655.80
    490.      64.      190.     235.     119.     107.     234.     399.     105.    654.50
    5.46      .54      1.79     1.01     .080     .050     .080     .052   652.10   123.84
  .000548     16.      16.      16.        0        0        7     0.00   178.50   302.34


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     234.40  WSEL=     657.69  ENC Q1=     234.40  WSEL=     657.79  RATIO=    .0000
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 NAT Q1=    249.  RATIOS LOB,CH,RCB=   .2026   .3433   .4541  WSEL=    657.79
3280 CROSS SECTION     27.20 EXTENDED      3.80 FEET


3470 ENCROACHMENT STATIONS=      68.2     301.9  TYPE=      4  TARGET=        .058
    27.20      5.80   657.80      0.00   657.69   657.82       .02       .02       .00    655.70
    490.       94.      177.      219.     196.     110.      241.      399.      105.     654.40
    5.47       .48      1.61      .91      .080     .050      .080      .052   652.00     68.17
  .000427      50.       50.       50.        2        0         1      0.00   233.71    301.88


  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=    .400 CEHV=    .800
 2800 NAT Q1=    237.23  WSEL=    657.71  ENC Q1=    237.23  WSEL=    657.81  RATIO=   .0000
 NAT Q1=    252.  RATIOS LOB,CH,RCB=   .2053   .3419   .4529  WSEL=    657.81
3280 CROSS SECTION     27.28 EXTENDED      3.91 FEET


3470 ENCROACHMENT STATIONS=      67.7     301.9  TYPE=      4  TARGET=        .058
    27.28      5.82   657.82      0.00   657.71   657.84       .02       .02       .00    655.70
    490.       95.      176.      219.     198.     110.      241.      400.      105.     654.40
    5.48       .48      1.60      .91      .080     .050      .080      .052   652.00     67.66
  .000422      45.       45.       45.        1        0         1      0.00   234.23    301.89


  3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SP   XK        XKCR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.50      2.60    200.00      12.00      0.00     37.20      0.00    652.00    652.00

 2800 NAT Q1=    185.67  WSEL=    657.75  ENC Q1=    185.67  WSEL=    657.85  RATIO=   .0000
 NAT Q1=    198.  RATIOS LOB,CH,RCB=   .1352   .3984   .4664  WSEL=    657.85
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION     27.32 EXTENDED      3.16 FEET

   SECND     DEPTH     CHSEL     CRITS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VRCB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLCBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      88.6     302.0  TYPE=      4  TARGET=        .063
    27.32      5.86   657.86      0.00   657.75   657.89       .03       .01       .01    656.40
    490.       54.      208.      227.     114.     107.      212.      400.      105.     654.50
    5.49       .48      1.96      1.07     .080     .050      .080      .052   652.00     88.61
  .000694      13.       13.       13.        0        0         7      0.00   213.40    302.01


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=    249.91  WSEL=    657.83  ENC Q1=    249.91  WSEL=    657.93  RATIO=  0.0000
 NAT Q1=    265.  RATIOS LOB,CH,RCB=   .2032   .3582   .4385  WSEL=    657.93
3280 CROSS SECTION     27.40 EXTENDED      3.63 FEET
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3470 ENCROACHMENT STATIONS=       67.7      302.4  TYPE=      4  TARGET=          .056
    27.49      6.33    657.93      0.00    657.83    657.95       .02        .06        .01     656.00
      490.       92.       196.      213.      200.      119.      244.       401.       106.      654.10
     5.51       .46      1.56       .87      .080      .050      .080       .052     651.60      67.75
  .000382       110.      110.      110.         2         0         1       0.00     234.63     302.38


 3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     239.24  WSEL=     657.86  ENC Q1=     239.24  WSEL=     657.96  RATIO=    .0000
 NAT Q1=     254.  RATIOS LOB,CH,ROB=    .1938    .3637    .4425  WSEL=     657.96
3280 CROSS SECTION      27.48 EXTENDED       3.56 FEET


3470 ENCROACHMENT STATIONS=       70.1      302.3  TYPE=      4  TARGET=          .057
    27.48      6.26    657.96      0.00    657.86    657.98       .02        .03        .00     656.10
      490.       86.       189.      215.      187.      117.      239.       402.       106.      654.20
     5.53       .46      1.61       .90      .080      .050      .080       .052     651.70      70.14
  .000417        70.       70.       70.         2         0         1       0.00     232.13     302.27


 3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB   XK          XKOR        COEQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.45        2.60      200.00        4.80        0.00       15.84        0.00      651.70      651.70

 2800 NAT Q1=     178.54  WSEL=     657.91  ENC Q1=     178.54  WSEL=     658.01  RATIO=    .0000
 NAT Q1=     191.  RATIOS LOB,CH,ROB=    .1535    .4201    .4264  WSEL=     658.01
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      27.52 EXTENDED       3.01 FEET


3470 ENCROACHMENT STATIONS=       80.8      300.8  TYPE=      4  TARGET=          .065
    27.52      6.31    658.01      0.00    657.91    658.05       .04        .01        .01     656.40
      490.       64.       220.      206.      126.      107.      195.       402.       106.      655.00
     5.53       .50      2.06      1.06      .080      .050      .080       .052     651.70      80.79
  .000749        20.       20.       20.         0         0         8       0.00     220.00     300.79


 3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     152.57  WSEL=     657.98  ENC Q1=     152.57  WSEL=     658.08  RATIO=    .0000
 NAT Q1=     164.  RATIOS LOB,CH,ROB=    .1154    .4476    .4370  WSEL=     658.08
3280 CROSS SECTION      27.60 EXTENDED       2.79 FEET

   SECNO       DEPTH       CRSEL       CRIWS       WSELK       EG          FV          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       XICH        XLOBR       ITRIAL      IDC         ICONT       CORAR       TOPWID      ENDST


3470 ENCROACHMENT STATIONS=       98.5      300.6  TYPE=      4  TARGET=          .069
    27.60      6.09    658.09      0.00    657.98    658.14       .05        .08        .01     656.70
      490.       42.       235.      212.       85.      101.      180.       403.       107.      655.30
     5.55       .50      2.33      1.18      .080      .050      .080       .052     652.00      98.53
  .001026        90.       90.       90.         2         0         1       0.00     202.11     300.64
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  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     173.41  WSEL=     658.16  ENC Q1=     173.41  WSEL=     658.26  RATIO=   0.0000
 NAT Q1=     186.  RATIOS LOB,CH,ROB=    .1465   .4250   .4285  WSEL=     658.26
3280 CROSS SECTION      27.68 EXTENDED       2.97 FEET


3470 ENCROACHMENT STATIONS=       83.2      300.8  TYPE=       4  TARGET=          .066
    27.68      6.27   658.27      0.00   658.16   658.31       .04       .17       .00    656.70
     490.       60.      223.      207.      119.      106.      192.      405.      108.     655.30
     5.58       .50      2.11      1.08      .080      .050      .080      .052   652.00     83.22
  .000794       185.      185.      185.         2         0         1      0.00   217.56    300.77


  3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB   XK         XKCR       COEQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       1.45       2.60     200.00       4.42       0.00      15.90       0.00     652.00     652.00

 2800 NAT Q1=     180.11  WSEL=     658.22  ENC Q1=     180.11  WSEL=     658.32  RATIO=    .0000
 NAT Q1=     193.  RATIOS LOB,CH,ROB=    .1556   .4186   .4258  WSEL=     658.32
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION      27.72 EXTENDED       3.02 FEET


3470 ENCROACHMENT STATIONS=       80.1      300.8  TYPE=       4  TARGET=          .065
    27.72      6.32   658.32      0.00   658.22   658.36       .04       .01       .00    656.70
     490.       65.      219.      206.      129.      107.      196.      405.      108.     655.30
     5.58       .50      2.05      1.05      .080      .050      .080      .052   652.00     80.08
  .000736        13.       13.       13.         0         0         9      0.00   220.72    300.80


  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     184.85  WSEL=     658.26  ENC Q1=     184.85  WSEL=     658.36  RATIO=    .0000
 NAT Q1=     198.  RATIOS LOB,CH,ROB=    .1618   .4142   .4240  WSEL=     658.36
3280 CROSS SECTION      27.80 EXTENDED       3.06 FEET


3470 ENCROACHMENT STATIONS=       78.1      300.8  TYPE=       4  TARGET=          .064
    27.80      6.36   658.36      0.00   658.26   658.40       .04       .04       .00    656.70
     490.       68.      217.      205.      136.      108.      198.      406.      108.     655.30
     5.59       .50      2.01      1.03      .080      .050      .080      .052   652.00     78.11
  .000699        50.       50.       50.         2         0         1      0.00   222.72    300.83


  3649 NUMBER SECTIONS EXCEED LIMIT
CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     250.67  WSEL=     658.46  ENC Q1=     250.67  WSEL=     658.56  RATIO=   0.0000
 NAT Q1=     263.  RATIOS LOB,CH,ROB=    .2967   .3286   .3757  WSEL=     658.56
3280 CROSS SECTION      28.00 EXTENDED       3.77 FEET

   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     ICC        ICONT      CORAR      TOPWID       ENDST
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3470 ENCROACHMENT STATIONS=      290.4      445.9  TYPE=      4  TARGET=          .047
    28.00      6.07    658.57      0.00    658.46    658.59       .02       .18       .00    655.90
    490.       144.      167.      178.      192.      109.      221.      410.      110.     655.80
    5.69       .75      1.53       .81      .080      .050      .080      .052    652.50    290.35
  .000375      370.      370.      370.         2         0         1      0.00    155.59    445.94

  3649 NUMBER SECTIONS EXCEED LIMIT
 2800 NAT Q1=     280.78  WSEL=     658.69  ENC Q1=     280.78  WSEL=     658.79  RATIO=    .0000
 NAT Q1=     294.  RATIOS LOB,CH,ROB=    .2189    .4305    .3506  WSEL=     658.79
3280 CROSS SECTION      29.00 EXTENDED       3.68 FEET


3470 ENCROACHMENT STATIONS=      137.2      303.8  TYPE=      4  TARGET=          .045
    29.00      5.18    658.78      0.00    658.69    658.80       .01       .21       .00    655.70
    490.       103.      219.      169.      190.      198.      244.      418.      112.     653.60
    5.90       .54      1.10       .69      .100      .060      .100      .052    653.60    137.21
  .000300      630.      630.      630.         2         0         1      0.00    166.61    303.81

  3649 NUMBER SECTIONS EXCEED LIMIT
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SUMMARY PRINTOUT FOR MULTIPLE PROFILES

INDIAN CREEK 100 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
6.200	1020.00	579.44	579.44	183.52	579.64	400.00	0.00	0.00	579.44		-I		-I	579.44
6.200	1020.00	579.44	579.44	178.55	579.66	287.92	491.43	779.35	579.44		0.00		0.00	579.44
7.000	1020.00	581.39	581.39	150.60	581.75	205.82	0.00	0.00	0.00		579.44		579.44	0.00
7.000	1020.00	581.45	581.45	150.42	581.83	100.10	294.00	394.10	581.39		579.44		579.44	581.39
7.100	1020.00	583.87	583.87	119.20	584.37	73.08	0.00	0.00	0.00		0.00		0.00	0.00
7.100	1020.00	583.94	583.94	118.64	584.47	66.73	653.52	724.00	583.87		581.39		581.39	583.87
7.980	1020.00	585.78	585.78	67.30	589.79	8.00	0.00	0.00	0.00		0.00		0.00	0.00
7.980	1020.00	585.78	585.78	51.82	589.79	8.00	700.00	708.00	585.78		583.87		583.87	585.78
8.080	1020.00	589.82	589.82	92.19	591.70	8.00	0.00	0.00	0.00		0.00		0.00	0.00
8.080	1020.00	589.82	589.82	86.35	591.70	8.00	669.00	677.00	589.82		585.78		585.78	589.82
8.100	1020.00	591.97	591.97	1303.03	591.98	119.00	0.00	0.00	0.00		0.00		0.00	0.00
8.100	1020.00	591.98	591.98	1286.45	591.99	116.18	613.03	729.22	591.97		589.82		589.82	591.97
8.200	1020.00	592.01	592.01	2810.66	592.01	537.42	0.00	0.00	0.00		0.00		0.00	0.00
8.200	1020.00	592.01	592.01	2791.09	592.02	459.24	517.91	977.15	592.01		591.97		591.97	592.01
8.300	1020.00	592.03	592.03	1465.77	592.04	422.24	0.00	0.00	0.00		0.00		0.00	0.00
8.300	1020.00	592.04	592.04	1426.02	592.05	396.23	210.00	627.83	592.03		592.01		592.01	592.03
8.980	1020.00	592.04	592.04	1423.80	592.04	420.95	0.00	0.00	0.00		0.00		0.00	0.00
8.980	1020.00	592.05	592.05	1384.79	592.05	395.05	210.00	627.60	592.04		592.03		592.03	592.04
9.020	1020.00	592.36	592.36	1871.81	592.37	453.85	0.00	0.00	0.00		0.00		0.00	0.00
9.020	1020.00	592.37	592.37	1826.64	592.37	429.53	237.47	667.00	592.36		592.04		592.04	592.36
9.100	1020.00	592.37	592.37	1970.49	592.37	457.58	0.00	0.00	0.00		0.00		0.00	0.00
9.100	1020.00	592.37	592.37	1924.48	592.37	429.77	237.23	667.00	592.37		592.36		592.36	592.37
9.200	1020.00	592.37	592.37	635.89	592.40	175.00	0.00	0.00	0.00		0.00		0.00	0.00
9.200	1020.00	592.37	592.37	620.77	592.40	165.38	412.88	578.26	592.37		592.37		592.37	592.37
9.210	1020.00	592.40	592.40	462.17	592.47	100.00	0.00	0.00	0.00		0.00		0.00	0.00
9.210	1020.00	592.40	592.40	460.95	592.48	96.10	445.95	542.05	592.40		592.37		592.37	592.40
9.220	1020.00	592.52	592.52	478.00	592.59	100.00	0.00	0.00	0.00		0.00		0.00	0.00
9.220	1020.00	592.53	592.53	477.25	592.60	96.19	445.91	542.10	592.52		592.40		592.40	592.52
9.300	1020.00	592.46	592.46	292.46	592.68	41.00	0.00	0.00	0.00		0.00		0.00	0.00
9.300	1020.00	592.47	592.47	286.69	592.69	41.00	253.00	294.00	592.46		592.52		592.52	592.46
9.380	1020.00	592.42	592.42	226.98	592.88	24.00	0.00	0.00	0.00		0.00		0.00	0.00
9.380	1020.00	592.45	592.45	204.84	592.90	24.00	257.00	281.00	592.42		592.46		592.46	592.42
9.420	1020.00	594.34	594.34	217.56	594.79	24.00	0.00	0.00	0.00		0.00		0.00	0.00
9.420	1020.00	594.37	594.37	201.55	594.81	24.00	224.00	248.00	594.34		592.42		592.42	594.34

9.500	1020.00	594.82	594.82	566.21	594.88	101.00	0.00	0.00	0.00	0.00	0.00	0.00
9.500	1020.00	594.84	594.84	557.34	594.90	91.90	192.59	284.49	594.82	594.34	594.34	594.82

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
9.610	1020.00	595.13	595.13	921.74	595.14	322.93	0.00	0.00	0.00	0.00	0.00	0.00
9.610	1020.00	595.15	595.15	921.79	595.16	281.32	1123.00	1404.32	595.13	594.82	594.82	595.13
9.620	1020.00	595.18	595.18	611.25	595.20	356.49	0.00	0.00	0.00	0.00	0.00	0.00
9.620	1020.00	595.21	595.21	625.16	595.22	313.53	73.75	387.28	595.18	595.13	595.13	595.18
9.680	1020.00	595.21	595.21	618.92	595.22	356.98	0.00	0.00	0.00	0.00	0.00	0.00
9.680	1020.00	595.23	595.23	632.25	595.25	314.15	73.33	387.48	595.21	595.18	595.18	595.21
9.720	1020.00	595.27	595.27	640.10	595.28	358.31	0.00	0.00	0.00	0.00	0.00	0.00
9.720	1020.00	595.29	595.29	650.53	595.31	318.47	70.64	389.11	595.27	595.21	595.21	595.27
9.750	1020.00	595.28	595.28	610.06	595.29	356.42	0.00	0.00	0.00	0.00	0.00	0.00
9.750	1020.00	595.30	595.30	623.59	595.32	313.43	73.82	387.25	595.28	595.27	595.27	595.28
9.840	1020.00	595.56	595.56	281.93	595.62	232.47	0.00	0.00	0.00	0.00	0.00	0.00
9.840	1020.00	595.57	595.57	273.50	595.65	171.66	1104.93	1276.59	595.56	595.28	595.28	595.56
9.850	1020.00	595.78	595.78	401.43	595.81	386.53	0.00	0.00	0.00	0.00	0.00	0.00
9.850	1020.00	595.81	595.81	388.97	595.84	306.15	109.54	415.69	595.78	595.56	595.56	595.78
9.880	1020.00	595.85	595.85	416.75	595.87	388.14	0.00	0.00	0.00	0.00	0.00	0.00
9.880	1020.00	595.88	595.88	405.21	595.91	309.33	108.67	418.00	595.85	595.78	595.78	595.85
9.920	1020.00	595.91	595.91	431.48	595.93	389.67	0.00	0.00	0.00	0.00	0.00	0.00
9.920	1020.00	595.94	595.94	419.76	595.97	311.86	107.94	419.80	595.91	595.85	595.85	595.91
9.930	1020.00	595.96	595.96	328.92	595.99	378.46	0.00	0.00	0.00	0.00	0.00	0.00
9.930	1020.00	596.00	596.00	320.20	596.03	293.80	113.82	407.63	595.96	595.91	595.91	595.96
9.940	1020.00	596.28	596.28	218.69	596.35	248.64	0.00	0.00	0.00	0.00	0.00	0.00
9.940	1020.00	596.33	596.33	215.68	596.41	202.77	1141.07	1343.85	596.28	595.96	595.96	596.28
9.950	1020.00	596.65	596.65	352.31	596.68	273.40	0.00	0.00	0.00	0.00	0.00	0.00
9.950	1020.00	596.72	596.72	349.10	596.75	232.16	60.60	292.76	596.65	596.28	596.28	596.65
9.960	1020.00	596.73	596.73	366.46	596.75	274.47	0.00	0.00	0.00	0.00	0.00	0.00
9.960	1020.00	596.79	596.79	363.40	596.82	233.26	59.89	293.16	596.73	596.65	596.65	596.73
9.970	1020.00	596.81	596.81	382.22	596.83	275.64	0.00	0.00	0.00	0.00	0.00	0.00
9.970	1020.00	596.88	596.88	378.90	596.90	234.18	59.32	293.50	596.81	596.73	596.73	596.81
9.980	1020.00	596.87	596.87	394.50	596.90	276.54	0.00	0.00	0.00	0.00	0.00	0.00
9.980	1020.00	596.94	596.94	391.19	596.97	234.86	58.90	293.76	596.87	596.81	596.81	596.87
9.990	695.00	597.29	597.29	191.98	597.33	281.53	0.00	0.00	0.00	0.00	0.00	0.00
9.990	695.00	597.36	597.36	191.83	597.40	198.18	148.28	346.46	597.29	596.87	596.87	597.29
10.000	695.00	598.00	598.00	177.94	598.04	278.03	0.00	0.00	0.00	0.00	0.00	0.00
10.000	695.00	598.07	598.07	178.55	598.11	195.94	148.95	344.89	598.00	597.29	597.29	598.00
10.010	695.00	598.95	598.95	200.77	598.98	283.57	0.00	0.00	0.00	0.00	0.00	0.00
10.010	695.00	599.02	599.02	199.95	599.06	200.49	147.34	347.83	598.95	598.00	598.00	598.95

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
10.040	695.00	600.09	600.09	136.51	600.19	162.10	0.00	0.00	0.00	0.00	0.00	0.00
10.040	695.00	600.14	600.14	140.33	600.25	128.18	184.30	312.49	600.09	598.95	598.95	600.09
10.050	695.00	601.47	601.47	186.07	601.54	176.72	0.00	0.00	0.00	0.00	0.00	0.00
10.050	695.00	601.48	601.48	188.19	601.54	149.22	177.10	326.32	601.47	600.09	600.09	601.47
10.100	695.00	602.98	602.98	53.07	603.47	128.21	0.00	0.00	0.00	0.00	0.00	0.00
10.100	695.00	603.00	603.00	50.30	603.60	91.17	201.41	292.58	602.98	601.47	601.47	602.98
10.180	695.00	603.79	603.79	368.02	603.81	150.00	0.00	0.00	0.00	0.00	0.00	0.00
10.180	695.00	603.94	603.94	383.93	603.97	140.53	174.90	315.43	603.79	602.98	602.98	603.79
10.220	695.00	605.71	605.71	504.01	605.73	166.86	0.00	0.00	0.00	0.00	0.00	0.00
10.220	695.00	605.87	605.87	531.17	605.89	148.45	332.09	480.54	605.71	603.79	603.79	605.71
10.300	695.00	605.72	605.72	325.21	605.76	152.68	0.00	0.00	0.00	0.00	0.00	0.00
10.300	695.00	605.88	605.88	340.46	605.91	129.66	346.97	476.63	605.72	605.71	605.71	605.72
10.350	695.00	605.78	605.78	281.15	605.82	149.32	0.00	0.00	0.00	0.00	0.00	0.00
10.350	695.00	605.93	605.93	294.78	605.97	127.14	348.40	475.53	605.78	605.72	605.72	605.78
10.380	695.00	605.85	605.85	132.22	605.98	115.90	0.00	0.00	0.00	0.00	0.00	0.00
10.380	695.00	605.99	605.99	136.54	606.12	94.36	71.61	170.00	605.85	605.78	605.78	605.85
10.420	695.00	607.26	607.26	229.75	607.31	134.51	0.00	0.00	0.00	0.00	0.00	0.00
10.420	695.00	607.40	607.40	235.20	607.46	107.04	62.96	170.00	607.26	605.85	605.85	607.26
10.450	695.00	607.32	607.32	173.25	607.38	131.06	0.00	0.00	0.00	0.00	0.00	0.00
10.450	695.00	607.46	607.46	177.59	607.52	105.75	64.25	170.00	607.32	607.26	607.26	607.32
11.000	695.00	607.95	607.95	324.13	607.97	153.99	0.00	0.00	0.00	0.00	0.00	0.00
11.000	695.00	608.07	608.07	330.69	608.09	142.85	274.61	417.46	607.95	607.32	607.32	607.95
11.500	695.00	608.66	608.66	230.57	608.70	153.61	0.00	0.00	0.00	0.00	0.00	0.00
11.500	695.00	608.75	608.75	234.15	608.79	138.22	275.62	413.83	608.66	607.95	607.95	608.66
11.900	695.00	609.46	609.46	208.61	609.50	153.51	0.00	0.00	0.00	0.00	0.00	0.00
11.900	695.00	609.53	609.53	210.15	609.58	136.07	276.02	412.10	609.46	608.66	608.66	609.46
11.980	695.00	609.68	609.68	117.41	609.81	116.67	0.00	0.00	0.00	0.00	0.00	0.00
11.980	695.00	609.74	609.74	118.63	609.89	95.17	310.58	405.74	609.68	609.46	609.46	609.68
12.020	695.00	612.70	612.70	150.20	612.89	73.92	0.00	0.00	0.00	0.00	0.00	0.00
12.020	695.00	612.77	612.77	149.53	612.97	54.97	99.03	154.00	612.70	609.68	609.68	612.70
12.100	695.00	613.06	613.06	100.92	613.44	95.11	0.00	0.00	0.00	0.00	0.00	0.00
12.100	695.00	613.13	613.13	101.81	613.51	42.37	102.34	144.70	613.06	612.70	612.70	613.06
12.180	695.00	613.44	613.44	109.08	613.76	108.60	0.00	0.00	0.00	0.00	0.00	0.00
12.180	695.00	613.51	613.51	111.19	613.84	60.79	101.79	162.58	613.44	613.06	613.06	613.44
12.220	695.00	613.92	613.92	358.14	613.95	204.08	0.00	0.00	0.00	0.00	0.00	0.00
12.220	695.00	614.00	614.00	356.03	614.02	183.63	41.83	225.46	613.92	613.44	613.44	613.92

SECTION	DISCHARGE	CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
SECTION	DISCHARGE	CWSEL												
12.300	695.00	613.96	613.96	240.17	614.01	200.35	0.00	0.00	0.00		0.00		0.00	0.00
12.300	695.00	614.04	614.04	238.85	614.08	174.86	49.27	224.13	613.96		613.92		613.92	613.96
12.400	695.00	615.38	615.38	134.52	615.51	226.40	0.00	0.00	0.00		0.00		0.00	0.00
12.400	695.00	615.44	615.44	138.96	615.56	176.28	13.58	189.86	615.38		613.96		613.96	615.38
12.480	695.00	615.70	615.70	229.74	615.75	257.94	0.00	0.00	0.00		0.00		0.00	0.00
12.480	695.00	615.74	615.74	231.74	615.79	204.74	8.62	213.36	615.70		615.38		615.38	615.70
12.520	695.00	615.77	615.77	349.08	615.79	259.71	0.00	0.00	0.00		0.00		0.00	0.00
12.520	695.00	615.81	615.81	355.73	615.83	224.01	80.81	304.82	615.77		615.70		615.70	615.77
12.600	695.00	615.78	615.78	169.58	615.85	193.53	0.00	0.00	0.00		0.00		0.00	0.00
12.600	695.00	615.82	615.82	171.72	615.89	149.38	107.66	257.04	615.78		615.77		615.77	615.78
12.700	695.00	616.89	616.89	107.24	617.07	158.69	0.00	0.00	0.00		0.00		0.00	0.00
12.700	695.00	616.92	616.92	106.67	617.11	105.77	119.98	225.76	616.89		615.78		615.78	616.89
12.900	695.00	618.39	618.39	145.69	618.46	297.91	0.00	0.00	0.00		0.00		0.00	0.00
12.900	695.00	618.42	618.42	147.44	618.50	197.18	293.71	490.90	618.39		616.89		616.89	618.39
13.000	490.00	619.58	619.58	82.44	619.69	187.39	0.00	0.00	0.00		0.00		0.00	0.00
13.000	490.00	619.57	619.57	84.93	619.68	165.37	295.14	460.51	619.58		618.39		618.39	619.58
13.050	490.00	621.37	621.37	83.05	621.48	188.08	0.00	0.00	0.00		0.00		0.00	0.00
13.050	490.00	621.33	621.33	81.68	621.45	169.12	293.96	463.08	621.37		619.58		619.58	621.37
13.060	490.00	623.26	623.26	75.08	623.48	231.63	0.00	0.00	0.00		0.00		0.00	0.00
13.060	490.00	623.27	623.27	74.30	623.50	138.26	84.66	222.91	623.26		621.37		621.37	623.26
13.100	490.00	625.21	625.21	85.98	625.37	251.65	0.00	0.00	0.00		0.00		0.00	0.00
13.100	490.00	625.25	625.25	85.61	625.42	159.53	83.24	242.77	625.21		623.26		623.26	625.21
13.180	490.00	625.51	625.51	230.69	625.53	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.180	490.00	625.56	625.56	231.17	625.58	186.15	6.35	192.51	625.51		625.21		625.21	625.51
13.220	490.00	625.60	625.60	244.54	625.62	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	490.00	625.65	625.65	245.19	625.67	191.03	5.42	196.45	625.60		625.51		625.51	625.60
13.300	490.00	625.62	625.62	195.57	625.64	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	490.00	625.67	625.67	196.71	625.70	179.32	6.78	186.10	625.62		625.60		625.60	625.62
14.000	490.00	625.73	625.73	86.48	625.86	261.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	490.00	625.78	625.78	98.82	625.91	177.66	235.58	413.24	625.73		625.62		625.62	625.73
14.980	490.00	626.00	626.00	154.40	626.07	159.93	0.00	0.00	0.00		0.00		0.00	0.00
14.980	490.00	626.04	626.04	156.81	626.11	122.69	53.39	176.08	626.00		625.73		625.73	626.00
15.020	490.00	626.12	626.12	164.49	626.18	164.37	0.00	0.00	0.00		0.00		0.00	0.00
15.020	490.00	626.16	626.16	167.75	626.22	129.36	47.79	177.15	626.12		626.00		626.00	626.12
15.100	490.00	626.16	626.16	121.15	626.27	143.69	0.00	0.00	0.00		0.00		0.00	0.00
15.100	490.00	626.20	626.20	119.45	626.31	96.12	75.89	172.01	626.16		626.12		626.12	626.16

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
16.000	490.00	627.02	627.02	56.96	627.34	80.73	0.00	0.00	0.00	0.00	0.00	0.00
16.000	490.00	627.07	627.07	57.66	627.40	47.45	149.48	197.00	627.02	626.16	626.16	627.02
16.100	490.00	628.23	628.23	76.32	628.44	106.12	0.00	0.00	0.00	0.00	0.00	0.00
16.100	490.00	628.26	628.26	76.73	628.48	71.59	9.27	80.87	628.23	627.02	627.02	628.23
16.980	490.00	628.74	628.74	71.95	628.97	105.47	0.00	0.00	0.00	0.00	0.00	0.00
16.980	490.00	628.77	628.77	72.34	629.00	68.01	10.01	78.02	628.74	628.23	628.23	628.74
17.020	490.00	630.27	630.27	206.27	630.30	225.00	0.00	0.00	0.00	0.00	0.00	0.00
17.020	490.00	630.30	630.30	199.92	630.33	172.71	70.93	243.64	630.27	628.74	628.74	630.27
17.100	490.00	630.29	630.29	208.81	630.32	225.00	0.00	0.00	0.00	0.00	0.00	0.00
17.100	490.00	630.32	630.32	202.59	630.35	173.96	70.53	244.50	630.29	630.27	630.27	630.29
18.000	490.00	630.67	630.67	191.65	630.71	155.92	0.00	0.00	0.00	0.00	0.00	0.00
18.000	490.00	630.71	630.71	191.81	630.76	108.71	289.94	398.65	630.67	630.29	630.29	630.67
18.900	490.00	631.01	631.01	205.62	631.06	94.68	0.00	0.00	0.00	0.00	0.00	0.00
18.900	490.00	631.05	631.05	208.80	631.10	80.24	117.31	197.56	631.01	630.67	630.67	631.01
18.980	490.00	631.07	631.07	120.86	631.19	45.00	0.00	0.00	0.00	0.00	0.00	0.00
18.980	490.00	631.11	631.11	122.68	631.23	45.00	135.00	180.00	631.07	631.01	631.01	631.07
19.080	490.00	631.08	631.08	127.65	631.20	45.00	0.00	0.00	0.00	0.00	0.00	0.00
19.080	490.00	631.18	631.18	133.14	631.30	45.00	0.00	0.00	631.08	631.07	631.07	631.08
19.100	490.00	631.16	631.16	100.08	631.30	83.28	0.00	0.00	0.00	0.00	0.00	0.00
19.100	490.00	631.25	631.25	102.22	631.40	47.52	148.00	195.52	631.16	631.08	631.08	631.16
20.000	490.00	632.40	632.40	63.67	632.57	240.51	0.00	0.00	0.00	0.00	0.00	0.00
20.000	490.00	632.46	632.46	62.59	632.65	122.39	172.61	295.00	632.40	631.16	631.16	632.40
20.100	490.00	633.00	633.00	45.88	633.48	140.92	0.00	0.00	0.00	0.00	0.00	0.00
20.100	490.00	633.07	633.07	46.04	633.57	37.90	9.00	46.92	633.00	632.40	632.40	633.00
20.980	490.00	634.03	634.03	90.21	634.17	147.64	0.00	0.00	0.00	0.00	0.00	0.00
20.980	490.00	634.13	634.13	89.84	634.27	112.12	9.00	121.12	634.03	633.00	633.00	634.03
21.020	490.00	634.55	634.55	95.69	634.70	152.79	0.00	0.00	0.00	0.00	0.00	0.00
21.020	490.00	634.64	634.64	100.87	634.78	99.82	68.53	168.35	634.55	634.03	634.03	634.55
21.100	490.00	634.68	634.68	97.69	634.83	156.77	0.00	0.00	0.00	0.00	0.00	0.00
21.100	490.00	634.76	634.76	102.18	634.90	101.82	67.11	168.93	634.68	634.55	634.55	634.68
22.000	490.00	635.36	635.36	97.60	635.47	164.00	0.00	0.00	0.00	0.00	0.00	0.00
22.000	490.00	635.39	635.39	97.10	635.51	112.92	53.10	166.01	635.36	634.68	634.68	635.36
22.980	490.00	635.69	635.69	138.70	635.74	164.00	0.00	0.00	0.00	0.00	0.00	0.00
22.980	490.00	635.73	635.73	135.71	635.79	124.50	50.31	174.81	635.69	635.36	635.36	635.69
23.020	490.00	636.75	636.75	342.82	636.76	165.00	0.00	0.00	0.00	0.00	0.00	0.00
23.020	490.00	636.79	636.79	335.43	636.80	156.36	214.65	371.01	636.75	635.69	635.69	636.75

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford Twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: 100yr Convergence

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 year Convergence Summary

INDIAN CREEK 100 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
8.200	1020.00	580.50	580.50	415.58	580.54	400.00	0.00	0.00	580.50	-I	-I	580.50
8.200	1020.00	578.90	578.90	112.48	579.48	297.64	0.00	0.00	578.40	0.00	0.00	578.40
8.000	1020.00	580.98	580.98	115.81	581.53	148.45	0.00	0.00	0.00	580.50	580.50	0.00
8.000	1020.00	581.77	581.77	191.72	582.00	276.29	0.00	0.00	0.00	578.40	578.40	0.00
8.100	1020.00	584.13	584.13	134.51	584.54	73.70	0.00	0.00	0.00	0.00	0.00	0.00
8.100	1020.00	583.64	583.64	106.01	584.25	72.52	0.00	0.00	0.00	0.00	0.00	0.00
8.980	1020.00	585.78	585.78	67.30	589.79	8.00	0.00	0.00	0.00	0.00	0.00	0.00
8.980	1020.00	585.78	585.78	67.33	589.79	8.00	0.00	0.00	0.00	0.00	0.00	0.00
8.080	1020.00	589.82	589.82	92.19	591.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00
8.080	1020.00	589.82	589.82	92.22	591.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00
8.100	1020.00	591.97	591.97	1303.09	591.98	119.00	0.00	0.00	0.00	0.00	0.00	0.00
8.100	1020.00	591.98	591.98	1303.47	591.99	119.00	0.00	0.00	0.00	0.00	0.00	0.00
8.200	1020.00	592.01	592.01	2810.88	592.01	537.43	0.00	0.00	0.00	0.00	0.00	0.00
8.200	1020.00	592.01	592.01	2812.09	592.01	537.49	0.00	0.00	0.00	0.00	0.00	0.00
8.300	1020.00	592.04	592.04	1465.92	592.04	422.25	0.00	0.00	0.00	0.00	0.00	0.00
8.300	1020.00	592.04	592.04	1466.79	592.04	422.28	0.00	0.00	0.00	0.00	0.00	0.00
8.980	1020.00	592.04	592.04	1423.95	592.04	420.95	0.00	0.00	0.00	0.00	0.00	0.00
8.980	1020.00	592.04	592.04	1424.80	592.04	420.98	0.00	0.00	0.00	0.00	0.00	0.00
9.020	1020.00	592.36	592.36	1871.91	592.37	453.85	0.00	0.00	0.00	0.00	0.00	0.00
9.020	1020.00	592.37	592.37	1872.47	592.37	453.88	0.00	0.00	0.00	0.00	0.00	0.00
9.100	1020.00	592.37	592.37	1970.59	592.37	457.58	0.00	0.00	0.00	0.00	0.00	0.00
9.100	1020.00	592.37	592.37	1971.16	592.37	457.61	0.00	0.00	0.00	0.00	0.00	0.00
9.200	1020.00	592.37	592.37	635.93	592.40	175.00	0.00	0.00	0.00	0.00	0.00	0.00
9.200	1020.00	592.37	592.37	636.16	592.40	175.00	0.00	0.00	0.00	0.00	0.00	0.00
9.210	1020.00	592.40	592.40	462.19	592.47	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.210	1020.00	592.40	592.40	462.33	592.47	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.220	1020.00	592.52	592.52	478.03	592.59	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.220	1020.00	592.52	592.52	478.17	592.59	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.300	1020.00	592.46	592.46	292.48	592.68	41.00	0.00	0.00	0.00	0.00	0.00	0.00
9.300	1020.00	592.46	592.46	292.56	592.68	41.00	0.00	0.00	0.00	0.00	0.00	0.00
9.380	1020.00	592.42	592.42	226.99	592.88	24.00	0.00	0.00	0.00	0.00	0.00	0.00
9.380	1020.00	592.42	592.42	227.04	592.88	24.00	0.00	0.00	0.00	0.00	0.00	0.00
9.420	1020.00	594.34	594.34	217.57	594.79	24.00	0.00	0.00	0.00	0.00	0.00	0.00
9.420	1020.00	594.34	594.34	217.63	594.79	24.00	0.00	0.00	0.00	0.00	0.00	0.00

9.500	1020.00	594.82	594.82	566.23	594.88	101.00	0.00	0.00	0.00	0.00	0.00	0.00
9.500	1020.00	594.83	594.83	566.38	594.88	101.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
9.610	1020.00	595.13	595.13	921.80	595.14	322.94	0.00	0.00	0.00		0.00		0.00	0.00
9.610	1020.00	595.13	595.13	922.11	595.14	322.98	0.00	0.00	0.00		0.00		0.00	0.00
9.620	1020.00	595.18	595.18	611.29	595.20	356.49	0.00	0.00	0.00		0.00		0.00	0.00
9.620	1020.00	595.18	595.18	611.56	595.20	356.51	0.00	0.00	0.00		0.00		0.00	0.00
9.680	1020.00	595.21	595.21	618.97	595.22	356.98	0.00	0.00	0.00		0.00		0.00	0.00
9.680	1020.00	595.21	595.21	619.22	595.22	357.00	0.00	0.00	0.00		0.00		0.00	0.00
9.720	1020.00	595.27	595.27	640.14	595.28	358.31	0.00	0.00	0.00		0.00		0.00	0.00
9.720	1020.00	595.27	595.27	640.40	595.28	358.33	0.00	0.00	0.00		0.00		0.00	0.00
9.750	1020.00	595.28	595.28	610.11	595.29	356.42	0.00	0.00	0.00		0.00		0.00	0.00
9.750	1020.00	595.28	595.28	610.36	595.29	356.43	0.00	0.00	0.00		0.00		0.00	0.00
9.840	1020.00	595.56	595.56	281.94	595.62	232.47	0.00	0.00	0.00		0.00		0.00	0.00
9.840	1020.00	595.56	595.56	282.03	595.62	232.49	0.00	0.00	0.00		0.00		0.00	0.00
9.850	1020.00	595.78	595.78	401.45	595.81	386.54	0.00	0.00	0.00		0.00		0.00	0.00
9.850	1020.00	595.78	595.78	401.56	595.81	386.55	0.00	0.00	0.00		0.00		0.00	0.00
9.880	1020.00	595.85	595.85	416.77	595.87	388.15	0.00	0.00	0.00		0.00		0.00	0.00
9.880	1020.00	595.85	595.85	416.87	595.87	388.16	0.00	0.00	0.00		0.00		0.00	0.00
9.920	1020.00	595.91	595.91	431.50	595.93	389.67	0.00	0.00	0.00		0.00		0.00	0.00
9.920	1020.00	595.91	595.91	431.60	595.93	389.68	0.00	0.00	0.00		0.00		0.00	0.00
9.930	1020.00	595.96	595.96	328.94	595.99	378.46	0.00	0.00	0.00		0.00		0.00	0.00
9.930	1020.00	595.96	595.96	329.03	595.99	378.47	0.00	0.00	0.00		0.00		0.00	0.00
9.940	1020.00	596.28	596.28	218.70	596.35	248.64	0.00	0.00	0.00		0.00		0.00	0.00
9.940	1020.00	596.28	596.28	218.73	596.35	248.65	0.00	0.00	0.00		0.00		0.00	0.00
9.950	1020.00	596.65	596.65	352.31	596.68	273.40	0.00	0.00	0.00		0.00		0.00	0.00
9.950	1020.00	596.65	596.65	352.34	596.68	273.40	0.00	0.00	0.00		0.00		0.00	0.00
9.960	1020.00	596.73	596.73	366.46	596.75	274.47	0.00	0.00	0.00		0.00		0.00	0.00
9.960	1020.00	596.73	596.73	366.49	596.75	274.47	0.00	0.00	0.00		0.00		0.00	0.00
9.970	1020.00	596.81	596.81	382.22	596.83	275.64	0.00	0.00	0.00		0.00		0.00	0.00
9.970	1020.00	596.81	596.81	382.25	596.83	275.64	0.00	0.00	0.00		0.00		0.00	0.00
9.980	1020.00	596.87	596.87	394.51	596.90	276.54	0.00	0.00	0.00		0.00		0.00	0.00
9.980	1020.00	596.87	596.87	394.54	596.90	276.54	0.00	0.00	0.00		0.00		0.00	0.00
9.990	695.00	597.29	597.29	191.98	597.33	281.53	0.00	0.00	0.00		0.00		0.00	0.00
9.990	695.00	597.29	597.29	191.99	597.33	281.53	0.00	0.00	0.00		0.00		0.00	0.00
10.000	695.00	598.00	598.00	177.94	598.04	278.03	0.00	0.00	0.00		0.00		0.00	0.00
10.000	695.00	598.00	598.00	177.94	598.04	278.03	0.00	0.00	0.00		0.00		0.00	0.00
10.010	695.00	598.95	598.95	200.77	598.98	283.57	0.00	0.00	0.00		0.00		0.00	0.00
10.010	695.00	598.95	598.95	200.77	598.98	283.57	0.00	0.00	0.00		0.00		0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
SECTION	DISCHARGE	CWSEL												
10.040	695.00	600.09	600.09	136.51	600.19	162.10	0.00	0.00	0.00		0.00		0.00	0.00
10.040	695.00	600.09	600.09	136.51	600.19	162.10	0.00	0.00	0.00		0.00		0.00	0.00
10.050	695.00	601.47	601.47	186.07	601.54	176.72	0.00	0.00	0.00		0.00		0.00	0.00
10.050	695.00	601.47	601.47	186.07	601.54	176.72	0.00	0.00	0.00		0.00		0.00	0.00
10.100	695.00	602.98	602.98	53.07	603.47	128.21	0.00	0.00	0.00		0.00		0.00	0.00
10.100	695.00	602.98	602.98	53.07	603.47	128.21	0.00	0.00	0.00		0.00		0.00	0.00
10.180	695.00	603.79	603.79	368.02	603.81	150.00	0.00	0.00	0.00		0.00		0.00	0.00
10.180	695.00	603.79	603.79	368.02	603.81	150.00	0.00	0.00	0.00		0.00		0.00	0.00
10.220	695.00	605.71	605.71	504.01	605.73	166.86	0.00	0.00	0.00		0.00		0.00	0.00
10.220	695.00	605.71	605.71	504.01	605.73	166.86	0.00	0.00	0.00		0.00		0.00	0.00
10.300	695.00	605.72	605.72	325.21	605.76	152.68	0.00	0.00	0.00		0.00		0.00	0.00
10.300	695.00	605.72	605.72	325.21	605.76	152.68	0.00	0.00	0.00		0.00		0.00	0.00
10.350	695.00	605.78	605.78	281.15	605.82	149.32	0.00	0.00	0.00		0.00		0.00	0.00
10.350	695.00	605.78	605.78	281.15	605.82	149.32	0.00	0.00	0.00		0.00		0.00	0.00
10.380	695.00	605.85	605.85	132.22	605.98	115.90	0.00	0.00	0.00		0.00		0.00	0.00
10.380	695.00	605.85	605.85	132.22	605.98	115.90	0.00	0.00	0.00		0.00		0.00	0.00
10.420	695.00	607.26	607.26	229.75	607.31	134.51	0.00	0.00	0.00		0.00		0.00	0.00
10.420	695.00	607.26	607.26	229.75	607.31	134.51	0.00	0.00	0.00		0.00		0.00	0.00
10.450	695.00	607.32	607.32	173.25	607.38	131.06	0.00	0.00	0.00		0.00		0.00	0.00
11.000	695.00	607.95	607.95	324.13	607.97	153.99	0.00	0.00	0.00		0.00		0.00	0.00
11.000	695.00	607.95	607.95	324.13	607.97	153.99	0.00	0.00	0.00		0.00		0.00	0.00
11.500	695.00	608.66	608.66	230.57	608.70	153.61	0.00	0.00	0.00		0.00		0.00	0.00
11.500	695.00	608.66	608.66	230.57	608.70	153.61	0.00	0.00	0.00		0.00		0.00	0.00
11.900	695.00	609.46	609.46	208.61	609.50	153.51	0.00	0.00	0.00		0.00		0.00	0.00
11.900	695.00	609.46	609.46	208.61	609.50	153.51	0.00	0.00	0.00		0.00		0.00	0.00
11.980	695.00	609.68	609.68	117.41	609.81	116.67	0.00	0.00	0.00		0.00		0.00	0.00
11.980	695.00	609.68	609.68	117.41	609.81	116.67	0.00	0.00	0.00		0.00		0.00	0.00
12.020	695.00	612.70	612.70	150.20	612.89	73.92	0.00	0.00	0.00		0.00		0.00	0.00
12.020	695.00	612.70	612.70	150.20	612.89	73.92	0.00	0.00	0.00		0.00		0.00	0.00
12.100	695.00	613.06	613.06	100.92	613.44	95.11	0.00	0.00	0.00		0.00		0.00	0.00
12.100	695.00	613.06	613.06	100.92	613.44	95.11	0.00	0.00	0.00		0.00		0.00	0.00
12.180	695.00	613.44	613.44	109.08	613.76	108.60	0.00	0.00	0.00		0.00		0.00	0.00
12.180	695.00	613.44	613.44	109.08	613.76	108.60	0.00	0.00	0.00		0.00		0.00	0.00
12.220	695.00	613.92	613.92	358.14	613.95	204.08	0.00	0.00	0.00		0.00		0.00	0.00
12.220	695.00	613.92	613.92	358.14	613.95	204.08	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
12.300	695.00	613.96	613.96	240.17	614.01	200.35	0.00	0.00	0.00		0.00		0.00	0.00
12.300	695.00	613.96	613.96	240.17	614.01	200.35	0.00	0.00	0.00		0.00		0.00	0.00
12.400	695.00	615.38	615.38	134.52	615.51	226.40	0.00	0.00	0.00		0.00		0.00	0.00
12.400	695.00	615.38	615.38	134.52	615.51	226.40	0.00	0.00	0.00		0.00		0.00	0.00
12.480	695.00	615.70	615.70	229.74	615.75	257.94	0.00	0.00	0.00		0.00		0.00	0.00
12.480	695.00	615.70	615.70	229.74	615.75	257.94	0.00	0.00	0.00		0.00		0.00	0.00
12.520	695.00	615.77	615.77	349.08	615.79	259.71	0.00	0.00	0.00		0.00		0.00	0.00
12.520	695.00	615.77	615.77	349.08	615.79	259.71	0.00	0.00	0.00		0.00		0.00	0.00
12.600	695.00	615.78	615.78	169.58	615.85	193.53	0.00	0.00	0.00		0.00		0.00	0.00
12.600	695.00	615.78	615.78	169.58	615.85	193.53	0.00	0.00	0.00		0.00		0.00	0.00
12.700	695.00	616.89	616.89	107.24	617.07	158.69	0.00	0.00	0.00		0.00		0.00	0.00
12.700	695.00	616.89	616.89	107.24	617.07	158.69	0.00	0.00	0.00		0.00		0.00	0.00
12.900	695.00	618.39	618.39	145.69	618.46	297.91	0.00	0.00	0.00		0.00		0.00	0.00
12.900	695.00	618.39	618.39	145.69	618.46	297.91	0.00	0.00	0.00		0.00		0.00	0.00
13.000	490.00	619.58	619.58	82.44	619.69	187.39	0.00	0.00	0.00		0.00		0.00	0.00
13.000	490.00	619.58	619.58	82.44	619.69	187.39	0.00	0.00	0.00		0.00		0.00	0.00
13.050	490.00	621.37	621.37	83.05	621.48	188.08	0.00	0.00	0.00		0.00		0.00	0.00
13.050	490.00	621.37	621.37	83.05	621.48	188.08	0.00	0.00	0.00		0.00		0.00	0.00
13.060	490.00	623.26	623.26	75.08	623.48	231.63	0.00	0.00	0.00		0.00		0.00	0.00
13.060	490.00	623.26	623.26	75.08	623.48	231.63	0.00	0.00	0.00		0.00		0.00	0.00
13.100	490.00	625.21	625.21	85.98	625.37	251.65	0.00	0.00	0.00		0.00		0.00	0.00
13.100	490.00	625.21	625.21	85.98	625.37	251.65	0.00	0.00	0.00		0.00		0.00	0.00
13.180	490.00	625.51	625.51	230.69	625.53	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.180	490.00	625.51	625.51	230.69	625.53	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	490.00	625.60	625.60	244.54	625.62	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	490.00	625.60	625.60	244.54	625.62	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	490.00	625.62	625.62	195.57	625.64	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	490.00	625.62	625.62	195.57	625.64	213.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	490.00	625.73	625.73	86.48	625.86	261.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	490.00	625.73	625.73	86.48	625.86	261.00	0.00	0.00	0.00		0.00		0.00	0.00
14.980	490.00	626.00	626.00	154.40	626.07	159.93	0.00	0.00	0.00		0.00		0.00	0.00
14.980	490.00	626.00	626.00	154.40	626.07	159.93	0.00	0.00	0.00		0.00		0.00	0.00
15.020	490.00	626.12	626.12	164.49	626.18	164.37	0.00	0.00	0.00		0.00		0.00	0.00
15.020	490.00	626.12	626.12	164.49	626.18	164.37	0.00	0.00	0.00		0.00		0.00	0.00
15.100	490.00	626.16	626.16	121.15	626.27	143.69	0.00	0.00	0.00		0.00		0.00	0.00
15.100	490.00	626.16	626.16	121.15	626.27	143.69	0.00	0.00	0.00		0.00		0.00	0.00

SECTION	DISCHARGE	CLSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
SECTION	DISCHARGE	CWSEL												
16.000	490.00	627.02	627.02	56.96	627.34	80.73	0.00	0.00	0.00		0.00		0.00	0.00
16.000	490.00	627.02	627.02	56.96	627.34	80.73	0.00	0.00	0.00		0.00		0.00	0.00
16.100	490.00	628.23	628.23	76.32	628.44	106.12	0.00	0.00	0.00		0.00		0.00	0.00
16.100	490.00	628.23	628.23	76.32	628.44	106.12	0.00	0.00	0.00		0.00		0.00	0.00
16.980	490.00	628.74	628.74	71.95	628.97	105.47	0.00	0.00	0.00		0.00		0.00	0.00
16.980	490.00	628.74	628.74	71.95	628.97	105.47	0.00	0.00	0.00		0.00		0.00	0.00
17.020	490.00	630.27	630.27	206.27	630.30	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.020	490.00	630.27	630.27	206.27	630.30	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.100	490.00	630.29	630.29	208.81	630.32	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.100	490.00	630.29	630.29	208.81	630.32	225.00	0.00	0.00	0.00		0.00		0.00	0.00
18.000	490.00	630.67	630.67	191.65	630.71	155.92	0.00	0.00	0.00		0.00		0.00	0.00
18.000	490.00	630.67	630.67	191.65	630.71	155.92	0.00	0.00	0.00		0.00		0.00	0.00
18.900	490.00	631.01	631.01	205.62	631.06	94.68	0.00	0.00	0.00		0.00		0.00	0.00
18.900	490.00	631.01	631.01	205.62	631.06	94.68	0.00	0.00	0.00		0.00		0.00	0.00
18.980	490.00	631.07	631.07	120.86	631.19	45.00	0.00	0.00	0.00		0.00		0.00	0.00
18.980	490.00	631.07	631.07	120.86	631.19	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.080	490.00	631.08	631.08	127.65	631.20	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.080	490.00	631.08	631.08	127.65	631.20	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.100	490.00	631.16	631.16	100.08	631.30	83.28	0.00	0.00	0.00		0.00		0.00	0.00
19.100	490.00	631.16	631.16	100.08	631.30	83.28	0.00	0.00	0.00		0.00		0.00	0.00
20.000	490.00	632.40	632.40	63.67	632.57	240.51	0.00	0.00	0.00		0.00		0.00	0.00
20.000	490.00	632.40	632.40	63.67	632.57	240.51	0.00	0.00	0.00		0.00		0.00	0.00
20.100	490.00	633.00	633.00	45.88	633.48	140.92	0.00	0.00	0.00		0.00		0.00	0.00
20.100	490.00	633.00	633.00	45.88	633.48	140.92	0.00	0.00	0.00		0.00		0.00	0.00
20.980	490.00	634.03	634.03	90.21	634.17	147.64	0.00	0.00	0.00		0.00		0.00	0.00
20.980	490.00	634.03	634.03	90.21	634.17	147.64	0.00	0.00	0.00		0.00		0.00	0.00
21.020	490.00	634.55	634.55	95.69	634.70	152.79	0.00	0.00	0.00		0.00		0.00	0.00
21.020	490.00	634.55	634.55	95.69	634.70	152.79	0.00	0.00	0.00		0.00		0.00	0.00
21.100	490.00	634.68	634.68	97.69	634.83	156.77	0.00	0.00	0.00		0.00		0.00	0.00
21.100	490.00	634.68	634.68	97.69	634.83	156.77	0.00	0.00	0.00		0.00		0.00	0.00
22.000	490.00	635.36	635.36	97.60	635.47	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.000	490.00	635.36	635.36	97.60	635.47	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.980	490.00	635.69	635.69	138.70	635.74	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.980	490.00	635.69	635.69	138.70	635.74	164.00	0.00	0.00	0.00		0.00		0.00	0.00
23.020	490.00	636.75	636.75	342.82	636.76	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.020	490.00	636.75	636.75	342.82	636.76	165.00	0.00	0.00	0.00		0.00		0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
SECTION	DISCHARGE	CWSEL												
23.100	490.00	636.75	636.75	229.31	636.77	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.100	490.00	636.75	636.75	229.31	636.77	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.200	490.00	637.17	637.17	120.44	637.24	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.200	490.00	637.17	637.17	120.44	637.24	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.900	490.00	638.26	638.26	95.39	638.40	89.14	0.00	0.00	0.00		0.00		0.00	0.00
23.900	490.00	638.26	638.26	95.39	638.40	89.14	0.00	0.00	0.00		0.00		0.00	0.00
24.000	490.00	639.73	639.73	94.23	639.87	88.55	0.00	0.00	0.00		0.00		0.00	0.00
24.000	490.00	639.73	639.73	94.23	639.87	88.55	0.00	0.00	0.00		0.00		0.00	0.00
24.100	490.00	641.33	641.33	109.13	641.44	103.16	0.00	0.00	0.00		0.00		0.00	0.00
24.100	490.00	641.33	641.33	109.13	641.44	103.16	0.00	0.00	0.00		0.00		0.00	0.00
24.900	490.00	643.26	643.26	66.90	643.62	104.21	0.00	0.00	0.00		0.00		0.00	0.00
24.900	490.00	643.26	643.26	66.90	643.62	104.21	0.00	0.00	0.00		0.00		0.00	0.00
24.950	490.00	644.57	644.57	102.74	644.73	150.00	0.00	0.00	0.00		0.00		0.00	0.00
24.950	490.00	644.57	644.57	102.74	644.73	150.00	0.00	0.00	0.00		0.00		0.00	0.00
25.000	490.00	645.28	645.28	110.36	645.42	150.00	0.00	0.00	0.00		0.00		0.00	0.00
25.000	490.00	645.28	645.28	110.36	645.42	150.00	0.00	0.00	0.00		0.00		0.00	0.00
25.020	490.00	645.36	645.36	84.63	645.59	135.12	0.00	0.00	0.00		0.00		0.00	0.00
25.020	490.00	645.36	645.36	84.63	645.59	135.12	0.00	0.00	0.00		0.00		0.00	0.00
25.050	490.00	645.53	645.53	65.46	645.89	101.35	0.00	0.00	0.00		0.00		0.00	0.00
25.100	490.00	646.23	646.23	51.48	646.76	69.33	0.00	0.00	0.00		0.00		0.00	0.00
25.100	490.00	646.23	646.23	51.48	646.76	69.33	0.00	0.00	0.00		0.00		0.00	0.00
25.150	490.00	647.28	647.28	50.08	647.84	65.64	0.00	0.00	0.00		0.00		0.00	0.00
25.150	490.00	647.28	647.28	50.08	647.84	65.64	0.00	0.00	0.00		0.00		0.00	0.00
25.200	490.00	648.38	648.38	50.08	648.94	65.64	0.00	0.00	0.00		0.00		0.00	0.00
25.200	490.00	648.38	648.38	50.08	648.94	65.64	0.00	0.00	0.00		0.00		0.00	0.00
25.250	490.00	649.48	649.48	50.11	650.04	65.69	0.00	0.00	0.00		0.00		0.00	0.00
25.250	490.00	649.48	649.48	50.11	650.04	65.69	0.00	0.00	0.00		0.00		0.00	0.00
25.300	490.00	650.58	650.58	50.13	651.14	65.75	0.00	0.00	0.00		0.00		0.00	0.00
25.300	490.00	650.58	650.58	50.13	651.14	65.75	0.00	0.00	0.00		0.00		0.00	0.00
25.350	490.00	651.68	651.68	50.12	652.24	65.72	0.00	0.00	0.00		0.00		0.00	0.00
25.350	490.00	651.68	651.68	50.12	652.24	65.72	0.00	0.00	0.00		0.00		0.00	0.00
25.400	490.00	652.78	652.78	50.09	653.34	65.65	0.00	0.00	0.00		0.00		0.00	0.00
25.400	490.00	652.78	652.78	50.09	653.34	65.65	0.00	0.00	0.00		0.00		0.00	0.00
25.450	490.00	653.88	653.88	50.08	654.44	65.62	0.00	0.00	0.00		0.00		0.00	0.00
25.450	490.00	653.88	653.88	50.08	654.44	65.62	0.00	0.00	0.00		0.00		0.00	0.00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: 100 yr. Flow

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1       HUD-FIA   H-4705
T2       BEDFORD  TOWNSHIP  FIS
T3       INDIAN   CREEK 100 YEAR FLOW  Q=1020 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
                                                                                  592.01
     -1.        4.        0.        0.    .003100      0.00       1.0       0.    579.440    0.000

J2  NPROF     IPLOT     PREVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     0.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000     0.000     0.000     0.000
NC       .065      .065      .045      .150      .350     0.000     0.000     0.000     0.000     0.000
OT      5.000   600.000   880.000  1020.000  1390.000  1020.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1      6.200     9.000   585.000   611.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    579.400   400.000   578.500   585.000   574.800   588.000   573.800   591.000   573.300   595.000
GR    573.900   599.000   575.500   606.000   577.700   611.000   578.500   800.000     0.000     0.000

X1      7.000    14.000   294.000   345.000   550.000   550.000   550.000     0.000     0.000     0.000
GR    592.100     0.000   589.200   127.000   583.800   214.000   580.300   294.000   578.600   313.000
GR    576.000   330.000   575.500   333.000   575.400   337.000   576.100   338.000   577.400   344.000
GR    580.400   345.000   580.500   370.000   581.500   487.000   581.600   537.000     0.000     0.000

X1      7.100    11.000   694.000   724.000   450.000   450.000   450.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    581.600   647.000   581.600   674.000   581.600   675.000   581.600   676.000   581.600   694.000
GR    577.300   702.000   578.000   706.000   585.500   724.000   585.500   745.000   585.500   746.000
GR    585.500   748.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      7.980    11.000   700.000   708.000   130.000   130.000   130.000     0.000      .200     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   587.500   587.500     0.000
GR    581.600   673.000   581.600   674.000   581.600   675.000   581.600   676.000   581.600   694.000
GR    577.300   700.000   578.000   708.000   585.500   724.000   585.500   745.000   585.500   746.000
GR    585.500   748.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
SB      0.000     1.500     2.600   200.000    10.670     0.000    64.000     0.000   577.500   577.500

X1      8.080     8.000   669.000   677.000    39.000    39.000    39.000     0.000     -.200     0.000
X2      0.000     0.000     1.000   583.500   596.100     0.000     0.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   596.100   596.100     0.000
GR    581.900   657.000   578.900   669.000   578.900   671.000   577.700   673.000   578.800   677.000
GR    578.800   683.000   582.800   782.000   591.800   822.000     0.000     0.000     0.000     0.000
NC       .080      .080      .050     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      8.100    12.000   667.000   673.000    50.000    50.000    50.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    582.800   611.000   582.800   612.000   582.800   613.000   582.800   614.000   582.800   615.000
GR    581.900   657.000   578.900   667.000   578.900   671.000   577.700   673.000   578.800   680.000
GR    578.800   683.000   580.800   730.000     0.000     0.000     0.000     0.000     0.000     0.000
NC      0.000     0.000     0.000      .150      .350     0.000     0.000     0.000     0.000     0.000

X1      8.200    20.000   738.000   763.000  1000.000  1000.000  1000.000     0.000     0.000     0.000
GR    594.400   400.000   590.000   510.000   583.800   524.000   583.900   600.000   584.400   648.000
GR    584.200   738.000   582.900   743.000   582.600   745.000   582.900   746.000   583.500   760.000
GR    584.400   763.000   584.200   800.000   583.900   845.000   583.600   858.000   583.900   866.000
GR    583.900   918.000   583.000   936.000   583.800   951.000   584.900   960.000   592.500  1000.000

X1      8.300    11.000   350.000   376.000  1250.000  1250.000  1250.000     0.000     0.000     0.000
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GR	594.400	210.000	593.200	220.000	586.300	289.000	586.400	359.000	587.000	362.000
GR	584.400	368.000	585.700	374.000	586.600	376.000	585.900	627.000	586.600	635.000
GR	595.800	667.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.980	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.100	0.000
SB	0.000	1.400	2.600	0.000	23.500	0.000	110.450	0.000	584.500	584.500
X1	9.020	12.000	640.000	667.000	83.000	83.000	83.000	0.000	.200	0.000
X2	0.000	0.000	1.000	589.200	590.400	0.000	0.000	0.000	0.000	0.000
BT	3.000	0.000	595.600	0.000	640.000	590.600	0.000	667.000	590.700	0.000
GR	594.400	160.000	594.900	162.000	591.800	220.000	585.800	229.000	585.500	235.000
GR	586.100	459.000	585.700	640.000	584.300	645.000	585.400	653.000	584.300	663.000
GR	585.000	665.000	587.100	667.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.100	0.000	0.000	0.000	50.000	50.000	50.000	0.000	-.200	0.000
NC	.065	.065	.045	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.200	10.000	482.000	506.000	300.000	300.000	300.000	0.000	0.000	0.000
GR	590.000	407.000	590.000	408.000	587.400	418.000	587.600	482.000	585.200	485.000
GR	584.300	494.000	584.800	503.000	587.800	506.000	588.100	581.000	588.100	582.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.210	7.000	482.000	506.000	145.000	145.000	145.000	0.000	-.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	588.600	588.600	0.000
GR	587.600	444.000	587.600	482.000	585.200	485.000	584.300	494.000	584.800	503.000
GR	587.800	506.000	587.900	544.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.400	2.600	100.000	27.300	1.300	114.400	0.000	584.000	584.000
X1	9.220	0.000	0.000	0.000	10.000	10.000	10.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	588.400	589.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	589.200	589.200	0.000
X1	9.300	11.000	253.000	294.000	25.000	25.000	25.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.000	593.000	0.000
GR	596.600	100.000	595.800	120.000	590.000	235.000	587.000	253.000	585.200	257.000
GR	584.300	268.000	585.700	281.000	589.400	294.000	589.600	300.000	590.000	375.000
GR	594.000	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.380	11.000	257.000	281.000	75.000	75.000	75.000	0.000	-.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.000	593.000	0.000
GR	596.600	100.000	595.800	120.000	590.000	235.000	587.000	253.000	585.200	257.000
GR	584.300	268.000	585.700	281.000	589.400	294.000	589.600	300.000	590.000	375.000
GR	594.000	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.400	2.600	250.000	24.000	1.800	97.680	0.000	584.000	584.000
X1	9.420	15.000	224.000	248.000	106.000	106.000	106.000	0.000	.500	0.000
X2	0.000	0.000	1.000	588.400	595.100	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	595.100	595.100	0.000
GR	596.500	100.000	595.800	150.000	592.800	190.000	591.500	208.000	588.000	224.000
GR	586.600	235.000	583.500	243.000	584.500	247.000	587.700	248.000	589.100	278.000
GR	584.800	286.000	590.200	300.000	588.900	363.000	588.400	400.000	594.200	460.000
NC	.060	.060	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.500	11.000	235.000	250.000	40.000	40.000	40.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	593.200	185.000	593.200	186.000	592.800	190.000	591.500	208.000	588.000	222.000
GR	586.600	235.000	583.500	243.000	584.500	249.000	587.700	250.000	589.100	278.000
GR	589.400	286.000	590.200	300.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.610	11.000	1315.000	1342.000	1340.000	1340.000	1340.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	599.000	1000.000	595.000	1105.000	591.000	1137.000	590.200	1200.000	591.000	1262.000
GR	591.000	1315.000	590.000	1320.000	587.400	1332.000	590.000	1342.000	591.000	1395.000
GR	599.000	1450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.620	10.000	240.000	255.000	320.000	320.000	320.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	50.000	592.000	125.000	591.000	240.000	590.500	245.000
GR	587.500	250.000	590.200	255.000	591.000	300.000	595.000	403.000	600.000	450.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.680	0.000	0.000	0.000	90.000	90.000	90.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	310.000	.500	0.000	9.900	2.000	587.500	587.500
X1	9.720	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	589.600	590.800	0.000	0.000	0.000	0.000	0.000
X1	9.750	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.100	0.000
NC	.075	.075	.055	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.840	9.000	1227.000	1252.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	600.000	1000.000	594.000	1100.000	593.000	1120.000	592.000	1227.000	591.000	1232.000
GR	589.000	1242.000	592.000	1252.000	594.000	1280.000	600.000	1382.000	0.000	0.000
X1	9.850	12.000	255.000	288.000	200.000	200.000	200.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	83.000	594.000	105.000	593.000	200.000	592.000	225.000
GR	591.000	255.000	589.000	265.000	592.000	273.000	593.000	288.000	594.000	411.000
GR	595.000	450.000	600.000	492.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.880	0.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	375.000	.500	0.000	26.250	2.000	589.000	589.000
X1	9.920	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.500	593.500	0.000	0.000	0.000	0.000	0.000
X1	9.930	0.000	0.000	0.000	80.000	80.000	80.000	0.000	.500	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.940	12.000	1270.000	1285.000	250.000	250.000	250.000	0.000	0.000	0.000
GR	603.500	1050.000	603.000	1080.000	600.000	1095.000	595.000	1125.000	594.800	1215.000
GR	594.000	1250.000	593.000	1270.000	591.100	1280.000	592.000	1285.000	593.000	1330.000
GR	595.000	1350.000	601.000	1425.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.950	11.000	150.000	162.000	250.000	250.000	250.000	0.000	0.000	0.000
GR	603.000	0.000	600.000	25.000	595.000	50.000	594.000	90.000	593.000	150.000
GR	591.700	155.000	593.000	162.000	593.000	220.000	594.000	295.000	595.000	300.000
GR	601.000	355.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.960	0.000	0.000	0.000	90.000	90.000	90.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	265.000	.500	0.000	2.500	2.000	591.700	591.700
X1	9.970	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.700	593.700	0.000	0.000	0.000	0.000	0.000
X1	9.980	0.000	0.000	0.000	90.000	90.000	90.000	0.000	0.000	0.000
NC	.065	.065	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
OT	5.000	410.000	595.000	695.000	950.000	695.000	0.000	0.000	0.000	0.000

X1	9.990	15.000	306.000	314.000	500.000	500.000	500.000	0.000	-.800	0.000
GR	605.100	0.000	604.600	14.000	597.000	138.000	595.800	200.000	595.900	238.000
GR	595.200	306.000	593.900	307.000	593.400	310.000	594.000	313.000	595.500	314.000
GR	597.000	349.000	598.000	400.000	603.100	500.000	606.100	553.000	606.500	600.000
X1	10.000	0.000	0.000	0.000	500.000	500.000	500.000	0.000	.800	0.000
X1	10.010	0.000	0.000	0.000	700.000	700.000	700.000	0.000	.800	0.000
X1	10.040	10.000	240.000	256.000	700.000	700.000	700.000	0.000	-4.000	0.000
GR	610.400	100.000	601.600	200.000	601.800	240.000	599.300	244.000	599.100	248.000
GR	600.000	250.000	601.500	256.000	602.300	300.000	607.600	400.000	609.800	500.000
X1	10.050	0.000	0.000	0.000	720.000	720.000	720.000	0.000	.900	0.000
X1	10.100	9.000	240.000	256.000	80.000	80.000	80.000	0.000	0.000	0.000
GR	604.200	170.000	601.600	200.000	601.800	240.000	599.300	244.000	599.100	248.000
GR	600.000	250.000	601.500	256.000	602.300	300.000	603.400	320.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	10.180	0.000	0.000	0.000	140.000	140.000	140.000	0.000	-2.200	0.000
SB	0.000	1.600	2.600	150.000	4.070	0.000	19.150	0.000	596.900	596.900
X1	10.220	12.000	454.000	467.000	17.000	17.000	17.000	0.000	-1.200	0.000
X2	0.000	0.000	1.000	601.600	604.500	0.000	0.000	0.000	0.000	0.000
GR	610.400	270.000	607.900	300.000	606.700	322.000	603.200	347.000	602.400	400.000
GR	600.400	454.000	599.300	458.000	598.100	460.000	598.400	464.000	600.100	467.000
GR	607.000	485.000	607.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	10.300	12.000	454.000	467.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	610.400	270.000	607.900	300.000	606.700	322.000	603.200	347.000	602.400	400.000
GR	600.400	454.000	599.300	458.000	598.100	460.000	598.400	464.000	600.100	467.000
GR	607.000	485.000	607.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	10.350	0.000	0.000	0.000	110.000	110.000	110.000	0.000	.400	0.000
X1	10.380	13.000	145.000	170.000	80.000	80.000	80.000	0.000	.800	0.000
GR	610.000	0.000	609.000	5.000	608.000	15.000	607.000	25.000	605.000	50.000
GR	604.000	60.000	603.000	80.000	602.800	95.000	603.000	110.000	602.000	145.000
GR	598.200	155.000	605.000	165.000	606.000	170.000	0.000	0.000	0.000	0.000
SB	1.050	1.600	2.600	125.000	18.000	2.000	83.080	0.000	599.000	599.000
X1	10.420	0.000	0.000	0.000	112.000	112.000	112.000	0.000	.300	0.000
X2	0.000	0.000	1.000	604.200	607.000	0.000	0.000	0.000	0.000	0.000
NC	.080	.080	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	10.450	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.300	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	11.000	18.000	335.000	354.000	750.000	750.000	750.000	0.000	0.000	0.000
GR	612.600	0.000	612.600	35.000	612.600	270.000	604.800	271.000	603.600	307.000
GR	603.400	335.000	602.200	338.000	601.600	341.000	601.100	341.100	601.800	346.000
GR	603.400	354.000	604.400	400.000	606.300	424.000	609.100	425.000	612.200	500.000
GR	612.300	600.000	612.200	700.000	613.800	800.000	0.000	0.000	0.000	0.000
X1	11.500	0.000	0.000	0.000	1150.000	1150.000	1150.000	0.000	1.500	0.000
X1	11.900	0.000	0.000	0.000	800.000	800.000	800.000	0.000	1.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

X1	11.980	9.000	335.000	354.000	130.000	130.000	130.000	0.000	3.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.000	609.000	0.000
GR	603.700	307.000	603.400	335.000	602.200	338.000	601.600	341.000	601.100	341.100
GR	601.800	346.000	603.400	354.000	604.400	400.000	606.300	424.000	0.000	0.000
SB	0.000	1.300	2.600	100.000	10.150	0.000	45.670	0.000	604.500	604.500
X1	12.020	11.000	111.000	126.000	36.000	36.000	36.000	0.000	-1.400	0.000
X2	0.000	0.000	1.000	609.000	612.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.300	612.300	0.000
GP	617.100	58.000	617.100	59.000	616.500	67.000	612.600	98.000	610.100	111.000
GR	606.600	117.000	605.900	121.000	606.300	125.000	607.900	126.000	612.400	145.000
GR	612.600	160.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	12.100	11.000	111.000	126.000	130.000	130.000	130.000	0.000	0.000	0.000
GR	622.700	0.000	617.100	59.000	616.500	67.000	612.600	98.000	610.100	111.000
GR	606.600	117.000	605.900	121.000	606.300	125.000	607.900	126.000	612.400	145.000
GP	613.900	246.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	12.180	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.200	0.000
SB	0.000	1.330	2.600	120.000	7.930	0.000	26.970	0.000	606.100	606.100
X1	12.220	10.000	82.000	92.000	34.000	34.000	34.000	0.000	-.900	0.000
X2	0.000	0.000	1.000	609.500	612.400	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.800	0.000	612.500	36.000	612.400	69.000	608.500	82.000	607.400	83.000
GR	607.000	88.000	607.400	92.000	612.500	106.000	610.800	123.000	611.600	230.000
X1	12.300	10.000	82.000	92.000	80.000	80.000	80.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.800	0.000	612.500	36.000	612.400	69.000	608.500	82.000	607.400	83.000
GR	607.000	88.000	607.400	92.000	612.500	106.000	610.800	123.000	611.600	230.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	12.400	10.000	118.000	143.000	1070.000	1070.000	1070.000	0.000	0.000	0.000
GR	615.300	0.000	612.800	118.000	610.400	122.000	609.100	123.000	607.900	126.000
GR	608.700	130.000	611.000	132.000	613.400	143.000	614.700	200.000	617.200	296.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	12.480	0.000	0.000	0.000	140.000	140.000	140.000	0.000	-.500	0.000
SB	0.000	1.510	2.600	250.000	6.790	0.000	25.120	0.000	607.400	607.400
X1	12.520	8.000	198.000	203.000	23.000	23.000	23.000	0.000	-1.500	0.000
X2	0.000	0.000	1.000	611.100	613.800	0.000	0.000	0.000	0.000	0.000
GR	620.400	0.000	614.900	100.000	613.400	175.000	609.400	198.000	608.900	200.000
GR	609.300	203.000	613.800	226.000	620.500	400.000	0.000	0.000	0.000	0.000
X1	12.600	8.000	198.000	203.000	25.000	25.000	25.000	0.000	0.000	0.000
GR	620.400	0.000	614.900	100.000	613.400	175.000	609.400	198.000	608.900	200.000
GR	609.300	203.000	613.800	226.000	620.500	400.000	0.000	0.000	0.000	0.000
X1	12.700	0.000	0.000	0.000	450.000	450.000	450.000	0.000	1.900	0.000
X1	12.900	12.000	334.000	350.000	450.000	450.000	450.000	0.000	-1.900	0.000
GR	623.600	150.000	622.000	250.000	619.400	288.000	616.200	334.000	614.800	335.000
GR	614.500	339.000	615.000	341.000	616.000	343.000	617.600	350.000	620.000	500.000
GR	620.000	553.000	622.100	700.000	0.000	0.000	0.000	0.000	0.000	0.000
OT	5.000	290.000	420.000	490.000	685.000	490.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	13.000	12.000	334.000	350.000	450.000	450.000	450.000	0.000	0.000	0.000
GR	623.600	150.000	622.000	250.000	619.400	288.000	616.200	334.000	614.800	335.000

GR	614.500	339.000	615.000	341.300	616.000	343.000	617.600	350.000	620.000	500.000
GR	620.000	553.000	622.100	700.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	13.050	0.000	0.000	0.000	510.000	510.000	510.000	0.000	1.800	0.000
X1	13.060	10.000	92.000	113.000	510.000	510.000	510.000	0.000	-1.800	0.000
GR	627.000	0.000	624.200	80.000	622.700	92.000	620.400	98.000	620.000	103.000
GR	620.900	107.000	622.600	113.000	624.300	132.000	625.000	282.000	627.000	482.000
X1	13.100	0.000	0.000	0.000	510.000	510.000	510.000	0.000	1.800	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	13.180	9.000	117.000	138.000	100.000	100.000	100.000	0.000	-.400	0.000
GR	624.200	0.000	622.100	117.000	620.000	124.000	619.700	125.000	619.400	127.000
GR	620.100	132.000	623.500	138.000	624.200	166.000	625.000	213.000	0.000	0.000
SR	0.000	1.810	2.600	200.000	3.930	0.000	12.970	0.000	619.000	619.000
X1	13.220	9.000	117.000	138.000	60.000	60.000	60.000	0.000	-.400	0.000
X2	0.000	0.000	1.000	622.300	624.300	0.000	0.000	0.000	0.000	0.000
GR	624.200	0.000	622.100	117.000	620.000	124.000	619.700	125.000	619.400	127.000
GR	620.100	132.000	623.500	138.000	624.200	166.000	625.000	213.000	0.000	0.000
X1	13.300	9.000	117.000	138.000	40.000	40.000	40.000	0.000	0.000	0.000
GR	624.200	0.000	622.100	117.000	620.000	124.000	619.700	125.000	619.400	127.000
GR	620.100	132.000	623.500	138.000	624.200	166.000	625.000	213.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	14.000	11.000	328.000	362.000	150.000	150.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	625.400	199.000	625.400	200.000	624.700	328.000	621.100	338.000	620.400	339.000
GR	619.200	340.000	620.400	342.000	624.700	362.000	625.600	458.000	625.600	459.000
GR	625.600	460.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	14.980	11.000	135.000	167.000	110.000	110.000	110.000	0.000	-.600	0.000
GR	627.500	0.000	625.000	75.000	625.000	135.000	621.100	143.000	620.400	144.000
GR	620.300	145.000	620.300	151.000	621.000	154.000	621.600	160.000	623.700	167.000
GR	630.700	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SR	0.000	1.800	2.700	150.000	3.770	0.000	12.440	0.000	619.700	619.700
X1	15.020	11.000	135.000	167.000	60.000	60.000	60.000	0.000	-.600	0.000
X2	0.000	0.000	1.000	623.000	624.800	0.000	0.000	0.000	0.000	0.000
GR	627.500	0.000	625.000	75.000	625.000	135.000	621.100	143.000	620.400	144.000
GR	620.300	145.000	620.300	151.000	621.000	154.000	621.600	160.000	623.700	167.000
GR	630.700	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	15.100	11.000	135.000	167.000	40.000	40.000	40.000	0.000	0.000	0.000
GR	627.500	0.000	625.000	75.000	625.000	135.000	621.100	143.000	620.400	144.000
GR	620.300	145.000	620.300	151.000	621.000	154.000	621.600	160.000	623.700	167.000
GR	630.700	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	16.000	11.000	166.000	197.000	330.000	330.000	330.000	0.000	0.000	0.000
GR	627.900	80.000	625.800	166.000	622.900	177.000	621.400	178.000	621.000	179.000
GR	621.500	184.000	623.100	185.000	627.100	197.000	628.700	235.000	628.800	300.000
GR	629.900	335.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	16.100	12.000	32.000	59.000	200.000	200.000	200.000	0.000	0.000	0.000
GR	629.100	0.000	626.000	32.000	623.900	37.000	622.400	38.000	622.000	40.000
GR	622.200	42.000	623.900	46.000	627.100	59.000	627.700	91.000	627.800	98.000
GR	627.800	103.000	629.300	114.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	16.980	0.000	0.000	0.000	120.000	120.000	120.000	0.000	.600	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	628.500	628.500	0.000
SB	0.000	1.400	2.600	215.000	8.000	0.000	47.200	0.000	622.600	622.600
X1	17.020	9.000	156.000	174.000	26.000	26.000	26.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	628.500	630.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	628.500	628.500	0.000
GR	629.300	50.000	628.800	78.000	625.400	156.000	623.100	159.000	622.600	162.000
GR	623.100	164.000	628.700	174.000	629.200	227.000	629.500	275.000	0.000	0.000
X1	17.100	9.000	156.000	174.000	37.000	37.000	37.000	0.000	0.000	0.000
GR	629.300	50.000	628.800	78.000	625.400	156.000	623.100	159.000	622.600	162.000
GR	623.100	164.000	628.700	174.000	629.200	227.000	629.500	275.000	0.000	0.000
NC	.070	.060	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	18.000	17.000	314.000	325.000	650.000	650.000	650.000	0.000	0.000	0.000
GR	633.000	197.000	633.000	198.000	633.000	199.000	633.000	200.000	630.800	270.000
GR	630.100	285.000	626.600	303.000	625.700	314.000	624.300	315.000	624.000	319.000
GR	624.400	322.000	625.500	325.000	625.800	334.000	628.500	341.000	629.600	402.000
GR	633.600	502.000	634.300	570.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	18.900	14.000	140.000	161.000	560.000	560.000	560.000	0.000	0.000	0.000
GR	633.700	0.000	633.000	99.000	631.500	100.000	628.500	135.000	626.100	140.000
GR	626.100	144.000	626.100	149.000	626.100	153.000	626.100	161.000	626.100	180.000
GR	629.700	200.000	633.000	201.000	633.000	400.000	633.000	500.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	18.980	14.000	135.000	180.000	110.000	110.000	110.000	0.000	1.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	633.000	633.000	0.000
GR	633.700	0.000	632.300	71.000	631.500	100.000	628.500	135.000	626.100	136.000
GR	626.100	144.000	626.100	149.000	626.100	153.000	626.100	161.000	626.100	180.000
GR	630.200	181.000	631.700	300.000	632.800	400.000	633.000	500.000	0.000	0.000
SB	1.250	1.600	2.600	125.000	45.500	1.500	211.200	0.000	627.200	627.200
X1	19.080	10.000	145.000	190.000	37.000	37.000	37.000	0.000	-.300	0.000
X2	0.000	0.000	1.000	631.000	633.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	633.500	633.500	0.000
GR	634.600	0.000	632.100	144.000	627.500	145.000	627.500	172.000	627.500	175.000
GR	627.500	182.000	627.500	190.000	630.600	191.000	631.600	250.000	632.500	300.000
NC	.080	.080	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	19.100	10.000	148.000	186.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	634.600	0.000	632.100	144.000	627.500	148.000	627.500	172.000	627.500	175.000
GR	627.500	182.000	627.500	186.000	630.600	200.000	631.600	250.000	632.500	300.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	20.000	12.000	265.000	295.000	350.000	350.000	350.000	0.000	0.000	0.000
GR	631.700	150.000	631.700	155.000	631.200	232.000	631.400	265.000	629.600	272.000
GR	628.500	286.000	628.900	287.000	631.900	295.000	632.300	367.000	632.200	384.000
GR	632.700	400.000	632.700	405.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	20.100	9.000	9.000	35.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	634.100	0.000	633.100	9.000	629.300	12.000	628.900	19.000	629.300	23.000
GR	629.800	27.000	632.000	35.000	632.800	70.000	632.900	150.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	20.980	0.000	0.000	0.000	120.000	120.000	120.000	0.000	.200	0.000
SB	0.000	1.300	2.600	150.000	5.713	0.000	18.280	0.000	629.100	629.100

X1	21.020	11.000	112.000	129.000	32.000	32.000	32.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	632.300	633.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	634.900	0.000	634.400	48.000	633.500	93.000	630.800	112.000	629.800	113.000
GR	629.600	114.000	629.200	117.000	629.500	126.000	632.200	129.000	634.800	180.000
GR	635.600	200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	21.100	11.000	112.000	129.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	634.900	0.000	634.400	48.000	633.500	93.000	630.800	112.000	629.800	113.000
GR	629.600	114.000	629.200	117.000	629.500	126.000	632.200	129.000	634.800	180.000
GR	635.600	200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	22.000	11.000	118.000	132.000	250.000	250.000	250.000	0.000	0.000	0.000
GR	634.000	43.000	633.900	59.000	633.000	118.000	630.200	121.000	629.700	123.000
GR	629.600	124.000	629.700	129.000	630.100	130.000	633.000	132.000	635.200	176.000
GR	635.300	207.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	22.980	0.000	0.000	0.000	150.000	150.000	150.000	0.000	-.200	0.000
SB	0.000	1.700	2.600	100.000	5.000	0.000	19.440	0.000	629.400	629.400
X1	23.020	10.000	280.000	305.000	52.000	52.000	52.000	0.000	-.900	0.000
X2	0.000	0.000	1.000	633.300	635.500	0.000	0.000	0.000	0.000	0.000
GR	634.400	210.000	634.400	211.000	634.400	212.000	633.500	280.000	630.900	286.000
GR	630.400	288.000	630.300	293.000	634.500	305.000	633.800	374.000	633.900	375.000
X1	23.100	10.000	280.000	305.000	24.000	24.000	24.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	634.400	210.000	634.400	211.000	634.400	212.000	633.500	280.000	630.900	286.000
GR	630.400	288.000	630.300	293.000	634.500	305.000	633.800	374.000	633.900	375.000
X1	23.200	0.000	0.000	0.000	550.000	550.000	550.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	23.900	16.000	262.000	275.000	550.000	550.000	550.000	0.000	-1.500	0.000
GR	640.000	204.000	640.000	205.000	640.000	206.000	640.000	207.000	640.000	208.000
GR	640.000	209.000	639.900	210.000	639.900	212.000	637.900	249.000	635.100	262.000
GR	634.800	269.000	635.600	275.000	636.200	285.000	640.000	305.000	640.600	350.000
GR	640.600	354.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	24.000	0.000	0.000	0.000	550.000	550.000	550.000	0.000	1.500	0.000
X1	24.100	0.000	0.000	0.000	675.000	675.000	675.000	0.000	1.300	0.000
NC	0.000	0.000	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	24.900	13.000	525.000	548.000	675.000	675.000	675.000	0.000	-1.200	0.000
GR	645.000	450.000	645.000	451.000	645.000	452.000	645.000	453.000	643.700	524.000
GR	643.500	525.000	639.500	537.000	638.700	542.000	638.600	543.000	638.800	544.000
GR	642.900	548.000	645.000	599.000	645.000	600.000	0.000	0.000	0.000	0.000
X1	24.950	0.000	0.000	0.000	325.000	325.000	325.000	0.000	.600	0.000
X1	25.000	0.000	0.000	0.000	325.000	325.000	325.000	0.000	.600	0.000
X1	25.020	0.000	0.000	0.000	55.000	55.000	55.000	0.000	.500	0.000
X1	25.050	0.000	0.000	0.000	60.000	60.000	60.000	0.000	.600	0.000

X1	25.100	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.150	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.200	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.250	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.300	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.350	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.400	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.450	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.900	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	25.980	10.000	161.000	192.000	120.000	120.000	120.000	0.000	0.000	0.000
GR	656.100	100.000	656.000	140.000	656.000	150.000	655.800	161.000	654.100	166.000
GR	650.800	176.000	654.100	192.000	654.300	250.000	654.400	264.000	654.400	265.000
SR	0.000	1.500	2.600	125.000	5.400	0.000	17.280	0.000	650.800	650.800
X1	26.020	0.000	0.000	0.000	36.000	36.000	36.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	654.000	655.800	0.000	0.000	0.000	0.000	0.000
X1	26.100	10.000	161.000	192.000	70.000	70.000	70.000	0.000	0.000	0.000
GR	656.100	100.000	656.000	140.000	656.000	150.000	655.800	161.000	654.100	166.000
GR	650.800	176.000	654.100	192.000	654.300	250.000	654.400	264.000	654.400	265.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	26.180	0.000	0.000	0.000	30.000	30.000	30.000	0.000	0.000	0.000
SR	0.000	1.500	2.600	150.000	7.000	0.000	23.800	0.000	650.800	650.800
X1	26.220	10.000	217.000	238.000	12.500	12.500	12.500	0.000	-.100	0.000
X2	0.000	0.000	1.000	654.200	655.200	0.000	0.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.600	188.000	655.900	200.000
GR	655.900	211.000	654.700	217.000	650.900	228.000	654.600	238.000	655.900	313.000
X1	26.300	10.000	217.000	238.000	60.000	60.000	60.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.600	188.000	655.900	200.000
GR	655.900	211.000	654.700	217.000	650.900	228.000	654.600	238.000	655.900	313.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	26.380	0.000	0.000	0.000	60.000	60.000	60.000	0.000	.400	0.000
SR	0.000	1.500	2.600	125.000	5.700	0.000	22.800	0.000	651.300	651.300
X1	26.420	11.000	218.000	236.000	17.500	17.500	17.500	0.000	-.500	0.000
X2	0.000	0.000	1.000	655.300	656.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.700	187.000	656.500	200.000
GR	656.100	211.000	654.800	218.000	651.800	224.000	652.200	228.000	655.500	236.000
GR	654.200	313.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	26.500	11.000	218.000	236.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.700	187.000	656.500	200.000
GR	656.100	211.000	654.800	218.000	651.800	224.000	652.200	228.000	655.500	236.000
GR	654.200	313.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000

X1	27.000	14.000	335.000	366.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	656.700	0.000	0.000
GR	655.200	265.000	656.200	266.000	656.200	267.000	656.200	312.000	656.600	313.000
GR	656.200	335.000	654.700	340.000	653.100	347.000	651.900	348.000	651.700	351.000
GR	651.900	355.000	655.200	366.000	654.300	427.000	654.300	435.000	0.000	0.000
X1	27.080	0.000	0.000	0.000	60.000	60.000	60.000	0.000	.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.350	2.600	150.000	7.000	0.000	23.100	0.000	652.100	652.100
X1	27.120	12.000	211.000	236.000	16.000	16.000	16.000	0.000	.100	0.000
X2	0.000	0.000	1.000	655.400	655.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	655.600	100.000	656.300	187.000	656.000	200.000	655.700	211.000	654.100	215.000
GR	653.300	221.000	653.200	222.000	652.000	226.000	652.000	228.000	654.400	236.000
GR	653.900	300.000	654.000	306.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	27.200	12.000	211.000	236.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.800	41.000	656.300	187.000	656.000	200.000	655.700	211.000	654.100	215.000
GR	653.300	221.000	653.200	222.000	652.000	226.000	652.000	228.000	654.400	236.000
GR	653.900	300.000	654.000	306.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	27.280	0.000	0.000	0.000	45.000	45.000	45.000	0.000	0.000	0.000
SB	0.000	1.500	2.600	200.000	12.000	0.000	37.200	0.000	652.000	652.000
X1	27.320	15.000	211.000	237.000	12.500	12.500	12.500	0.000	.400	0.000
X2	0.000	0.000	1.000	655.100	655.800	0.000	0.000	0.000	0.000	0.000
GR	656.700	41.000	656.700	42.000	656.600	75.000	656.600	187.000	656.100	200.000
GR	656.000	211.000	654.100	216.000	652.700	223.000	652.000	226.000	651.600	227.000
GR	652.100	229.000	653.100	232.000	654.100	237.000	654.300	300.000	654.300	307.000
X1	27.400	15.000	211.000	237.000	110.000	110.000	110.000	0.000	0.000	0.000
GR	656.700	41.000	656.700	42.000	656.600	75.000	656.600	187.000	656.100	200.000
GR	656.000	211.000	654.100	216.000	652.700	223.000	652.000	226.000	651.600	227.000
GR	652.100	229.000	653.100	232.000	654.100	237.000	654.300	300.000	654.300	307.000
X1	27.480	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.100	0.000
SB	0.000	1.450	2.600	200.000	4.800	0.000	15.840	0.000	651.700	651.700
X1	27.520	15.000	211.000	236.000	20.000	20.000	20.000	0.000	-.300	0.000
X2	0.000	0.000	1.000	655.000	656.200	0.000	0.000	0.000	0.000	0.000
GR	657.400	41.000	657.400	42.000	657.400	74.000	657.400	186.000	657.100	200.000
GR	656.700	211.000	655.100	216.000	654.000	222.000	652.600	224.000	652.000	227.000
GR	653.000	231.000	655.300	236.000	655.400	243.000	655.200	300.000	655.300	306.000
X1	27.600	15.000	211.000	236.000	90.000	90.000	90.000	0.000	0.000	0.000
GR	657.400	41.000	657.400	42.000	657.400	74.000	657.400	186.000	657.100	200.000
GR	656.700	211.000	655.100	216.000	654.000	222.000	652.600	224.000	652.000	227.000
GR	653.000	231.000	655.300	236.000	655.400	243.000	655.200	300.000	655.300	306.000
X1	27.680	0.000	0.000	0.000	185.000	185.000	185.000	0.000	0.000	0.000
SB	0.000	1.450	2.600	200.000	4.420	0.000	15.900	0.000	652.000	652.000
X1	27.720	0.000	0.000	0.000	13.000	13.000	13.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	655.600	656.600	0.000	0.000	0.000	0.000	0.000
X1	27.800	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000

X1	28.000	15.000	356.000	380.000	370.000	370.000	370.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	656.500	0.000	0.000
GR	655.100	296.000	655.000	317.000	655.200	319.000	655.500	322.000	656.100	330.000
GR	656.400	341.000	656.300	352.000	655.900	356.000	652.900	362.000	652.500	364.000
GR	653.000	370.000	654.600	373.000	655.800	380.000	655.300	400.000	654.800	450.000
NC	.100	.100	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	29.000	5.000	200.000	248.000	630.000	630.000	630.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	655.900	130.000	655.700	200.000	653.600	248.000	654.200	264.000	655.100	308.000
FJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .150 CEHV= .350
3280 CROSS SECTION 6.20 EXTENDED .94 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST
6.20	6.14	579.44	0.00	579.44	579.64	.20	0.00	0.00	578.50
1020.	72.	557.	391.	91.	118.	253.	0.	0.	577.70
0.00	.79	4.72	1.54	.065	.045	.065	0.000	573.30	400.00
.003089	0.	0.	0.	0	0	1	0.00	400.00	800.00
7.00	5.99	581.39	0.00	0.00	581.75	.36	2.05	.06	580.30
1020.	14.	928.	78.	14.	183.	71.	5.	4.	580.40
.03	1.04	5.06	1.10	.065	.045	.065	.045	575.40	268.96
.004587	550.	550.	550.	1	0	1	0.00	205.82	474.78

3280 CROSS SECTION 7.10 EXTENDED 2.27 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 581.60 ELREA= 585.50

7.10	6.57	583.87	0.00	0.00	584.37	.50	2.57	.05	581.60
1020.	349.	671.	0.	107.	102.	0.	7.	5.	585.50
.06	3.28	6.61	0.00	.065	.045	.065	.045	577.30	647.00
.007323	450.	450.	450.	2	0	1	0.00	73.08	720.08

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

3280 CROSS SECTION 7.98 EXTENDED 3.98 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.50 ELREA= 587.50

** D/S FACE ANN ARBOR RAILROAD

7.98	8.28	585.78	585.78	0.00	589.79	4.01	1.56	0.00	577.50
1020.	0.	1020.	0.	0.	63.	0.	7.	5.	578.20

.06	0.00	16.08	0.00	.065	.045	.065	.045	577.50	700.00
.022977	130.	130.	130.	30	11	1	0.00	8.00	708.00

SPECIAL BRIDGE

SR	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	200.00	10.67	0.00	64.00	0.00	577.50	577.50

3280 CROSS SECTION 8.08 EXTENDED 8.12 FEET

3301 HV CHANGED MORE THAN HVINS

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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
591.70	590.20	0.00	0.	1020.	64.	583.50	596.10	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 596.10 ELREA= 596.10

8.09	12.32	589.82	0.00	0.00	591.70	1.88	1.90	0.00	578.70
1020.	0.	1020.	0.	0.	93.	0.	8.	5.	578.60
.06	0.00	10.99	0.00	.065	.045	.065	.045	577.50	669.00
.012242	39.	39.	39.	3	0	1	0.00	8.00	677.00

1645 INT SEC ADDED BY RAISING SEC 8.10, -.100FT AND MULTIPLYING BY 1.183

3280 CROSS SECTION 1.01 EXTENDED 11.27 FEET

3301 HV CHANGED MORE THAN HVINS

1.01	14.37	591.97	0.00	0.00	591.98	.01	.00	.28	578.80
1020.	369.	101.	550.	665.	95.	844.	8.	5.	577.60
.07	.56	1.06	.65	.080	.050	.080	.045	577.60	611.00
.000042	25.	25.	25.	2	0	1	0.00	140.79	751.79

1645 INT SEC ADDED BY RAISING SEC 1.01, .100FT AND MULTIPLYING BY .845

3280 CROSS SECTION 8.10 EXTENDED 11.17 FEET

8.10	14.27	591.97	0.00	0.00	591.98	.01	.00	.00	578.90

1020.	368.	100.	551.	557.	80.	708.	9.	6.	577.70
.08	.66	1.26	.78	.080	.050	.080	.045	577.70	611.00
.000061	25.	25.	25.	2	0	1	0.00	119.00	730.00

CCHV= .150 CEHV= .350

8.20	9.41	592.01	0.00	0.00	592.01	.00	.02	.00	584.20
1020.	469.	98.	453.	1811.	217.	1725.	67.	13.	584.40
1.07	.26	.45	.26	.080	.050	.080	.047	582.60	459.96
.000013	1000.	1000.	1000.	2	0	1	0.00	537.42	997.38

8.30	7.63	592.03	0.00	0.00	592.04	.00	.03	.00	644.40
1020.	0.	383.	637.	0.	670.	1549.	153.	27.	586.60
1.81	0.00	.57	.41	.080	.050	.080	.048	584.40	231.66
.000048	1250.	1250.	1250.	2	0	1	0.00	422.24	653.90

CCHV= .300 CEHV= .500

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

** D/S FACE LAVOY RD

8.98	7.54	592.04	0.00	0.00	592.04	.00	.00	.00	594.50
1020.	0.	383.	637.	0.	656.	1523.	157.	27.	586.70
1.85	0.00	.58	.42	.080	.050	.080	.048	584.50	232.62
.000051	70.	70.	70.	2	0	1	0.00	420.95	653.57

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	0.00	23.50	0.00	110.45	0.00	584.50	584.50

3280 CROSS SECTION 9.02 EXTENDED 5.07 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
593.89	592.04	0.00	591.	429.	110.	589.20	590.40	30.00

9.02	7.86	592.36	0.00	0.00	592.37	.00	.32	0.00	585.90
1020.	906.	114.	0.	2631.	195.	0.	161.	28.	587.30
1.91	.34	.59	.00	.080	.050	.080	.048	584.50	213.15
.000030	83.	83.	83.	0	0	4	0.00	453.85	667.00

3280 CROSS SECTION 9.10 EXTENDED 5.27 FEET

9.10	8.07	592.37	0.00	0.00	592.37	.00	.00	.00	585.70

1020.	907.	113.	0.	2716.	200.	0.	165.	29.	587.10
1.95	.33	.57	.00	.080	.050	.060	.048	584.30	209.42
.000027	50.	50.	50.	2	0	1	0.00	457.58	667.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 9.20 EXTENDED 4.27 FEET

9.20	8.07	592.37	0.00	0.00	592.40	.03	.02	.01	587.60
1020.	360.	329.	331.	350.	175.	335.	178.	31.	587.80
2.02	1.03	1.88	.99	.065	.045	.065	.048	584.30	407.00
.000257	300.	300.	300.	0	0	1	0.00	175.00	582.00

CCHV= .300 CEHV= .500
3280 CROSS SECTION 9.21 EXTENDED 5.10 FEET

** D/S FACE DRIVEWAY

9.21	8.40	592.40	0.00	0.00	592.47	.07	.05	.02	587.30
1020.	266.	488.	266.	194.	183.	184.	180.	31.	587.50
2.04	1.37	2.67	1.45	.065	.045	.065	.048	584.00	444.00
.000487	145.	145.	145.	2	0	1	0.00	100.00	544.00

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.40	2.60	100.00	27.30	1.30	114.40	0.00	584.00	584.00

3280 CROSS SECTION 9.22 EXTENDED 5.22 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
O	OLOB	OCH	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
594.12	592.47	.01	695.	338.	114.	588.40	589.20	30.00

9.22	8.52	592.52	0.00	0.00	592.59	.07	.12	0.00	587.30
1020.	267.	484.	268.	198.	186.	189.	180.	32.	587.50
2.04	1.35	2.61	1.42	.065	.045	.065	.048	584.00	444.00
.000455	10.	10.	10.	2	0	7	0.00	100.00	544.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.00 ELREA= 593.00

9.30	8.16	592.46	0.00	0.00	592.68	.22	.02	.08	587.00

1020.	0.	1020.	0.	0.	271.	0.	180.	32.	589.40
2.04	0.00	3.76	0.00	.065	.045	.065	.048	584.30	253.00
.001216	25.	25.	25.	2	0	1	0.00	41.00	294.00

CCHV= .150 CEHV= .350

OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA= 593.00 ELREA= 593.00

** D/S FACE TELEGRAPH RD

9.39	8.42	592.42	0.00	0.00	592.88	.46	.12	.08	584.90
1020.	0.	1020.	0.	0.	188.	0.	181.	32.	585.40
2.04	0.00	5.42	0.00	.065	.045	.065	.048	584.00	257.00
.002019	75.	75.	75.	2	0	1	0.00	24.00	281.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDIEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.40	2.60	250.00	24.00	1.80	97.68	0.00	584.00	584.00

PRESSURE FLOW

FGPRS	FGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
594.79	593.29	.10	0.	1020.	98.	588.40	595.10	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA= 595.10 ELREA= 595.10

9.42	10.34	594.34	0.00	0.00	594.79	.45	1.91	0.00	588.50
1020.	0.	1020.	0.	0.	189.	0.	181.	32.	588.20
2.05	0.00	5.38	0.00	.065	.045	.065	.048	584.00	224.00
.002198	106.	106.	106.	2	0	1	0.00	24.00	248.00

3280 CROSS SECTION 9.50 EXTENDED 5.43 FEET

SECNO Q TIME SLOPE	DEPTH QLOB VLOB XLOBL	CWSEL QCH VCH XLCH	CRIWS QROB VROB XLOBR	WSELK ALOB XNL ITRIAL	EG ACH XNCH IOC	HV AROB XNR ICONT	HL VOL WTN CORAR	OLOSS TWA ELMIN TOPWID	BANK ELEV LEFT/RIGHT SSTA ENDST
9.50	11.32	594.82	0.00	0.00	594.88	.05	.03	.06	586.60
1020.	306.	374.	340.	226.	152.	225.	182.	32.	587.70
2.05	1.35	2.46	1.51	.060	.045	.060	.048	583.50	185.00
.000325	40.	40.	40.	2	0	1	0.00	101.00	286.00

CCHV= .150 CEHV= .350

9.61	7.73	595.13	0.00	0.00	595.14	.01	.25	.01	591.00
1020.	610.	197.	213.	854.	165.	304.	211.	38.	590.00
2.52	.71	1.20	.70	.060	.045	.060	.047	587.40	1100.46
.000122	1340.	1340.	1340.	3	0	1	0.00	322.93	1423.39

9.62	7.68	595.18	0.00	0.00	595.20	.02	.06	.00	591.00
1020.	490.	139.	391.	549.	85.	431.	220.	41.	590.20
2.61	.89	1.64	.91	.060	.045	.060	.047	587.50	48.20
.000278	320.	320.	320.	2	0	1	0.00	356.49	404.69

CCHV= .300 CEHV= .500

** D/S FACE DRIVE #1

9.68	7.71	595.21	0.00	0.00	595.22	.02	.02	.00	591.00
1020.	491.	138.	391.	554.	85.	435.	222.	41.	590.20
2.63	.89	1.62	.90	.060	.045	.060	.047	587.50	47.95
.000272	90.	90.	90.	2	0	1	0.00	356.98	404.93

SPECIAL BRIDGE

SB YK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.40	2.60	310.00	.50	0.00	9.90	2.00	587.50	587.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
825.97	595.22	0.00	1001.	19.	10.	599.60	590.80	30.00

9.72	7.77	595.27	0.00	0.00	595.28	.02	.06	0.00	591.00
1020.	492.	136.	392.	567.	86.	445.	223.	42.	590.20
2.64	.87	1.58	.88	.060	.045	.060	.047	587.50	47.26
.000254	20.	20.	20.	1	0	9	0.00	358.31	405.57

9.75	7.68	595.28	0.00	0.00	595.29	.02	.01	.00	591.10
1020.	490.	139.	391.	549.	85.	430.	224.	42.	590.30
2.65	.89	1.64	.91	.060	.045	.060	.047	587.60	48.24
.000280	40.	40.	40.	2	0	1	0.00	356.42	404.66

CCHV= .150 CEHV= .350

9.84	6.56	595.56	0.00	0.00	595.62	.06	.31	.02	592.00
1020.	554.	357.	108.	389.	126.	92.	235.	46.	592.00
2.74	1.43	2.83	1.17	.075	.055	.075	.048	589.00	1074.03
.001309	600.	600.	600.	2	0	1	0.00	232.47	1306.49

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	IOC	ICONT	CORAR	TOPWID	ENDST

9.85	6.78	595.78	0.00	0.00	595.81	.02	.18	.01	591.00
1020.	469.	276.	275.	460.	149.	333.	239.	47.	593.00
2.78	1.02	1.85	.83	.075	.055	.075	.048	589.00	70.03
.000646	200.	200.	200.	2	0	1	0.00	386.53	456.56

** D/S FACE DRIVE #2

9.88	6.85	595.85	0.00	0.00	595.87	.02	.06	.00	591.00
1020.	469.	272.	279.	472.	151.	344.	241.	48.	593.00
2.81	.99	1.80	.81	.075	.055	.075	.048	589.00	68.96
.000599	100.	100.	100.	2	0	1	0.00	388.14	457.10

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	375.00	.50	0.00	26.25	2.00	589.00	589.00

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
628.67	595.87	0.00	968.	51.	26.	592.50	593.50	30.00

9.92	6.91	595.91	0.00	0.00	595.93	.02	.06	0.00	591.00
1020.	469.	269.	282.	484.	153.	354.	241.	49.	593.00
2.81	.97	1.75	.80	.075	.055	.075	.048	589.00	67.95
.000559	20.	20.	20.	2	0	8	0.00	389.67	457.62

9.93	6.46	595.96	0.00	0.00	595.99	.03	.06	.01	591.50
1020.	468.	298.	254.	402.	139.	279.	243.	49.	593.50
2.83	1.17	2.15	.91	.075	.055	.075	.048	589.50	75.39
.000962	80.	80.	80.	2	0	1	0.00	378.46	453.85

CCHV= .150 CEHV= .350

9.94	5.18	596.28	0.00	0.00	596.35	.08	.35	.01	593.00
1020.	339.	220.	461.	250.	66.	226.	247.	51.	592.00
2.86	1.36	3.34	2.04	.075	.055	.075	.048	591.10	1117.33
.002175	250.	250.	250.	3	0	1	0.00	248.64	1365.97

9.95	4.95	596.65	0.00	0.00	596.68	.03	.32	.01	593.00
1020.	319.	105.	596.	282.	52.	471.	251.	53.	593.00
2.91	1.13	2.04	1.26	.075	.055	.075	.048	591.70	41.74
.000839	250.	250.	250.	2	0	1	0.00	273.40	315.14

CCHV= .300 CEHV= .500

** D/S FACE DRIVE #3

9.96	5.03	596.73	0.00	0.00	596.75	.03	.07	.00	593.00
1020.	321.	104.	595.	290.	53.	483.	253.	53.	593.00
2.93	1.11	1.98	1.23	.075	.055	.075	.048	591.70	41.36
.000775	90.	90.	90.	2	0	1	0.00	274.47	315.83

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	265.00	.50	0.00	2.50	2.00	591.70	591.70

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	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

PRESSURE AND WEIR FLOW

EGPRS	FGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
4215.51	596.75	0.00	1006.	6.	3.	592.70	593.70	30.00

9.97	5.11	596.81	0.00	0.00	596.83	.02	.08	0.00	593.00
1020.	323.	103.	594.	299.	54.	496.	253.	53.	593.00
2.94	1.08	1.92	1.20	.075	.055	.075	.048	591.70	40.95
.000712	20.	20.	20.	?	0	9	0.00	275.64	316.59
9.98	5.17	596.87	0.00	0.00	596.90	.02	.06	.00	593.00
1020.	324.	102.	594.	306.	54.	506.	255.	54.	593.00
2.96	1.06	1.88	1.17	.075	.055	.075	.049	591.70	40.63
.000668	90.	90.	90.	?	0	1	0.00	276.54	317.17

CCHV= .150 CEHV= .350

9.99	4.69	597.29	0.00	0.00	597.33	.04	.43	.00	594.40
695.	515.	83.	97.	372.	33.	95.	263.	57.	594.70
3.05	1.38	2.48	1.03	.065	.050	.065	.049	592.60	120.23
.001311	500.	500.	500.	2	0	1	0.00	281.53	401.75
10.00	4.60	598.00	0.00	0.00	598.04	.04	.71	.00	595.20
695.	516.	86.	93.	355.	33.	86.	268.	60.	595.50
3.14	1.45	2.63	1.08	.065	.050	.065	.049	593.40	121.75
.001526	500.	500.	500.	2	0	1	0.00	278.03	399.78
10.01	4.75	598.95	0.00	0.00	598.98	.03	.94	.00	596.00
695.	514.	81.	100.	383.	34.	100.	276.	65.	596.30
3.28	1.34	2.39	1.00	.065	.050	.065	.049	594.20	119.30
.001198	700.	700.	700.	2	0	1	0.00	283.57	402.87
10.04	4.99	600.09	0.00	0.00	600.19	.10	1.19	.02	597.80
695.	246.	227.	222.	131.	63.	127.	283.	68.	597.50
3.36	1.88	3.60	1.75	.065	.050	.065	.049	595.10	171.69
.002592	700.	700.	700.	2	0	1	0.00	162.10	333.80
10.05	5.47	601.47	0.00	0.00	601.54	.06	1.34	.01	598.70
695.	254.	202.	239.	165.	71.	167.	289.	71.	598.40
3.47	1.54	2.86	1.44	.065	.050	.065	.049	596.00	166.20
.001395	720.	720.	720.	1	0	1	0.00	176.72	342.92

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	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
10.10	3.88	602.98	602.98	0.00	603.47	.49	.27	0.00	601.80
695.	206.	334.	155.	62.	45.	52.	289.	71.	601.50
3.47	3.31	7.42	3.01	.065	.050	.065	.049	599.10	184.11
.017149	80.	80.	80.	30	14	1	0.00	128.21	312.31

CCHV= .400 CEHV= .800
3280 CROSS SECTION 10.18 EXTENDED 2.59 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	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

** D/S FACE PRIVATE DRIVEWAY

10.19	6.89	603.79	0.00	0.00	603.81	.02	.15	.19	599.60
695.	277.	162.	256.	264.	93.	243.	291.	72.	599.30
3.50	1.05	1.74	1.06	.065	.050	.065	.049	596.90	170.00
.000357	140.	140.	140.	4	0	1	0.00	150.00	320.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	PDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	150.00	4.07	0.00	19.15	0.00	596.90	596.90

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
636.51	603.84	0.00	532.	169.	19.	601.60	604.50	30.00

10.27	8.81	605.71	0.00	0.00	605.73	.02	1.92	0.00	599.20
695.	495.	159.	41.	566.	102.	61.	291.	72.	598.90
3.51	.87	1.55	.68	.065	.050	.065	.049	596.90	317.93
.000190	17.	17.	17.	1	0	6	0.00	166.86	484.80
10.30	7.62	605.72	0.00	0.00	605.76	.03	.01	.01	600.40
695.	470.	187.	38.	411.	87.	41.	291.	72.	600.10

3.52	1.14	2.15	.93	.065	.050	.065	.049	598.10	328.99
.000457	42.	42.	42.	2	0	1	0.00	152.68	481.67
10.35	7.28	605.78	0.00	0.00	605.82	.04	.06	.01	600.80
695.	460.	198.	37.	368.	82.	36.	293.	72.	600.50
3.54	1.25	2.40	1.03	.065	.050	.065	.049	598.50	331.45
.000611	110.	110.	110.	2	0	1	0.00	149.32	480.77

** D/S FACE LEWIS RD

10.39	6.85	605.85	0.00	0.00	605.98	.13	.09	.07	602.80
695.	384.	311.	0.	190.	84.	0.	293.	73.	606.80
3.54	2.02	3.70	0.00	.065	.050	.065	.049	599.00	49.35
.002763	80.	80.	80.	2	0	1	0.00	115.90	165.26

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.60	2.60	125.00	18.00	2.00	83.08	0.00	599.00	599.00

3280 CROSS SECTION 10.42 EXTENDED .16 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
607.59	606.05	.02	56.	637.	83.	604.20	607.00	30.00

10.42	7.96	607.26	0.00	0.00	607.31	.05	1.33	0.00	603.10
695.	450.	245.	0.	304.	110.	0.	294.	73.	607.10
3.56	1.48	2.24	.01	.065	.050	.065	.049	599.30	35.49
.000915	112.	112.	112.	2	0	2	0.00	134.51	170.00

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	ICC	ICCNT	CCRAR	TOPWID	ENDST
10.45	7.72	607.32	0.00	0.00	607.38	.06	.06	.01	603.40
695.	424.	271.	0.	278.	103.	0.	295.	73.	607.40
3.57	1.52	2.62	0.00	.080	.055	.080	.049	599.60	38.53
.001609	50.	50.	50.	2	0	1	0.00	131.06	169.59

CCHV= .150 CEHV= .350

11.00	6.85	607.95	0.00	0.00	607.97	.02	.59	.01	603.40
695.	264.	196.	235.	260.	109.	249.	303.	76.	603.40
3.74	1.01	1.80	.94	.080	.055	.080	.049	601.10	270.60
.000460	750.	750.	750.	3	0	1	0.00	153.99	424.59

11.50	6.06	608.66	0.00	0.00	608.70	.04	.72	.01	604.90
695.	259.	215.	221.	209.	94.	194.	318.	80.	604.90
3.95	1.24	2.29	1.14	.080	.055	.080	.050	602.60	270.70
.090909	1150.	1150.	1150.	3	0	1	0.00	153.61	424.31

11.90	5.86	609.46	0.00	0.00	609.50	.05	.80	.00	605.90
695.	258.	222.	216.	196.	90.	179.	327.	82.	605.90
4.09	1.31	2.46	1.20	.080	.055	.080	.050	603.60	270.72
.091119	800.	800.	800.	2	0	1	0.00	153.51	424.23

CCHV= .400 CEHV= .800
3290 CROSS SECTION 11.98 EXTENDED 2.57 FEET

** D/S FACE STERNS RD

11.99	5.18	609.68	0.00	0.00	609.81	.14	.24	.07	606.80
695.	154.	304.	237.	76.	77.	131.	328.	83.	606.80
4.10	2.02	3.94	1.80	.080	.055	.080	.050	604.50	307.00
.093504	130.	130.	130.	2	0	1	0.00	116.67	423.67

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.09	1.30	2.60	100.00	10.15	0.00	45.67	0.00	604.50	604.50

3280 CROSS SECTION 12.02 EXTENDED 1.50 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
614.35	611.79	0.00	119.	577.	46.	609.00	612.30	30.00

12.02	8.20	612.70	0.00	0.00	612.89	.19	3.08	0.00	608.70
695.	66.	443.	186.	45.	105.	99.	328.	83.	606.50
4.10	1.47	4.22	1.88	.080	.055	.080	.050	604.50	86.08
.092141	36.	36.	36.	2	0	4	0.00	73.92	160.00

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

12.10	7.16	613.06	0.00	0.00	613.44	.38	.40	.15	610.10
695.	41.	504.	151.	23.	89.	70.	329.	83.	607.90
4.11	1.76	5.64	2.15	.080	.055	.080	.050	605.90	94.34
.094743	130.	130.	130.	3	0	1	0.00	95.11	189.45

** D/S FACE SENECA RD

12.18	7.34	613.44	0.00	0.00	613.76	.33	.31	.02	610.30
695.	45.	490.	160.	26.	92.	82.	329.	83.	608.10
4.11	1.71	5.32	1.95	.080	.055	.080	.050	606.10	92.92
.004060	70.	70.	70.	2	0	1	0.00	108.60	201.52

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.33	2.60	120.00	7.93	0.00	26.97	0.00	606.10	606.10

3280 CROSS SECTION 12.22 EXTENDED 3.22 FEET

PRESSURE AND WEIR FLOW

FGPRS	FGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
627.15	613.76	0.00	561.	134.	27.	609.50	612.40	30.00

12.22	7.82	613.92	0.00	0.00	613.95	.02	.18	0.00	607.60
695.	108.	147.	440.	147.	75.	510.	330.	83.	606.50
4.12	.74	1.95	.86	.080	.055	.080	.050	606.10	25.92
.000377	34.	34.	34.	2	0	5	0.00	204.08	230.00

3280 CROSS SECTION 12.30 EXTENDED 2.36 FEET

12.30	6.96	613.96	0.00	0.00	614.01	.04	.04	.02	608.50
695.	93.	179.	423.	100.	67.	391.	331.	84.	607.40
4.14	.92	2.68	1.08	.080	.055	.080	.050	607.00	29.65
.000837	80.	80.	80.	2	0	1	0.00	200.35	230.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 12.40 EXTENDED .09 FEET

12.40	7.48	615.38	0.00	0.00	615.51	.13	1.47	.03	612.80
695.	184.	418.	93.	158.	116.	85.	342.	89.	613.40
4.25	1.16	3.61	1.09	.080	.055	.080	.051	607.90	0.00
.002669	1070.	1070.	1070.	2	0	1	0.00	226.40	226.40

CCHV= .400 CEHV= .800
3280 CROSS SECTION 12.48 EXTENDED .91 FEET

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

** D/S FACE BRIDGEWAY RD

12.49	8.30	615.70	0.00	0.00	615.75	.05	.20	.03	612.30
695.	238.	321.	136.	255.	136.	167.	343.	90.	612.90
4.27	.93	2.35	.81	.080	.055	.080	.051	607.40	0.00
.000915	140.	140.	140.	2	0	1	0.00	257.94	257.94

SPECIAL BRIDGE

SB	KK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHL	ELCHD
	0.00	1.51	2.60	250.00	6.79	0.00	25.12	0.00	607.40	607.40

PRESSURE AND WEIR FLOW

EGPRS	FGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
633.65	615.75	0.00	645.	50.	25.	611.10	613.80	30.00

12.52	8.37	615.77	0.00	0.00	615.79	.02	.05	0.00	607.90
695.	369.	88.	238.	422.	41.	289.	344.	90.	607.80
4.28	.87	2.16	.82	.080	.055	.080	.051	607.40	56.70
.000396	23.	23.	23.	1	0	8	0.00	259.71	316.41
12.60	6.88	615.78	0.00	0.00	615.85	.07	.02	.04	609.40
695.	336.	129.	230.	230.	33.	148.	344.	90.	609.30
4.28	1.46	3.88	1.55	.080	.055	.080	.051	608.90	82.96
.001689	25.	25.	25.	2	0	1	0.00	193.53	277.48
12.79	6.09	616.89	0.00	0.00	617.07	.17	1.13	.08	611.30
695.	299.	165.	230.	146.	29.	98.	348.	92.	611.20
4.33	2.05	5.63	2.36	.080	.055	.080	.051	610.80	98.30
.004209	450.	450.	450.	3	0	1	0.00	158.69	256.99
12.97	5.79	618.39	0.00	0.00	618.46	.08	1.36	.04	614.30
695.	189.	243.	263.	120.	72.	241.	351.	94.	615.70
4.39	1.57	3.36	1.09	.080	.055	.080	.051	612.60	275.06
.002276	450.	450.	450.	2	0	1	0.00	297.91	572.97

CCHV= .150 CEHV= .350

13.09	5.08	619.58	0.00	0.00	619.69	.12	1.21	.01	616.20
490.	131.	227.	132.	81.	61.	121.	355.	97.	617.60
4.44	1.61	3.73	1.09	.080	.055	.080	.051	614.50	285.56
.003533	450.	450.	450.	2	0	1	0.00	187.39	472.95
13.05	5.07	621.37	0.00	0.00	621.48	.11	1.79	.00	618.00
490.	131.	226.	133.	82.	61.	122.	358.	99.	619.40
4.50	1.60	3.71	1.09	.080	.055	.080	.051	616.30	285.43
.003481	510.	510.	510.	0	0	1	0.00	188.08	473.51

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT

TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
13.06	5.06	623.26	0.00	0.00	623.48	.22	1.96	.04	620.90
490.	39.	361.	90.	30.	84.	91.	361.	101.	620.80
4.54	1.31	4.32	.99	.080	.055	.080	.051	618.20	55.64
.004260	510.	510.	510.	1	0	1	0.00	231.63	287.26
13.10	5.21	625.21	0.00	0.00	625.37	.16	1.89	.01	622.70
490.	42.	336.	112.	36.	87.	119.	363.	104.	622.60
4.59	1.18	3.87	.94	.080	.055	.080	.051	620.00	51.19
.003249	510.	510.	510.	2	0	1	0.00	251.65	302.84

CCHV= .400 CEHV= .800
3280 CROSS SECTION 13.18 EXTENDED 1.70 FEET

** D/S FACE LONGFELLOW RD

13.18	6.51	625.51	0.00	0.00	625.53	.02	.10	.06	621.70
490.	247.	178.	65.	322.	108.	119.	364.	105.	623.10
4.61	.77	1.64	.55	.080	.055	.080	.051	619.00	0.00
.000451	100.	100.	100.	2	0	1	0.00	213.00	213.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.81	2.60	200.00	3.93	0.00	12.97	0.00	619.00	619.00

3280 CROSS SECTION 13.22 EXTENDED 1.81 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
665.67	625.53	0.00	469.	26.	13.	622.30	624.30	30.00

13.22	6.60	625.60	0.00	0.00	625.62	.02	.09	0.00	621.70
490.	248.	173.	69.	334.	110.	127.	365.	105.	623.10
4.63	.74	1.57	.54	.080	.055	.080	.051	619.00	0.00
.000401	60.	60.	60.	1	0	9	0.00	213.00	213.00

3280 CROSS SECTION 13.30 EXTENDED 1.42 FEET

13.30	6.22	625.62	0.00	0.00	625.64	.03	.02	.01	622.10
490.	243.	191.	56.	289.	102.	97.	366.	105.	623.50
4.64	.84	1.87	.58	.080	.055	.080	.051	619.40	0.00
.000628	40.	40.	40.	2	0	1	0.00	213.00	213.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 14.00 EXTENDED .33 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
O	OLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
14.00	6.53	625.73	0.00	0.00	625.86	.13	.18	.04	624.70
490.	71.	378.	41.	87.	115.	56.	367.	106.	624.70
4.65	.81	3.30	.73	.080	.055	.080	.051	619.20	199.00
.003210	150.	150.	150.	3	0	1	0.00	261.00	460.00

CCHV= .400 CEHV= .800

** D/S FACE TENNYSON RD

14.98	6.30	626.00	0.00	0.00	626.07	.07	.18	.03	624.40
490.	97.	371.	22.	135.	156.	29.	368.	107.	623.10
4.67	.72	2.39	.75	.080	.055	.080	.051	619.70	26.96
.001007	110.	110.	110.	2	0	1	0.00	159.93	186.89

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.80	2.70	150.00	3.77	0.00	12.44	0.00	619.70	619.70

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
659.37	626.07	0.00	458.	32.	12.	623.00	624.80	30.00
15.02	6.42	626.12	0.00	0.00	626.18	.06	.11	0.00	624.40
490.	104.	363.	23.	148.	159.	31.	368.	107.	623.10
4.68	.71	2.28	.72	.080	.055	.080	.051	619.70	23.35
.000887	60.	60.	60.	2	0	7	0.00	164.37	187.72
15.10	5.86	626.16	0.00	0.00	626.27	.11	.05	.04	625.00
490.	68.	404.	18.	90.	142.	21.	368.	107.	623.70
4.69	.76	2.85	.86	.080	.055	.080	.051	620.30	40.18
.001636	40.	40.	40.	2	0	1	0.00	143.69	183.87

CCHV= .150 CEHV= .350

16.00	6.02	627.02	0.00	0.00	627.34	.32	1.00	.08	625.80
490.	35.	455.	0.	30.	97.	0.	370.	108.	627.10
4.70	1.15	4.71	0.00	.080	.055	.080	.051	621.00	116.03
.007399	330.	330.	330.	2	0	1	0.00	80.73	196.76

3280 CROSS SECTION 16.10 EXTENDED .13 FEET

16.10	6.23	628.23	0.00	0.00	628.44	.21	1.08	.02	626.00
490.	50.	408.	32.	38.	102.	33.	370.	108.	627.10
4.72	1.32	4.01	.98	.080	.055	.080	.051	622.00	0.00
.004127	200.	200.	200.	2	0	1	0.00	106.12	106.12

CCHV= .200 CEHV= .400
3280 CROSS SECTION 16.98 EXTENDED .04 FEET

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

** D/S FACE JACKMAN RD

16.98	6.14	628.74	0.00	0.00	628.97	.23	.52	.01	626.60
490.	46.	416.	27.	35.	99.	28.	371.	109.	627.70
4.73	1.33	4.18	.96	.080	.055	.080	.051	622.60	0.00
.004639	120.	120.	120.	2	0	1	0.00	105.47	105.47

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	215.00	8.00	0.00	47.20	0.00	622.60	622.60

3280 CROSS SECTION 17.02 EXTENDED .97 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	Y3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
631.03	628.89	0.00	91.	400.	47.	628.50	630.00	30.00

17.02	7.67	630.27	0.00	0.00	630.30	.03	1.33	0.00	625.40
490.	252.	182.	56.	282.	99.	114.	371.	109.	628.70
4.73	.90	1.84	.49	.080	.055	.080	.051	622.60	50.00
.010564	26.	26.	26.	2	0	4	0.00	225.00	275.00

3280 CROSS SECTION 17.10 EXTENDED .99 FEET

17.10	7.69	630.29	0.00	0.00	630.32	.03	.02	.00	625.40
490.	252.	191.	57.	284.	95.	116.	371.	109.	628.70
4.74	.89	1.82	.49	.080	.055	.080	.051	622.60	50.00
.000551	37.	37.	37.	2	0	1	0.00	225.00	275.00

CCHV= .150 CEHV= .350

18.00	6.67	630.67	0.00	0.00	630.71	.05	.39	.01	625.70
490.	114.	166.	210.	95.	68.	183.	378.	112.	625.50

4.86	1.20	2.43	1.15	.070	.050	.060	.051	624.00	272.80
.000654	650.	650.	650.	3	0	1	0.00	155.92	428.73
18.90	4.91	631.01	0.00	0.00	631.06	.05	.34	.00	626.10
490.	43.	211.	236.	55.	103.	156.	382.	113.	626.10
4.95	.77	2.05	1.52	.070	.050	.060	.051	626.10	105.72
.000569	560.	560.	560.	3	0	1	0.00	94.68	200.40

CCHV= .300 CEHV= .500

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 633.00 ELREA= 633.00

** D/S FACE NEW BRIDGE UNDER CONSTRUCTION

18.98	3.87	631.07	0.00	0.00	631.19	.12	.10	.04	625.60
490.	0.	490.	0.	0.	173.	0.	383.	114.	627.20
4.96	0.00	2.83	0.00	.070	.050	.060	.051	627.20	135.00
.001644	110.	110.	110.	2	0	1	0.00	45.00	180.94

SPECIAL BRIDGE

SB XK	XKCR	COEQ	RDLEN	BWC	BW2	BAREA	SS	ELCHU	ELCHD
1.25	1.60	2.60	125.00	45.50	1.50	211.20	0.00	627.20	627.20

SECND	DEPTH	CWSEL	CRITWS	WSELK	EG	HV	HL	CLOSS	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	XICH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
631.20	631.20	.01	0.	490.	211.	631.00	633.50	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 633.50 ELREA= 633.50

19.08	3.88	631.08	0.00	0.00	631.20	.12	.01	0.00	627.20
490.	0.	490.	0.	0.	175.	0.	383.	114.	627.20
4.96	0.00	2.81	0.00	.070	.050	.060	.051	627.20	145.00
.001474	37.	37.	37.	2	0	1	0.00	45.00	190.00

3649 NUMBER SECTIONS EXCEED LIMIT

19.10	3.66	631.16	0.00	0.00	631.30	.14	.09	.01	627.50
490.	6.	437.	47.	6.	139.	37.	383.	114.	627.50
4.97	1.03	3.14	1.25	.080	.055	.080	.051	627.50	144.82
.002397	50.	50.	50.	2	0	1	0.00	83.28	228.10

3649 NUMBER SECTIONS EXCEED LIMIT

CCHV= .150 CEHV= .350

3280 CROSS SECTION 20.00 EXTENDED .70 FEET

20.00	3.90	632.40	0.00	0.00	632.57	.16	1.25	.01	631.40
490.	161.	314.	15.	113.	80.	25.	385.	115.	631.90
5.00	1.42	3.92	.61	.080	.055	.080	.051	628.50	150.00
.005923	350.	350.	350.	2	0	1	0.00	240.51	390.51

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 20.10 EXTENDED .10 FEET

20.10	4.10	633.00	632.19	0.00	633.48	.48	.80	.11	633.10
490.	0.	454.	36.	0.	79.	33.	385.	115.	632.00
5.00	0.00	5.75	1.10	.080	.055	.080	.051	628.90	9.08
.011404	100.	100.	100.	4	11	1	0.00	140.92	150.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .200 CEHV= .400
3280 CROSS SECTION 20.98 EXTENDED .94 FEET

** D/S FACE BROOKWOOD RD

20.98	4.93	634.03	0.00	0.00	634.17	.13	.62	.07	633.30
490.	1.	345.	144.	2.	101.	129.	385.	116.	632.20
5.02	.52	3.43	1.11	.080	.055	.080	.051	629.10	2.36
.002951	120.	120.	120.	2	0	1	0.00	147.64	150.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	RDIEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	150.00	5.71	0.00	18.28	0.00	629.10	629.10

SECNO	DEPTH	QWSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	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	ICC	ICCNT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

FGPRS	FGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
648.54	634.17	0.00	385.	105.	18.	632.30	633.70	30.00

21.02	5.45	634.55	0.00	0.00	634.70	.15	.53	0.00	630.70
490.	107.	319.	64.	82.	84.	59.	386.	116.	632.10
5.02	1.30	3.80	1.09	.080	.055	.080	.051	629.10	24.23
.002622	32.	32.	32.	2	0	6	0.00	152.79	177.01

3649 NUMBER SECTIONS EXCEED LIMIT

21.10	5.48	634.68	0.00	0.00	634.83	.15	.13	.00	630.80
490.	109.	316.	65.	85.	85.	60.	386.	116.	632.20
5.02	1.28	3.74	1.07	.080	.055	.080	.051	629.20	20.92
.002516	50.	50.	50.	2	0	1	0.00	156.77	177.69

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
3280 CROSS SECTION 22.00 EXTENDED 1.36 FEET

22.00	5.76	635.36	0.00	0.00	635.47	.11	.63	.01	633.00
490.	186.	243.	61.	135.	69.	59.	387.	117.	633.00
5.05	1.38	3.50	1.04	.080	.055	.080	.051	629.60	43.00
.002521	250.	250.	250.	2	0	1	0.00	164.00	207.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
3280 CROSS SECTION 22.98 EXTENDED 1.89 FEET

** D/S FACE DEAN RD

22.99	6.29	635.69	0.00	0.00	635.74	.06	.26	.02	632.80
490.	201.	203.	86.	175.	77.	99.	388.	118.	632.80
5.03	1.15	2.63	.87	.080	.055	.080	.052	629.40	43.00
.001249	150.	150.	150.	2	0	1	0.00	164.00	207.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	100.00	5.00	0.00	19.44	0.00	629.40	629.40

3280 CROSS SECTION 23.02 EXTENDED 3.75 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
652.46	635.74	0.00	366.	124.	19.	633.30	635.50	30.00

23.02	7.35	636.75	0.00	0.00	636.76	.01	1.01	0.00	632.60
490.	162.	177.	150.	258.	146.	245.	389.	118.	633.60
5.10	.63	1.21	.61	.080	.055	.080	.052	629.40	210.00
.000204	52.	52.	52.	1	0	6	0.00	165.00	375.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 23.10 EXTENDED 2.85 FEET

SECNO	DEPTH	CVSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	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
23.10	6.45	636.75	0.00	0.00	636.77	.02	.01	.01	633.50
490.	153.	200.	137.	195.	124.	182.	389.	118.	634.50
5.10	.78	1.62	.75	.080	.055	.080	.052	630.30	210.00
.000457	24.	24.	24.	2	0	1	0.00	165.00	375.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 23.20 EXTENDED 1.77 FEET

23.20	5.37	637.17	0.00	0.00	637.24	.06	.43	.03	635.00
490.	129.	254.	107.	120.	97.	107.	394.	120.	636.00
5.18	1.08	2.62	1.00	.080	.055	.080	.052	631.80	210.00
.001655	550.	550.	550.	3	0	1	0.00	165.00	375.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350

23.90	4.96	638.26	0.00	0.00	638.40	.14	1.13	.03	633.60
490.	117.	237.	137.	74.	61.	72.	398.	122.	634.10
5.24	1.57	3.88	1.90	.080	.055	.080	.052	633.30	214.60
.002638	550.	550.	550.	2	0	1	0.00	89.14	303.73

3649 NUMBER SECTIONS EXCEED LIMIT

24.00	4.93	639.73	0.00	0.00	639.87	.14	1.47	.00	635.10
490.	116.	238.	137.	73.	61.	71.	400.	123.	635.60
5.20	1.58	3.91	1.92	.080	.055	.080	.052	634.80	215.05
.002704	550.	550.	550.	1	0	1	0.00	88.55	303.61

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 24.10 EXTENDED .03 FEET

24.10	5.23	641.33	0.00	0.00	641.44	.11	1.57	.00	636.40
490.	125.	227.	138.	88.	65.	80.	404.	124.	636.90
5.37	1.42	3.52	1.72	.080	.055	.080	.052	636.10	204.00
.002016	675.	675.	675.	2	0	1	0.00	103.16	307.16

3649 NUMBER SECTIONS EXCEED LIMIT

24.90	5.86	643.26	0.00	0.00	643.62	.35	2.09	.08	642.30
490.	13.	443.	35.	17.	89.	30.	407.	126.	641.70
5.41	.75	5.00	1.16	.080	.050	.080	.052	637.40	481.93
.005365	675.	675.	675.	2	0	1	0.00	104.21	586.14

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 24.95 EXTENDED .17 FEET

24.95	6.57	644.57	0.00	0.00	644.73	.16	1.08	.03	642.90
490.	47.	380.	63.	60.	105.	62.	408.	127.	642.30
5.44	.78	3.64	1.01	.080	.050	.080	.052	638.00	450.00
.002275	325.	325.	325.	2	0	1	0.00	150.00	600.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 25.00 EXTENDED .28 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	OCH	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
25.00	6.68	645.28	0.00	0.00	645.42	.14	.69	.00	643.50
490.	54.	369.	68.	68.	107.	68.	410.	128.	642.90
5.47	.79	3.44	.99	.080	.050	.080	.052	638.60	450.00
.001071	325.	325.	325.	2	0	1	0.00	150.00	600.00
3649 NUMBER SECTIONS EXCEED LIMIT									
25.02	6.26	645.36	0.00	0.00	645.59	.23	.14	.03	644.00
490.	29.	411.	50.	38.	98.	47.	410.	128.	643.40
5.48	.77	4.21	1.06	.080	.050	.080	.052	639.10	460.53
.003353	55.	55.	55.	2	0	1	0.00	135.12	595.65
3649 NUMBER SECTIONS EXCEED LIMIT									
25.05	5.83	645.53	0.00	0.00	645.89	.36	.26	.05	644.60
490.	11.	445.	33.	16.	88.	29.	410.	128.	644.00
5.48	.74	5.07	1.16	.080	.050	.080	.052	639.70	483.91
.005603	60.	60.	60.	2	0	1	0.00	101.35	585.26
3649 NUMBER SECTIONS EXCEED LIMIT									
25.10	5.43	646.23	0.00	0.00	646.76	.53	.81	.06	645.70
490.	2.	469.	19.	3.	78.	15.	411.	128.	645.10
5.48	.59	5.99	1.21	.080	.050	.080	.052	640.80	506.07
.009060	115.	115.	115.	2	0	1	0.00	69.33	575.40
3649 NUMBER SECTIONS EXCEED LIMIT									
25.15	5.38	647.28	0.00	0.00	647.84	.56	1.07	.01	646.80
490.	1.	471.	17.	3.	77.	14.	411.	129.	646.20
5.49	.56	6.10	1.21	.080	.050	.080	.052	641.90	508.63
.009572	115.	115.	115.	2	0	1	0.00	65.64	574.26
3649 NUMBER SECTIONS EXCEED LIMIT									
25.20	5.38	648.38	0.00	0.00	648.94	.56	1.10	.00	647.90
490.	1.	471.	17.	3.	77.	14.	411.	129.	647.30
5.50	.56	6.10	1.21	.080	.050	.080	.052	643.00	508.63
.009572	115.	115.	115.	0	0	1	0.00	65.64	574.26
3649 NUMBER SECTIONS EXCEED LIMIT									
25.25	5.38	649.48	0.00	0.00	650.04	.56	1.10	.00	649.00
490.	1.	471.	17.	3.	77.	14.	411.	129.	648.40
5.50	.56	6.10	1.21	.080	.050	.080	.052	644.10	508.59
.009563	115.	115.	115.	0	0	1	0.00	65.69	574.28
3649 NUMBER SECTIONS EXCEED LIMIT									
25.30	5.38	650.58	0.00	0.00	651.14	.56	1.10	.00	650.10

490.	1.	471.	17.	3.	77.	14.	412.	129.	649.50
5.51	.56	6.09	1.21	.080	.050	.080	.052	645.20	508.55
.009554	115.	115.	115.	0	0	1	0.00	65.75	574.30

3649 NUMBER SECTIONS EXCEED LIMIT

SECNO	DEPTH	CWSEL	CRITS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	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
25.35	5.38	651.68	0.00	0.00	652.24	.56	1.10	.00	651.20
490.	1.	471.	17.	3.	77.	14.	412.	129.	650.60
5.51	.56	6.09	1.21	.080	.050	.080	.052	646.30	508.57
.009559	115.	115.	115.	0	0	1	0.00	65.72	574.29

3649 NUMBER SECTIONS EXCEED LIMIT

25.40	5.38	652.78	0.00	0.00	653.34	.56	1.10	.00	652.30
490.	1.	471.	17.	3.	77.	14.	412.	129.	651.70
5.52	.56	6.10	1.21	.080	.050	.080	.052	647.40	508.62
.009570	115.	115.	115.	0	0	1	0.00	65.65	574.27

3649 NUMBER SECTIONS EXCEED LIMIT

25.45	5.38	653.88	0.00	0.00	654.44	.56	1.10	.00	653.40
490.	1.	471.	17.	3.	77.	14.	412.	130.	652.80
5.52	.56	6.10	1.21	.080	.050	.080	.052	648.50	508.64
.009574	115.	115.	115.	0	0	1	0.00	65.62	574.26

3649 NUMBER SECTIONS EXCEED LIMIT

25.90	5.38	654.98	0.00	0.00	655.54	.56	1.10	.00	654.50
490.	1.	471.	17.	3.	77.	14.	413.	130.	653.90
5.53	.56	6.10	1.21	.080	.050	.080	.052	649.60	508.60
.009567	115.	115.	115.	0	0	1	0.00	65.67	574.27

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .300 CEHV= .500
3280 CROSS SECTION 25.98 EXTENDED 1.68 FEET

** D/S FACE DOUGLAS RD

25.98	5.28	656.08	0.00	0.00	656.18	.10	.50	.14	655.80
490.	1.	307.	183.	4.	100.	135.	413.	130.	654.10
5.54	.20	3.07	1.36	.080	.050	.080	.052	650.80	109.30
.002350	120.	120.	120.	2	0	1	0.00	155.70	265.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	125.00	5.40	0.00	17.28	0.00	650.80	650.80

3280 CROSS SECTION 26.02 EXTENDED 2.48 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
674.81	656.18	0.00	386.	104.	17.	654.00	655.80	30.00

26.09	6.08	656.88	0.00	0.00	656.93	.04	.75	0.00	655.80
490.	26.	265.	199.	53.	125.	193.	413.	130.	654.10
5.55	.49	2.12	1.03	.080	.050	.080	.052	650.80	100.00
.000836	36.	36.	36.	2	0	6	0.00	165.00	265.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 26.10 EXTENDED 2.54 FEET

SECNO	DEPTH	CWSEL	CRITS	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	ICC	ICONT	CORAR	TOPWID	ENDST

26.10	6.14	656.94	0.00	0.00	656.98	.04	.06	.00	655.80
490.	28.	263.	200.	57.	127.	198.	414.	130.	654.10
5.56	.49	2.07	1.01	.080	.050	.080	.052	650.80	100.00
.000781	70.	70.	70.	2	0	1	0.00	165.00	265.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
3280 CROSS SECTION 26.18 EXTENDED 2.57 FEET

** D/S FACE PRIVATE DRIVE #1

26.18	6.17	656.97	0.00	0.00	657.01	.04	.02	.00	655.80
490.	29.	262.	200.	58.	127.	200.	414.	131.	654.10
5.57	.49	2.05	1.00	.080	.050	.080	.052	650.80	100.00
.000759	30.	30.	30.	2	0	1	0.00	165.00	265.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKCR	COEQ	BDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	150.00	7.00	0.00	23.80	0.00	650.80	650.80

3280 CROSS SECTION 26.22 EXTENDED 1.17 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS

666.84	657.01	0.00	439.	52.	24.	654.20	655.20	30.00	

26.22	6.17	656.97	0.00	0.00	657.08	.10	.07	0.00	654.60
490.	39.	290.	161.	53.	90.	137.	414.	131.	654.50
5.57	.74	3.21	1.18	.080	.050	.080	.052	650.80	142.00
.001809	13.	13.	13.	2	0	8	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 26.30 EXTENDED 1.17 FEET

26.30	6.18	657.08	0.00	0.00	657.18	.10	.11	.00	654.70
490.	39.	290.	161.	53.	90.	137.	415.	131.	654.60
5.57	.74	3.21	1.18	.080	.050	.080	.052	650.90	142.00
.001810	60.	60.	60.	0	0	1	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .200 CEHV= .400
3280 CROSS SECTION 26.38 EXTENDED .89 FEET

** D/S FACE PRIVATE DRIVE #2

26.38	5.89	657.19	0.00	0.00	657.33	.15	.13	.02	655.10
490.	25.	316.	148.	31.	84.	115.	415.	131.	655.00
5.58	.81	3.75	1.29	.080	.050	.080	.052	651.30	142.00
.002710	60.	60.	60.	2	0	1	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	125.00	5.70	0.00	22.80	0.00	651.30	651.30

3280 CROSS SECTION 26.42 EXTENDED 3.68 FEET

SECNO	DEPTH	CLSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
667.94	657.33	0.00	418.	72.	23.	655.30	656.00	30.00

26.42	6.08	657.38	0.00	0.00	657.42	.03	.08	0.00	654.30
490.	67.	177.	246.	104.	83.	234.	415.	131.	655.00
5.58	.64	2.13	1.05	.080	.050	.080	.052	651.30	142.00
.000733	18.	18.	18.	2	0	6	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 26.50 EXTENDED 3.22 FEET

26.50	5.62	657.42	0.00	0.00	657.47	.06	.05	.01	654.80
490.	46.	197.	247.	69.	75.	198.	416.	131.	655.50
5.59	.67	2.62	1.25	.080	.050	.080	.052	651.90	142.00
.001284	50.	50.	50.	2	0	1	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
3280 CROSS SECTION 27.00 EXTENDED 3.23 FEET

27.00	5.83	657.53	0.00	0.00	657.57	.04	.09	.00	656.20
490.	51.	244.	195.	89.	125.	196.	416.	132.	655.20
5.61	.58	1.95	1.00	.080	.050	.080	.052	651.70	265.00
.000715	100.	100.	100.	2	0	1	0.00	170.00	435.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.08 EXTENDED 2.88 FEET

27.08	5.48	657.58	0.00	0.00	657.63	.05	.05	.01	656.60
490.	37.	259.	194.	64.	114.	171.	417.	132.	655.60
5.62	.58	2.28	1.13	.080	.050	.080	.052	652.10	265.00
.001103	60.	60.	60.	2	0	1	0.00	170.00	435.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.35	2.60	150.00	7.00	0.00	23.10	0.00	652.10	652.10

3280 CROSS SECTION 27.12 EXTENDED 3.56 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
667.01	657.63	0.00	441.	53.	23.	655.40	655.80	30.00

27.12	5.56	657.66	0.00	0.00	657.69	.03	.06	0.00	655.80
490.	67.	184.	239.	134.	104.	240.	417.	132.	654.50
5.62	.50	1.77	1.00	.080	.050	.080	.052	652.10	100.00
.000556	16.	16.	16.	2	0	7	0.00	206.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.20 EXTENDED 3.69 FEET

SECNO	DEPTH	CHSEL	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
27.20	5.69	657.69	0.00	0.00	657.71	.02	.02	.00	655.70
490.	93.	172.	226.	207.	107.	249.	418.	132.	654.40
5.64	.45	1.60	.91	.080	.050	.080	.052	652.00	41.00
.000437	50.	50.	50.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
3280 CROSS SECTION 27.28 EXTENDED 3.71 FEET

27.28	5.71	657.71	0.00	0.00	657.73	.02	.02	.00	655.70
490.	94.	171.	225.	210.	108.	251.	418.	133.	654.40
5.65	.45	1.59	.90	.080	.050	.080	.052	652.00	41.00
.000427	45.	45.	45.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	200.00	12.00	0.00	37.20	0.00	652.00	652.00

3280 CROSS SECTION 27.32 EXTENDED 3.05 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
661.75	657.73	0.00	422.	67.	37.	655.10	655.80	30.00

27.32	5.75	657.75	0.00	0.00	657.79	.03	.05	0.00	656.40
490.	58.	200.	232.	136.	104.	220.	418.	133.	654.50
5.65	.43	1.93	1.05	.080	.050	.080	.052	652.00	41.00
.000695	13.	13.	13.	2	0	7	0.00	266.00	307.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.40 EXTENDED 3.53 FEET

27.40	6.23	657.83	0.00	0.00	657.85	.02	.06	.01	656.00
490.	93.	179.	218.	217.	116.	253.	420.	133.	654.10
5.68	.43	1.54	.86	.080	.050	.080	.052	651.60	41.00
.000384	110.	110.	110.	2	0	1	0.00	266.00	307.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.48 EXTENDED 3.46 FEET

27.48	6.16	657.86	0.00	0.00	657.88	.02	.03	.00	656.10

490.	88.	182.	220.	204.	114.	248.	421.	134.	654.20
5.70	.43	1.59	.88	.080	.050	.080	.052	651.70	41.00
.000419	70.	70.	70.	2	0	1	0.00	266.00	307.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.45	2.60	200.00	4.80	0.00	15.84	0.00	651.70	651.70

3280 CROSS SECTION 27.52 EXTENDED 2.91 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	EV	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
679.40	657.88	0.00	459.	31.	16.	655.00	656.20	30.00

27.52	6.21	657.91	0.00	0.00	657.94	.04	.07	0.00	656.40
490.	67.	212.	211.	145.	104.	203.	421.	134.	655.00
5.70	.46	2.03	1.04	.080	.050	.080	.052	651.70	41.00
.000753	20.	20.	20.	2	0	9	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.60 EXTENDED 2.68 FEET

27.60	5.98	657.98	0.00	0.00	658.03	.05	.08	.01	656.70
490.	48.	226.	216.	107.	99.	188.	422.	134.	655.30
5.72	.45	2.29	1.15	.080	.050	.080	.052	652.00	41.00
.001031	90.	90.	90.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.68 EXTENDED 2.87 FEET

27.68	6.16	658.16	0.00	0.00	658.20	.04	.17	.00	656.70
490.	63.	214.	212.	138.	103.	201.	424.	136.	655.30
5.76	.46	2.08	1.06	.080	.050	.080	.052	652.00	41.00
.000798	185.	185.	185.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.45	2.60	200.00	4.42	0.00	15.90	0.00	652.00	652.00

3280 CROSS SECTION 27.72 EXTENDED 2.92 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
679.55	658.20	0.00	460.	32.	16.	655.60	656.60	30.00

27.72	6.22	658.22	0.00	0.00	658.26	.03	.05	0.00	656.70
490.	68.	211.	211.	147.	104.	204.	424.	136.	655.30
5.76	.46	2.02	1.03	.080	.050	.080	.052	652.00	41.00
.000740	13.	13.	13.	2	0	9	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.80 EXTENDED 2.96 FEET

27.80	6.26	658.26	0.00	0.00	658.29	.03	.04	.00	656.70
490.	71.	209.	210.	154.	105.	207.	424.	136.	655.30
5.77	.46	1.98	1.01	.080	.050	.080	.052	652.00	41.00
.000703	50.	50.	50.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
3280 CROSS SECTION 28.00 EXTENDED 3.66 FEET

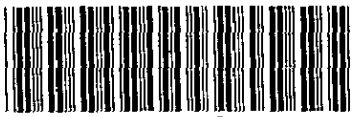
SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	TTRIAL	TOC	ICONT	CORAR	TOPWID	ENDST

28.00	5.96	658.46	0.00	0.00	658.48	.02	.19	.00	655.90
490.	144.	163.	184.	200.	107.	229.	428.	138.	655.80
5.87	.72	1.52	.80	.080	.050	.080	.052	652.50	286.00
.000382	370.	370.	370.	2	0	1	0.00	164.00	450.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 29.00 EXTENDED 3.58 FEET

29.00	5.09	658.69	0.00	0.00	658.70	.01	.21	.00	655.70
490.	106.	211.	173.	205.	193.	254.	437.	140.	653.60
6.00	.52	1.09	.68	.100	.060	.100	.052	653.60	130.00
.000305	630.	630.	630.	2	0	1	0.00	178.00	308.00

3649 NUMBER SECTIONS EXCEED LIMIT



1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: 100yr. Floodway

JOB NO. UM7270 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 19:00:10 07-25-79

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUPS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                    TT
MM MM    MM MM  NN NN       NN  EE                    TT
MM  MM  MM  MM  NN  NN      NN  EE                    TT
MM   MMMM   MM  NN   NN     NN  EEEEEEEE              TT
MM    MM    MM  NN    NN    NN  EEEEEEEE              TT
MM          MM  NN     NN   NN  EE                    TT
MM          MM  NN      NN  NN  EE                    TT
MM          MM  NN       NNNN  EE                    TT
MM          MM  NN        NNN  EE                    TT
MM          MM  NN         NN  EEEEEEEEEEEE        TT
MM          MM  NN          N  EEEEEEEEEEEE        TT

XX          XX   SSSSSSSSSS  NN          NN  LL
 XX        XX    SS          SS  NNNN      NN  LL
  XX      XX     SS              NN NN     NN  LL
   XX    XX      SSS             NN  NN    NN  LL
    XXXX          SSSSSSSS       NN   NN   NN  LL
    XXXX            SSSSSSSS     NN    NN  NN  LL
   XX  XX                  SSS   NN     NN NN  LL
  XX    XX                SS    NN      NNNN  LL
 XX      XX    SS          SS    NN       NNN  LL
XX        XX   SSSSSSSSSS  NN        NN  LLLLLLLLLLLL
XX        XX    SSSSSSSSS  NN         N  LLLLLLLLLLLL
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FWA OF THE LOAD 111
LWA+1 OF THE LOAD 55556

TRANSFER ADDRESS -- HEC2 17057

PROGRAM ENTRY POINTS -- HEC2 17057

PROGRAM AND BLOCK ASSIGNMENTS.

BLOCK	ADDRESS	LENGTH	FILE	DATE	PROCSSR	VER LEVEL	HARDWARE	COMMENTS
/HEC2A/	111	2112						
/HEC2B/	2223	4602						
/ALPHA/	7025	102						
/HEC2C/	7127	67						
/HEC2D/	7216	70						
/HEC2E/	7306	77						
/HEC2F/	7405	77						
/HEC2G/	7504	65						
/HEC2H/	7571	66						
/HEC2I/	7657	72						
/HEC2J/	7751	115						
HEC2	10066	20143	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
CARD	30231	1677	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
SUM2D	32130	1071	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
CHMP	33221	1664	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
DC	35105	725	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
FLODIS	36032	433	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
PLFLD	36465	1043	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
ADD2TS	37530	330	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
BWFIR	40060	1360	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
YCRIT	41440	120	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
SLARA	41560	310	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
SCALE	42070	232	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
XSEC	42322	1256	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
PROF	43600	1142	OBJ	08/16/76	FTN	4.6 420	6464 I	OPT=1
/STP.END/	44742	1						
/FCL.C./	44743	23						
/EXECMSG/	44766	0						
/CONFCIC/	44766	0						
/OS.IO./	44766	214						
ORNTRY=	45202	14	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		FCL INITIALIZATION ROUTINE.
COMIO=	45216	100	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		COMMON CODED I/O ROUTINES AND CONSTANTS.LSD
ENDFIL=	45316	64	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		WRITE END OF LOGICAL FILE MARK. LSD
FFCMSK=	45402	41	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		INITIALIZE CONSTANTS.
FLTOUT=	45443	311	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		COMMON FLOATING OUTPUT CODE LSD 48.19
FORSYS=	45754	630	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		FORTRAN OBJECT LIBRARY UTILITIES. LSD
INCOM=	46604	302	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		LSD 48.19 COMMON INPUT FORMATTING CODE
INPC=	47106	163	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		FORMATTED READ FORTRAN RECORD.LSD 48.19
KODER=	47271	456	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		OUTPUT FORMAT INTERPRETER. LSD 48.19
OUTC=	47747	203	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		FORMATTED WRITE FORTRAN RECORD. LSD
SYS=1ST	50152	62	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		MATH LIBRARY LINK TO ERROR MESSAGE PROCESSO
XTOY=	50234	7	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		REAL TO REAL EXPONENTIATION. LSD 48.19
FLTIN=	50243	154	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		COMMON FLOATING INPUT CONVERTER. LSD
FMTAP=	50417	353	SL-FORTRAN	05/11/79	COMPASS	3.5 79041		CRACK APLIST AND FORMAT FOR KODER/KRAKER.

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FORUTL=     50772    16 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   LSD 48.19 FCL MISC. UTILITIES.
GETFIT=     51010    42 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   LOCATE AN FIT GIVEN A FILE NAME.        LSD
/IO.BUF./   51052   227
INPB=       51301   321 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   BINARY READ FORTRAN RECORD.  LSD 48.19
KRAKER=     51622   425 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   PROCESS FORMATTED FORTRAN INPUT.         LSD
OUTB=       52247   210 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   BINARY WRITE FORTRAN RECORD.  LSD 48.19
OUTCOM=     52457   154 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   COMMON OUTPUT CODE  LSD 48.19
POSIND=     52633    37 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   POSITION FILE AT BEGINNING-OF-INFORMATION.
COTOER=     52672    14 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   COMPUTED GO TO ERROR PROCESSOR.          LSD
ALOG        52706    73 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   COMPUTE COMMON AND NATURAL LOGARITHMS. OPT=
EXP         53001    73 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   EXPONENTIAL FUNCTION. E TO POWER X. OPT=ALL
ITOJ=       53074    16 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   INTEGER TO INTEGER EXPONENTIATION.       LSD
SYSAID=     53112     1 SL-FORTRAN  05/11/79 COMPASS 3.5 79041   LINK BETWEEN SYS=AID AND INITIALIZATION COD
CPUSYS      53113    36 SL-SYSIO    03/27/76
/MSU=RMR/   53151    36
MSU=GP      53207   317 SL-SYSIO    01/26/79 COMPASS 3.5 470     GET/PUT CONTROL - MSU RECORD MANAGER.
MSU=GZ      53526    44 SL-SYSIO    01/26/79 COMPASS 3.5 470     GET Z RECORDS - MSU RECORD MANAGER.
MSU=W       53572   474 SL-SYSIO    01/26/79 COMPASS 3.5 470     W RECORD SUPPORT - MSURM
CIO=        54266    16 SL-SYSIO    07/07/79 COMPASS 3.5 79041   ISSUE CIO CALLS.
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BLOCK	ADDRESS	LENGTH	FILE	DATE	PROCSSR VER LEVEL	HARDWARE	COMMENTS
RDH=	54304	37	SL-SYSIO	07/07/79	COMPASS 3.5 79041		READ A LINE IN H FORMAT.
RDX=	54343	30	SL-SYSIO	07/07/79	COMPASS 3.5 79041		READ EXIT PROCESSING.
WTH=	54373	50	SL-SYSIO	07/07/79	COMPASS 3.5 79041		WRITE WORDS'.
MSU=RM	54443	565	SL-SYSIO	01/26/79	COMPASS 3.5 470		MSU RECORD MANAGER.
MSU=SKF	55230	35	SL-SYSIO	01/26/79	COMPASS 3.5 470		SKIP FORWARD - MSU RECORD MANAGER.
MSU=SKU	55265	27	SL-SYSIO	01/26/79	COMPASS 3.5 470		SKIP BACKWARD UTILITY ROUTINES.
MSU=PZ	55314	33	SL-SYSIO	01/26/79	COMPASS 3.5 470		PUT Z RECORDS - MSU RECORD MANAGER
CFS=	55347	47	SL-SYSIO	07/07/79	COMPASS 3.5 79041		CHECK FILE STATUS.
RDH=	55416	66	SL-SYSIO				
WTH=	55504	30	SL-SYSIO				
WTX=	55534	22	SL-SYSIO				

3.294 CP SECONDS 100500B CM STORAGE USED 98 TABLE MOVES

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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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C
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1       MID-BTA   H-470F
T2       BEDFORD  TOWNSHIP  FIS
T3       INDIAN   CREEK 100 YEAR FLOW  Q=1020 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       -1.       4.        0.        0.   .003100      0.00      1.0       0.   579.440     0.000

J2  NPROF      IPLOT     PREVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

      0.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000     0.000     0.000     0.000
NC       .065      .065      .045      .150      .350     0.000     0.000     0.000     0.000     0.000
QT      5.000   600.000   880.000  1020.000  1390.000  1020.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1      6.200     9.000   585.000   611.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    579.400   400.000   578.500   585.000   574.800   588.000   573.800   591.000   573.300   595.000
GR    573.900   599.000   575.500   606.000   577.700   611.000   578.500   800.000     0.000     0.000

X1      7.000    14.000   294.000   345.000   550.000   550.000   550.000     0.000     0.000     0.000
GR    592.100     0.000   589.200   127.000   583.800   214.000   580.300   294.000   578.600   313.000
GR    576.000   330.000   575.500   333.000   575.400   337.000   576.100   338.000   577.400   344.000
GR    580.400   345.000   580.500   370.000   581.500   487.000   581.600   537.000     0.000     0.000

X1      7.100    11.000   694.000   724.000   450.000   450.000   450.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    581.600   647.000   581.600   674.000   581.600   675.000   581.600   676.000   581.600   694.000
GR    577.300   702.000   578.000   706.000   585.500   724.000   585.500   745.000   585.500   746.000
GR    585.500   748.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      7.980    11.000   700.000   708.000   130.000   130.000   130.000     0.000      .200     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   587.500   587.500     0.000
GR    581.600   673.000   581.600   674.000   581.600   675.000   581.600   676.000   581.600   694.000
GR    577.300   700.000   578.000   708.000   585.500   724.000   585.500   745.000   585.500   746.000
GR    585.500   748.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
SB      0.000     1.500     2.600   200.000    10.670     0.000    64.000     0.000   577.500   577.500

X1      8.080     8.000   669.000   677.000    39.000    39.000    39.000     0.000     -.200     0.000
X2      0.000     0.000     1.000   583.500   596.100     0.000     0.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   596.100   596.100     0.000
GR    581.900   657.000   578.900   669.000   578.900   671.000   577.700   673.000   578.800   677.000
GR    579.800   683.000   582.800   782.000   591.800   822.000     0.000     0.000     0.000     0.000
NC       .080      .080      .050     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      8.100    12.000   667.000   673.000    50.000    50.000    50.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    582.800   611.000   582.800   612.000   582.800   613.000   582.800   614.000   582.800   615.000
GR    581.900   657.000   578.900   667.000   578.900   671.000   577.700   673.000   578.800   680.000
GR    579.800   683.000   580.800   730.000     0.000     0.000     0.000     0.000     0.000     0.000
NC      0.000     0.000     0.000      .150      .350     0.000     0.000     0.000     0.000     0.000

X1      8.200    20.000   738.000   763.000  1000.000  1000.000  1000.000     0.000     0.000     0.000
GR    594.400   400.000   590.000   510.000   583.800   524.000   583.900   600.000   584.400   648.000
GR    584.200   738.000   582.900   743.000   582.600   745.000   582.900   746.000   583.500   760.000
GR    584.400   763.000   584.200   800.000   583.900   845.000   583.600   858.000   583.900   866.000
GR    583.800   918.000   583.000   936.000   583.800   951.000   584.900   960.000   592.500  1000.000

X1      8.300    11.000   350.000   376.000  1250.000  1250.000  1250.000     0.000     0.000     0.000
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GR	594.400	210.000	593.200	220.000	586.300	289.000	586.400	359.000	587.000	362.000
GR	584.400	368.000	585.700	374.000	586.600	376.000	585.900	627.000	586.600	635.000
GR	595.800	667.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	8.980	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.100	0.000
SB	0.000	1.400	2.600	0.000	23.500	0.000	110.450	0.000	584.500	584.500
X1	9.020	12.000	640.000	667.000	83.000	83.000	83.000	0.000	.200	0.000
X2	0.000	0.000	1.000	589.200	590.400	0.000	0.000	0.000	0.000	0.000
BT	3.000	0.000	595.600	0.000	640.000	590.600	0.000	667.000	590.700	0.000
GR	594.400	160.000	594.900	162.000	591.800	220.000	585.800	229.000	585.500	235.000
GR	584.100	459.000	585.700	640.000	584.300	645.000	585.400	653.000	584.300	663.000
GR	585.000	665.000	587.100	667.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.100	0.000	0.000	0.000	50.000	50.000	50.000	0.000	-.200	0.000
NC	.065	.065	.045	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.200	10.000	482.000	506.000	300.000	300.000	300.000	0.000	0.000	0.000
GR	590.000	407.000	590.000	408.000	587.400	418.000	587.600	482.000	585.200	485.000
GR	584.300	494.000	584.800	503.000	587.800	506.000	588.100	581.000	588.100	582.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.210	7.000	482.000	506.000	145.000	145.000	145.000	0.000	-.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	588.600	588.600	0.000
GR	587.600	444.000	587.600	482.000	585.200	485.000	584.300	494.000	584.800	503.000
GP	587.800	506.000	587.900	544.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.400	2.600	100.000	27.300	1.300	114.400	0.000	584.000	584.000
X1	9.220	0.000	0.000	0.000	10.000	10.000	10.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	588.400	589.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	589.200	589.200	0.000
X1	9.300	11.000	253.000	294.000	25.000	25.000	25.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.000	593.000	0.000
GR	596.600	100.000	595.800	120.000	590.000	235.000	587.000	253.000	585.200	257.000
GR	584.300	268.000	585.700	281.000	589.400	294.000	589.600	300.000	590.000	375.000
GR	594.000	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.380	11.000	257.000	281.000	75.000	75.000	75.000	0.000	-.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.000	593.000	0.000
GR	596.600	100.000	595.800	120.000	590.000	235.000	587.000	253.000	585.200	257.000
GP	584.300	268.000	585.700	281.000	589.400	294.000	589.600	300.000	590.000	375.000
GR	594.000	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.250	1.400	2.600	250.000	24.000	1.800	97.680	0.000	584.000	584.000
X1	9.420	15.000	224.000	248.000	106.000	106.000	106.000	0.000	.500	0.000
X2	0.000	0.000	1.000	588.400	595.100	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	595.100	595.100	0.000
GR	596.500	100.000	595.800	150.000	592.800	190.000	591.500	208.000	588.000	224.000
GP	586.600	235.000	583.500	243.000	584.500	247.000	587.700	248.000	589.100	278.000
GR	584.800	286.000	590.200	300.000	588.900	363.000	588.400	400.000	594.200	460.000
NC	.060	.060	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.500	11.000	235.000	250.000	40.000	40.000	40.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	593.200	185.000	593.200	186.000	592.800	190.000	591.500	208.000	588.000	222.000
GR	586.600	235.000	583.500	243.000	584.500	249.000	587.700	250.000	589.100	278.000
GR	589.400	286.000	590.200	300.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	9.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.610	11.000	1315.000	1342.000	1340.000	1340.000	1340.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	598.000	1000.000	595.000	1105.000	591.000	1137.000	590.200	1200.000	591.000	1262.000
GR	591.000	1315.000	590.000	1320.000	587.400	1332.000	590.000	1342.000	591.000	1395.000
GR	599.000	1450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.620	10.000	240.000	255.000	320.000	320.000	320.000	0.000	0.000	0.000
GR	600.000	0.000	595.000	50.000	592.000	125.000	591.000	240.000	590.500	245.000
GR	587.500	250.000	590.200	255.000	591.000	300.000	595.000	403.000	600.000	450.000
NC	9.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.680	0.000	0.000	0.000	90.000	90.000	90.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	310.000	.500	0.000	9.900	2.000	587.500	587.500
X1	9.720	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	589.600	590.800	0.000	0.000	0.000	0.000	0.000
X1	9.750	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.100	0.000
NC	.075	.075	.055	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.840	9.000	1227.000	1252.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	600.000	1000.000	594.000	1100.000	593.000	1120.000	592.000	1227.000	591.000	1232.000
GR	589.000	1242.000	592.000	1252.000	594.000	1280.000	600.000	1382.000	0.000	0.000
X1	9.850	12.000	255.000	288.000	200.000	200.000	200.000	0.000	0.000	0.000
GR	601.000	0.000	595.000	83.000	594.000	105.000	593.000	200.000	592.000	225.000
GR	591.000	255.000	589.000	265.000	592.000	273.000	593.000	288.000	594.000	411.000
GR	595.000	450.000	600.000	492.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.880	0.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	375.000	.500	0.000	26.250	2.000	589.000	589.000
X1	9.920	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.500	593.500	0.000	0.000	0.000	0.000	0.000
X1	9.930	0.000	0.000	0.000	80.000	80.000	80.000	0.000	.500	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	9.940	12.000	1270.000	1285.000	250.000	250.000	250.000	0.000	0.000	0.000
GR	603.500	1050.000	603.000	1080.000	600.000	1095.000	595.000	1125.000	594.800	1215.000
GR	594.000	1250.000	593.000	1270.000	591.100	1280.000	592.000	1285.000	593.000	1330.000
GR	595.000	1350.000	601.000	1425.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	9.950	11.000	150.000	162.000	250.000	250.000	250.000	0.000	0.000	0.000
GR	603.000	0.000	600.000	25.000	595.000	50.000	594.000	90.000	593.000	150.000
GR	591.700	155.000	593.000	162.000	593.000	220.000	594.000	295.000	595.000	300.000
GR	601.000	355.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	9.960	0.000	0.000	0.000	90.000	90.000	90.000	0.000	0.000	0.000
SB	0.000	1.400	2.600	265.000	.500	0.000	2.500	2.000	591.700	591.700
X1	9.970	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.700	593.700	0.000	0.000	0.000	0.000	0.000
X1	9.990	0.000	0.000	0.000	90.000	90.000	90.000	0.000	0.000	0.000
NC	.065	.065	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
QT	5.000	410.000	595.000	695.000	950.000	695.000	0.000	0.000	0.000	0.000

X1	9.990	15.000	306.000	314.000	500.000	500.000	500.000	0.000	-.800	0.000
GR	605.100	0.000	604.600	14.000	597.000	138.000	595.800	200.000	595.900	238.000
GR	595.200	306.000	593.900	307.000	593.400	310.000	594.000	313.000	595.500	314.000
GR	597.000	349.000	598.000	400.000	603.100	500.000	606.100	553.000	606.500	600.000
X1	10.000	0.000	0.000	0.000	500.000	500.000	500.000	0.000	.800	0.000
X1	10.010	0.000	0.000	0.000	700.000	700.000	700.000	0.000	.800	0.000
X1	10.040	10.000	240.000	256.000	700.000	700.000	700.000	0.000	-4.000	0.000
GR	610.400	100.000	601.600	200.000	601.800	240.000	599.300	244.000	599.100	248.000
GR	600.000	250.000	601.500	256.000	602.300	300.000	607.600	400.000	609.800	500.000
X1	10.050	0.000	0.000	0.000	720.000	720.000	720.000	0.000	.900	0.000
X1	10.100	9.000	240.000	256.000	80.000	80.000	80.000	0.000	0.000	0.000
GR	604.200	170.000	601.600	200.000	601.800	240.000	599.300	244.000	599.100	248.000
GR	600.000	250.000	601.500	256.000	602.300	300.000	603.400	320.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	10.180	0.000	0.000	0.000	140.000	140.000	140.000	0.000	-2.200	0.000
SB	0.000	1.600	2.600	150.000	4.070	0.000	19.150	0.000	596.900	596.900
X1	10.220	12.000	454.000	467.000	17.000	17.000	17.000	0.000	-1.200	0.000
X2	0.000	0.000	1.000	601.600	604.500	0.000	0.000	0.000	0.000	0.000
GR	610.400	270.000	607.900	300.000	606.700	322.000	603.200	347.000	602.400	400.000
GR	600.400	454.000	599.300	458.000	598.100	460.000	598.400	464.000	600.100	467.000
GR	607.000	485.000	607.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	10.300	12.000	454.000	467.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	610.400	270.000	607.900	300.000	606.700	322.000	603.200	347.000	602.400	400.000
GR	600.400	454.000	599.300	458.000	598.100	460.000	598.400	464.000	600.100	467.000
GR	607.000	485.000	607.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	10.350	0.000	0.000	0.000	110.000	110.000	110.000	0.000	.400	0.000
X1	10.380	13.000	145.000	170.000	80.000	80.000	80.000	0.000	.800	0.000
GR	610.000	0.000	609.000	5.000	608.000	15.000	607.000	25.000	605.000	50.000
GR	604.000	60.000	603.000	80.000	602.800	95.000	603.000	110.000	602.000	145.000
GR	598.200	155.000	605.000	165.000	606.000	170.000	0.000	0.000	0.000	0.000
SB	1.050	1.600	2.600	125.000	18.000	2.000	83.080	0.000	599.000	599.000
X1	10.420	0.000	0.000	0.000	112.000	112.000	112.000	0.000	.300	0.000
X2	0.000	0.000	1.000	604.200	607.000	0.000	0.000	0.000	0.000	0.000
NC	.080	.080	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	10.450	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.300	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	11.000	18.000	335.000	354.000	750.000	750.000	750.000	0.000	0.000	0.000
GR	612.600	0.000	612.600	35.000	612.600	270.000	604.800	271.000	603.600	307.000
GR	603.400	335.000	602.200	338.000	601.600	341.000	601.100	341.100	601.800	346.000
GR	603.400	354.000	604.400	400.000	606.300	424.000	609.100	425.000	612.200	500.000
GR	612.300	600.000	612.200	700.000	613.800	800.000	0.000	0.000	0.000	0.000
X1	11.500	0.000	0.000	0.000	1150.000	1150.000	1150.000	0.000	1.500	0.000
X1	11.900	0.000	0.000	0.000	800.000	800.000	800.000	0.000	1.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

X1	11.980	9.000	335.000	354.000	130.000	130.000	130.000	0.000	3.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.000	609.000	0.000
GR	603.700	307.000	603.400	335.000	602.200	338.000	601.600	341.000	601.100	341.100
GR	601.800	346.000	603.400	354.000	604.400	400.000	606.300	424.000	0.000	0.000
SB	0.000	1.300	2.600	100.000	10.150	0.000	45.670	0.000	604.500	604.500
X1	12.020	11.000	111.000	126.000	36.000	36.000	36.000	0.000	-1.400	0.000
X2	0.000	0.000	1.000	609.000	612.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	612.300	612.300	0.000
GR	617.100	58.000	617.100	59.000	616.500	67.000	612.600	98.000	610.100	111.000
GR	606.600	117.000	605.900	121.000	606.300	125.000	607.900	126.000	612.400	145.000
GR	612.600	160.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	12.100	11.000	111.000	126.000	130.000	130.000	130.000	0.000	0.000	0.000
GR	622.700	0.000	617.100	59.000	616.500	67.000	612.600	98.000	610.100	111.000
GR	606.600	117.000	605.900	121.000	606.300	125.000	607.900	126.000	612.400	145.000
GR	613.900	246.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	12.180	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.200	0.000
SB	0.000	1.330	2.600	120.000	7.930	0.000	26.970	0.000	606.100	606.100
X1	12.220	10.000	82.000	92.000	34.000	34.000	34.000	0.000	-.900	0.000
X2	0.000	0.000	1.000	609.500	612.400	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.800	0.000	612.500	36.000	612.400	69.000	608.500	82.000	607.400	83.000
GR	607.000	88.000	607.400	92.000	612.500	106.000	610.800	123.000	611.600	230.000
X1	12.300	10.000	82.000	92.000	80.000	80.000	80.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	620.800	0.000	612.500	36.000	612.400	69.000	608.500	82.000	607.400	83.000
GR	607.000	88.000	607.400	92.000	612.500	106.000	610.800	123.000	611.600	230.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	12.400	10.000	118.000	143.000	1070.000	1070.000	1070.000	0.000	0.000	0.000
GR	615.300	0.000	612.800	118.000	610.400	122.000	609.100	123.000	607.900	126.000
GR	608.700	130.000	611.000	132.000	613.400	143.000	614.700	200.000	617.200	296.000
NC	0.000	0.000	0.000	.400	.900	0.000	0.000	0.000	0.000	0.000
X1	12.480	0.000	0.000	0.000	140.000	140.000	140.000	0.000	-.500	0.000
SB	0.000	1.510	2.600	250.000	6.790	0.000	25.120	0.000	607.400	607.400
X1	12.520	8.000	198.000	203.000	23.000	23.000	23.000	0.000	-1.500	0.000
X2	0.000	0.000	1.000	611.100	613.800	0.000	0.000	0.000	0.000	0.000
GR	620.400	0.000	614.900	100.000	613.400	175.000	609.400	198.000	608.900	200.000
GR	609.300	203.000	613.800	226.000	620.500	400.000	0.000	0.000	0.000	0.000
X1	12.600	8.000	198.000	203.000	25.000	25.000	25.000	0.000	0.000	0.000
GR	620.400	0.000	614.900	100.000	613.400	175.000	609.400	198.000	608.900	200.000
GR	609.300	203.000	613.800	226.000	620.500	400.000	0.000	0.000	0.000	0.000
X1	12.700	0.000	0.000	0.000	450.000	450.000	450.000	0.000	1.900	0.000
X1	12.900	12.000	334.000	350.000	450.000	450.000	450.000	0.000	-1.900	0.000
GR	623.600	150.000	622.000	250.000	619.400	288.000	616.200	334.000	614.800	335.000
GR	614.500	339.000	615.000	341.000	616.000	343.000	617.600	350.000	620.000	500.000
GR	620.000	553.000	622.100	700.000	0.000	0.000	0.000	0.000	0.000	0.000
OT	5.000	290.000	420.000	490.000	685.000	490.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	13.000	12.000	334.000	350.000	450.000	450.000	450.000	0.000	0.000	0.000
GR	623.600	150.000	622.000	250.000	619.400	288.000	616.200	334.000	614.800	335.000

GR	614.500	339.000	615.000	341.000	616.000	343.000	617.600	350.000	620.000	500.000
GR	620.000	553.000	622.100	700.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	13.050	0.000	0.000	0.000	510.000	510.000	510.000	0.000	1.800	0.000
X1	13.060	10.000	92.000	113.000	510.000	510.000	510.000	0.000	-1.800	0.000
GR	627.000	0.000	624.200	80.000	622.700	92.000	620.400	98.000	620.000	103.000
GR	620.900	107.000	622.600	113.000	624.300	132.000	625.000	282.000	627.000	482.000
X1	13.100	0.000	0.000	0.000	510.000	510.000	510.000	0.000	1.800	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	13.180	9.000	117.000	138.000	100.000	100.000	100.000	0.000	-.400	0.000
GR	624.200	0.000	622.100	117.000	620.000	124.000	619.700	125.000	619.400	127.000
GR	620.100	132.000	623.500	138.000	624.200	166.000	625.000	213.000	0.000	0.000
SB	0.000	1.810	2.600	200.000	3.930	0.000	12.970	0.000	619.000	619.000
X1	13.220	9.000	117.000	138.000	60.000	60.000	60.000	0.000	-.400	0.000
X2	0.000	0.000	1.000	622.300	624.300	0.000	0.000	0.000	0.000	0.000
GR	624.200	0.000	622.100	117.000	620.000	124.000	619.700	125.000	619.400	127.000
GR	620.100	132.000	623.500	138.000	624.200	166.000	625.000	213.000	0.000	0.000
X1	13.300	9.000	117.000	138.000	40.000	40.000	40.000	0.000	0.000	0.000
GR	624.200	0.000	622.100	117.000	620.000	124.000	619.700	125.000	619.400	127.000
GR	620.100	132.000	623.500	138.000	624.200	166.000	625.000	213.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	14.000	11.000	328.000	362.000	150.000	150.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	625.400	199.000	625.400	200.000	624.700	328.000	621.100	338.000	620.400	339.000
GR	619.200	340.000	620.400	342.000	624.700	362.000	625.600	458.000	625.600	459.000
GR	625.600	460.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	14.980	11.000	135.000	167.000	110.000	110.000	110.000	0.000	-.600	0.000
GR	627.500	0.000	625.000	75.000	625.000	135.000	621.100	143.000	620.400	144.000
GR	620.300	145.000	620.300	151.000	621.000	154.000	621.600	160.000	623.700	167.000
GR	630.700	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.800	2.700	150.000	3.770	0.000	12.440	0.000	619.700	619.700
X1	15.020	11.000	135.000	167.000	60.000	60.000	60.000	0.000	-.600	0.000
X2	0.000	0.000	1.000	623.000	624.800	0.000	0.000	0.000	0.000	0.000
GR	627.500	0.000	625.000	75.000	625.000	135.000	621.100	143.000	620.400	144.000
GR	620.300	145.000	620.300	151.000	621.000	154.000	621.600	160.000	623.700	167.000
GR	630.700	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	15.100	11.000	135.000	167.000	40.000	40.000	40.000	0.000	0.000	0.000
GR	627.500	0.000	625.000	75.000	625.000	135.000	621.100	143.000	620.400	144.000
GR	620.300	145.000	620.300	151.000	621.000	154.000	621.600	160.000	623.700	167.000
GR	630.700	215.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	16.000	11.000	166.000	197.000	330.000	330.000	330.000	0.000	0.000	0.000
GR	627.900	80.000	625.800	166.000	622.900	177.000	621.400	178.000	621.000	179.000
GR	621.500	184.000	623.100	185.000	627.100	197.000	628.700	235.000	628.800	300.000
GR	628.900	335.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	16.100	12.000	32.000	59.000	200.000	200.000	200.000	0.000	0.000	0.000
GR	629.100	0.000	626.000	32.000	623.900	37.000	622.400	38.000	622.000	40.000
GR	622.200	42.000	623.900	46.000	627.100	59.000	627.700	91.000	627.800	98.000
GR	627.900	103.000	629.300	114.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	16.980	0.000	0.000	0.000	120.000	120.000	120.000	0.000	.600	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	628.500	628.500	0.000
SB	0.000	1.400	2.600	215.000	8.000	0.000	47.200	0.000	622.600	622.600
X1	17.020	9.000	156.000	174.000	26.000	26.000	26.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	628.500	630.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	628.500	628.500	0.000
GR	629.300	50.000	628.800	78.000	625.400	156.000	623.100	159.000	622.600	162.000
GR	623.100	164.000	628.700	174.000	629.200	227.000	629.500	275.000	0.000	0.000
X1	17.100	9.000	156.000	174.000	37.000	37.000	37.000	0.000	0.000	0.000
GR	629.300	50.000	628.800	78.000	625.400	156.000	623.100	159.000	622.600	162.000
GR	623.100	164.000	628.700	174.000	629.200	227.000	629.500	275.000	0.000	0.000
NC	.070	.060	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	18.000	17.000	314.000	325.000	650.000	650.000	650.000	0.000	0.000	0.000
GR	633.000	197.000	633.000	198.000	633.000	199.000	633.000	200.000	630.800	270.000
GR	630.100	285.000	626.600	303.000	625.700	314.000	624.300	315.000	624.000	319.000
GR	624.400	322.000	625.500	325.000	625.800	334.000	628.500	341.000	629.600	402.000
GR	633.600	502.000	634.300	570.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	19.900	14.000	140.000	161.000	560.000	560.000	560.000	0.000	0.000	0.000
GR	633.700	0.000	633.000	99.000	631.500	100.000	628.500	135.000	626.100	140.000
GR	626.100	144.000	626.100	149.000	626.100	153.000	626.100	161.000	626.100	180.000
GR	629.700	200.000	633.000	201.000	633.000	400.000	633.000	500.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	19.980	14.000	135.000	180.000	110.000	110.000	110.000	0.000	1.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	633.000	633.000	0.000
GR	633.700	0.000	632.300	71.000	631.500	100.000	628.500	135.000	626.100	136.000
GR	626.100	144.000	626.100	149.000	626.100	153.000	626.100	161.000	626.100	180.000
GR	630.200	181.000	631.700	200.000	632.800	400.000	633.000	500.000	0.000	0.000
SB	1.250	1.600	2.600	125.000	45.500	1.500	211.200	0.000	627.200	627.200
X1	19.080	10.000	145.000	190.000	37.000	37.000	37.000	0.000	-.300	0.000
X2	0.000	0.000	1.000	631.000	633.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	633.500	633.500	0.000
GR	634.600	0.000	632.100	144.000	627.500	145.000	627.500	172.000	627.500	175.000
GR	627.500	182.000	627.500	190.000	630.600	191.000	631.600	250.000	632.500	300.000
NC	.080	.080	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	19.100	10.000	148.000	186.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	634.600	0.000	632.100	144.000	627.500	148.000	627.500	172.000	627.500	175.000
GR	627.500	182.000	627.500	186.000	630.600	200.000	631.600	250.000	632.500	300.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	20.000	12.000	265.000	295.000	350.000	350.000	350.000	0.000	0.000	0.000
GR	631.700	150.000	631.700	155.000	631.200	232.000	631.400	265.000	629.600	272.000
GR	629.500	286.000	628.900	287.000	631.900	295.000	632.300	367.000	632.200	384.000
GR	632.700	400.000	632.700	405.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	20.100	9.000	9.000	35.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	634.100	0.000	633.100	9.000	629.300	12.000	628.900	19.000	629.300	23.000
GR	629.800	27.000	632.000	35.000	632.800	70.000	632.900	150.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	20.980	0.000	0.000	0.000	120.000	120.000	120.000	0.000	.200	0.000
SB	0.000	1.300	2.600	150.000	5.713	0.000	18.280	0.000	629.100	629.100

X1	21.020	11.000	112.000	129.000	32.000	32.000	32.000	0.000	-.100	0.000
X2	0.000	0.000	1.000	632.300	633.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	634.900	0.000	634.400	48.000	633.500	93.000	630.800	112.000	629.800	113.000
GR	629.600	114.000	629.200	117.000	629.500	126.000	632.200	129.000	634.800	180.000
GR	635.600	200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	21.100	11.000	112.000	129.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	634.900	0.000	634.400	48.000	633.500	93.000	630.800	112.000	629.800	113.000
GR	629.600	114.000	629.200	117.000	629.500	126.000	632.200	129.000	634.800	180.000
GR	635.600	200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	22.000	11.000	118.000	132.000	250.000	250.000	250.000	0.000	0.000	0.000
GR	634.000	43.000	633.900	59.000	633.000	118.000	630.200	121.000	629.700	123.000
GR	629.600	124.000	629.700	129.000	630.100	130.000	633.000	132.000	635.200	176.000
GR	635.300	207.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	22.980	0.000	0.000	0.000	150.000	150.000	150.000	0.000	-.200	0.000
SR	0.000	1.700	2.600	100.000	5.000	0.000	19.440	0.000	629.400	629.400
X1	23.020	10.000	280.000	305.000	52.000	52.000	52.000	0.000	-.900	0.000
X2	0.000	0.000	1.000	633.300	635.500	0.000	0.000	0.000	0.000	0.000
GR	634.400	210.000	634.400	211.000	634.400	212.000	633.500	280.000	630.900	286.000
GR	630.400	288.000	630.300	293.000	634.500	305.000	633.800	374.000	633.900	375.000
X1	23.100	10.000	280.000	305.000	24.000	24.000	24.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	634.400	210.000	634.400	211.000	634.400	212.000	633.500	280.000	630.900	286.000
GR	630.400	288.000	630.300	293.000	634.500	305.000	633.800	374.000	633.900	375.000
X1	23.200	0.000	0.000	0.000	550.000	550.000	550.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	23.900	16.000	262.000	275.000	550.000	550.000	550.000	0.000	-1.500	0.000
GR	640.000	204.000	640.000	205.000	640.000	206.000	640.000	207.000	640.000	208.000
GR	640.000	209.000	639.900	210.000	639.900	212.000	637.900	249.000	635.100	262.000
GR	634.800	269.000	635.600	275.000	636.200	285.000	640.000	305.000	640.600	350.000
GR	640.600	354.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	24.000	0.000	0.000	0.000	550.000	550.000	550.000	0.000	1.500	0.000
X1	24.100	0.000	0.000	0.000	675.000	675.000	675.000	0.000	1.300	0.000
NC	0.000	0.000	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	24.900	13.000	525.000	548.000	675.000	675.000	675.000	0.000	-1.200	0.000
GR	645.000	450.000	645.000	451.000	645.000	452.000	645.000	453.000	643.700	524.000
GR	643.500	525.000	639.500	537.000	638.700	542.000	638.600	543.000	638.800	544.000
GR	642.900	548.000	645.000	599.000	645.000	600.000	0.000	0.000	0.000	0.000
X1	24.950	0.000	0.000	0.000	325.000	325.000	325.000	0.000	.600	0.000
X1	25.000	0.000	0.000	0.000	325.000	325.000	325.000	0.000	.600	0.000
X1	25.020	0.000	0.000	0.000	55.000	55.000	55.000	0.000	.500	0.000
X1	25.050	0.000	0.000	0.000	60.000	60.000	60.000	0.000	.600	0.000

X1	25.100	0.000	0.000	0.000	115.000	115.000	115.000	C.CCC	1.1C0	0.000
X1	25.150	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.200	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.1C0	C.CCC
X1	25.250	0.000	0.000	0.000	115.000	115.000	115.000	C.CCC	1.1C0	0.000
X1	25.300	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.350	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	C.000
X1	25.400	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.1C0	0.000
X1	25.450	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.100	0.000
X1	25.900	0.000	0.000	0.000	115.000	115.000	115.000	0.000	1.1C0	C.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	25.980	10.000	161.000	192.000	120.000	120.000	120.000	0.000	0.000	C.000
GR	656.100	100.000	656.000	140.000	656.000	150.000	655.800	161.000	654.100	166.000
GR	650.800	176.000	654.100	192.000	654.300	250.000	654.400	264.000	654.400	265.000
SB	0.000	1.500	2.600	125.000	5.400	0.000	17.280	0.000	650.800	650.800
X1	26.020	0.000	0.000	0.000	36.000	36.000	36.000	C.CCC	0.000	0.000
X2	0.000	0.000	1.000	654.000	655.800	0.000	0.000	0.000	0.000	0.000
X1	26.100	10.000	161.000	192.000	70.000	70.000	70.000	0.CCC	0.000	0.000
GR	656.100	100.000	656.000	140.000	656.000	150.000	655.800	161.000	654.100	166.000
GR	650.800	176.000	654.100	192.000	654.300	250.000	654.400	264.000	654.400	265.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	26.180	0.000	0.000	0.000	30.000	30.000	30.000	C.CCC	0.000	0.000
SB	0.000	1.500	2.600	150.000	7.000	0.000	23.800	0.000	650.800	650.800
X1	26.220	10.000	217.000	238.000	12.500	12.500	12.500	0.000	-.1C0	0.000
X2	0.000	0.000	1.000	654.200	655.200	0.000	0.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.600	188.000	655.900	200.000
GR	655.900	211.000	654.700	217.000	650.900	228.000	654.600	238.000	655.900	313.000
X1	26.300	10.000	217.000	238.000	60.000	60.000	60.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.600	188.000	655.900	200.000
GR	655.900	211.000	654.700	217.000	650.900	228.000	654.600	238.000	655.900	313.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	C.CCC	0.000	C.000
X1	26.380	0.000	0.000	0.000	60.000	60.000	60.000	0.000	.400	0.000
SB	0.000	1.500	2.600	125.000	5.700	0.000	22.800	0.000	651.300	651.300
X1	26.420	11.000	218.000	236.000	17.500	17.500	17.500	0.000	-.500	0.000
X2	0.000	0.000	1.000	655.300	656.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.700	187.000	656.500	200.000
GR	656.100	211.000	654.800	218.000	651.800	224.000	652.200	228.000	655.500	236.000
GR	654.200	313.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	26.500	11.000	218.000	236.000	50.000	50.000	50.000	0.000	0.000	C.CCC
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.700	142.000	656.700	143.000	656.700	144.000	656.700	187.000	656.500	200.000
GR	656.100	211.000	654.800	218.000	651.800	224.000	652.200	228.000	655.500	236.000
GR	654.200	313.000	0.000	0.000	0.000	0.000	0.000	0.CCC	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000

X1	27.000	14.000	335.000	366.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	656.700	0.000	0.000
GR	656.200	265.000	656.200	265.000	656.200	267.000	656.200	312.000	656.600	313.000
GR	656.200	335.000	654.700	340.000	653.100	347.000	651.900	348.000	651.700	351.000
GR	651.900	355.000	655.200	366.000	654.300	427.000	654.300	435.000	0.000	0.000
X1	27.080	0.000	0.000	0.000	60.000	60.000	60.000	0.000	.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.350	2.600	150.000	7.000	0.000	23.100	0.000	652.100	652.100
X1	27.120	12.000	211.000	236.000	16.000	16.000	16.000	0.000	.100	0.000
X2	0.000	0.000	1.000	655.400	655.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.600	100.000	656.300	187.000	656.000	200.000	655.700	211.000	654.100	215.000
GR	653.300	221.000	653.200	222.000	652.000	226.000	652.000	228.000	654.400	236.000
GR	653.900	300.000	654.000	306.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	27.200	12.000	211.000	236.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	656.800	41.000	656.300	187.000	656.000	200.000	655.700	211.000	654.100	215.000
GR	653.300	221.000	653.200	222.000	652.000	226.000	652.000	228.000	654.400	236.000
GR	653.900	300.000	654.000	306.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	27.280	0.000	0.000	0.000	45.000	45.000	45.000	0.000	0.000	0.000
SB	0.000	1.500	2.600	200.000	12.000	0.000	37.200	0.000	652.000	652.000
X1	27.320	15.000	211.000	237.000	12.500	12.500	12.500	0.000	.400	0.000
X2	0.000	0.000	1.000	655.100	655.800	0.000	0.000	0.000	0.000	0.000
GR	656.700	41.000	656.700	42.000	656.600	75.000	656.600	187.000	656.100	200.000
GR	656.000	211.000	654.100	216.000	652.700	223.000	652.000	226.000	651.600	227.000
GR	652.100	229.000	653.100	232.000	654.100	237.000	654.300	300.000	654.300	307.000
X1	27.400	15.000	211.000	237.000	110.000	110.000	110.000	0.000	0.000	0.000
GR	656.700	41.000	656.700	42.000	656.600	75.000	656.600	187.000	656.100	200.000
GR	656.000	211.000	654.100	216.000	652.700	223.000	652.000	226.000	651.600	227.000
GR	652.100	229.000	653.100	232.000	654.100	237.000	654.300	300.000	654.300	307.000
X1	27.480	0.000	0.000	0.000	70.000	70.000	70.000	0.000	.100	0.000
SB	0.000	1.450	2.600	200.000	4.800	0.000	15.840	0.000	651.700	651.700
X1	27.520	15.000	211.000	236.000	20.000	20.000	20.000	0.000	-.300	0.000
X2	0.000	0.000	1.000	655.000	656.200	0.000	0.000	0.000	0.000	0.000
GR	657.400	41.000	657.400	42.000	657.400	74.000	657.400	186.000	657.100	200.000
GR	656.700	211.000	655.100	216.000	654.000	222.000	652.600	224.000	652.000	227.000
GR	653.000	231.000	655.300	236.000	655.400	243.000	655.200	300.000	655.300	306.000
X1	27.600	15.000	211.000	236.000	90.000	90.000	90.000	0.000	0.000	0.000
GR	657.400	41.000	657.400	42.000	657.400	74.000	657.400	186.000	657.100	200.000
GR	656.700	211.000	655.100	216.000	654.000	222.000	652.600	224.000	652.000	227.000
GR	653.000	231.000	655.300	236.000	655.400	243.000	655.200	300.000	655.300	306.000
X1	27.680	0.000	0.000	0.000	185.000	185.000	185.000	0.000	0.000	0.000
SB	0.000	1.450	2.600	200.000	4.420	0.000	15.900	0.000	652.000	652.000
X1	27.720	0.000	0.000	0.000	13.000	13.000	13.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	655.600	656.600	0.000	0.000	0.000	0.000	0.000
X1	27.800	0.000	0.000	0.000	50.000	50.000	50.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000

X1	28.000	15.000	356.000	380.000	370.000	370.000	370.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	656.500	0.000	0.000
GR	655.100	286.000	655.000	317.000	655.200	319.000	655.500	322.000	656.100	330.000
GR	656.400	341.000	656.300	352.000	655.900	356.000	652.900	362.000	652.500	364.000
GR	653.000	370.000	654.600	373.000	655.800	380.000	655.300	400.000	654.800	450.000
NC	.100	.100	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	29.000	5.000	200.000	248.000	630.000	630.000	630.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	655.800	130.000	655.700	200.000	653.600	248.000	654.200	264.000	655.100	308.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .150 CEHV= .350
3280 CROSS SECTION 6.20 EXTENDED .94 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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
6.20	6.14	579.44	0.00	579.44	579.64	.20	0.00	0.00	578.50
1020.	72.	557.	391.	91.	118.	253.	0.	0.	577.70
0.03	.79	4.72	1.54	.065	.045	.065	0.000	573.30	400.00
.003089	0.	0.	0.	0	0	1	0.00	400.00	800.00
7.09	5.99	581.39	0.00	0.00	581.75	.36	2.05	.06	580.30
1020.	14.	928.	78.	14.	183.	71.	5.	4.	580.40
.03	1.04	5.06	1.10	.065	.045	.065	.045	575.40	268.96
.004587	550.	550.	550.	1	0	1	0.00	205.82	474.78

3280 CROSS SECTION 7.10 EXTENDED 2.27 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 581.60 ELREA= 585.50

7.10	6.57	583.87	0.00	0.00	584.37	.50	2.57	.05	581.60
1020.	349.	671.	0.	107.	102.	0.	7.	5.	585.50
.06	3.28	6.61	0.00	.065	.045	.065	.045	577.30	647.00
.007327	450.	450.	450.	2	0	1	0.00	73.08	720.08

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

3280 CROSS SECTION 7.98 EXTENDED 3.98 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.50 ELREA= 587.50

** D/S FACE ANN ARBOR RAILROAD

7.99	8.28	585.78	585.78	0.00	589.79	4.01	1.56	0.00	577.50
1020.	0.	1020.	0.	0.	63.	0.	7.	5.	578.20

.06	0.00	16.08	0.00	.065	.045	.065	.045	577.50	700.00
.022972	130.	130.	130.	30	11	1	0.00	8.00	708.00

SPECIAL BRIDGE

SS	XK	XKCR	COFQ	PDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	200.00	10.67	0.00	64.00	0.00	577.50	577.50

3280 CROSS SECTION 8.09 EXTENDED 8.12 FEET

3301 HV CHANGED MORE THAN HVINS

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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	CLEIP	QPR	BAREA	ELLC	ELTRD	CLASS
591.70	590.20	0.00	0.	1020.	64.	583.50	596.10	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 596.10 ELREA= 596.10

8.08	12.32	589.82	0.00	0.00	591.70	1.88	1.90	0.00	578.70
1020.	0.	1020.	0.	0.	93.	0.	8.	5.	578.60
.06	0.00	10.99	0.00	.065	.045	.065	.045	577.50	669.00
.012242	39.	39.	39.	3	0	1	0.00	8.00	677.00

1645 INT SEC ADDED BY RAISING SEC 8.10, -.100FT AND MULTIPLYING BY 1.183

3280 CROSS SECTION 1.01 EXTENDED 11.27 FEET

3301 HV CHANGED MORE THAN HVINS

1.01	14.37	591.97	0.00	0.00	591.98	.01	.00	.28	578.80
1020.	869.	101.	550.	665.	95.	844.	8.	5.	577.60
.07	.56	1.06	.65	.080	.050	.080	.045	577.60	611.00
.000042	25.	25.	25.	2	0	1	0.00	140.79	751.79

1645 INT SEC ADDED BY RAISING SEC 1.01, .100FT AND MULTIPLYING BY .845

3280 CROSS SECTION 8.10 EXTENDED 11.17 FEET

8.10	14.27	591.97	0.00	0.00	591.98	.01	.00	.00	578.90

1020.	368.	100.	551.	557.	80.	708.	9.	6.	577.70
.09	.66	1.26	.78	.080	.050	.080	.045	577.70	611.00
.000061	25.	25.	25.	2	0	1	0.00	119.00	730.00

CCHV= .150 CEHV= .350

8.20	0.41	592.01	0.00	0.00	592.01	.00	.02	.00	584.20
1020.	469.	98.	453.	1811.	217.	1725.	67.	13.	584.40
1.07	.26	.45	.26	.080	.050	.080	.047	582.60	459.96
.000013	1000.	1000.	1000.	2	0	1	0.00	537.42	997.38

8.30	7.63	592.03	0.00	0.00	592.04	.00	.03	.00	644.40
1020.	0.	383.	637.	0.	670.	1549.	153.	27.	586.60
1.81	0.00	.57	.41	.080	.050	.080	.048	584.40	231.66
.000048	1250.	1250.	1250.	2	0	1	0.00	422.24	653.90

CCHV= .300 CEHV= .500

SECND	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	OROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST

** D/S FACE LAVOY RD

8.99	7.54	592.04	0.00	0.00	592.04	.00	.00	.00	594.50
1020.	0.	383.	637.	0.	656.	1523.	157.	27.	586.70
1.85	0.00	.58	.42	.080	.050	.080	.048	584.50	232.62
.000051	70.	70.	70.	2	0	1	0.00	420.95	653.57

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	0.00	23.50	0.00	110.45	0.00	584.50	584.50

3280 CROSS SECTION 9.02 EXTENDED 5.07 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
593.89	592.04	0.00	591.	429.	110.	589.20	590.40	30.00

9.02	7.86	592.36	0.00	0.00	592.37	.00	.32	0.00	585.90
1020.	906.	114.	0.	7631.	195.	0.	161.	28.	587.30
1.91	.34	.59	.00	.080	.050	.080	.048	584.50	213.15
.000030	83.	83.	83.	0	0	4	0.00	453.85	667.00

3280 CROSS SECTION 9.10 EXTENDED 5.27 FEET

9.10	8.07	592.37	0.00	0.00	592.37	.00	.00	.00	585.70

1020.	907.	113.	0.	2716.	200.	0.	165.	29.	587.10
1.95	.33	.57	.00	.080	.050	.060	.048	584.30	209.42
.000027	50.	50.	50.	2	0	1	0.00	457.58	667.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 9.20 EXTENDED 4.27 FEET

9.20	8.07	592.37	0.00	0.00	592.40	.03	.02	.01	587.60
1020.	360.	329.	331.	350.	175.	335.	178.	31.	587.80
2.02	1.03	1.88	.99	.065	.045	.065	.048	584.30	407.00
.000257	300.	300.	300.	0	0	1	0.00	175.00	582.00

CCHV= .300 CEHV= .500
3280 CROSS SECTION 9.21 EXTENDED 5.10 FEET

** D/S FACE DRIVEWAY

9.21	8.40	592.40	0.00	0.00	592.47	.07	.05	.02	587.30
1020.	266.	488.	266.	194.	183.	184.	180.	31.	587.50
2.04	1.37	2.67	1.45	.065	.045	.065	.048	584.00	444.00
.000487	145.	145.	145.	2	0	1	0.00	100.00	544.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	BOLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.40	2.60	100.00	27.30	1.30	114.40	0.00	584.00	584.00

3280 CROSS SECTION 9.22 EXTENDED 5.22 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	HB	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
594.12	592.47	.01	685.	338.	114.	588.40	589.20	30.00

9.22	8.52	592.52	0.00	0.00	592.59	.07	.12	0.00	587.30
1020.	267.	484.	268.	198.	186.	189.	180.	32.	587.50
2.04	1.35	2.61	1.42	.065	.045	.065	.048	584.00	444.00
.000455	10.	10.	10.	2	0	7	0.00	100.00	544.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.00 ELREA= 593.00

9.30	8.16	592.46	0.00	0.00	592.68	.22	.02	.08	587.00

1020.	0.	1020.	0.	0.	271.	0.	180.	32.	589.40
2.04	0.00	3.76	0.00	.065	.045	.065	.048	584.30	253.00
.001216	25.	25.	25.	2	0	1	0.00	41.00	294.00

CCHV= .150 CEHV= .350

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 593.00 ELREA= 593.00

** D/S FACE TELEGRAPH RD

9.38	8.42	592.42	0.00	0.00	592.88	.46	.12	.08	584.90
1020.	0.	1020.	0.	0.	188.	0.	181.	32.	585.40
2.04	0.00	5.42	0.00	.065	.045	.065	.048	584.00	257.00
.002019	75.	75.	75.	2	0	1	0.00	24.00	281.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.40	2.60	250.00	24.00	1.80	97.68	0.00	584.00	584.00

PRESSURE FLOW

EGPRS	EGLNC	H3	QWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
594.79	593.29	.10	0.	1020.	98.	588.40	595.10	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 595.10 ELREA= 595.10

9.42	10.34	594.34	0.00	0.00	594.79	.45	1.91	0.00	588.50
1020.	0.	1020.	0.	0.	189.	0.	181.	32.	588.20
2.05	0.00	5.38	0.00	.065	.045	.065	.048	584.00	224.00
.002198	106.	106.	106.	2	0	1	0.00	24.00	248.00

3280 CROSS SECTION 9.50 EXTENDED 5.43 FEET

SECNO Q TIME SLOPE	DEPTH QLOB VLOB XLOBL	CHSEL QCH VCH XLCH	CRITS QROB VROB XLOBR	WSELK ALOB XML ITRIAL	EG ACH XNCH ICC	HV AROB XNR ICONT	HL VOL WTN CORAR	OLOSS TWA ELMIN TOPWID	BANK ELEV LEFT/RIGHT SSTA ENDST
9.50	11.32	594.82	0.00	0.00	594.88	.05	.03	.06	586.60
1020.	306.	374.	340.	226.	152.	225.	182.	32.	587.70
2.05	1.35	2.46	1.51	.060	.045	.060	.048	583.50	185.00
.000325	40.	40.	40.	2	0	1	0.00	101.00	286.00

CCHV= .150 CEHV= .350

9.61	7.73	595.13	0.00	0.00	595.14	.01	.25	.01	591.00
1020.	610.	197.	213.	854.	165.	304.	211.	38.	590.00
2.52	.71	1.20	.70	.060	.045	.060	.047	587.40	1100.46
.000122	1340.	1340.	1340.	3	0	1	0.00	322.93	1423.39

9.62	7.68	595.18	0.00	0.00	595.20	.02	.06	.00	591.00
1020.	490.	139.	391.	549.	85.	431.	220.	41.	590.20
2.61	.89	1.64	.91	.060	.045	.060	.047	587.50	48.20
.000278	320.	320.	320.	2	0	1	0.00	356.49	404.69

CCHV= .300 CEHV= .500

** D/S FACE DRIVE #1

9.68	7.71	595.21	0.00	0.00	595.22	.02	.02	.00	591.00
1020.	491.	138.	391.	554.	85.	435.	222.	41.	590.20
2.63	.89	1.62	.90	.060	.045	.060	.047	587.50	47.95
.000272	90.	90.	90.	2	0	1	0.00	356.98	404.93

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	310.00	.50	0.00	9.90	2.00	587.50	587.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
825.97	595.22	0.00	1001.	19.	10.	589.60	590.80	30.00

9.72	7.77	595.27	0.00	0.00	595.28	.02	.06	0.00	591.00
1020.	492.	136.	392.	567.	86.	445.	223.	42.	590.20
2.64	.87	1.58	.88	.060	.045	.060	.047	587.50	47.26
.000254	20.	20.	20.	1	0	9	0.00	358.31	405.57

9.75	7.68	595.29	0.00	0.00	595.29	.02	.01	.00	591.10
1020.	490.	139.	391.	549.	85.	430.	224.	42.	590.30
2.65	.89	1.64	.91	.060	.045	.060	.047	587.60	48.24
.000280	40.	40.	40.	2	0	1	0.00	356.42	404.66

CCHV= .150 CEHV= .350

9.84	6.56	595.56	0.00	0.00	595.62	.06	.31	.02	592.00
1020.	554.	357.	108.	389.	126.	92.	235.	46.	592.00
2.74	1.43	2.83	1.17	.075	.055	.075	.048	589.00	1074.03
.001309	600.	600.	600.	2	0	1	0.00	232.47	1306.49

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

9.85	6.78	595.78	0.00	0.00	595.81	.02	.18	.01	591.00
1020.	469.	276.	275.	460.	149.	333.	239.	47.	593.00
2.78	1.02	1.85	.83	.075	.055	.075	.048	589.00	70.03
.000646	200.	200.	200.	2	0	1	0.00	386.53	456.56

** D/S FACE DRIVE #2

9.88	6.85	595.85	0.00	0.00	595.87	.02	.06	.00	591.00
1020.	469.	272.	279.	472.	151.	344.	241.	48.	593.00
2.81	.99	1.80	.81	.075	.055	.075	.048	589.00	68.96
.000599	100.	100.	100.	2	0	1	0.00	388.14	457.10

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	375.00	.50	0.00	26.25	2.00	589.00	589.00

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
628.67	595.87	0.00	968.	51.	26.	592.50	593.50	30.00

9.92	6.91	595.91	0.00	0.00	595.93	.02	.06	0.00	591.00
1020.	469.	269.	282.	484.	153.	354.	241.	49.	593.00
2.81	.97	1.75	.80	.075	.055	.075	.048	589.00	67.95
.000559	20.	20.	20.	2	0	8	0.00	389.67	457.62

9.93	6.46	595.96	0.00	0.00	595.99	.03	.06	.01	591.50
1020.	468.	298.	254.	402.	139.	279.	243.	49.	593.50
2.83	1.17	2.15	.91	.075	.055	.075	.048	589.50	75.39
.000962	80.	80.	80.	2	0	1	0.00	378.46	453.85

CCHV= .150 CEHV= .350

9.94	5.18	596.29	0.00	0.00	596.35	.08	.35	.01	593.00
1020.	339.	220.	461.	250.	66.	226.	247.	51.	592.00
2.86	1.36	3.34	2.04	.075	.055	.075	.048	591.10	1117.33
.002175	250.	250.	250.	3	0	1	0.00	248.64	1365.97

9.95	4.95	596.65	0.00	0.00	596.68	.03	.32	.01	593.00
1020.	319.	105.	596.	282.	52.	471.	251.	53.	593.00
2.91	1.13	2.04	1.26	.075	.055	.075	.048	591.70	41.74
.000838	250.	250.	250.	2	0	1	0.00	273.40	315.14

CCHV= .300 CEHV= .500

** D/S FACE DRIVE #3

9.96	5.03	596.73	0.00	0.00	596.75	.03	.07	.00	593.00
1020.	321.	104.	595.	290.	53.	483.	253.	53.	593.00
2.93	1.11	1.98	1.23	.075	.055	.075	.048	591.70	41.36
.000775	90.	90.	90.	2	0	1	0.00	274.47	315.83

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	265.00	.50	0.00	2.50	2.00	591.70	591.70

SECND	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
4215.51	596.75	0.00	1006.	6.	3.	592.70	593.70	30.00

	9.97	5.11	596.81	0.00	0.00	596.83	.02	.08	0.00	593.00
	1020.	323.	103.	594.	299.	54.	496.	253.	53.	593.00
	2.94	1.08	1.92	1.20	.075	.055	.075	.048	591.70	40.95
	.000712	20.	20.	20.	2	0	9	0.00	275.64	316.59
	9.98	5.17	596.87	0.00	0.00	596.90	.02	.06	.00	593.00
	1020.	324.	102.	594.	306.	54.	506.	255.	54.	593.00
	2.96	1.06	1.88	1.17	.075	.055	.075	.049	591.70	40.63
	.000668	90.	90.	90.	2	0	1	0.00	276.54	317.17
CCHV=	.150	CFHV=	.350							
	9.99	4.69	597.29	0.00	0.00	597.33	.04	.43	.00	594.40
	695.	515.	83.	97.	372.	33.	95.	263.	57.	594.70
	3.05	1.38	2.48	1.03	.065	.050	.065	.049	592.60	120.23
	.001311	500.	500.	500.	2	0	1	0.00	281.53	401.75
	10.00	4.60	598.00	0.00	0.00	598.04	.04	.71	.00	595.20
	695.	516.	86.	93.	355.	33.	86.	268.	60.	595.50
	3.14	1.45	2.63	1.08	.065	.050	.065	.049	593.40	121.75
	.001526	500.	500.	500.	2	0	1	0.00	278.03	399.78
	10.01	4.75	598.95	0.00	0.00	598.98	.03	.94	.00	596.00
	695.	514.	81.	100.	383.	34.	100.	276.	65.	596.30
	3.20	1.34	2.39	1.00	.065	.050	.065	.049	594.20	119.30
	.001198	700.	700.	700.	2	0	1	0.00	283.57	402.87
	10.04	4.99	600.09	0.00	0.00	600.19	.10	1.19	.02	597.80
	695.	245.	227.	222.	131.	63.	127.	283.	68.	597.50
	3.36	1.88	3.60	1.75	.065	.050	.065	.049	595.10	171.69
	.002592	700.	700.	700.	2	0	1	0.00	162.10	333.80
	10.05	5.47	601.47	0.00	0.00	601.54	.06	1.34	.01	598.70
	695.	254.	202.	239.	165.	71.	167.	289.	71.	598.40
	3.47	1.54	2.86	1.44	.065	.050	.065	.049	596.00	166.20
	.001395	720.	720.	720.	1	0	1	0.00	176.72	342.92

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	OROB	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
10.10	3.88	602.98	602.98	0.00	603.47	.49	.27	0.00	601.80
695.	206.	334.	155.	62.	45.	52.	289.	71.	601.50
3.47	3.31	7.42	3.01	.065	.050	.065	.049	599.10	184.11
.017149	80.	80.	80.	30	14	1	0.00	128.21	312.31

CCHV= .400 CEHV= .900
3280 CROSS SECTION 10.18 EXTENDED 2.59 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	ORCB	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

** D/S FACE PRIVATE DRIVEWAY

10.18	6.89	603.79	0.00	0.00	603.81	.02	.15	.19	599.60
695.	277.	162.	256.	264.	93.	243.	291.	72.	599.30
3.50	1.05	1.74	1.06	.065	.050	.065	.049	596.90	170.00
.000357	140.	140.	140.	4	0	1	0.00	150.00	320.00

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	150.00	4.07	0.00	19.15	0.00	596.90	596.90

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	FLLC	ELTRD	CLASS
636.51	603.84	0.00	532.	169.	19.	601.60	604.50	30.00

10.22	8.81	605.71	0.00	0.00	605.73	.02	1.92	0.00	599.20
695.	495.	159.	41.	566.	102.	61.	291.	72.	598.90
3.51	.87	1.55	.68	.065	.050	.065	.049	596.90	317.93
.000190	17.	17.	17.	1	0	6	0.00	166.86	484.80
10.30	7.62	605.72	0.00	0.00	605.76	.03	.01	.01	600.40
695.	470.	187.	38.	411.	87.	41.	291.	72.	600.10

3.52	1.14	2.15	.93	.065	.050	.065	.049	598.10	328.99
.000457	42.	42.	42.	2	0	1	0.00	152.68	481.67
10.35	7.28	605.78	0.00	0.00	605.82	.04	.06	.01	600.80
695.	460.	198.	37.	368.	82.	36.	293.	72.	600.50
3.54	1.25	2.40	1.03	.065	.050	.065	.049	598.50	331.45
.000611	110.	110.	110.	2	0	1	0.00	149.32	480.77

** D/S FACE LEWIS RD

10.39	6.85	605.85	0.00	0.00	605.98	.13	.09	.07	602.80
695.	384.	311.	0.	190.	84.	0.	293.	73.	606.80
3.54	2.02	3.70	0.00	.065	.050	.065	.049	599.00	49.35
.002763	80.	80.	80.	2	0	1	0.00	115.90	165.26

SPECIAL BRIDGE

SB	XK	XKCR	CDEQ	PDLEN	BHC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.60	2.60	125.00	18.00	2.00	83.08	0.00	599.00	599.00

3280 CROSS SECTION 10.42 EXTENDED .16 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
607.59	606.05	.02	56.	637.	83.	604.20	607.00	30.00

10.42	7.96	607.26	0.00	0.00	607.31	.05	1.33	0.00	603.10
695.	450.	245.	0.	304.	110.	0.	294.	73.	607.10
3.56	1.48	2.24	.01	.065	.050	.065	.049	599.30	35.49
.000915	112.	112.	112.	2	0	2	0.00	134.51	170.00

SECNO Q TIME SLOPE	DEPTH QLOB VLOB XLOBL	QWSEL QCH VCH XLCH	QRTWS QROB VROB XLOBR	WSELK ALOB XNL ITRIAL	EG ACH XNCH ICC	HV AROB XNR ICONT	HL VOL WTN CORAR	OLOSS TWA ELMIN TOPWID	BANK ELEV LEFT/RIGHT SSTA ENDST
10.45	7.72	607.32	0.00	0.00	607.38	.06	.06	.01	603.40
695.	424.	271.	0.	278.	103.	0.	295.	73.	607.40
3.57	1.52	2.62	0.00	.080	.055	.080	.049	599.60	38.53
.001609	50.	50.	50.	2	0	1	0.00	131.06	169.59

CCHV= .150 CEHV= .350

11.00	6.85	607.95	0.00	0.00	607.97	.02	.59	.01	603.40
695.	264.	196.	235.	260.	109.	249.	303.	76.	603.40
3.74	1.01	1.80	.94	.080	.055	.080	.049	601.10	270.60
.000460	750.	750.	750.	3	0	1	0.00	153.99	424.59

11.50	5.06	608.66	0.00	0.00	608.70	.04	.72	.01	604.90
695.	259.	215.	221.	209.	94.	194.	318.	80.	604.90
3.95	1.24	2.29	1.14	.080	.055	.080	.050	602.60	270.70
.000909	1150.	1150.	1150.	3	0	1	0.00	153.61	424.31
11.90	5.86	609.46	0.00	0.00	609.50	.05	.80	.00	605.90
695.	259.	222.	216.	196.	90.	179.	327.	82.	605.90
4.09	1.31	2.46	1.20	.080	.055	.080	.050	603.60	270.72
.001110	800.	800.	800.	2	0	1	0.00	153.51	424.23

CCHV= .400 CEHV= .800
3280 CROSS SECTION 11.98 EXTENDED. 2.57 FEET

** D/S FACE STERNS RD

11.98	5.18	609.68	0.00	0.00	609.81	.14	.24	.07	606.80
695.	154.	304.	237.	76.	77.	131.	328.	83.	606.80
4.10	2.02	3.94	1.80	.080	.055	.080	.050	604.50	307.00
.003504	130.	130.	130.	2	0	1	0.00	116.67	423.67

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	100.00	10.15	0.00	45.67	0.00	604.50	604.50

3280 CROSS SECTION 12.02 EXTENDED 1.50 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
614.35	611.79	0.00	119.	577.	46.	609.00	612.30	30.00

12.02	8.20	612.70	0.00	0.00	612.89	.19	3.08	0.00	608.70
695.	66.	443.	186.	45.	105.	99.	328.	83.	606.50
4.10	1.47	4.22	1.88	.080	.055	.080	.050	604.50	86.08
.002141	36.	36.	36.	2	0	4	0.00	73.92	160.00

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

12.10	7.16	613.06	0.00	0.00	613.44	.38	.40	.15	610.10
695.	41.	504.	151.	23.	89.	70.	329.	83.	607.90
4.11	1.76	5.64	2.15	.080	.055	.080	.050	605.90	94.34
.004743	130.	130.	130.	3	0	1	0.00	95.11	189.45

** D/S FACE SENECA RD

12.19	7.34	613.44	0.00	0.00	613.76	.33	.31	.02	610.30
695.	45.	490.	160.	26.	92.	82.	329.	83.	608.10
4.11	1.71	5.32	1.95	.080	.055	.080	.050	606.10	92.92
.004060	70.	70.	70.	2	0	1	0.00	108.60	201.52

SPECIAL BRIDGE

SB	XK	XKOB	COFQ	BDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.33	2.60	120.00	7.93	0.00	26.97	0.00	606.10	606.10

3280 CROSS SECTION 12.22 EXTENDED 3.22 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
627.15	613.76	0.00	561.	134.	27.	609.50	612.40	30.00

12.22	7.82	613.92	0.00	0.00	613.95	.02	.18	0.00	607.60
695.	108.	147.	440.	147.	75.	510.	330.	83.	606.50
4.12	.74	1.95	.86	.080	.055	.080	.050	606.10	25.92
.000377	34.	34.	34.	2	0	5	0.00	204.08	230.00

3280 CROSS SECTION 12.30 EXTENDED 2.36 FEET

12.30	6.96	613.96	0.00	0.00	614.01	.04	.04	.02	608.50
695.	93.	179.	423.	100.	67.	391.	331.	84.	607.40
4.14	.92	2.68	1.08	.080	.055	.080	.050	607.00	29.65
.000837	80.	80.	80.	2	0	1	0.00	200.35	230.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 12.40 EXTENDED .09 FEET

12.40	7.48	615.38	0.00	0.00	615.51	.13	1.47	.03	612.80
695.	184.	418.	93.	158.	116.	85.	342.	89.	613.40
4.25	1.16	3.61	1.09	.080	.055	.080	.051	607.90	0.00
.002669	1070.	1070.	1070.	2	0	1	0.00	226.40	226.40

CCHV= .400 CEHV= .800
3280 CROSS SECTION 12.48 EXTENDED .91 FEET

SECNO	DEPTH	CRSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	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

** D/S FACE BRIDGEWAY RD

12.48	8.30	615.70	0.00	0.00	615.75	.05	.20	.03	612.30
695.	238.	321.	136.	255.	136.	167.	343.	90.	612.90
4.27	.93	2.35	.81	.080	.055	.080	.051	607.40	0.00
.010915	140.	140.	140.	2	0	1	0.00	257.94	257.94

SPECIAL BRIDGE

SR	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.51	2.60	250.00	6.79	0.00	25.12	0.00	607.40	607.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
633.65	615.75	0.00	645.	50.	25.	611.10	613.80	30.00

12.52	8.37	615.77	0.00	0.00	615.79	.02	.05	0.00	607.90
695.	369.	88.	238.	422.	41.	289.	344.	90.	607.80
4.29	.87	2.16	.82	.080	.055	.080	.051	607.40	56.70
.000396	23.	23.	23.	1	0	8	0.00	259.71	316.41
12.60	6.88	615.78	0.00	0.00	615.85	.07	.02	.04	609.40
695.	336.	129.	230.	230.	33.	148.	344.	90.	609.30
4.29	1.46	3.88	1.55	.080	.055	.080	.051	608.90	83.96
.001680	25.	25.	25.	2	0	1	0.00	193.53	277.48
12.70	6.09	616.89	0.00	0.00	617.07	.17	1.13	.08	611.30
695.	299.	165.	230.	146.	29.	98.	348.	92.	611.20
4.33	2.05	5.63	2.36	.080	.055	.080	.051	610.80	98.30
.004200	450.	450.	450.	3	0	1	0.00	158.69	256.99
12.90	5.79	618.39	0.00	0.00	618.46	.08	1.36	.04	614.30
695.	189.	243.	263.	120.	72.	241.	351.	94.	615.70
4.39	1.57	3.36	1.09	.080	.055	.080	.051	612.60	275.06
.002276	450.	450.	450.	2	0	1	0.00	297.91	572.97

CCHV= .150 CEHV= .350

13.00	5.08	619.58	0.00	0.00	619.69	.12	1.21	.01	616.20
490.	131.	227.	132.	81.	61.	121.	355.	97.	617.60
4.44	1.61	3.73	1.09	.080	.055	.080	.051	614.50	285.56
.003533	450.	450.	450.	2	0	1	0.00	187.39	472.95
13.05	5.07	621.37	0.00	0.00	621.48	.11	1.79	.00	618.00
490.	131.	226.	133.	82.	61.	122.	358.	99.	619.40
4.50	1.60	3.71	1.09	.080	.055	.080	.051	616.30	285.43
.003481	510.	510.	510.	0	0	1	0.00	188.08	473.51

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	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	ICC	ICONT	CORAR	TOPWID	ENDST
13.06	5.06	623.26	0.00	0.00	623.48	.22	1.96	.04	620.90
490.	39.	361.	90.	30.	84.	91.	361.	101.	620.80
4.54	1.31	4.32	.99	.080	.055	.080	.051	618.20	55.64
.004260	510.	510.	510.	1	0	1	0.00	231.63	287.26
13.10	5.21	625.21	0.00	0.00	625.37	.16	1.89	.01	622.70
490.	42.	336.	112.	36.	87.	119.	363.	104.	622.60
4.59	1.18	3.87	.94	.080	.055	.080	.051	620.00	51.19
.003248	510.	510.	510.	2	0	1	0.00	251.65	302.84

CCHV= .400 CEHV= .800
3280 CROSS SECTION 13.19 EXTENDED 1.70 FEET

** D/S FACE LONGFELLOW RD

13.18	6.51	625.51	0.00	0.00	625.53	.02	.10	.06	621.70
490.	247.	178.	65.	322.	108.	119.	364.	105.	623.10
4.61	.77	1.64	.55	.080	.055	.080	.051	619.00	0.00
.000451	100.	100.	100.	2	0	1	0.00	213.00	213.00

SPECIAL BRIDGE

SB XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.81	2.60	200.00	3.93	0.00	12.97	0.00	619.00	619.00

3280 CROSS SECTION 13.22 EXTENDED 1.81 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
665.67	625.53	0.00	469.	26.	13.	622.30	624.30	30.00

13.22	6.60	625.60	0.00	0.00	625.62	.02	.09	0.00	621.70
490.	248.	173.	69.	334.	110.	127.	365.	105.	623.10
4.63	.74	1.57	.54	.080	.055	.080	.051	619.00	0.00
.000401	60.	60.	60.	1	0	9	0.00	213.00	213.00

3280 CROSS SECTION 13.30 EXTENDED 1.42 FEET

13.30	6.22	625.62	0.00	0.00	625.64	.03	.02	.01	622.10
490.	243.	191.	56.	289.	102.	97.	366.	105.	623.50
4.64	.84	1.87	.58	.080	.055	.080	.051	619.40	0.00
.000628	40.	40.	40.	2	0	1	0.00	213.00	213.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 14.00 EXTENDED .33 FEET

SECNO Q TIME SLOPE	DEPTH QLOB VLOB XLOBL	CWSEL QCH VCH XLCH	CRITS QROB VROB XLOBR	WSELK ALOB XNL ITRIAL	EG ACH XNCH IDC	HV AROB XNR ICONT	HL VOL WTN CORAR	CLOSS TWA ELMIN TOPWID	BANK ELEV LEFT/RIGHT SSTA ENDST
14.00	6.53	625.73	0.00	0.00	625.86	.13	.18	.04	624.70
490.	71.	378.	41.	87.	115.	56.	367.	106.	624.70
4.65	.81	3.30	.73	.080	.055	.080	.051	619.20	199.00
.003210	150.	150.	150.	3	0	1	0.00	261.00	460.00

CCHV= .400 CEHV= .800

** D/S FACE TENNYSON RD

14.98	6.30	626.00	0.00	0.00	626.07	.07	.18	.03	624.40
490.	97.	371.	22.	135.	156.	29.	368.	107.	623.10
4.67	.72	2.39	.75	.080	.055	.080	.051	619.70	26.96
.001007	110.	110.	110.	2	0	1	0.00	159.93	186.89

SPECIAL BRIDGE

SB	XK	XKOB	COEQ	BOLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.80	2.70	150.00	3.77	0.00	12.44	0.00	619.70	619.70

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
669.37	626.07	0.00	458.	32.	12.	623.00	624.80	30.00

15.02	6.42	626.12	0.00	0.00	626.18	.06	.11	0.00	624.40
490.	104.	363.	23.	148.	159.	31.	368.	107.	623.10
4.68	.71	2.28	.72	.080	.055	.080	.051	619.70	23.35
.000887	60.	60.	60.	2	0	7	0.00	164.37	187.72

15.10	5.86	626.16	0.00	0.00	626.27	.11	.05	.04	625.00
490.	68.	404.	18.	90.	142.	21.	368.	107.	623.70
4.69	.76	2.85	.86	.080	.055	.080	.051	620.30	40.18
.001636	40.	40.	40.	2	0	1	0.00	143.69	183.87

CCHV= .150 CEHV= .350

16.00	6.02	627.02	0.00	0.00	627.34	.32	1.00	.08	625.80
490.	35.	455.	0.	30.	97.	0.	370.	108.	627.10
4.70	1.15	4.71	0.00	.080	.055	.080	.051	621.00	116.03
.007399	330.	330.	330.	2	0	1	0.00	80.73	196.76

3280 CROSS SECTION 16.10 EXTENDED .13 FEET

16.10	6.23	628.23	0.00	0.00	628.44	.21	1.08	.02	626.00
490.	50.	408.	32.	38.	102.	33.	370.	108.	627.10
4.72	1.32	4.01	.98	.080	.055	.080	.051	622.00	0.00
.004122	200.	200.	200.	2	0	1	0.00	106.12	106.12

CCHV= .200 CEHV= .400
3280 CROSS SECTION 16.98 EXTENDED .04 FEET

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

** D/S FACE JACKMAN RD

16.98	6.14	628.74	0.00	0.00	628.97	.23	.52	.01	626.60
490.	46.	416.	27.	35.	99.	28.	371.	109.	627.70
4.73	1.33	4.18	.96	.080	.055	.080	.051	622.60	0.00
.004638	120.	120.	120.	2	0	1	0.00	~~105.47~~	105.47

SPECIAL BRIDGE

SB	XK	XKOR	CDEO	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.40	2.60	215.00	8.00	0.00	47.20	0.00	622.60	622.60

3280 CROSS SECTION 17.02 EXTENDED .97 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
631.08	628.89	0.00	91.	400.	47.	628.50	630.00	30.00

17.02	7.67	630.27	0.00	0.00	630.30	.03	1.33	0.00	625.40
490.	252.	182.	56.	282.	99.	114.	371.	109.	628.70
4.73	.90	1.84	.49	.080	.055	.080	.051	622.60	50.00
.000564	26.	26.	26.	2	0	4	0.00	225.00	275.00

3280 CROSS SECTION 17.10 EXTENDED .99 FEET

17.10	7.69	630.29	0.00	0.00	630.32	.03	.02	.00	625.40
490.	252.	181.	57.	284.	99.	116.	371.	109.	628.70
4.74	.89	1.82	.49	.080	.055	.080	.051	622.60	50.00
.000551	37.	37.	37.	2	0	1	0.00	225.00	275.00

CCHV= .150 CEHV= .350

18.00	6.67	630.67	0.00	0.00	630.71	.05	.39	.01	625.70
490.	114.	166.	210.	95.	68.	183.	378.	112.	625.50

4.86	1.20	2.43	1.15	.070	.050	.060	.051	624.00	272.80
.000654	650.	650.	650.	3	0	1	0.00	155.92	428.73
18.90	4.91	631.01	0.00	0.00	631.06	.05	.34	.00	626.10
490.	43.	211.	236.	55.	103.	156.	382.	113.	626.10
4.95	.77	2.05	1.52	.070	.050	.060	.051	626.10	105.72
.000568	560.	560.	560.	3	0	1	0.00	94.68	200.40

CCHV= .300 CEHV= .500

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 633.00 ELREA= 633.00

** D/S FACE NEW BRIDGE UNDER CONSTRUCTION

18.98	3.97	631.07	0.00	0.00	631.19	.12	.10	.04	629.60
490.	0.	490.	0.	0.	173.	0.	383.	114.	627.20
4.96	0.00	2.83	0.00	.070	.050	.060	.051	627.20	135.00
.001644	110.	110.	110.	2	0	1	0.00	45.00	180.94

SPECIAL BRIDGE

SB	XK	XKCR	CCFO	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.60	2.60	125.00	45.50	1.50	211.20	0.00	627.20	627.20

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
631.20	631.20	.01	0.	490.	211.	631.00	633.50	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 633.50 ELREA= 633.50

19.08	3.98	631.08	0.00	0.00	631.20	.12	.01	0.00	627.20
490.	0.	490.	0.	0.	175.	0.	383.	114.	627.20
4.96	0.00	2.81	0.00	.070	.050	.060	.051	627.20	145.00
.001474	37.	37.	37.	2	0	1	0.00	45.00	190.00

3649 NUMBER SECTIONS EXCEED LIMIT

19.10	3.66	631.16	0.00	0.00	631.30	.14	.09	.01	627.50
490.	6.	437.	47.	6.	139.	37.	383.	114.	627.50
4.97	1.03	3.14	1.25	.080	.055	.080	.051	627.50	144.82
.002397	50.	50.	50.	2	0	1	0.00	83.28	228.10

3649 NUMBER SECTIONS EXCEED LIMIT

CCHV= .150 CEHV= .350

3280 CROSS SECTION 20.00 EXTENDED .70 FEET

20.00	3.90	632.40	0.00	0.00	632.57	.16	1.25	.01	631.40
490.	161.	314.	15.	113.	80.	25.	385.	115.	631.90
5.00	1.42	3.92	.61	.080	.055	.080	.051	628.50	150.00
.005923	350.	350.	350.	2	0	1	0.00	240.51	390.51

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 20.10 EXTENDED .10 FEET

20.10	4.10	633.00	632.19	0.00	633.48	.48	.80	.11	633.10
490.	0.	454.	36.	0.	79.	33.	385.	115.	632.00
5.00	0.00	5.75	1.10	.080	.055	.080	.051	628.90	9.08
.011404	100.	100.	100.	4	11	1	0.00	140.92	150.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .200 CEHV= .400
3280 CROSS SECTION 20.98 EXTENDED .94 FEET.

** D/S FACE BROOKWOOD RD

20.98	4.93	634.03	0.00	0.00	634.17	.13	.62	.07	633.30
490.	1.	345.	144.	2.	101.	129.	385.	116.	632.20
5.02	.52	3.43	1.11	.080	.055	.080	.051	629.10	2.36
.002951	120.	120.	120.	2	0	1	0.00	147.64	150.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR	XK	XKCR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.60	150.00	5.71	0.00	18.28	0.00	629.10	629.10

SECNO	DEPTH	CHSEL	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	ICC	ICCNT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
648.54	634.17	0.00	385.	105.	18.	632.30	633.70	30.00

21.02	5.45	634.55	0.00	0.00	634.70	.15	.53	0.00	630.70
490.	107.	319.	64.	82.	84.	59.	386.	116.	632.10
5.02	1.30	3.80	1.09	.080	.055	.080	.051	629.10	24.23
.002622	32.	32.	32.	2	0	6	0.00	152.79	177.01

3649 NUMBER SECTIONS EXCEED LIMIT

21.10	5.48	634.68	0.00	0.00	634.83	.15	.13	.00	630.80
490.	109.	316.	65.	85.	85.	60.	386.	116.	632.20
5.02	1.28	3.74	1.07	.080	.055	.080	.051	629.20	20.92
.002516	50.	50.	50.	?	0	1	0.00	156.77	177.69

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
3280 CROSS SECTION 22.00 EXTENDED 1.36 FEET

22.00	5.76	635.36	0.00	0.00	635.47	.11	.63	.01	633.00
490.	186.	243.	61.	135.	69.	59.	387.	117.	633.00
5.05	1.38	3.50	1.04	.080	.055	.080	.051	629.60	43.00
.002521	250.	250.	250.	?	0	1	0.00	164.00	207.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
3280 CROSS SECTION 22.98 EXTENDED 1.89 FEET

** D/S FACE DEAN RD

22.99	6.29	635.69	0.00	0.00	635.74	.06	.26	.02	632.80
490.	201.	203.	86.	175.	77.	99.	388.	118.	632.80
5.09	1.15	2.63	.87	.080	.055	.080	.052	629.40	43.00
.001249	150.	150.	150.	?	0	1	0.00	164.00	207.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COFO	BDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.60	100.00	5.00	0.00	19.44	0.00	629.40	629.40

3280 CROSS SECTION 23.02 EXTENDED 3.75 FEET

PRESSURE AND WEIR FLOW

FGPRS	FGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
652.46	635.74	0.00	366.	124.	19.	633.30	635.50	30.00

23.02	7.35	636.75	0.00	0.00	636.76	.01	1.01	0.00	632.60
490.	162.	177.	150.	258.	146.	245.	389.	118.	633.60
5.10	.63	1.21	.61	.080	.055	.080	.052	629.40	210.00
.000204	52.	52.	52.	1	0	6	0.00	165.00	375.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 23.10 EXTENDED 2.85 FEET

SECND	DEPTH	CRSEL	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	XICH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
23.10	6.45	636.75	0.00	0.00	636.77	.02	.01	.01	633.50
490.	153.	200.	137.	195.	124.	182.	389.	118.	634.50
5.10	.78	1.62	.75	.080	.055	.080	.052	630.30	210.00
.000457	24.	24.	24.	?	0	1	0.00	165.00	375.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 23.20 EXTENDED 1.77 FEET

23.20	5.37	637.17	0.00	0.00	637.24	.06	.43	.03	635.00
490.	129.	254.	107.	120.	97.	107.	394.	120.	636.00
5.19	1.08	2.62	1.00	.080	.055	.080	.052	631.80	210.00
.001655	550.	550.	550.	3	0	1	0.00	165.00	375.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350

23.90	4.96	638.26	0.00	0.00	638.40	.14	1.13	.03	633.60
490.	117.	237.	137.	74.	61.	72.	398.	122.	634.10
5.24	1.57	3.88	1.90	.080	.055	.080	.052	633.30	214.60
.002639	550.	550.	550.	?	0	1	0.00	89.14	303.73

3649 NUMBER SECTIONS EXCEED LIMIT

24.00	4.93	639.73	0.00	0.00	639.87	.14	1.47	.00	635.10
490.	116.	238.	137.	73.	61.	71.	400.	123.	635.60
5.29	1.58	3.91	1.92	.080	.055	.080	.052	634.80	215.05
.002704	550.	550.	550.	1	0	1	0.00	88.55	303.61

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 24.10 EXTENDED .03 FEET

24.10	5.23	641.33	0.00	0.00	641.44	.11	1.57	.00	636.40
490.	125.	227.	138.	88.	65.	80.	404.	124.	636.90
5.37	1.42	3.52	1.72	.080	.055	.080	.052	636.10	204.00
.002016	675.	675.	675.	2	0	1	0.00	103.16	307.16

3649 NUMBER SECTIONS EXCEED LIMIT

24.90	5.86	643.26	0.00	0.00	643.62	.35	2.09	.08	642.30
490.	13.	443.	35.	17.	89.	30.	407.	126.	641.70
5.41	.75	5.00	1.16	.080	.050	.080	.052	637.40	481.93
.005365	675.	675.	675.	?	0	1	0.00	104.21	586.14

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 24.95 EXTENDED .17 FEET

24.95	6.57	644.57	0.00	0.00	644.73	.16	1.08	.03	642.90
490.	47.	380.	63.	60.	105.	62.	408.	127.	642.30
5.44	.78	3.64	1.01	.080	.050	.080	.052	638.00	450.00
.002275	325.	325.	325.	2	0	1	0.00	150.00	600.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 25.00 EXTENDED .28 FEET

SECNO Q TIME SLOPE	DEPTH QLOB VLOB XLOBL	CWSEL QCH VCH XLCH	CRITS QROB VROB XLOBR	WSELK ALOB XNL ITRIAL	EG ACH XNCH IDC	HV AROB XNR ICONT	HL VOL WTN CORAR	CLOSS TWA ELMIN TOPWID	BANK ELEV LEFT/RIGHT SSTA ENDST
25.00	6.68	645.28	0.00	0.00	645.42	.14	.69	.00	642.50
490.	54.	369.	68.	69.	107.	68.	410.	128.	642.90
5.47	.79	3.44	.99	.080	.050	.080	.052	638.60	450.00
.001971	325.	325.	325.	2	0	1	0.00	150.00	600.00
3649 NUMBER SECTIONS EXCEED LIMIT									
25.02	6.26	645.36	0.00	0.00	645.59	.23	.14	.03	644.00
490.	29.	411.	50.	38.	98.	47.	410.	128.	643.40
5.48	.77	4.21	1.06	.080	.050	.080	.052	639.10	460.53
.003353	55.	55.	55.	2	0	1	0.00	135.12	595.65
3649 NUMBER SECTIONS EXCEED LIMIT									
25.05	5.83	645.53	0.00	0.00	645.89	.36	.26	.05	644.60
490.	11.	445.	33.	16.	88.	29.	410.	128.	644.00
5.49	.74	5.07	1.16	.080	.050	.080	.052	639.70	483.91
.005603	60.	60.	60.	2	0	1	0.00	101.35	585.26
3649 NUMBER SECTIONS EXCEED LIMIT									
25.10	5.43	646.23	0.00	0.00	646.76	.53	.81	.06	645.70
490.	2.	469.	19.	3.	78.	15.	411.	128.	645.10
5.48	.59	5.99	1.21	.080	.050	.080	.052	640.80	506.07
.009060	115.	115.	115.	2	0	1	0.00	69.33	575.40
3649 NUMBER SECTIONS EXCEED LIMIT									
25.15	5.38	647.28	0.00	0.00	647.84	.56	1.07	.01	646.80
490.	1.	471.	17.	3.	77.	14.	411.	129.	646.20
5.49	.56	6.10	1.21	.080	.050	.080	.052	641.90	508.63
.009572	115.	115.	115.	2	0	1	0.00	65.64	574.26
3649 NUMBER SECTIONS EXCEED LIMIT									
25.20	5.38	648.38	0.00	0.00	648.94	.56	1.10	.00	647.90
490.	1.	471.	17.	3.	77.	14.	411.	129.	647.30
5.50	.56	6.10	1.21	.080	.050	.080	.052	643.00	508.63
.009572	115.	115.	115.	2	0	1	0.00	65.64	574.26
3649 NUMBER SECTIONS EXCEED LIMIT									
25.25	5.38	649.48	0.00	0.00	650.04	.56	1.10	.00	649.00
490.	1.	471.	17.	3.	77.	14.	411.	129.	648.40
5.50	.56	6.10	1.21	.080	.050	.080	.052	644.10	508.59
.009563	115.	115.	115.	0	0	1	0.00	65.69	574.28
3649 NUMBER SECTIONS EXCEED LIMIT									
25.30	5.38	650.58	0.00	0.00	651.14	.56	1.10	.00	650.10

490.	1.	471.	17.	3.	77.	14.	412.	129.	649.50
5.51	.56	6.09	1.21	.080	.050	.080	.052	645.20	508.55
.009555	115.	115.	115.	0	0	1	0.00	65.75	574.30

3649 NUMBER SECTIONS EXCEED LIMIT

SECNO	DEPTH	CWSEL	CRITS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	ORCB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VRCB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	ICC	ICONT	CORAR	TOPWID	ENDST
25.35	5.38	651.68	0.00	0.00	652.24	.56	1.10	.00	651.20
490.	1.	471.	17.	3.	77.	14.	412.	129.	650.60
5.51	.56	6.09	1.21	.080	.050	.080	.052	646.30	508.57
.009559	115.	115.	115.	0	0	1	0.00	65.72	574.29

3649 NUMBER SECTIONS EXCEED LIMIT

25.40	5.38	652.78	0.00	0.00	653.34	.56	1.10	.00	652.30
490.	1.	471.	17.	3.	77.	14.	412.	129.	651.70
5.52	.56	6.10	1.21	.080	.050	.080	.052	647.40	508.62
.009570	115.	115.	115.	0	0	1	0.00	65.65	574.27

3649 NUMBER SECTIONS EXCEED LIMIT

25.45	5.38	653.88	0.00	0.00	654.44	.56	1.10	.00	653.40
490.	1.	471.	17.	3.	77.	14.	412.	130.	652.80
5.52	.56	6.10	1.21	.080	.050	.080	.052	648.50	508.64
.009574	115.	115.	115.	0	0	1	0.00	65.62	574.26

3649 NUMBER SECTIONS EXCEED LIMIT

25.90	5.38	654.98	0.00	0.00	655.54	.56	1.10	.00	654.50
490.	1.	471.	17.	3.	77.	14.	413.	130.	653.90
5.53	.56	6.10	1.21	.080	.050	.080	.052	649.60	508.60
.009567	115.	115.	115.	0	0	1	0.00	65.67	574.27

3649 NUMBER SECTIONS EXCEED LIMIT

CCHV= .300 CEHV= .500

3280 CROSS SECTION 25.98 EXTENDED 1.68 FEET

** D/S FACE DOUGLAS RD

25.98	5.28	656.08	0.00	0.00	656.18	.10	.50	.14	655.80
490.	1.	307.	183.	4.	100.	135.	413.	130.	654.10
5.54	.20	3.07	1.36	.080	.050	.080	.052	650.80	109.30
.002350	120.	120.	120.	2	0	1	0.00	155.70	265.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR	XK	XKCR	COEQ	BDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	125.00	5.40	0.00	17.28	0.00	650.80	650.80

3280 CROSS SECTION 26.02 EXTENDED 2.48 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
674.81	656.18	0.00	386.	104.	17.	654.00	655.80	30.00

26.02	6.09	656.88	0.00	C.CO	656.93	.04	.75	0.00	655.80
490.	26.	265.	199.	53.	125.	193.	413.	130.	654.1C
5.55	.49	2.12	1.03	.080	.050	.080	.052	650.80	100.00
.000836	36.	36.	36.	2	0	6	0.00	165.00	265.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 26.10 EXTENDED 2.54 FEET

SECNO	DEPTH	CHSEL	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
26.10	6.14	656.94	0.00	0.00	656.98	.04	.06	.00	655.80
490.	28.	263.	200.	57.	127.	198.	414.	130.	654.10
5.56	.49	2.07	1.01	.080	.050	.080	.052	650.80	100.00
.000781	70.	70.	70.	2	0	1	0.00	165.00	265.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
3280 CROSS SECTION 26.18 EXTENDED 2.57 FEET

** D/S FACE PRIVATE DRIVE #1

26.18	6.17	656.97	0.00	0.00	657.01	.04	.02	.00	655.80
490.	29.	262.	200.	58.	127.	200.	414.	131.	654.10
5.57	.49	2.05	1.00	.080	.050	.080	.052	650.80	100.00
.000759	30.	30.	30.	2	0	1	0.00	165.00	265.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	RWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	150.00	7.00	0.00	23.80	0.00	650.80	650.80

3280 CROSS SECTION 26.22 EXTENDED 1.17 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS

666.84	657.01	0.00	439.	52.	24.	654.20	655.20	30.00	

26.22	6.17	656.97	0.00	0.00	657.08	.10	.07	0.00	654.60
490.	39.	290.	161.	53.	90.	137.	414.	131.	654.50
5.57	.74	3.21	1.18	.080	.050	.080	.052	650.80	142.00
.001800	13.	13.	13.	2	0	8	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 26.30 EXTENDED 1.17 FEET

26.30	6.13	657.08	0.00	0.00	657.18	.10	.11	.00	654.70
490.	39.	290.	161.	53.	90.	137.	415.	131.	654.60
5.57	.74	3.21	1.18	.080	.050	.080	.052	650.90	142.00
.001810	60.	60.	60.	0	0	1	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .200 CEHV= .400
3280 CROSS SECTION 26.38 EXTENDED .89 FEET

** D/S FACE PRIVATE DRIVE #2

26.38	5.89	657.19	0.00	0.00	657.33	.15	.13	.02	655.10
490.	25.	316.	148.	31.	84.	115.	415.	131.	655.00
5.58	.81	3.75	1.29	.080	.050	.080	.052	651.30	142.00
.002710	60.	60.	60.	2	0	1	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	EQLEN	SWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	125.00	5.70	0.00	22.80	0.00	651.30	651.30

3280 CROSS SECTION 26.42 EXTENDED 3.68 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	FV	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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
657.94	657.33	0.00	418.	72.	23.	655.30	656.00	30.00

26.42	6.08	657.38	0.00	0.00	657.42	.03	.08	0.00	654.30
490.	67.	177.	246.	104.	83.	234.	415.	131.	655.00
5.58	.64	2.13	1.05	.080	.050	.080	.052	651.30	142.00
.000733	18.	18.	18.	2	0	6	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 26.50 EXTENDED 3.22 FEET

26.50	5.62	657.42	0.00	0.00	657.47	.06	.05	.01	654.80
490.	46.	197.	247.	69.	75.	198.	416.	131.	655.50
5.50	.67	2.62	1.25	.080	.050	.080	.052	651.80	142.00
.001284	50.	50.	50.	2	0	1	0.00	171.00	313.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
3280 CROSS SECTION 27.00 EXTENDED 3.23 FEET

27.00	5.83	657.53	0.00	0.00	657.57	.04	.09	.00	656.20
490.	51.	244.	195.	89.	125.	196.	416.	132.	655.20
5.61	.58	1.95	1.00	.080	.050	.080	.052	651.70	265.00
.000715	100.	100.	100.	2	0	1	0.00	170.00	435.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.08 EXTENDED 2.88 FEET

27.08	5.48	657.58	0.00	0.00	657.63	.05	.05	.01	656.60
490.	37.	259.	194.	64.	114.	171.	417.	132.	655.60
5.62	.58	2.28	1.13	.080	.050	.080	.052	652.10	265.00
.001103	60.	60.	60.	2	0	1	0.00	170.00	435.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SR	XK	XKCR	COEP	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.35	2.60	150.00	7.00	0.00	23.10	0.00	652.10	652.10

3280 CROSS SECTION 27.12 EXTENDED 3.56 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGIWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
667.01	657.63	0.00	441.	53.	23.	655.40	655.80	30.00

27.12	5.56	657.66	0.00	0.00	657.69	.03	.06	0.00	655.80
490.	67.	184.	239.	134.	104.	240.	417.	132.	654.50
5.62	.50	1.77	1.00	.080	.050	.080	.052	652.10	100.00
.000556	16.	16.	16.	2	0	7	0.00	206.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.20 EXTENDED 3.69 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV

Q	QLOB	QCH	QROB	ALCB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICCNT	CORAR	TOPWID	ENDST
27.20	5.69	657.69	0.00	0.00	657.71	.02	.02	.00	655.70
490.	93.	172.	226.	207.	107.	249.	418.	132.	654.40
5.64	.45	1.60	.91	.080	.050	.080	.052	652.00	41.00
.000437	50.	50.	50.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .400 CEHV= .800
3280 CROSS SECTION 27.28 EXTENDED 3.71 FEET

27.28	5.71	657.71	0.00	0.00	657.73	.02	.02	.00	655.70
490.	94.	171.	225.	210.	108.	251.	418.	133.	654.40
5.65	.45	1.59	.90	.080	.050	.080	.052	652.00	41.00
.000427	45.	45.	45.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	BRLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.50	2.60	200.00	12.00	0.00	37.20	0.00	652.00	652.00

3280 CROSS SECTION 27.32 EXTENDED 3.05 FEET

PRESSURE AND WEIR FLOW

EGRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
661.75	657.73	0.00	422.	67.	37.	655.10	655.80	30.00

27.32	5.75	657.75	0.00	0.00	657.79	.03	.05	0.00	656.40
490.	58.	200.	232.	136.	104.	220.	418.	133.	654.50
5.65	.43	1.93	1.05	.080	.050	.080	.052	652.00	41.00
.000696	13.	13.	13.	2	0	7	0.00	266.00	307.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.40 EXTENDED 3.53 FEET

27.40	6.23	657.83	0.00	0.00	657.85	.02	.06	.01	656.00
490.	93.	179.	218.	217.	116.	253.	420.	133.	654.10
5.68	.43	1.54	.86	.080	.050	.080	.052	651.60	41.00
.000384	110.	110.	110.	2	0	1	0.00	266.00	307.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.48 EXTENDED 3.46 FEET

27.48	6.16	657.86	0.00	0.00	657.88	.02	.03	.00	656.10

490.	88.	182.	220.	204.	114.	248.	421.	134.	654.20
5.70	.43	1.59	.88	.080	.050	.080	.052	651.70	41.00
.000419	70.	70.	70.	2	0	1	0.00	266.00	307.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.45	2.60	200.00	4.80	0.00	15.84	0.00	651.70	651.70

3280 CROSS SECTION 27.52 EXTENDED 2.91 FEET

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	ICC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
679.40	657.88	0.00	459.	31.	16.	655.00	656.20	30.00

27.52	6.21	657.91	0.00	0.00	657.94	.04	.07	0.00	656.40
490.	67.	212.	211.	145.	104.	203.	421.	134.	655.00
5.70	.46	2.03	1.04	.080	.050	.080	.052	651.70	41.00
.000753	20.	20.	20.	2	0	9	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.60 EXTENDED 2.68 FEET

27.60	5.98	657.98	0.00	0.00	658.03	.05	.08	.01	656.70
490.	48.	226.	216.	107.	99.	188.	422.	134.	655.30
5.72	.45	2.29	1.15	.080	.050	.080	.052	652.00	41.00
.001031	90.	90.	90.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3290 CROSS SECTION 27.69 EXTENDED 2.87 FEET

27.69	6.16	658.16	0.00	0.00	658.20	.04	.17	.00	656.70
490.	63.	214.	212.	138.	103.	201.	424.	136.	655.30
5.76	.46	2.08	1.06	.080	.050	.080	.052	652.00	41.00
.000799	185.	185.	185.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.45	2.60	200.00	4.42	0.00	15.90	0.00	652.00	652.00

3280 CROSS SECTION 27.72 EXTENDED 2.92 FEET

PRESSURE AND WEIR FLOW

FGPRS	FGLWC	H3	GWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
679.55	658.20	0.00	460.	32.	16.	655.60	656.60	30.00

27.72	6.22	658.22	0.00	0.00	658.26	.03	.05	0.00	656.70
490.	69.	211.	211.	147.	104.	204.	424.	136.	655.30
5.76	.46	2.02	1.03	.080	.050	.080	.052	652.00	41.00
.000740	13.	13.	13.	2	0	9	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 27.80 EXTENDED 2.96 FEET

27.80	6.26	658.26	0.00	0.00	658.29	.03	.04	.00	656.70
490.	71.	209.	210.	154.	105.	207.	424.	136.	655.30
5.77	.46	1.98	1.01	.080	.050	.080	.052	652.00	41.00
.000703	50.	50.	50.	2	0	1	0.00	265.00	306.00

3649 NUMBER SECTIONS EXCEED LIMIT
CCHV= .150 CEHV= .350
3280 CROSS SECTION 28.00 EXTENDED 3.66 FEET

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

28.00	5.96	658.46	0.00	0.00	658.48	.02	.19	.00	655.90
490.	144.	163.	184.	200.	107.	229.	428.	138.	655.80
5.87	.72	1.52	.80	.080	.050	.080	.052	652.50	286.00
.000382	370.	370.	370.	2	0	1	0.00	164.00	450.00

3649 NUMBER SECTIONS EXCEED LIMIT
3280 CROSS SECTION 29.00 EXTENDED 3.58 FEET

29.00	5.09	658.69	0.00	0.00	658.70	.01	.21	.00	655.70
490.	106.	211.	173.	205.	193.	254.	437.	140.	653.60
6.08	.52	1.09	.68	.100	.060	.100	.052	653.60	130.00
.000305	630.	630.	630.	2	0	1	0.00	178.00	308.00

3649 NUMBER SECTIONS EXCEED LIMIT

1) COUNTY: Monroe

2) STUDY NAME: Bedford Twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: 100 yr. Sensitivity

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
9.610	1020.00	595.42	595.42	790.03	595.43	335.41	0.00	0.00	0.00		0.00		0.00	0.00
9.610	1020.00	594.89	594.89	1200.96	594.90	315.83	0.00	0.00	0.00		0.00		0.00	0.00
9.620	1020.00	595.50	595.50	546.70	595.51	362.60	0.00	0.00	0.00		0.00		0.00	0.00
9.620	1020.00	594.92	594.92	764.75	594.94	348.75	0.00	0.00	0.00		0.00		0.00	0.00
9.680	1020.00	595.53	595.53	554.58	595.54	363.21	0.00	0.00	0.00		0.00		0.00	0.00
9.680	1020.00	594.93	594.93	767.76	594.95	349.16	0.00	0.00	0.00		0.00		0.00	0.00
9.720	1020.00	595.59	595.59	571.76	595.60	364.52	0.00	0.00	0.00		0.00		0.00	0.00
9.720	1020.00	594.99	594.99	797.35	595.01	353.03	0.00	0.00	0.00		0.00		0.00	0.00
9.750	1020.00	595.60	595.60	548.01	595.61	362.71	0.00	0.00	0.00		0.00		0.00	0.00
9.750	1020.00	595.00	595.00	758.00	595.02	347.84	0.00	0.00	0.00		0.00		0.00	0.00
9.840	1020.00	595.96	595.96	264.03	596.00	245.80	0.00	0.00	0.00		0.00		0.00	0.00
9.840	1020.00	595.17	595.17	325.95	595.26	219.42	0.00	0.00	0.00		0.00		0.00	0.00
9.850	1020.00	596.19	596.19	386.47	596.20	396.66	0.00	0.00	0.00		0.00		0.00	0.00
9.850	1020.00	595.37	595.37	442.30	595.40	376.16	0.00	0.00	0.00		0.00		0.00	0.00
9.880	1020.00	596.26	596.26	400.56	596.27	398.39	0.00	0.00	0.00		0.00		0.00	0.00
9.880	1020.00	595.42	595.42	458.35	595.46	377.51	0.00	0.00	0.00		0.00		0.00	0.00
9.920	1020.00	596.32	596.32	414.90	596.33	400.11	0.00	0.00	0.00		0.00		0.00	0.00
9.920	1020.00	595.48	595.48	475.88	595.51	378.95	0.00	0.00	0.00		0.00		0.00	0.00
9.930	1020.00	596.37	596.37	325.73	596.40	388.84	0.00	0.00	0.00		0.00		0.00	0.00
9.930	1020.00	595.52	595.52	345.33	595.57	367.43	0.00	0.00	0.00		0.00		0.00	0.00
9.940	1020.00	596.71	596.71	217.03	596.76	256.62	0.00	0.00	0.00		0.00		0.00	0.00
9.940	1020.00	595.79	595.79	224.00	595.92	239.55	0.00	0.00	0.00		0.00		0.00	0.00
9.950	1020.00	597.08	597.08	335.63	597.10	279.51	0.00	0.00	0.00		0.00		0.00	0.00
9.950	1020.00	596.18	596.18	384.10	596.22	266.64	0.00	0.00	0.00		0.00		0.00	0.00
9.960	1020.00	597.17	597.17	348.69	597.18	280.67	0.00	0.00	0.00		0.00		0.00	0.00
9.960	1020.00	596.24	596.24	399.48	596.28	267.56	0.00	0.00	0.00		0.00		0.00	0.00
9.970	1020.00	597.25	597.25	363.41	597.27	281.97	0.00	0.00	0.00		0.00		0.00	0.00
9.970	1020.00	596.32	596.32	419.38	596.36	268.73	0.00	0.00	0.00		0.00		0.00	0.00
9.980	1020.00	597.32	597.32	373.32	597.33	282.82	0.00	0.00	0.00		0.00		0.00	0.00
9.980	1020.00	596.38	596.38	432.52	596.41	269.49	0.00	0.00	0.00		0.00		0.00	0.00
9.990	695.00	597.75	597.75	206.72	597.77	297.98	0.00	0.00	0.00		0.00		0.00	0.00
9.990	695.00	596.75	596.75	171.55	596.83	248.20	0.00	0.00	0.00		0.00		0.00	0.00
10.000	695.00	598.38	598.38	184.04	598.41	291.99	0.00	0.00	0.00		0.00		0.00	0.00
10.000	695.00	597.57	597.57	173.22	597.64	248.87	0.00	0.00	0.00		0.00		0.00	0.00
10.010	695.00	599.30	599.30	200.23	599.32	296.30	0.00	0.00	0.00		0.00		0.00	0.00
10.010	695.00	598.54	598.54	203.72	598.59	260.58	0.00	0.00	0.00		0.00		0.00	0.00

INDIAN
100 yr.
Sensitivity

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CVSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
10.040	695.00	600.48	600.48	134.80	600.54	173.73	0.00	0.00	0.00	0.00	0.00	0.00
10.040	695.00	599.62	599.62	137.32	599.80	147.87	0.00	0.00	0.00	0.00	0.00	0.00
10.050	695.00	601.90	601.90	181.53	601.94	189.42	0.00	0.00	0.00	0.00	0.00	0.00
10.050	695.00	600.98	600.98	193.64	601.08	161.79	0.00	0.00	0.00	0.00	0.00	0.00
10.100	695.00	602.95	602.95	39.82	603.47	127.51	0.00	0.00	0.00	0.00	0.00	0.00
10.100	695.00	602.96	602.96	74.15	603.47	127.58	0.00	0.00	0.00	0.00	0.00	0.00
10.180	695.00	603.89	603.99	294.05	603.91	150.00	0.00	0.00	0.00	0.00	0.00	0.00
10.180	695.00	603.72	603.72	510.59	603.74	150.00	0.00	0.00	0.00	0.00	0.00	0.00
10.220	695.00	605.72	605.72	388.51	605.74	166.99	0.00	0.00	0.00	0.00	0.00	0.00
10.220	695.00	605.71	605.71	719.00	605.73	166.77	0.00	0.00	0.00	0.00	0.00	0.00
10.300	695.00	605.74	605.74	251.60	605.77	152.82	0.00	0.00	0.00	0.00	0.00	0.00
10.300	695.00	605.71	605.71	462.68	605.75	152.59	0.00	0.00	0.00	0.00	0.00	0.00
10.350	695.00	605.83	605.83	221.21	605.87	149.83	0.00	0.00	0.00	0.00	0.00	0.00
10.350	695.00	605.74	605.74	394.77	605.78	148.94	0.00	0.00	0.00	0.00	0.00	0.00
10.380	695.00	605.96	605.96	107.69	606.07	117.76	0.00	0.00	0.00	0.00	0.00	0.00
10.380	695.00	605.77	605.77	180.08	605.91	114.62	0.00	0.00	0.00	0.00	0.00	0.00
10.420	695.00	607.30	607.30	180.07	607.35	135.00	0.00	0.00	0.00	0.00	0.00	0.00
10.420	695.00	607.22	607.22	321.77	607.27	134.00	0.00	0.00	0.00	0.00	0.00	0.00
10.450	695.00	607.39	607.39	137.90	607.45	132.38	0.00	0.00	0.00	0.00	0.00	0.00
10.450	695.00	607.25	607.25	239.64	607.31	129.83	0.00	0.00	0.00	0.00	0.00	0.00
11.000	695.00	608.26	608.26	281.00	608.28	154.15	0.00	0.00	0.00	0.00	0.00	0.00
11.000	695.00	607.64	607.64	407.89	607.67	153.84	0.00	0.00	0.00	0.00	0.00	0.00
11.500	695.00	609.14	609.14	219.65	609.17	153.84	0.00	0.00	0.00	0.00	0.00	0.00
11.500	695.00	608.13	608.13	250.57	608.19	153.35	0.00	0.00	0.00	0.00	0.00	0.00
11.900	695.00	609.99	609.99	206.51	610.03	153.77	0.00	0.00	0.00	0.00	0.00	0.00
11.900	695.00	608.84	608.84	211.59	608.92	153.21	0.00	0.00	0.00	0.00	0.00	0.00
11.980	695.00	610.22	610.22	121.00	610.30	117.00	0.00	0.00	0.00	0.00	0.00	0.00
11.980	695.00	609.04	609.04	112.48	609.30	108.72	0.00	0.00	0.00	0.00	0.00	0.00
12.020	695.00	612.84	612.84	121.35	613.02	75.02	0.00	0.00	0.00	0.00	0.00	0.00
12.020	695.00	612.55	612.55	203.24	612.76	72.73	0.00	0.00	0.00	0.00	0.00	0.00
12.100	695.00	613.38	613.38	89.28	613.67	119.25	0.00	0.00	0.00	0.00	0.00	0.00
12.100	695.00	612.73	612.73	125.02	613.21	70.02	0.00	0.00	0.00	0.00	0.00	0.00
12.180	695.00	613.84	613.84	100.27	614.07	138.89	0.00	0.00	0.00	0.00	0.00	0.00
12.180	695.00	612.95	612.95	126.50	613.43	72.11	0.00	0.00	0.00	0.00	0.00	0.00
12.220	695.00	614.15	614.15	302.48	614.16	205.08	0.00	0.00	0.00	0.00	0.00	0.00
12.220	695.00	613.80	613.80	486.17	613.83	203.56	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
12.300	695.00	614.20	614.20	208.03	614.24	201.38	0.00	0.00	0.00		0.00		0.00	0.00
12.300	695.00	613.82	613.82	318.72	613.87	199.74	0.00	0.00	0.00		0.00		0.00	0.00
12.400	695.00	615.86	615.86	142.59	615.93	244.45	0.00	0.00	0.00		0.00		0.00	0.00
12.400	695.00	614.72	614.72	119.71	615.04	173.65	0.00	0.00	0.00		0.00		0.00	0.00
12.480	695.00	616.12	616.12	221.59	616.15	273.59	0.00	0.00	0.00		0.00		0.00	0.00
12.480	695.00	615.26	615.26	248.39	615.34	240.66	0.00	0.00	0.00		0.00		0.00	0.00
12.520	695.00	616.19	616.19	318.44	616.20	277.95	0.00	0.00	0.00		0.00		0.00	0.00
12.520	695.00	615.34	615.34	411.24	615.37	240.39	0.00	0.00	0.00		0.00		0.00	0.00
12.600	695.00	616.20	616.20	162.71	616.25	212.10	0.00	0.00	0.00		0.00		0.00	0.00
12.600	695.00	615.34	615.34	189.39	615.45	174.28	0.00	0.00	0.00		0.00		0.00	0.00
12.700	695.00	617.37	617.37	109.30	617.47	179.56	0.00	0.00	0.00		0.00		0.00	0.00
12.700	695.00	616.28	616.28	106.54	616.64	115.42	0.00	0.00	0.00		0.00		0.00	0.00
12.900	695.00	618.76	618.76	147.98	618.80	328.90	0.00	0.00	0.00		0.00		0.00	0.00
12.900	695.00	617.93	617.93	145.38	618.09	207.85	0.00	0.00	0.00		0.00		0.00	0.00
13.000	490.00	619.92	619.92	83.29	619.99	214.15	0.00	0.00	0.00		0.00		0.00	0.00
13.000	490.00	619.12	619.12	80.92	619.35	152.73	0.00	0.00	0.00		0.00		0.00	0.00
13.050	490.00	621.71	621.71	82.39	621.78	213.04	0.00	0.00	0.00		0.00		0.00	0.00
13.050	490.00	620.95	620.95	83.37	621.17	155.43	0.00	0.00	0.00		0.00		0.00	0.00
13.060	490.00	623.60	623.60	77.27	623.71	274.74	0.00	0.00	0.00		0.00		0.00	0.00
13.060	490.00	622.77	622.77	74.46	623.21	121.39	0.00	0.00	0.00		0.00		0.00	0.00
13.100	490.00	625.49	625.49	84.47	625.59	288.14	0.00	0.00	0.00		0.00		0.00	0.00
13.100	490.00	624.79	624.79	86.21	625.12	170.63	0.00	0.00	0.00		0.00		0.00	0.00
13.180	490.00	625.72	625.72	199.98	625.74	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.180	490.00	625.29	625.29	291.73	625.31	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	490.00	625.81	625.81	209.61	625.82	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	490.00	625.43	625.43	316.19	625.45	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	490.00	625.83	625.83	170.71	625.85	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	490.00	625.44	625.44	249.87	625.47	213.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	490.00	626.01	626.01	86.85	626.09	261.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	490.00	625.43	625.43	92.39	625.67	240.90	0.00	0.00	0.00		0.00		0.00	0.00
14.980	490.00	626.26	626.26	135.85	626.31	169.45	0.00	0.00	0.00		0.00		0.00	0.00
14.980	490.00	625.77	625.77	194.46	625.85	151.36	0.00	0.00	0.00		0.00		0.00	0.00
15.020	490.00	626.34	626.34	141.35	626.39	172.34	0.00	0.00	0.00		0.00		0.00	0.00
15.020	490.00	625.94	625.94	213.29	626.01	157.62	0.00	0.00	0.00		0.00		0.00	0.00
15.100	490.00	626.39	626.39	106.19	626.48	152.30	0.00	0.00	0.00		0.00		0.00	0.00
15.100	490.00	625.96	625.96	153.89	626.09	136.19	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
16.000	490.00	627.48	627.48	58.58	627.69	109.27	0.00	0.00	0.00		0.00		0.00	0.00
16.000	490.00	626.38	626.38	55.53	626.97	52.76	0.00	0.00	0.00		0.00		0.00	0.00
16.100	490.00	628.63	628.63	75.52	628.76	109.07	0.00	0.00	0.00		0.00		0.00	0.00
16.100	490.00	627.71	627.71	77.70	628.08	85.82	0.00	0.00	0.00		0.00		0.00	0.00
16.980	490.00	629.15	629.15	72.08	629.30	108.50	0.00	0.00	0.00		0.00		0.00	0.00
16.980	490.00	628.19	628.19	65.47	628.71	27.00	0.00	0.00	0.00		0.00		0.00	0.00
17.020	490.00	630.36	630.36	167.22	630.39	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.020	490.00	630.14	630.14	272.91	630.17	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.100	490.00	630.40	630.40	170.25	630.42	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.100	490.00	630.15	630.15	273.88	630.18	225.00	0.00	0.00	0.00		0.00		0.00	0.00
18.000	490.00	630.93	630.93	168.37	630.97	169.50	0.00	0.00	0.00		0.00		0.00	0.00
18.000	490.00	630.37	630.37	234.60	630.43	142.23	0.00	0.00	0.00		0.00		0.00	0.00
18.900	490.00	631.37	631.37	182.18	631.41	98.97	0.00	0.00	0.00		0.00		0.00	0.00
18.900	490.00	630.61	630.61	247.64	630.67	89.86	0.00	0.00	0.00		0.00		0.00	0.00
18.980	490.00	631.46	631.46	108.64	631.56	45.00	0.00	0.00	0.00		0.00		0.00	0.00
18.980	490.00	630.63	630.63	141.84	630.79	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.080	490.00	631.49	631.49	116.14	631.59	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.080	490.00	630.64	630.64	149.36	630.80	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.100	490.00	631.60	631.60	95.82	631.70	105.54	0.00	0.00	0.00		0.00		0.00	0.00
19.100	490.00	630.69	630.69	111.06	630.89	59.36	0.00	0.00	0.00		0.00		0.00	0.00
20.000	490.00	632.79	632.79	74.17	632.87	255.00	0.00	0.00	0.00		0.00		0.00	0.00
20.000	490.00	631.91	631.91	51.01	632.39	146.97	0.00	0.00	0.00		0.00		0.00	0.00
20.100	490.00	633.32	633.32	46.12	633.61	142.99	0.00	0.00	0.00		0.00		0.00	0.00
20.100	490.00	632.67	632.67	52.13	633.37	55.25	0.00	0.00	0.00		0.00		0.00	0.00
20.980	490.00	634.26	634.26	81.12	634.36	149.60	0.00	0.00	0.00		0.00		0.00	0.00
20.980	490.00	633.74	633.74	102.30	633.95	144.94	0.00	0.00	0.00		0.00		0.00	0.00
21.020	490.00	634.60	634.60	75.85	634.74	158.54	0.00	0.00	0.00		0.00		0.00	0.00
21.020	490.00	634.50	634.50	132.70	634.66	147.12	0.00	0.00	0.00		0.00		0.00	0.00
21.100	490.00	634.81	634.81	81.44	634.94	172.13	0.00	0.00	0.00		0.00		0.00	0.00
21.100	490.00	634.56	634.56	129.86	634.73	142.97	0.00	0.00	0.00		0.00		0.00	0.00
22.000	490.00	635.67	635.67	92.46	635.74	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.000	490.00	634.98	634.98	107.28	635.16	128.69	0.00	0.00	0.00		0.00		0.00	0.00
22.980	490.00	636.01	636.01	128.31	636.05	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.980	490.00	635.32	635.32	155.85	635.41	164.00	0.00	0.00	0.00		0.00		0.00	0.00
23.020	490.00	636.80	636.80	269.47	636.81	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.020	490.00	636.70	636.70	481.78	636.72	165.00	0.00	0.00	0.00		0.00		0.00	0.00

SECTION	DISCHARGE	CLSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
SECTION	DISCHARGE	CWSEL												
23.100	490.00	636.81	636.81	181.65	636.83	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.100	490.00	636.71	636.71	320.28	636.73	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.200	490.00	637.42	637.42	110.03	637.47	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.200	490.00	636.94	636.94	144.08	637.02	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.900	490.00	638.70	638.70	91.40	638.79	115.61	0.00	0.00	0.00		0.00		0.00	0.00
23.900	490.00	637.72	637.72	102.63	637.94	76.23	0.00	0.00	0.00		0.00		0.00	0.00
24.000	490.00	640.24	640.24	93.65	640.33	119.21	0.00	0.00	0.00		0.00		0.00	0.00
24.000	490.00	639.06	639.06	94.20	639.31	72.56	0.00	0.00	0.00		0.00		0.00	0.00
24.100	490.00	641.85	641.85	108.94	641.92	141.97	0.00	0.00	0.00		0.00		0.00	0.00
24.100	490.00	640.67	640.67	111.21	640.86	79.76	0.00	0.00	0.00		0.00		0.00	0.00
24.900	490.00	643.78	643.78	70.09	643.99	144.83	0.00	0.00	0.00		0.00		0.00	0.00
24.900	490.00	642.52	642.52	61.32	643.21	44.93	0.00	0.00	0.00		0.00		0.00	0.00
24.950	490.00	644.97	644.97	101.08	645.07	150.00	0.00	0.00	0.00		0.00		0.00	0.00
24.950	490.00	644.08	644.08	108.03	644.36	120.36	0.00	0.00	0.00		0.00		0.00	0.00
25.000	490.00	645.69	645.69	109.06	645.78	150.00	0.00	0.00	0.00		0.00		0.00	0.00
25.000	490.00	644.74	644.74	112.32	645.01	125.46	0.00	0.00	0.00		0.00		0.00	0.00
25.020	490.00	645.79	645.79	85.99	645.93	150.00	0.00	0.00	0.00		0.00		0.00	0.00
25.020	490.00	644.77	644.77	85.43	645.20	89.36	0.00	0.00	0.00		0.00		0.00	0.00
25.050	490.00	645.99	645.99	66.22	646.21	137.38	0.00	0.00	0.00		0.00		0.00	0.00
25.050	490.00	644.88	644.88	63.99	645.53	50.64	0.00	0.00	0.00		0.00		0.00	0.00
25.100	490.00	646.70	646.70	52.34	647.04	106.46	0.00	0.00	0.00		0.00		0.00	0.00
25.100	490.00	645.56	645.56	49.80	646.48	33.71	0.00	0.00	0.00		0.00		0.00	0.00
25.150	490.00	647.73	647.73	50.24	648.10	101.05	0.00	0.00	0.00		0.00		0.00	0.00
25.150	490.00	646.67	646.67	49.96	647.59	33.88	0.00	0.00	0.00		0.00		0.00	0.00
25.200	490.00	648.82	648.82	50.24	649.19	101.05	0.00	0.00	0.00		0.00		0.00	0.00
25.200	490.00	647.78	647.78	50.18	648.69	34.10	0.00	0.00	0.00		0.00		0.00	0.00
25.250	490.00	649.92	649.92	50.06	650.29	100.56	0.00	0.00	0.00		0.00		0.00	0.00
25.250	490.00	648.88	648.88	50.40	649.79	34.32	0.00	0.00	0.00		0.00		0.00	0.00
25.300	490.00	651.02	651.02	49.95	651.39	100.28	0.00	0.00	0.00		0.00		0.00	0.00
25.300	490.00	649.97	649.97	50.18	650.88	34.10	0.00	0.00	0.00		0.00		0.00	0.00
25.350	490.00	652.13	652.13	50.05	652.50	100.55	0.00	0.00	0.00		0.00		0.00	0.00

DMPX.

```
P    052115   A0  016404   B0  000000
RA   201600   A1  000001   B1  000001     C(A1)=  0000  0000  0000  0000  0000     C(B1)=  0000  0000  0000  0000  0000
FL   055600   A2  016625   B2  016444     C(A2)=  0000  0100  0001  0000  0015     C(B2)=  1730  5410  2102  0007  5424
EM   070000   A3  016432   B3  000015     C(A3)=  0000  0000  0000  0001  6624     C(B3)=  0000  0000  0000  0000  0000
RF   000000   A4  016431   B4  016624     C(A4)=  0000  0000  0000  0001  7022     C(B4)=  0000  0300  0016  0000  0000
FF   000000   A5  016624   B5  017046     C(A5)=  0000  0100  0001  0000  0015     C(B5)=  0000  0226  0000  0004  4772
MA   001600   A6  000001   B6  000404     C(A6)=  0000  0000  0000  0000  0000     C(B6)=  1731  5077  1463  1463  1463
              A7  016427   B7  000000     C(A7)=  2401  2005  3433  0000  0013     C(B7)=  0000  0000  0000  0000  0000
X0  0000  0000  0000  0000  0000
X1  0000  0000  0000  0000  0000
X2  0000  0000  0000  0001  6427
X3  0000  0000  0000  0001  6624
X4  0000  0000  0000  0000  0402
X5  0000  0000  0000  0005  1532
X6  0311  1700  0000  0001  6427
X7  2401  2005  3433  0000  0012

   00000   00000 00000 00000 00000   00002=11162 02524 00000 10066   17252 42025 24000 12131
   00004   24012 00544 34000 14174         24012 00544 35000 14636   24012 00544 36000 15300   24012 00544 37000 15742
   00010   24012 00536 33000 16404         00000 00000 00000
   00054  =56110 03110 00054 54710         51100 00001 03110 00055   64550 02550 00000 46000   00000 00000 00000 00000
   00060   15051 52000 00000 00061         00000 55600 00000 00001   51600 00001 04000 00054   63310 02300 00000 46000
   00064   17021 20000 00000 00000         00000 00000 00000 55556   40000 00000 00000 00111   00000 00000 00000 00000
   00100  =54000 00000 01000

   53015   52140 53050 34225 63302         41772 30336 31237 44372   30411 40743 34017 27630
   53020   04000 50237 00000 00000         26221 13666 61307 77731   61100 00001 51500 53043   54451 07230 53007 55251
   53024   04230 53005 03710 53027         06020 53005 61000 46000   03310 53031 61000 46000   61200 07541 61000 46000
   53030   01000 50155 00000 53001         03710 53020 43213 21174   20273 15621 04000 53020   51200 53040 37510 21404
   53034   52150 53050 40327 36640         61307 77717 40731 27131   34217 34312 26423 63362   27633 04000 53020 46000
   53040   17135 42710 27757 50703         60462 56056 35533 44772   17315 62652 70026 71674   17400 00056 12507 31226
   53044   61176 02774 13567 64200         17077 31133 60654 04730   17345 15012 32362 15762   17267 15524 05065 62467
   53050   17204 00000 00000 00000         17204 13253 03317 46110   17204 27127 01707 65214   17204 43417 23347 25422
   53054   17204 60337 60243 06671         17204 75724 62301 10641   17205 13773 26523 30521   17205 32540 76724 41241
   53060   17205 52023 63147 74736         17205 72042 43476 54014   17206 12634 52042 52407   17206 34222 14052 17605
   53064   17206 56423 74625 53235         17207 01463 36730 25225   17207 25403 06717 56444   17207 52225 75052 22207
   53070   17207 77777 77777 77777         24171 75514 01220 70556   55061 41701 24111 60755   17260 52206 14172 70000
   53074   42222 03230 53075 42442         20373 42222 61000 46000   21002 03230 53077 42442   20373 03100 53074 26604
   53100   04004 53100 61000 46000         10033 20373 51400 53111   27201 03230 53103 10422   20373 21001 03200 53074
   53104   21101 71600 00001 36333         03110 53107 21373 15513   13665 04000 53100 46000   03030 53100 76600 46000
   53110   04000 53100 61000 46000         20000 00000 00000 00001   01000 46241 00000 00000   04000 53126 00000 00000
   53114   01300 00000 00000 00000         04000 54275 00000 00000   51100 00001 03110 53116   54610 04000 53114 46000
   53120   51100 00066 03310 53122         51100 53113 04000 53123   71100 00130 20160 46000   13616 13116 13616 46000
   53124   51600 53114 10611 46000         51100 00001 01000 53113   20652 01000 53115 46000   51100 00001 03110 53127
   53130   04000 55465 00000 00000         51100 00001 03110 53130   71602 20314 04000 53126   36662 01000 53115 46000
   53134   04000 55100 00000 00000         71602 20314 27606 20652   53120 20173 03310 53134   03010 53134 51100 00001
   53140   03110 53136 04000 53133         71603 24616 12661 20651   01000 53115 61000 46000   04000 45142 00000 00000
   53144   20622 12161 73610 20123         03210 53141 20151 13116   20636 51600 53150 74660   36116 20123 04000 53141
   53150   00000 45213 00000 00001         02000 53577 61000 46000   60000 00000 04004 53152   60000 00000 04004 53153
   53154   02000 55314 61000 46000         60000 00000 04004 53155   60000 00000 04004 53156   60000 00000 04004 53157
   53160   60000 00000 04004 53160         60000 00000 04004 53161   02000 53725 61000 46000   60000 00000 04004 53163
   53164   60000 00000 04004 53164         02000 53527 61000 46000   60000 00000 04004 53166   60000 00000 04004 53167
   53170   60000 00000 04004 53170         60000 00000 04004 53171   60000 00000 04004 53172   60000 00000 04004 53173
   53174   60000 00000 04004 53174         60000 00000 04004 53175   60000 00000 04004 53176   60000 00000 04004 53177
   53200   60000 00000 04004 53200         60000 00000 04004 53201   60000 00000 04004 53202   60000 00000 04004 53203
   53204   02000 54111 61000 46000         02000 54151 61000 46000   00000 00000 00000 00000   60000 00000 04004 53207
   53210   60000 00000 04004 53210         71600 00001 040
```

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 07/25/79  MSJ HUSTLER 2       LSD 48.29  07/21/79  6500
17.20.39.UM17296
17.20.40.JOB READ-  07/25/79 .15.32.40.
17.20.40.MCNAMEE,PN      ,RG3,CM120000,JC2500,T50
17.20.40..
17.20.40.NL    20000
17.20.40.PP  000000000033  000000000210
17.20.41.LAST ACCESS- M 14.55 07/25/79
17.20.41.RUNS- 1621   PN DOLLAR BALANCE $01632.37
17.20.41.CP-PP SEC.     .030-     .000  $      .00
17.20.41.ATTACH,CBJ,HEC20BJ,PW=*---*.
17.50.06.CBJ      - CYCLE 01, HEC20BJ
17.50.06.FILE ATTACHED
17.50.06.CP-PP SEC.     .047-     .854  $      .01
17.50.06.NL   030000
17.50.06.PP       00000003  000000000012
17.50.06.NL    44000
17.50.06.PP  000000000020  000000000032
17.50.08.NL    50000
17.50.08.PP  000000000025  000000000152
17.50.08.NL    54000
17.50.08.PP  000000000030  000000000212
17.50.09.NL    60000
17.50.09.PP  000000000033  000000000252
17.50.10.NL    64000
17.50.10.PP  000000000036  000000000330
17.50.10.NL    70000
17.50.10.PP  000000000042  000000000405
17.50.13.NL    74000
17.50.13.PP  000000000054  000000000475
17.50.14.NL   100000
17.50.14.PP  000000000056  000000000557
17.52.23.NL   104000
17.52.23.PP  000000000067  000000000643
17.52.23.CBJ.
17.52.24.NL    55600
17.52.24.PP  000000000104  000000000667
17.52.24.DUE TO A COMING CHANGE IN CYBER RECORD
17.52.24.MANAGER, YOUR BINARY WILL SOON NO LONGER
17.52.24.WORK.  PLEASE RECOMPILE.
17.52.24.EXEC BEGUN.17.52.24.
18.30.52.TIME LIMIT
18.30.52.MAX FILES 0008 MAX PRUS 002200B.
18.30.52.  PP     60.173 SEC.
18.30.52.PP  000000004135  000000017575
18.30.52.CP USE    52.466 SEC    VALUE$     2.04
18.30.52.PP USE   222.161 SEC    VALUE$      .56
18.30.52.CM USE    28.053 W-H    VALUE$     6.64
18.30.52.TOTAL COMPUTE VALUE AT RG3 $    13.86
```

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: Report

00BREAK00

FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 Bedford Twp. Monroe Co., Michigan

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Indian Creek

STUDY LIMITS: Confluence with Halfway Creek (downstream limit) to just downstream Temperance Rd. (upstream limit)

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: McNamee, Porter and Seeley field crew 12/4/79 - 1/11/79

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on April 5, 1979

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps - 1"=1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n"	.045~.060
Overbank "n"	.060-.10
n values thru bridges	.01-.025
Contraction Coefficients	.15-.5
Expansion Coefficients	.35-1.0

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review,please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS & CALIBRATION

No high water marks were available for use in calibrating the HEC-2 model for Indian Creek.

A sensitivity analysis was performed on the 100 year flow by raising and lowering all Manning "n" values by 30%. Water surface elevations in the major portion of the drain were within ±0.5 feet.

Starting Conditions

Norman depth was assumed for the starting elevation. The slope-area method was used to determine this starting elevation for all flows, utilizing the same value of slope determined from the field surveyed profile. A convergence test was performed on the 100 year flow by changing the starting elevation determined by the profile slope by approximately ±1 foot. The results indicate good convergence about 1150 feet upstream from the starting point.

Designated Floodway

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcharge of 0.1 ft. At field surveyed sections the designated floodway was established using the computer sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1"=1000' topographic map for floodway delineation.)

Computer Outputs

Enclsoed are complete computer outputs for (i) 100 year natural and 100 year designated floodway, (ii) 10, 50 and 500 yr. flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

Comments

At 18.98-19.08 ELLC was lowered from 632 to 631 in order to correctly model pressure flow for the 100 year flood.

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Indian Creek
COMPUTED BY DATE CHK'D BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

Section No.		Section Type		Remarks
6.2	A		2	Valley Section - Modified to limit top width
7	B		2	Valley Section - Modified to limit top width
7.1	C		2	Valley Section - Modified to limit top width (1on4 D/S expansion)
7.98			4	D/S Face Ann Arbor Railroad - Repeat 7.1+0.2 with some modification to model bridge opening
	D			
8.02			4	U/S Face Ann Arbor Railroad - Developed From 8.1 and Bridge Detail
8.1	E		2	Valley Section - Modified for 1on1 U/S expansion
8.2	F		2	Valley Section - Modified to limit top width
8.3	G		2	Valley Section - Modified to limit top width
8.98			3	D/S Face Lavey Rd - Repeat 8.3 + 0.1'
	H			
9.02			3	U/S Face Lavey Rd - Repeat 9.1+0.2
9.1	I		2	Valley Section - Modified to limit top width
9.2	J		2	Valley Section - Modified to limit top width
9.21			4	D/S Face Driveway - Developed From 9.2 and Driveway Detail
	K			
9.22			4	U/S Face Driveway - Repeat 9.21
9.3	L		2	Valley Section - Right over bank developed from 9.5 (section modified by model for 1 on 1 U/S expansion + 1on4 D/S exp.)
9.38			3	D/S Face Telegraph Rd - Repeat 9.3-0.3'
9.42	M		3	U/S Face Telegraph Rd - Repeat 9.5+0.5' Modifications on 9.5 not made on 9.42
9.5	N		2	Valley Section - Modified for 1 on 1 U/S expansion
9.61	O		1	Bedford Park Center Study - Valley Section
9.62			3	Valley Section - Repeat 9.68 (Bedford Park Center Study)
9.68			1	D/S Face Drive - (Bedford Park Center Study)
9.72	P		3	U/S Face Drive - Repeat 9.72 Bedford Park Center Study

JOB: HUD-FIA H-4705

COMMUNITY: Bedford FILE NO.

WATERCOURSE: Indian Creek DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
9.75		3	Valley Section - Repeat 9.68 + 0.1' (Bedford Park Center Study)
9.84	Q	1	Valley Section - Bedford Park Center Study
9.85		3	Valley Section - Repeat 9.88 Bedford Park Center Study
9.88		1	D/S Face Drive - Bedford Park Center Study
9.92	R	3	U/S Face Drive - Repeat 9.88 Bedford Park Center Study
9.93		3	Valley Section - Repeat 9.88 + 0.5' - Bedford Park Center Study
9.94	S	2	Valley Section - Modified to eliminate ineffective Flow area (Bedford Park Center Stu
9.95		3	Valley Section - Repeat 9.96 - Bedford Park Center Study
9.96		1	D/S Face Drive - Bedford Park Center Study
9.97	T	3	U/S Face Drive - Repeat 9.96 Bedford Park Center Study
9.98		3	Valley Section - Repeat 9.96 - Bedford Park Center Study
9.99		3	Valley Section - Repeat 10 - 0.8'
10	U	1	Valley Section
10.01		3	Valley Section - Repeat 10 + 0.8'
10.04		3	Valley Section - Repeat 10.1 - 4.0' (w/o overbank chngs made on 10.1)
10.05		3	Valley Section - Repeat 10.1 - 3.1' (w/o overbank chngs made on 10.1)
10.1	V	2	Valley Section - Modified to reduce top width & ineffective Flow area in overbanks

JOB: HUD-FLA H-410S

COMMUNITY: Bedford

WATERCOURSE: Indian Creek

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
10.18		3	D/S Face Driveway - Repeat 10.1 + 2.2'
10.22	W	3	U/S Face Driveway - Repeat 10.3 - 1.2'
10.3	X	1	Valley Section
10.35		3	Valley Section - Repeat 10.3 + 0.4'
10.38		1	D/S Face Lewis Rd - Bedford Park Center Study
10.42	Y	3	U/S Face Lewis Rd - Bedford Park Center Study Repeat 10.38 + 0.3'
10.45		3	Valley Section - Repeat 10.38 + 0.6'
11	Z	2	Valley Section - Modified to limit top width
11.5		3	Valley Section - Repeat 11 + 1.5'
11.9		3	Valley Section - Repeat 11 + 2.5'
11.98		4	D/S Face Sterns Rd - Developed from 11 and Bridge Detail
12.02	AA		U/S Face Sterns Rd - Developed From 12.1 and Bridge Detail
12.1	AB	1	Valley Section
12.18		3	D/S Face Seneca Rd - Repeat 12.1 + 0.2'
12.22	AC	3	U/S Face Seneca Rd - Repeat 12.3 - 0.9'
12.3	AD	1	Valley Section
12.4	AE	1	Valley Section
12.48		3	D/S Face Bridgeway Rd - Repeat 12.4 - 0.5'
12.52	AF	3	U/S Face Bridgeway Rd - Repeat 12.6 - 1.5
12.6	AG	1	Valley Section
12.7		3	Valley Section - Repeat 12.6 + 1.9'
12.9		3	Valley Section - Repeat 13 - 1.9'
13	AH	1	Valley Section
13.05		3	Valley Section - Repeat 13 + 1.8'
13.06		3	Valley Section - Repeat 13.1 - 1.8'
13.1	AI	2	Valley Section - Overbanks developed From 13

JOB HUD-FIA H-4705

COMMUNITY: Bedford

WATERCOURSE: Indian Creek

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE	REMARKS
13.18	3	D/S Face Longfellow Rd - Repeat 13.3 + 0.4'
13.22	AJ 3	U/S Face Longfellow Rd - Repeat 13.3 - 0.4'
13.3	AK 1	Valley Section
14	AL 2	Valley Section - Modified to limit top width
14.98	3	D/S Face Tennyson Rd - Repeat 15.1 - 0.6'
15.02	AM 3	U/S Face Tennyson Rd - Repeat 15.1 - 0.6'
15.1	AN 2	Valley Section - Developed left overbank from 16
16	AO 2	Valley Section - Modified to eliminate ineffective flow area and limit top width
16.1	AP 2	Valley Section - Modified overbanks to eliminate ineffective flow area
16.98	3	D/S Face Jackman Rd - Repeat 16.1 + 0.6'
17.02	AQ 3	U/S Face Jackman Rd - Repeat 17.1
17.1	AR 2	Valley Section - Modified to limit top width
18	AS 2	Valley Section - Modified to limit top width
18.9	AT 2	Valley Section - Modified to limit D/S expansion to 1 on 4, modified channel to approximate bridge opening
18.98	4	D/S Face New Bridge Under Construction - Developed from 18.9 and Bridge Detail
19.02	AU 3	U/S Face New Bridge Under Construction - Repeat 19.1 - 0.3'
19.1	AV 2	Valley Section - Modified to limit top width
20	AW 2	Valley Section - Modified to limit top width
20.1	AX 1	Valley Section
20.98	3	D/S Face Brookwood Rd - Repeat 20.1 + 0.2'
21.02	AY	U/S Face Brookwood Rd - Repeat 21.1 - 0.1'
21.1	AZ 1	Valley Section
22	BA 2	Valley Section - Modified to limit width

JOB HUD-FLA H-4705

COMMUNITY: Bedford

WATERCOURSE: Indian Creek

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than IMPS and/or Abrams)
2	Field Survey Section, partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE		REMARKS
22.98		3	D/S Face Dean Rd - Repeat 22 - 0.2'
23.02	BB	3	u/s Face Dean Rd - Repeat 23.1 - 0.9'
23.1	BC	2	Valley Section - Modified to limit topwidth
23.2		3	Valley Section - Repeat 23.1 + 1.5
23.9		3	Valley Section - Repeat 24 - 1.5
24	BD	2	Valley Section - Modified to limit topwidth
24.1		3	Valley Section - Repeat 24 + 1.3'
24.9		3	Valley Section - Repeat 25 - 1.2'
24.95		3	Valley Section - Repeat 25 - 0.6'
25	BE	2	Valley Section - Modify to limit top width and eliminate ineffective flow area
25.02		3	Valley Section - Repeat 25 + 0.5'
25.05		3	Valley Section - Repeat 25 + 1.1'
25.1		3	Valley Section - Repeat 25 + 2.2'
25.15		3	Valley Section - Repeat 25 + 3.3'
25.2		3	Valley Section - Repeat 25 + 4.4'
25.25		3	Valley Section - Repeat 25 + 5.5'
25.3		3	Valley Section - Repeat 25 + 6.6'
25.35		3	Valley Section - Repeat 25 + 7.7'
25.4		3	Valley Section - Repeat 25 + 8.8'
25.45		3	Valley Section - Repeat 25 + 9.9'
25.9		3	Valley Section - Repeat 25 + 11'
25.98		3	D/S Face Douglas Rd - Repeat 26.1
26.02	BF	3	U/S Face Douglas Rd - Repeat 26.1
26.1	BG	2	Valley Section - Overbanks developed from x-sections 27 + 28
26.18		3	D/S Face Private Drive - Repeat 26.1
26.22	BH		u/s Face Private Drive - Repeat 26.3 - 0.1'
26.3	BI	2	Valley Section - Overbanks developed from 27+28

COMMUNITY: Bedford

WATERCOURSE: Indian Creek

TABLE X2 – XKOR – CALCULATIONS

$XKOR = 1 + K_e + K_F$ $\quad K_F = \frac{29 n l^2}{R^{4/3}}$ $\quad R = \frac{A}{P}$

Cross Section Location	K_e	A	P	R	n	l	K_F	XKOR	REMARKS
7.98-8.02	0.2	64.0	33.33	1.92	.025	39	0.3	1.50	
8.98-9.02	0.1	110.45	56.4	1.96	.020	83	0.3	1.40	
9.21-9.22	0.3	114.40	60.8	1.88	.025	10	0.1	1.40	
9.38-9.42	0.1	97.68	62	1.58	.020	106	0.3	1.40	
9.68-9.72	0.1	9.90	18.79	0.53	.015	20	0.3	1.40	
9.88-9.92	0.1	26.25	23.65	1.11	.025	20	0.3	1.40	
9.96-9.97	0.1	2.50	9.47	0.26	.010	20	0.3	1.40	* minor loss expected ∴ use lower n value
10.18-10.22	0.5	19.15	17.54	1.09	.013	17	0.1	1.60	
10.38-10.42	0.3	83.08	52.8	1.57	.013	172	0.3	1.60	
11.98-12.02	0.2	45.67	29.3	1.56	.013	36	0.1	1.30	
12.18-12.22	0.2	26.97	22.66	1.19	.013	34	0.13	1.33	
12.48-12.52	0.4	25.12	21.0	1.20	.013	23	0.11	1.51	
13.18-13.22	0.5	12.97	14.46	0.90	.013	60	0.31	1.81	
14.98-15.02	0.5	12.44	14.14	0.88	.013	60	0.3	1.80	
16.98-17.02	0.2	47.20	27.8	1.70	.025	26	0.20	1.40	
18.98-19.02	0.3	211	107.2	1.97	.025	37	0.3	1.60	
20.98-21.02	0.15	18.28	17.8	1.03	.013	32	0.15	1.30	
22.98-23.02	0.5	19.44	17.28	1.09	.013	52	0.2	1.70	
25.98-26.02	0.1	17.28	17.2	1.00	.020	36	0.4	1.50	
26.18-26.22	0.3	23.8	20.8	1.14	.025	13	0.2	1.50	
26.38-26.42	0.2	22.8	19.4	1.18	.025	18	0.3	1.50	
27.08-27.12	0.15	23.1	20.6	1.12	.025	16	0.2	1.35	
27.28-27.32	0.3	37.2	30.2	1.23	.025	13	0.2	1.50	
27.48-27.52	0.3	15.84	16.2	0.98	.015	20	0.15	1.45	
27.68-27.72	0.2	15.90	16.04	0.99	.025	13	0.25	1.45	

JOB: HUD-FIA H-4705 SHEET NO.

COMMUNITY: Bedford FILE NO.

WATERCOURSE: Indian Creek DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.	SECTION TYPE	REMARKS
26.38	3	D/s Face Private Drive - Repeat 26.3 + 0.4'
BJ		
26.42	3	U/s Face Private Drive - Repeat 26.5 - 0.5'
26.5	BK 2	Valley Section - Overbanks developed from 27+28
27	BL 2	Valley Section - Modified to limit Top width
27.08	3	D/s Face Private Drive - Repeat 27 + 0.4'
BM		
27.12	4	U/s Face Private Drive - Repeat 27.2 + 0.1 with top width modified to eliminate ineffective flow area
27.2	BN 2	Valley Section - Overbanks developed from 27+28
27.28	3	D/s Face Private Drive - Repeat 27.2
BO		
27.32	3	U/s Face Private Drive - Repeat 27.4 + 0.4'
27.4	BP 2	Valley Section - Overbanks developed from 27+28
27.48	3	D/s Face Private Drive - Repeat 27.4 + 0.1
BQ		
27.52	3	U/s Face Private Drive - Repeat 27.6 - 0.3'
27.6	BR 2	Valley Section - Overbanks developed from 27+28
27.68	3	D/s Face Private Drive - Repeat 27.6
BS		
27.72	3	U/s Face Private Drive - Repeat 27.6
27.8	3	Valley Section - Repeat 27.6
28	BT 2	Valley Section - Modified to limit top width and eliminate ineffective flow area
29	BU 2	Valley Section - Modified to limit top width

Bridge Detail @ X-section #6 cont

12-5-78 cont.

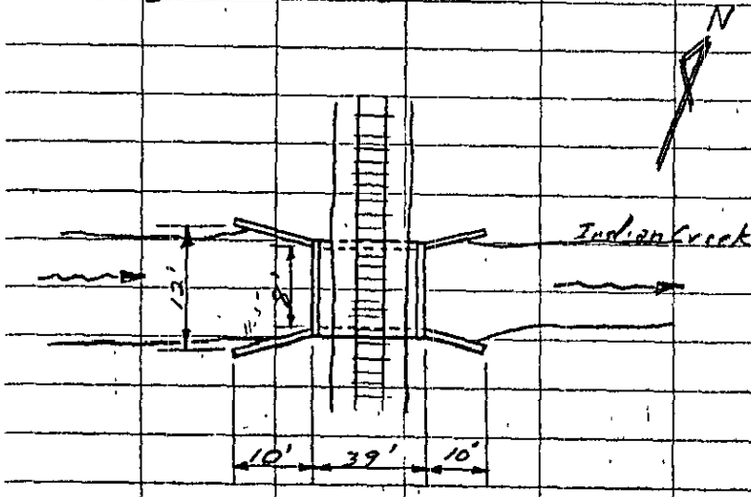
Sta	+S	H1	-S	Elev
29' right		598.77	21.8	576.97
32' right			18.4	580.37
T.P.			4.43	594.34
	4.48	598.82		
BM 170			6.84	591.98

Bedford Township Bridge detail

12-5-78 cont.

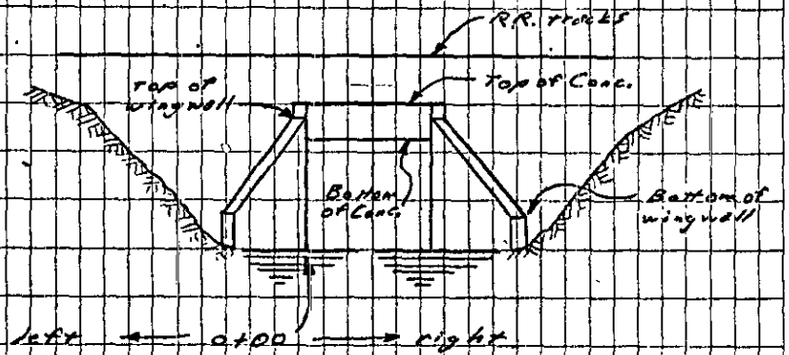
RR. Bridge over Indian Creek

@ Section #8

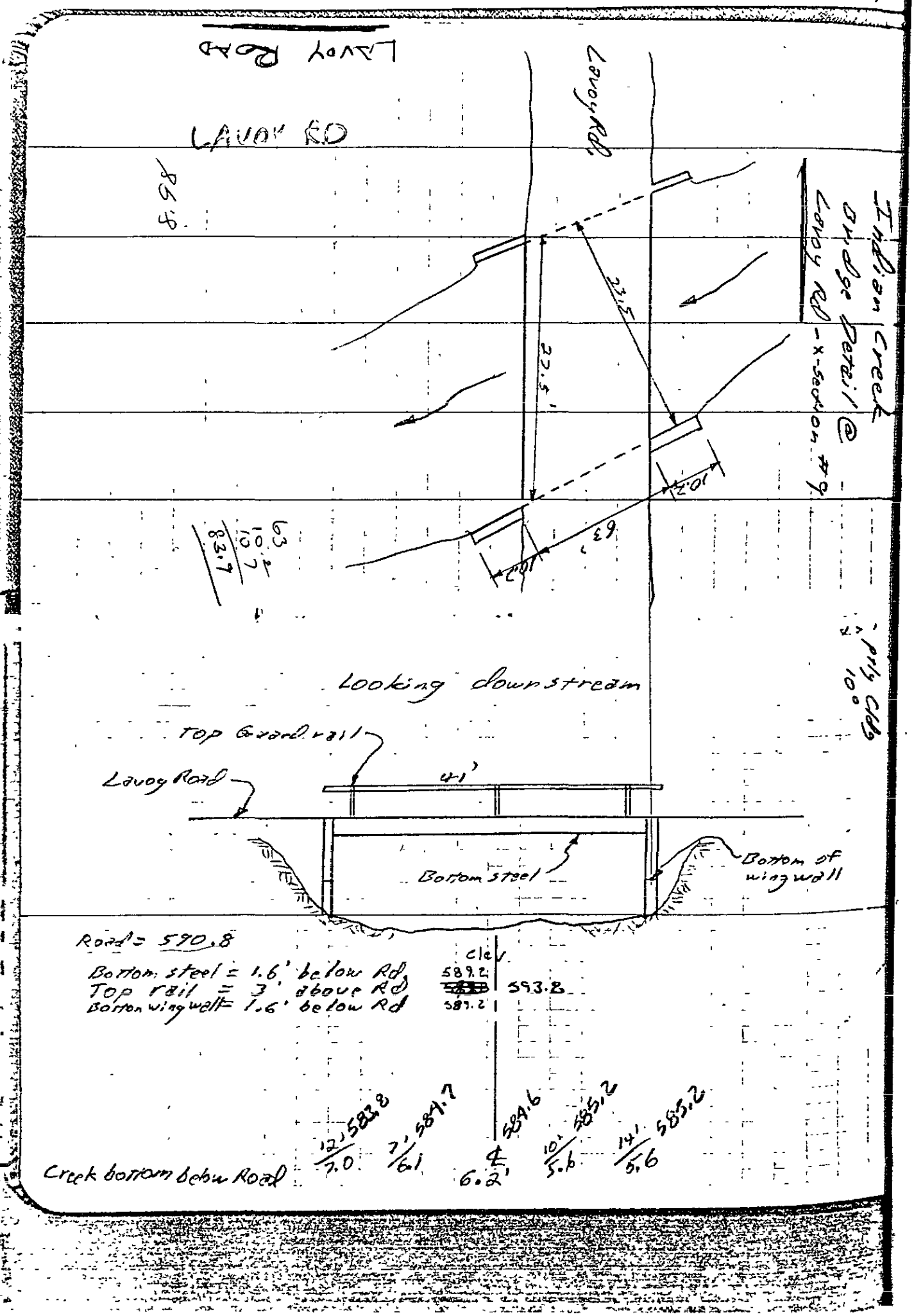


wingwalls are 1.5' thick

Looking downstream



0+00 = Sta 6+99 on X-Section #8



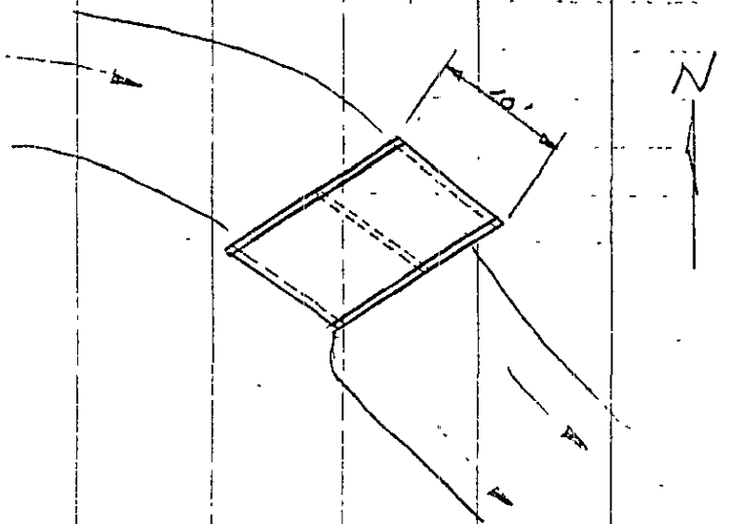
Lavoy Road
LAVOY RD
Lavoy Rd.
Indian Creek
Bridge Detail @
Lavoy Rd - x-section #9
86.8
23.5
22.5'
10.2
63
10.2
63
10.2
10.7
83.9
Looking downstream
Top Guard rail
Lavoy Road
41'
Bottom steel
Bottom of wingwall
Road = 590.8
Bottom steel = 1.6' below Rd
Top rail = 3' above Rd
Bottom wingwall = 1.6' below Rd
clev
589.2
593.8
589.2
12' 583.8
7.0
7' 584.7
6.1
584.6
℄
6.2'
10' 585.2
5.6
14' 585.2
5.6
Creek bottom below Road

Bedford Tounsi p-Indian creek
12-11-78 cont.
Bridge Detail - private driveway between x-section 2 and Telegraph Road.

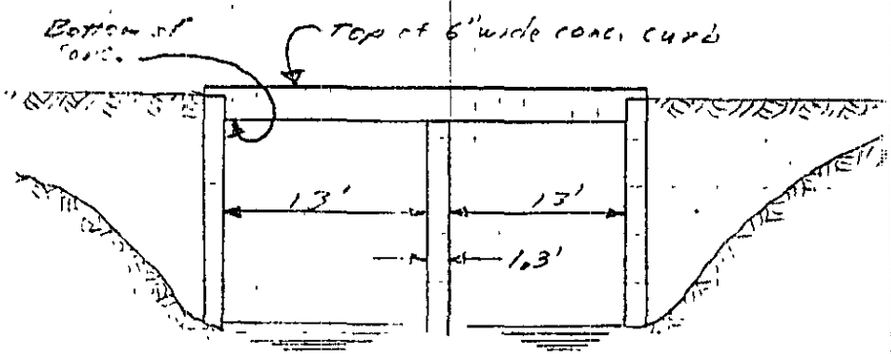
New number 9.21

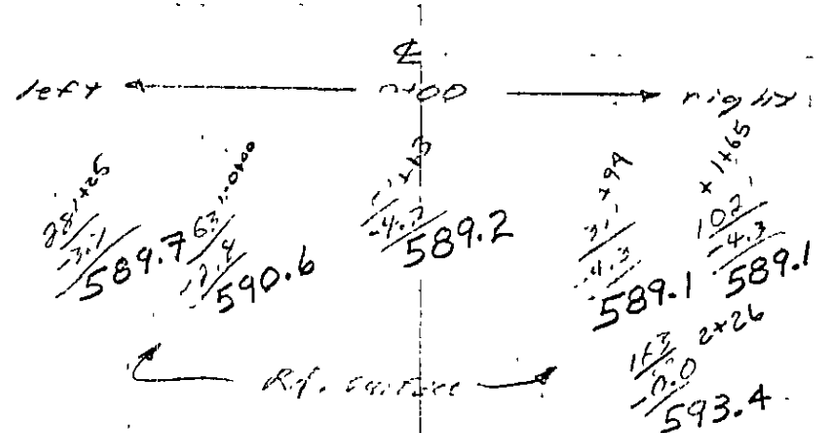
12-11-78

472-B/38



Looking downstream

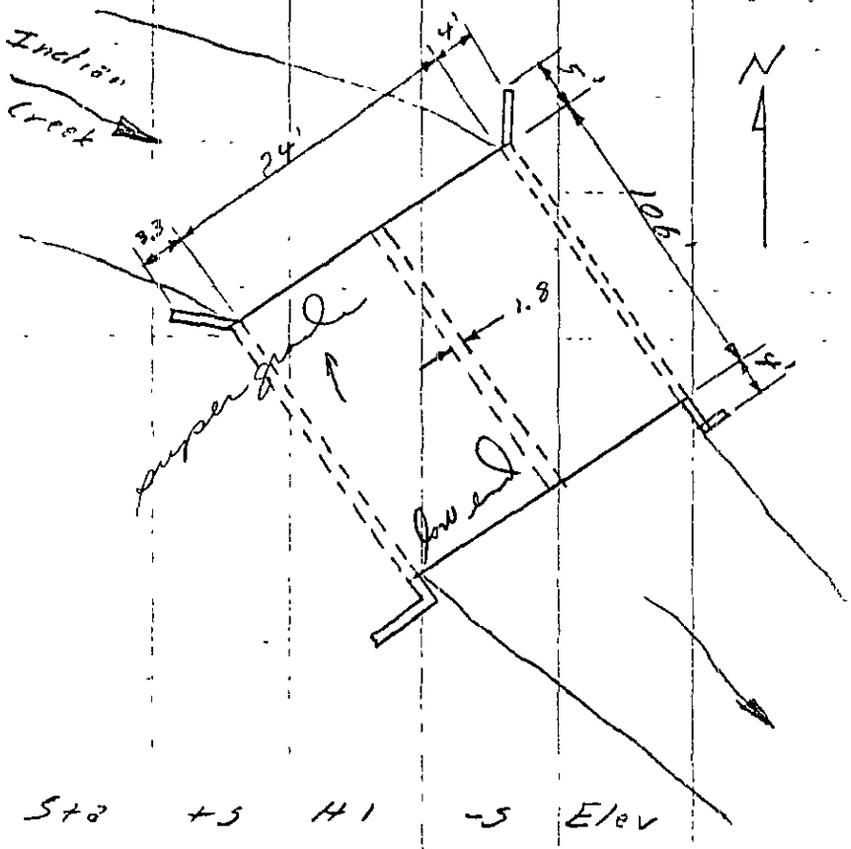


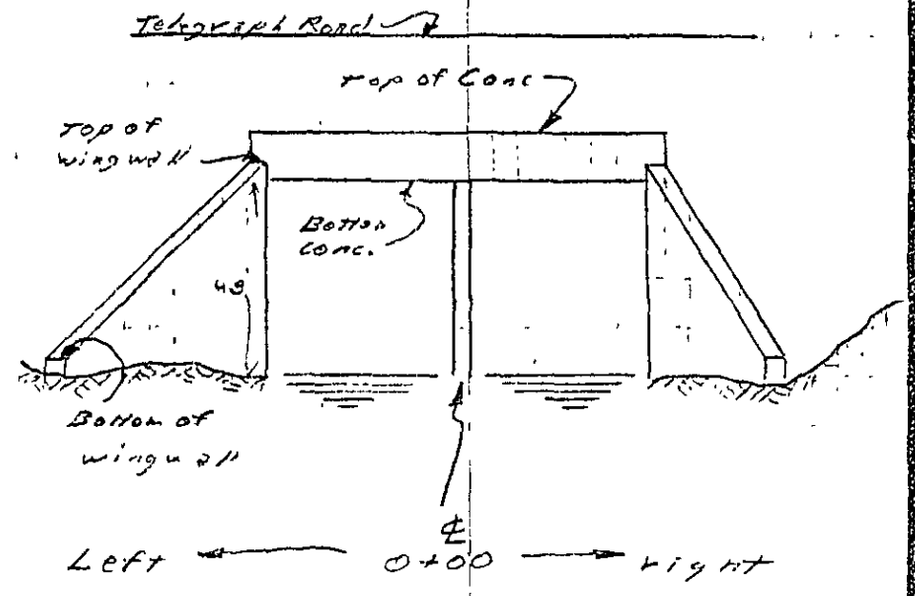


Sta	+S	HI	-S	Elev
BM166				590.54
	2.87	593.4		593.4
			3.7	589.7
			3.7	589.7

Top of left end curb
Top of right end curb

Bedford - Indian Creek
12-11-28 cont.
Bridge Detail at Telegraph Rd.





Sta	+S	HI	-S	Elev
Bm 166				590.54
	7.51	598.05		

10' 2+43 / -12.9 / 585.1

5' 2+48 / -13.8 / 584.2

0' 2+55 / -14.2 / 583.8

5' 2+58 / -14.1 / 583.9

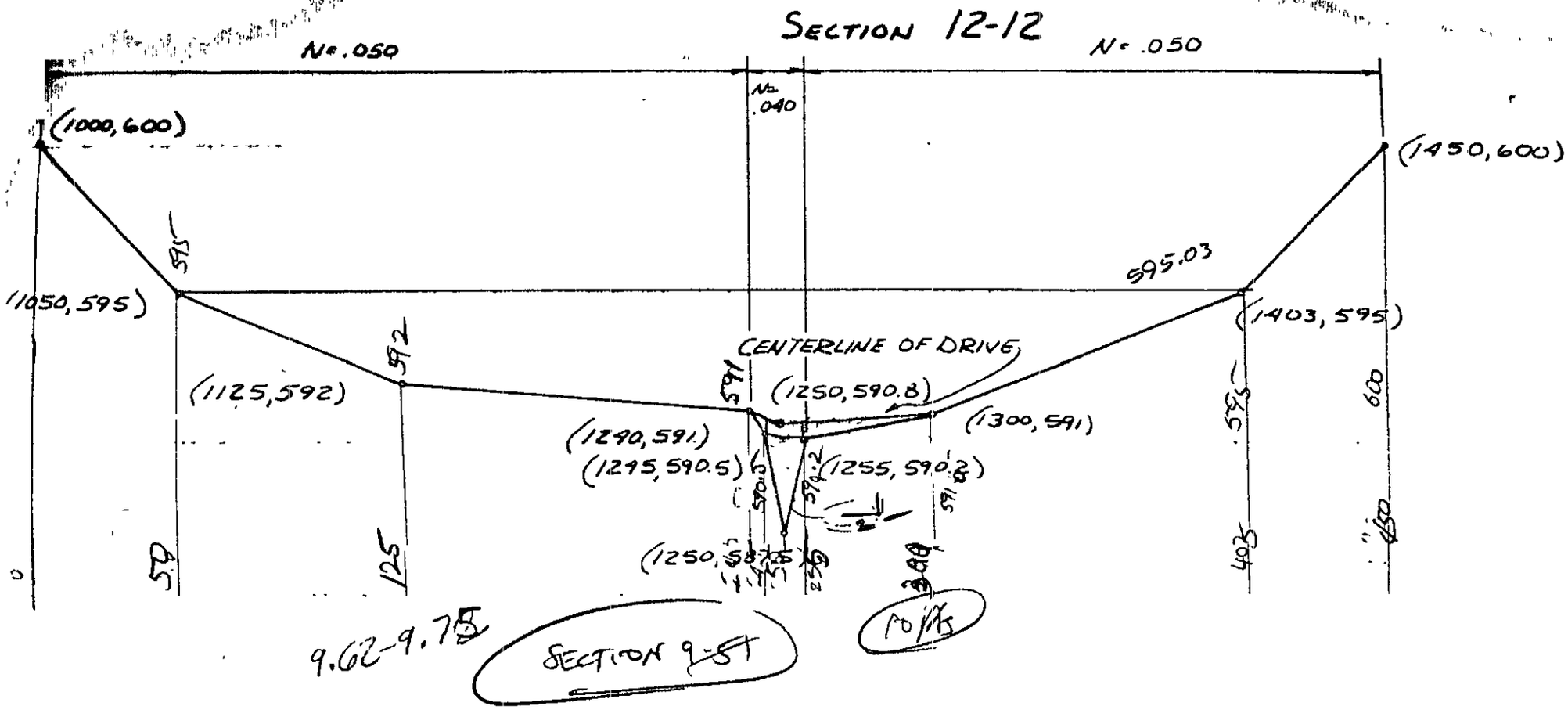
10' 2+63 / -12.9 / 585.1

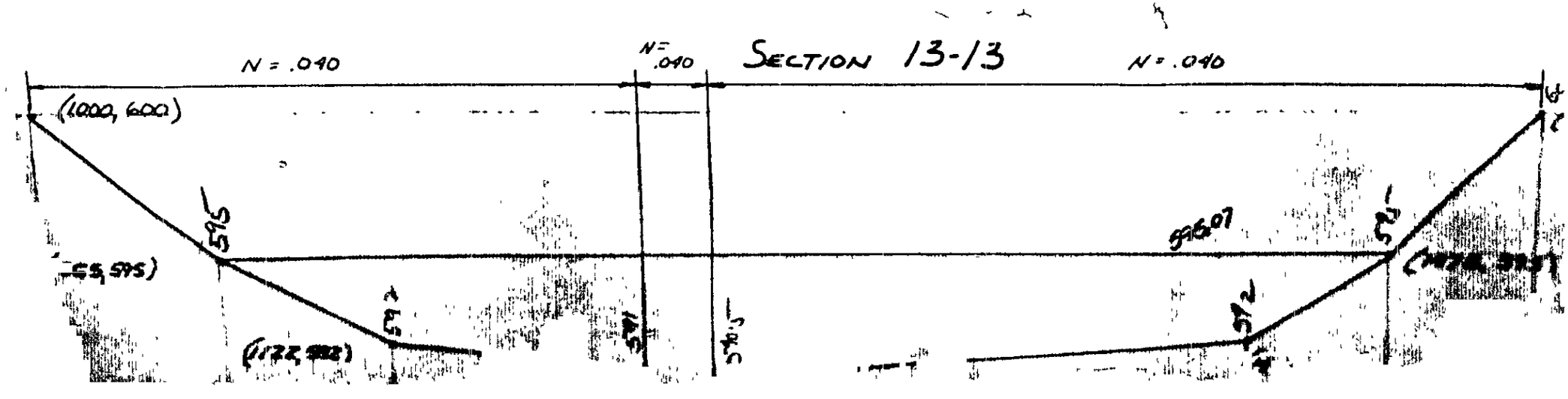
10' 2+41 / -12.1 / 585.9

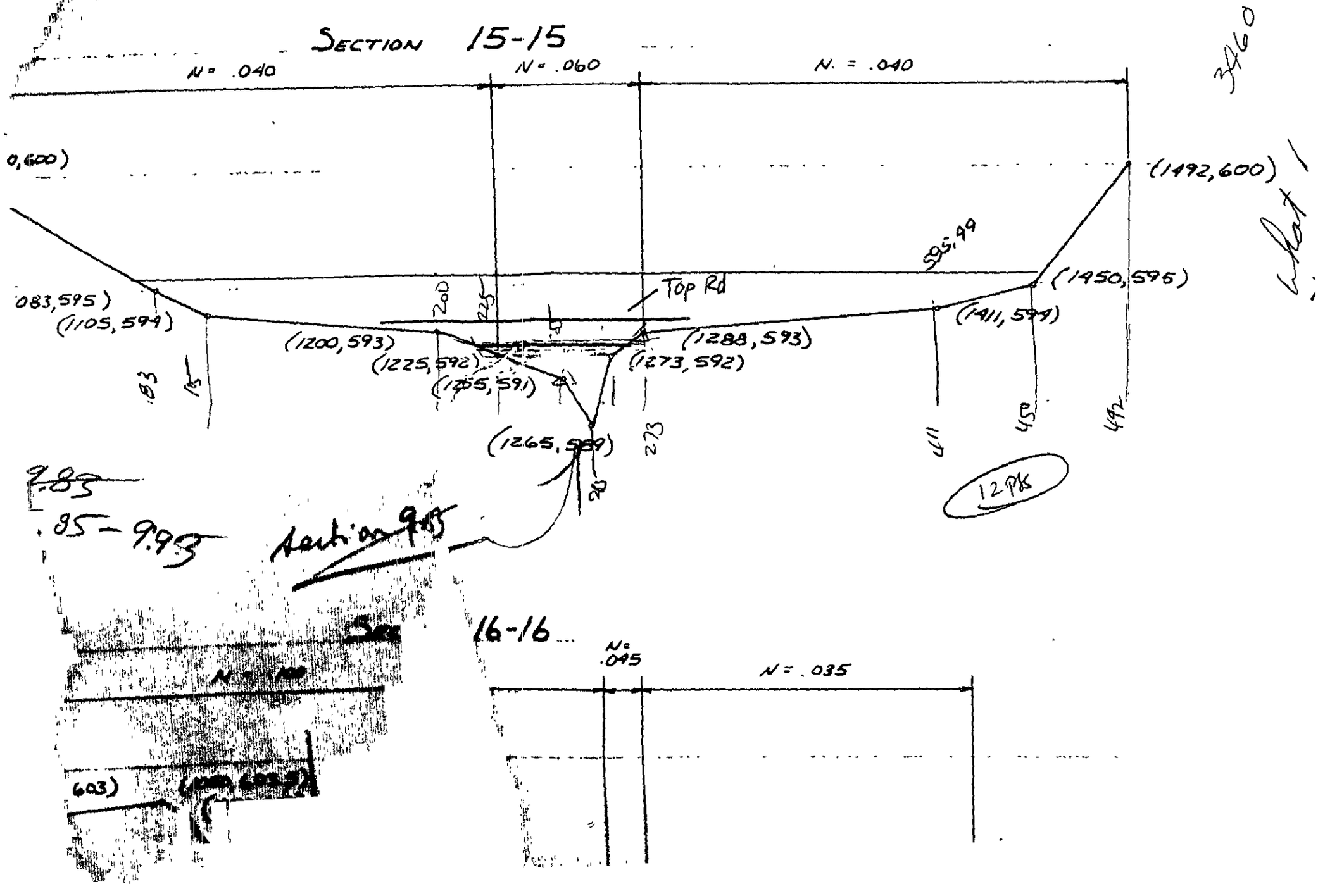
15' 2+38 / -10.[illegible] / 587.5

12' 2+65 / -11.6 / 586.4

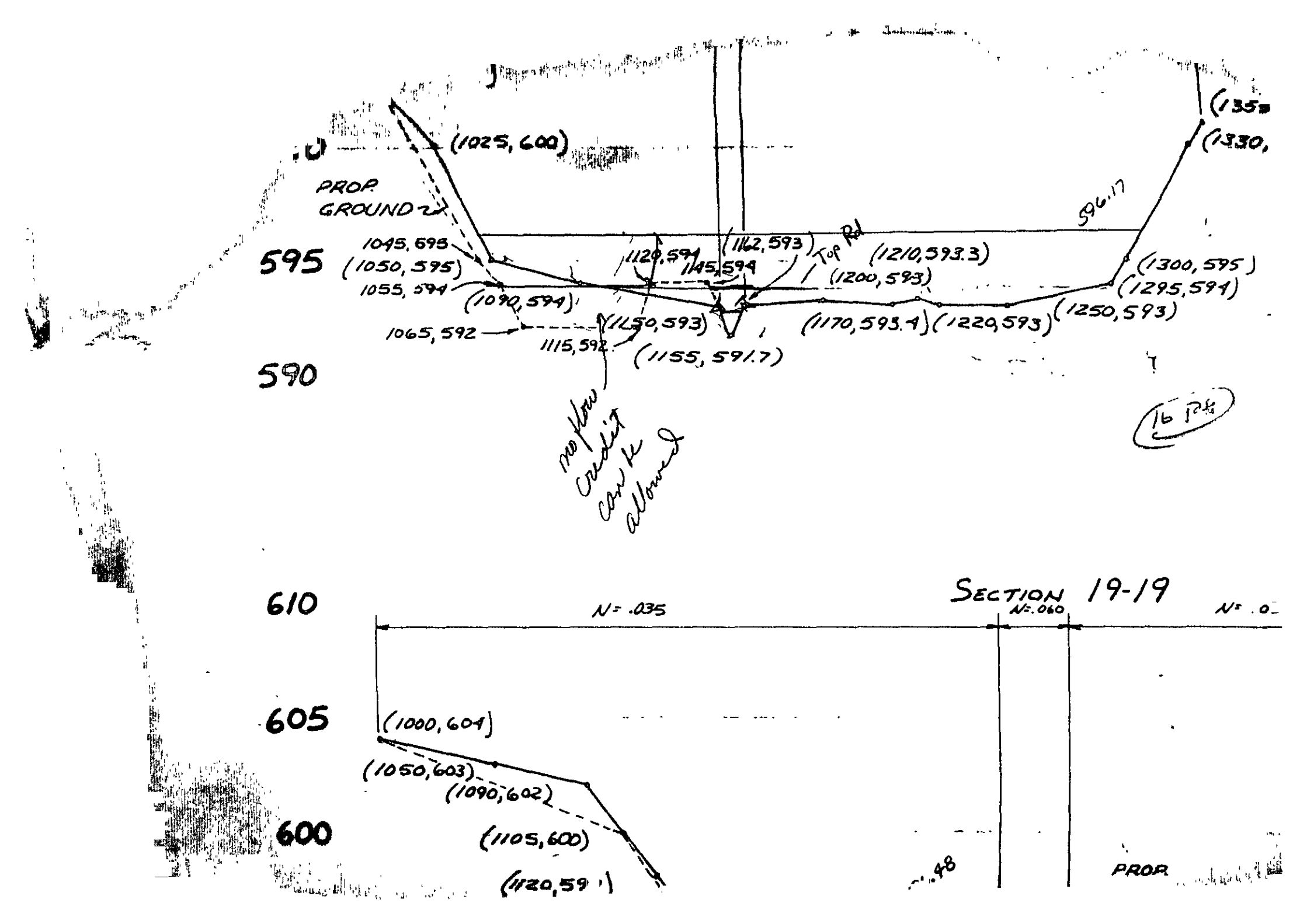
15' 2+68 / -9.8 / 588.2


SECTION 12-12
N=.050
N=.050
N=.040
(1000,600)
(1450,600)
595
595.03
(1050,595)
(1403,595)
592
CENTERLINE OF DRIVE
591
(1250,590.8)
(1125,592)
(1300,591)
(1240,591)
(1245,590.5)
(1255,590.2)
600
595
125
403
9.62-9.75
SECTION 9-51
10 PAS


SECTION 13-13
N=.040
N=.040
N=.040
(1000,600)
595
595.07
592
591



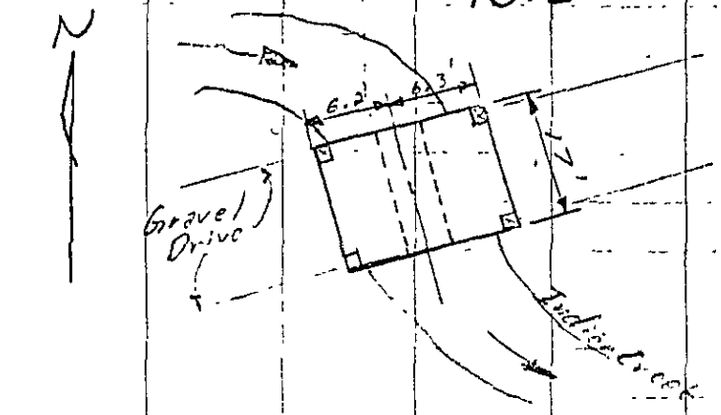
SECTION 15-15
N = .040
N = .060
N. = .040
0,600)
(1492,600)
595.99
(1450,595)
(1411,594)
083,595)
(1105,594)
(1200,593)
(1225,592)
(1255,591)
(1288,593)
(1273,592)
(1265,589)
Top Rd
200
225
273
411
450
492
12 pts
3460
What 1
9.85
.85 - 9.95
Section 9.95
16-16
N = .045
N = .035
603)

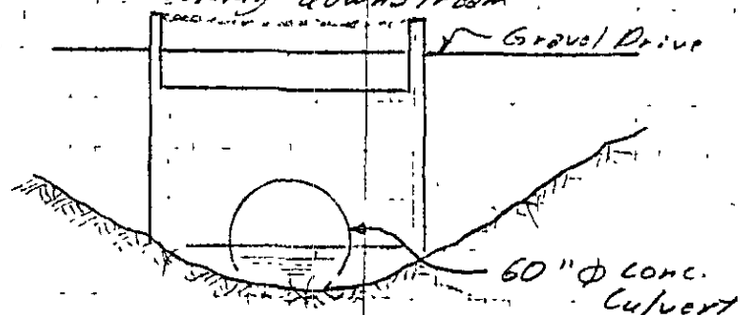

(1025, 600)
PROP GROUND
595
590
610
605
600
1045, 595
(1050, 595)
1055, 594
(1090, 594)
1065, 592
1115, 592
(1150, 593)
(1155, 591.7)
1120, 591
1145, 594
(1162, 593)
Top Rd
(1210, 593.3)
(1200, 593)
(1170, 593.4)
(1220, 593)
(1250, 593)
(1300, 595)
(1295, 594)
596.17
(1330,
(135
no flow credit can be allowed
16 pts
SECTION 19-19
N=.035
N=.060
N=.0
(1000, 604)
(1050, 603)
(1090, 602)
(1105, 600)
(1120, 59
.48
PROP

472-B
48

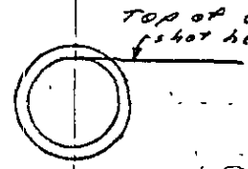
Indian Creek - Bridge Retail
12-11-78 cont.
Culvert under private driveway
approx. 300' downstream of
may be Road crossing

10.2





Conc pillars are 1' x 1' and 2.6' high with 1 chain stretched between



601.6
5.0
596.6

Sta	+5	41	-5	Elev
BM 158				606.18
	4.20	610.4 / 610.38		
			8.8	601.6
			10.3	600.1
			13.5	596.9
			6.5	603.9
			5.9	604.5
				Good
			5.0	605.4
BM 157			4.20	606.18

596.35

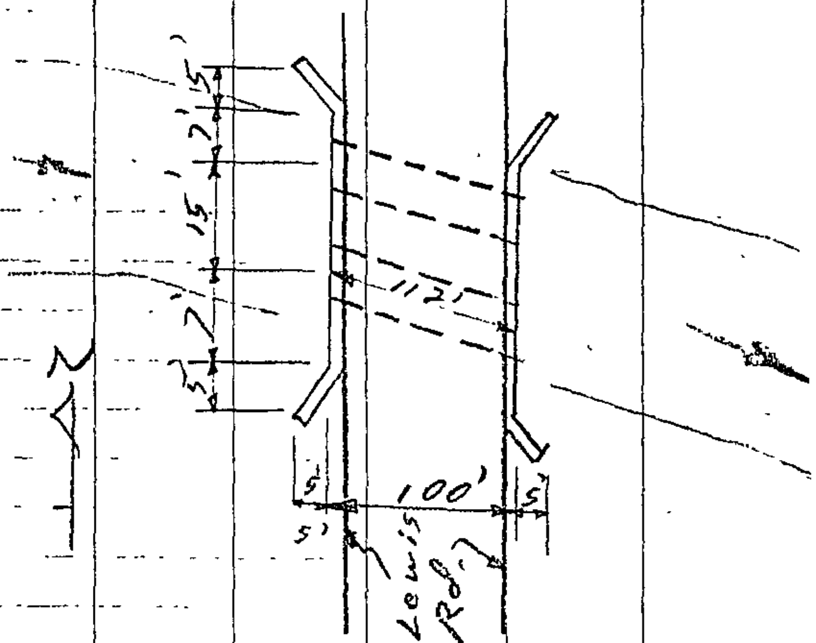
Top of culvert
Water surface
Bottom of dirt in culvert
Top of concrete on bridge
Top of gravel drive over culverts
Drive is level
Top of Telephone manhole, Resident said water flooded to here in spring of 1978

Indian Creek
Bridge # 10.4
@ Lewis Rd

30 may '79
Cldy. 65°

D. Cain
K. Barn

432-8 B
P3 49(4)



Culverts are 6' high, 9' wide
x 112' long horiz. Elipt. RCP

Photo #10
Film 140

72"x108"
= 90" ϕ
= 7.5'
44.18

.047 x 7.5² = 2.64
A = 44.18 - 2.64 = 41.54
P = 26.4

n = .013

K_F =

see next pg.

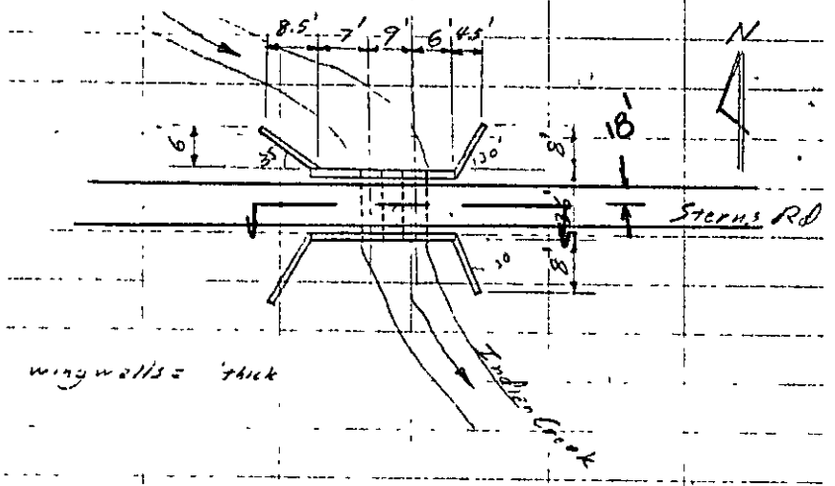
STA	+S	HI	-S	Elev	Remarks
BM158				606.18 605.40	chis. "X" N.F.
	7.18	612.58 ~~613.36~~			
			5.6	607.0	℄ Rd over ℄ culverts
			2.7	609.9	top guard rail
			6.4	606.2	top headwall
			8.4	604.2	Top north culvert
			8.4	604.2	Top south culvert

Bedford Township - Bridge Detail

12-5-28 Cont.

Indian Creek - Bridge @ Stearns Road

@ x-section # 12



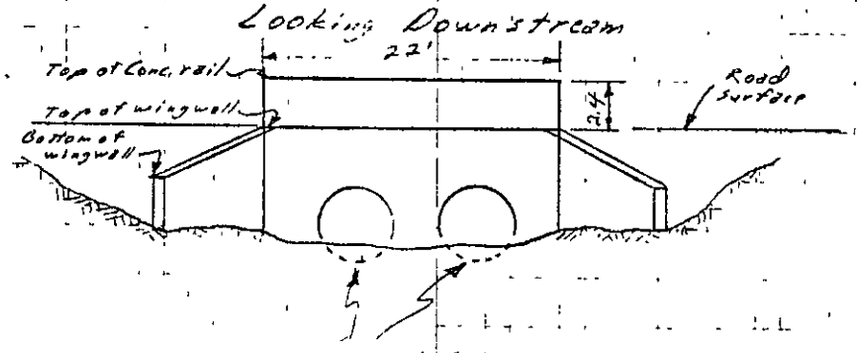
wingwalls = 1' thick

Sta	+S	HI	-S	Elev.
BM 72				614.58
	2.07	616.65		
			2.1	614.55
			4.3	612.35
			5.9	610.75
			1.8	614.85
			13.2	603.45
			11.1	605.55
			7.7	608.95
			6.0	610.65

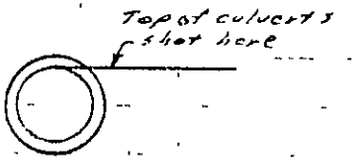
O Cain # 111
G. Alspach ϕ

472-B
21

Looking Downstream



78" ϕ conc. culverts.



Description

Top Conc. rail

Top East wing wall

Bottom East wing wall

Top East culvert

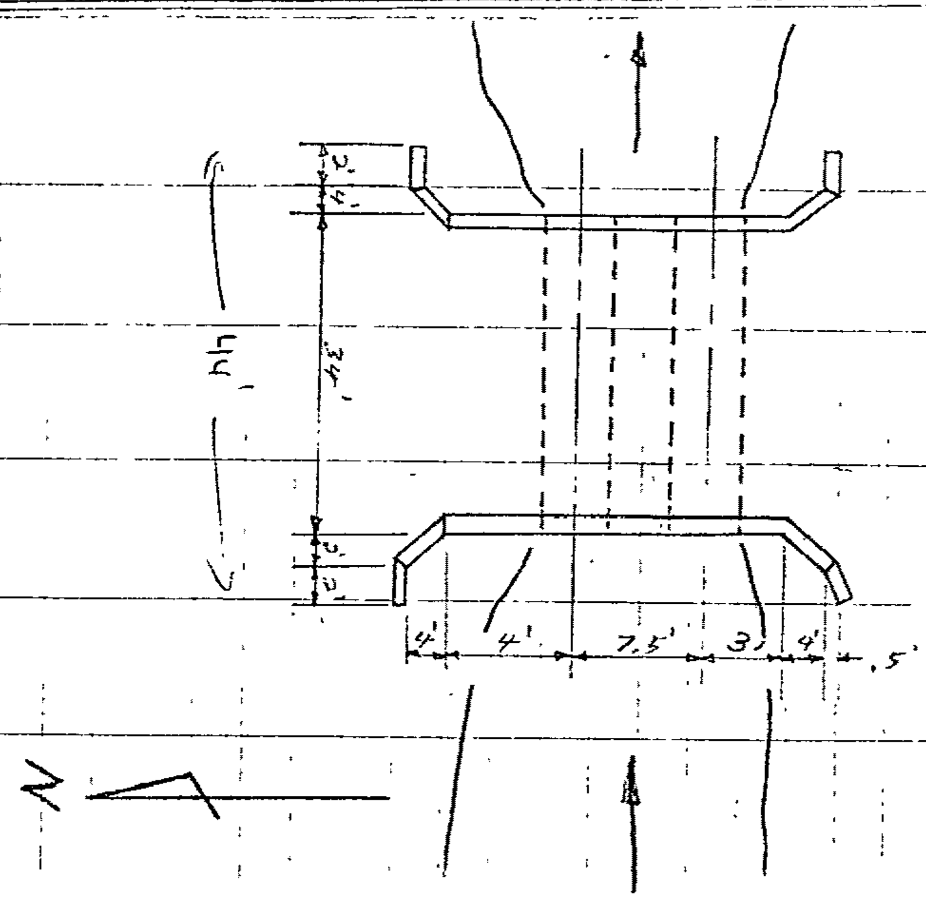
Ground in East culvert

Ground in West culvert

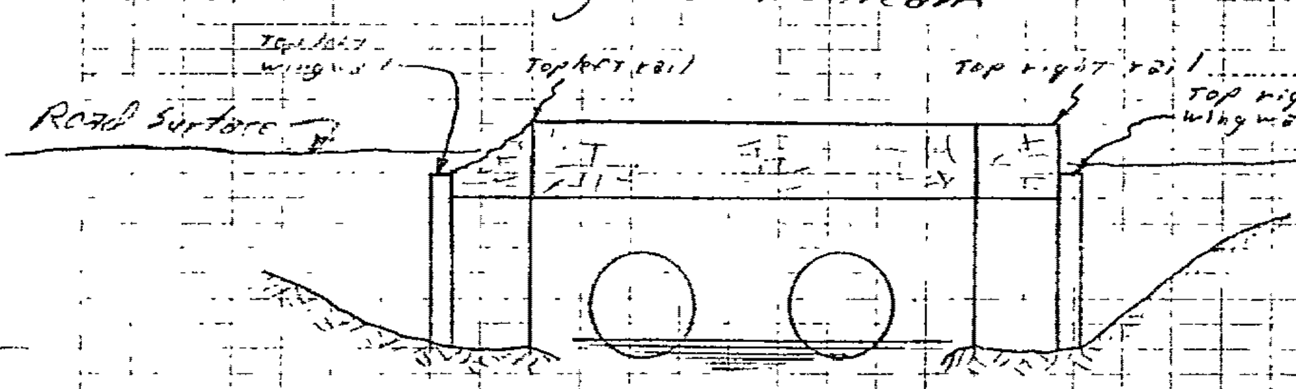
Top of West culvert

Bottom West wing wall

Indian Creek – Fowler delta
12-11-78 Cont.
Bridge at Seneca St.



Looking Downstream

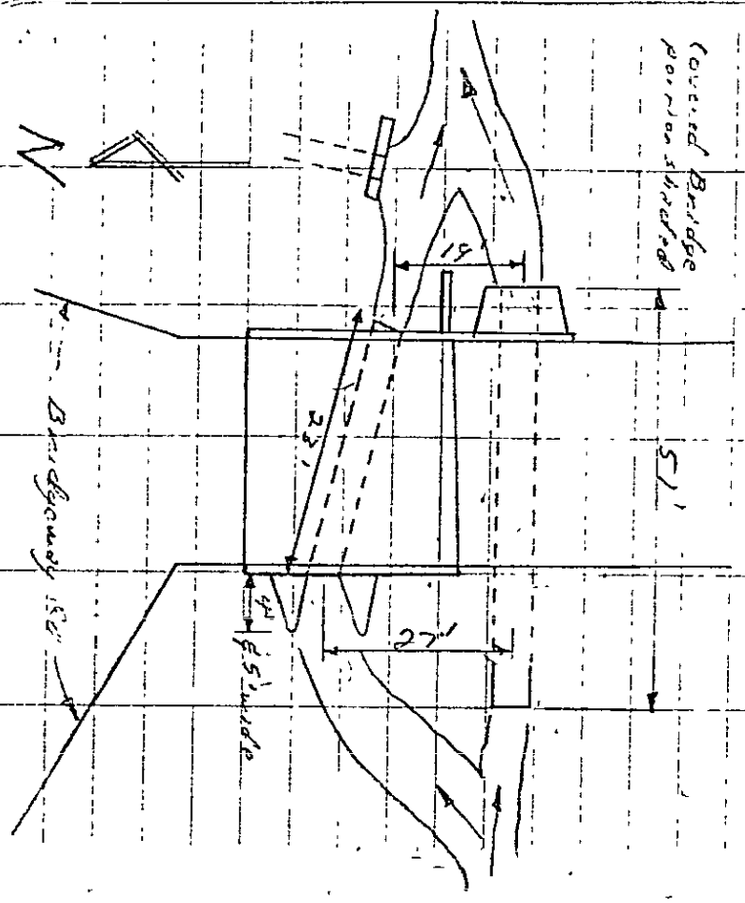


Culverts are 5' φ conc.

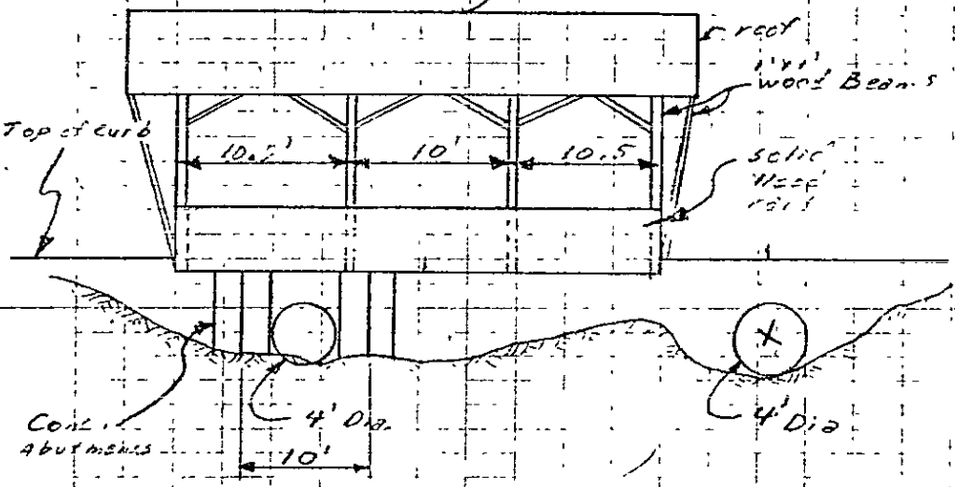
right culvert 1/3 filled upstream &
downstream ...

47R-B

51



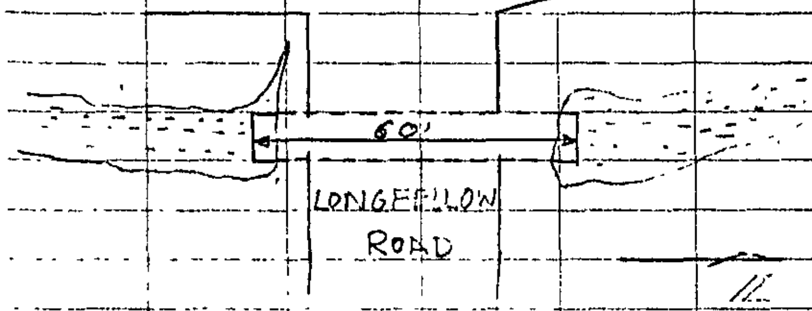
Looking Downstream

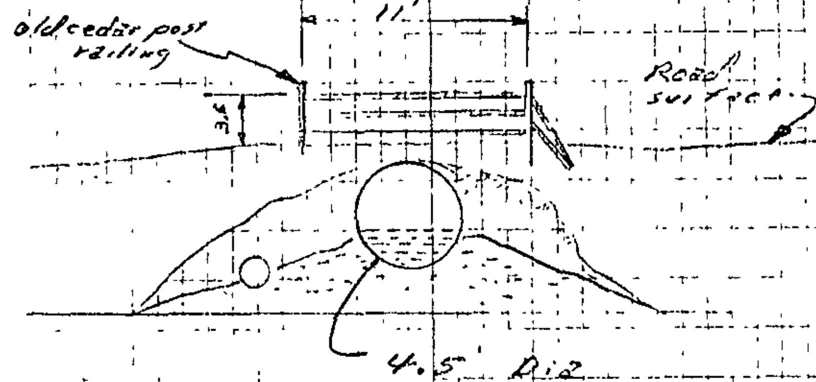


100% of flow thru right culvert

472-B

Indian Creek. - Bridge at Longfellow Road 12-12-78 con





Bench Loop to Bridge at Longfellow

Sta	+S	HI	-S	Elev
BM114				628.28
	4.46	632.74		
Set BM			5.01	627.73
	3.87	631.60		
TP			5.59	626.01
	3.99	630.00		
Set BM			6.60	[illegible]
	6.53	629.93		
TP			5.55	624.38
	5.09	629.47		
Set BM			6.75	622.72 (623.73)
	7.55	630.27		

D. Cain ⊼ rdr
N. Shomary ⌀
G. Algerceli ⌀

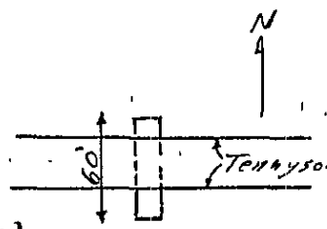
Mine spike in power pole on S-W corner of intersection at Center & Jackson

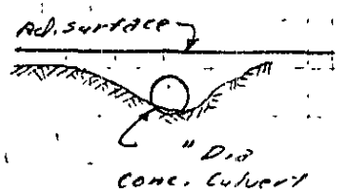
Top north end conc. culvert for Indian Creek under TENNYSON RD.

Top south end conc. culvert for Indian Creek under Longfellow Road

Indian Creek
12-13-78 cont.
X-Section #15 @ Bridge
Detail of Tennyson Road

per A.B. 5/18/79 JSW



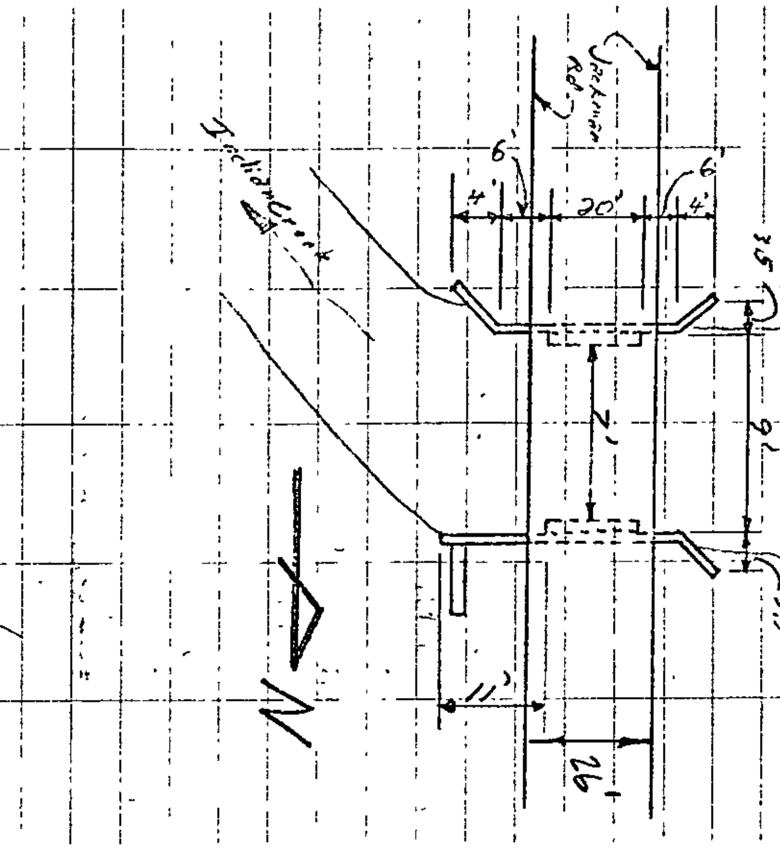


STA	+S	HI	-S	Elev	
New BM				~~627.74~~ 623.40	Top of northbound culvert on Tennyson (page 61 this book)
	6.50	634.24		-4.3	
0+00			5.8	628.4	624.1 Top of Pavmt.
1+00			6.1	628.1	623.8 " " "
2+00			5.8	628.4	624.1 " " "
3+00			4.7	629.5	625.2
4+00			4.2	630.0	625.7
5+00			4.3	629.9	625.6
6+00			4.6	629.6	625.3
Start X-Section 15.1 in Lawn					
0+00			4.9	629.3	625.0 in Lawn
0+60			4.9	629.3	625.0 " "
0+68			8.8	625.4	621.10 edge crack
			8.9	625.3	621.0 water course
0+69			9.5	624.7	620.4
0+70			9.6	624.6	620.3 ℄ creek
0+76			9.6	624.6	620.3
0+79			8.9	625.3	621.0 edge cr.
0+[illegible]			8.3	625.9	621.6
[illegible]+12			6.2	629.0	623.7

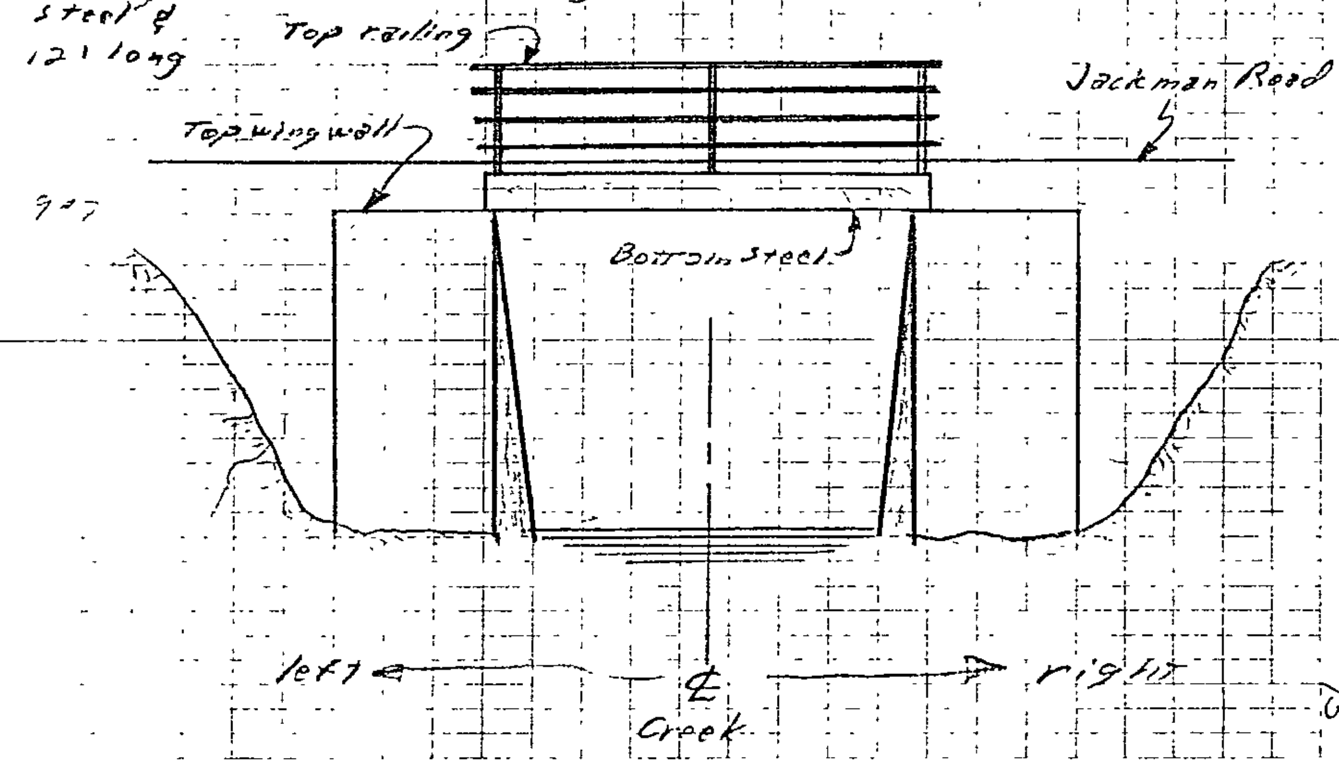
Plotted 15 & 15.1
J.P.M.

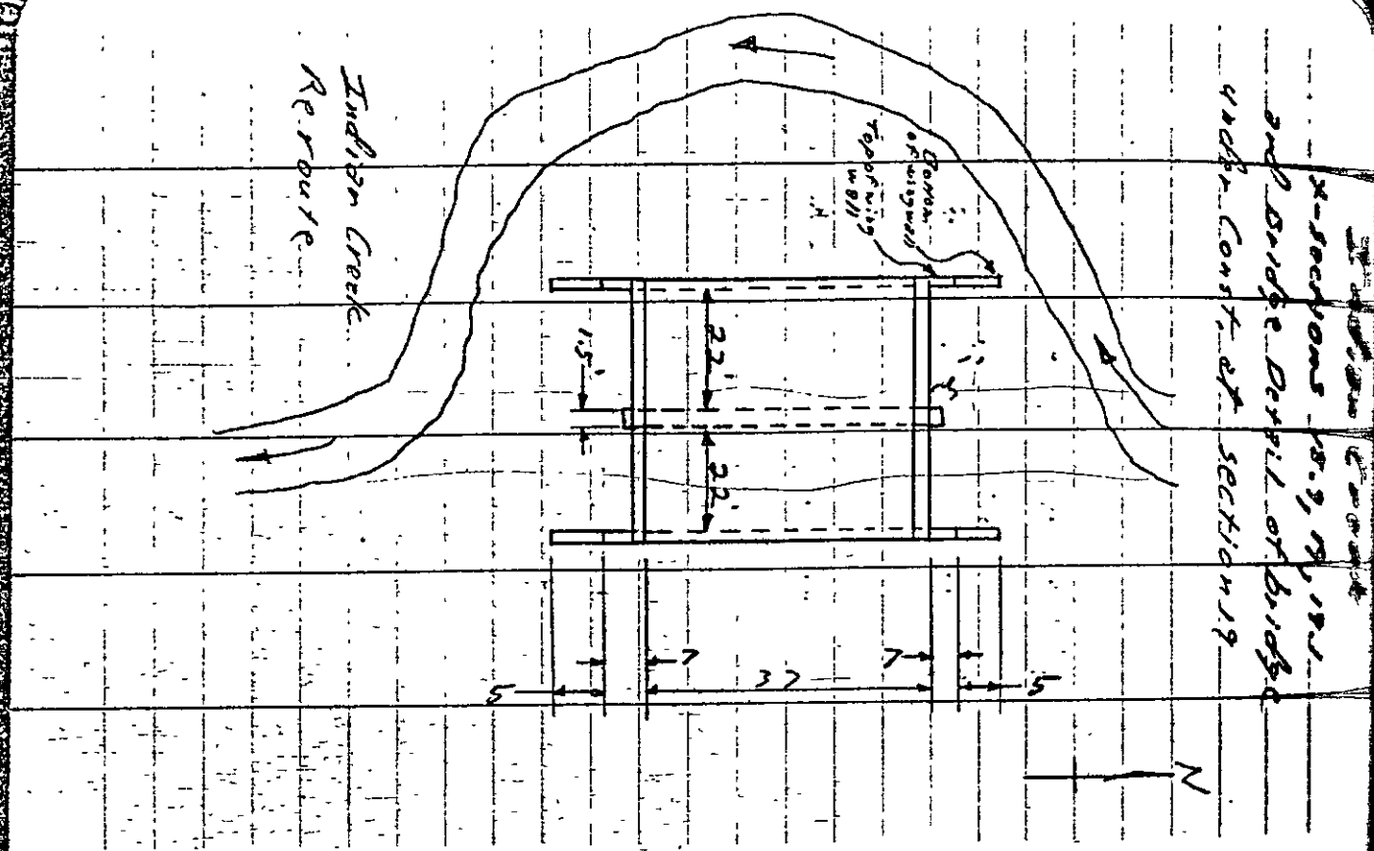
X very flat ground

Indian Creek
12-13-75 Cont'd,
Bridge Detail at Jackman Rd.



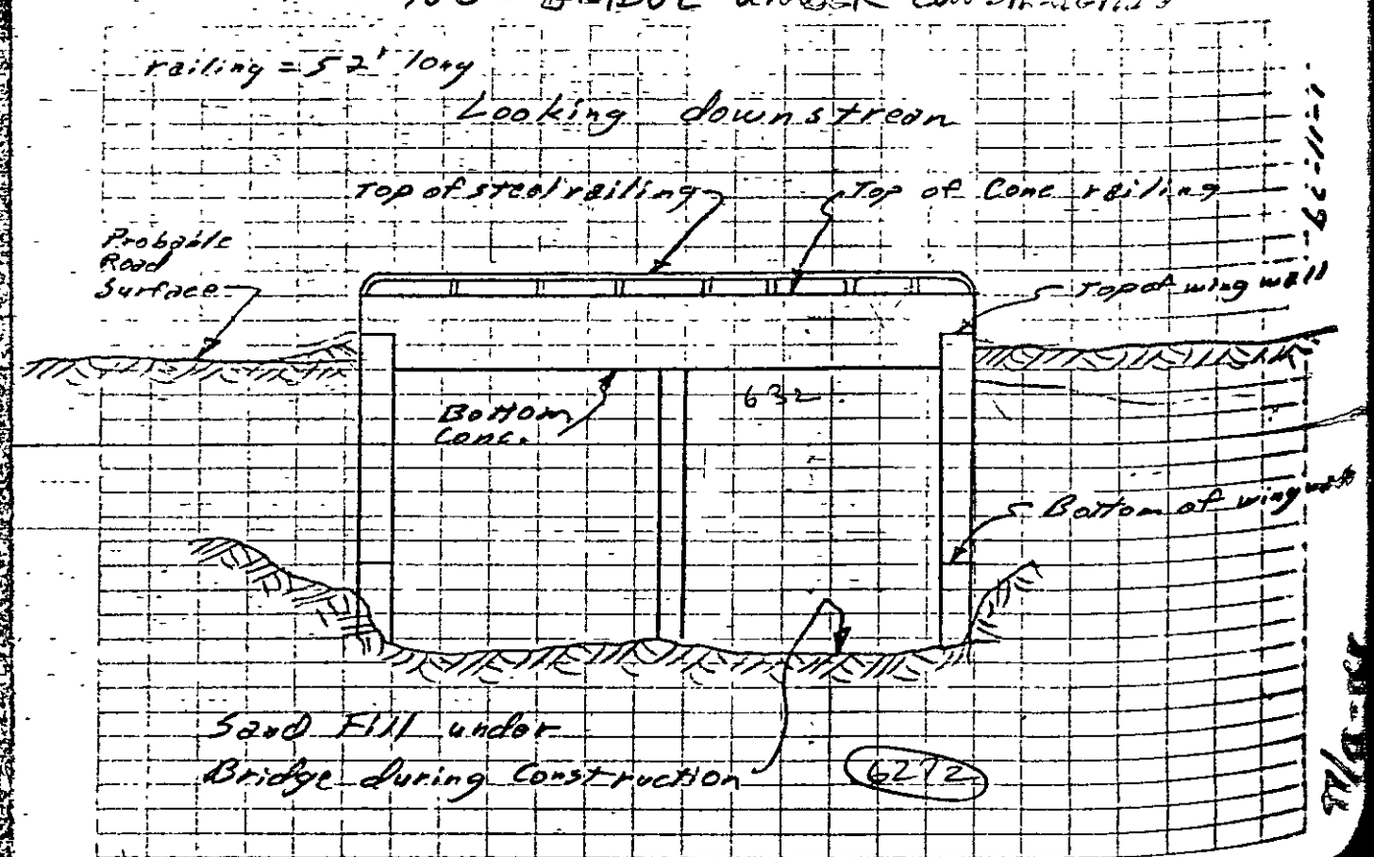
Looking Downstream (East)





Indian Creek
X-sections 18.9, 19, 19.1
and Bridge Detail of bridge
under Const. at section 19

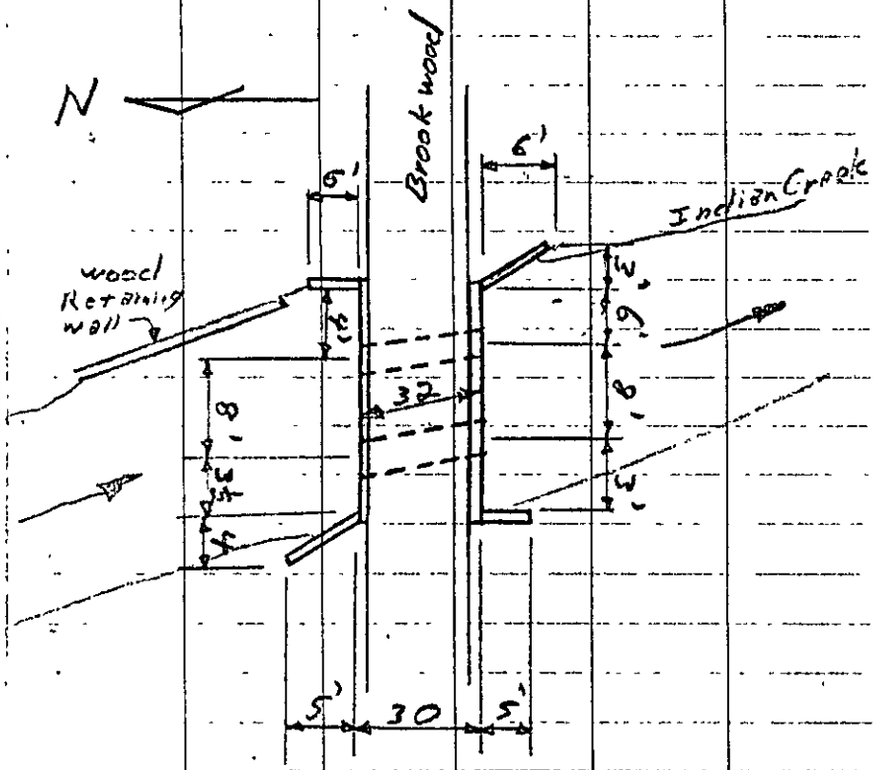
NEW BRIDGE UNDER CONSTRUCTION

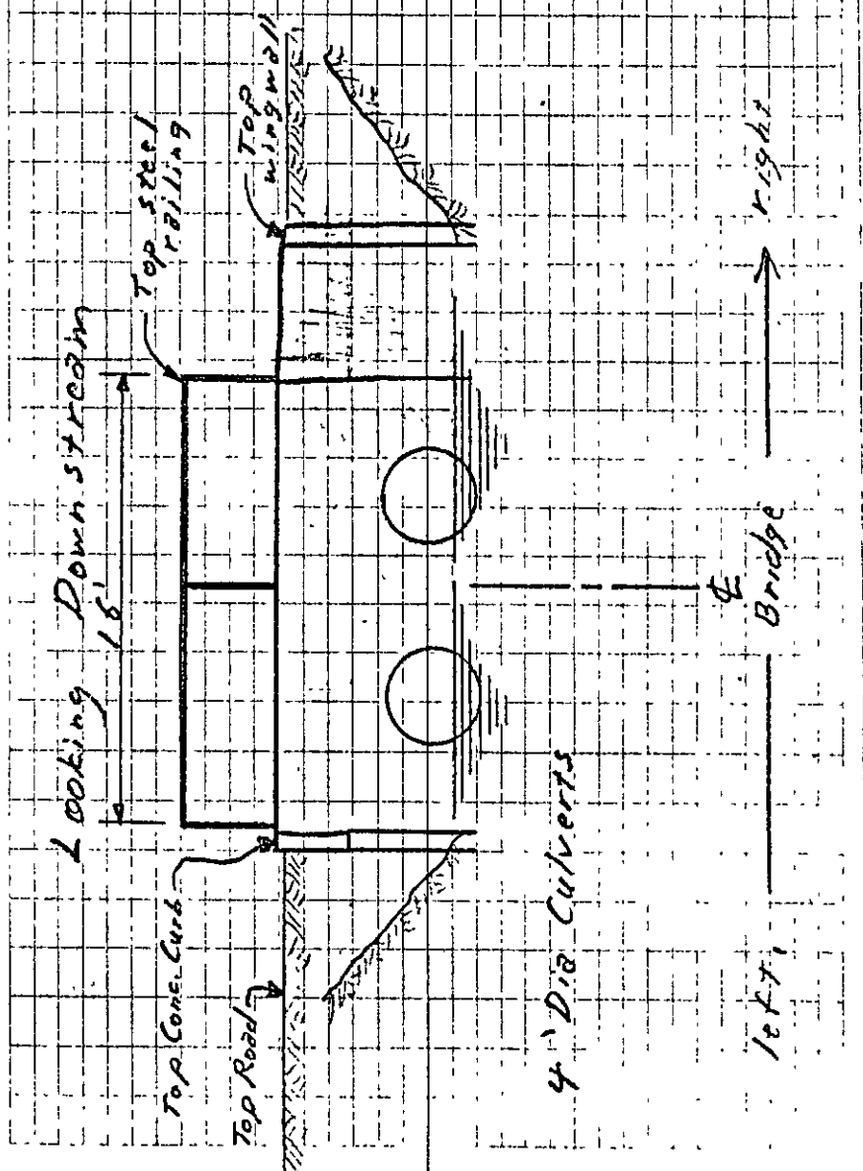


Indian Creek
Continued from Field Book 472 B
page 80

12-14-78
Ptly Cldy 25°-30°

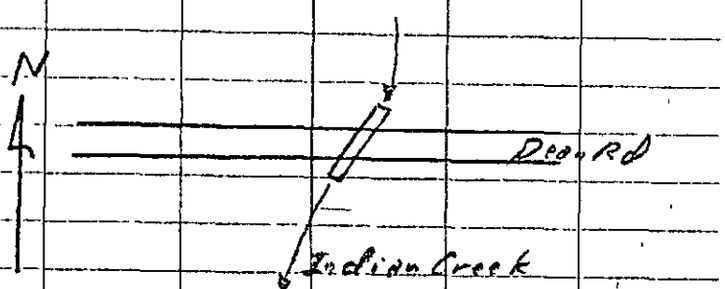
Bridge Detail at
Brookwood St.





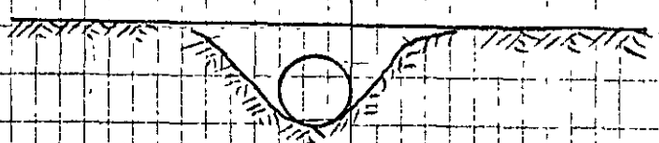
	+S	HI	-S	ELEV.
2+93		640.02	9.7	630.3
3+05			5.5	634.5
4+00			6.2	633.8
5+00			6.1	633.9
BM 112			6.01	634.01

Culvert at Dean Rd.



field flat from here, woods in 150'

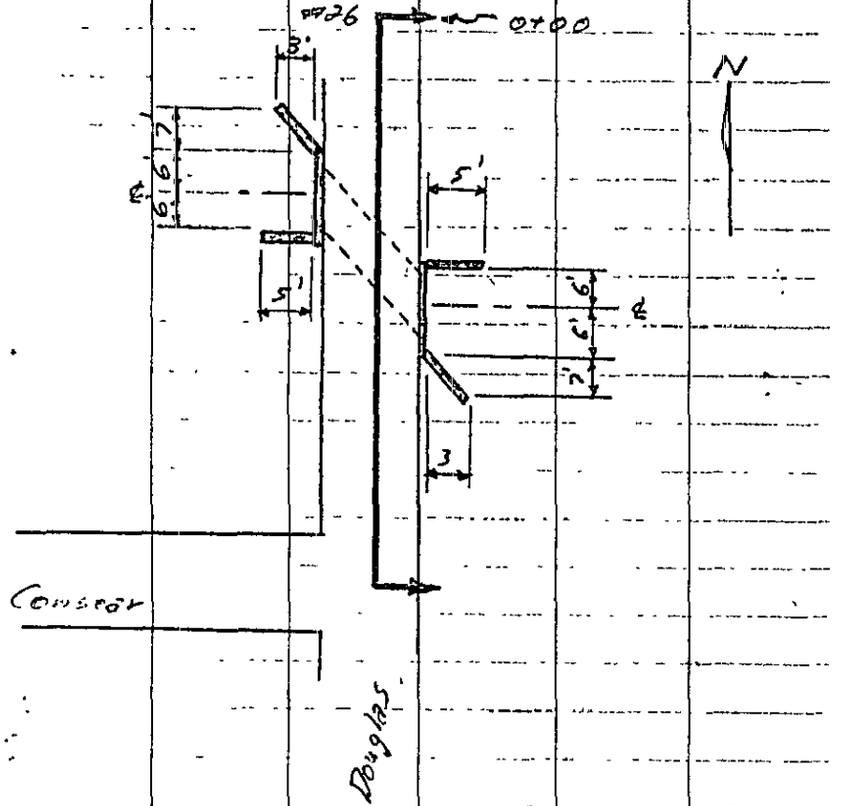
Looking Downstream



Culvert 52' long ϕ 6' Dia

Culvert invert = 627.3
ground in culvert = 629.4
water surface = 630.4

Indian Creek
X-Section #26 & bridge
detail @ Douglas Road



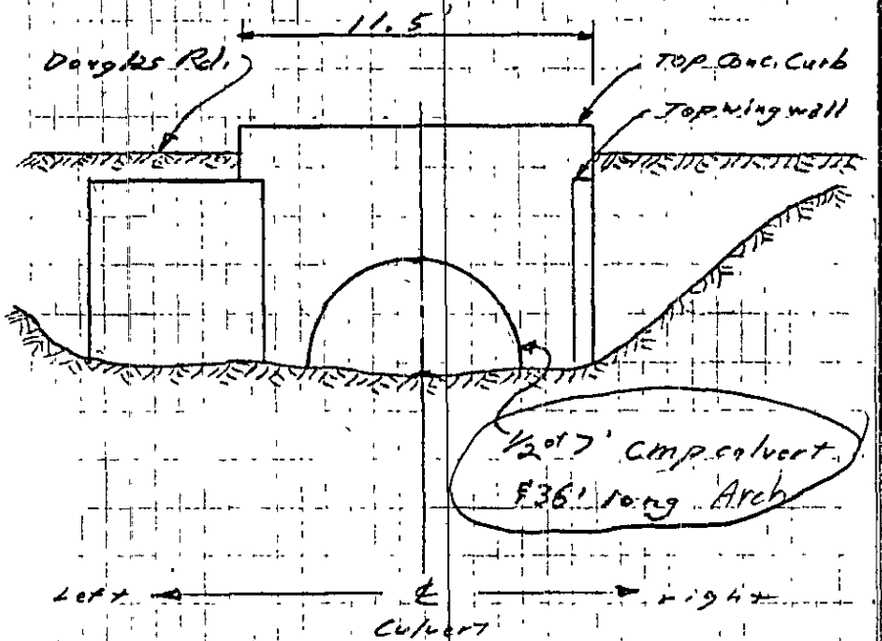
Sta	+S	HI	-S	Elev
Bm 137				657.29
	2.70	659.99		
			4.2	655.79
			2.6	657.39

12-18-78

D. Cain
N. Shamart
G. Alspach

477-C
25

Looking Downstream



Descr.

Top left wingwall
Top left end conc. Curb

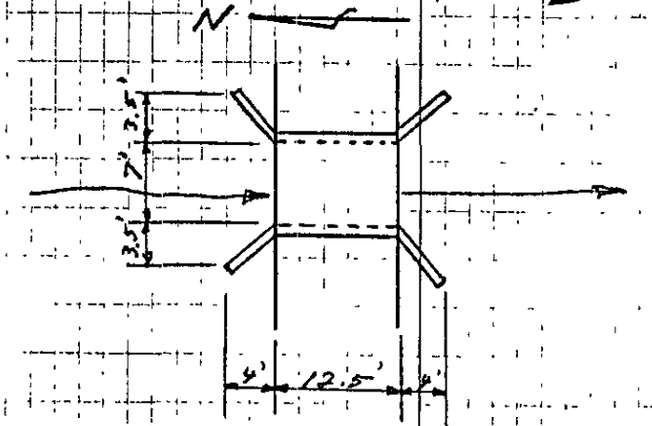
Indian Creek

Driveway X sections Cont.

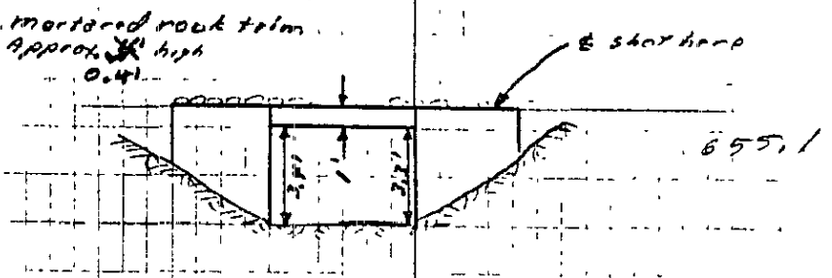
12-18-28

Bridge at 26.2

PRIVATE DRIVE #1



Looking downstream

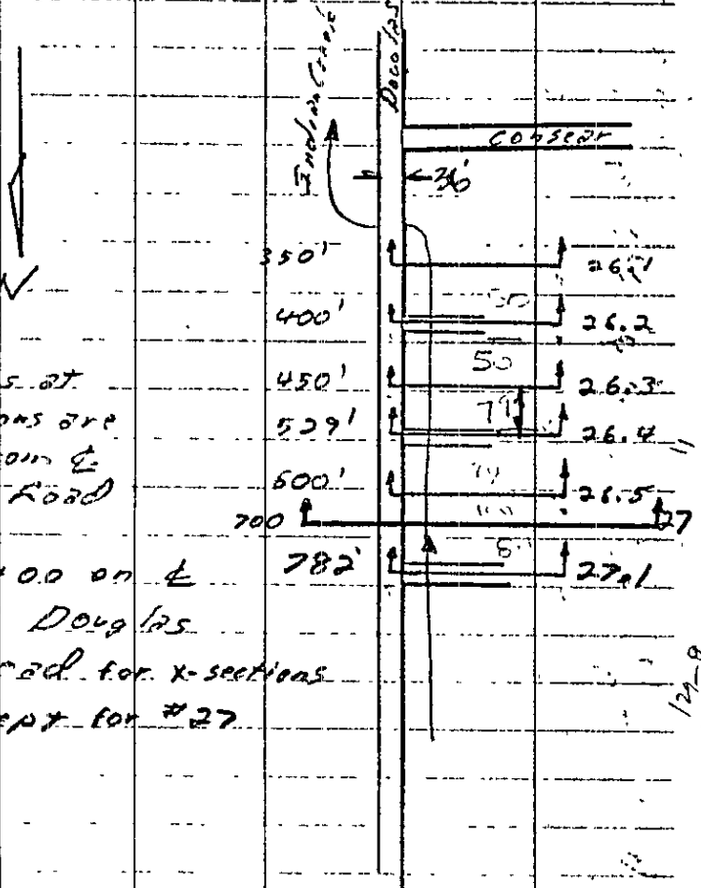


6551

for Elev. see ℄ shot for X-section 26.2 on page 28 this book

Indian Creek

X-sections of Driveway culverts north of Conser Rd.



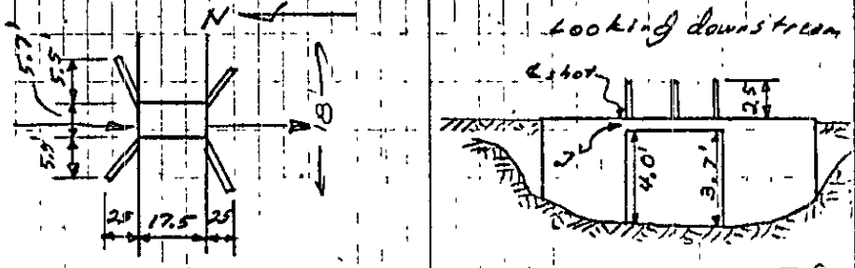
Distances at x-sections are north from ℄ Conser Road

0+00.0 on ℄ of Douglas Road for x-sections except for #27

12-18-78

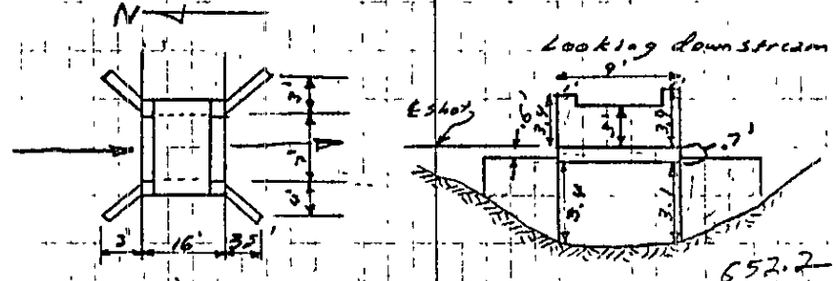
PRIVATE DRIVE #2

Bridge @ 26.4



L = 225'

Get elevation from culvert ℄ shot for section 26.4 on page 29 this book



Bridge at 27.1

Elev. measured from ℄ shot for x-section 27.1 on page 29 this book

PRWATE DRIVE #3

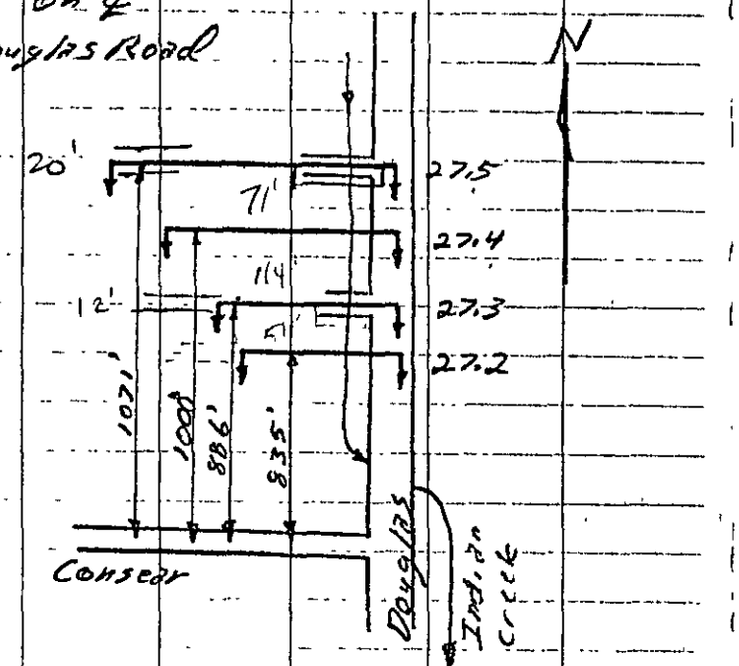
Indian Creek

X-Sections at Driveway culverts on Douglas north of Conseur

X-sections 27.2, 27.3, 27.4 and 27.5

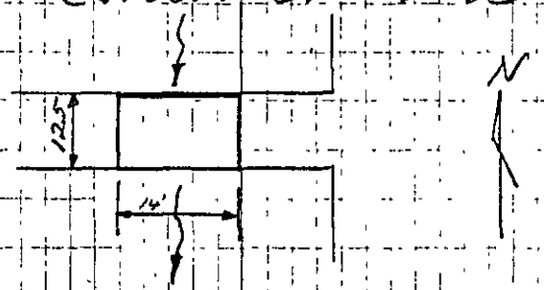
12-19-78
cloudy 30°-35°

0+00 on ℄ of Douglas Road

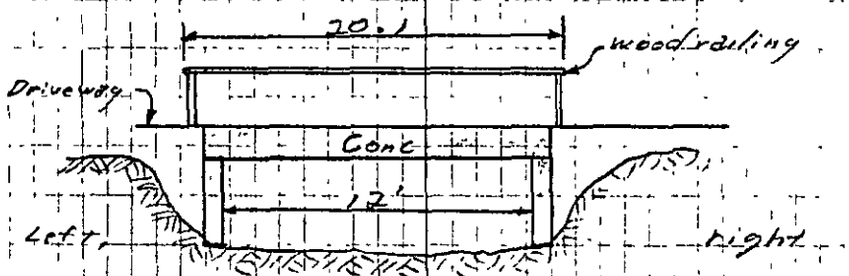


PRIVATE DRIVE #4

Culvert at #27.3



Looking Downstream

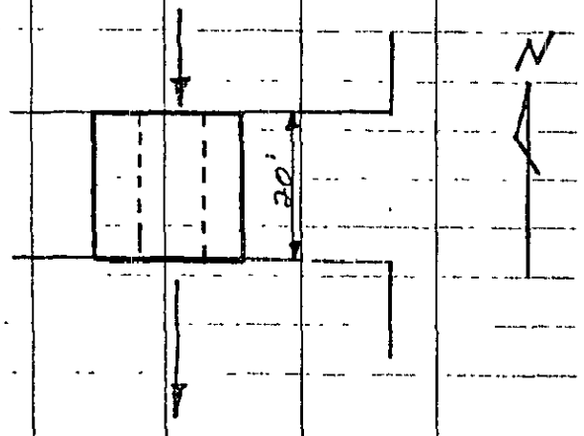


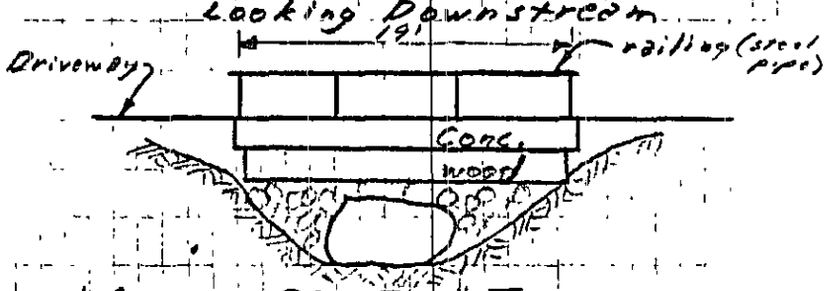
top railing = 658.6
bottom of conc = 655.2
creek bottom at left wall = 653.3
creek bottom at right wall = 653.1
℄ creek = 652.0

Sta.	+	HI	−	ELEV	
0+37		659.03	7.4	651.6	℄ of the creek
0+			6.9	652.1	Edge of water
0+			5.9	653.1	
0+			4.9	654.1	
1+00			4.7	654.3	
	x-section 27.5 on Dive				
0+00			3.00	656.0	℄ road
0+			3.0	656.0	edge road
0+			2.9	656.2	℄ of the bridge
0+			3.0	656.0	
0+			3.8	655.2	
1+00			3.7	656.2	
BM 138			3.19	655.91	

Elev. BM = 138 655.91

Culvert at 27.5





PRIVATE DRIVE #5

Top railing = 659.2

Bent steel culvert Approx 3.3' x 4.8'

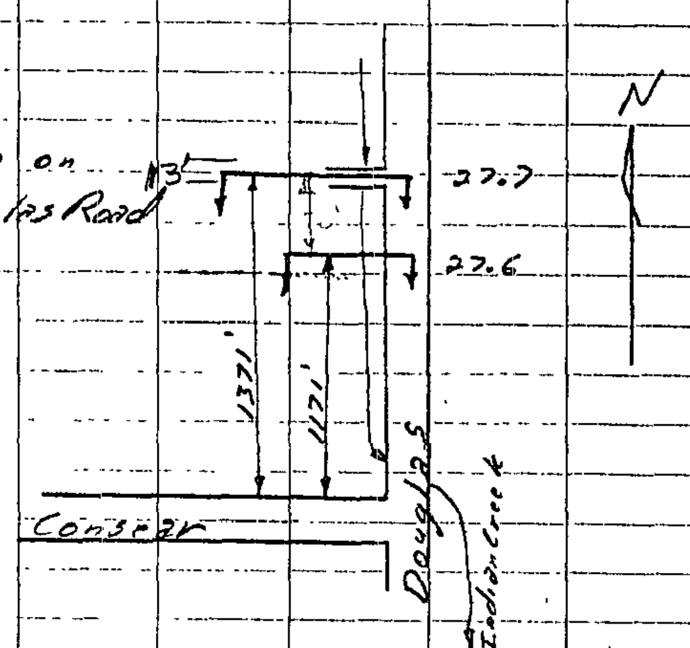
℄ creek = 651.7

472-C
36

Indian creek

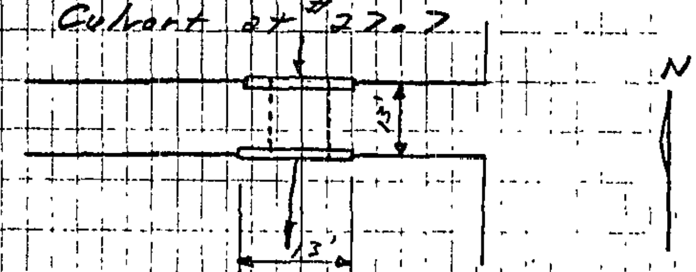
x-section #27.6 & 27.7

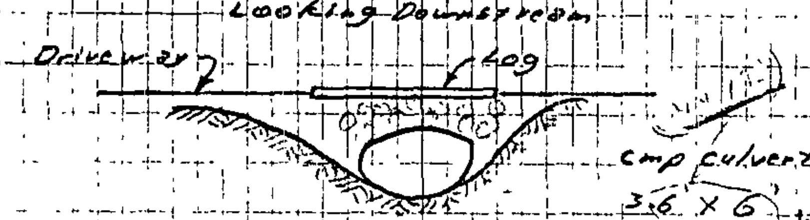
0+00 on
℄ Douglas Road



12-19-78
D. Cain
W. Shemont ∏ ⌀
C. Mortocci ⌀

Culvert at #27.7





PRIVATE DRIVE #6

Inv = 652.0

top log = 656.7

STA	+S	H.I	-S	Elev	Description
BM 138				655.91	
	4.16	660.07			
	Start x-section 27.6 - on Lawn				
0+00			3.0	656.0	℄ road
0+11			3.4	656.7	edge road
0+16			5.0	655.1	
0+22			6.1	654.0	
0+24			7.5	652.6	

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford Twp.

3) WATERCOURSE: Indian Creek

4) DOCUMENT TYPE: Summery 100 - 500

00BREAK00

Summary - Indian Creek
100 - 500

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

INDIAN CREEK 500 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
6.200	1020.00	579.44	579.44	183.52	579.64	400.00	0.00	0.00	579.44	-1	-1	579.44
6.200	1390.00	579.80	579.80	249.77	579.99	400.00	0.00	0.00	579.44	0.00	0.00	579.44
7.000	1020.00	581.39	581.39	150.60	581.75	205.82	0.00	0.00	0.00	579.44	579.44	0.00
7.000	1390.00	581.79	581.79	196.48	582.21	277.11	0.00	0.00	0.00	579.44	579.44	0.00
7.100	1020.00	583.87	583.87	119.20	584.37	73.08	0.00	0.00	0.00	0.00	0.00	0.00
7.100	1390.00	584.46	584.46	156.11	585.07	74.51	0.00	0.00	0.00	0.00	0.00	0.00
7.980	1020.00	585.78	585.78	67.30	585.79	8.00	0.00	0.00	0.00	0.00	0.00	0.00
7.980	1390.00	587.51	587.51	311.69	587.85	75.00	0.00	0.00	0.00	0.00	0.00	0.00
8.080	1020.00	589.82	589.82	92.19	591.70	8.00	0.00	0.00	0.00	0.00	0.00	0.00
8.080	1390.00	596.50	596.50	3311.79	596.51	165.00	0.00	0.00	0.00	0.00	0.00	0.00
8.100	1020.00	591.97	591.97	1303.03	591.98	119.00	0.00	0.00	0.00	0.00	0.00	0.00
8.100	1390.00	596.50	596.50	2269.04	596.51	119.00	0.00	0.00	0.00	0.00	0.00	0.00
8.200	1020.00	592.01	592.01	2810.66	592.01	537.42	0.00	0.00	0.00	0.00	0.00	0.00
8.200	1390.00	596.52	596.52	6252.83	596.52	600.00	0.00	0.00	0.00	0.00	0.00	0.00
8.300	1020.00	592.03	592.03	1465.77	592.04	422.24	0.00	0.00	0.00	0.00	0.00	0.00
8.300	1390.00	596.53	596.53	4117.79	596.53	457.00	0.00	0.00	0.00	0.00	0.00	0.00
8.980	1020.00	592.04	592.04	1423.80	592.04	420.55	0.00	0.00	0.00	0.00	0.00	0.00
8.980	1390.00	596.53	596.53	4045.02	596.53	457.00	0.00	0.00	0.00	0.00	0.00	0.00
9.020	1020.00	592.36	592.36	1871.81	592.37	453.85	0.00	0.00	0.00	0.00	0.00	0.00
9.020	1390.00	596.58	596.58	4431.06	596.58	507.00	0.00	0.00	0.00	0.00	0.00	0.00
9.100	1020.00	592.37	592.37	1970.49	592.37	457.58	0.00	0.00	0.00	0.00	0.00	0.00
9.100	1390.00	596.58	596.58	4576.48	596.58	507.00	0.00	0.00	0.00	0.00	0.00	0.00
9.200	1020.00	592.37	592.37	635.89	592.40	175.00	0.00	0.00	0.00	0.00	0.00	0.00
9.200	1390.00	596.58	596.58	1719.30	596.59	175.00	0.00	0.00	0.00	0.00	0.00	0.00
9.210	1020.00	592.40	592.40	462.17	592.47	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.210	1390.00	596.58	596.58	1106.16	596.62	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.220	1020.00	592.52	592.52	478.00	592.59	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.220	1390.00	596.73	596.73	1133.58	596.77	100.00	0.00	0.00	0.00	0.00	0.00	0.00
9.300	1020.00	592.46	592.46	292.46	592.68	41.00	0.00	0.00	0.00	0.00	0.00	0.00
9.300	1390.00	596.77	596.77	1810.89	596.78	350.00	0.00	0.00	0.00	0.00	0.00	0.00
9.380	1020.00	592.42	592.42	226.98	592.88	24.00	0.00	0.00	0.00	0.00	0.00	0.00
9.380	1390.00	596.77	596.77	1880.16	596.79	350.00	0.00	0.00	0.00	0.00	0.00	0.00
9.420	1020.00	594.34	594.34	217.56	594.79	24.00	0.00	0.00	0.00	0.00	0.00	0.00
9.420	1390.00	596.97	596.97	1788.30	596.98	358.64	0.00	0.00	0.00	0.00	0.00	0.00

9.500	1020.00	594.82	594.82	566.21	594.88	101.00	0.00	0.00	0.00	0.00	0.00	0.00
9.500	1390.00	596.95	596.95	895.12	597.00	101.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
9.610	1020.00	595.13	595.13	921.74	595.14	322.93	0.00	0.00	0.00		0.00		0.00	0.00
9.610	1390.00	597.15	597.15	1748.95	597.16	407.44	0.00	0.00	0.00		0.00		0.00	0.00
9.620	1020.00	595.18	595.18	611.25	595.20	356.49	0.00	0.00	0.00		0.00		0.00	0.00
9.620	1390.00	597.17	597.17	1358.08	597.18	395.13	0.00	0.00	0.00		0.00		0.00	0.00
9.680	1020.00	595.21	595.21	618.92	595.22	356.98	0.00	0.00	0.00		0.00		0.00	0.00
9.680	1390.00	597.18	597.18	1358.08	597.19	395.13	0.00	0.00	0.00		0.00		0.00	0.00
9.720	1020.00	595.27	595.27	640.10	595.28	358.31	0.00	0.00	0.00		0.00		0.00	0.00
9.720	1390.00	597.26	597.26	1401.19	597.27	397.00	0.00	0.00	0.00		0.00		0.00	0.00
9.750	1020.00	595.28	595.28	610.06	595.29	356.42	0.00	0.00	0.00		0.00		0.00	0.00
9.750	1390.00	597.26	597.26	1353.90	597.27	394.95	0.00	0.00	0.00		0.00		0.00	0.00
9.840	1020.00	595.56	595.56	281.93	595.62	232.47	0.00	0.00	0.00		0.00		0.00	0.00
9.840	1390.00	597.37	597.37	616.44	597.40	293.35	0.00	0.00	0.00		0.00		0.00	0.00
9.850	1020.00	595.78	595.78	401.43	595.81	386.53	0.00	0.00	0.00		0.00		0.00	0.00
9.850	1390.00	597.46	597.46	889.81	597.47	428.44	0.00	0.00	0.00		0.00		0.00	0.00
9.880	1020.00	595.85	595.85	416.75	595.87	388.14	0.00	0.00	0.00		0.00		0.00	0.00
9.880	1390.00	597.48	597.48	898.28	597.50	429.05	0.00	0.00	0.00		0.00		0.00	0.00
9.920	1020.00	595.91	595.91	431.48	595.93	389.67	0.00	0.00	0.00		0.00		0.00	0.00
9.920	1390.00	597.56	597.56	926.97	597.57	431.09	0.00	0.00	0.00		0.00		0.00	0.00
9.930	1020.00	595.96	595.96	328.92	595.99	378.46	0.00	0.00	0.00		0.00		0.00	0.00
9.930	1390.00	597.58	597.58	762.74	597.59	418.92	0.00	0.00	0.00		0.00		0.00	0.00
9.940	1020.00	596.28	596.28	218.69	596.35	248.64	0.00	0.00	0.00		0.00		0.00	0.00
9.940	1390.00	597.69	597.69	456.50	597.73	274.72	0.00	0.00	0.00		0.00		0.00	0.00
9.950	1020.00	596.65	596.65	352.31	596.68	273.40	0.00	0.00	0.00		0.00		0.00	0.00
9.950	1390.00	597.88	597.88	612.74	597.91	290.80	0.00	0.00	0.00		0.00		0.00	0.00
9.960	1020.00	596.73	596.73	366.46	596.75	274.47	0.00	0.00	0.00		0.00		0.00	0.00
9.960	1390.00	597.93	597.93	624.03	597.95	291.47	0.00	0.00	0.00		0.00		0.00	0.00
9.970	1020.00	596.81	596.81	382.22	596.83	275.64	0.00	0.00	0.00		0.00		0.00	0.00
9.970	1390.00	598.03	598.03	648.89	598.05	292.93	0.00	0.00	0.00		0.00		0.00	0.00
9.980	1020.00	596.87	596.87	394.50	596.90	276.54	0.00	0.00	0.00		0.00		0.00	0.00
9.980	1390.00	598.07	598.07	659.01	598.09	293.51	0.00	0.00	0.00		0.00		0.00	0.00
9.990	695.00	597.29	597.29	191.98	597.33	281.53	0.00	0.00	0.00		0.00		0.00	0.00
9.990	950.00	598.32	598.32	383.25	598.35	318.53	0.00	0.00	0.00		0.00		0.00	0.00
10.000	695.00	598.00	598.00	177.94	598.04	278.03	0.00	0.00	0.00		0.00		0.00	0.00
10.000	950.00	598.70	598.70	297.55	598.74	303.52	0.00	0.00	0.00		0.00		0.00	0.00
10.010	695.00	598.95	598.95	200.77	598.98	283.57	0.00	0.00	0.00		0.00		0.00	0.00
10.010	950.00	599.44	599.44	286.59	599.48	301.44	0.00	0.00	0.00		0.00		0.00	0.00

SECTION	DISCHARGE	CWSEL	CVSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
SECTION	DISCHARGE	CWSEL												
10.040	695.00	600.09	600.09	136.51	600.19	162.10	0.00	0.00	0.00		0.00		0.00	0.00
10.040	950.00	600.54	600.54	182.24	600.66	175.67	0.00	0.00	0.00		0.00		0.00	0.00
10.050	695.00	601.47	601.47	186.07	601.54	176.72	0.00	0.00	0.00		0.00		0.00	0.00
10.050	950.00	601.99	601.99	248.41	602.07	192.35	0.00	0.00	0.00		0.00		0.00	0.00
10.100	695.00	602.98	602.98	53.07	603.47	128.21	0.00	0.00	0.00		0.00		0.00	0.00
10.100	950.00	603.24	603.24	68.73	603.82	135.89	0.00	0.00	0.00		0.00		0.00	0.00
10.180	695.00	603.79	603.79	368.02	603.81	150.00	0.00	0.00	0.00		0.00		0.00	0.00
10.180	950.00	604.21	604.21	431.88	604.25	150.00	0.00	0.00	0.00		0.00		0.00	0.00
10.220	695.00	605.71	605.71	504.01	605.73	166.86	0.00	0.00	0.00		0.00		0.00	0.00
10.220	950.00	606.07	606.07	564.63	606.09	188.39	0.00	0.00	0.00		0.00		0.00	0.00
10.300	695.00	605.72	605.72	325.21	605.76	152.68	0.00	0.00	0.00		0.00		0.00	0.00
10.300	950.00	606.08	606.08	374.32	606.13	156.17	0.00	0.00	0.00		0.00		0.00	0.00
10.350	695.00	605.78	605.78	281.15	605.82	149.32	0.00	0.00	0.00		0.00		0.00	0.00
10.350	950.00	606.16	606.16	329.86	606.22	153.02	0.00	0.00	0.00		0.00		0.00	0.00
10.380	695.00	605.85	605.85	132.22	605.98	115.90	0.00	0.00	0.00		0.00		0.00	0.00
10.380	950.00	606.26	606.26	163.44	606.42	122.99	0.00	0.00	0.00		0.00		0.00	0.00
10.420	695.00	607.26	607.26	229.75	607.31	134.51	0.00	0.00	0.00		0.00		0.00	0.00
10.420	950.00	607.84	607.84	297.87	607.90	141.72	0.00	0.00	0.00		0.00		0.00	0.00
10.450	695.00	607.32	607.32	173.25	607.38	131.06	0.00	0.00	0.00		0.00		0.00	0.00
10.450	950.00	607.90	607.90	227.22	607.98	138.75	0.00	0.00	0.00		0.00		0.00	0.00
11.000	695.00	607.95	607.95	324.13	607.97	153.99	0.00	0.00	0.00		0.00		0.00	0.00
11.000	950.00	608.61	608.61	413.35	608.65	154.32	0.00	0.00	0.00		0.00		0.00	0.00
11.500	695.00	608.66	608.66	230.57	608.70	153.61	0.00	0.00	0.00		0.00		0.00	0.00
11.500	950.00	609.39	609.39	315.23	609.43	153.96	0.00	0.00	0.00		0.00		0.00	0.00
11.900	695.00	609.46	609.46	208.61	609.50	153.51	0.00	0.00	0.00		0.00		0.00	0.00
11.900	950.00	610.17	610.17	289.61	610.23	153.86	0.00	0.00	0.00		0.00		0.00	0.00
11.980	695.00	609.68	609.68	117.41	609.81	116.67	0.00	0.00	0.00		0.00		0.00	0.00
11.980	950.00	610.38	610.38	170.03	610.52	117.00	0.00	0.00	0.00		0.00		0.00	0.00
12.020	695.00	612.70	612.70	150.20	612.89	73.92	0.00	0.00	0.00		0.00		0.00	0.00
12.020	950.00	613.33	613.33	186.58	613.58	78.94	0.00	0.00	0.00		0.00		0.00	0.00
12.100	695.00	613.06	613.06	100.92	613.44	95.11	0.00	0.00	0.00		0.00		0.00	0.00
12.100	950.00	613.75	613.75	136.78	614.15	146.96	0.00	0.00	0.00		0.00		0.00	0.00
12.180	695.00	613.44	613.44	109.08	613.76	108.60	0.00	0.00	0.00		0.00		0.00	0.00
12.180	950.00	614.15	614.15	150.31	614.48	158.76	0.00	0.00	0.00		0.00		0.00	0.00
12.220	695.00	613.92	613.92	358.14	613.95	204.08	0.00	0.00	0.00		0.00		0.00	0.00
12.220	950.00	614.55	614.55	456.83	614.57	206.79	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
12.300	695.00	613.96	613.96	240.17	614.01	200.35	0.00	0.00	0.00		0.00		0.00	0.00
12.300	950.00	614.59	614.59	324.00	614.64	203.07	0.00	0.00	0.00		0.00		0.00	0.00
12.400	695.00	615.38	615.38	134.52	615.51	226.40	0.00	0.00	0.00		0.00		0.00	0.00
12.400	950.00	615.96	615.96	198.15	616.08	248.51	0.00	0.00	0.00		0.00		0.00	0.00
12.480	695.00	615.70	615.70	229.74	615.75	257.94	0.00	0.00	0.00		0.00		0.00	0.00
12.480	950.00	616.25	616.25	309.91	616.30	278.99	0.00	0.00	0.00		0.00		0.00	0.00
12.520	695.00	615.77	615.77	349.08	615.79	259.71	0.00	0.00	0.00		0.00		0.00	0.00
12.520	950.00	616.34	616.34	438.11	616.36	284.26	0.00	0.00	0.00		0.00		0.00	0.00
12.600	695.00	615.78	615.78	169.58	615.85	193.53	0.00	0.00	0.00		0.00		0.00	0.00
12.600	950.00	616.35	616.35	227.69	616.42	218.59	0.00	0.00	0.00		0.00		0.00	0.00
12.700	695.00	616.89	616.89	107.24	617.07	158.69	0.00	0.00	0.00		0.00		0.00	0.00
12.700	950.00	617.47	617.47	150.37	617.63	183.96	0.00	0.00	0.00		0.00		0.00	0.00
12.900	695.00	618.39	618.39	145.69	618.46	297.91	0.00	0.00	0.00		0.00		0.00	0.00
12.900	950.00	618.86	618.86	207.69	618.94	337.97	0.00	0.00	0.00		0.00		0.00	0.00
13.000	490.00	619.58	619.58	82.44	619.69	187.39	0.00	0.00	0.00		0.00		0.00	0.00
13.000	685.00	619.99	619.99	114.62	620.11	220.04	0.00	0.00	0.00		0.00		0.00	0.00
13.050	490.00	621.37	621.37	83.05	621.48	188.08	0.00	0.00	0.00		0.00		0.00	0.00
13.050	685.00	621.80	621.80	115.57	621.92	273.91	0.00	0.00	0.00		0.00		0.00	0.00
13.060	490.00	623.26	623.26	75.08	623.48	231.63	0.00	0.00	0.00		0.00		0.00	0.00
13.060	685.00	623.67	623.67	107.66	623.87	285.15	0.00	0.00	0.00		0.00		0.00	0.00
13.100	490.00	625.21	625.21	85.98	625.37	251.65	0.00	0.00	0.00		0.00		0.00	0.00
13.100	685.00	625.58	625.58	118.52	625.75	299.77	0.00	0.00	0.00		0.00		0.00	0.00
13.180	490.00	625.51	625.51	230.69	625.53	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.180	685.00	625.89	625.89	282.82	625.92	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	490.00	625.60	625.60	244.54	625.62	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.220	685.00	626.00	626.00	298.17	626.02	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	490.00	625.62	625.62	195.57	625.64	213.00	0.00	0.00	0.00		0.00		0.00	0.00
13.300	685.00	626.02	626.02	246.16	626.06	213.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	490.00	625.73	625.73	86.48	625.86	261.00	0.00	0.00	0.00		0.00		0.00	0.00
14.000	685.00	626.17	626.17	129.09	626.28	261.00	0.00	0.00	0.00		0.00		0.00	0.00
14.980	490.00	626.00	626.00	154.40	626.07	159.93	0.00	0.00	0.00		0.00		0.00	0.00
14.980	685.00	626.40	626.40	189.98	626.50	174.80	0.00	0.00	0.00		0.00		0.00	0.00
15.020	490.00	626.12	626.12	164.49	626.18	164.37	0.00	0.00	0.00		0.00		0.00	0.00
15.020	685.00	626.53	626.53	201.89	626.61	179.35	0.00	0.00	0.00		0.00		0.00	0.00
15.100	490.00	626.16	626.16	121.15	626.27	143.69	0.00	0.00	0.00		0.00		0.00	0.00
15.100	685.00	626.58	626.58	152.48	626.71	159.07	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
16.000	490.00	627.02	627.02	56.96	627.34	80.73	0.00	0.00	0.00		0.00		0.00	0.00
16.000	685.00	627.57	627.57	80.47	627.93	115.09	0.00	0.00	0.00		0.00		0.00	0.00
16.100	490.00	628.23	628.23	76.32	628.44	106.12	0.00	0.00	0.00		0.00		0.00	0.00
16.100	685.00	628.79	628.79	107.69	629.01	110.23	0.00	0.00	0.00		0.00		0.00	0.00
16.980	490.00	628.74	628.74	71.95	628.97	105.47	0.00	0.00	0.00		0.00		0.00	0.00
16.980	685.00	629.29	629.29	101.64	629.54	109.50	0.00	0.00	0.00		0.00		0.00	0.00
17.020	490.00	630.27	630.27	206.27	630.30	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.020	685.00	630.64	630.64	252.99	630.68	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.100	490.00	630.29	630.29	208.81	630.32	225.00	0.00	0.00	0.00		0.00		0.00	0.00
17.100	685.00	630.67	630.67	256.69	630.71	225.00	0.00	0.00	0.00		0.00		0.00	0.00
18.000	490.00	630.67	630.67	191.65	630.71	155.92	0.00	0.00	0.00		0.00		0.00	0.00
18.000	685.00	631.14	631.14	242.99	631.20	181.59	0.00	0.00	0.00		0.00		0.00	0.00
18.900	490.00	631.01	631.01	205.62	631.06	94.68	0.00	0.00	0.00		0.00		0.00	0.00
18.900	685.00	631.56	631.56	254.94	631.63	100.61	0.00	0.00	0.00		0.00		0.00	0.00
18.980	490.00	631.07	631.07	120.86	631.19	45.00	0.00	0.00	0.00		0.00		0.00	0.00
18.980	685.00	631.63	631.63	150.50	631.81	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.080	490.00	631.08	631.08	127.65	631.20	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.080	685.00	631.71	631.71	163.97	631.89	45.00	0.00	0.00	0.00		0.00		0.00	0.00
19.100	490.00	631.16	631.16	100.08	631.30	83.28	0.00	0.00	0.00		0.00		0.00	0.00
19.100	685.00	631.83	631.83	139.59	631.99	118.49	0.00	0.00	0.00		0.00		0.00	0.00
20.000	490.00	632.40	632.40	63.67	632.57	240.51	0.00	0.00	0.00		0.00		0.00	0.00
20.000	685.00	632.94	632.94	110.70	633.05	255.00	0.00	0.00	0.00		0.00		0.00	0.00
20.100	490.00	633.00	633.00	45.88	633.48	140.92	0.00	0.00	0.00		0.00		0.00	0.00
20.100	685.00	633.28	633.28	58.04	633.88	142.64	0.00	0.00	0.00		0.00		0.00	0.00
20.980	490.00	634.03	634.03	90.21	634.17	147.64	0.00	0.00	0.00		0.00		0.00	0.00
20.980	685.00	634.50	634.50	124.00	634.65	150.00	0.00	0.00	0.00		0.00		0.00	0.00
21.020	490.00	634.55	634.55	95.69	634.70	152.79	0.00	0.00	0.00		0.00		0.00	0.00
21.020	685.00	634.86	634.86	116.28	635.06	184.01	0.00	0.00	0.00		0.00		0.00	0.00
21.100	490.00	634.68	634.68	97.69	634.83	156.77	0.00	0.00	0.00		0.00		0.00	0.00
21.100	685.00	635.05	635.05	122.84	635.23	186.16	0.00	0.00	0.00		0.00		0.00	0.00
22.000	490.00	635.36	635.36	97.60	635.47	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.000	685.00	635.84	635.84	133.92	635.95	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.980	490.00	635.69	635.69	138.70	635.74	164.00	0.00	0.00	0.00		0.00		0.00	0.00
22.980	685.00	636.19	636.19	183.92	636.25	164.00	0.00	0.00	0.00		0.00		0.00	0.00
23.020	490.00	636.75	636.75	342.82	636.76	165.00	0.00	0.00	0.00		0.00		0.00	0.00
23.020	685.00	637.18	637.18	405.41	637.20	165.00	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CRSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
23.100	490.00	636.75	636.75	229.31	636.77	165.00	0.00	0.00	0.00	0.00	0.00	0.00
23.100	685.00	637.19	637.19	282.46	637.22	165.00	0.00	0.00	0.00	0.00	0.00	0.00
23.200	490.00	637.17	637.17	120.44	637.24	165.00	0.00	0.00	0.00	0.00	0.00	0.00
23.200	685.00	637.69	637.69	168.80	637.76	165.00	0.00	0.00	0.00	0.00	0.00	0.00
23.900	490.00	638.26	638.26	95.39	638.40	89.14	0.00	0.00	0.00	0.00	0.00	0.00
23.900	685.00	638.81	638.81	126.13	638.98	124.49	0.00	0.00	0.00	0.00	0.00	0.00
24.000	490.00	639.73	639.73	94.23	639.87	88.55	0.00	0.00	0.00	0.00	0.00	0.00
24.000	685.00	640.39	640.39	130.95	640.54	130.11	0.00	0.00	0.00	0.00	0.00	0.00
24.100	490.00	641.33	641.33	109.13	641.44	103.16	0.00	0.00	0.00	0.00	0.00	0.00
24.100	685.00	642.00	642.00	153.05	642.12	150.00	0.00	0.00	0.00	0.00	0.00	0.00
24.900	490.00	643.26	643.26	66.90	643.62	104.21	0.00	0.00	0.00	0.00	0.00	0.00
24.900	685.00	643.88	643.88	96.81	644.23	150.00	0.00	0.00	0.00	0.00	0.00	0.00
24.950	490.00	644.57	644.57	102.74	644.73	150.00	0.00	0.00	0.00	0.00	0.00	0.00
24.950	685.00	645.14	645.14	145.46	645.30	150.00	0.00	0.00	0.00	0.00	0.00	0.00
25.000	490.00	645.28	645.28	110.36	645.42	150.00	0.00	0.00	0.00	0.00	0.00	0.00
25.000	685.00	645.84	645.84	154.29	645.98	150.00	0.00	0.00	0.00	0.00	0.00	0.00
25.020	490.00	645.36	645.36	84.63	645.59	135.12	0.00	0.00	0.00	0.00	0.00	0.00
25.020	685.00	645.92	645.92	121.03	646.15	150.00	0.00	0.00	0.00	0.00	0.00	0.00
25.050	490.00	645.53	645.53	65.46	645.89	101.35	0.00	0.00	0.00	0.00	0.00	0.00
25.050	685.00	646.05	646.05	89.42	646.47	142.36	0.00	0.00	0.00	0.00	0.00	0.00
25.100	490.00	646.23	646.23	51.48	646.76	69.33	0.00	0.00	0.00	0.00	0.00	0.00
25.100	685.00	646.76	646.76	70.78	647.38	111.65	0.00	0.00	0.00	0.00	0.00	0.00
25.150	490.00	647.28	647.28	50.08	647.84	65.64	0.00	0.00	0.00	0.00	0.00	0.00
25.150	685.00	647.84	647.84	70.02	648.48	110.22	0.00	0.00	0.00	0.00	0.00	0.00
25.200	490.00	648.38	648.38	50.08	648.94	65.64	0.00	0.00	0.00	0.00	0.00	0.00
25.200	685.00	648.94	648.94	69.68	649.58	109.58	0.00	0.00	0.00	0.00	0.00	0.00
25.250	490.00	649.48	649.48	50.11	650.04	65.69	0.00	0.00	0.00	0.00	0.00	0.00
25.250	685.00	650.05	650.05	70.03	650.69	110.25	0.00	0.00	0.00	0.00	0.00	0.00
25.300	490.00	650.58	650.58	50.13	651.14	65.75	0.00	0.00	0.00	0.00	0.00	0.00
25.300	685.00	651.15	651.15	70.30	651.79	110.75	0.00	0.00	0.00	0.00	0.00	0.00
25.350	490.00	651.68	651.68	50.12	652.24	65.72	0.00	0.00	0.00	0.00	0.00	0.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter drain and Bragdon ditch

4) DOCUMENT TYPE: 10 yr.

00BREAK00

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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  HUD-FIA H-4705
T2  BEDFORD TWP FIS
T3      BRAGDEN DITCH   10 YEAR FLOW = 295 CFS

J1  ICHECK     INQ       NINV      IDIR       STRT      METRIC     HVINS      Q          WSEL       FQ

       -1.       2.        0.        0.   .002200        0.00       1.0       0.   597.300      0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000     0.000     0.000     0.000
NC       .080     .080      .040      .100      .300     0.000     0.000     0.000     0.000     0.000
QT      5.000   295.000   440.000   515.000   715.000   515.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1      1.210    12.000  1355.000  1365.000     0.000     0.000     0.000     0.000     0.000     0.000
GR    604.000  1045.000   599.000  1115.000   597.000  1180.000   596.000  1195.000   595.100  1335.000
GR    595.000  1355.000   593.800  1360.000   595.000  1365.000   596.600  1375.000   597.000  1410.000
GR    600.000  1515.000   605.000  1585.000     0.000     0.000     0.000     0.000     0.000     0.000

X1      1.330    15.000  1185.000  1205.000   450.000   450.000   450.000     0.000     0.000     0.000
GR    607.000  1000.000   606.000  1015.000   605.000  1040.000   600.000  1080.000   599.000  1085.000
GR    598.000  1105.000   597.000  1125.000   596.000  1185.000   594.000  1190.000   596.000  1195.000
GR    597.000  1205.000   598.000  1250.000   599.000  1270.000   600.000  1275.000   605.000  1315.000

X1      1.340    14.000  1215.000  1235.000   450.000   450.000   450.000     0.000     0.000     0.000
GR    610.000  1000.000   609.000  1075.000   605.000  1110.000   600.000  1160.000   599.000  1175.000
GR    598.000  1215.000   596.000  1220.000   594.500  1225.000   597.000  1230.000   598.000  1235.000
GR    599.000  1315.000   600.000  1330.000   605.000  1370.000   610.000  1460.000     0.000     0.000

X1      1.350    14.000  1200.000  1240.000   350.000   350.000   350.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   605.000   605.000     0.000
GR    613.000  1000.000   612.000  1015.000   611.000  1040.000   610.000  1045.000   605.000  1075.000
GR    602.000  1100.000   599.000  1200.000   598.000  1210.000   595.000  1225.000   600.000  1240.000
GR    602.000  1280.000   610.000  1350.000   611.000  1380.000   612.000  1450.000     0.000     0.000
NC      0.000     0.000     0.000      .200      .400     0.000     0.000     0.000     0.000     0.000

X1      1.380    15.000  1218.000  1231.000    50.000    50.000    50.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   606.000   606.000     0.000
GR    613.000  1000.000   612.000  1015.000   611.000  1040.000   610.000  1045.000   605.000  1075.000
GR    602.000  1100.000   599.000  1205.000   598.000  1210.000   597.200  1218.000   597.200  1231.000
GR    600.000  1235.000   602.000  1280.000   610.000  1350.000   611.000  1380.000   612.000  1450.000
SB      0.000     2.800     2.700   300.000    12.850     0.000    36.000     0.000   597.200   597.200

X1      1.420    10.000   141.000   154.000   116.000   116.000   116.000     0.000     0.000     0.000
X2      0.000     0.000     1.000   600.000   610.300     0.000     0.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000   610.300   610.300     0.000
GR    606.200     0.000   604.700    15.000   600.100    69.000   599.400   132.000   597.200   141.000
GR    597.200   145.000   597.200   152.000   600.000   154.000   599.100   226.000   606.200   259.000

X1     15.750    10.000   132.000   155.000   100.000   100.000   100.000     0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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GR	604.000	22.000	604.000	23.000	600.100	69.000	599.400	132.000	597.400	140.000
GR	597.200	145.000	597.500	152.000	600.000	155.000	604.000	236.000	604.000	237.000
NC	.050	.050	.045	.100	.300	0.000	0.000	0.000	0.000	0.000
X1	18.000	7.000	131.000	158.000	510.000	510.000	510.000	0.000	0.000	0.000
GR	607.300	0.000	601.800	50.000	600.800	131.000	597.800	143.000	601.300	158.000
GR	601.300	265.000	605.700	282.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	100.980	8.000	131.000	158.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	602.000	602.000	0.000
GR	607.300	0.000	601.800	50.000	600.800	131.000	598.000	143.000	598.000	148.000
GR	601.300	158.000	601.300	265.000	605.700	282.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	0.000	3.140	0.000	12.570	0.000	598.000	598.000
X1	101.020	8.000	127.000	158.000	30.000	30.000	30.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	602.000	603.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.000	.300	3.300
BT	15.000	0.000	609.900	0.000	50.000	609.100	0.000	130.000	604.100	0.000
BT	192.000	603.800	0.000	196.000	603.300	0.000	196.400	603.300	0.000	197.200
BT	603.300	0.000	198.000	603.300	0.000	198.800	603.300	0.000	199.600	603.300
BT	0.000	200.000	603.300	0.000	206.000	604.400	0.000	315.000	606.400	0.000
BT	375.000	608.800	0.000	400.000	610.500	0.000	0.000	0.000	0.000	0.000
GR	608.800	0.000	605.300	32.000	602.300	127.000	598.000	143.000	598.000	148.000
GR	604.000	158.000	605.000	298.000	608.800	329.000	0.000	0.000	0.000	0.000
X1	101.210	7.000	127.000	158.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	608.800	0.000	605.300	32.000	602.300	127.000	598.200	138.000	604.000	158.000
GR	605.000	298.000	608.800	329.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	101.900	12.000	188.000	215.000	330.000	330.000	330.000	0.000	-.100	0.000
GR	611.100	0.000	610.100	40.000	608.100	57.000	605.000	100.000	602.700	188.000
GR	599.400	196.000	598.900	200.000	599.300	203.000	604.500	215.000	607.800	288.000
GR	611.500	320.000	613.100	372.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	101.950	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.050	.050	.050	.050	.050	0.000	0.000	0.000	0.000
X1	102.000	0.000	0.000	0.000	49.000	49.000	49.000	0.000	.100	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	102.260	12.000	188.000	215.000	194.000	194.000	194.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.400	603.400	0.000
GR	611.100	0.000	610.100	40.000	608.100	57.000	605.000	100.000	602.700	188.000
GR	599.400	194.000	599.400	200.000	599.400	204.000	604.500	215.000	607.800	288.000
GR	611.500	320.000	613.100	372.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	250.000	3.140	0.000	12.570	0.000	599.400	599.400
X1	102.280	12.000	188.000	215.000	12.000	12.000	12.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	603.400	603.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.900	603.900	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	599.400	194.000	599.400	200.000	599.900	210.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	102.500	12.000	188.000	215.000	94.000	94.000	94.000	0.000	0.000	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	600.000	196.000	599.500	200.000	599.900	203.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

X1	102.980	12.000	188.000	215.000	70.000	70.000	70.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.800	603.800	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	599.800	194.000	599.800	200.000	599.900	210.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.700	2.800	250.000	3.140	0.000	12.570	0.000	599.800	599.800
X1	103.020	8.000	185.000	215.000	59.000	59.000	59.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	603.800	609.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.200	609.200	0.000
GR	609.300	0.000	607.200	50.000	605.400	100.000	604.700	185.000	599.800	197.000
GR	599.800	205.000	604.100	215.000	611.700	298.000	0.000	0.000	0.000	0.000
X1	103.290	7.000	185.000	215.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	609.300	0.000	607.200	50.000	605.400	100.000	604.700	185.000	600.100	200.000
GR	604.100	215.000	611.700	298.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.060	.060	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	104.000	11.000	230.000	268.000	370.000	370.000	370.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.400	0.000	0.000
GR	608.500	0.000	607.300	50.000	605.300	150.000	608.400	208.000	606.500	230.000
GR	601.700	247.000	601.700	251.000	608.700	268.000	610.100	300.000	612.300	370.000
GR	612.800	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	104.500	0.000	0.000	0.000	330.000	330.000	330.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.300	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	104.980	11.000	230.000	268.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	606.600	606.600	0.000
GR	608.500	0.000	607.300	50.000	605.300	150.000	608.400	208.000	606.500	230.000
GR	601.600	245.000	601.600	254.000	608.700	268.000	610.100	300.000	612.300	370.000
GR	612.800	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.800	2.800	0.000	5.040	0.000	25.200	0.000	601.600	601.600
X1	105.020	9.000	186.000	216.000	81.000	81.000	81.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.600	607.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.600	607.800	0.000
BT	15.000	0.000	613.600	0.000	100.000	610.500	0.000	183.000	607.300	0.000
BT	193.000	607.500	0.000	196.750	607.600	0.000	197.500	607.700	0.000	198.500
BT	607.700	0.000	200.000	607.800	0.000	201.500	607.800	0.000	202.500	607.900
BT	0.000	203.250	607.900	0.000	204.000	608.000	0.000	217.000	608.500	0.000
BT	300.000	610.300	0.000	400.000	611.600	0.000	0.000	0.000	0.000	0.000
GR	611.900	0.000	608.700	60.000	607.300	115.000	606.900	173.000	606.200	186.000
GR	601.600	190.000	601.600	200.000	607.200	216.000	610.900	336.000	0.000	0.000
X1	105.410	8.000	186.000	216.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	611.900	0.000	608.700	60.000	607.300	115.000	606.900	173.000	606.200	186.000
GR	601.900	200.000	607.200	216.000	610.900	336.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	105.480	7.000	183.000	221.000	950.000	950.000	950.000	0.000	0.000	0.000
GR	612.800	0.000	610.300	100.000	610.200	183.000	604.600	200.000	611.500	221.000
GR	612.600	300.000	612.900	320.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	105.980	8.000	183.000	221.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.900	608.900	0.000
GR	612.800	0.000	610.300	100.000	610.200	183.000	604.900	190.000	604.900	200.000
GR	611.500	221.000	612.600	300.000	612.900	320.000	0.000	0.000	0.000	0.000

SB	0.000	1.200	2.900	125.000	3.140	0.000	12.570	0.000	604.900	604.900
X1	106.020	8.000	79.000	120.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	608.900	610.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.000	611.000	0.000
GR	614.600	0.000	613.200	79.000	604.900	100.000	604.900	110.000	611.000	120.000
GR	611.600	200.000	612.700	280.000	614.600	300.000	0.000	0.000	0.000	0.000
X1	106.530	7.000	79.000	120.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	614.600	0.000	613.200	79.000	605.200	100.000	611.000	120.000	611.600	200.000
GR	612.700	280.000	614.600	300.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	106.580	6.000	79.000	120.000	1080.000	1080.000	1080.000	0.000	0.000	0.000
GR	621.600	0.000	616.000	79.000	608.000	100.000	613.900	120.000	614.400	200.000
GR	615.500	380.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	106.590	0.000	0.000	0.000	820.000	820.000	820.000	0.000	2.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	255.000	380.000	450.000	620.000	450.000	0.000	0.000	0.000	0.000
X1	106.980	7.000	79.000	120.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.900	615.900	0.000
GR	624.000	0.000	618.000	79.000	610.400	90.000	610.400	107.000	616.300	120.000
GR	616.800	200.000	618.500	380.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.700	600.000	7.500	0.000	41.250	0.000	610.400	610.400
X1	107.020	16.000	550.000	568.000	33.500	33.500	33.500	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.900	618.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	618.500	618.500	0.000
GR	621.400	0.000	620.500	100.000	618.100	200.000	616.400	300.000	614.400	400.000
GR	613.200	500.000	612.900	550.000	610.400	555.000	610.400	562.000	610.400	567.000
GR	613.000	568.000	614.500	584.000	613.900	602.000	616.100	700.000	619.500	800.000
GR	619.700	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.065	.065	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	107.100	16.000	550.000	568.000	100.000	100.000	100.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	614.800	0.000
GR	621.400	0.000	620.500	100.000	618.100	200.000	616.400	300.000	614.400	400.000
GR	613.200	500.000	612.900	550.000	610.800	558.000	610.400	562.000	610.500	565.000
GR	613.000	568.000	614.500	584.000	613.900	602.000	616.100	700.000	619.500	800.000
GR	619.700	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000
NH	5.000	.065	500.000	.100	550.000	.055	568.000	.100	600.000	.065
NH	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	108.000	0.000	0.000	0.000	890.000	890.000	890.000	0.000	2.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	617.100	0.000
NC	.045	.045	.040	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	109.000	15.000	367.000	396.000	2350.000	2350.000	2350.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	622.400	0.000	621.200	100.000	620.700	200.000	620.600	300.000	619.800	367.000
GR	619.300	373.000	617.400	376.000	617.000	380.000	616.700	384.000	617.000	388.000
GR	619.300	396.000	619.300	397.000	619.400	500.000	619.500	600.000	620.700	700.000
X1	109.050	9.000	870.000	890.000	300.000	300.000	300.000	0.000	0.000	0.000
GR	625.000	500.000	621.900	502.000	620.000	800.000	619.800	870.000	617.300	875.000
GR	617.300	885.000	619.800	890.000	620.000	900.000	625.000	1220.000	0.000	0.000
X1	109.100	16.000	770.000	799.000	1160.000	1160.000	1160.000	0.000	0.000	0.000

GR	630.000	0.000	625.500	10.000	625.000	650.000	623.500	750.000	622.500	770.000
GR	620.400	780.000	620.200	781.000	619.500	783.000	620.200	785.000	620.400	788.000
GR	622.500	799.000	623.500	871.000	624.400	950.000	626.600	1116.000	629.500	1177.000
GR	633.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	109.980	16.000	770.000	799.000	115.000	115.000	115.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	623.800	623.800	0.000
GR	630.000	0.000	625.500	10.000	625.000	650.000	623.500	750.000	622.500	770.000
GR	620.500	780.000	620.500	781.000	620.500	783.000	620.500	785.000	620.500	788.000
GR	622.500	799.000	623.500	871.000	624.400	950.000	626.600	1116.000	629.500	1177.000
GR	633.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.900	3.000	0.000	5.340	0.000	17.100	0.000	620.500	620.500
X1	110.020	14.000	112.000	143.000	72.000	72.000	72.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	623.800	625.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	625.900	625.900	0.000
BT	21.000	0.000	630.000	0.000	10.000	627.000	0.000	600.000	626.700	0.000
BT	700.000	626.200	0.000	750.000	626.000	0.000	790.000	625.900	0.000	795.000
BT	625.900	0.000	797.000	625.900	0.000	797.600	625.900	0.000	797.900	625.900
BT	0.000	800.000	625.900	0.000	802.100	625.900	0.000	802.400	625.900	0.000
BT	803.000	625.900	0.000	805.000	625.900	0.000	812.000	625.900	0.000	822.000
BT	625.900	0.000	850.000	625.900	0.000	900.000	626.000	0.000	1000.000	627.700
BT	0.000	1100.000	631.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	120.000
GR	620.700	122.000	620.500	126.000	620.700	130.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
X1	110.050	14.000	112.000	143.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	123.000
GR	621.100	124.000	620.700	126.000	621.100	128.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
X1	110.100	0.000	0.000	0.000	160.000	160.000	160.000	0.000	.400	0.000
X1	110.200	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.180	.250	.250	.370	.250	0.000	0.000	0.000	0.000
X1	110.980	14.000	112.000	143.000	180.000	180.000	180.000	0.000	1.700	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	626.200	626.200	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	120.000
GR	620.700	122.000	620.500	126.000	620.700	130.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
SB	0.000	1.700	2.900	0.000	3.140	0.000	12.570	0.000	622.200	622.200
X1	111.020	18.000	167.000	207.000	38.000	38.000	38.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	626.200	629.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	629.300	629.300	0.000
BT	23.000	0.000	632.000	0.000	100.000	632.000	0.000	200.000	631.300	0.000
BT	300.000	630.100	0.000	350.000	629.600	0.000	362.000	629.500	0.000	386.000
BT	629.300	0.000	396.000	629.300	0.000	398.000	629.300	0.000	398.200	629.300
BT	0.000	398.800	629.300	0.000	400.000	629.300	0.000	401.200	629.300	0.000
BT	401.800	629.300	0.000	402.000	629.300	0.000	403.000	629.300	0.000	410.000
BT	629.400	0.000	420.000	629.500	0.000	443.000	629.600	0.000	458.000	629.700
BT	0.000	500.000	630.100	0.000	600.000	631.600	0.000	680.000	631.700	0.000
GR	632.100	0.000	630.800	63.000	629.600	78.000	628.100	167.000	626.800	178.000
GR	623.400	180.000	623.000	181.000	622.200	183.000	622.200	192.000	622.200	193.000
GR	623.300	194.000	623.500	197.000	626.600	207.000	627.000	245.000	628.700	299.000
GR	630.600	335.000	632.600	349.000	632.800	400.000	0.000	0.000	0.000	0.000
X1	111.100	18.000	167.000	207.000	50.000	50.000	50.000	0.000	0.000	0.000

GR	632.100	0.000	630.800	63.000	629.600	78.000	628.100	167.000	626.800	178.000
GP	623.400	187.000	623.000	190.000	622.300	191.000	622.400	192.000	622.400	193.000
GR	623.300	194.000	623.500	197.000	626.600	207.000	627.000	245.000	628.700	299.000
GR	630.600	335.000	632.600	349.000	632.800	400.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	111.200	11.000	140.000	173.000	510.000	510.000	510.000	0.000	0.000	0.000
GR	629.200	0.000	627.600	140.000	625.900	146.000	624.900	148.000	624.400	153.000
GR	624.500	162.000	624.900	165.000	625.200	167.000	627.700	173.000	629.900	300.000
GR	631.800	340.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	111.280	11.000	140.000	173.000	142.000	142.000	142.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	626.300	626.300	0.000
GR	629.200	0.000	627.600	140.000	625.900	146.000	624.900	148.000	624.300	153.000
GR	624.300	162.000	624.900	165.000	625.200	167.000	627.700	173.000	629.900	300.000
GR	631.800	340.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.700	0.000	2.440	0.000	4.880	0.000	624.300	624.300
X1	111.320	12.000	194.000	236.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	626.300	627.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	627.800	627.800	0.000
BT	20.000	0.000	630.900	0.000	90.000	629.000	0.000	100.000	628.800	0.000
BT	134.000	628.000	0.000	139.000	627.900	0.000	143.000	627.800	0.000	143.500
BT	627.800	0.000	143.600	627.800	0.000	144.100	627.800	0.000	145.000	627.800
BT	0.000	145.900	627.800	0.000	146.400	627.800	0.000	146.500	627.800	0.000
BT	147.000	627.800	0.000	150.000	627.800	0.000	161.000	627.900	0.000	195.000
BT	628.000	0.000	200.000	628.000	0.000	230.000	628.200	0.000	340.000	631.900
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	631.000	0.000	629.000	89.000	627.000	194.000	625.900	200.000	624.300	205.000
GR	624.300	209.000	624.300	214.000	624.300	218.000	625.100	225.000	626.600	236.000
GR	628.900	300.000	630.000	340.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	111.400	12.000	194.000	236.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	631.000	0.000	629.000	89.000	627.000	194.000	625.900	200.000	624.100	204.000
GR	624.400	209.000	624.200	214.000	624.300	221.000	625.100	225.000	626.600	236.000
GR	628.900	300.000	630.000	340.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	112.000	10.000	200.000	228.000	640.000	640.000	640.000	0.000	0.000	0.000
GR	632.600	0.000	629.500	100.000	627.200	200.000	625.600	207.000	624.700	210.000
GR	624.700	222.000	627.700	228.000	628.200	248.000	629.300	327.000	630.200	400.000
X1	112.100	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.010	.020	.020	.020	.020	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Bragdon Ditch

4) DOCUMENT TYPE: 100 yr.

00BREAK00

JOB NO. UM1158 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 13:03:31 . 07-09-79

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                  TT
MM MM    MM MM  NN NN       NN  EE                  TT
MM  MMMM  MM    NN  NN      NN  EE                  TT
MM   MM   MM    NN   NN     NN  EEEEEEEE            TT
MM        MM    NN    NN    NN  EEEEEEEE            TT
MM        MM    NN     NN   NN  EE                  TT
MM        MM    NN      NN  NN  EE                  TT
MM        MM    NN       NNNN  EE                  TT
MM        MM    NN        NNN  EE                  TT
MM        MM    NN         NN  EEEEEEEEEEEE        TT
MM        MM    NN          N  EEEEEEEEEEEE        TT

XX        XX     SSSSSSSSS   NN          NN  LL
XX        XX    SSSSSSSSSSS  NNN         NN  LL
 XX      XX     SS         SS NNNN        NN  LL
  XX    XX      SS            NN NN       NN  LL
   XX  XX       SSS           NN  NN      NN  LL
    XXXX         SSSSSSSSS    NN   NN     NN  LL
    XXXX          SSSSSSSSS   NN    NN    NN  LL
   XX  XX               SSS  NN     NN NN  LL
  XX    XX              SS   NN      NNNN  LL
 XX      XX    SS        SS   NN       NNN  LL
XX        XX   SSSSSSSSSSS   NN        NN  LLLLLLLLLLL
XX        XX    SSSSSSSSS    NN         N  LLLLLLLLLLL
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FWA OF THE LOAD 111
LWA+1 OF THE LOAD 55556

TRANSFER ADDRESS -- HEC2 17057

PROGRAM AND BLOCK ASSIGNMENTS.

BLOCK	ADDRESS	LENGTH	FILE	DATE	PROCSSR VER LEVEL	HARDWARE	COMMENTS
/HEC2A/	111	2112					
/HEC2B/	2223	4602					
/ALPHA/	7025	102					
/HEC2C/	7127	67					
/HEC2D/	7216	70					
/HEC2E/	7306	77					
/HEC2F/	7405	77					
/HEC2G/	7504	65					
/HEC2H/	7571	66					
/HEC2I/	7657	72					
/HEC2J/	7751	115					
HEC2	10066	20143	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
CARD	30231	1677	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
SUMPQ	32130	1071	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
CHIMP	33221	1664	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
DC	35105	725	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
FLODIS	36032	433	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
BLFLO	36465	1043	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
ADDPTS	37530	330	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
BWEIR	40060	1360	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
YCRIT	41440	120	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
SLARA	41560	310	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
SCALE	42070	232	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
XSEC	42322	1256	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
PROF	43600	1142	OBJ	08/16/76	FTN 4.6 420	6464 I	OPT=1
/STP.END/	44742	1					
/FCL.C./	44743	23					
/CONECIO/	44766	0					
/EXECMSG/	44766	0					
/Q8.IO./	44766	214					
Q8NTRY=	45202	14	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		FCL INITIALIZATION ROUTINE.
COMIO=	45216	100	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		COMMON CODED I/O ROUTINES AND CONSTANTS.LSD
ENDFIL=	45316	64	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		WRITE END OF LOGICAL FILE MARK. LSD
FECMSK=	45402	41	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		INITIALIZE CONSTANTS.
FLTOUT=	45443	311	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		COMMON FLOATING OUTPUT CODE LSD 48.19
FORSYS=	45754	630	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		FORTRAN OBJECT LIBRARY UTILITIES. LSD
INCOM=	46604	302	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		LSD 48.19 COMMON INPUT FORMATTING CODE
INPC=	47106	163	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		FORMATTED READ FORTRAN RECORD.LSD 48.19
KODER=	47271	456	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		OUTPUT FORMAT INTERPRETER. LSD 48.19
OUTC=	47747	203	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		FORMATTED WRITE FORTRAN RECORD. LSD
SYS=1ST	50152	62	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		MATH LIBRARY LINK TO ERROR MESSAGE PROCESSO
XTOY=	50234	7	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		REAL TO REAL EXPONENTIATION. LSD 48.19
FLTIN=	50243	154	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		COMMON FLOATING INPUT CONVERTER. LSD
FMTAP=	50417	353	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		CRACK APLIST AND FORMAT FOR KODER/KRAKER.
FORUTL=	50772	16	SL-FORTRAN	05/11/79	COMPASS 3.5 79041		LSD 48.19 FCL MISC. UTILITIES.

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GETFIT=      51010      42  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   LOCATE AN FIT GIVEN A FILE NAME.          LSD
/IO.BUF./    51052     227
INPB=        51301     321  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   BINARY READ FORTRAN RECORD.   LSD 48.19
KRAKER=      51622     425  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   PROCESS FORMATTED FORTRAN INPUT.          LSD
OUTB=        52247     210  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   BINARY WRITE FORTRAN RECORD.  LSD 48.19
OUTCOM=      52457     154  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   COMMON OUTPUT CODE  LSD 48.19
REWIND=      52633      37  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   POSITION FILE AT BEGINNING-OF-INFORMATION.
GOTOER=      52672      14  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   COMPUTED GO TO ERROR PROCESSOR.           LSD
ALOG         52706      73  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   COMPUTE COMMON AND NATURAL LOGARITHMS. OPT=
EXP          53001      73  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   EXPONENTIAL FUNCTION. E TO POWER X. OPT=ALL
ITOJ=        53074      16  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   INTEGER TO INTEGER EXPONENTIATION.        LSD
SYSAID=      53112       1  SL-FORTRAN  05/11/79 COMPASS 3.5 79041   LINK BETWEEN SYS=AID AND INITIALIZATION COD
CPUSYS       53113      36  SL-SYSIO    03/27/76
/MSU=RMC/    53151      36
MSU=GP       53207     317  SL-SYSIO    01/26/79 COMPASS 3.5 470     GET/PUT CONTROL - MSU RECORD MANAGER.
MSU=GZ       53526      44  SL-SYSIO    01/26/79 COMPASS 3.5 470     GET Z RECORDS - MSU RECORD MANAGER.
MSU=W        53572     474  SL-SYSIO    01/26/79 COMPASS 3.5 470     W RECORD SUPPORT - MSURM
CIO=         54266      16  SL-SYSIO    07/07/79 COMPASS 3.5 79041   ISSUE CIO CALLS.
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RDH=	54304	37	SL-SYSIO	07/07/79 COMPASS 3.5 79041	READ A LINE IN H FORMAT.
RDX=	54343	30	SL-SYSIO	07/07/79 COMPASS 3.5 79041	READ EXIT PROCESSING.
WTW=	54373	50	SL-SYSIO	07/07/79 COMPASS 3.5 79041	WRITE WORDS.
MSU=RM	54443	565	SL-SYSIO	01/26/79 COMPASS 3.5 470	MSU RECORD MANAGER.
MSU=SKF	55230	35	SL-SYSIO	01/26/79 COMPASS 3.5 470	SKIP FORWARD - MSU RECORD MANAGER.
MSU=SKU	55265	27	SL-SYSIO	01/26/79 COMPASS 3.5 470	SKIP BACKWARD UTILITY ROUTINES.
MSU=PZ	55314	33	SL-SYSIO	01/26/79 COMPASS 3.5 470	PUT Z RECORDS - MSU RECORD MANAGER
CFS=	55347	47	SL-SYSIO	07/07/79 COMPASS 3.5 79041	CHECK FILE STATUS.
RDW=	55416	66	SL-SYSIO		
WTH=	55504	30	SL-SYSIO		
WTX=	55534	22	SL-SYSIO		

2.853 CP SECONDS 76300B CM STORAGE USED 67 TABLE MOVES

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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  HUD-FIA H-4705
T2  BEDFORD TWP FIS
T3      BRAGDEN DITCH   100 YEAR FLOW = 515 CFS

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

       -1.        4.         0.         0.   .002200       0.00       1.0        0.   597.300      0.000

J3      1.000     34.000      3.000      4.000     27.000     28.000      9.000      0.000      0.000      0.000
NC       .080      .080       .040       .100       .300      0.000      0.000      0.000      0.000      0.000
QT      5.000    295.000    440.000    515.000    715.000    515.000      0.000      0.000      0.000      0.000
ET      0.000      0.000      0.000      0.000      0.000      1.400      0.000      0.000      0.000      0.000

X1      1.210     12.000   1355.000   1365.000      0.000      0.000      0.000      0.000      0.000      0.000
GR    604.000   1045.000    599.000   1115.000    597.000   1180.000    596.000   1195.000    595.100   1335.000
GR    595.000   1355.000    593.800   1360.000    595.000   1365.000    596.600   1375.000    597.000   1410.000
GR    600.000   1515.000    605.000   1585.000      0.000      0.000      0.000      0.000      0.000      0.000

X1      1.330     15.000   1185.000   1205.000    450.000    450.000    450.000      0.000      0.000      0.000
GR    607.000   1000.000    606.000   1015.000    605.000   1040.000    600.000   1080.000    599.000   1085.000
GR    598.000   1105.000    597.000   1125.000    596.000   1185.000    594.000   1190.000    596.000   1195.000
GR    597.000   1205.000    598.000   1250.000    599.000   1270.000    600.000   1275.000    605.000   1315.000

X1      1.340     14.000   1215.000   1235.000    450.000    450.000    450.000      0.000      0.000      0.000
GR    610.000   1000.000    609.000   1075.000    605.000   1110.000    600.000   1160.000    599.000   1175.000
GR    598.000   1215.000    596.000   1220.000    594.500   1225.000    597.000   1230.000    598.000   1235.000
GR    599.000   1315.000    600.000   1330.000    605.000   1370.000    610.000   1460.000      0.000      0.000

X1      1.350     14.000   1200.000   1240.000    350.000    350.000    350.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    605.000    605.000      0.000
GR    613.000   1000.000    612.000   1015.000    611.000   1040.000    610.000   1045.000    605.000   1075.000
GR    602.000   1100.000    599.000   1200.000    598.000   1210.000    595.000   1225.000    600.000   1240.000
GR    602.000   1280.000    610.000   1350.000    611.000   1380.000    612.000   1450.000      0.000      0.000
NC      0.000      0.000      0.000       .200       .400      0.000      0.000      0.000      0.000      0.000

X1      1.380     15.000   1218.000   1231.000     50.000     50.000     50.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    606.000    606.000      0.000
GR    613.000   1000.000    612.000   1015.000    611.000   1040.000    610.000   1045.000    605.000   1075.000
GR    602.000   1100.000    599.000   1205.000    598.000   1210.000    597.200   1218.000    597.200   1231.000
GR    600.000   1235.000    602.000   1280.000    610.000   1350.000    611.000   1380.000    612.000   1450.000
SB      0.000      2.800      2.700    300.000     12.850      0.000     36.000      0.000    597.200    597.200

X1      1.420     10.000    141.000    154.000    116.000    116.000    116.000      0.000      0.000      0.000
X2      0.000      0.000      1.000    600.000    610.300      0.000      0.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000    610.300    610.300      0.000
GR    606.200      0.000    604.700     15.000    600.100     69.000    599.400    132.000    597.200    141.000
GR    597.200    145.000    597.200    152.000    600.000    154.000    599.100    226.000    606.200    259.000

X1     15.750     10.000    132.000    155.000    100.000    100.000    100.000      0.000      0.000      0.000
X3     10.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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GR	604.000	22.000	604.000	23.000	600.100	69.000	599.400	132.000	597.400	140.000
GR	597.200	145.000	597.500	152.000	600.000	155.000	604.000	236.000	604.000	237.000
NC	.050	.050	.045	.100	.300	0.000	0.000	0.000	0.000	0.000
X1	18.000	7.000	131.000	158.000	510.000	510.000	510.000	0.000	0.000	0.000
GR	607.300	0.000	601.800	50.000	600.800	131.000	597.800	143.000	601.300	158.000
GR	601.300	265.000	605.700	282.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	100.980	8.000	131.000	158.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	602.000	602.000	0.000
GR	607.300	0.000	601.800	50.000	600.800	131.000	598.000	143.000	598.000	148.000
GR	601.300	158.000	601.300	265.000	605.700	282.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	0.000	3.140	0.000	12.570	0.000	598.000	598.000
X1	101.020	8.000	127.000	158.000	30.000	30.000	30.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	602.000	603.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.000	.300	3.300
BT	15.000	0.000	609.900	0.000	50.000	609.100	0.000	130.000	604.100	0.000
BT	192.000	603.800	0.000	196.000	603.300	0.000	196.400	603.300	0.000	197.200
BT	603.300	0.000	198.000	603.300	0.000	198.800	603.300	0.000	199.600	603.300
BT	0.000	200.000	603.300	0.000	206.000	604.400	0.000	315.000	606.400	0.000
BT	375.000	608.800	0.000	400.000	610.500	0.000	0.000	0.000	0.000	0.000
GR	609.800	0.000	605.300	32.000	602.300	127.000	598.000	143.000	598.000	148.000
GR	604.000	158.000	605.000	298.000	608.800	329.000	0.000	0.000	0.000	0.000
X1	101.210	7.000	127.000	158.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	608.800	0.000	605.300	32.000	602.300	127.000	598.200	138.000	604.000	158.000
GR	605.000	298.000	608.800	329.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	101.900	12.000	188.000	215.000	330.000	330.000	330.000	0.000	-.100	0.000
GR	611.100	0.000	610.100	40.000	608.100	57.000	605.000	100.000	602.700	188.000
GR	599.400	196.000	598.900	200.000	599.300	203.000	604.500	215.000	607.800	288.000
GR	611.500	320.000	613.100	372.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	101.950	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.050	.050	.050	.050	.050	0.000	0.000	0.000	0.000
X1	102.000	0.000	0.000	0.000	49.000	49.000	49.000	0.000	.100	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	102.260	12.000	188.000	215.000	194.000	194.000	194.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.400	603.400	0.000
GR	611.100	0.000	610.100	40.000	608.100	57.000	605.000	100.000	602.700	188.000
GR	599.400	194.000	599.400	200.000	599.400	204.000	604.500	215.000	607.800	288.000
GR	611.500	320.000	613.100	372.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	250.000	3.140	0.000	12.570	0.000	599.400	599.400
X1	102.280	12.000	188.000	215.000	12.000	12.000	12.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	603.400	603.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.900	603.900	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	599.400	194.000	599.400	200.000	599.900	210.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	102.500	12.000	188.000	215.000	94.000	94.000	94.000	0.000	0.000	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	600.000	196.000	599.500	200.000	599.900	203.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

X1	102.980	12.000	188.000	215.000	70.000	70.000	70.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.800	603.800	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	599.800	194.000	599.800	200.000	599.900	210.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.700	2.800	250.000	3.140	0.000	12.570	0.000	599.800	599.800
X1	103.020	8.000	185.000	215.000	59.000	59.000	59.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	603.800	609.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.200	609.200	0.000
GR	609.300	0.000	607.200	50.000	605.400	100.000	604.700	185.000	599.800	197.000
GR	599.800	205.000	604.100	215.000	611.700	298.000	0.000	0.000	0.000	0.000
X1	103.290	7.000	185.000	215.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	609.300	0.000	607.200	50.000	605.400	100.000	604.700	185.000	600.100	200.000
GR	604.100	215.000	611.700	298.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.060	.060	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	104.000	11.000	230.000	268.000	370.000	370.000	370.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.400	0.000	0.000
GR	608.500	0.000	607.300	50.000	605.300	150.000	608.400	208.000	606.500	230.000
GR	601.700	247.000	601.700	251.000	608.700	268.000	610.100	300.000	612.300	370.000
GR	612.800	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	104.500	0.000	0.000	0.000	330.000	330.000	330.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.300	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	104.980	11.000	230.000	268.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	606.600	606.600	0.000
GR	608.500	0.000	607.300	50.000	605.300	150.000	608.400	208.000	606.500	230.000
GR	601.600	245.000	601.600	254.000	608.700	268.000	610.100	300.000	612.300	370.000
GR	612.800	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.800	2.800	0.000	5.040	0.000	25.200	0.000	601.600	601.600
X1	105.020	9.000	186.000	216.000	81.000	81.000	81.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.600	607.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.600	607.800	0.000
BT	15.000	0.000	613.600	0.000	100.000	610.500	0.000	183.000	607.300	0.000
BT	193.000	607.500	0.000	196.750	607.600	0.000	197.500	607.700	0.000	198.500
BT	607.700	0.000	200.000	607.800	0.000	201.500	607.800	0.000	202.500	607.900
BT	0.000	203.250	607.900	0.000	204.000	608.000	0.000	217.000	608.500	0.000
BT	300.000	610.300	0.000	400.000	611.600	0.000	0.000	0.000	0.000	0.000
GR	611.900	0.000	608.700	60.000	607.300	115.000	606.900	173.000	606.200	186.000
GR	601.600	190.000	601.600	200.000	607.200	216.000	610.900	336.000	0.000	0.000
X1	105.410	8.000	186.000	216.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	611.900	0.000	608.700	60.000	607.300	115.000	606.900	173.000	606.200	186.000
GR	601.900	200.000	607.200	216.000	610.900	336.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	105.480	7.000	183.000	221.000	950.000	950.000	950.000	0.000	0.000	0.000
GR	612.800	0.000	610.300	100.000	610.200	183.000	604.600	200.000	611.500	221.000
GR	612.600	300.000	612.900	320.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	105.980	8.000	183.000	221.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.900	608.900	0.000
GR	612.800	0.000	610.300	100.000	610.200	183.000	604.900	190.000	604.900	200.000
GR	611.500	221.000	612.600	300.000	612.900	320.000	0.000	0.000	0.000	0.000

SB	0.000	1.200	2.900	125.000	3.140	0.000	12.570	0.000	604.900	604.900
X1	106.020	8.000	79.000	120.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	608.900	610.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.000	611.000	0.000
GR	614.600	0.000	613.200	79.000	604.900	100.000	604.900	110.000	611.000	120.000
GR	611.600	200.000	612.700	280.000	614.600	300.000	0.000	0.000	0.000	0.000
X1	106.530	7.000	79.000	120.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	614.600	0.000	613.200	79.000	605.200	100.000	611.000	120.000	611.600	200.000
GR	612.700	280.000	614.600	300.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	106.580	6.000	79.000	120.000	1080.000	1080.000	1080.000	0.000	0.000	0.000
GR	621.600	0.000	616.000	79.000	608.000	100.000	613.900	120.000	614.400	200.000
GR	615.500	380.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	106.590	0.000	0.000	0.000	820.000	820.000	820.000	0.000	2.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	255.000	380.000	450.000	620.000	450.000	0.000	0.000	0.000	0.000
X1	106.980	7.000	79.000	120.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.900	615.900	0.000
GR	624.000	0.000	618.000	79.000	610.400	90.000	610.400	107.000	616.300	120.000
GR	616.800	200.000	618.500	380.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.700	600.000	7.500	0.000	41.250	0.000	610.400	610.400
X1	107.020	16.000	550.000	568.000	33.500	33.500	33.500	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.900	618.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	618.500	618.500	0.000
GR	621.400	0.000	620.500	100.000	618.100	200.000	616.400	300.000	614.400	400.000
GR	613.200	500.000	612.900	550.000	610.400	555.000	610.400	562.000	610.400	567.000
GR	613.000	568.000	614.500	584.000	613.900	602.000	616.100	700.000	619.500	800.000
GR	619.700	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.065	.065	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	107.100	16.000	550.000	568.000	100.000	100.000	100.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	614.800	0.000
GR	621.400	0.000	620.500	100.000	618.100	200.000	616.400	300.000	614.400	400.000
GR	613.200	500.000	612.900	550.000	610.800	558.000	610.400	562.000	610.500	565.000
GR	613.000	568.000	614.500	584.000	613.900	602.000	616.100	700.000	619.500	800.000
GR	619.700	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000
NH	5.000	.065	500.000	.100	550.000	.055	568.000	.100	600.000	.065
NH	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	108.000	0.000	0.000	0.000	890.000	890.000	890.000	0.000	2.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	617.100	0.000
NC	.045	.045	.040	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	109.000	15.000	367.000	396.000	2350.000	2350.000	2350.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	622.400	0.000	621.200	100.000	620.700	200.000	620.600	300.000	619.800	367.000
GR	619.300	373.000	617.400	376.000	617.000	380.000	616.700	384.000	617.000	388.000
GR	619.300	396.000	619.300	397.000	619.400	500.000	619.500	600.000	620.700	700.000
X1	109.050	9.000	870.000	890.000	300.000	300.000	300.000	0.000	0.000	0.000
GR	625.000	500.000	621.900	502.000	620.000	800.000	619.800	870.000	617.300	875.000
GR	617.300	885.000	619.800	890.000	620.000	900.000	625.000	1220.000	0.000	0.000
X1	109.100	16.000	770.000	799.000	1160.000	1160.000	1160.000	0.000	0.000	0.000

GR	630.000	0.000	625.500	10.000	625.000	650.000	623.500	750.000	622.500	770.000
GR	620.400	780.000	620.200	781.000	619.500	783.000	620.200	785.000	620.400	788.000
GR	622.500	799.000	623.500	871.000	624.400	950.000	626.600	1116.000	629.500	1177.000
GR	633.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	109.980	16.000	770.000	799.000	115.000	115.000	115.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	623.800	623.800	0.000
GR	630.000	0.000	625.500	10.000	625.000	650.000	623.500	750.000	622.500	770.000
GR	620.500	780.000	620.500	781.000	620.500	783.000	620.500	785.000	620.500	788.000
GR	622.500	799.000	623.500	871.000	624.400	950.000	626.600	1116.000	629.500	1177.000
GR	633.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.900	3.000	0.000	5.340	0.000	17.100	0.000	620.500	620.500
X1	110.020	14.000	112.000	143.000	72.000	72.000	72.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	623.800	625.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	625.900	625.900	0.000
BT	21.000	0.000	630.000	0.000	10.000	627.000	0.000	600.000	626.700	0.000
BT	700.000	626.200	0.000	750.000	626.000	0.000	790.000	625.900	0.000	795.000
BT	625.900	0.000	797.000	625.900	0.000	797.600	625.900	0.000	797.900	625.900
BT	0.000	800.000	625.900	0.000	802.100	625.900	0.000	802.400	625.900	0.000
BT	803.000	625.900	0.000	805.000	625.900	0.000	812.000	625.900	0.000	822.000
BT	625.900	0.000	850.000	625.900	0.000	900.000	626.000	0.000	1000.000	627.700
BT	0.000	1100.000	631.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	120.000
GR	620.700	122.000	620.500	126.000	620.700	130.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
X1	110.050	14.000	112.000	143.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	123.000
GR	621.100	124.000	620.700	126.000	621.100	128.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
X1	110.100	0.000	0.000	0.000	160.000	160.000	160.000	0.000	.400	0.000
X1	110.200	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.180	.250	.250	.370	.250	0.000	0.000	0.000	0.000
X1	110.980	14.000	112.000	143.000	180.000	180.000	180.000	0.000	1.700	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	626.200	626.200	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	120.000
GR	620.700	122.000	620.500	126.000	620.700	130.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
SB	0.000	1.700	2.900	0.000	3.140	0.000	12.570	0.000	622.200	622.200
X1	111.020	18.000	167.000	207.000	38.000	38.000	38.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	626.200	629.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	629.300	629.300	0.000
BT	23.000	0.000	632.000	0.000	100.000	632.000	0.000	200.000	631.300	0.000
BT	300.000	630.100	0.000	350.000	629.600	0.000	362.000	629.500	0.000	386.000
BT	629.300	0.000	396.000	629.300	0.000	398.000	629.300	0.000	398.200	629.300
BT	0.000	398.800	629.300	0.000	400.000	629.300	0.000	401.200	629.300	0.000
BT	401.800	629.300	0.000	402.000	629.300	0.000	403.000	629.300	0.000	410.000
BT	629.400	0.000	420.000	629.500	0.000	443.000	629.600	0.000	458.000	629.700
BT	0.000	500.000	630.100	0.000	600.000	631.600	0.000	680.000	631.700	0.000
GR	632.100	0.000	630.800	63.000	629.600	78.000	628.100	167.000	626.800	178.000
GR	623.400	180.000	623.000	181.000	622.200	183.000	622.200	192.000	622.200	193.000
GR	623.300	194.000	623.500	197.000	626.600	207.000	627.000	245.000	628.700	299.000
GR	630.600	335.000	632.600	349.000	632.800	400.000	0.000	0.000	0.000	0.000
X1	111.100	18.000	167.000	207.000	50.000	50.000	50.000	0.000	0.000	0.000

GR	632.100	0.000	630.800	63.000	629.600	78.000	628.100	167.000	626.800	178.000
GR	623.400	187.000	623.000	190.000	622.300	191.000	622.400	192.000	622.400	193.000
GR	623.300	194.000	623.500	197.000	626.600	207.000	627.000	245.000	628.700	299.000
GR	630.600	335.000	632.600	349.000	632.800	400.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	111.200	11.000	140.000	173.000	510.000	510.000	510.000	0.000	0.000	0.000
GR	629.200	0.000	627.600	140.000	625.900	146.000	624.900	148.000	624.400	153.000
GR	624.500	162.000	624.900	165.000	625.200	167.000	627.700	173.000	629.900	300.000
GR	631.800	340.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	111.280	11.000	140.000	173.000	142.000	142.000	142.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	626.300	626.300	0.000
GR	629.200	0.000	627.600	140.000	625.900	146.000	624.900	148.000	624.300	153.000
GR	624.300	162.000	624.900	165.000	625.200	167.000	627.700	173.000	629.900	300.000
GR	631.800	340.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.700	0.000	2.440	0.000	4.880	0.000	624.300	624.300
X1	111.320	12.000	194.000	236.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	626.300	627.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	627.800	627.800	0.000
BT	20.000	0.000	630.900	0.000	90.000	629.000	0.000	100.000	628.800	0.000
BT	134.000	628.000	0.000	139.000	627.900	0.000	143.000	627.800	0.000	143.500
BT	627.800	0.000	143.600	627.800	0.000	144.100	627.800	0.000	145.000	627.800
BT	0.000	145.900	627.800	0.000	146.400	627.800	0.000	146.500	627.800	0.000
BT	147.000	627.800	0.000	150.000	627.800	0.000	161.000	627.900	0.000	195.000
BT	628.000	0.000	200.000	628.000	0.000	230.000	628.200	0.000	340.000	631.900
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	631.000	0.000	629.000	89.000	627.000	194.000	625.900	200.000	624.300	205.000
GR	624.300	209.000	624.300	214.000	624.300	218.000	625.100	225.000	626.600	236.000
GR	628.900	300.000	630.000	340.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	111.400	12.000	194.000	236.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	631.000	0.000	629.000	89.000	627.000	194.000	625.900	200.000	624.100	204.000
GR	624.400	209.000	624.200	214.000	624.300	221.000	625.100	225.000	626.600	236.000
GR	628.900	300.000	630.000	340.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	112.000	10.000	200.000	228.000	640.000	640.000	640.000	0.000	0.000	0.000
GR	632.600	0.000	629.500	100.000	627.200	200.000	625.600	207.000	624.700	210.000
GR	624.700	222.000	627.700	228.000	628.200	248.000	629.300	327.000	630.200	400.000
X1	112.100	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.010	.020	.020	.020	.020	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1.21	3.50	597.30	0.00	597.30	597.36	.06	0.00	0.00	595.00
515.	387.	101.	27.	303.	29.	34.	0.	0.	595.00
0.00	1.28	3.48	.79	.080	.040	.080	0.000	593.80	1170.25
.002204	0.	0.	0.	0	0	1	0.00	250.25	1420.50
1.33	4.49	598.49	0.00	0.00	598.63	.15	1.25	.03	596.00
515.	233.	232.	50.	141.	55.	47.	3.	2.	597.00
.05	1.65	4.25	1.07	.080	.040	.080	.040	594.00	1095.28
.003602	450.	450.	450.	3	0	1	0.00	164.43	1259.72
1.34	5.38	599.88	0.00	0.00	600.06	.18	1.42	.01	598.00
515.	71.	305.	139.	61.	70.	117.	6.	4.	598.00
.09	1.16	4.35	1.19	.080	.040	.080	.040	594.50	1161.70
.002790	450.	450.	450.	2	0	1	0.00	166.59	1328.30

OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA= 605.00 ELREA= 605.00

1.35	5.72	600.72	0.00	0.00	600.95	.23	.87	.01	599.00
515.	0.	515.	0.	0.	134.	0.	7.	5.	600.00
.11	0.00	3.85	0.00	.080	.040	.080	.040	595.00	1200.00
.002252	350.	350.	350.	2	0	1	0.00	40.00	1254.40

If we have a Pr condition for starting (≈) why do we have increasing depth going U/S?

CCHV= .200 CEHV= .400
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 606.00 ELREA= 606.00

1.38	3.64	600.84	600.84	0.00	602.68	1.84	.24	0.00	597.20
515.	0.	515.	0.	0.	47.	0.	7.	5.	597.20
.11	0.00	10.89	0.00	.080	.040	.080	.040	597.20	1218.00
.016126	50.	50.	50.	30	14	1	0.00	13.00	1231.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.80	2.70	300.00	12.85	0.00	36.00	0.00	597.20	597.20

3280 CROSS SECTION 1.42 EXTENDED 3.37 FEET

3301 HV CHANGED MORE THAN HVINS

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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
609.74	602.92	0.00	0.	515.	36.	600.00	610.30	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEN= 610.30 ELREA= 610.30

1.42	12.37	609.57	0.00	0.00	609.74	.16	7.06	0.00	597.20
515.	0.	515.	0.	0.	158.	0.	8.	5.	600.00
.12	0.00	3.26	0.00	.080	.040	.080	.040	597.20	141.00
.000604	116.	116.	116.	2	0	1	0.00	13.00	154.00

3280 CROSS SECTION 15.75 EXTENDED 5.77 FEET

15.75	12.57	609.77	0.00	0.00	609.77	.00	.00	.03	599.40
515.	233.	148.	134.	992.	273.	635.	10.	5.	600.00
.21	.23	.54	.21	.080	.040	.080	.040	597.20	22.00
.000009	100.	100.	100.	2	0	1	0.00	215.00	237.00

CCHV= .100 CEHV= .300
3280 CROSS SECTION 18.00 EXTENDED 4.07 FEET

18.00	11.97	609.77	0.00	0.00	609.78	.00	.00	.00	600.80
515.	203.	81.	231.	948.	279.	1013.	34.	8.	601.30
.82	.21	.29	.23	.050	.045	.050	.041	597.80	0.00
.000004	510.	510.	510.	2	0	1	0.00	282.00	282.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 100.98 EXTENDED 4.07 FEET

100.98	11.77	609.77	0.00	0.00	609.78	.00	.00	.00	600.80
515.	202.	83.	230.	948.	285.	1013.	39.	9.	601.30
.94	.21	.29	.23	.050	.045	.050	.041	598.00	0.00
.000004	100.	100.	100.	2	0	1	0.00	282.00	282.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	0.00	3.14	0.00	12.57	0.00	598.00	598.00

3280 CROSS SECTION 101.02 EXTENDED 1.01 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
651.48	609.78	0.00	500.	15.	13.	602.00	603.30	30.00

101.02	11.81	609.81	0.00	0.00	609.81	.00	.03	0.00	602.30
515.	178.	126.	211.	659.	302.	833.	41.	9.	604.00
.97	.27	.42	.25	.050	.045	.050	.041	598.00	0.00
.000008	30.	30.	30.	0	0	7	0.00	329.00	329.00

3280 CROSS SECTION 101.21 EXTENDED 1.01 FEET

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
101.21	11.61	609.81	0.00	0.00	609.81	.00	.00	.00	602.30
515.	182.	115.	217.	659.	279.	833.	45.	10.	604.00
1.06	.28	.41	.26	.050	.045	.050	.041	598.20	0.00
.000009	100.	100.	100.	2	0	1	0.00	329.00	329.00
CCHV= .150 CEHV= .350									
101.90	11.01	609.81	0.00	0.00	609.81	.00	.00	.00	602.60
515.	278.	147.	90.	692.	243.	294.	56.	12.	604.40
1.27	.40	.61	.31	.050	.045	.050	.042	598.80	41.60
.000020	330.	330.	330.	2	0	1	0.00	264.66	306.26
WATER EL=X5 CARD= 609.861									
101.95	11.06	609.86	0.00	0.00	609.86	.00	.00	.00	602.60
515.	278.	146.	91.	699.	244.	298.	56.	12.	604.40
1.27	.40	.60	.30	.050	.045	.050	.042	598.80	41.18
.000019	1.	1.	1.	0	0	1	0.00	265.52	306.69
102.00	10.96	609.86	0.00	0.00	609.87	.00	.00	.00	602.70
515.	278.	148.	89.	685.	241.	289.	58.	12.	604.50
1.30	.41	.61	.31	.050	.045	.050	.042	598.90	42.02
.000020	49.	49.	49.	2	0	1	0.00	263.82	305.84
CCHV= .200 CEHV= .400									
102.26	10.47	609.87	0.00	0.00	609.87	.00	.00	.00	602.70

515.	276.	150.	89.	685.	245.	290.	63.	13.	604.50
1.42	.40	.61	.31	.050	.045	.050	.042	599.40	41.99
.000020	194.	194.	194.	2	0	1	0.00	263.88	305.87

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	250.00	3.14	0.00	12.57	0.00	599.40	599.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
651.57	609.87	0.00	501.	16.	13.	603.40	603.90	30.00

102.29	10.50	609.90	0.00	0.00	609.90	.00	.03	0.00	603.40
515.	258.	179.	78.	594.	254.	240.	63.	13.	605.10
1.42	.44	.71	.32	.050	.045	.050	.042	599.40	46.76
.000027	12.	12.	12.	0	0	6	0.00	254.24	301.01

102.50	10.40	609.90	0.00	0.00	609.91	.00	.00	.00	603.40
515.	272.	161.	82.	593.	226.	240.	66.	14.	605.10
1.47	.46	.71	.34	.050	.045	.050	.042	599.50	46.78
.000030	94.	94.	94.	2	0	1	0.00	254.21	300.99

CCHV= .400 CEHV= .800

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

102.98	10.10	609.90	0.00	0.00	609.91	.00	.00	.00	603.40
515.	261.	175.	79.	594.	248.	240.	67.	14.	605.10
1.51	.44	.71	.33	.050	.045	.050	.042	599.80	46.76
.000028	70.	70.	70.	2	0	1	0.00	254.25	301.01

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.80	250.00	3.14	0.00	12.57	0.00	599.80	599.80

3280 CROSS SECTION 103.02 EXTENDED .78 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
654.22	609.91	0.00	482.	32.	13.	603.80	609.20	30.00

103.02	10.28	610.08	0.00	0.00	610.08	.00	.17	0.00	604.70
515.	280.	174.	61.	708.	257.	195.	69.	15.	604.10
1.55	.39	.68	.31	.050	.045	.050	.042	599.80	0.00
.000026	59.	59.	59.	0	0	8	0.00	280.30	280.30

3280 CROSS SECTION 103.29 EXTENDED .78 FEET

103.29	9.98	610.08	0.00	0.00	610.08	.00	.00	.00	604.70
515.	292.	159.	64.	708.	235.	195.	70.	15.	604.10
1.58	.41	.68	.33	.050	.045	.050	.042	600.10	0.00
.000028	50.	50.	50.	2	0	1	0.00	280.28	280.28

CCHV= .150 CEHV= .350
3280 CROSS SECTION 104.00 EXTENDED 1.59 FEET

104.00	8.39	610.09	0.00	0.00	610.10	.01	.02	.00	606.50
515.	341.	171.	4.	735.	219.	22.	79.	17.	608.70
1.76	.46	.78	.16	.060	.050	.060	.043	601.70	0.00
.000072	370.	370.	370.	2	0	1	0.00	299.80	299.80

3280 CROSS SECTION 104.50 EXTENDED 1.71 FEET

104.50	8.51	610.11	0.00	0.00	610.12	.00	.02	.00	606.40
515.	343.	167.	5.	763.	223.	26.	87.	20.	608.60
1.93	.45	.75	.17	.060	.050	.060	.044	601.60	0.00
.000064	330.	330.	330.	2	0	1	0.00	303.65	303.65

CCHV= .400 CEHV= .800
3280 CROSS SECTION 104.98 EXTENDED 1.61 FEET

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
104.98	8.52	610.12	0.00	0.00	610.13	.01	.01	.00	606.50
515.	327.	184.	4.	740.	237.	23.	89.	20.	608.70
1.97	.44	.78	.16	.060	.050	.060	.044	601.60	0.00
.000065	100.	100.	100.	0	0	1	0.00	300.47	300.47

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.80	2.80	0.00	5.04	0.00	25.20	0.00	601.60	601.60

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS

621.79	610.13	0.00	459.	51.	25.	606.60	607.30	30.00	
105.02	8.62	610.22	0.00	0.00	610.23	.01	.11	0.00	606.20
515.	214.	243.	58.	374.	205.	149.	91.	21.	607.20
2.00	.57	1.19	.39	.060	.050	.060	.044	601.60	31.35
.000140	81.	81.	81.	1	0	8	0.00	282.84	314.20
105.41	8.34	610.24	0.00	0.00	610.25	.01	.02	.00	606.20
515.	235.	217.	63.	375.	178.	150.	92.	22.	607.20
2.03	.63	1.22	.42	.060	.050	.060	.044	601.90	31.18
.000168	100.	100.	100.	2	0	1	0.00	283.31	314.49

CCHV= .150 CEHV= .350

105.48	5.90	610.50	0.00	0.00	610.83	.34	.47	.11	610.20
515.	16.	499.	0.	21.	106.	0.	101.	26.	611.50
2.09	.75	4.73	0.00	.060	.050	.060	.045	604.60	92.13
.006205	950.	950.	950.	4	0	1	0.00	125.81	217.95

CCHV= .400 CEHV= .800

105.98	6.20	611.10	0.00	0.00	611.22	.12	.30	.09	610.20
515.	72.	443.	0.	83.	148.	0.	102.	26.	611.50
2.10	.87	2.99	0.00	.060	.050	.060	.045	604.90	68.07
.001740	100.	100.	100.	2	0	1	0.00	151.65	219.72

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.90	125.00	3.14	0.00	12.57	0.00	604.90	604.90

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
642.37	611.22	0.00	427.	88.	13.	608.90	610.90	30.00

106.02	7.00	611.90	0.00	0.00	612.02	.12	.80	0.00	613.20
515.	0.	483.	32.	0.	172.	51.	102.	26.	611.00
2.10	0.00	2.82	.62	.060	.050	.060	.045	604.90	82.29
.001324	20.	20.	20.	2	0	7	0.00	139.55	221.84

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
106.53	6.86	612.06	0.00	0.00	612.20	.14	.17	.02	613.20
515.	0.	453.	62.	0.	141.	69.	102.	27.	611.00
2.11	0.00	3.21	.91	.060	.050	.060	.045	605.20	81.99
.002181	100.	100.	100.	2	0	1	0.00	151.63	233.62

CCHV= .150 CEHV= .350

106.58	6.70	614.70	0.00	0.00	614.88	.18	2.66	.01	616.00
515.	0.	474.	41.	C.	134.	51.	107.	31.	613.90
2.20	0.00	3.54	.81	.060	.050	.060	.046	608.00	82.42
.002805	1080.	1080.	1080.	2	0	1	0.00	166.30	248.71
106.59	6.83	616.83	0.00	0.00	616.98	.15	2.10	.00	618.00
515.	0.	458.	57.	0.	139.	70.	111.	34.	615.90
2.28	0.00	3.30	.82	.060	.050	.060	.047	610.00	82.07
.002347	820.	820.	820.	2	0	1	0.00	188.34	270.41

CCHV= .400 CEHV= .800

106.98	6.67	617.07	0.00	0.00	617.14	.07	.13	.03	618.00
450.	0.	431.	19.	C.	194.	45.	111.	34.	616.30
2.29	0.00	2.23	.42	.060	.050	.060	.047	610.40	80.35
.000753	100.	100.	100.	2	0	1	0.00	147.87	228.22

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.70	600.00	7.50	0.00	41.25	0.00	610.40	610.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
620.02	617.32	0.00	120.	332.	41.	615.90	618.50	30.00

107.02	8.28	618.68	0.00	0.00	618.68	.00	1.54	0.00	612.90
450.	275.	53.	122.	1246.	141.	617.	112.	35.	613.00
2.33	.22	.38	.20	.060	.050	.060	.047	610.40	175.99
.000012	34.	34.	34.	0	0	5	0.00	599.79	775.77
107.10	7.98	618.68	0.00	0.00	618.68	.00	.00	.00	613.20
450.	277.	52.	121.	1136.	127.	556.	117.	36.	613.30
2.44	.24	.41	.22	.065	.055	.065	.047	610.70	188.46
.000019	100.	100.	100.	2	0	1	0.00	578.50	766.97

CCHV= .100 CEHV= .300

1490 NH CARD USED

108.00	5.71	618.71	0.00	0.00	618.72	.01	.04	.00	615.50
450.	260.	108.	82.	458.	86.	181.	143.	46.	615.60
2.79	.57	1.25	.45	.076	.055	.072	.048	613.00	314.34
.000279	890.	890.	890.	2	0	1	0.00	386.05	760.39

CCHV= .150 CEHV= .350

SECND	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

109.00	3.47	620.17	0.00	0.00	620.26	.09	1.51	.03	619.80
450.	3.	205.	242.	6.	64.	174.	169.	65.	619.30
3.08	.56	3.22	1.39	.045	.040	.045	.046	616.70	336.52
.002752	2350.	2350.	2350.	3	0	1	0.00	318.82	655.33
109.05	3.63	620.93	0.00	0.00	621.04	.12	.77	.01	619.80
450.	186.	220.	44.	140.	60.	38.	170.	67.	619.80
3.12	1.33	3.67	1.16	.045	.040	.045	.046	617.30	654.30
.002429	300.	300.	300.	2	0	1	0.00	305.15	959.45
109.10	4.39	623.89	0.00	0.00	624.06	.17	2.99	.02	622.50
450.	31.	312.	106.	23.	82.	71.	176.	74.	622.50
3.22	1.37	3.82	1.50	.045	.040	.045	.045	619.50	724.07
.002744	1160.	1160.	1160.	4	0	1	0.00	181.07	905.14

CCHV= .400 CEHV= .800

109.98	3.73	624.23	0.00	0.00	624.31	.09	.23	.03	622.50
050.	47.	258.	145.	42.	87.	112.	177.	74.	622.50
3.23	1.12	2.96	1.29	.045	.040	.045	.045	620.50	701.31
.001486	115.	115.	115.	2	0	1	0.00	233.80	935.11

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	3.00	0.00	5.34	0.00	17.10	0.00	620.50	620.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
644.66	625.32	0.00	300.	152.	17.	623.80	625.90	30.00

110.02	5.93	626.43	0.00	0.00	626.56	.13	2.24	0.00	624.90
450.	24.	373.	54.	24.	119.	48.	177.	74.	625.00
3.24	.99	3.14	1.11	.045	.040	.045	.045	620.50	80.56
.001285	72.	72.	72.	2	0	9	0.00	122.89	203.45
110.05	5.79	626.49	0.00	0.00	626.63	.14	.07	.00	624.90
450.	29.	356.	65.	26.	109.	52.	177.	75.	625.00
3.25	1.11	3.27	1.26	.045	.040	.045	.045	620.70	79.28
.001526	50.	50.	50.	2	0	1	0.00	125.11	204.39
110.10	5.66	626.76	0.00	0.00	626.92	.16	.27	.02	625.30
450.	25.	369.	56.	22.	105.	44.	178.	75.	625.40
3.26	1.15	3.51	1.28	.045	.040	.045	.045	621.10	81.99
.001857	160.	160.	160.	2	0	1	0.00	120.40	202.39

WATER EL=X5 CARD= 627.009

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
110.20	5.91	627.01	0.00	0.00	627.13	.12	.00	.02	625.30
450.	32.	345.	73.	30.	113.	59.	178.	75.	625.40
3.26	1.06	3.06	1.23	.045	.040	.045	.045	621.10	76.82
.001282	1.	1.	1.	0	0	1	0.00	129.38	206.20
110.98	5.14	627.34	0.00	0.00	627.66	.32	.37	.16	626.60
450.	6.	435.	9.	6.	94.	10.	178.	75.	626.70
3.27	1.04	4.61	.95	.045	.040	.045	.045	622.20	96.80
.003767	180.	180.	180.	2	0	1	0.00	77.31	174.12

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.90	0.00	3.14	0.00	12.57	0.00	622.20	622.20

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
661.17	627.60	0.00	318.	133.	13.	626.20	629.30	30.00

111.02	8.09	630.29	0.00	0.00	630.30	.01	2.65	0.00	628.10
450.	50.	230.	170.	132.	226.	289.	179.	76.	626.60
3.29	.38	1.02	.59	.045	.040	.045	.045	622.20	69.28
.000083	38.	38.	38.	1	0	9	0.00	259.99	329.27
111.10	8.00	630.30	0.00	0.00	630.31	.01	.00	.00	628.10
450.	54.	213.	183.	132.	203.	289.	179.	76.	626.60
3.30	.41	1.05	.63	.045	.040	.045	.045	622.30	69.30
.000096	50.	50.	50.	2	0	1	0.00	259.95	329.24

CCHV= .150 CEHV= .350
3280 CROSS SECTION 111.20 EXTENDED 1.14 FEET

111.20	5.95	630.35	0.00	0.00	630.36	.01	.06	.00	627.60
450.	157.	195.	98.	272.	164.	198.	187.	79.	627.70
3.47	.58	1.19	.49	.045	.040	.045	.045	624.40	0.00
.000127	510.	510.	510.	2	0	1	0.00	309.35	309.35

CCHV= .400 CEHV= .800
3280 CROSS SECTION 111.28 EXTENDED 1.17 FEET

111.28	6.07	630.37	0.00	0.00	630.38	.01	.02	.00	627.60
450.	156.	196.	98.	276.	167.	202.	189.	80.	627.70
3.52	.57	1.18	.49	.045	.040	.045	.045	624.30	0.00
.000121	142.	142.	142.	2	0	1	0.00	309.88	309.88

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	0.00	2.44	0.00	4.88	0.00	624.30	624.30

3280 CROSS SECTION 111.32 EXTENDED .43 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
802.02	630.38	0.00	438.	9.	5.	626.30	627.80	30.00

111.32	6.13	630.43	0.00	0.00	630.43	.01	.05	0.00	627.00
450.	139.	208.	103.	301.	221.	211.	189.	80.	626.60
3.53	.46	.94	.49	.045	.040	.045	.045	624.30	25.20
.000071	16.	16.	16.	0	0	10	0.00	314.80	340.00

3280 CROSS SECTION 111.40 EXTENDED .43 FEET

111.40	6.33	630.43	0.00	0.00	630.44	.01	.00	.00	627.00
450.	138.	210.	102.	300.	224.	211.	190.	81.	626.60
3.55	.46	.94	.49	.045	.040	.045	.045	624.10	25.44
.000070	42.	42.	42.	2	0	1	0.00	314.56	340.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 112.00 EXTENDED .29 FEET

112.00	5.79	630.49	0.00	0.00	630.50	.01	.06	.00	627.20
450.	143.	176.	132.	229.	140.	242.	200.	85.	627.70
3.76	.62	1.26	.55	.045	.040	.045	.044	624.70	68.19
.000141	640.	640.	640.	2	0	1	0.00	331.81	400.00

WATER EL=X5 CARD= 630.507
3280 CROSS SECTION 112.10 EXTENDED .31 FEET

112.10	5.81	630.51	0.00	0.00	630.52	.01	.00	.00	627.20
450.	143.	174.	133.	232.	140.	245.	200.	85.	627.70
3.76	.62	1.24	.54	.045	.040	.045	.044	624.70	67.51
.000137	1.	1.	1.	0	0	1	0.00	332.49	400.00

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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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TI   HUD-FIA H-4705
T2   BEDFORD TWP FIS
T3       BRAGDEN DITCH  100 YEAR FLOW = 515 CFS    S * 1.30

J1   ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       -1.       4.        0.        0.    .002860      0.00      1.0        0.    597.300     0.000

J2   NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     2.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
```

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1.21	3.36	597.16	0.00	597.30	597.23	.07	0.00	0.00	595.00
515.	386.	106.	23.	278.	28.	27.	0.	0.	595.00
0.00	1.39	3.85	.86	.080	.040	.080	0.000	593.80	1174.78
.002880	0.	0.	0.	0	0	5	0.00	240.85	1415.63
1.33	4.52	598.52	0.00	0.00	598.66	.14	1.41	.02	596.00
515.	233.	230.	51.	144.	55.	49.	3.	2.	597.00
.05	1.62	4.16	1.06	.080	.040	.080	.040	594.00	1094.63
.003405	450.	450.	450.	2	0	1	0.00	165.74	1260.37
1.34	5.38	599.88	0.00	0.00	600.06	.18	1.39	.01	598.00
515.	71.	306.	138.	61.	70.	116.	6.	4.	598.00
.09	1.16	4.36	1.19	.080	.040	.080	.040	594.50	1161.80
.002819	450.	450.	450.	2	0	1	0.00	166.40	1328.20

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 605.00 ELREA= 605.00

1.35	5.73	600.73	0.00	0.00	600.95	.23	.88	.01	599.00
515.	0.	515.	0.	0.	134.	0.	7.	5.	600.00
.11	0.00	3.85	0.00	.080	.040	.080	.040	595.00	1200.00
.002248	350.	350.	350.	2	0	1	0.00	40.00	1254.43

CCHV= .200 CEHV= .400
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

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

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 606.00 ELREA= 606.00

1.38	3.64	600.84	600.84	0.00	602.68	1.84	.24	0.00	597.20
515.	0.	515.	0.	0.	47.	0.	7.	5.	597.20
.11	0.00	10.89	0.00	.080	.040	.080	.040	597.20	1218.00
.016126	50.	50.	50.	30	14	1	0.00	13.00	1231.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.80	2.70	300.00	12.85	0.00	36.00	0.00	597.20	597.20

3280 CROSS SECTION 1.42 EXTENDED 3.37 FEET

3301 HV CHANGED MORE THAN HVINS

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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
609.74	602.92	0.00	0.	515.	36.	600.00	610.30	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 610.30 ELREA= 610.30

1.42	12.37	609.57	0.00	0.00	609.74	.16	7.06	0.00	597.20
515.	0.	515.	0.	0.	158.	0.	7.	5.	600.00
.12	0.00	3.26	0.00	.080	.040	.080	.040	597.20	141.00
.000604	116.	116.	116.	2	0	1	0.00	13.00	154.00

3280 CROSS SECTION 15.75 EXTENDED 5.77 FEET

15.75	12.57	609.77	0.00	0.00	609.77	.00	.00	.03	599.40
515.	233.	148.	134.	992.	273.	635.	10.	5.	600.00
.21	.23	.54	.21	.080	.040	.080	.040	597.20	22.00
.000008	100.	100.	100.	2	0	1	0.00	215.00	237.00

CCHV= .100 CEHV= .300
3280 CROSS SECTION 18.00 EXTENDED 4.07 FEET

18.00	11.97	609.77	0.00	0.00	609.78	.00	.00	.00	600.80
515.	203.	81.	231.	948.	279.	1013.	34.	8.	601.30
.82	.21	.29	.23	.050	.045	.050	.041	597.80	0.00
.000004	510.	510.	510.	2	0	1	0.00	282.00	282.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 100.98 EXTENDED 4.07 FEET

100.98	11.77	609.77	0.00	0.00	609.78	.00	.00	.00	600.80
515.	202.	83.	230.	948.	285.	1013.	39.	9.	601.30
.94	.21	.29	.23	.050	.045	.050	.041	598.00	0.00
.000004	100.	100.	100.	2	0	1	0.00	282.00	282.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	0.00	3.14	0.00	12.57	0.00	598.00	598.00

3280 CROSS SECTION 101.02 EXTENDED 1.01 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
651.48	609.78	0.00	500.	15.	13.	602.00	603.30	30.00

101.02	11.81	609.81	0.00	0.00	609.81	.00	.03	0.00	602.30
515.	178.	126.	211.	659.	302.	833.	41.	9.	604.00
.97	.27	.42	.25	.050	.045	.050	.041	598.00	0.00
.000008	30.	30.	30.	0	0	7	0.00	329.00	329.00

3280 CROSS SECTION 101.21 EXTENDED 1.01 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IOC	ICONT	CORAR	TOPWID	ENDST
101.21	11.61	609.81	0.00	0.00	609.81	.00	.00	.00	602.30
515.	182.	115.	217.	659.	279.	833.	45.	9.	604.00
1.06	.28	.41	.26	.050	.045	.050	.041	598.20	0.00
.000009	100.	100.	100.	2	0	1	0.00	329.00	329.00
CCHV=	.150	CEHV=	.350						
101.90	11.01	609.81	0.00	0.00	609.81	.00	.00	.00	602.60
515.	278.	147.	90.	692.	243.	294.	56.	12.	604.40
1.27	.40	.61	.31	.050	.045	.050	.042	598.80	41.60
.000020	330.	330.	330.	2	0	1	0.00	264.66	306.26
WATER FL=X5		CARD=	609.861						
101.95	11.06	609.86	0.00	0.00	609.86	.00	.00	.00	602.60
515.	278.	146.	91.	699.	244.	298.	56.	12.	604.40
1.27	.40	.60	.30	.050	.045	.050	.042	598.80	41.18
.000019	1.	1.	1.	0	0	1	0.00	265.52	306.69
102.00	10.96	609.86	0.00	0.00	609.87	.00	.00	.00	602.70
515.	278.	148.	89.	685.	241.	289.	57.	12.	604.50
1.30	.41	.61	.31	.050	.045	.050	.042	598.90	42.02
.000020	49.	49.	49.	2	0	1	0.00	263.82	305.84
CCHV=	.200	CEHV=	.400						
102.26	10.47	609.87	0.00	0.00	609.87	.00	.00	.00	602.70

515.	276.	150.	89.	685.	245.	290.	63.	13.	604.50
1.42	.40	.61	.31	.050	.045	.050	.042	599.40	41.99
.000020	194.	194.	194.	2	0	1	0.00	263.88	305.87

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	250.00	3.14	0.00	12.57	0.00	599.40	599.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
651.57	609.87	0.00	501.	16.	13.	603.40	603.90	30.00

102.28	10.50	609.90	0.00	0.00	609.90	.00	.03	0.00	603.40
515.	258.	179.	78.	594.	254.	240.	63.	13.	605.10
1.43	.44	.71	.32	.050	.045	.050	.042	599.40	46.76
.000027	12.	12.	12.	0	0	6	0.00	254.24	301.01

102.50	10.40	609.90	0.00	0.00	609.91	.00	.00	.00	603.40
515.	272.	161.	82.	593.	226.	240.	66.	14.	605.10
1.48	.46	.71	.34	.050	.045	.050	.042	599.50	46.78
.000030	94.	94.	94.	2	0	1	0.00	254.21	300.99

CCHV= .400 CEHV= .800

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
102.98	10.10	609.90	0.00	0.00	609.91	.00	.00	.00	603.40
515.	261.	175.	79.	594.	248.	240.	67.	14.	605.10
1.51	.44	.71	.33	.050	.045	.050	.042	599.80	46.76
.000029	70.	70.	70.	2	0	1	0.00	254.25	301.01

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.80	250.00	3.14	0.00	12.57	0.00	599.80	599.80

3280 CROSS SECTION 103.02 EXTENDED .78 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
654.22	609.91	0.00	482.	32.	13.	603.80	609.20	30.00

103.02	10.28	610.08	0.00	0.00	610.08	.00	.17	0.00	604.70
515.	280.	174.	61.	708.	257.	195.	69.	15.	604.10
1.55	.39	.68	.31	.050	.045	.050	.042	599.80	0.00
.000026	59.	59.	59.	0	0	8	0.00	280.30	280.30

3280 CROSS SECTION 103.29 EXTENDED .78 FEET

103.29	9.98	610.08	0.00	0.00	610.08	.00	.00	.00	604.70
515.	292.	159.	64.	708.	235.	195.	70.	15.	604.10
1.58	.41	.68	.33	.050	.045	.050	.042	600.10	0.00
.000028	50.	50.	50.	2	0	1	0.00	280.28	280.28

CCHV= .150 CEHV= .350
3280 CROSS SECTION 104.00 EXTENDED 1.59 FEET

104.00	8.39	610.09	0.00	0.00	610.10	.01	.02	.00	606.50
515.	341.	171.	4.	735.	219.	22.	79.	17.	608.70
1.76	.46	.78	.16	.060	.050	.060	.043	601.70	0.00
.000072	370.	370.	370.	2	0	I	0.00	299.80	299.80

3280 CROSS SECTION 104.50 EXTENDED 1.71 FEET

104.50	8.51	610.11	0.00	0.00	610.12	.00	.02	.00	606.40
515.	343.	167.	5.	763.	223.	26.	87.	20.	608.60
1.93	.45	.75	.17	.060	.050	.060	.044	601.60	0.00
.000064	330.	330.	330.	2	0	1	0.00	303.65	303.65

CCHV= .400 CEHV= .800
3280 CROSS SECTION 104.98 EXTENDED 1.61 FEET

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
104.98	8.52	610.12	0.00	0.00	610.13	.01	.01	.00	606.50
515.	327.	184.	4.	740.	237.	23.	89.	20.	608.70
1.98	.44	.78	.16	.060	.050	.060	.044	601.60	0.00
.000065	100.	100.	100.	0	0	1	0.00	300.47	300.47

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.80	2.80	0.00	5.04	0.00	25.20	0.00	601.60	601.60

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS

621.79	610.13	0.00	459.	51.	25.	606.60	607.30	30.00	
105.02	8.62	610.22	0.00	0.00	610.23	.01	.11	0.00	606.20
515.	214.	243.	58.	374.	205.	149.	91.	21.	607.20
2.00	.57	1.19	.39	.060	.050	.060	.044	601.60	31.35
.000140	81.	81.	81.	1	0	8	0.00	282.84	314.20
105.41	8.34	610.24	0.00	0.00	610.25	.01	.02	.00	606.20
515.	235.	217.	63.	375.	178.	150.	92.	22.	607.20
2.04	.63	1.22	.42	.060	.050	.060	.044	601.90	31.19
.000168	100.	100.	100.	2	0	1	0.00	283.31	314.49

CCHV= .150 CEHV= .350

105.48	5.90	610.50	0.00	0.00	610.83	.34	.47	.11	610.20
515.	16.	499.	0.	21.	106.	0.	101.	26.	611.50
2.09	.75	4.73	0.00	.060	.050	.060	.045	604.60	92.13
.006205	950.	950.	950.	4	0	1	0.00	125.81	217.95

CCHV= .400 CEHV= .800

105.98	6.20	611.10	0.00	0.00	611.22	.12	.30	.09	610.20
515.	72.	443.	0.	83.	148.	0.	102.	26.	611.50
2.10	.87	2.99	0.00	.060	.050	.060	.045	604.90	68.07
.001740	100.	100.	100.	2	0	1	0.00	151.65	219.72

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	ROLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.90	125.00	3.14	0.00	12.57	0.00	604.90	604.90

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
642.37	611.22	0.00	427.	88.	13.	608.90	610.90	30.00

106.02	7.00	611.90	0.00	0.00	612.02	.12	.80	0.00	613.20
515.	0.	483.	32.	0.	172.	51.	102.	26.	611.00
2.10	0.00	2.82	.62	.060	.050	.060	.045	604.90	82.29
.001324	20.	20.	20.	2	0	7	0.00	139.55	221.84

SECND	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
106.53	6.86	612.06	0.00	0.00	612.20	.14	.17	.02	613.20
515.	0.	453.	62.	0.	141.	69.	102.	27.	611.00
2.11	0.00	3.21	.91	.060	.050	.060	.045	605.20	81.99
.002181	100.	100.	100.	2	0	1	0.00	151.63	233.62

CCHV= .150 CEHV= .350

106.58	6.70	614.70	0.00	0.00	614.88	.18	2.66	.01	616.00
515.	0.	474.	41.	0.	134.	51.	107.	31.	613.90
2.20	0.00	3.54	.81	.060	.050	.060	.046	608.00	82.42
.002805	1080.	1080.	1080.	2	0	1	0.00	166.30	248.71
106.59	6.83	616.83	0.00	0.00	616.98	.15	2.10	.00	618.00
515.	0.	458.	57.	0.	139.	70.	111.	34.	615.90
2.28	0.00	3.30	.82	.060	.050	.060	.047	610.00	82.07
.002347	820.	820.	820.	2	0	1	0.00	188.34	270.41

CCHV= .400 CEHV= .800

106.98	6.67	617.07	0.00	0.00	617.14	.07	.13	.03	618.00
450.	0.	431.	19.	0.	194.	45.	111.	34.	616.30
2.29	0.00	2.23	.42	.060	.050	.060	.047	610.40	80.35
.000753	100.	100.	100.	2	0	1	0.00	147.87	228.22

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.70	600.00	7.50	0.00	41.25	0.00	610.40	610.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
620.07	617.32	0.00	120.	332.	41.	615.90	618.50	30.00

107.02	8.28	618.68	0.00	0.00	618.68	.00	1.54	0.00	612.90
450.	275.	53.	122.	1246.	141.	617.	112.	35.	613.00
2.33	.22	.38	.20	.060	.050	.060	.047	610.40	175.99
.000012	34.	34.	34.	0	0	5	0.00	599.79	775.77
107.10	7.98	618.68	0.00	0.00	618.68	.00	.00	.00	613.20
450.	277.	52.	121.	1136.	127.	556.	117.	36.	613.30
2.44	.24	.41	.22	.065	.055	.065	.047	610.70	188.46
.000019	100.	100.	100.	2	0	1	0.00	578.50	766.97

CCHV= .100 CEHV= .300

1490 NH CARD USED

108.00	5.71	618.71	0.00	0.00	618.72	.01	.04	.00	615.50
450.	260.	108.	82.	458.	86.	181.	143.	46.	615.60
2.79	.57	1.25	.45	.076	.055	.072	.048	613.00	314.34
.000279	890.	890.	890.	2	0	1	0.00	386.05	700.39

CCHV= .150 CEHV= .350

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

109.09	3.47	620.17	0.00	0.00	620.26	.09	1.51	.03	619.80
450.	3.	205.	242.	6.	64.	174.	169.	65.	619.30
3.08	.56	3.22	1.39	.045	.040	.045	.046	616.70	336.52
.002752	2350.	2350.	2350.	3	0	1	0.00	318.82	655.33
109.05	3.63	620.93	0.00	0.00	621.04	.12	.77	.01	619.80
450.	186.	220.	44.	140.	60.	38.	170.	67.	619.80
3.12	1.33	3.67	1.16	.045	.040	.045	.046	617.30	654.30
.002429	300.	300.	300.	2	0	1	0.00	305.15	959.45
109.10	4.39	623.89	0.00	0.00	624.06	.17	2.99	.02	622.50
450.	31.	312.	106.	23.	82.	71.	176.	74.	622.50
3.22	1.37	3.82	1.50	.045	.040	.045	.045	619.50	724.07
.002744	1160.	1160.	1160.	4	0	1	0.00	181.07	905.14

CCHV= .400 CEHV= .800

109.98	3.73	624.23	0.00	0.00	624.31	.09	.23	.03	622.50
450.	47.	258.	145.	42.	87.	112.	176.	74.	622.50
3.24	1.12	2.96	1.29	.045	.040	.045	.045	620.50	701.31
.001486	115.	115.	115.	2	0	1	0.00	233.80	935.11

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	3.00	0.00	5.34	0.00	17.10	0.00	620.50	620.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
644.66	625.32	0.00	300.	152.	17.	623.80	625.90	30.00

110.02	5.93	626.43	0.00	0.00	626.56	.13	2.24	0.00	624.90
450.	24.	373.	54.	24.	119.	48.	177.	74.	625.00
3.24	.99	3.14	1.11	.045	.040	.045	.045	620.50	80.56
.001285	72.	72.	72.	2	0	9	0.00	122.89	203.45
110.05	5.79	626.49	0.00	0.00	626.63	.14	.07	.00	624.90
450.	29.	356.	65.	26.	109.	52.	177.	75.	625.00
3.25	1.11	3.27	1.26	.045	.040	.045	.045	620.70	79.28
.001526	50.	50.	50.	2	0	1	0.00	125.11	204.39
110.10	5.66	626.76	0.00	0.00	626.92	.16	.27	.02	625.30
450.	25.	369.	56.	22.	105.	44.	178.	75.	625.40
3.26	1.15	3.51	1.28	.045	.040	.045	.045	621.10	81.99
.001857	160.	160.	160.	2	0	1	0.00	120.40	202.39

WATER EL=X5 CARD= 627.009

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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
110.20	5.91	627.01	0.00	0.00	627.13	.12	.00	.02	625.30
450.	32.	345.	73.	30.	113.	59.	178.	75.	625.40
3.26	1.06	3.06	1.23	.045	.040	.045	.045	621.10	76.82
.001282	1.	1.	1.	0	0	1	0.00	129.38	206.20
110.98	5.14	627.34	0.00	0.00	627.66	.32	.37	.16	626.60
450.	6.	435.	9.	6.	94.	10.	178.	75.	626.70
3.27	1.04	4.61	.95	.045	.040	.045	.045	622.20	96.80
.003767	180.	180.	180.	2	0	1	0.00	77.31	174.12

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.90	0.00	3.14	0.00	12.57	0.00	622.20	622.20

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
661.17	627.60	0.00	318.	133.	13.	626.20	629.30	30.00

111.02	8.09	630.29	0.00	0.00	630.30	.01	2.65	0.00	628.10
450.	50.	230.	170.	132.	226.	289.	179.	76.	626.60
3.29	.38	1.02	.59	.045	.040	.045	.045	622.20	69.28
.000083	38.	38.	38.	1	0	9	0.00	259.99	329.27
111.10	8.00	630.30	0.00	0.00	630.31	.01	.00	.00	628.10
450.	54.	213.	183.	132.	203.	289.	179.	76.	626.60
3.30	.41	1.05	.63	.045	.040	.045	.045	622.30	69.30
.000096	50.	50.	50.	2	0	1	0.00	259.95	329.24

CCHV= .150 CEHV= .350
3280 CROSS SECTION 111.20 EXTENDED 1.14 FEET

111.20	5.95	630.35	0.00	0.00	630.36	.01	.06	.00	627.60
450.	157.	195.	98.	272.	164.	198.	187.	79.	627.70
3.48	.58	1.19	.49	.045	.040	.045	.045	624.40	0.00
.000127	510.	510.	510.	2	0	1	0.00	309.35	309.35

CCHV= .400 CEHV= .800
3280 CROSS SECTION 111.28 EXTENDED 1.17 FEET

111.28	6.07	630.37	0.00	0.00	630.38	.01	.02	.00	627.60
450.	156.	196.	98.	276.	167.	202.	189.	80.	627.70
3.52	.57	1.18	.49	.045	.040	.045	.045	624.30	0.00
.000121	142.	142.	142.	2	0	1	0.00	309.88	309.88

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	0.00	2.44	0.00	4.88	0.00	624.30	624.30

3280 CROSS SECTION 111.32 EXTENDED .43 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
802.02	630.38	0.00	438.	9.	5.	626.30	627.80	30.00

111.32	6.13	630.43	0.00	0.00	630.43	.01	.05	0.00	627.00
450.	139.	208.	103.	301.	221.	211.	189.	80.	626.60
3.53	.46	.94	.49	.045	.040	.045	.045	624.30	25.20
.000071	16.	16.	16.	0	0	10	0.00	314.80	340.00

3280 CROSS SECTION 111.40 EXTENDED .43 FEET

111.40	6.33	630.43	0.00	0.00	630.44	.01	.00	.00	627.00
450.	138.	210.	102.	300.	224.	211.	190.	81.	626.60
3.55	.46	.94	.49	.045	.040	.045	.045	624.10	25.44
.000070	42.	42.	42.	2	0	1	0.00	314.56	340.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 112.00 EXTENDED .29 FEET

112.00	5.79	630.49	0.00	0.00	630.50	.01	.06	.00	627.20
450.	143.	176.	132.	229.	140.	242.	200.	85.	627.70
3.76	.62	1.26	.55	.045	.040	.045	.044	624.70	68.19
.000141	640.	640.	640.	2	0	1	0.00	331.81	400.00

WATER EL=X5 CARD= 630.507
3280 CROSS SECTION 112.10 EXTENDED .31 FEET

112.10	5.81	630.51	0.00	0.00	630.52	.01	.00	.00	627.20
450.	143.	174.	133.	232.	140.	245.	200.	85.	627.70
3.76	.62	1.24	.54	.045	.040	.045	.044	624.70	67.51
.000137	1.	1.	1.	0	0	1	0.00	332.49	400.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Bragdon ditch

4) DOCUMENT TYPE: 100yr.

00BREAK00

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1  HUD-FIA H-4705
T2  BEDFORD
T3  SALTER DRAIN -  100 YEAR FLOW=290 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       -1.       4.        0.        0.  0.000000      0.00      1.0       0.   620.240    0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000    0.000     0.000     0.000
NC       .065      .065      .045      .100      .300     0.000     0.000    0.000     0.000     0.000
QT      5.000   160.000   240.000   280.000   395.000   280.000     0.000    0.000     0.000     0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000    0.000     0.000     0.000

X1    200.050    14.000   177.000   192.000     0.000     0.000     0.000    0.000    -1.900     0.000
GR    623.500     0.000   622.800    99.000   621.400   150.000   620.200  177.000   617.700   181.000
GR    616.600   183.000   617.200   185.000   619.100   187.000   620.500  192.000   621.300   200.000
GR    623.000   211.000   624.400   255.000   625.100   310.000   625.300  400.000     0.000     0.000

X1    200.100    14.000   177.000   192.000   850.000   850.000   850.000    0.000     0.000     0.000
GR    623.500     0.000   622.800    99.000   621.400   150.000   620.200  177.000   617.700   181.000
GR    616.600   183.000   617.200   185.000   619.100   187.000   620.500  192.000   621.300   200.000
GR    623.000   211.000   624.400   255.000   625.100   310.000   625.300  400.000     0.000     0.000
NC      0.000     0.000     0.000      .400      .800     0.000     0.000    0.000     0.000     0.000

X1    200.980    13.000   161.000   185.000   125.000   125.000   125.000    0.000    -.300      0.000
GR    626.300     0.000   624.100   115.000   621.000   161.000   619.700  168.000   618.600   170.000
GR    618.400   172.000   618.800   174.000   619.300   179.000   621.600  185.000   622.700   200.000
GR    623.500   258.000   625.700   304.000   626.900   400.000     0.000    0.000     0.000     0.000
SB      0.000     1.700     2.800     0.000     5.170     0.000    19.630    0.000   618.100   618.100

X1    201.020    13.000   161.000   185.000    49.000    49.000    49.000    0.000    -.300      0.000
X2      0.000     0.000     1.000   621.900   625.800     0.000     0.000    0.000     0.000     0.000
BT      4.000   115.000   626.000     0.000   200.000   626.000     0.000  304.000   625.800     0.000
BT    400.000   626.800     0.000     0.000     0.000     0.000     0.000    0.000     0.000     0.000
GR    626.300     0.000   624.100   115.000   621.000   161.000   619.700  168.000   618.600   170.000
GR    618.400   172.000   618.800   174.000   619.300   179.000   621.600  185.000   622.700   200.000
GR    623.500   258.000   625.700   304.000   626.900   400.000     0.000    0.000     0.000     0.000
NC       .060      .060     0.000     0.000     0.000     0.000     0.000    0.000     0.000     0.000

X1    201.100     0.000     0.000     0.000    25.000    25.000    25.000    0.000      .300     0.000
NC      0.000     0.000     0.000      .150      .350     0.000     0.000    0.000     0.000     0.000

X1    202.000    13.000   244.000   264.000   650.000   650.000   650.000    0.000     0.000     0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000    0.000     0.000     0.000
GR    629.600     0.000   626.700   105.000   625.100   200.000   623.800  244.000   621.600   248.000
GR    620.600   255.000   619.900   257.000   620.800   258.000   623.100  264.000   622.900   323.000
GR    624.400   400.000   627.900   477.000   627.700   600.000     0.000    0.000     0.000     0.000

X1    202.500    12.000   242.000   267.000   600.000   600.000   600.000    0.000     1.100     0.000
GR    629.600     0.000   626.700   105.000   625.100   200.000   623.600  242.000   621.600   248.000
GR    620.500   252.000   620.500   261.000   623.700   267.000   624.300  322.000   625.500   375.000
GR    628.000   478.000   628.500   600.000     0.000     0.000     0.000    0.000     0.000     0.000
NC      0.000      .100     0.000     0.000     0.000     0.000     0.000    0.000     0.000     0.000

X1    203.000    15.000   502.000   531.000   600.000   600.000   600.000    0.000     0.000     0.000
GR    631.300     0.000   631.400   200.000   628.900   400.000   626.000  502.000   623.800   510.000
GR    623.300   513.000   623.500   520.000   623.400   523.000   623.800  525.000   626.600   531.000
GR    628.900   600.000   629.700   640.000   631.400   800.000   631.600 1000.000   632.900  1187.000
EJ      0.000     0.000     0.000     0.000     0.000     0.000     0.000    0.000     0.000     0.000
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CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	OLOB	OCH	OROB	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
	** CONFLUENCE WITH INDIAN CREEK								
200.05	5.54	620.24	0.00	620.24	620.41	.17	0.00	0.00	618.30
280.	61.	203.	16.	46.	53.	12.	0.	0.	618.60
0.00	1.33	3.84	1.30	.065	.045	.065	0.000	614.70	123.04
.002979	0.	0.	0.	0	0	1	0.00	82.39	205.44
200.10	5.78	622.38	0.00	0.00	622.51	.12	2.09	.00	620.20
280.	72.	189.	19.	61.	57.	16.	2.	2.	620.50
.09	1.19	3.34	1.19	.065	.045	.065	.045	616.60	113.97
.002062	850.	850.	850.	2	0	1	0.00	93.07	207.05

CCHV= .400 CEHV= .800

	** D/S FACE JACKMAN RD								
200.98	4.53	622.63	0.00	0.00	622.76	.13	.25	.01	620.70
280.	28.	242.	11.	28.	78.	14.	3.	2.	621.30
.10	.99	3.11	.77	.065	.045	.065	.045	618.10	132.21
.001959	125.	125.	125.	2	0	1	0.00	85.19	217.40

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.80	0.00	5.17	0.00	19.63	0.00	618.10	618.10

3280 CROSS SECTION 201.02 EXTENDED .14 FEET

PRESSURF AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	OPR	BAREA	ELLC	ELTRD	CLASS
628.00	622.76	0.00	54.	226.	20.	621.90	625.80	30.00
201.02	8.04	626.14	0.00	0.00	626.14	.00	3.38	0.00	620.70
280.	79.	105.	96.	322.	162.	365.	3.	2.	621.30
.14	.24	.65	.26	.065	.045	.065	.045	618.10	0.00
.000032	49.	49.	49.	0	0	6	0.00	363.34	363.34
201.10	7.74	626.14	0.00	0.00	626.14	.00	.00	.00	621.00
280.	77.	108.	96.	274.	154.	315.	4.	2.	621.60
.15	.28	.70	.30	.060	.045	.060	.045	618.40	8.41

.000039	25.	25.	25.	2	0	1	0.00	330.71	339.12

CCHV= .150 CEHV= .350

SECNO	DEPTH	CHSEL	CRIPS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	ARCB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
202.00	6.27	626.17	0.00	0.00	626.18	.00	.04	.00	623.80
280.	29.	73.	178.	110.	92.	416.	14.	7.	623.10
.51	.27	.79	.43	.060	.045	.060	.045	619.90	136.34
.000081	650.	650.	650.	2	0	1	0.00	302.64	438.99
202.50	4.65	626.25	0.00	0.00	626.31	.06	.11	.02	624.70
280.	21.	202.	57.	34.	92.	80.	20.	10.	624.80
.60	.62	2.20	.71	.060	.045	.060	.045	621.60	196.77
.000836	600.	600.	600.	3	0	1	0.00	162.97	359.74
203.00	3.71	627.01	0.00	0.00	627.17	.16	.82	.04	626.00
280.	14.	265.	1.	18.	81.	2.	22.	12.	626.60
.66	.80	3.29	.26	.060	.045	.100	.045	623.30	466.72
.002647	600.	600.	600.	2	0	1	0.00	76.37	543.09

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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  HUD-FIA H-4705
T2  BEDFORD
T3  SALTER DRAIN -  100 YEAR FLOW=280 CFS  ENCROACHMENT OPTION

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.        6.        0.        0.  0.000000      0.00      1.0        0.   620.240     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

      2.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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CCHV=     .100 CEHV=     .300
 2800 NAT Q1=      51.30  WSEL=     620.24  ENC Q1=      51.30  WSEL=     620.34  RATIO=    .0000
 NAT Q1=      55.  RATIOS LOB,CH,ROB=    .2347    .7045    .0608  WSEL=     620.34
   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


3470 ENCROACHMENT STATIONS=      150.8      195.7  TYPE=      4  TARGET=         .072

         **  CONFLUENCE WITH INDIAN CREEK

   200.05      5.54    620.24      0.00    620.24    620.44       .20      0.00      0.00    618.30
     280.       57.       214.       9.       36.       53.       5.        0.        0.     618.60
     0.00      1.61      4.04      1.68      .065      .045      .065     0.000    614.70    150.83
  .003304        0.        0.        0.         0         0         1      0.00     44.86    195.68


 2800 NAT Q1=      61.67  WSEL=     622.38  ENC Q1=      61.67  WSEL=     622.48  RATIO=   0.0000
 NAT Q1=      66.  RATIOS LOB,CH,ROB=    .2718    .6579    .0704  WSEL=     622.48

3470 ENCROACHMENT STATIONS=      136.7      197.1  TYPE=      4  TARGET=         .065
   200.10      5.87    622.47      0.00    622.38    622.59       .13      2.14       .01    620.20
     280.       75.       192.      13.       57.       58.       9.        2.        1.     620.50
      .09      1.33      3.32      1.45      .065      .045      .065      .045    616.60    136.66
  .001985       850.      850.      850.         3         0         1      0.00     60.44    197.10


CCHV=     .400 CEHV=     .800
 2800 NAT Q1=      63.42  WSEL=     622.63  ENC Q1=      63.42  WSEL=     622.73  RATIO=    .0000
 NAT Q1=      67.  RATIOS LOB,CH,ROB=    .1047    .8501    .0452  WSEL=     622.73

3470 ENCROACHMENT STATIONS=      139.5      190.5  TYPE=      4  TARGET=         .060

         **  D/S FACE JACKMAN RD

   200.98      4.60    622.70      0.00    622.63    622.83       .13       .24       .00    620.70
     280.       32.       241.       7.       28.       79.       7.        2.        1.     621.30
      .10      1.15      3.04      1.10      .065      .045      .065      .045    618.10    139.49
 .001802       125.      125.      125.         2         0         1      0.00     51.05    190.54


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
     0.00        1.70        2.80        0.00        5.17        0.00        19.63       0.00      618.10      618.10

 2800 NAT Q1=     494.16  WSEL=     626.14  ENC Q1=     494.16  WSEL=     626.24  RATIO=  0.0000
 NAT Q1=     518.  RATIOS LOB,CH,ROB=    .2859    .3676    .3465  WSEL=     626.24
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    201.02 EXTENDED        .21 FEET

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


3470 ENCROACHMENT STATIONS=       31.8      292.1  TYPE=      4  TARGET=          .046
   201.02      8.11    626.21      0.00    626.14    626.21       .00       .00       .05    620.70
     280.       81.       104.       95.       316.      163.       338.        3.        1.     621.30
      .13       .26       .64       .28       .065      .045       .065      .045    618.10     31.81
  .000031       49.       49.       49.          0         0          6      0.00    260.27    292.08


 2800 NAT Q1=     447.97  WSEL=     626.14  ENC Q1=     447.97  WSEL=     626.24  RATIO=    .0000
 NAT Q1=     470.  RATIOS LOB,CH,ROB=    .2789    .3755    .3457  WSEL=     626.24

3470 ENCROACHMENT STATIONS=       43.8      286.2  TYPE=      4  TARGET=          .048
   201.10      7.81    626.21      0.00    626.14    626.21       .00       .00       .00    621.00
     280.       79.       106.       95.       270.      156.       299.        3.        2.     621.60
      .15       .29       .68       .32       .060      .045       .060      .045    618.40     43.76
  .000037       25.       25.       25.          2         0          1      0.00    242.44    286.20


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     310.18  WSEL=     626.17  ENC Q1=     310.18  WSEL=     626.27  RATIO=    .0000
 NAT Q1=     330.  RATIOS LOB,CH,ROB=    .1114    .2531    .6355  WSEL=     626.27

3470 ENCROACHMENT STATIONS=      204.3      399.3  TYPE=      4  TARGET=          .061
   202.00      6.34    626.24      0.00    626.17    626.25       .00       .03       .00    623.80
     280.       25.       75.       179.       74.       94.       390.       13.        5.     623.10
      .48       .34       .80       .46       .060      .045       .060      .045    619.90    204.33
  .000083       650.      650.      650.         2         0          1      0.00    194.97    399.30


 2800 NAT Q1=      96.81  WSEL=     626.25  ENC Q1=      96.81  WSEL=     626.35  RATIO=  0.0000
 NAT Q1=     105.  RATIOS LOB,CH,ROB=    .0841    .6976    .2183  WSEL=     626.35

3470 ENCROACHMENT STATIONS=      219.2      319.2  TYPE=      4  TARGET=          .077
   202.50      4.72    626.32      0.00    626.25    626.38       .06       .11       .02    624.70
     280.       22.       205.       53.       28.       94.       65.       18.        7.     624.80
      .57       .80      2.18       .81       .060      .045       .060      .045    621.60    219.24
  .000799       600.      600.      600.         2         0          1      0.00     99.94    319.18


 2800 NAT Q1=      54.42  WSEL=     627.01  ENC Q1=      54.87  WSEL=     627.11  RATIO=  -.0083
 NAT Q1=      59.  RATIOS LOB,CH,ROB=    .0617    .9343    .0040  WSEL=     627.11

3470 ENCROACHMENT STATIONS=      502.0      531.0  TYPE=      4  TARGET=          .066
   203.00      3.76    627.06      0.00    627.01    627.24       .18       .81       .04    626.00
     280.        0.       280.        0.        0.        82.        0.       20.        8.     626.60
      .62       .01      3.40       .01       .060      .045       .100      .045    623.30    502.00
  .002771       600.      600.      600.         3         0          1      0.00     29.00    531.00
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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  HUD-FIA H-4705
T2  BEDFORD
T3  SALTER DRAIN -  100 YEAR FLOW=280 CFS

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

      -1.        4.         0.         0.    .003000       0.00       1.0         0.    622.000      0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

      3.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
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CCHV= .100 CEHV= .300

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
	** CONFLUENCE WITH INDIAN CREEK								
200.05	5.54	620.24	0.00	622.00	620.42	.17	0.00	0.00	618.30
280.	61.	203.	16.	46.	53.	12.	0.	0.	618.60
0.00	1.33	3.83	1.30	.065	.045	.065	0.000	614.70	122.91
.002963	0.	0.	0.	0	0	4	0.00	82.54	205.46
200.10	5.78	622.38	0.00	0.00	622.51	.12	2.09	.00	620.20
280.	72.	189.	19.	61.	57.	16.	2.	2.	620.50
.09	1.19	3.34	1.19	.065	.045	.065	.045	616.60	114.01
.002065	850.	850.	850.	2	0	1	0.00	93.02	207.04

CCHV= .400 CEHV= .800

	** D/S FACE JACKMAN RD								
200.98	4.53	622.63	0.00	0.00	622.76	.13	.25	.01	620.70
280.	28.	242.	11.	28.	78.	14.	3.	2.	621.30
.10	.99	3.11	.77	.065	.045	.065	.045	618.10	132.22
.001950	125.	125.	125.	2	0	1	0.00	85.16	217.37

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.80	0.00	5.17	0.00	19.63	0.00	618.10	618.10

3280 CROSS SECTION 201.02 EXTENDED .14 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
628.00	622.76	0.00	54.	226.	20.	621.90	625.80	30.00

201.02	8.04	626.14	0.00	0.00	626.14	.00	3.38	0.00	620.70
280.	79.	105.	96.	322.	162.	365.	3.	2.	621.30
.14	.24	.65	.26	.065	.045	.065	.045	618.10	0.00
.000032	49.	49.	49.	0	0	6	0.00	363.33	363.33
201.10	7.74	626.14	0.00	0.00	626.14	.00	.00	.00	621.00
280.	77.	108.	96.	274.	154.	315.	4.	2.	621.60
.15	.28	.70	.30	.060	.045	.060	.045	618.40	8.42

.000039	25.	25.	25.	2	0	1	0.00	330.70	339.12

CCHV= .150 CEHV= .350

SECND	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLCB	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
202.00	6.27	626.17	0.00	0.00	626.18	.00	.04	.00	623.80
280.	29.	73.	178.	110.	92.	416.	14.	7.	623.10
.51	.27	.79	.43	.060	.045	.060	.045	619.90	136.35
.000081	650.	650.	650.	2	0	1	0.00	302.64	438.99
202.50	4.65	626.25	0.00	0.00	626.31	.06	.11	.02	624.70
280.	21.	202.	57.	34.	92.	80.	20.	10.	624.80
.60	.62	2.20	.71	.060	.045	.060	.045	621.60	196.77
.000837	600.	600.	600.	3	0	1	0.00	162.97	359.74
203.00	3.71	627.01	0.00	0.00	627.17	.16	.82	.04	626.00
280.	14.	265.	1.	18.	81.	2.	22.	12.	626.60
.66	.80	2.29	.26	.060	.045	.100	.045	623.30	466.72
.002647	600.	600.	600.	2	0	1	0.00	76.37	543.09

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Broagdon ditch

4) DOCUMENT TYPE: 100yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

Converge.ce

ER DRAIN - 100 YEAR FLO

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
200.050	280.00	620.24	620.24	51.30	620.41	82.39	0.00	0.00	620.24	-I	-I	620.24
200.050	280.00	620.24	620.24	48.71	620.44	44.86	150.83	195.68	620.24	0.00	0.00	620.24
200.050	280.00	620.24	620.24	51.44	620.42	82.54	0.00	0.00	622.00	627.01	627.01	622.00
200.050	280.00	620.06	620.06	44.86	620.28	74.88	0.00	0.00	622.00	0.00	0.00	622.00
200.050	280.00	620.47	620.47	61.02	620.60	92.45	0.00	0.00	622.00	0.00	0.00	622.00
200.050	280.00	620.59	620.59	51.01	620.70	97.42	0.00	0.00	622.00	0.00	0.00	622.00
200.050	280.00	619.79	619.79	51.45	620.11	63.03	0.00	0.00	622.00	0.00	0.00	622.00
200.100	280.00	622.38	622.38	61.67	622.51	93.07	0.00	0.00	0.00	620.24	620.24	0.00
200.100	280.00	622.47	622.47	62.85	622.59	60.44	136.66	197.10	622.38	620.24	620.24	622.38
200.100	280.00	622.38	622.38	61.62	622.51	93.02	0.00	0.00	0.00	622.00	622.00	0.00
200.100	280.00	622.44	622.44	63.75	622.55	95.05	0.00	0.00	0.00	622.00	622.00	0.00
200.100	280.00	622.32	622.32	58.83	622.46	90.29	0.00	0.00	0.00	622.00	622.00	0.00
200.100	280.00	622.74	622.74	61.12	622.82	108.57	0.00	0.00	0.00	622.00	622.00	0.00
200.100	280.00	621.94	621.94	62.83	622.16	73.79	0.00	0.00	0.00	622.00	622.00	0.00
200.980	280.00	622.63	622.63	63.42	622.76	85.19	0.00	0.00	0.00	0.00	0.00	0.00
200.980	280.00	622.70	622.70	65.96	622.83	51.05	139.49	190.54	622.63	622.38	622.38	622.63
200.980	280.00	622.63	622.63	63.40	622.76	85.16	0.00	0.00	0.00	0.00	0.00	0.00
200.980	280.00	622.67	622.67	65.12	622.80	88.61	0.00	0.00	0.00	0.00	0.00	0.00
200.980	280.00	622.59	622.59	61.41	622.73	81.04	0.00	0.00	0.00	0.00	0.00	0.00
200.980	280.00	623.00	623.00	61.84	623.09	116.03	0.00	0.00	0.00	0.00	0.00	0.00
200.980	280.00	622.19	622.19	66.59	622.40	58.37	0.00	0.00	0.00	0.00	0.00	0.00
201.020	280.00	626.14	626.14	494.16	626.14	363.34	0.00	0.00	0.00	0.00	0.00	0.00
201.020	280.00	626.21	626.21	506.48	626.21	260.27	31.81	292.09	626.14	622.63	622.63	626.14
201.020	280.00	626.14	626.14	494.16	626.14	363.33	0.00	0.00	0.00	0.00	0.00	0.00
201.020	280.00	626.14	626.14	494.90	626.14	363.58	0.00	0.00	0.00	0.00	0.00	0.00
201.020	280.00	626.14	626.14	493.49	626.14	363.11	0.00	0.00	0.00	0.00	0.00	0.00
201.020	280.00	626.17	626.17	385.23	626.17	365.54	0.00	0.00	0.00	0.00	0.00	0.00
201.020	280.00	626.11	626.11	696.18	626.11	361.04	0.00	0.00	0.00	0.00	0.00	0.00
201.100	280.00	626.14	626.14	447.97	626.14	330.71	0.00	0.00	0.00	0.00	0.00	0.00
201.100	280.00	626.21	626.21	462.61	626.21	242.44	43.76	286.20	626.14	626.14	626.14	626.14
201.100	280.00	626.14	626.14	447.96	626.14	330.70	0.00	0.00	0.00	0.00	0.00	0.00
201.100	280.00	626.14	626.14	448.64	626.15	331.11	0.00	0.00	0.00	0.00	0.00	0.00
201.100	280.00	626.14	626.14	447.35	626.14	330.34	0.00	0.00	0.00	0.00	0.00	0.00
201.100	280.00	626.17	626.17	349.39	626.17	334.44	0.00	0.00	0.00	0.00	0.00	0.00
201.100	280.00	626.11	626.11	630.84	626.11	326.85	0.00	0.00	0.00	0.00	0.00	0.00
202.000	280.00	626.17	626.17	310.18	626.18	302.64	0.00	0.00	0.00	0.00	0.00	0.00
202.000	280.00	626.24	626.24	306.77	626.25	194.97	204.33	399.30	626.17	626.14	626.14	626.17
202.000	280.00	626.17	626.17	310.18	626.18	302.64	0.00	0.00	0.00	0.00	0.00	0.00
202.000	280.00	626.18	626.18	310.75	626.18	302.88	0.00	0.00	0.00	0.00	0.00	0.00
202.000	280.00	626.17	626.17	309.66	626.18	302.42	0.00	0.00	0.00	0.00	0.00	0.00
202.000	280.00	626.22	626.22	245.83	626.23	306.58	0.00	0.00	0.00	0.00	0.00	0.00
202.000	280.00	626.13	626.13	430.86	626.13	298.98	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
202.500	280.00	626.25	626.25	96.81	626.31	162.97	0.00	0.00	0.00	0.00	0.00	0.00
202.500	280.00	626.32	626.32	99.07	626.38	99.94	219.24	319.18	626.25	626.17	626.17	626.25
202.500	280.00	626.25	626.25	96.81	626.31	162.97	0.00	0.00	0.00	0.00	0.00	0.00
202.500	280.00	626.26	626.26	97.02	626.31	163.24	0.00	0.00	0.00	0.00	0.00	0.00
202.500	280.00	626.25	626.25	96.62	626.31	162.72	0.00	0.00	0.00	0.00	0.00	0.00
202.500	280.00	626.37	626.37	82.20	626.42	175.66	0.00	0.00	0.00	0.00	0.00	0.00
202.500	280.00	626.15	626.15	126.98	626.21	153.62	0.00	0.00	0.00	0.00	0.00	0.00
203.000	280.00	627.01	627.01	54.42	627.17	76.37	0.00	0.00	0.00	0.00	0.00	0.00
203.000	280.00	627.06	627.06	53.19	627.24	29.00	502.00	531.00	627.01	626.25	626.25	627.01
203.000	280.00	627.01	627.01	54.42	627.17	76.37	0.00	0.00	0.00	0.00	0.00	0.00
203.000	280.00	627.01	627.01	54.43	627.17	76.39	0.00	0.00	0.00	0.00	0.00	0.00
203.000	280.00	627.01	627.01	54.41	627.17	76.36	0.00	0.00	0.00	0.00	0.00	0.00
203.000	280.00	627.36	627.36	53.31	627.47	98.80	0.00	0.00	0.00	0.00	0.00	0.00
203.000	280.00	626.59	626.59	57.48	626.83	49.89	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
200.050	280.000	620.240	0.000	0.000	0.000	82.392	0.000	0.000
200.050	280.000	620.240	0.000	0.000	0.000	44.856	37.537	0.000
200.050	280.000	620.244	.004	0.000	0.000	82.543	-.151	0.000
200.050	280.000	620.065	-.179	0.000	0.000	74.878	7.515	0.000
200.050	280.000	620.474	.410	0.000	0.000	92.450	-10.058	0.000
200.050	280.000	620.590	.116	0.000	0.000	97.416	-15.024	0.000
200.050	280.000	619.789	-.802	0.000	0.000	63.028	19.364	0.000
200.100	280.000	622.383	0.000	2.143	0.000	93.073	0.000	850.000
200.100	280.000	622.466	.084	2.226	0.000	60.438	32.635	850.000
200.100	280.000	622.382	-.084	2.138	0.000	93.025	.048	850.000
200.100	280.000	622.438	.056	2.373	0.000	95.051	-1.978	850.000
200.100	280.000	622.324	-.114	1.850	0.000	90.294	2.779	850.000
200.100	280.000	622.744	.420	2.154	0.000	108.565	-15.492	850.000
200.100	280.000	621.935	-.809	2.147	0.000	73.792	19.281	850.000
200.980	280.000	622.632	0.000	.249	0.000	85.187	0.000	125.000
200.980	280.000	622.703	.071	.237	0.000	51.049	34.138	125.000
200.980	280.000	622.631	-.072	.249	0.000	85.155	.031	125.000
200.980	280.000	622.672	.041	.234	0.000	88.605	-3.419	125.000
200.980	280.000	622.595	-.078	.270	0.000	81.042	4.144	125.000
200.980	280.000	623.001	.407	.257	0.000	116.030	-30.843	125.000
200.980	280.000	622.193	-.809	.257	0.000	58.375	26.812	125.000
201.020	280.000	626.139	0.000	3.507	0.000	363.336	0.000	49.000
201.020	280.000	626.210	.071	3.507	0.000	260.273	103.063	49.000
201.020	280.000	626.139	-.071	3.507	0.000	363.334	.003	49.000
201.020	280.000	626.142	.003	3.469	0.000	363.581	-.244	49.000
201.020	280.000	626.136	-.006	3.541	0.000	363.113	.224	49.000
201.020	280.000	626.166	.030	3.165	0.000	365.540	-2.204	49.000
201.020	280.000	626.110	-.056	3.917	0.000	361.044	2.292	49.000
201.100	280.000	626.139	0.000	.001	0.000	330.708	0.000	25.000
201.100	280.000	626.211	.071	.001	0.000	242.436	88.272	25.000
201.100	280.000	626.139	-.071	.001	0.000	330.703	.005	25.000
201.100	280.000	626.142	.003	.001	0.000	331.112	-.405	25.000
201.100	280.000	626.137	-.006	.001	0.000	330.337	.371	25.000
201.100	280.000	626.168	.031	.001	0.000	334.438	-3.730	25.000
201.100	280.000	626.110	-.057	.000	0.000	326.848	3.860	25.000

202.000	280.000	626.174	0.000	.035	0.000	302.643	0.000	650.000
202.000	280.000	626.244	.070	.034	0.000	194.967	107.676	650.000
202.000	280.000	626.174	-.070	.035	0.000	302.640	.003	650.000
202.000	280.000	626.177	.003	.035	0.000	302.883	-.240	650.000
202.000	280.000	626.172	-.006	.035	0.000	302.422	.220	650.000
202.000	280.000	626.225	.053	.057	0.000	306.580	-3.937	650.000
202.000	280.000	626.128	-.097	.018	0.000	298.982	3.661	650.000
202.500	280.000	626.254	0.000	.080	0.000	162.968	0.000	600.000
202.500	280.000	626.325	.071	.081	0.000	99.943	63.026	600.000
202.500	280.000	626.254	-.071	.080	0.000	162.965	.003	600.000
202.500	280.000	626.257	.003	.079	0.000	163.243	-.275	600.000
202.500	280.000	626.252	-.005	.080	0.000	162.717	.251	600.000
202.500	280.000	626.372	.120	.147	0.000	175.660	-12.691	600.000
202.500	280.000	626.148	-.224	.020	0.000	153.624	9.344	600.000
203.000	280.000	627.010	0.000	.756	0.000	76.371	0.000	600.000
203.000	280.000	627.056	.046	.732	0.000	29.001	47.370	600.000
203.000	280.000	627.010	-.046	.756	0.000	76.371	.000	600.000
203.000	280.000	627.010	.000	.753	0.000	76.385	-.014	600.000
203.000	280.000	627.010	-.000	.758	0.000	76.359	.013	600.000
203.000	280.000	627.356	.346	.984	0.000	98.802	-22.431	600.000
203.000	280.000	626.586	-.770	.437	0.000	49.888	26.483	600.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	12.000	0.000
2	4.000	.066	7.689	-4.310
3	0.000	0.000	12.000	.001
4	0.000	0.000	11.966	-.034
5	0.000	0.000	12.049	.049
6	0.000	0.000	12.798	.798
7	0.000	0.000	11.146	-.854

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Bragdon ditch

4) DOCUMENT TYPE: 100 yr. Sensitivity

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

BRAGDEN DITCH 100 YEAR Scenario

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
1.210	515.00	597.30	597.30	109.69	597.36	250.25	0.00	0.00	597.30	-I	-I	597.30
1.210	515.00	597.16	597.16	95.96	597.23	240.85	0.00	0.00	597.30	0.00	0.00	597.30
5-7 1.210	515.00	597.50	597.50	131.27	597.54	263.81	0.00	0.00	597.30	0.00	0.00	597.30
N#1.30 1.210	515.00	597.60	597.60	109.85	597.64	270.55	0.00	0.00	597.30	0.00	0.00	597.30
N#-7 1.210	515.00	596.94	596.94	109.58	597.05	224.33	0.00	0.00	597.30	0.00	0.00	597.30
1.330	515.00	598.49	598.49	85.80	598.63	164.43	0.00	0.00	0.00	597.30	597.30	0.00
1.330	515.00	598.52	598.52	88.26	598.66	165.74	0.00	0.00	0.00	597.30	597.30	0.00
1.330	515.00	598.46	598.46	83.63	598.61	163.26	0.00	0.00	0.00	597.30	597.30	0.00
1.330	515.00	598.81	598.81	85.66	598.90	177.15	0.00	0.00	0.00	597.30	597.30	0.00
1.330	515.00	598.09	598.09	84.68	598.36	148.79	0.00	0.00	0.00	597.30	597.30	0.00
1.340	515.00	599.88	599.88	97.50	600.06	166.59	0.00	0.00	0.00	0.00	0.00	0.00
1.340	515.00	599.88	599.88	97.00	600.06	166.40	0.00	0.00	0.00	0.00	0.00	0.00
1.340	515.00	599.89	599.89	97.67	600.07	166.66	0.00	0.00	0.00	0.00	0.00	0.00
1.340	515.00	600.23	600.23	96.99	600.34	174.07	0.00	0.00	0.00	0.00	0.00	0.00
1.340	515.00	599.47	599.47	97.56	599.83	154.12	0.00	0.00	0.00	0.00	0.00	0.00
1.350	515.00	600.72	600.72	108.53	600.95	40.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	515.00	600.73	600.73	108.63	600.95	40.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	515.00	600.73	600.73	108.75	600.96	40.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	515.00	601.13	601.13	100.77	601.31	40.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	515.00	600.29	600.29	123.03	600.59	40.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	515.00	600.84	600.84	40.55	602.68	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	515.00	600.84	600.84	40.55	602.68	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	515.00	600.84	600.84	40.55	602.68	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	515.00	600.84	600.84	31.21	602.68	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	515.00	600.84	600.84	58.04	602.68	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.420	515.00	609.57	609.57	209.53	609.74	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.420	515.00	609.57	609.57	209.53	609.74	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.420	515.00	609.57	609.57	209.53	609.74	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.420	515.00	609.57	609.57	161.19	609.74	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.420	515.00	609.58	609.58	299.47	609.74	13.00	0.00	0.00	0.00	0.00	0.00	0.00
15.750	515.00	609.77	609.77	1776.61	609.77	215.00	0.00	0.00	0.00	0.00	0.00	0.00
15.750	515.00	609.77	609.77	1776.61	609.77	215.00	0.00	0.00	0.00	0.00	0.00	0.00
15.750	515.00	609.77	609.77	1776.61	609.77	215.00	0.00	0.00	0.00	0.00	0.00	0.00
15.750	515.00	609.77	609.77	1367.24	609.77	215.00	0.00	0.00	0.00	0.00	0.00	0.00
15.750	515.00	609.77	609.77	2539.21	609.78	215.00	0.00	0.00	0.00	0.00	0.00	0.00
18.000	515.00	609.77	609.77	2728.37	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
18.000	515.00	609.77	609.77	2728.37	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
18.000	515.00	609.77	609.77	2728.37	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
18.000	515.00	609.78	609.78	2100.59	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
18.000	515.00	609.78	609.78	3898.68	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
100.980	515.00	609.77	609.77	2742.04	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
100.980	515.00	609.77	609.77	2742.03	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
100.980	515.00	609.77	609.77	2742.03	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
100.980	515.00	609.78	609.78	2111.21	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
100.980	515.00	609.78	609.78	3918.06	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
101.020	515.00	609.81	609.81	1771.15	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.020	515.00	609.81	609.81	1771.15	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.020	515.00	609.81	609.81	1771.14	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.020	515.00	609.81	609.81	1364.17	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.020	515.00	609.81	609.81	2530.99	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.210	515.00	609.81	609.81	1723.84	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.210	515.00	609.81	609.81	1723.84	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.210	515.00	609.81	609.81	1723.83	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.210	515.00	609.81	609.81	1328.00	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.210	515.00	609.81	609.81	2463.08	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.900	515.00	609.81	609.81	1161.75	609.81	264.66	0.00	0.00	0.00	0.00	0.00	0.00
101.900	515.00	609.81	609.81	1161.74	609.81	264.66	0.00	0.00	0.00	0.00	0.00	0.00
101.900	515.00	609.81	609.81	1161.74	609.81	264.66	0.00	0.00	0.00	0.00	0.00	0.00
101.900	515.00	609.82	609.82	895.84	609.82	264.80	0.00	0.00	0.00	0.00	0.00	0.00
101.900	515.00	609.81	609.81	1658.88	609.81	264.63	0.00	0.00	0.00	0.00	0.00	0.00
101.950	515.00	609.86	609.86	1179.54	609.86	265.52	0.00	0.00	0.00	0.00	0.00	0.00
101.950	515.00	609.86	609.86	1179.54	609.86	265.52	0.00	0.00	0.00	0.00	0.00	0.00
101.950	515.00	609.86	609.86	1179.54	609.86	265.52	0.00	0.00	0.00	0.00	0.00	0.00
101.950	515.00	609.87	609.87	909.55	609.87	265.65	0.00	0.00	0.00	0.00	0.00	0.00
101.950	515.00	609.86	609.86	1684.29	609.86	265.49	0.00	0.00	0.00	0.00	0.00	0.00
102.000	515.00	609.86	609.86	1144.38	609.87	263.82	0.00	0.00	0.00	0.00	0.00	0.00
102.000	515.00	609.86	609.86	1144.38	609.87	263.82	0.00	0.00	0.00	0.00	0.00	0.00
102.000	515.00	609.86	609.86	1144.38	609.87	263.82	0.00	0.00	0.00	0.00	0.00	0.00
102.000	515.00	609.87	609.87	882.64	609.87	263.96	0.00	0.00	0.00	0.00	0.00	0.00
102.000	515.00	609.86	609.86	1633.82	609.86	263.78	0.00	0.00	0.00	0.00	0.00	0.00
102.260	515.00	609.87	609.87	1152.00	609.87	263.88	0.00	0.00	0.00	0.00	0.00	0.00
102.260	515.00	609.87	609.87	1152.00	609.87	263.88	0.00	0.00	0.00	0.00	0.00	0.00
102.260	515.00	609.87	609.87	1151.99	609.87	263.88	0.00	0.00	0.00	0.00	0.00	0.00
102.260	515.00	609.88	609.88	889.22	609.88	264.08	0.00	0.00	0.00	0.00	0.00	0.00
102.260	515.00	609.86	609.86	1643.71	609.87	263.81	0.00	0.00	0.00	0.00	0.00	0.00
102.280	515.00	609.90	609.90	990.47	609.90	254.24	0.00	0.00	0.00	0.00	0.00	0.00
102.280	515.00	609.90	609.90	990.47	609.90	254.24	0.00	0.00	0.00	0.00	0.00	0.00
102.280	515.00	609.90	609.90	990.47	609.90	254.24	0.00	0.00	0.00	0.00	0.00	0.00
102.280	515.00	609.91	609.91	764.69	609.92	254.44	0.00	0.00	0.00	0.00	0.00	0.00
102.280	515.00	609.90	609.90	1413.14	609.90	254.18	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
102.500	515.00	609.90	609.90	939.58	609.91	254.21	0.00	0.00	0.00	0.00	0.00	0.00
102.500	515.00	609.90	609.90	939.57	609.91	254.21	0.00	0.00	0.00	0.00	0.00	0.00
102.500	515.00	609.90	609.90	939.57	609.91	254.21	0.00	0.00	0.00	0.00	0.00	0.00
102.500	515.00	609.92	609.92	725.97	609.92	254.44	0.00	0.00	0.00	0.00	0.00	0.00
102.500	515.00	609.90	609.90	1339.82	609.90	254.12	0.00	0.00	0.00	0.00	0.00	0.00
102.980	515.00	609.90	609.90	979.67	609.91	254.25	0.00	0.00	0.00	0.00	0.00	0.00
102.980	515.00	609.90	609.90	979.67	609.91	254.25	0.00	0.00	0.00	0.00	0.00	0.00
102.980	515.00	609.90	609.90	979.67	609.91	254.25	0.00	0.00	0.00	0.00	0.00	0.00
102.980	515.00	609.92	609.92	757.17	609.92	254.50	0.00	0.00	0.00	0.00	0.00	0.00
102.980	515.00	609.90	609.90	1396.62	609.90	254.14	0.00	0.00	0.00	0.00	0.00	0.00
103.020	515.00	610.08	610.08	1012.09	610.08	280.30	0.00	0.00	0.00	0.00	0.00	0.00
103.020	515.00	610.08	610.08	1012.09	610.08	280.30	0.00	0.00	0.00	0.00	0.00	0.00
103.020	515.00	610.08	610.08	1012.09	610.08	280.30	0.00	0.00	0.00	0.00	0.00	0.00
103.020	515.00	610.09	610.09	781.31	610.09	280.42	0.00	0.00	0.00	0.00	0.00	0.00
103.020	515.00	610.07	610.07	1443.58	610.07	280.25	0.00	0.00	0.00	0.00	0.00	0.00
103.290	515.00	610.08	610.08	966.59	610.08	280.28	0.00	0.00	0.00	0.00	0.00	0.00
103.290	515.00	610.08	610.08	966.58	610.08	280.28	0.00	0.00	0.00	0.00	0.00	0.00
103.290	515.00	610.08	610.08	966.58	610.08	280.28	0.00	0.00	0.00	0.00	0.00	0.00
103.290	515.00	610.09	610.09	746.52	610.09	280.40	0.00	0.00	0.00	0.00	0.00	0.00
103.290	515.00	610.07	610.07	1378.26	610.08	280.22	0.00	0.00	0.00	0.00	0.00	0.00
104.000	515.00	610.09	610.09	608.12	610.10	299.80	0.00	0.00	0.00	0.00	0.00	0.00
104.000	515.00	610.09	610.09	608.12	610.10	299.80	0.00	0.00	0.00	0.00	0.00	0.00
104.000	515.00	610.09	610.09	608.12	610.10	299.80	0.00	0.00	0.00	0.00	0.00	0.00
104.000	515.00	610.11	610.11	472.30	610.12	300.41	0.00	0.00	0.00	0.00	0.00	0.00
104.000	515.00	610.08	610.08	863.75	610.08	299.51	0.00	0.00	0.00	0.00	0.00	0.00
104.500	515.00	610.11	610.11	642.16	610.12	303.65	0.00	0.00	0.00	0.00	0.00	0.00
104.500	515.00	610.11	610.11	642.15	610.12	303.65	0.00	0.00	0.00	0.00	0.00	0.00
104.500	515.00	610.11	610.11	642.15	610.12	303.65	0.00	0.00	0.00	0.00	0.00	0.00
104.500	515.00	610.15	610.15	501.89	610.16	304.82	0.00	0.00	0.00	0.00	0.00	0.00
104.500	515.00	610.09	610.09	907.53	610.10	302.87	0.00	0.00	0.00	0.00	0.00	0.00
104.980	515.00	610.12	610.12	640.76	610.13	300.47	0.00	0.00	0.00	0.00	0.00	0.00
104.980	515.00	610.12	610.12	640.76	610.13	300.47	0.00	0.00	0.00	0.00	0.00	0.00
104.980	515.00	610.12	610.12	640.76	610.13	300.47	0.00	0.00	0.00	0.00	0.00	0.00
104.980	515.00	610.16	610.16	501.85	610.17	301.81	0.00	0.00	0.00	0.00	0.00	0.00
104.980	515.00	610.09	610.09	905.69	610.10	299.77	0.00	0.00	0.00	0.00	0.00	0.00
105.020	515.00	610.22	610.22	434.51	610.23	282.84	0.00	0.00	0.00	0.00	0.00	0.00
105.020	515.00	610.22	610.22	434.51	610.23	282.84	0.00	0.00	0.00	0.00	0.00	0.00
105.020	515.00	610.22	610.22	434.51	610.23	282.84	0.00	0.00	0.00	0.00	0.00	0.00
105.020	515.00	610.26	610.26	340.38	610.27	284.84	0.00	0.00	0.00	0.00	0.00	0.00
105.020	515.00	610.20	610.20	613.73	610.21	281.61	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
105.410	515.00	610.24	610.24	397.69	610.25	283.31	0.00	0.00	0.00	0.00	0.00	0.00
105.410	515.00	610.24	610.24	397.69	610.25	283.31	0.00	0.00	0.00	0.00	0.00	0.00
105.410	515.00	610.24	610.24	397.69	610.25	283.31	0.00	0.00	0.00	0.00	0.00	0.00
105.410	515.00	610.29	610.29	313.52	610.30	285.80	0.00	0.00	0.00	0.00	0.00	0.00
105.410	515.00	610.20	610.20	558.99	610.22	281.67	0.00	0.00	0.00	0.00	0.00	0.00
105.480	515.00	610.50	610.50	65.38	610.83	125.81	0.00	0.00	0.00	0.00	0.00	0.00
105.480	515.00	610.50	610.50	65.38	610.83	125.81	0.00	0.00	0.00	0.00	0.00	0.00
105.480	515.00	610.50	610.50	65.38	610.83	125.81	0.00	0.00	0.00	0.00	0.00	0.00
105.480	515.00	610.86	610.86	65.62	611.07	141.76	0.00	0.00	0.00	0.00	0.00	0.00
105.480	515.00	610.16	610.16	76.20	610.63	33.80	0.00	0.00	0.00	0.00	0.00	0.00
105.980	515.00	611.10	611.10	123.46	611.22	151.65	0.00	0.00	0.00	0.00	0.00	0.00
105.980	515.00	611.10	611.10	123.46	611.22	151.65	0.00	0.00	0.00	0.00	0.00	0.00
105.980	515.00	611.10	611.10	123.46	611.22	151.65	0.00	0.00	0.00	0.00	0.00	0.00
105.980	515.00	611.36	611.36	111.28	611.45	163.09	0.00	0.00	0.00	0.00	0.00	0.00
105.980	515.00	610.78	610.78	146.27	610.96	138.19	0.00	0.00	0.00	0.00	0.00	0.00
106.020	515.00	611.90	611.90	141.55	612.02	139.55	0.00	0.00	0.00	0.00	0.00	0.00
106.020	515.00	611.90	611.90	141.55	612.02	139.55	0.00	0.00	0.00	0.00	0.00	0.00
106.020	515.00	611.90	611.90	141.55	612.02	139.55	0.00	0.00	0.00	0.00	0.00	0.00
106.020	515.00	611.94	611.94	110.96	612.05	142.49	0.00	0.00	0.00	0.00	0.00	0.00
106.020	515.00	611.87	611.87	199.63	611.99	137.55	0.00	0.00	0.00	0.00	0.00	0.00
106.530	515.00	612.06	612.06	110.29	612.20	151.63	0.00	0.00	0.00	0.00	0.00	0.00
106.530	515.00	612.06	612.06	110.29	612.20	151.63	0.00	0.00	0.00	0.00	0.00	0.00
106.530	515.00	612.06	612.06	110.29	612.20	151.63	0.00	0.00	0.00	0.00	0.00	0.00
106.530	515.00	612.19	612.19	92.33	612.32	161.56	0.00	0.00	0.00	0.00	0.00	0.00
106.530	515.00	611.95	611.95	146.94	612.12	143.43	0.00	0.00	0.00	0.00	0.00	0.00
106.580	515.00	614.70	614.70	97.25	614.88	166.30	0.00	0.00	0.00	0.00	0.00	0.00
106.580	515.00	614.70	614.70	97.25	614.88	166.30	0.00	0.00	0.00	0.00	0.00	0.00
106.580	515.00	614.70	614.70	97.25	614.88	166.30	0.00	0.00	0.00	0.00	0.00	0.00
106.580	515.00	615.18	615.18	104.75	615.27	246.97	0.00	0.00	0.00	0.00	0.00	0.00
106.580	515.00	613.89	613.89	88.09	614.26	35.46	0.00	0.00	0.00	0.00	0.00	0.00
106.590	515.00	616.83	616.83	106.31	616.98	188.34	0.00	0.00	0.00	0.00	0.00	0.00
106.590	515.00	616.83	616.83	106.31	616.98	188.34	0.00	0.00	0.00	0.00	0.00	0.00
106.590	515.00	616.83	616.83	106.31	616.98	188.34	0.00	0.00	0.00	0.00	0.00	0.00
106.590	515.00	617.17	617.17	103.95	617.27	245.20	0.00	0.00	0.00	0.00	0.00	0.00
106.590	515.00	616.27	616.27	107.25	616.56	96.27	0.00	0.00	0.00	0.00	0.00	0.00
106.980	450.00	617.07	617.07	163.99	617.14	147.87	0.00	0.00	0.00	0.00	0.00	0.00
106.980	450.00	617.07	617.07	163.99	617.14	147.87	0.00	0.00	0.00	0.00	0.00	0.00
106.980	450.00	617.07	617.07	163.99	617.14	147.87	0.00	0.00	0.00	0.00	0.00	0.00
106.980	450.00	617.38	617.38	145.38	617.43	181.02	0.00	0.00	0.00	0.00	0.00	0.00
106.980	450.00	616.63	616.63	195.93	616.73	92.53	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
107.020	450.00	618.68	618.68	1296.80	618.68	599.79	0.00	0.00	0.00	0.00	0.00	0.00
107.020	450.00	618.68	618.68	1296.80	618.68	599.79	0.00	0.00	0.00	0.00	0.00	0.00
107.020	450.00	618.68	618.68	1296.80	618.68	599.79	0.00	0.00	0.00	0.00	0.00	0.00
107.020	450.00	618.70	618.70	1009.29	618.71	601.84	0.00	0.00	0.00	0.00	0.00	0.00
107.020	450.00	618.64	618.64	1822.26	618.64	596.92	0.00	0.00	0.00	0.00	0.00	0.00
107.100	450.00	618.68	618.68	1044.58	618.68	578.50	0.00	0.00	0.00	0.00	0.00	0.00
107.100	450.00	618.68	618.68	1044.58	618.68	578.50	0.00	0.00	0.00	0.00	0.00	0.00
107.100	450.00	618.68	618.68	1044.58	618.68	578.50	0.00	0.00	0.00	0.00	0.00	0.00
107.100	450.00	618.71	618.71	813.95	618.71	580.62	0.00	0.00	0.00	0.00	0.00	0.00
107.100	450.00	618.64	618.64	1465.74	618.64	575.58	0.00	0.00	0.00	0.00	0.00	0.00
108.000	450.00	618.71	618.71	269.21	618.72	386.05	0.00	0.00	0.00	0.00	0.00	0.00
108.000	450.00	618.71	618.71	269.21	618.72	386.05	0.00	0.00	0.00	0.00	0.00	0.00
108.000	450.00	618.71	618.71	269.21	618.72	386.05	0.00	0.00	0.00	0.00	0.00	0.00
108.000	450.00	618.77	618.77	215.37	618.78	390.36	0.00	0.00	0.00	0.00	0.00	0.00
108.000	450.00	618.65	618.65	368.50	618.66	380.57	0.00	0.00	0.00	0.00	0.00	0.00
109.000	450.00	620.17	620.17	85.78	620.26	318.82	0.00	0.00	0.00	0.00	0.00	0.00
109.000	450.00	620.17	620.17	85.78	620.26	318.82	0.00	0.00	0.00	0.00	0.00	0.00
109.000	450.00	620.17	620.17	85.78	620.26	318.82	0.00	0.00	0.00	0.00	0.00	0.00
109.000	450.00	620.52	620.52	112.50	620.56	379.78	0.00	0.00	0.00	0.00	0.00	0.00
109.000	450.00	619.86	619.86	70.57	620.12	267.52	0.00	0.00	0.00	0.00	0.00	0.00
109.050	450.00	620.93	620.93	91.30	621.04	305.15	0.00	0.00	0.00	0.00	0.00	0.00
109.050	450.00	620.93	620.93	91.30	621.04	305.15	0.00	0.00	0.00	0.00	0.00	0.00
109.050	450.00	620.93	620.93	91.30	621.04	305.15	0.00	0.00	0.00	0.00	0.00	0.00
109.050	450.00	621.10	621.10	88.80	621.17	344.38	0.00	0.00	0.00	0.00	0.00	0.00
109.050	450.00	620.75	620.75	101.75	620.95	265.71	0.00	0.00	0.00	0.00	0.00	0.00
109.100	450.00	623.89	623.89	85.91	624.06	181.07	0.00	0.00	0.00	0.00	0.00	0.00
109.100	450.00	623.89	623.89	85.91	624.06	181.07	0.00	0.00	0.00	0.00	0.00	0.00
109.100	450.00	623.89	623.89	85.91	624.06	181.07	0.00	0.00	0.00	0.00	0.00	0.00
109.100	450.00	624.14	624.14	86.41	624.24	221.05	0.00	0.00	0.00	0.00	0.00	0.00
109.100	450.00	623.49	623.49	79.61	623.87	120.34	0.00	0.00	0.00	0.00	0.00	0.00
109.980	450.00	624.23	624.23	116.74	624.31	233.80	0.00	0.00	0.00	0.00	0.00	0.00
109.980	450.00	624.23	624.23	116.74	624.31	233.80	0.00	0.00	0.00	0.00	0.00	0.00
109.980	450.00	624.23	624.23	116.74	624.31	233.80	0.00	0.00	0.00	0.00	0.00	0.00
109.980	450.00	624.44	624.44	110.41	624.50	264.81	0.00	0.00	0.00	0.00	0.00	0.00
109.980	450.00	624.04	624.04	135.95	624.17	203.89	0.00	0.00	0.00	0.00	0.00	0.00
110.020	450.00	626.43	626.43	125.55	626.56	122.89	0.00	0.00	0.00	0.00	0.00	0.00
110.020	450.00	626.43	626.43	125.55	626.56	122.89	0.00	0.00	0.00	0.00	0.00	0.00
110.020	450.00	626.43	626.43	125.55	626.56	122.89	0.00	0.00	0.00	0.00	0.00	0.00
110.020	450.00	626.44	626.44	97.18	626.56	123.22	0.00	0.00	0.00	0.00	0.00	0.00
110.020	450.00	626.42	626.42	178.39	626.55	122.61	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
110.050	450.00	626.49	626.49	115.21	626.63	125.11	0.00	0.00	0.00	0.00	0.00	0.00
110.050	450.00	626.49	626.49	115.21	626.63	125.11	0.00	0.00	0.00	0.00	0.00	0.00
110.050	450.00	626.49	626.49	115.21	626.63	125.11	0.00	0.00	0.00	0.00	0.00	0.00
110.050	450.00	626.55	626.55	92.83	626.68	127.38	0.00	0.00	0.00	0.00	0.00	0.00
110.050	450.00	626.45	626.45	160.11	626.59	123.78	0.00	0.00	0.00	0.00	0.00	0.00
110.100	450.00	626.76	626.76	104.42	626.92	120.40	0.00	0.00	0.00	0.00	0.00	0.00
110.100	450.00	626.76	626.76	104.42	626.92	120.40	0.00	0.00	0.00	0.00	0.00	0.00
110.100	450.00	626.76	626.76	104.42	626.92	120.40	0.00	0.00	0.00	0.00	0.00	0.00
110.100	450.00	626.93	626.93	91.99	627.06	126.93	0.00	0.00	0.00	0.00	0.00	0.00
110.100	450.00	626.59	626.59	131.48	626.79	114.26	0.00	0.00	0.00	0.00	0.00	0.00
110.200	450.00	627.01	627.01	125.67	627.13	129.38	0.00	0.00	0.00	0.00	0.00	0.00
110.200	450.00	627.01	627.01	125.67	627.13	129.38	0.00	0.00	0.00	0.00	0.00	0.00
110.200	450.00	627.01	627.01	125.67	627.13	129.38	0.00	0.00	0.00	0.00	0.00	0.00
110.200	450.00	627.18	627.18	109.22	627.28	135.55	0.00	0.00	0.00	0.00	0.00	0.00
110.200	450.00	626.84	626.84	158.93	626.99	123.42	0.00	0.00	0.00	0.00	0.00	0.00
110.980	450.00	627.34	627.34	73.32	627.66	77.31	0.00	0.00	0.00	0.00	0.00	0.00
110.980	450.00	627.34	627.34	73.32	627.66	77.31	0.00	0.00	0.00	0.00	0.00	0.00
110.980	450.00	627.34	627.34	73.32	627.66	77.31	0.00	0.00	0.00	0.00	0.00	0.00
110.980	450.00	627.62	627.62	68.00	627.85	96.09	0.00	0.00	0.00	0.00	0.00	0.00
110.980	450.00	627.03	627.03	85.68	627.45	56.29	0.00	0.00	0.00	0.00	0.00	0.00

OUTPUT FILE LINE LIMIT EXCEEDED
ERROR NUMBER 83 DETECTED BY OUTC= AT ADDRESS 000175
CALLED FROM SUMPO AT LINE 119
CALLED FROM HEC2 AT LINE 2890

DMPX.

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P    053115   A0  016404   B0  000000
RA   074300   A1  000001   B1  000001    C(A1)=  0102  2420  0000  0000  0000    C(B1)=  0102  2420  0000  0000  0000
FL   055600   A2  051007   B2  777755    C(A2)=  1717  0631  4631  4640  3615    C(B2)=
EM   070000   A3  046231   B3  015666    C(A3)=  0000  0000  0000  0000  0000    C(B3)=  1726  6701  4631  4631  4632
RE   000000   A4  045760   B4  000001    C(A4)=  5555  5555  3734  5742  3733    C(B4)=  0102  2420  0000  0000  0000
FE   000000   A5  044764   B5  000000    C(A5)=  0000  0062  0000  0002  1741    C(B5)=  0000  0000  0000  0000  0000
MA   000600   A6  000001   B6  046225    C(A6)=  0102  2420  0000  0000  0000    C(B6)=  5140  0460  4504  0004  6164
              A7  055400   B7  000044    C(A7)=  2401  2005  3433  0000  0132    C(B7)=  0000  0000  0000  0000  0000
X0  0000  0000  0000  0000  0000
X1  0000  0000  0000  0000  0000
X2  1717  0631  4631  4640  3615
X3  2000  0000  0000  0000  0012
X4  2000  0000  0000  0000  0000
X5  0000  0000  0000  0000  0002
X6  0102  2420  0000  0000  0000
X7  2000  0000  0000  0000  0004

00000   00000 00000 00000 00000      01022 42000 00000 00000      11162 02524 00000 10066      17252 42025 24000 12131
00004   24012 00544 34000 14174      24012 00544 35000 14636      24012 00544 36000 15300      24012 00544 37000 15742
00010   24012 00534 33000 16404      00000 00000 00000
00054  =56110 03110 00054 54710      51100 00001 03110 00055      64550 02550 00000 46000      00000 00000 00000 00000
00060   15051 52000 00000 00061      00000 55600 00000 00001      51600 00001 04000 00054      63310 02300 00000 46000
00064   17021 20000 00000 00000      00000 00000 00000 55556      40000 00000 00000 00111      00000 00000 00000 00000
00100  =54000 00000 01000

53015   52140 53050 34225 63302      41772 30336 31237 44372      30411 40743 34017 27630
53020   04000 50237 00000 00000      26221 13666 61307 77731      61100 00001 51500 53043      54451 07230 53007 55251
53024   04230 53005 03710 53027      06020 53005 61000 46000      03310 53031 61000 46000      61200 07541 61000 46000
53030   01000 50155 00000 53001      03710 53020 43213 21174      20273 15621 04000 53020      51200 53040 37510 21404
53034   52150 53050 40327 36640      61307 77717 40731 27131      34217 34312 26423 63362      27633 04000 53020 46000
53040   17135 42710 27757 50703      60462 56056 35533 44772      17315 62652 70026 71674      17400 00056 12507 31226
53044   61176 02774 13567 64200      17077 31133 60654 04730      17345 15012 32362 15762      17267 15524 05065 62467
53050   17204 00000 00000 00000      17204 13253 03317 46110      17204 27127 01707 65214      17204 43417 23347 25422
53054   17204 60337 60243 06671      17204 75724 62301 10641      17205 13773 26523 30521      17205 32540 76724 41241
53060   17205 52023 63147 74736      17205 72042 43476 54014      17206 12634 52042 52407      17206 34222 14052 17605
53064   17206 56423 74625 53235      17207 01463 36730 25225      17207 25403 06717 56444      17207 52225 75052 22207
53070   17207 77777 77777 77777      24171 75514 01220 70556      55061 41701 24111 60755      17260 52206 14172 70000
53074   42222 03230 53075 42442      20373 42222 61000 46000      21002 03230 53077 42442      20373 03100 53074 26604
53100   04000 42222 00000 00000      10033 20373 51400 53111      27201 03230 53103 10422      20373 21001 03200 53074
53104   21101 71600 00001 36333      03110 53107 21373 15513      13665 04000 53100 46000      03030 53100 76600 46000
53110   04000 53100 61000 46000      20000 00000 00000 00001      01000 46241 00000 00000      04000 53126 00000 00000
53114   01300 00000 00000 00000      04000 46105 00000 00000      51100 00001 03110 53116      54610 04000 53114 46000
53120   51100 00066 03310 53122      51100 53113 04000 53123      71100 00130 20160 46000      13616 13116 13616 46000
53124   51600 53114 10611 46000      51100 00001 01000 53113      20652 01000 53115 46000      51100 00001 03110 53127
53130   04000 55465 00000 00000      51100 00001 03110 53130      71602 20314 04000 53126      36662 01000 53115 46000
53134   04000 55100 00000 00000      71602 20314 27606 20652      53120 20173 03310 53134      03010 53134 51100 00001
53140   03110 53136 04000 53133      71603 24616 12661 20651      01000 53115 61000 46000      04000 46103 00000 00000
53144   20622 12161 73610 20123      03210 53141 20151 13116      20636 51600 53150 74660      36116 20123 04000 53141
53150   00000 45213 00000 00001      02000 53577 61000 46000      60000 00000 00000 00000
53154  =02000 55314 61000 46000      60000 00000 00000 00000  53162=02000 53725 61000 46000      60000 00000 00000 00000
53165  =02000 53527 61000 46000      60000 00000 00000
53204  =02000 54111 61000 46000      02000 54151 61000 46000      00000 00000 00000 00000      60000 00000 00000 00000
53211  =71600 00001 04000 53213      76600 46000 61000 46000      516
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 07/09/79  MSU HUSTLER 2      LSD 48.26  07/07/79  6500
12.26.05.UMM1158
12.26.06.JOB READ-  07/09/79 .11.34.31.
12.26.06.MCNAMEE,PN      ,RG3,CM120000,JC1250,T50
12.26.06..
12.26.07.NL    20000
12.26.07.RP  000000000033  000000000210
12.26.07.LAST ACCESS- M 11.26 07/09/79
12.26.07.RUNS- 1452   PN DOLLAR BALANCE $00226.70
12.26.07.CP-PP SEC.     .036-     .000  $     .00
12.26.08.ATTACH,OBJ,HEC2OBJ,PW=*---*.
12.26.09.OBJ.     - CYCLE 01, HEC2OBJ
12.26.09.FILE ATTACHED
12.26.09.CP-PP SEC.     .046-    1.176  $     .01
12.26.09.NL  030000
12.26.09.RP      00000003  000000000012
12.26.10.NL   44000
12.26.10.RP  000000000015  000000000032
12.26.10.NL   50000
12.26.10.RP  000000000022  000000000141
12.26.12.NL   54000
12.26.12.RP  000000000026  000000000252
12.26.19.NL   60000
12.26.19.RP  000000000031  000000000315
12.26.23.NL   64000
12.26.23.RP  000000000034  000000000350
12.26.23.NL   70000
12.26.23.RP  000000000040  000000000415
12.26.25.NL   74000
12.26.25.RP  000000000051  000000000522
12.29.24.NL  100000
12.29.24.RP  000000000052  000000000573
12.31.44.OBJ.
12.31.45.NL    55600
12.31.45.RP  000000000075  000000000667
12.31.45.DUE TO A COMING CHANGE IN CYBER RECORD
12.31.45.MANAGER, YOUR BINARY WILL SOON NO LONGER
12.31.45.WORK.  PLEASE RECOMPILE.
12.31.45.EXEC BEGUN.12.31.45.
12.47.41.FTN - FATAL ERROR   83
12.47.41.     41.740 CP SECONDS EXECUTION TIME
12.47.41.CPU ABORT
12.47.41.MAX FILES 0008 MAX PRUS 0025008.
12.47.41. PP     38.449 SEC.
12.47.41.RP  000000002302  000000010625
12.47.41.CP USE    44.733 SEC    VALUE$     1.74
12.47.41.PP USE   126.301 SEC    VALUE$      .32
12.47.41.CM USE    17.480 W-H    VALUE$     4.14
12.47.41.TOTAL COMPUTE VALUE AT RG3 $     9.29
```

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Bragdon Ditch

4) DOCUMENT TYPE: 500 yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

BRAGDEN DITCH 500 YEAR

	SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
10	1.210	295.00	596.76	596.76	62.54	596.81	205.81	0.00	0.00	597.30	-1	-1	597.30
50	1.210	440.00	597.13	597.13	93.34	597.19	238.97	0.00	0.00	597.30	0.00	0.00	597.30
500	1.210	715.00	597.68	597.68	152.53	597.74	276.02	0.00	0.00	597.30	0.00	0.00	597.30
	1.330	295.00	597.94	597.94	50.50	598.06	141.22	0.00	0.00	0.00	597.30	597.30	0.00
	1.330	440.00	598.32	598.32	73.92	598.46	157.81	0.00	0.00	0.00	597.30	597.30	0.00
	1.330	715.00	598.87	598.87	117.27	599.04	179.85	0.00	0.00	0.00	597.30	597.30	0.00
	1.340	295.00	599.27	599.27	56.67	599.44	148.26	0.00	0.00	0.00	0.00	0.00	0.00
	1.340	440.00	599.69	599.69	83.70	599.87	161.02	0.00	0.00	0.00	0.00	0.00	0.00
	1.340	715.00	600.31	600.31	133.93	600.51	175.61	0.00	0.00	0.00	0.00	0.00	0.00
	1.350	295.00	600.03	600.03	74.16	600.15	40.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.350	440.00	600.51	600.51	97.40	600.70	40.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.350	715.00	601.20	601.20	135.19	601.54	40.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.380	295.00	599.71	599.71	22.14	600.98	13.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.380	440.00	600.48	600.48	34.22	602.13	13.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.380	715.00	601.74	601.74	57.77	604.02	13.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.420	295.00	602.30	602.30	56.93	602.63	13.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.420	440.00	606.77	606.77	146.55	606.97	13.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.420	715.00	610.69	610.69	2391.08	610.69	259.00	0.00	0.00	0.00	0.00	0.00	0.00
	15.750	295.00	602.72	602.72	212.41	602.74	172.08	0.00	0.00	0.00	0.00	0.00	0.00
	15.750	440.00	607.02	607.02	994.31	607.02	215.00	0.00	0.00	0.00	0.00	0.00	0.00
	15.750	715.00	610.69	610.69	2079.04	610.70	215.00	0.00	0.00	0.00	0.00	0.00	0.00
	18.000	295.00	602.84	602.84	184.39	602.86	230.43	0.00	0.00	0.00	0.00	0.00	0.00
	18.000	440.00	607.02	607.02	1389.61	607.03	279.49	0.00	0.00	0.00	0.00	0.00	0.00
	18.000	715.00	610.70	610.70	3258.60	610.70	282.00	0.00	0.00	0.00	0.00	0.00	0.00
	100.980	295.00	602.87	602.87	195.60	602.88	230.78	0.00	0.00	0.00	0.00	0.00	0.00
	100.980	440.00	607.02	607.02	1401.19	607.03	279.50	0.00	0.00	0.00	0.00	0.00	0.00
	100.980	715.00	610.70	610.70	3273.06	610.70	282.00	0.00	0.00	0.00	0.00	0.00	0.00
	101.020	295.00	604.73	604.73	163.87	604.76	209.89	0.00	0.00	0.00	0.00	0.00	0.00
	101.020	440.00	607.08	607.08	666.99	607.08	299.29	0.00	0.00	0.00	0.00	0.00	0.00
	101.020	715.00	610.74	610.74	2263.78	610.74	329.00	0.00	0.00	0.00	0.00	0.00	0.00
	101.210	295.00	604.77	604.77	137.46	604.80	215.66	0.00	0.00	0.00	0.00	0.00	0.00
	101.210	440.00	607.08	607.08	628.28	607.09	299.29	0.00	0.00	0.00	0.00	0.00	0.00
	101.210	715.00	610.74	610.74	2213.74	610.74	329.00	0.00	0.00	0.00	0.00	0.00	0.00
	101.900	295.00	604.93	604.93	124.03	604.97	126.92	0.00	0.00	0.00	0.00	0.00	0.00
	101.900	440.00	607.10	607.10	418.36	607.11	205.29	0.00	0.00	0.00	0.00	0.00	0.00
	101.900	715.00	610.74	610.74	1518.94	610.75	303.97	0.00	0.00	0.00	0.00	0.00	0.00
	101.950	295.00	604.98	604.98	128.79	605.02	128.87	0.00	0.00	0.00	0.00	0.00	0.00
	101.950	440.00	607.15	607.15	427.79	607.16	207.08	0.00	0.00	0.00	0.00	0.00	0.00
	101.950	715.00	610.79	610.79	1539.73	610.80	306.40	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
102.000	295.00	605.00	605.00	122.19	605.05	126.15	0.00	0.00	0.00	0.00	0.00	0.00
102.000	440.00	607.16	607.16	409.91	607.17	203.66	0.00	0.00	0.00	0.00	0.00	0.00
102.000	715.00	610.79	610.79	1498.69	610.80	301.59	0.00	0.00	0.00	0.00	0.00	0.00
102.260	295.00	605.11	605.11	136.11	605.15	130.11	0.00	0.00	0.00	0.00	0.00	0.00
102.260	440.00	607.18	607.18	419.32	607.19	204.46	0.00	0.00	0.00	0.00	0.00	0.00
102.260	715.00	610.80	610.80	1507.01	610.80	301.80	0.00	0.00	0.00	0.00	0.00	0.00
102.280	295.00	605.10	605.10	118.90	605.16	91.94	0.00	0.00	0.00	0.00	0.00	0.00
102.280	440.00	607.20	607.20	348.93	607.22	183.38	0.00	0.00	0.00	0.00	0.00	0.00
102.280	715.00	610.84	610.84	1317.74	610.85	275.01	0.00	0.00	0.00	0.00	0.00	0.00
102.500	295.00	605.16	605.16	88.93	605.24	95.74	0.00	0.00	0.00	0.00	0.00	0.00
102.500	440.00	607.22	607.22	307.63	607.24	183.61	0.00	0.00	0.00	0.00	0.00	0.00
102.500	715.00	610.84	610.84	1264.26	610.85	274.88	0.00	0.00	0.00	0.00	0.00	0.00
102.980	295.00	605.25	605.25	121.15	605.31	101.11	0.00	0.00	0.00	0.00	0.00	0.00
102.980	440.00	607.23	607.23	343.24	607.25	184.16	0.00	0.00	0.00	0.00	0.00	0.00
102.980	715.00	610.85	610.85	1306.18	610.85	274.99	0.00	0.00	0.00	0.00	0.00	0.00
103.020	295.00	609.53	609.53	835.60	609.53	274.34	0.00	0.00	0.00	0.00	0.00	0.00
103.020	440.00	609.79	609.79	917.15	609.79	277.17	0.00	0.00	0.00	0.00	0.00	0.00
103.020	715.00	610.94	610.94	1327.93	610.94	289.75	0.00	0.00	0.00	0.00	0.00	0.00
103.290	295.00	609.53	609.53	792.34	609.53	274.33	0.00	0.00	0.00	0.00	0.00	0.00
103.290	440.00	609.79	609.79	872.72	609.79	277.15	0.00	0.00	0.00	0.00	0.00	0.00
103.290	715.00	610.94	610.94	1279.35	610.95	289.71	0.00	0.00	0.00	0.00	0.00	0.00
104.000	295.00	609.54	609.54	468.15	609.54	287.20	0.00	0.00	0.00	0.00	0.00	0.00
104.000	440.00	609.80	609.80	532.89	609.81	293.23	0.00	0.00	0.00	0.00	0.00	0.00
104.000	715.00	610.96	610.96	866.34	610.96	327.24	0.00	0.00	0.00	0.00	0.00	0.00
104.500	295.00	609.55	609.55	495.36	609.56	289.78	0.00	0.00	0.00	0.00	0.00	0.00
104.500	440.00	609.83	609.83	564.28	609.83	296.03	0.00	0.00	0.00	0.00	0.00	0.00
104.500	715.00	610.98	610.98	906.60	610.98	331.14	0.00	0.00	0.00	0.00	0.00	0.00
104.980	295.00	609.56	609.56	495.97	609.56	287.50	0.00	0.00	0.00	0.00	0.00	0.00
104.980	440.00	609.83	609.83	564.03	609.84	293.74	0.00	0.00	0.00	0.00	0.00	0.00
104.980	715.00	610.98	610.98	902.10	610.99	327.95	0.00	0.00	0.00	0.00	0.00	0.00
105.020	295.00	609.64	609.64	326.31	609.65	253.04	0.00	0.00	0.00	0.00	0.00	0.00
105.020	440.00	609.94	609.94	379.26	609.95	268.32	0.00	0.00	0.00	0.00	0.00	0.00
105.020	715.00	611.07	611.07	633.36	611.09	320.61	0.00	0.00	0.00	0.00	0.00	0.00
105.410	295.00	609.65	609.65	289.88	609.65	253.13	0.00	0.00	0.00	0.00	0.00	0.00
105.410	440.00	609.95	609.95	343.14	609.97	268.78	0.00	0.00	0.00	0.00	0.00	0.00
105.410	715.00	611.09	611.09	594.28	611.10	320.75	0.00	0.00	0.00	0.00	0.00	0.00
105.480	295.00	609.82	609.82	45.14	610.02	31.75	0.00	0.00	0.00	0.00	0.00	0.00
105.480	440.00	610.21	610.21	55.04	610.54	52.50	0.00	0.00	0.00	0.00	0.00	0.00
105.480	715.00	611.34	611.34	120.24	611.55	162.50	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
105.980	295.00	610.20	610.20	74.73	610.30	33.85	0.00	0.00	0.00	0.00	0.00	0.00
105.980	440.00	610.80	610.80	103.43	610.93	138.93	0.00	0.00	0.00	0.00	0.00	0.00
105.980	715.00	611.69	611.69	176.86	611.81	190.74	0.00	0.00	0.00	0.00	0.00	0.00
106.020	295.00	611.49	611.49	117.56	611.55	102.40	0.00	0.00	0.00	0.00	0.00	0.00
106.020	440.00	611.78	611.78	133.50	611.87	130.33	0.00	0.00	0.00	0.00	0.00	0.00
106.020	715.00	612.23	612.23	166.66	612.39	164.48	0.00	0.00	0.00	0.00	0.00	0.00
106.530	295.00	611.58	611.58	81.21	611.66	113.46	0.00	0.00	0.00	0.00	0.00	0.00
106.530	440.00	611.91	611.91	100.27	612.04	140.42	0.00	0.00	0.00	0.00	0.00	0.00
106.530	715.00	612.45	612.45	140.94	612.62	180.52	0.00	0.00	0.00	0.00	0.00	0.00
106.580	295.00	613.60	613.60	53.70	613.75	33.67	0.00	0.00	0.00	0.00	0.00	0.00
106.580	440.00	614.42	614.42	81.19	614.60	118.94	0.00	0.00	0.00	0.00	0.00	0.00
106.580	715.00	615.23	615.23	140.96	615.40	254.98	0.00	0.00	0.00	0.00	0.00	0.00
106.590	295.00	615.83	615.83	59.95	615.96	35.09	0.00	0.00	0.00	0.00	0.00	0.00
106.590	440.00	616.60	616.60	91.01	616.74	149.38	0.00	0.00	0.00	0.00	0.00	0.00
106.590	715.00	617.28	617.28	146.04	617.43	263.15	0.00	0.00	0.00	0.00	0.00	0.00
106.980	255.00	616.06	616.06	111.90	616.10	37.65	0.00	0.00	0.00	0.00	0.00	0.00
106.980	380.00	616.83	616.83	148.32	616.90	122.93	0.00	0.00	0.00	0.00	0.00	0.00
106.980	620.00	617.51	617.51	201.47	617.60	195.43	0.00	0.00	0.00	0.00	0.00	0.00
107.020	255.00	616.92	616.92	92.57	617.01	18.00	0.00	0.00	0.00	0.00	0.00	0.00
107.020	380.00	618.58	618.58	1245.11	618.58	592.75	0.00	0.00	0.00	0.00	0.00	0.00
107.020	620.00	618.84	618.84	1383.98	618.84	611.30	0.00	0.00	0.00	0.00	0.00	0.00
107.100	255.00	617.05	617.05	454.61	617.05	439.30	0.00	0.00	0.00	0.00	0.00	0.00
107.100	380.00	618.58	618.58	1000.17	618.58	571.46	0.00	0.00	0.00	0.00	0.00	0.00
107.100	620.00	618.84	618.84	1119.65	618.84	590.04	0.00	0.00	0.00	0.00	0.00	0.00
108.000	255.00	617.10	617.10	62.35	617.15	233.60	0.00	0.00	0.00	0.00	0.00	0.00
108.000	380.00	618.61	618.61	249.47	618.61	376.15	0.00	0.00	0.00	0.00	0.00	0.00
108.000	620.00	618.90	618.90	306.82	618.91	400.71	0.00	0.00	0.00	0.00	0.00	0.00
109.000	255.00	620.12	620.12	80.32	620.15	312.15	0.00	0.00	0.00	0.00	0.00	0.00
109.000	380.00	619.95	619.95	59.61	620.08	283.86	0.00	0.00	0.00	0.00	0.00	0.00
109.000	620.00	620.57	620.57	154.48	620.63	386.80	0.00	0.00	0.00	0.00	0.00	0.00
109.050	255.00	620.51	620.51	50.70	620.64	214.03	0.00	0.00	0.00	0.00	0.00	0.00
109.050	380.00	620.84	620.84	81.95	620.95	287.76	0.00	0.00	0.00	0.00	0.00	0.00
109.050	620.00	621.14	621.14	119.89	621.26	350.93	0.00	0.00	0.00	0.00	0.00	0.00
109.100	255.00	623.41	623.41	51.26	623.55	112.87	0.00	0.00	0.00	0.00	0.00	0.00
109.100	380.00	623.70	623.70	69.97	623.87	151.60	0.00	0.00	0.00	0.00	0.00	0.00
109.100	620.00	624.21	624.21	119.98	624.38	231.17	0.00	0.00	0.00	0.00	0.00	0.00
109.980	255.00	623.70	623.70	48.37	623.89	29.00	0.00	0.00	0.00	0.00	0.00	0.00
109.980	380.00	624.06	624.06	97.62	624.15	207.55	0.00	0.00	0.00	0.00	0.00	0.00
109.980	620.00	624.54	624.54	160.64	624.63	280.74	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
110.020	255.00	626.20	626.20	107.75	626.26	114.88	0.00	0.00	0.00	0.00	0.00	0.00
110.020	380.00	626.37	626.37	120.43	626.46	120.69	0.00	0.00	0.00	0.00	0.00	0.00
110.020	620.00	626.51	626.51	133.15	626.73	126.03	0.00	0.00	0.00	0.00	0.00	0.00
110.050	255.00	626.23	626.23	94.44	626.30	115.69	0.00	0.00	0.00	0.00	0.00	0.00
110.050	380.00	626.42	626.42	108.71	626.53	122.32	0.00	0.00	0.00	0.00	0.00	0.00
110.050	620.00	626.63	626.63	128.09	626.85	130.33	0.00	0.00	0.00	0.00	0.00	0.00
110.100	255.00	626.37	626.37	77.39	626.46	99.58	0.00	0.00	0.00	0.00	0.00	0.00
110.100	380.00	626.64	626.64	95.06	626.77	116.00	0.00	0.00	0.00	0.00	0.00	0.00
110.100	620.00	627.01	627.01	126.87	627.23	129.85	0.00	0.00	0.00	0.00	0.00	0.00
110.200	255.00	626.55	626.55	89.05	626.62	111.44	0.00	0.00	0.00	0.00	0.00	0.00
110.200	380.00	626.89	626.89	114.90	626.98	124.98	0.00	0.00	0.00	0.00	0.00	0.00
110.200	620.00	627.38	627.38	162.76	627.52	142.74	0.00	0.00	0.00	0.00	0.00	0.00
110.980	255.00	626.77	626.77	50.19	626.94	37.85	0.00	0.00	0.00	0.00	0.00	0.00
110.980	380.00	627.17	627.17	65.68	627.44	65.81	0.00	0.00	0.00	0.00	0.00	0.00
110.980	620.00	627.74	627.74	96.72	628.13	104.65	0.00	0.00	0.00	0.00	0.00	0.00
111.020	255.00	629.95	629.95	411.93	629.95	249.07	0.00	0.00	0.00	0.00	0.00	0.00
111.020	380.00	630.19	630.19	469.83	630.20	256.81	0.00	0.00	0.00	0.00	0.00	0.00
111.020	620.00	630.50	630.50	549.71	630.52	266.59	0.00	0.00	0.00	0.00	0.00	0.00
111.100	255.00	629.95	629.95	377.00	629.95	248.98	0.00	0.00	0.00	0.00	0.00	0.00
111.100	380.00	630.19	630.19	433.43	630.20	256.65	0.00	0.00	0.00	0.00	0.00	0.00
111.100	620.00	630.51	630.51	512.88	630.52	266.51	0.00	0.00	0.00	0.00	0.00	0.00
111.200	255.00	629.98	629.98	304.63	629.98	301.49	0.00	0.00	0.00	0.00	0.00	0.00
111.200	380.00	630.24	630.24	369.14	630.25	306.95	0.00	0.00	0.00	0.00	0.00	0.00
111.200	620.00	630.59	630.59	465.59	630.60	314.27	0.00	0.00	0.00	0.00	0.00	0.00
111.280	255.00	629.99	629.99	311.12	629.99	301.79	0.00	0.00	0.00	0.00	0.00	0.00
111.280	380.00	630.25	630.25	377.90	630.26	307.40	0.00	0.00	0.00	0.00	0.00	0.00
111.280	620.00	630.61	630.61	478.95	630.63	314.99	0.00	0.00	0.00	0.00	0.00	0.00
111.320	255.00	630.02	630.02	421.75	630.03	296.77	0.00	0.00	0.00	0.00	0.00	0.00
111.320	380.00	630.30	630.30	497.17	630.31	309.23	0.00	0.00	0.00	0.00	0.00	0.00
111.320	620.00	630.68	630.68	610.82	630.69	326.04	0.00	0.00	0.00	0.00	0.00	0.00
111.400	255.00	630.03	630.03	425.80	630.03	296.66	0.00	0.00	0.00	0.00	0.00	0.00
111.400	380.00	630.30	630.30	500.81	630.31	309.05	0.00	0.00	0.00	0.00	0.00	0.00
111.400	620.00	630.68	630.68	615.21	630.70	325.95	0.00	0.00	0.00	0.00	0.00	0.00
112.000	255.00	630.06	630.06	276.38	630.07	306.40	0.00	0.00	0.00	0.00	0.00	0.00
112.000	380.00	630.35	630.35	344.84	630.36	327.50	0.00	0.00	0.00	0.00	0.00	0.00
112.000	620.00	630.77	630.77	457.53	630.78	340.80	0.00	0.00	0.00	0.00	0.00	0.00
112.100	255.00	630.07	630.07	278.58	630.07	307.57	0.00	0.00	0.00	0.00	0.00	0.00
112.100	380.00	630.37	630.37	350.08	630.38	328.17	0.00	0.00	0.00	0.00	0.00	0.00
112.100	620.00	630.79	630.79	463.94	630.80	341.50	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
1.210	295.000	596.764	0.000	0.000	0.000	205.808	0.000	0.000
1.210	440.000	597.133	.369	0.000	0.000	238.971	-33.163	0.000
1.210	715.000	597.682	.549	0.000	0.000	276.016	-70.208	0.000

1.330	295.000	597.942	0.000	1.178	0.000	141.217	0.000	450.000
1.330	440.000	598.320	.378	1.187	0.000	157.812	-16.595	450.000
1.330	715.000	598.871	.551	1.189	0.000	179.854	-38.637	450.000
1.340	295.000	599.270	0.000	1.329	0.000	148.258	0.000	450.000
1.340	440.000	599.695	.424	1.375	0.000	161.017	-12.759	450.000
1.340	715.000	600.310	.616	1.439	0.000	175.610	-27.352	450.000
1.350	295.000	600.034	0.000	.763	0.000	40.000	0.000	350.000
1.350	440.000	600.511	.477	.816	0.000	40.000	0.000	350.000
1.350	715.000	601.199	.687	.888	0.000	40.000	0.000	350.000
1.380	295.000	599.711	0.000	-.322	0.000	13.000	0.000	50.000
1.380	440.000	600.477	.766	-.034	0.000	13.000	0.000	50.000
1.380	715.000	601.736	1.259	.537	0.000	13.000	0.000	50.000
1.420	295.000	602.296	0.000	2.584	0.000	13.000	0.000	116.000
1.420	440.000	606.769	4.473	6.292	0.000	13.000	0.000	116.000
1.420	715.000	610.692	3.923	8.956	0.000	259.001	-246.001	116.000
15.750	295.000	602.724	0.000	.428	0.000	172.079	0.000	100.000
15.750	440.000	607.015	4.291	.246	0.000	215.001	-42.922	100.000
15.750	715.000	610.693	3.678	.000	0.000	215.001	-42.922	100.000
18.000	295.000	602.844	0.000	.120	0.000	230.427	0.000	510.000
18.000	440.000	607.024	4.180	.009	0.000	279.490	-49.064	510.000
18.000	715.000	610.698	3.674	.005	0.000	282.001	-51.574	510.000
100.980	295.000	602.869	0.000	.025	0.000	230.777	0.000	100.000
100.980	440.000	607.025	4.156	.001	0.000	279.500	-48.722	100.000
100.980	715.000	610.699	3.674	.000	0.000	282.001	-51.224	100.000
101.020	295.000	604.728	0.000	1.860	0.000	209.885	0.000	30.000
101.020	440.000	607.078	2.349	.053	0.000	299.290	-89.404	30.000
101.020	715.000	610.737	3.659	.039	0.000	329.000	-119.115	30.000
101.210	295.000	604.766	0.000	.038	0.000	215.658	0.000	100.000
101.210	440.000	607.083	2.316	.005	0.000	299.287	-83.628	100.000
101.210	715.000	610.738	3.656	.001	0.000	329.000	-113.342	100.000
101.900	295.000	604.928	0.000	.162	0.000	126.917	0.000	330.000
101.900	440.000	607.101	2.173	.019	0.000	205.287	-78.370	330.000
101.900	715.000	610.742	3.641	.003	0.000	303.972	-177.056	330.000
101.950	295.000	604.978	0.000	.050	0.000	128.867	0.000	1.000
101.950	440.000	607.151	2.173	.050	0.000	207.081	-78.214	1.000
101.950	715.000	610.792	3.641	.050	0.000	306.403	-177.536	1.000
102.000	295.000	605.002	0.000	.024	0.000	126.149	0.000	49.000
102.000	440.000	607.156	2.154	.005	0.000	203.657	-77.508	49.000
102.000	715.000	610.793	3.637	.001	0.000	301.586	-175.437	49.000
102.260	295.000	605.112	0.000	.109	0.000	130.107	0.000	194.000
102.260	440.000	607.178	2.066	.022	0.000	204.463	-74.355	194.000
102.260	715.000	610.797	3.619	.004	0.000	301.802	-171.695	194.000
102.280	295.000	605.097	0.000	-.015	0.000	91.936	0.000	12.000
102.280	440.000	607.202	2.105	.024	0.000	183.379	-91.444	12.000
102.280	715.000	610.841	3.639	.044	0.000	275.006	-183.071	12.000

102.500	295.000	605.161	0.000	.064	0.000	95.738	0.000	94.000
102.500	440.000	607.218	2.057	.016	0.000	183.609	-87.871	94.000
102.500	715.000	610.844	3.626	.003	0.000	274.880	-179.141	94.000
102.980	295.000	605.250	0.000	.089	0.000	101.111	0.000	70.000
102.980	440.000	607.233	1.983	.015	0.000	184.159	-83.048	70.000
102.980	715.000	610.846	3.613	.002	0.000	274.994	-173.883	70.000
103.020	295.000	609.532	0.000	4.282	0.000	274.344	0.000	59.000
103.020	440.000	609.790	.257	2.557	0.000	277.174	-2.830	59.000
103.020	715.000	610.939	1.150	.094	0.000	289.748	-15.404	59.000
103.290	295.000	609.533	0.000	.001	0.000	274.333	0.000	50.000
103.290	440.000	609.791	.258	.001	0.000	277.151	-2.818	50.000
103.290	715.000	610.941	1.150	.002	0.000	289.711	-15.378	50.000
104.000	295.000	609.540	0.000	.008	0.000	287.202	0.000	370.000
104.000	440.000	609.804	.264	.014	0.000	293.233	-6.031	370.000
104.000	715.000	610.957	1.152	.016	0.000	327.244	-40.042	370.000
104.500	295.000	609.553	0.000	.013	0.000	289.783	0.000	330.000
104.500	440.000	609.826	.273	.022	0.000	296.026	-6.243	330.000
104.500	715.000	610.979	1.152	.022	0.000	331.136	-41.352	330.000
104.980	295.000	609.557	0.000	.004	0.000	287.498	0.000	100.000
104.980	440.000	609.832	.276	.006	0.000	293.741	-6.243	100.000
104.980	715.000	610.985	1.153	.006	0.000	327.954	-40.456	100.000
105.020	295.000	609.638	0.000	.082	0.000	253.036	0.000	81.000
105.020	440.000	609.938	.300	.106	0.000	268.325	-15.289	81.000
105.020	715.000	611.073	1.135	.088	0.000	320.606	-67.569	81.000
105.410	295.000	609.647	0.000	.009	0.000	253.133	0.000	100.000
105.410	440.000	609.953	.305	.015	0.000	268.777	-15.643	100.000
105.410	715.000	611.086	1.133	.014	0.000	320.748	-67.615	100.000
105.480	295.000	609.819	0.000	.172	0.000	31.747	0.000	950.000
105.480	440.000	610.213	.394	.260	0.000	52.504	-20.757	950.000
105.480	715.000	611.343	1.130	.257	0.000	162.497	-130.750	950.000
105.980	295.000	610.196	0.000	.377	0.000	33.847	0.000	100.000
105.980	440.000	610.802	.606	.589	0.000	138.933	-105.087	100.000
105.980	715.000	611.694	.892	.351	0.000	190.739	-156.893	100.000
106.020	295.000	611.493	0.000	1.297	0.000	102.402	0.000	20.000
106.020	440.000	611.778	.285	.975	0.000	130.325	-27.923	20.000
106.020	715.000	612.231	.453	.536	0.000	164.479	-62.077	20.000
106.530	295.000	611.575	0.000	.082	0.000	113.456	0.000	100.000
106.530	440.000	611.913	.338	.136	0.000	140.421	-26.965	100.000
106.530	715.000	612.445	.532	.215	0.000	180.518	-67.062	100.000
106.580	295.000	613.595	0.000	2.020	0.000	33.672	0.000	1080.000
106.580	440.000	614.415	.820	2.502	0.000	118.941	-85.270	1080.000
106.580	715.000	615.231	.816	2.786	0.000	254.979	-221.307	1080.000
106.590	295.000	615.832	0.000	2.237	0.000	35.092	0.000	820.000
106.590	440.000	616.596	.764	2.181	0.000	149.382	-114.290	820.000
106.590	715.000	617.280	.684	2.049	0.000	263.153	-228.060	820.000
106.980	255.000	616.056	0.000	.224	0.000	37.647	0.000	100.000

106.980	380.000	616.834	.778	.238	0.000	122.930	-85.282	100.000
106.980	620.000	617.509	.675	.229	0.000	195.430	-157.782	100.000
107.020	255.000	616.921	0.000	.866	0.000	18.000	0.000	33.500
107.020	380.000	618.577	1.655	1.743	0.000	592.755	-574.755	33.500
107.020	620.000	618.837	.260	1.328	0.000	611.298	-593.298	33.500
107.100	255.000	617.045	0.000	.124	0.000	439.300	0.000	100.000
107.100	380.000	618.578	1.532	.001	0.000	571.462	-132.162	100.000
107.100	620.000	618.839	.261	.002	0.000	590.036	-150.736	100.000
108.000	255.000	617.098	0.000	.052	0.000	233.602	0.000	890.000
108.000	380.000	618.606	1.508	.028	0.000	376.154	-142.552	890.000
108.000	620.000	618.898	.292	.059	0.000	400.706	-167.104	890.000
109.000	255.000	620.121	0.000	3.023	0.000	312.149	0.000	2350.000
109.000	380.000	619.948	-.173	1.342	0.000	283.862	28.286	2350.000
109.000	620.000	620.567	.619	1.669	0.000	386.802	-74.653	2350.000
109.050	255.000	620.514	0.000	.392	0.000	214.027	0.000	300.000
109.050	380.000	620.842	.328	.894	0.000	287.764	-73.737	300.000
109.050	620.000	621.136	.294	.569	0.000	350.928	-136.901	300.000
109.100	255.000	623.409	0.000	2.896	0.000	112.874	0.000	1160.000
109.100	380.000	623.698	.289	2.856	0.000	151.595	-38.721	1160.000
109.100	620.000	624.207	.509	3.071	0.000	231.171	-118.296	1160.000
109.980	255.000	623.700	0.000	.290	0.000	29.000	0.000	115.000
109.980	380.000	624.057	.357	.359	0.000	207.548	-178.548	115.000
109.980	620.000	624.541	.483	.333	0.000	280.735	-251.735	115.000
110.020	255.000	626.203	0.000	2.503	0.000	114.875	0.000	72.000
110.020	380.000	626.365	.162	2.308	0.000	120.691	-5.815	72.000
110.020	620.000	626.511	.145	1.970	0.000	126.032	-11.156	72.000
110.050	255.000	626.233	0.000	.030	0.000	115.689	0.000	50.000
110.050	380.000	626.419	.185	.053	0.000	122.316	-6.627	50.000
110.050	620.000	626.634	.216	.124	0.000	130.331	-14.642	50.000
110.100	255.000	626.369	0.000	.136	0.000	99.580	0.000	160.000
110.100	380.000	626.636	.266	.217	0.000	115.995	-16.415	160.000
110.100	620.000	627.012	.376	.378	0.000	129.854	-30.274	160.000
110.200	255.000	626.549	0.000	.180	0.000	111.444	0.000	1.000
110.200	380.000	626.886	.336	.250	0.000	124.984	-13.540	1.000
110.200	620.000	627.382	.496	.370	0.000	142.740	-31.296	1.000
110.980	255.000	626.770	0.000	.221	0.000	37.851	0.000	180.000
110.980	380.000	627.171	.400	.285	0.000	65.807	-27.956	180.000
110.980	620.000	627.744	.573	.362	0.000	104.652	-66.801	180.000
111.020	255.000	629.946	0.000	3.176	0.000	249.074	0.000	38.000
111.020	380.000	630.188	.243	3.018	0.000	256.813	-7.739	38.000
111.020	620.000	630.499	.311	2.755	0.000	266.587	-17.513	38.000
111.100	255.000	629.948	0.000	.002	0.000	248.985	0.000	50.000
111.100	380.000	630.192	.244	.003	0.000	256.652	-7.667	50.000
111.100	620.000	630.506	.314	.007	0.000	266.514	-17.529	50.000
111.200	255.000	629.975	0.000	.028	0.000	301.489	0.000	510.000
111.200	380.000	630.237	.261	.045	0.000	306.949	-5.460	510.000

111.200	620.000	630.587	.351	.082	0.000	314.269	-12.780	510.000
111.280	255.000	629.985	0.000	.010	0.000	301.793	0.000	142.000
111.280	380.000	630.252	.266	.015	0.000	307.397	-5.604	142.000
111.280	620.000	630.613	.361	.025	0.000	314.986	-13.193	142.000
111.320	255.000	630.025	0.000	.039	0.000	296.770	0.000	16.000
111.320	380.000	630.302	.277	.050	0.000	309.234	-12.464	16.000
111.320	620.000	630.680	.378	.067	0.000	326.037	-29.267	16.000
111.400	255.000	630.026	0.000	.002	0.000	296.662	0.000	42.000
111.400	380.000	630.304	.278	.002	0.000	309.049	-12.387	42.000
111.400	620.000	630.684	.380	.004	0.000	325.952	-29.290	42.000
112.000	255.000	630.058	0.000	.032	0.000	306.401	0.000	640.000
112.000	380.000	630.353	.296	.049	0.000	327.502	-21.101	640.000
112.000	620.000	630.767	.413	.082	0.000	340.804	-34.403	640.000
112.100	255.000	630.068	0.000	.010	0.000	307.573	0.000	1.000
112.100	380.000	630.373	.306	.020	0.000	328.173	-20.600	1.000
112.100	620.000	630.787	.413	.020	0.000	341.501	-33.928	1.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	62.056	0.000
2	0.000	0.000	78.769	16.713
3	0.000	0.000	96.327	34.271

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Bragdon ditch

4) DOCUMENT TYPE: 500yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

SR DRAIN - 500 YEAR FLOW

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
200.050	160.00	619.54	619.54	29.29	619.69	52.35	0.00	0.00	622.00	-1	-1	622.00
200.050	240.00	620.03	620.03	43.82	620.20	73.59	0.00	0.00	622.00	0.00	0.00	622.00
200.050	395.00	620.70	620.70	71.89	620.89	102.34	0.00	0.00	622.00	0.00	0.00	622.00
200.100	160.00	621.67	621.67	35.38	621.78	62.09	0.00	0.00	0.00	622.00	622.00	0.00
200.100	240.00	622.18	622.18	53.03	622.30	84.28	0.00	0.00	0.00	622.00	622.00	0.00
200.100	395.00	622.87	622.87	86.73	623.01	121.99	0.00	0.00	0.00	622.00	622.00	0.00
200.980	160.00	621.93	621.93	38.17	622.02	50.65	0.00	0.00	0.00	0.00	0.00	0.00
200.980	240.00	622.42	622.42	55.03	622.54	67.07	0.00	0.00	0.00	0.00	0.00	0.00
200.980	395.00	623.12	623.12	88.19	623.28	128.19	0.00	0.00	0.00	0.00	0.00	0.00
201.020	160.00	623.67	623.67	126.59	623.68	151.07	0.00	0.00	0.00	0.00	0.00	0.00
201.020	240.00	626.01	626.01	462.90	626.01	352.66	0.00	0.00	0.00	0.00	0.00	0.00
201.020	395.00	626.38	626.38	554.66	626.38	382.72	0.00	0.00	0.00	0.00	0.00	0.00
201.100	160.00	623.67	623.67	105.88	623.69	140.22	0.00	0.00	0.00	0.00	0.00	0.00
201.100	240.00	626.01	626.01	419.44	626.01	313.12	0.00	0.00	0.00	0.00	0.00	0.00
201.100	395.00	626.38	626.38	504.16	626.39	358.38	0.00	0.00	0.00	0.00	0.00	0.00
202.000	160.00	623.95	623.95	44.96	623.99	137.91	0.00	0.00	0.00	0.00	0.00	0.00
202.000	240.00	626.04	626.04	284.34	626.04	291.42	0.00	0.00	0.00	0.00	0.00	0.00
202.000	395.00	626.43	626.43	362.37	626.44	323.67	0.00	0.00	0.00	0.00	0.00	0.00
202.500	160.00	624.91	624.91	32.88	625.03	41.09	0.00	0.00	0.00	0.00	0.00	0.00
202.500	240.00	626.11	626.11	85.89	626.16	150.54	0.00	0.00	0.00	0.00	0.00	0.00
202.500	395.00	626.55	626.55	122.52	626.62	193.70	0.00	0.00	0.00	0.00	0.00	0.00
203.000	160.00	626.33	626.33	33.23	626.44	40.13	0.00	0.00	0.00	0.00	0.00	0.00
203.000	240.00	626.82	626.82	47.71	626.96	64.56	0.00	0.00	0.00	0.00	0.00	0.00
203.000	395.00	627.44	627.44	73.70	627.64	104.66	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH C	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
200.050	160.000	619.540	0.000	0.000	0.000	52.355	0.000	0.000
200.050	240.000	620.035	.495	0.000	0.000	73.593	-21.239	0.000
200.050	395.000	620.705	.670	0.000	0.000	102.335	-49.981	0.000
200.100	160.000	621.667	0.000	2.127	0.000	62.090	0.000	850.000
200.100	240.000	622.176	.509	2.141	0.000	84.281	-22.191	850.000
200.100	395.000	622.873	.697	2.168	0.000	121.990	-59.899	850.000
200.980	160.000	621.927	0.000	.260	0.000	50.653	0.000	125.000
200.980	240.000	622.423	.495	.246	0.000	67.068	-16.415	125.000
200.980	395.000	623.125	.702	.251	0.000	128.187	-77.534	125.000
201.020	160.000	623.668	0.000	1.741	0.000	151.065	0.000	49.000
201.020	240.000	626.006	2.337	3.583	0.000	352.663	-201.598	49.000
201.020	395.000	626.379	.373	3.254	0.000	382.721	-231.656	49.000
201.100	160.000	623.672	0.000	.004	0.000	140.218	0.000	25.000

201.100	240.000	626.006	2.334	.001	0.000	313.121	-172.903	25.000
201.100	395.000	626.380	.374	.001	0.000	358.377	-218.160	25.000
202.000	160.000	623.949	0.000	.277	0.000	137.909	0.000	650.000
202.000	240.000	626.036	2.087	.030	0.000	291.418	-153.509	650.000
202.000	395.000	626.434	.398	.053	0.000	323.667	-185.758	650.000
202.500	160.000	624.915	0.000	.965	0.000	41.086	0.000	600.000
202.500	240.000	626.106	1.191	.069	0.000	150.542	-109.456	600.000
202.500	395.000	626.551	.445	.117	0.000	193.697	-152.611	600.000
203.000	160.000	626.334	0.000	1.419	0.000	40.130	0.000	600.000
203.000	240.000	626.822	.488	.716	0.000	64.561	-24.430	600.000
203.000	395.000	627.441	.619	.890	0.000	104.660	-64.530	600.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE END	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	5.343	0.000
2	0.000	0.000	11.220	5.878
3	0.000	0.000	13.754	8.412

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Salter Drain and Bragdon ditch

4) DOCUMENT TYPE: Report

00BREAK00

FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 Bedford Twp., Monroe Co., Michigan

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Salter Drain

STUDY LIMITS: From confluence with Indian Creek (downstream limit) to 1850 feet upstream of Jackman Rd. (upstream limit)

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: McNamee, Porter and Seeley Field Crew 12/19/78-12/20/78

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on April 5, 1979

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps 1"=1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n"	.045
Overbank "n"	.060-.100
n values thru bridges	.013
Contraction Coefficients	.1-.4
Expansion Coefficients	.3-.8

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review, please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS & CALIBRATION

No high water makrs were available for use in calibrating the HEC-2 model for Salter Drain.

A sensitivity analysis was performed on the 100 yr. flow by raising and lowering all Manning "n" values by 30%. Water surface elevations in the major portion of the drain were within ±0.3 feet, thus indicating a good model.

Starting Conditions

Normal depth was assumed for the starting elevation.

The slope-area method was used to determine this starting elevation for all flows utilizing the same value of slope determined from the field surveyed profile. A convergence test was performed on the 100 year flow by changing the slope obtained from the profile by ±30%. The results indicate good convergence about 850 feet upstream of the starting point.

Designated Floodway

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcahrge of 0.1 ft. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1"=1000' topographic map for floodway delineation).

Computer Outputs

Enclosed are complete computer outputs for (i) 100 year natural and 100 year designated floodway, (ii) 10, 50 and 500 yr. flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

Section No.	Section Type		Remarks
200.05		3	Valley Section - Repeat 200.1 +1.9'
200.1	A	2	Valley Section - Modified to exclude ineffective flow area in right overbank
200.98		3	D/S Face Jackman Rd. - Repeat 201.1 - 0.3'
	B		
201.02		3	U/S Face Jackman Rd - Repeat 201.1 - 0.3'
201.1	C	1	Valley Section
202	D	1	Valley Section
202.5		4	Valley Section - Developed from 202 and 203
203	E	1	Valley Section

COMMUNITY: BEDFORD

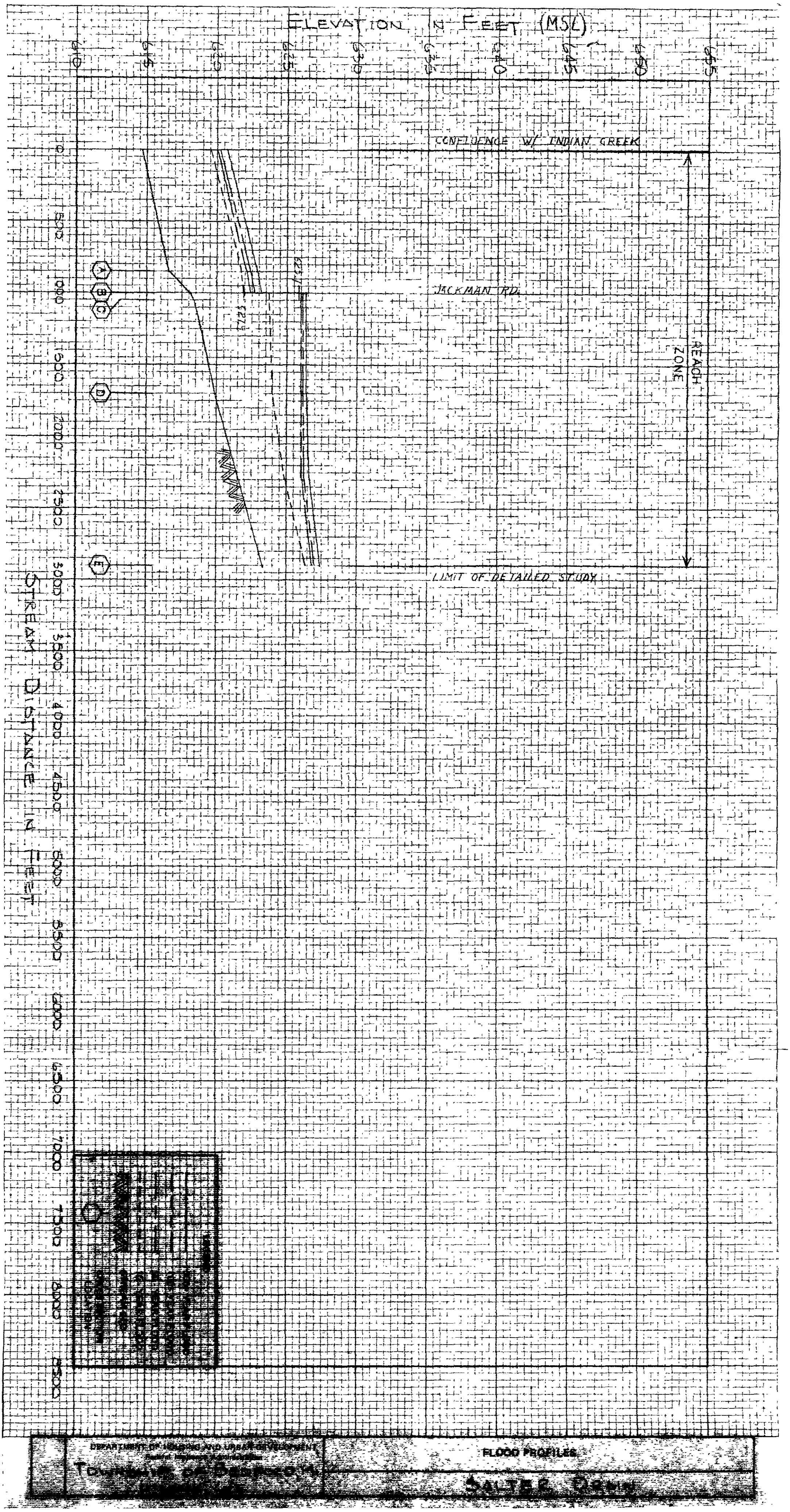
WATERCOURSE: SALTER DRAIN

TABLE ~~X~~2 – XKOR – CALCULATIONS

$XKOR = 1 + K_E + K_F$ $\quad K_F = \frac{29 n \ell^2}{R^{4/3}}$ $\quad R = \frac{A}{P}$

Cross Section Location	K_e	A	P	R	n	ℓ	K_F	XKOR	REMARKS
200.98 – 201.02	0.5	19.63	17.94	1.09	.013	49	0.2	1.70	

"PERFECT" CROSS SECTION
10 X 10 = ONE INCH
EUGENE DIETZGEN CO.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF DARBY, PA.
DELAWARE COUNTY

FLOOD PROFILES

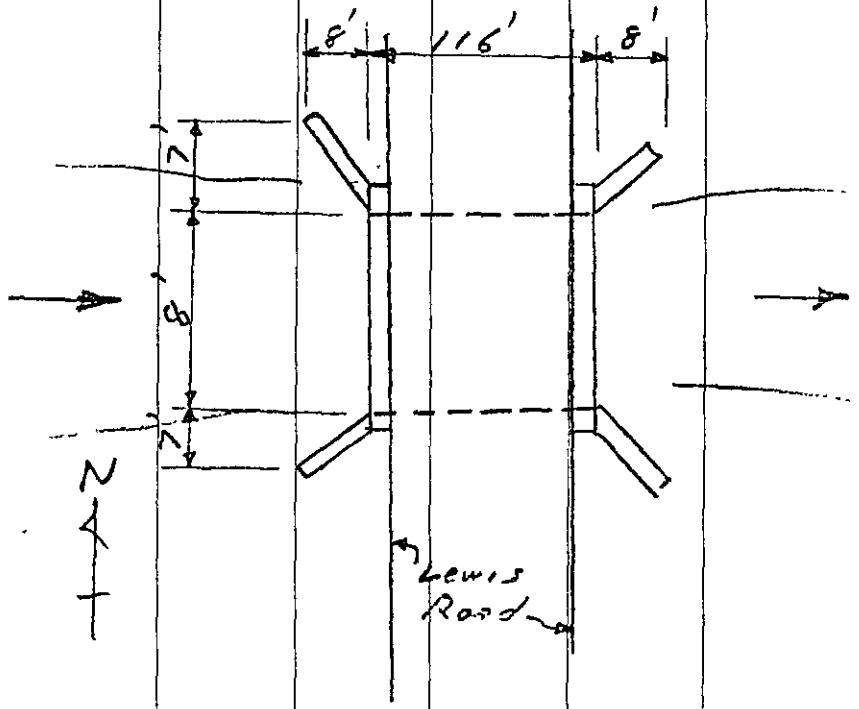
SALTER RUN

Bragden Ditch
Bridge #100
@ Lewis Rd.

30 May '79

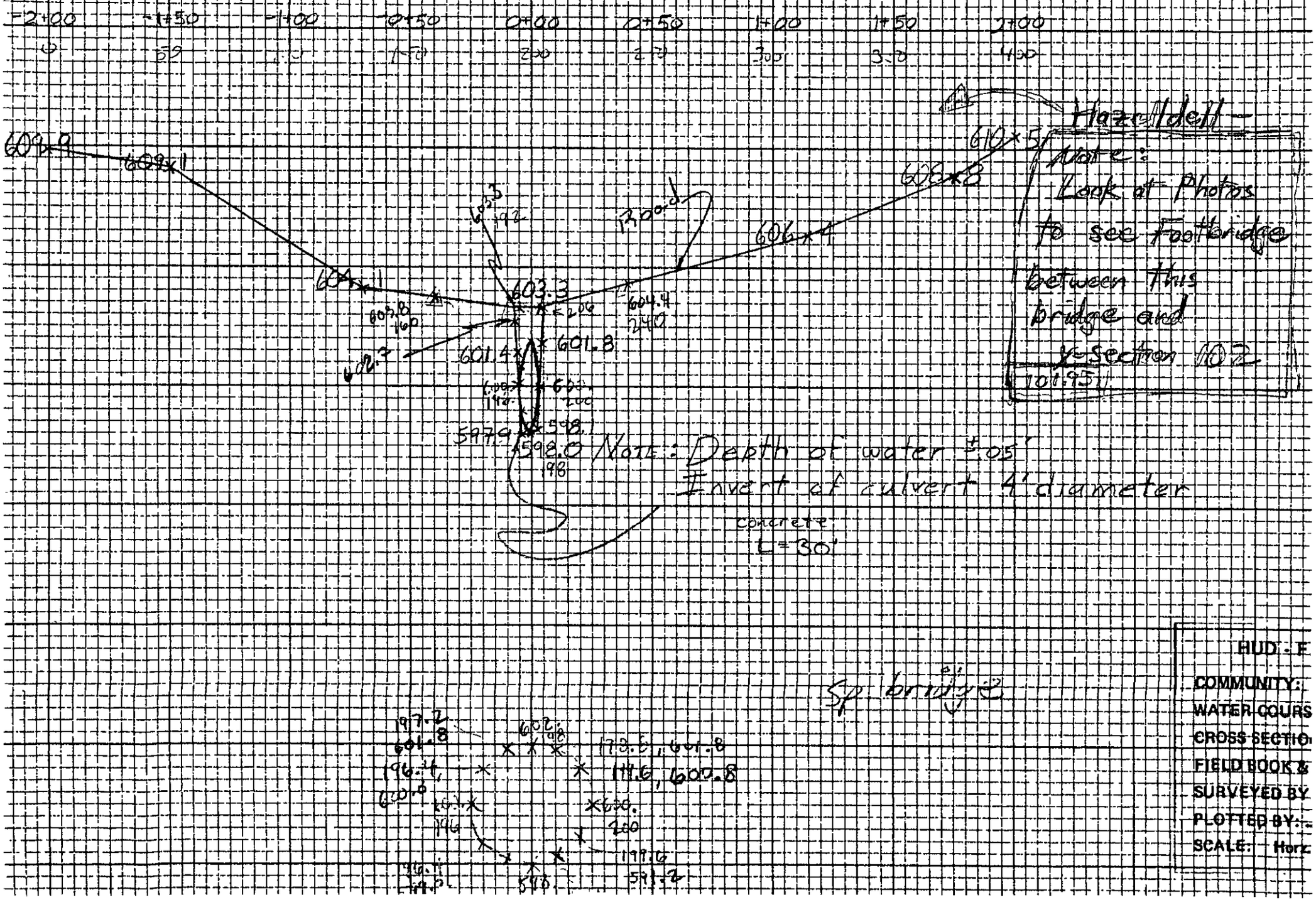
O. Cain
K. Burn

472 ~~6~~ C
30
2C



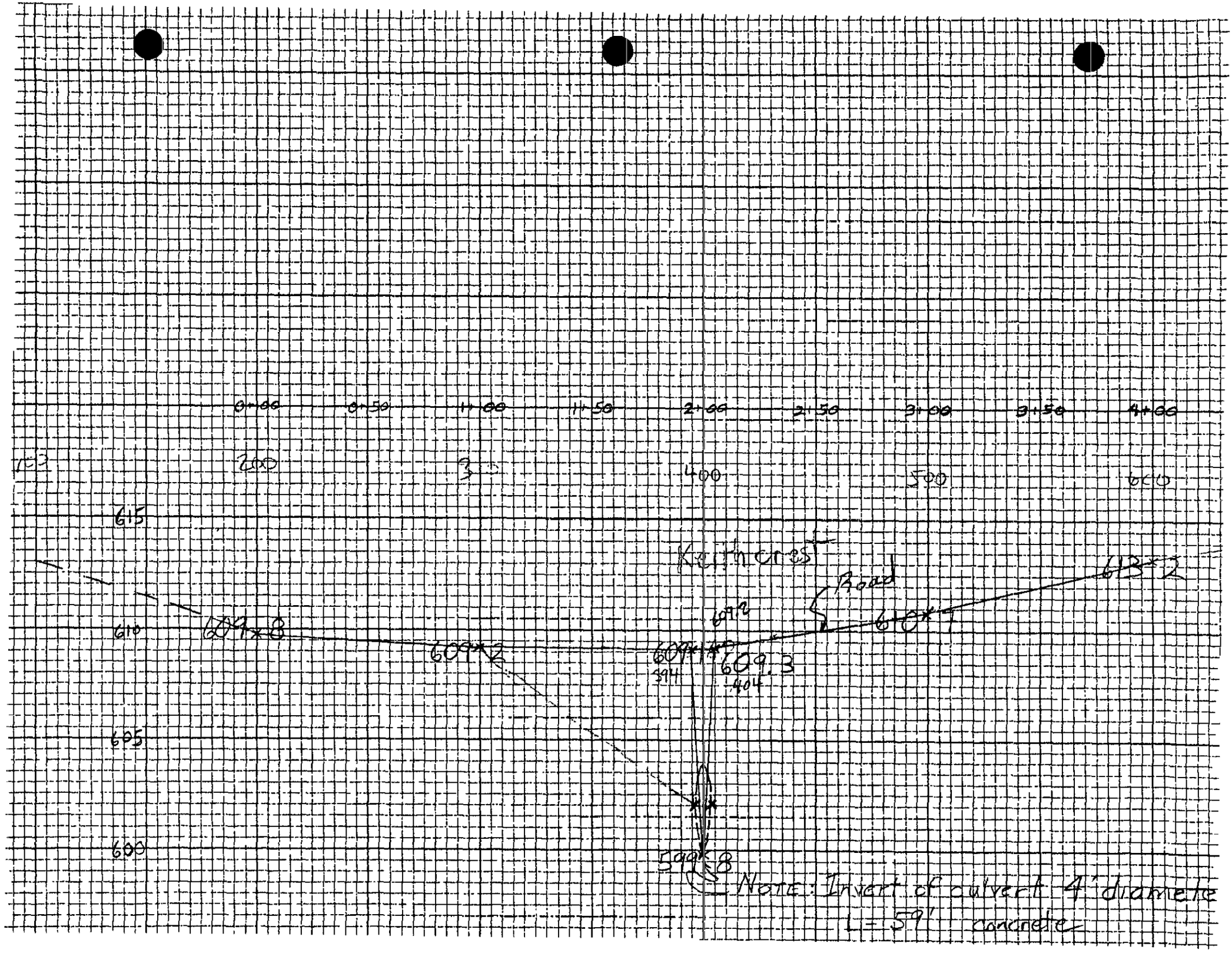
Conc. Box culvert

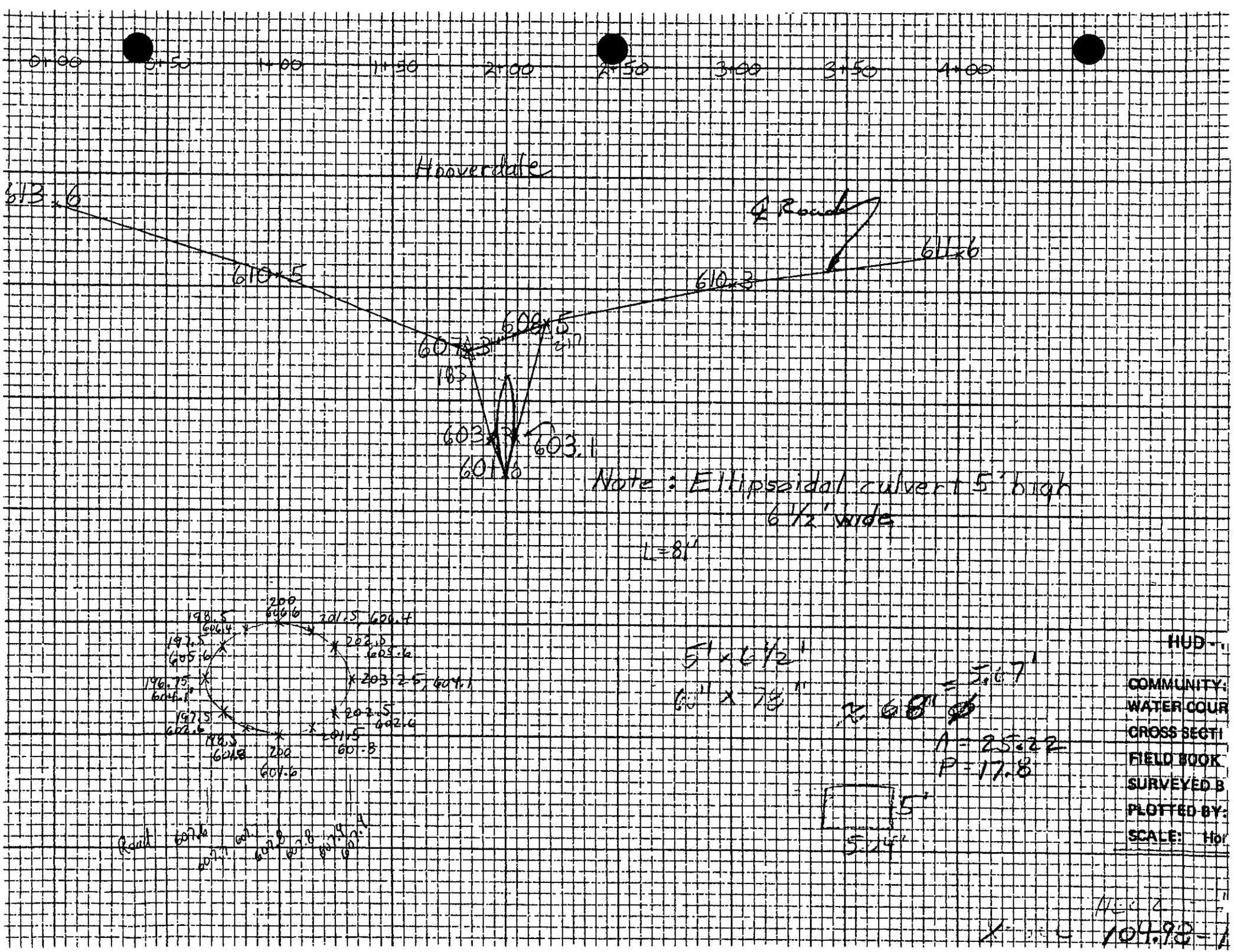
Sta	+S	HI	-S	Elev	Remarks
BM160				603.82	
	11.41	615.23			
			4.9	610.33	℄ road
			2.3	612.93	Top guard rail
			11.3	603.93	Top headwall
			13.5	601.73	Bottom Conc.

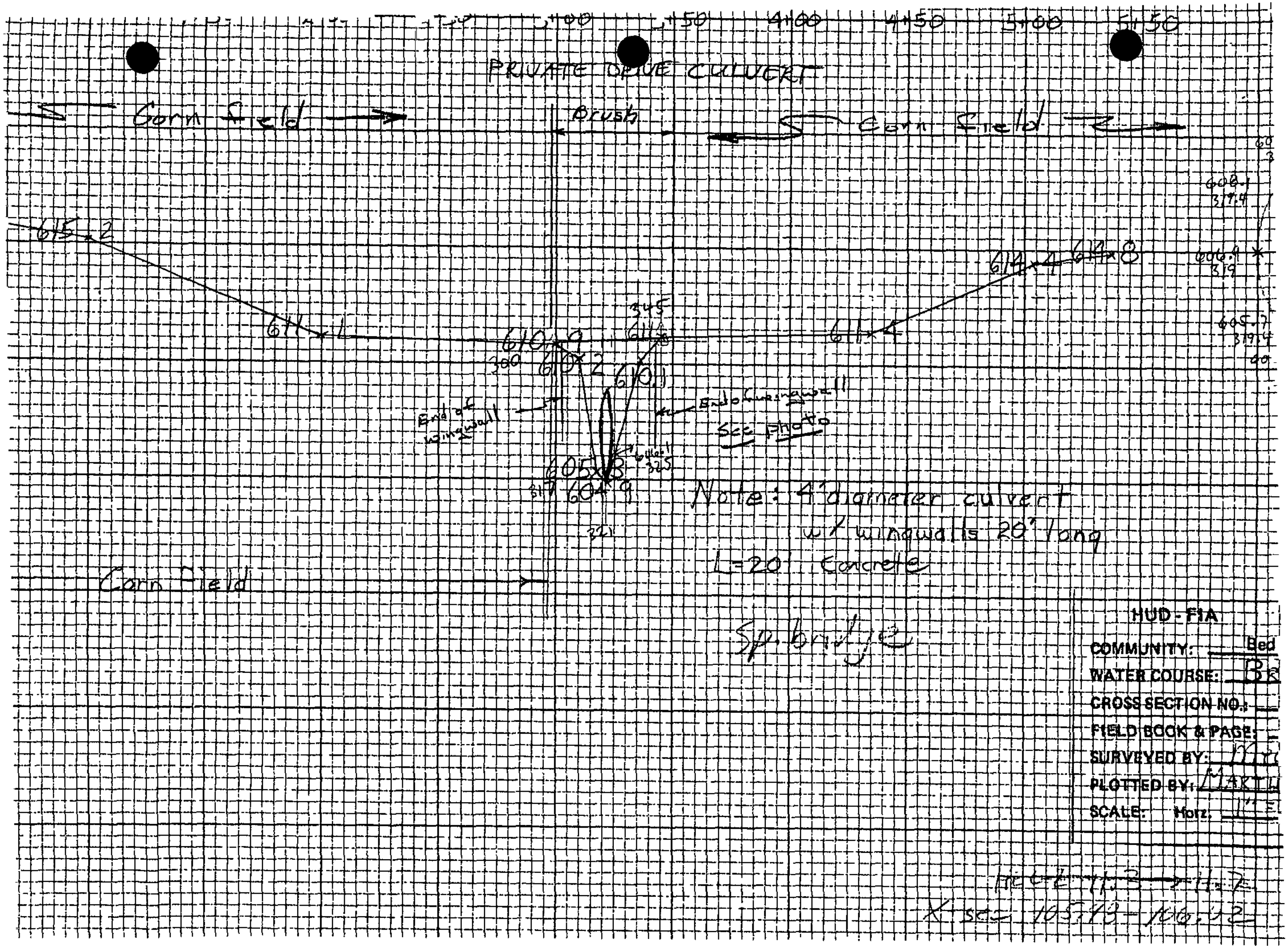

-2+00
-1+50
-1+00
0+50
0+00
0+50
1+00
1+50
2+00
Hazeldell
Note:
Look at Photos
to see footbridge
between this
bridge and
X-Section 102
609.9
609.1
608.8
606.4
603.3
604.4
601.4
601.8
597.9
598.0
Note: Depth of water ±.05'
Invert of culvert 4' diameter
concrete
L=30'
Sp. bridge
HUD - F
COMMUNITY:
WATER COURS
CROSS SECTIO
FIELD BOOK &
SURVEYED BY
PLOTTED BY:
SCALE: Horz

472-C
2

D. tch				
on #102				
s Left side of J. tch			Description	
HI	-	Rod (-)	Elev	
608.48				
		0.4	611.1	hand level +3.0'
		0.4	610.1	+2.0'
		0.4	608.1	note: flood level 2 yrs ago, per resident. Contact
		3.5	604.98	Driveway = 102.26 - 102.28
		5.8	602.65	
		9.1	598.38	roll # 2
		9.6	598.88	photo # 15 @ ℄ stream
		9.2	599.28	photo # 16 between X-sect. 102 & 103
		4.0	604.48	culvert is 4' dia, 12' long,
		0.7	607.78	downstream from X-section
	0.76		607.72	200' (East of)
15.27				# 103
		3.8	611.47	
		2.2	613.07	
		2.9	612.37	
	10.44		604.83	
14.62				


0+00
0+50
1+00
1+50
2+00
2+50
3+00
3+50
4+00
200
400
500
615
610
605
600
Keithcrest
Road
613*2
610*7
609*8
609*2
609.3
594
404
599*8
NOTE: Invert of culvert 4' diamete
L = 59' concrete


0+00
0+50
1+00
1+50
2+00
2+50
3+00
3+50
4+00
Hooverdale
613.6
610.5
607.3
608.5
610.3
611.6
℄ Road
183
217
603.1
601.6
Note: Ellipsoidal culvert 5' high
6 1/2' wide
L=81'
200
606.6
198.5
606.4
201.5, 606.4
197.5
605.6
202.5
605.6
196.75
604.1
203.25, 604.1
197.5
602.6
202.5
602.6
198.5
601.8
200
601.6
201.5
601.8
Road 607.6
607.7
607.8
607.8
607.9
607.9
5' x 6 1/2'
60" x 78"
≈ 68" ø = 5.67'
A = 25.22
P = 17.8
5'
5.24'
HUD -
COMMUNITY:
WATER COUR
CROSS SECTI
FIELD BOOK
SURVEYED B
PLOTTED BY:
SCALE: Hor
104.98

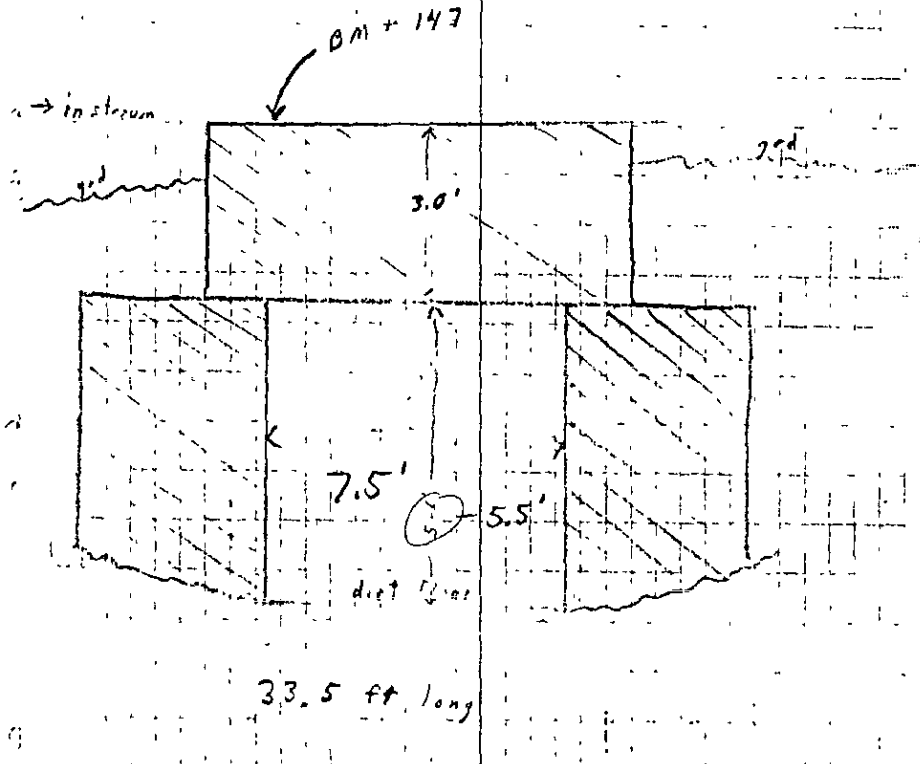

4+00
4+50
5+00
5+50
PRIVATE DRIVE CULVERT
Corn field
Brush
Corn field
615.2
611.1
610.9
610.2
611.4
610.1
605.8
604.9
611.4
614.4
614.8
End of wingwall
End of wingwall
See photo
Note: 4' diameter culvert
w/ wingwalls 20' long
L=20' Concrete
Corn field
Sp. bridge
HUD - FIA
COMMUNITY: Bed
WATER COURSE:
CROSS SECTION NO.:
FIELD BOOK & PAGE:
SURVEYED BY:
PLOTTED BY:
SCALE: Horz.

Brayden Ditch
X-section # 107
0.00 is right side of stream

Sta	+	HI	−	Rod	Elev
BM # 147					618.89
	4.22	623.11			
0+00				2.6	620.5
1+00				3.4	619.7
2+00				4.2	618.9
2+54				5.5	617.6
2+60				12.0	611.1
2+66				12.7	610.4
2+70				4.8	619.3
3+00				4.6	618.5
4+05				5.0	618.1
5+40				5.0	618.1
TP1			7.21		615.90
	6.90	622.80			
BM # 147			3.91		618.89

roll # 2
photo # 22
looking upstream
looking downstream

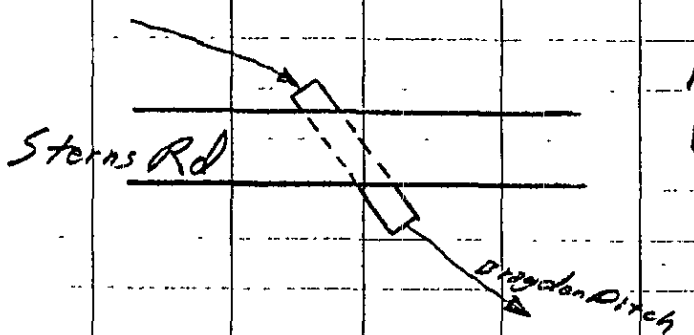
JACKMAN RD



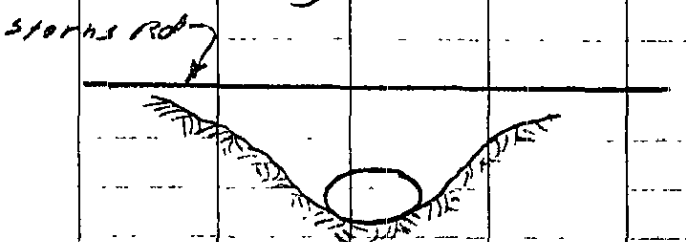
Bragden Ditch
Culvert at Sterns Road

12-20-78

472-C
53



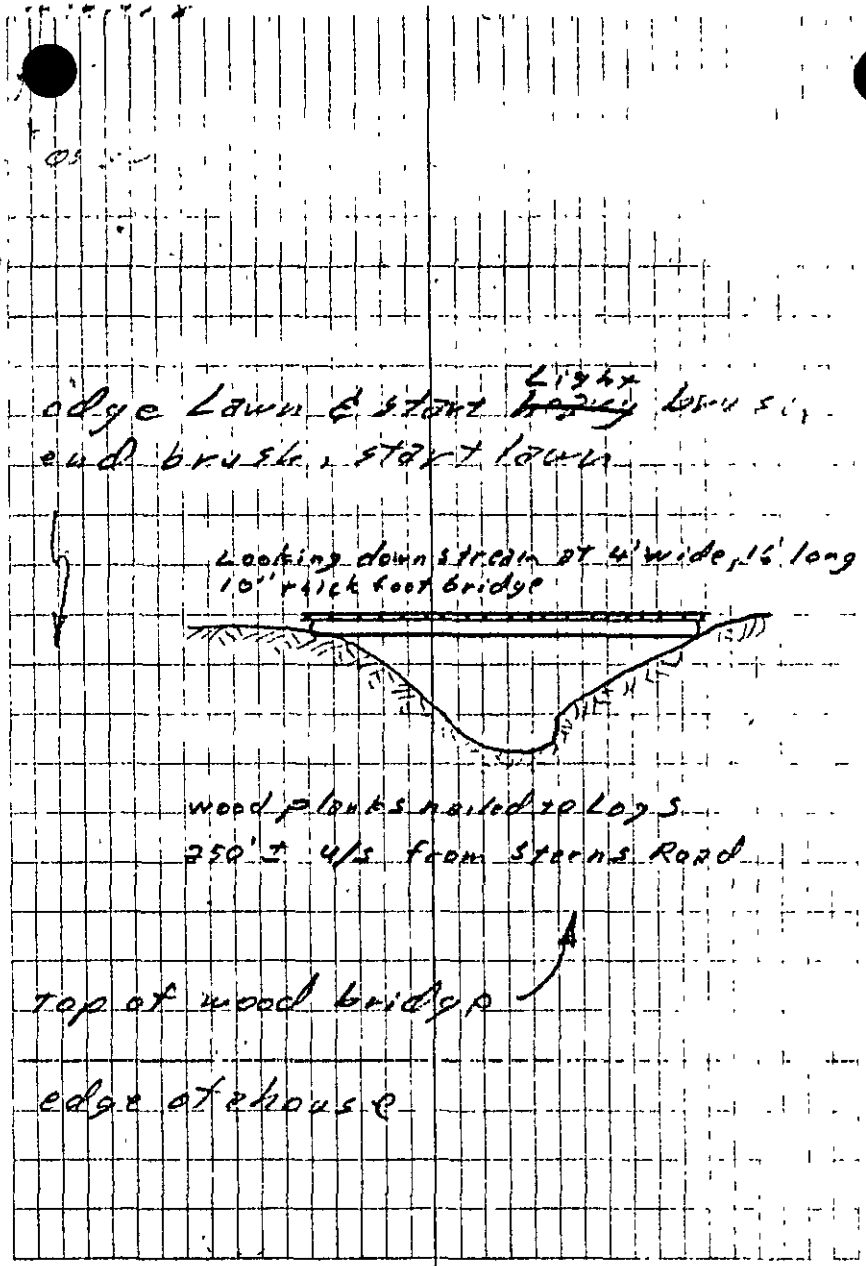
Looking Downstream



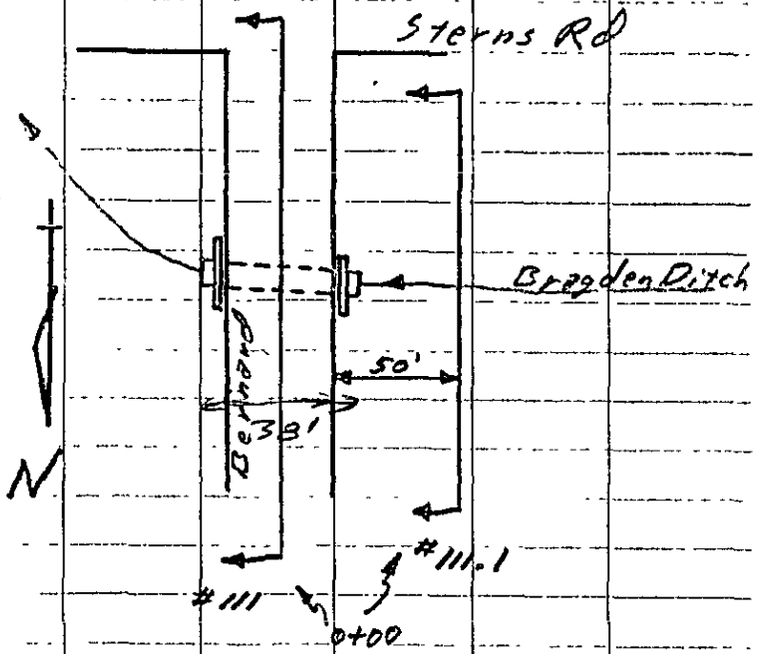
Culvert is 6'x4' horizontal eliptical RCP, 72' long

STA	+S	HI	-S	ELEV
4+			6.0	
BM 78			15.19	623.80'
	Start X-Section #110.1			
BM 78				623.85
	13.29	637.14		
0+00			6.9	630.2'
0+42			8.4	628.7'
1+12			11.8	625.3'
1+16			12.3	624.8'
1+23			14.9	622.2'
1+24			15.6	621.5'
1+26			16.0	621.1'
1+28			15.6	621.5'
1+34			13.9	623.2'
1+43			11.7	625.4'
1+82			10.9	626.2'
2+00			10.5	626.6'
			12.2	624.9'
2+41			7.8	629.3'
2+60			7.5	629.6'
BM 78			13.29	623.85'

REDUCED 12-22-78 G. ALSPACH



Brogden Ditch
X-Sections 111, 111.1 and
Bridge at Bernard St.

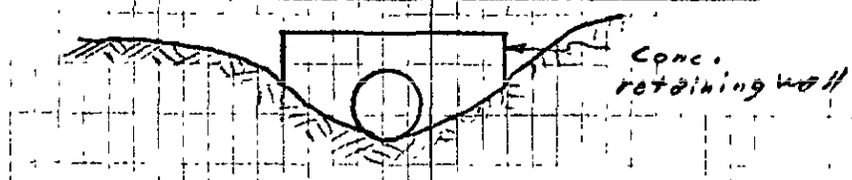


Sta	+S	HI	-S	Elev	Description
BM78				623.85	
	11.93	635.78			
	start X-section #111 on road				
6+80			4.1	631.68	
5+00			4.2	631.58	
TP 5+00			5.61	630.17	
	2.67	632.84			

12-20-78 N. Stewart T
D. Cain ϕ
G. Allspach ϕ

472-E/50

Looking Downstream

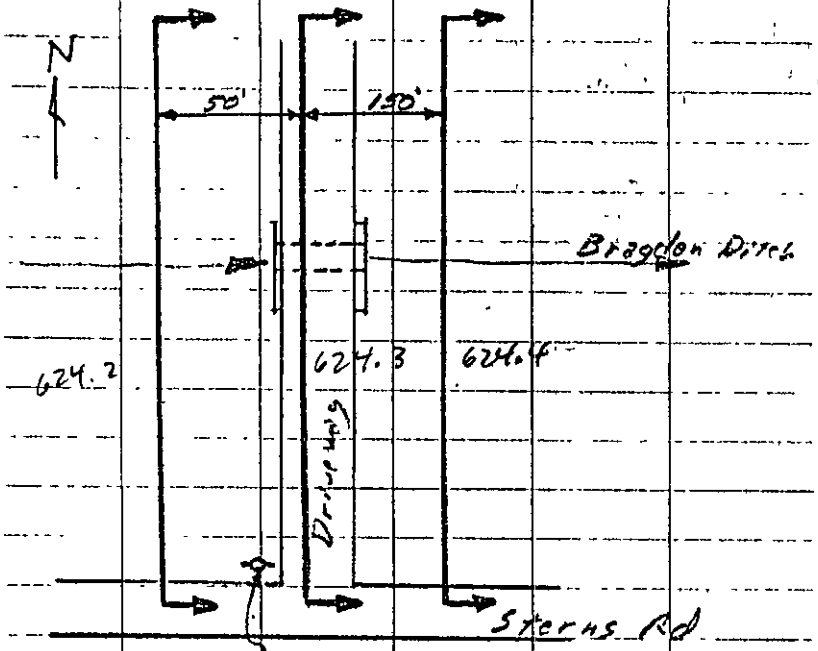


Culvert = 4 'RCP ℄ 38 ' long

111 & 111.1 PLOTTED JPM

Bragdon Ditch

X-sections 111.2, 111.3, 111.4 @ bridge at Private Drive



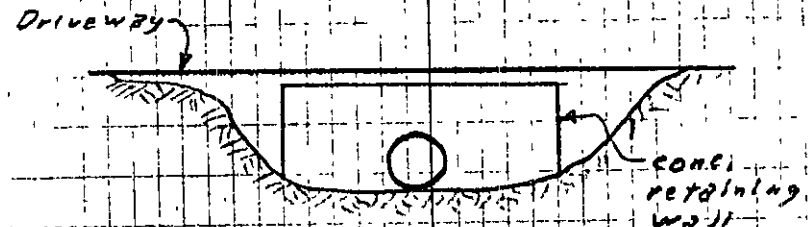
Sta	+S	HI	-S	Elev	Description
BM 79					

Start X-section 111.2 on next page

1 21-78

59

Looking Downstream



Culvert = 3' Dia @ 16' long

N/S invert = 623.3

pipe 1/3 filled w/ very light silt

Bragdon Ditch
X-section #112 Cont

12-21-78

Sta	+	HI	−	Elev	Description
		633.91			
2+28	~~2+28~~		6.2	627.7	}
2+48			5.7	628.2	} in grass field
3+27			4.6	629.3	}
4+00			3.7	630.2	
TP1			6.44	627.47	
	5.55	633.02			
BM 77			3.00	630.02	629.99 .03 high

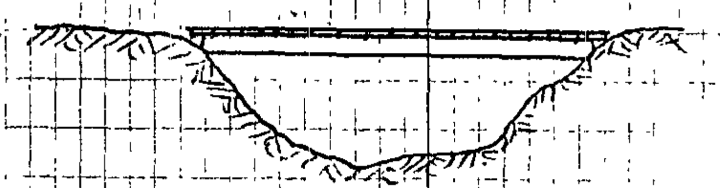
Plotted GM
1-17-78

Wood bridge over Bragdon Ditch @ X-section #112

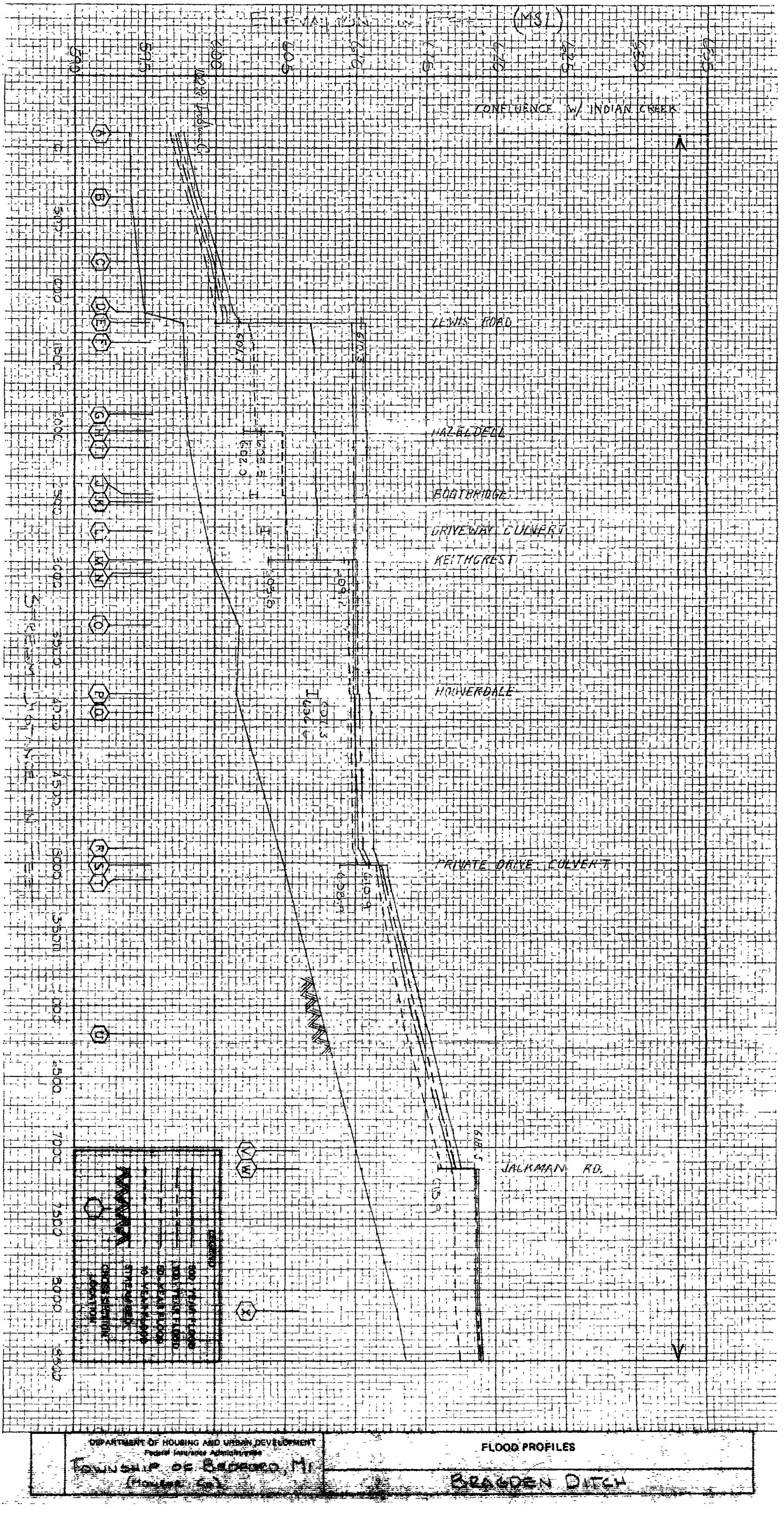
3' wide, 20' long x 8" thick

wood planks nailed across Logs.

WOOD FOOTBRIDGE



"PERFECT" CROSS SECTION
10 X 10 = ONE INCH
EUGENE DIETZGEN CO

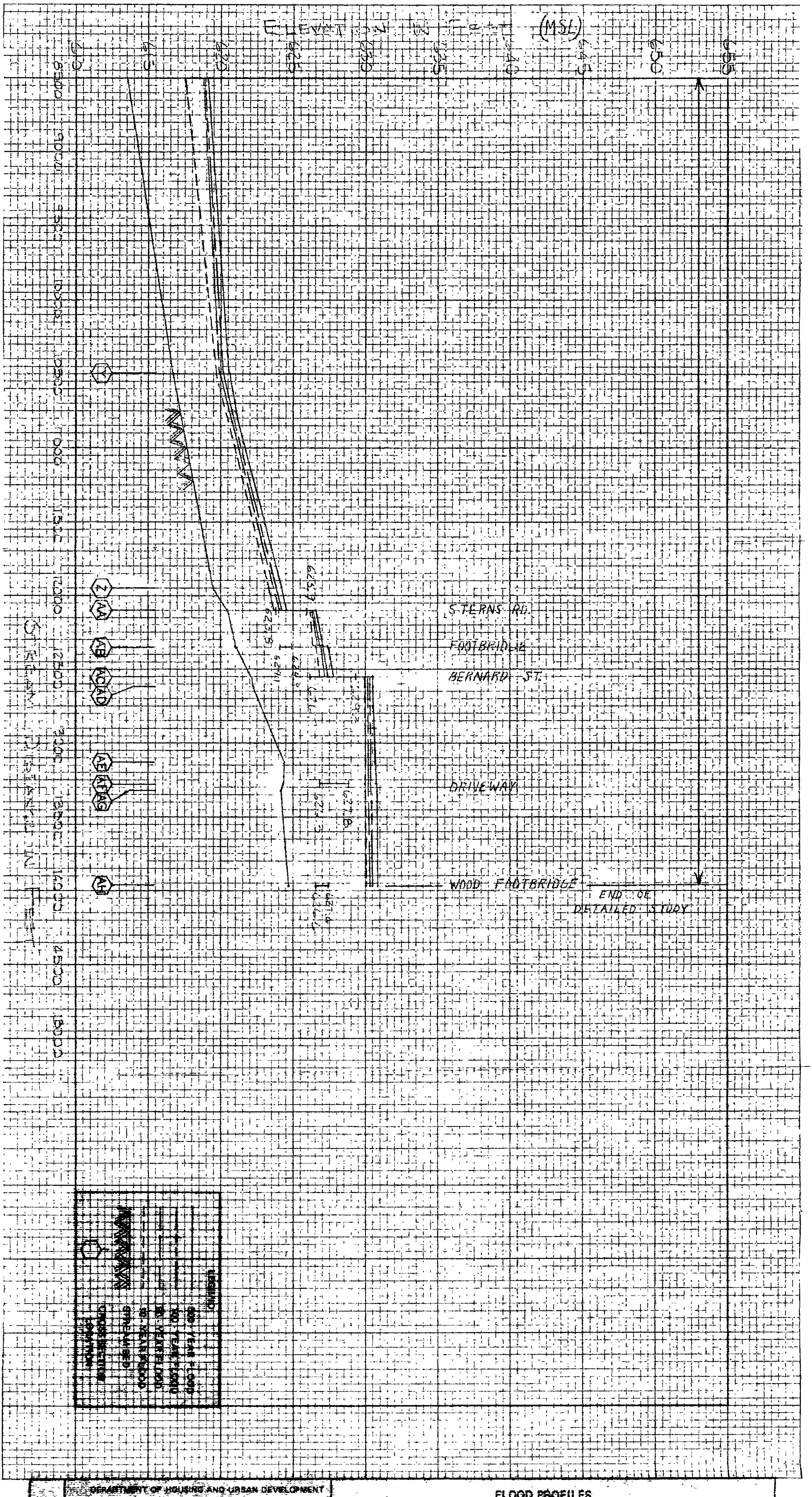


DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

TOWNSHIP OF BADDECK, MI
(HOUGHTON CO.)

FLOOD PROFILES

BRAGDEN DITCH



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration
TOWNSHIP OF BEDFORD, MI
(MONROE CO.)

FLOOD PROFILES

BRAGDEN DITCH

FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 BEDFORD TWP FIS, MONROE CO., MICHIGAN

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Bragden Ditch

STUDY LIMITS: Confluence with Indian Creek (downstream limit) to downstream of Dean Road (upstream limit)

DATE OF AERIAL SURVEY: None

DATE OF LAND SURVEY: 12/6/78 - 1/4/79, McNamee, Porter & Seeley field crew

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on 4/5/79

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps - 1" = 1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:
Channel "n" .040 - .055
Overbank "n" .045 - .08
n values thru bridges .012 - .025
Contraction Coefficients 0.1 - 0.4
Expansion Coefficients 0.3 - 0.8

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review, please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS & CALIBRATION:

The model was not calibrated as there was no high water information available. A sensitivity analysis was performed on the 100 year flood by raising and lowering all Manning "n" values by 30%. The resulting water surface elevations in the major portion of the drain were within ±0.1 foot, thus indicating a reasonable model.

Starting Conditions

The model was started at normal depth at the confluence with Indian Creek, which was obtained by using the slope-area method in the HEC-2 program. The slope used was obtained from the profile developed by the field survey. A convergence test was run on the 100 year flow by raising and lowering the original slope by 30%. The results from the convergence test indicated good convergence about 900 feet upstream of the starting point, thus indicating a good model. The slope-area method was then used to obtain starting elevations for all other flows by utilizing the original slope.

Designated Floodway

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcharge of 0.1 feet. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1" = 1000' topographic map for floodway delineation.)

Computer Outputs

Enclosed are complete computer outputs for (i) 100 year natural and 100 year designated floodway, (ii) 10, 50 and 500 year flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

Comments

At Lewis Avenue (X-sections 1.38-1.42), the bridge was modelled as a special bridge, with the elevation of the low chord (ELLC) lowered from its actual elevation of 601.7 to 600 in order to correctly model pressure flow and obtain the correct loss through the bridge. This was done for all flows, keeping the original area (with low chord at 601.7) the same.

[illegible] Bedford
[illegible]: Bragden Ditch

[illegible] 1 – SECNO

Section Types [illegible]

1. Surveyed (See [illegible] Other Than [illegible]PS and/or [illegible])
2. Field Survey [illegible] modelling [illegible]
3. S[illegible] surveyed [illegible] with an invert [illegible] (See Remarks)
4. S[illegible]

Section No.		Section Type	Remarks
1.21	A	1	Bedford Park Center Study (@ confluence w/Indian Creek) Valley Section #21
1.33	B	1	Bedford Park Center Study - Valley Section#
1.34	C	1	Bedford Park Center Study - Valley Section #3
1.35	D	2	Bedford Park Center Study - Valley Section #35 - 1 on 4 D/S expansion from Bridge
1.38		4	D/S Face of Lewis Ave
	E		Repeat of 1.35 - Channel Bottom Adjusted to Bridge Invert and Width
1.42		4	U/S Face of Lewis Ave - Winding Way Study Repeat of 15.75 - Channel Bottom Adjusted to Bridge Invert and Width
15.75	F	2	Winding Way Study - Elevations +0.2 = Valley Sect - 1 on 1 U/S Expansion from Bridge
18.00	G	2	Winding Way Study - Elevations +0.3 - Valle Secti
100.98		4	Winding Way Study - D/S Face of Hazeldell
	H		Repeat of 18.00 - Channel Bottom Adjusted to Bridge Invert and Width
101.02		4	Winding Way Study - U/S Face of Hazeldell Repeat of 101.21 - Channel Bottom Adjusted to Bridge Invert and Width
101.21	I	2	Winding Way Study - Valley Section #21 Elevations + 0.1
101.90		3	Valley Section - Repeat of 102 -0.1 eleva' chang
101.95	J	3	Footbridge - Repeat of 102 - Input Loss w/ Elevation change -0
102	K	1	Valley Section
102.26		4	D/S Face Driveway Culv - Repeat of 102 - Elevation and Channel Modified - 4' Ø Culv
	L		
102.28		4	U/S Face Driveway Culvert - Repeat of 102 - Elevation and Channel Modified
102.5		3	Valley Section - 102 + 0.6
102.98		4	D/S Face Keithcrest - Repeat of 102 - Channel Bottom Adjusted to Bridge invert + width
	M		
103.02		4	Winding Way Study - U/S Face Keithcrest Repeat of 103.29 - Channel Bottom Adjusted to Bridge invert + width

Bed Ford

[illegible] Bragden Ditch

[illegible] 1 – [illegible]

[illegible] Type [illegible]

1 Surveyed ([illegible] MPS [illegible] Abrams)

2 Field Surv[illegible] For modelling

3 Synthetic [illegible] invert adjustment (See Remarks)

4 [illegible]

Section	No.	Section Type	Remarks
103.29	N	2	Winding Way Study – Valley Section – Elevations – 0
104	O	1	Valley Section
104.5		3	Valley Section – Repeat of 104 – Elevation – 0.1
104.98	P	4	D/S Face Hooverdale – Repeat of 104 – Channel Bottom Adjusted to Bridge Invert + Width
105.02		2	U/S Face Hooverdale – Modify Channel Bottom of X-section 105 – Bridge Section at Hooverdale
105.41	Q	2	Winding Way Study – Valley Section #40+50 – 1.1
105.48	R	2	Winding Way Study – Valley Section #47+50 – 0.1
105.98	S	4	D/S Face Private Drive Culvert – Channel Modification of X-section – 105.48
106.02		4	U/S Face Private Drive Culvert – Channel Modification of X-section 106.53
106.53	T	2	Winding Way Study – Valley Section #52+50 – 0.4
106.58	U	2	Winding Way Study – Valley Section #57+50 + 1.1
106.59	V	3	Winding Way Study – Repeat 106.58 + 2.0
106.98	W	4	Winding Way Study – Developed from 106.58 D/S Face Jackman Rd Channel Bottom Adjusted to Bridge invert + wi[illegible]
107.02		4	U/S Face Jackman Rd – Channel Bottom Adjusted to Bridge invert and width from Bridge Detail X-section
107.1		2	Valley Section – Repeat of 108 – 2.3
108	X	1	Valley Section
109	Y	1	Valley Section – [illegible]
109.05		4	Valley Section – Developed from USGS
109.1	Z	2	Valley Section – Left Overbank extended from USGS
109.98	AA	4	D/S Face Sterns Rd – Repeat 109.1 – Channel Bottom Adjusted to Bridge invert + width
110.02		4	U/S Face Sterns Rd – Repeat 110.1 – Channel Bottom Adjusted to Bridge invert + width

Bedford

Bragden Ditch

TABLE [illegible] - SECNO

Section Types — Description

1 Surveyed (See Remarks if Other Than MPS and/or Abrams)

2 Field Survey Sections partly modified For modelling

3 Synthetic - Repeat of [illegible] section [illegible] invert adjustment (See Remarks)

4 Synthetic - Developed From [illegible] Section [illegible] Information

Section No		Section Type	Remarks
110.05		3	Valley Section - Repeat 110.1 - 0.4
110.1	AB	1	Valley Section
110.2		1	Footbridge - Repeat 110.1 Input Loss w/ X5
110.98		4	D/s Face Bernard St. - Repeat 110.1 - Channel
	AC		Bottom Adjusted to Bridge Invert + Width
111.02		4	U/S Face Bernard St - Repeat 111.1 - Channel
			Bottom Adjusted to Bridge Invert + Width
111.1	AD	1	Valley Section
111.2	AE	4	Valley Section [illegible]
111.28		4	D/s Face Driveway Culvert - Repeat 111.2
	AF		Channel Bottom Adjusted to Bridge Invert
111.32		4	U/S Face Driveway Culvert - Repeat 111.4 -
			Channel Bottom Adjusted to Bridge Invert + Width
111.4	AG	1	Valley Section
112	AH	1	Valley Section
112.1		1	Footbridge - Repeat 112 Input Loss w/ X5

JOB: HUD-FIA H-4705

COMMUNITY: BEDFORD

WATERCOURSE: BRAGDEN DITCH

TABLE 2 - XKOR CALCULATIONS

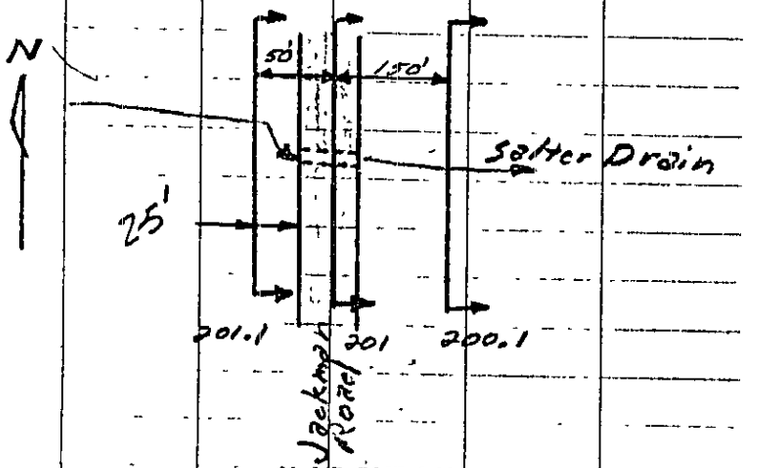
$XKOR = 1 + K_e + K_F$ $\quad K_f = \frac{29 n^2 l}{R^{4/3}}$ $\quad R = A/P$

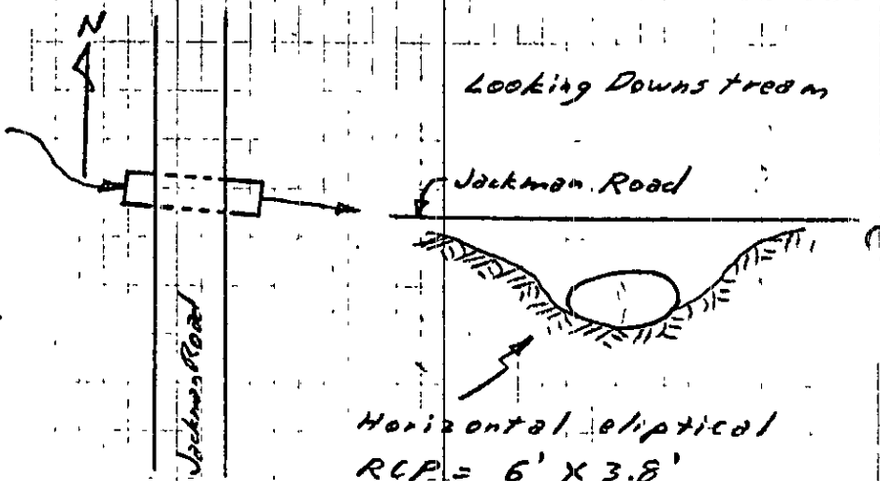
Cross Section Location	K_e	A	P	R	n	l	k_F	XKOR	Remarks
1.38 - 1.42	0.5	3.6	2.5	1.44	.025	116	1.3	2.8	
100.98 - 101.02	0.5	12.57	12.57	1	.013	30	0.1	1.6	
102.26 - 102.28	0.5	12.57	12.57	1	.013	12	0.1	1.6	
102.98 - 103.02	0.5	12.57	12.57	1	.012	59	0.2	1.7	
104.98 - 105.02	0.5	25.2	20.1	1.25	.012	81	0.3	1.8	
105.98 - 106.02	0.1	12.57	12.57	1	.012	20	0.1	1.2	
106.98 - 107.02	0.3	41.25	26	1.59	.022	33.5	0.3	1.6	
109.98 - 110.02	0.5	17.1	17.0	1.0	.013	72	0.4	1.9	
110.98 - 111.02	0.5	12.57	12.57	1.0	.013	38	0.2	1.7	
111.28 - 111.32	0.1	4.88	9.78	0.5	.013	76	0.2	1.3	

Salter Drain

X-Sections 200.1, 201, 201.1 & Culvert Detail

12-19-78





Sta	+S	HI	-S	Elev	Description
BM 115				621.94	
	8.36	630.30			
	Start X-section 201 - on road				
0+00			4.3	626.0	
1+00			4.3	626.0	
2+00			4.3	626.0	
2+50			4.5	625.8	℄ creek
3+00			4.5	625.8	
4+00			3.8	626.8	
5+00			3.0	627.3	
			12.2	618.1	Upstream invert

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty drain

4) DOCUMENT TYPE: 10, 50 and 500 yr. Summery

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

10, 50 + 500 yr. Summary

KELLY DOTY DRAIN 500 YR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
400.000	265.00	586.10	586.10	60.77	586.22	29.80	0.00	0.00	587.26	-I	-I	587.26
400.000	395.00	586.92	586.92	90.52	587.08	60.55	0.00	0.00	587.26	0.00	0.00	587.26
400.000	650.00	587.97	587.97	148.30	588.18	70.00	0.00	0.00	587.26	0.00	0.00	587.26
400.980	265.00	586.27	586.27	52.16	586.53	14.00	0.00	0.00	0.00	587.26	587.26	0.00
400.980	395.00	587.07	587.07	66.07	587.49	14.00	0.00	0.00	0.00	587.26	587.26	0.00
400.980	650.00	588.01	588.01	83.36	588.83	14.00	0.00	0.00	0.00	587.26	587.26	0.00
401.020	265.00	586.41	586.41	57.91	586.63	14.00	0.00	0.00	0.00	0.00	0.00	0.00
401.020	395.00	587.54	587.54	78.35	587.87	14.00	0.00	0.00	0.00	0.00	0.00	0.00
401.020	650.00	589.58	589.58	313.22	589.65	100.00	0.00	0.00	0.00	0.00	0.00	0.00
401.100	265.00	586.54	586.54	39.04	586.80	24.00	0.00	0.00	0.00	0.00	0.00	0.00
401.100	395.00	587.81	587.81	66.30	588.05	33.76	0.00	0.00	0.00	0.00	0.00	0.00
401.100	650.00	589.60	589.60	185.70	589.70	111.44	0.00	0.00	0.00	0.00	0.00	0.00
402.000	265.00	588.85	588.85	87.24	588.94	65.07	0.00	0.00	0.00	0.00	0.00	0.00
402.000	395.00	589.69	589.69	144.34	589.76	288.60	0.00	0.00	0.00	0.00	0.00	0.00
402.000	650.00	590.49	590.49	313.25	590.52	700.00	0.00	0.00	0.00	0.00	0.00	0.00
403.000	265.00	590.38	590.39	69.86	590.51	23.14	0.00	0.00	0.00	0.00	0.00	0.00
403.000	395.00	591.16	591.16	88.50	591.36	27.81	0.00	0.00	0.00	0.00	0.00	0.00
403.000	650.00	591.55	591.55	120.34	591.82	247.57	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
400.000	265.000	586.097	0.000	0.000	0.000	29.801	0.000	0.000
400.000	395.000	586.923	.827	0.000	0.000	60.553	-30.752	0.000
400.000	650.000	587.975	1.052	0.000	0.000	70.000	-40.199	0.000
400.980	265.000	586.270	0.000	.173	0.000	14.000	0.000	108.000
400.980	395.000	587.069	.799	.146	0.000	14.000	0.000	108.000
400.980	650.000	588.006	.937	.031	0.000	14.000	0.000	108.000
401.020	265.000	586.406	0.000	.136	0.000	14.000	0.000	44.000
401.020	395.000	587.539	1.133	.470	0.000	14.000	0.000	44.000
401.020	650.000	589.583	2.044	1.577	0.000	100.000	-86.000	44.000
401.100	265.000	586.537	0.000	.131	0.000	23.996	0.000	50.000
401.100	395.000	587.812	1.275	.273	0.000	33.758	-9.762	50.000
401.100	650.000	589.596	1.785	.014	0.000	111.441	-87.445	50.000
402.000	265.000	588.851	0.000	2.314	0.000	65.065	0.000	1200.000
402.000	395.000	589.688	.837	1.876	0.000	288.604	-223.539	1200.000
402.000	650.000	590.492	.805	.896	0.000	700.000	-634.935	1200.000
403.000	265.000	590.380	0.000	1.529	0.000	23.139	0.000	1350.000
403.000	395.000	591.160	.780	1.472	0.000	27.806	-4.667	1350.000
403.000	650.000	591.548	.388	1.055	0.000	247.565	-224.427	1350.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	2.684	0.000
2	0.000	0.000	9.477	6.793
3	0.000	0.000	26.143	23.460

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Drain D-tx

4) DOCUMENT TYPE: 50 yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

SPRING BROOK - 50 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
599.900	345.00	605.63	605.63	57.10	605.86	52.69	0.00	0.00	606.48	-I	-I	606.48
599.900	510.00	606.20	606.20	84.91	606.49	64.02	0.00	0.00	606.48	0.00	0.00	606.48
599.980	345.00	606.11	606.11	47.72	606.39	48.22	0.00	0.00	0.00	606.48	606.48	0.00
599.980	510.00	606.66	606.66	72.41	607.02	59.22	0.00	0.00	0.00	606.48	606.48	0.00
600.020	345.00	609.83	609.83	339.40	609.84	122.69	0.00	0.00	0.00	0.00	0.00	0.00
600.020	510.00	610.16	610.16	381.39	610.20	129.29	0.00	0.00	0.00	0.00	0.00	0.00
600.100	345.00	609.83	609.83	243.46	609.85	141.65	0.00	0.00	0.00	0.00	0.00	0.00
600.100	510.00	610.18	610.18	286.40	610.21	146.84	0.00	0.00	0.00	0.00	0.00	0.00
600.500	345.00	609.94	609.94	84.55	610.04	108.90	0.00	0.00	0.00	0.00	0.00	0.00
600.500	510.00	610.34	610.34	108.52	610.49	121.11	0.00	0.00	0.00	0.00	0.00	0.00
601.000	345.00	610.87	610.87	38.87	611.24	64.17	0.00	0.00	0.00	0.00	0.00	0.00
601.000	510.00	611.49	611.49	60.20	611.86	89.97	0.00	0.00	0.00	0.00	0.00	0.00
601.100	345.00	616.93	616.93	65.26	617.19	38.02	0.00	0.00	0.00	0.00	0.00	0.00
601.100	510.00	617.60	617.60	91.81	617.94	42.47	0.00	0.00	0.00	0.00	0.00	0.00
601.980	345.00	617.13	617.13	85.52	617.43	14.18	0.00	0.00	0.00	0.00	0.00	0.00
601.980	510.00	617.84	617.84	104.59	618.35	32.15	0.00	0.00	0.00	0.00	0.00	0.00
602.020	345.00	619.85	619.85	241.01	619.90	151.87	0.00	0.00	0.00	0.00	0.00	0.00
602.020	510.00	620.13	620.13	276.33	620.20	160.80	0.00	0.00	0.00	0.00	0.00	0.00
602.100	345.00	619.86	619.86	126.33	619.96	60.24	0.00	0.00	0.00	0.00	0.00	0.00
602.100	510.00	620.14	620.14	143.95	620.31	75.97	0.00	0.00	0.00	0.00	0.00	0.00
602.150	345.00	620.01	620.01	135.81	620.09	68.93	0.00	0.00	0.00	0.00	0.00	0.00
602.150	510.00	620.34	620.34	158.05	620.49	85.68	0.00	0.00	0.00	0.00	0.00	0.00
602.200	345.00	620.08	620.08	168.75	620.15	59.28	0.00	0.00	0.00	0.00	0.00	0.00
602.200	510.00	620.45	620.45	193.95	620.57	64.75	0.00	0.00	0.00	0.00	0.00	0.00
603.000	345.00	620.75	620.75	117.87	620.79	168.67	0.00	0.00	0.00	0.00	0.00	0.00
603.000	510.00	621.34	621.34	184.05	621.39	179.38	0.00	0.00	0.00	0.00	0.00	0.00
603.100	310.00	621.91	621.91	36.36	622.24	38.04	0.00	0.00	0.00	0.00	0.00	0.00
603.100	455.00	622.35	622.35	49.20	622.82	42.09	0.00	0.00	0.00	0.00	0.00	0.00
603.980	310.00	622.62	622.62	34.05	623.16	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	455.00	623.20	623.20	40.95	624.11	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.990	310.00	622.70	622.70	71.81	623.18	11.93	0.00	0.00	0.00	0.00	0.00	0.00
603.990	455.00	623.35	623.35	85.76	624.15	11.95	0.00	0.00	0.00	0.00	0.00	0.00
604.010	310.00	622.81	622.81	74.03	623.26	11.94	0.00	0.00	0.00	0.00	0.00	0.00
604.010	455.00	623.53	623.53	89.76	624.28	11.96	0.00	0.00	0.00	0.00	0.00	0.00

604.020	310.00	622.79	622.79	36.02	623.29	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	455.00	623.51	623.51	44.76	624.31	12.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
604.100	310.00	623.47	623.47	124.90	623.50	115.65	0.00	0.00	0.00	0.00	0.00	0.00
604.100	455.00	624.57	624.57	223.15	624.60	119.88	0.00	0.00	0.00	0.00	0.00	0.00
604.500	310.00	624.09	624.09	65.74	624.14	177.85	0.00	0.00	0.00	0.00	0.00	0.00
604.500	455.00	624.96	624.96	133.09	625.00	233.55	0.00	0.00	0.00	0.00	0.00	0.00
604.700	310.00	625.17	625.17	38.82	625.32	142.70	0.00	0.00	0.00	0.00	0.00	0.00
604.700	455.00	625.61	625.61	60.73	625.75	172.14	0.00	0.00	0.00	0.00	0.00	0.00
605.000	310.00	626.88	626.88	48.40	626.98	156.65	0.00	0.00	0.00	0.00	0.00	0.00
605.000	455.00	627.25	627.25	69.10	627.36	181.52	0.00	0.00	0.00	0.00	0.00	0.00
605.050	310.00	629.83	629.83	41.50	629.96	146.82	0.00	0.00	0.00	0.00	0.00	0.00
605.050	455.00	630.23	630.23	62.34	630.36	174.00	0.00	0.00	0.00	0.00	0.00	0.00
605.100	310.00	633.02	633.02	45.63	633.13	152.83	0.00	0.00	0.00	0.00	0.00	0.00
605.100	455.00	633.39	633.39	65.90	633.51	178.02	0.00	0.00	0.00	0.00	0.00	0.00
605.500	310.00	634.72	634.72	77.60	634.75	179.40	0.00	0.00	0.00	0.00	0.00	0.00
605.500	455.00	635.10	635.10	114.73	635.13	197.79	0.00	0.00	0.00	0.00	0.00	0.00
606.000	310.00	636.97	636.97	25.34	637.09	130.93	0.00	0.00	0.00	0.00	0.00	0.00
606.000	455.00	637.27	637.27	39.11	637.40	148.51	0.00	0.00	0.00	0.00	0.00	0.00
606.030	255.00	640.93	640.93	19.28	641.10	115.98	0.00	0.00	0.00	0.00	0.00	0.00
606.030	380.00	641.64	641.64	55.39	641.72	151.88	0.00	0.00	0.00	0.00	0.00	0.00
606.060	255.00	644.40	644.40	46.61	644.45	144.74	0.00	0.00	0.00	0.00	0.00	0.00
606.060	380.00	644.47	644.47	50.62	644.56	148.09	0.00	0.00	0.00	0.00	0.00	0.00
606.100	255.00	646.95	646.95	28.22	647.04	126.95	0.00	0.00	0.00	0.00	0.00	0.00
606.100	380.00	647.41	647.41	53.48	647.49	150.38	0.00	0.00	0.00	0.00	0.00	0.00
606.980	255.00	648.12	648.12	19.27	648.29	115.97	0.00	0.00	0.00	0.00	0.00	0.00
606.980	380.00	648.30	648.30	25.67	648.54	124.03	0.00	0.00	0.00	0.00	0.00	0.00
607.020	255.00	650.52	650.52	86.92	650.54	176.65	0.00	0.00	0.00	0.00	0.00	0.00
607.020	380.00	650.79	650.79	111.94	650.83	182.61	0.00	0.00	0.00	0.00	0.00	0.00
607.100	255.00	650.56	650.56	95.29	650.58	177.50	0.00	0.00	0.00	0.00	0.00	0.00
607.100	380.00	650.84	650.84	122.96	650.88	183.74	0.00	0.00	0.00	0.00	0.00	0.00
608.000	255.00	652.11	652.11	46.93	652.16	133.30	0.00	0.00	0.00	0.00	0.00	0.00
608.000	380.00	652.61	652.61	76.09	652.67	148.77	0.00	0.00	0.00	0.00	0.00	0.00
608.100	255.00	653.76	653.76	58.37	653.81	142.78	0.00	0.00	0.00	0.00	0.00	0.00
608.100	380.00	654.16	654.16	85.90	654.21	154.74	0.00	0.00	0.00	0.00	0.00	0.00
608.300	255.00	653.87	653.87	31.20	654.06	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	380.00	654.23	654.23	41.19	654.52	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	255.00	654.15	654.15	17.08	655.01	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	380.00	654.49	654.49	20.54	655.99	13.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TC	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
609.070	255.00	654.49	654.49	20.65	655.16	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	380.00	656.10	656.10	40.24	656.73	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	255.00	655.36	655.36	97.99	655.39	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	380.00	656.88	656.88	241.88	656.89	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.200	255.00	655.93	655.93	40.28	656.01	138.92	0.00	0.00	0.00	0.00	0.00	0.00
609.200	380.00	657.05	657.05	127.54	657.08	167.36	0.00	0.00	0.00	0.00	0.00	0.00
609.300	255.00	656.79	656.79	41.98	656.86	142.74	0.00	0.00	0.00	0.00	0.00	0.00
609.300	380.00	657.34	657.34	74.60	657.41	156.99	0.00	0.00	0.00	0.00	0.00	0.00
609.900	255.00	657.79	657.79	30.80	657.98	73.52	0.00	0.00	0.00	0.00	0.00	0.00
609.900	380.00	658.16	658.16	41.72	658.41	91.32	0.00	0.00	0.00	0.00	0.00	0.00
609.950	255.00	658.92	658.92	43.60	659.02	94.02	0.00	0.00	0.00	0.00	0.00	0.00
609.950	380.00	659.44	659.44	64.36	659.56	119.37	0.00	0.00	0.00	0.00	0.00	0.00
610.000	255.00	659.68	659.68	42.57	659.79	92.55	0.00	0.00	0.00	0.00	0.00	0.00
610.000	380.00	660.21	660.21	63.66	660.34	118.65	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH C	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
599.900	345.000	605.634	0.000	0.000	0.000	52.688	0.000	0.000
599.900	510.000	606.201	.566	0.000	0.000	64.016	-11.328	0.000
599.980	345.000	606.113	0.000	.478	0.000	48.223	0.000	113.000
599.980	510.000	606.662	.549	.461	0.000	59.220	-10.997	113.000
600.020	345.000	609.825	0.000	3.713	0.000	122.692	0.000	37.000
600.020	510.000	610.165	.339	3.503	0.000	129.294	-6.602	37.000
600.100	345.000	609.832	0.000	.007	0.000	141.648	0.000	50.000
600.100	510.000	610.178	.346	.014	0.000	146.842	-5.193	50.000
600.500	345.000	609.936	0.000	.104	0.000	108.900	0.000	350.000
600.500	510.000	610.344	.408	.165	0.000	121.111	-12.211	350.000
601.000	345.000	610.874	0.000	.938	0.000	64.166	0.000	350.000
601.000	510.000	611.492	.618	1.148	0.000	89.972	-25.805	350.000
601.100	345.000	616.933	0.000	6.059	0.000	38.020	0.000	1350.000
601.100	510.000	617.601	.668	6.109	0.000	42.473	-4.453	1350.000
601.980	345.000	617.134	0.000	.200	0.000	14.180	0.000	100.000
601.980	510.000	617.836	.702	.235	0.000	32.148	-17.969	100.000
602.020	345.000	619.849	0.000	2.716	0.000	151.874	0.000	52.000
602.020	510.000	620.129	.280	2.293	0.000	160.798	-8.924	52.000
602.100	345.000	619.856	0.000	.007	0.000	60.244	0.000	50.000
602.100	510.000	620.139	.283	.010	0.000	75.965	-15.722	50.000
602.150	345.000	620.006	0.000	.150	0.000	68.929	0.000	1.000
602.150	510.000	620.339	.333	.200	0.000	85.679	-16.749	1.000
602.200	345.000	620.077	0.000	.071	0.000	59.280	0.000	100.000

602.200	510.000	620.449	.371	.110	0.000	64.746	-5.466	100.000
603.000	345.000	620.746	0.000	.669	0.000	168.668	0.000	1100.000
603.000	510.000	621.344	.597	.895	0.000	179.377	-10.709	1100.000
603.100	310.000	621.910	0.000	1.164	0.000	38.035	0.000	750.000
603.100	455.000	622.349	.438	1.005	0.000	42.089	-4.054	750.000
603.980	310.000	622.624	0.000	.713	0.000	12.000	0.000	105.000
603.980	455.000	623.204	.580	.855	0.000	12.000	0.000	105.000
603.990	310.000	622.701	0.000	.077	0.000	11.932	0.000	1.000
603.990	455.000	623.349	.649	.146	0.000	11.951	-.018	1.000
604.010	310.000	622.805	0.000	.105	0.000	11.935	0.000	43.000
604.010	455.000	623.533	.727	.183	0.000	11.956	-.021	43.000
604.020	310.000	622.789	0.000	-.016	0.000	12.000	0.000	1.000
604.020	455.000	623.508	.719	-.025	0.000	12.000	0.000	1.000
604.100	310.000	623.468	0.000	.679	0.000	115.648	0.000	50.000
604.100	455.000	624.574	1.105	1.066	0.000	119.878	-4.230	50.000
604.500	310.000	624.088	0.000	.620	0.000	177.852	0.000	600.000
604.500	455.000	624.961	.873	.387	0.000	233.546	-55.694	600.000
604.700	310.000	625.175	0.000	1.086	0.000	142.702	0.000	325.000
604.700	455.000	625.613	.439	.652	0.000	172.138	-29.436	325.000
605.000	310.000	626.878	0.000	1.703	0.000	156.653	0.000	325.000
605.000	455.000	627.246	.368	1.632	0.000	181.522	-24.869	325.000
605.050	310.000	629.831	0.000	2.953	0.000	146.817	0.000	625.000
605.050	455.000	630.228	.397	2.982	0.000	174.002	-27.185	625.000
605.100	310.000	633.021	0.000	3.190	0.000	152.829	0.000	625.000
605.100	455.000	633.391	.370	3.163	0.000	178.024	-25.195	625.000
605.500	310.000	634.723	0.000	1.702	0.000	179.401	0.000	625.000
605.500	455.000	635.100	.377	1.709	0.000	197.790	-18.389	625.000
606.000	310.000	636.972	0.000	2.249	0.000	130.932	0.000	625.000
606.000	455.000	637.266	.294	2.166	0.000	148.512	-17.580	625.000
606.030	255.000	640.930	0.000	3.958	0.000	115.977	0.000	137.500
606.030	380.000	641.644	.714	4.378	0.000	151.878	-35.901	137.500
606.060	255.000	644.404	0.000	3.474	0.000	144.738	0.000	550.000
606.060	380.000	644.469	.065	2.825	0.000	148.087	-3.349	550.000
606.100	255.000	646.949	0.000	2.545	0.000	126.952	0.000	550.000
606.100	380.000	647.410	.461	2.941	0.000	150.380	-23.428	550.000
606.980	255.000	648.121	0.000	1.172	0.000	115.967	0.000	105.000
606.980	380.000	648.297	.176	.887	0.000	124.033	-8.067	105.000
607.020	255.000	650.519	0.000	2.397	0.000	176.649	0.000	45.000
607.020	380.000	650.792	.274	2.495	0.000	182.608	-5.960	45.000
607.100	255.000	650.557	0.000	.039	0.000	177.497	0.000	50.000
607.100	380.000	650.844	.287	.052	0.000	183.744	-6.247	50.000

608.000	255.000	652.109	0.000	1.551	0.000	133.302	0.000	1220.000
608.000	380.000	652.610	.502	1.766	0.000	148.773	-15.470	1220.000
608.100	255.000	653.764	0.000	1.655	0.000	142.782	0.000	700.000
608.100	380.000	654.158	.394	1.548	0.000	154.736	-11.954	700.000
608.300	255.000	653.867	0.000	.103	0.000	44.000	0.000	60.000
608.300	380.000	654.225	.359	.068	0.000	44.000	-.000	60.000
608.980	255.000	654.154	0.000	.287	0.000	13.000	0.000	61.000
608.980	380.000	654.487	.333	.262	0.000	13.000	.000	61.000
609.070	255.000	654.493	0.000	.339	0.000	13.000	0.000	29.000
609.070	380.000	656.101	1.608	1.614	0.000	13.000	.000	29.000
609.100	255.000	655.364	0.000	.871	0.000	116.000	0.000	50.000
609.100	380.000	656.876	1.512	.775	0.000	116.000	-.000	50.000
609.200	255.000	655.926	0.000	.562	0.000	138.922	0.000	440.000
609.200	380.000	657.053	1.127	.177	0.000	167.364	-28.443	440.000
609.300	255.000	656.787	0.000	.861	0.000	142.739	0.000	220.000
609.300	380.000	657.343	.556	.290	0.000	156.987	-14.248	220.000
609.900	255.000	657.794	0.000	1.007	0.000	73.520	0.000	220.000
609.900	380.000	658.158	.364	.814	0.000	91.318	-17.799	220.000
609.950	255.000	658.915	0.000	1.122	0.000	94.024	0.000	220.000
609.950	380.000	659.435	.520	1.278	0.000	119.373	-25.349	220.000
610.000	255.000	659.683	0.000	.768	0.000	92.546	0.000	220.000
610.000	380.000	660.209	.526	.774	0.000	118.647	-26.101	220.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	46.569	0.000
2	0.000	0.000	43.310	-3.259

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook and Kelly Dotty drain

4) DOCUMENT TYPE: 100 yr.

00BREAK00

JOB NO. UM1448 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 15:18:53 07-09-79

GOOD

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                    TT
MM MM    MM MM  NN NN       NN  EE                    TT
MM  MMMM  MM MM  NN  NN     NN  EE                    TT
MM   MM   MM MM  NN   NN    NN  EEEEEEEE              TT
MM        MM MM  NN    NN   NN  EEEEEEEE              TT
MM        MM MM  NN     NN  NN  EE                    TT
MM        MM MM  NN      NNNN  EE                    TT
MM        MM MM  NN       NNN  EE                    TT
MM        MM MM  NN        NN  EEEEEEEEEEEE          TT
MM        MM MM  NN         N  EEEEEEEEEEEE          TT

XX        XX   SSSSSSSSS   NN          NN  LL
XX        XX  SSSSSSSSSSS  NNN         NN  LL
 XX      XX   SS         SS NNNN        NN  LL
  XX    XX    SS            NN NN       NN  LL
   XX  XX     SSS           NN  NN      NN  LL
    XXXX       SSSSSSSSS    NN   NN     NN  LL
    XXXX        SSSSSSSSS   NN    NN    NN  LL
   XX  XX             SSS  NN     NN NN  LL
  XX    XX             SS  NN      NNNN  LL
 XX      XX   SS         SS NN       NNN  LL
XX        XX  SSSSSSSSSSS  NN        NN  LLLLLLLLLLLL
XX        XX   SSSSSSSSS   NN         N  LLLLLLLLLLLL
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1    HUD-FIA H-4705
T2    BEDFORD TWP FIS
T3       SPRING BROOK - 100 YEAR FLOW  Q=600 CFS

J1   ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
        -1.       4.        0.        0.  0.000000      0.00      1.0       0.   606.480    0.000

J3       1.000    34.000     3.000     4.000    27.000    28.000     9.000     0.000     0.000     0.000
NC        .060      .060      .040      .400      .800     0.000     0.000     0.000     0.000     0.000
QT       5.000   345.000   510.000   600.000   835.000   600.000     0.000     0.000     0.000     0.000
ET       0.000     0.000     0.000     0.000     0.000     1.400     0.000     0.000     0.000     0.000

X1     599.900    15.000   220.000   260.000     0.000     0.000     0.000     0.000     0.000     0.000
GR     625.000     0.000   620.000    60.000   615.000   110.000   610.000   150.000   605.000   220.000
GR     604.500   225.000   602.700   230.000   602.500   240.000   602.700   250.000   604.500   255.000
GR     605.000   260.000   610.000   290.000   615.000   320.000   620.000   350.000   625.000   390.000

X1     599.980     0.000     0.000     0.000   113.000   113.000   113.000     0.000      .700     0.000
SB       0.000     2.300     2.700   125.000     3.140     0.000    12.600     0.000   603.000   603.000

X1     600.020     0.000     0.000     0.000    37.000    37.000    37.000     0.000     0.000     0.000
X2       0.000     0.000     1.000   607.000   609.100     0.000     0.000     0.000     0.000     0.000

X1     600.100    17.000   179.000   192.000    50.000    50.000    50.000     0.000     0.000     0.000
GR     625.700     0.000   625.500    34.000   625.100    61.000   614.100   100.000   610.900   116.000
GR     608.600   146.000   605.400   179.000   603.600   182.000   603.500   184.000   604.000   189.000
GR     605.400   192.000   605.700   200.000   607.500   242.000   609.000   270.000   623.700   298.000
GR     626.100   309.000   626.100   350.000     0.000     0.000     0.000     0.000     0.000     0.000
NC        .080      .080      .045      .200      .400     0.000     0.000     0.000     0.000     0.000

X1     600.500     0.000     0.000     0.000   350.000   350.000   350.000     0.000     1.600     0.000

X1     601.000    17.000   179.000   192.000   350.000   350.000   350.000     0.000     3.300     0.000
GR     625.700     0.000   625.500    34.000   625.100    61.000   614.100   100.000   610.900   116.000
GR     608.600   146.000   607.900   179.000   603.600   182.000   603.500   184.000   604.000   189.000
GR     605.400   192.000   605.700   200.000   607.500   242.000   609.000   270.000   623.700   298.000
GR     626.100   309.000   626.100   350.000     0.000     0.000     0.000     0.000     0.000     0.000
NC        .045      .045      .040     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1     601.100    20.000   169.000   185.000  1350.000  1350.000  1350.000     0.000     0.000     0.000
GR     631.200     0.000   629.800    60.000   627.900    90.000   626.400   100.000   620.600   139.000
GR     614.800   162.000   614.600   169.000   613.200   175.000   611.300   176.000   613.200   182.000
GR     614.500   185.000   620.100   200.000   622.600   229.000   622.600   254.000   622.600   283.000
GR     622.600   293.000   622.600   318.000   623.900   360.000   628.600   400.000   631.400   475.000
NC       0.000     0.000     0.000      .400      .800     0.000     0.000     0.000     0.000     0.000

X1     601.980    17.000   142.000   156.000   100.000   100.000   100.000     0.000     0.000     0.000
GR     628.300     0.000   626.700    18.000   624.900    53.000   619.400    71.000   618.500   100.000
GR     618.100   115.000   617.400   141.900   613.800   142.000   611.500   144.000   611.200   146.000
GR     611.200   154.000   612.700   156.000   617.800   156.100   619.100   200.000   621.200   260.000
GR     624.800   300.000   627.200   340.000     0.000     0.000     0.000     0.000     0.000     0.000
SB       0.000     2.300     2.700   150.000     4.200     0.000    12.600     0.000   611.200   611.200

X1     602.020     0.000     0.000     0.000    52.000    52.000    52.000     0.000     0.000     0.000
X2       0.000     0.000     1.000   614.200   619.200     0.000     0.000     0.000     0.000     0.000
NC       0.000     0.000      .030     0.000     0.000     0.000     0.000     0.000     0.000     0.000

X1     602.100    22.000   210.000   218.000    50.000    50.000    50.000     0.000     0.000     0.000
X3      10.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000   623.000     0.000
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GR	629.400	0.000	629.000	65.000	627.500	100.000	624.700	138.000	620.300	167.000
GR	619.800	191.000	618.600	200.000	617.100	210.000	612.400	211.000	612.900	217.000
GR	616.800	218.000	617.000	244.000	619.300	245.000	622.800	270.000	622.900	296.000
GR	621.900	350.000	621.400	355.000	622.800	368.000	623.100	390.000	622.900	400.000
GR	627.700	435.000	629.400	455.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	602.150	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-4.000	.150	.200	.200	.300	.200	0.000	0.000	0.000	0.000
NC	0.000	0.000	.040	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	602.200	18.000	212.000	233.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	629.400	0.000	629.000	66.000	627.500	100.000	624.600	137.000	621.400	165.000
GR	621.100	179.000	616.300	212.000	613.400	222.000	613.000	227.000	616.300	233.000
GR	619.400	240.000	622.600	265.000	622.800	297.000	622.000	350.000	622.800	367.000
GR	623.000	390.000	622.800	400.000	629.500	455.000	0.000	0.000	0.000	0.000
NC	.060	.060	.045	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	603.000	18.000	260.000	287.000	1100.000	1100.000	1100.000	0.000	0.000	0.000
GR	636.900	0.000	636.500	11.000	635.200	22.000	633.300	100.000	632.000	120.000
GR	620.300	160.000	619.100	200.000	618.900	260.000	616.700	270.000	615.800	273.000
GR	616.000	277.000	619.900	287.000	619.900	300.000	621.000	335.000	633.700	363.000
GR	634.600	400.000	636.200	450.000	636.300	500.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
QT	5.000	310.000	455.000	540.000	740.000	540.000	0.000	0.000	0.000	0.000
X1	603.100	16.000	197.000	226.000	750.000	750.000	750.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	635.300	0.000	635.100	100.000	634.000	135.000	625.300	160.000	620.600	197.000
GR	619.100	215.000	618.300	216.000	618.200	218.000	618.300	220.000	622.900	226.000
GR	621.800	268.000	621.800	300.000	625.200	364.000	627.700	380.000	635.700	400.000
GR	639.200	425.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	603.980	13.000	294.000	306.000	105.000	105.000	105.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	632.000	632.000	0.000
GR	635.700	0.000	632.200	200.000	625.700	265.000	622.300	294.000	618.300	294.100
GR	618.000	300.000	618.000	303.000	619.000	305.900	622.000	306.000	625.000	317.000
GR	628.400	350.000	632.500	400.000	635.500	500.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	603.990	4.000	294.000	306.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	632.000	632.000	0.000
BT	2.000	294.000	632.000	625.100	306.000	632.000	625.100	0.000	0.000	0.000
GR	625.100	294.000	618.000	294.100	618.000	305.900	625.100	306.000	0.000	0.000
X1	604.010	0.000	0.000	0.000	43.000	43.000	43.000	0.000	0.000	0.000
X2	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	632.000	632.000	0.000
NC	0.000	0.000	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	604.020	13.000	294.000	306.000	1.000	1.000	1.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	632.000	632.000	0.000
GR	635.700	0.000	632.200	200.000	625.700	265.000	622.300	294.000	618.300	294.100
GR	618.000	300.000	618.000	303.000	619.000	305.900	622.000	306.000	625.000	317.000
GR	628.400	350.000	632.500	400.000	635.500	500.000	0.000	0.000	0.000	0.000
NC	.080	0.000	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	604.100	14.000	230.000	241.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	636.100	0.000	636.000	60.000	635.600	100.000	634.200	189.000	624.600	190.000
GR	622.000	200.000	619.600	230.000	618.700	231.000	617.600	235.000	618.600	239.000

GR	619.900	241.000	621.900	260.000	621.700	290.000	622.200	310.000	0.000	0.000
NC	.085	.085	.055	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	604.500	16.000	248.000	264.000	600.000	600.000	600.000	0.000	-3.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	640.600	0.000	640.100	36.000	639.600	69.000	628.000	100.000	626.300	181.000
GR	625.800	200.000	624.900	248.000	623.400	250.000	623.400	254.000	623.500	259.000
GR	626.300	264.000	625.900	291.000	628.300	338.000	639.100	373.000	639.800	397.000
GR	640.200	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	604.700	0.000	0.000	0.000	325.000	325.000	325.000	0.000	1.600	0.000
X1	605.000	0.000	0.000	0.000	325.000	325.000	325.000	0.000	1.500	0.000
X1	605.050	0.000	0.000	0.000	625.000	625.000	625.000	0.000	3.100	0.000
X1	605.100	0.000	0.000	0.000	625.000	625.000	625.000	0.000	3.100	0.000
NC	.060	.060	.060	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	605.500	13.000	300.000	457.000	625.000	625.000	625.000	0.000	-3.100	0.000
GR	647.100	0.000	646.800	100.000	645.200	200.000	644.500	263.000	643.500	268.000
GR	638.200	275.000	637.600	300.000	635.700	400.000	635.800	436.000	636.000	457.000
GR	642.000	500.000	643.900	513.000	644.700	535.000	0.000	0.000	0.000	0.000
X1	606.000	0.000	0.000	0.000	625.000	625.000	625.000	0.000	3.100	0.000
NC	0.000	0.000	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	5.000	255.000	380.000	450.000	620.000	450.000	0.000	0.000	0.000	0.000
X1	606.030	13.000	105.000	111.000	550.000	550.000	550.000	0.000	-5.800	0.000
GR	653.400	0.000	652.200	25.000	650.400	27.000	646.000	41.000	645.800	105.000
GR	644.300	108.000	644.500	110.000	645.800	111.000	646.100	125.000	647.800	205.000
GR	647.700	225.000	653.600	253.000	654.600	325.000	0.000	0.000	0.000	0.000
X1	606.060	0.000	0.000	0.000	550.000	550.000	550.000	0.000	2.900	0.000
X1	606.100	0.000	0.000	0.000	550.000	550.000	550.000	0.000	2.900	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	606.980	0.000	0.000	0.000	105.000	105.000	105.000	0.000	1.400	0.000
SB	0.000	1.600	2.700	150.000	8.000	0.000	17.600	0.000	645.700	645.700
X1	607.020	16.000	131.000	162.000	45.000	45.000	45.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	647.900	650.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	659.400	0.000	658.200	100.000	656.500	111.000	654.300	123.000	649.800	131.000
GR	647.900	133.000	645.700	143.000	647.200	150.000	649.000	157.000	649.800	162.000
GR	648.600	200.000	650.100	265.000	650.200	300.000	653.600	368.000	657.100	390.000
GR	657.200	440.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.080	.060	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	607.100	16.000	131.000	162.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	659.400	0.000	658.200	100.000	656.500	111.000	654.300	123.000	649.800	131.000
GR	647.900	133.000	645.700	143.000	647.200	150.000	649.000	157.000	649.800	162.000
GR	648.600	200.000	650.100	265.000	650.200	300.000	653.600	368.000	657.100	390.000
GR	657.200	440.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.085	.085	.060	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	609.000	18.000	200.000	245.000	1220.000	1220.000	1220.000	0.000	0.000	0.000
GR	662.700	0.000	660.400	52.000	656.700	90.000	651.900	162.000	650.400	200.000
GR	649.700	219.000	648.600	220.000	648.500	222.000	648.800	223.000	649.800	224.000

GR	651.000	245.000	651.600	284.000	652.600	300.000	654.200	317.000	662.200	341.000
GR	663.200	365.000	664.700	400.000	665.600	450.000	0.000	0.000	0.000	0.000
NC	.065	.065	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	608.100	13.000	142.000	164.000	700.000	700.000	700.000	0.000	0.000	0.000
GR	659.000	0.000	657.000	24.000	653.900	60.000	652.400	100.000	652.100	142.000
GR	651.000	147.000	650.900	151.000	650.900	160.000	652.500	164.000	653.300	200.000
GR	655.200	226.000	661.100	254.000	661.800	300.000	0.000	0.000	0.000	0.000
X1	608.300	7.000	142.000	164.000	60.000	60.000	60.000	0.000	.300	0.000
GR	652.200	131.000	652.100	142.000	651.000	147.000	650.900	151.000	650.900	160.000
GR	652.500	164.000	652.700	175.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	608.980	7.000	147.000	160.000	61.000	61.000	61.000	0.000	.600	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	659.300	659.300	0.000
GR	652.200	131.000	652.100	142.000	651.000	147.000	650.900	151.000	650.900	160.000
GR	652.500	164.000	652.700	175.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	2.000	1.650	2.700	150.000	13.530	.010	40.600	0.000	651.500	651.500
X1	609.070	0.000	0.000	0.000	29.000	29.000	29.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	654.500	659.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	659.300	659.300	0.000
NC	.060	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	609.100	15.000	154.000	196.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	654.400	117.000	654.400	118.000	654.300	119.000	654.300	120.000	653.800	154.000
GR	652.500	173.000	651.900	181.000	651.900	186.000	651.800	190.000	653.000	196.000
GR	653.100	200.000	654.300	230.000	654.400	231.000	654.400	232.000	654.400	233.000
X1	609.200	15.000	154.000	196.000	440.000	440.000	440.000	0.000	1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	661.900	0.000	662.000	15.000	659.200	40.000	654.400	100.000	653.800	154.000
GR	652.500	173.000	651.900	181.000	651.900	186.000	651.800	190.000	653.000	196.000
GR	653.100	200.000	654.300	237.000	657.600	279.000	661.800	297.000	662.600	310.000
NC	.085	.085	.060	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	609.300	0.000	0.000	0.000	220.000	220.000	220.000	0.000	.700	0.000
X1	609.900	16.000	300.000	328.000	220.000	220.000	220.000	0.000	-1.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	666.100	0.000	665.900	100.000	663.300	203.000	661.900	235.000	658.100	300.000
GR	657.200	305.000	656.400	306.000	656.200	313.000	656.700	321.000	657.100	322.000
GR	658.500	328.000	660.300	385.000	663.100	400.000	664.500	413.000	665.700	500.000
GR	666.300	518.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	609.950	0.000	0.000	0.000	220.000	220.000	220.000	0.000	.700	0.000
X1	610.000	0.000	0.000	0.000	220.000	220.000	220.000	0.000	.800	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .400 CEHV= .800

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

WS on Halfway Creek = 611.8 at peak.

****CONFLUENCE WITH HALFWAY CREEK (UPPER PORTION)

599.90	3.98	606.48	0.00	606.48	606.80	.32	0.00	0.00	605.00
600.	18.	574.	8.	15.	124.	7.	0.	0.	605.00
0.00	1.20	4.64	1.19	.060	.040	.060	0.000	602.50	199.28
.003538	0.	0.	0.	0	0	1	0.00	69.60	268.88

****D/S FACE PRIVATE DRIVE

599.98	3.73	606.93	0.00	0.00	607.32	.39	.46	.06	605.70
600.	13.	581.	6.	11.	114.	5.	0.	0.	605.70
.01	1.24	5.12	1.23	.060	.040	.060	.040	603.20	202.81
.004822	113.	113.	113.	2	0	1	0.00	64.56	267.37

SPECIAL BRIDGE

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.30	2.70	125.00	3.14	0.00	12.60	0.00	603.00	603.00

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
687.91	607.20	0.00	477.	123.	13.	607.00	609.10	30.00

600.02	7.12	610.32	0.00	0.00	610.36	.04	3.04	0.00	605.70
600.	96.	463.	41.	149.	249.	64.	1.	0.	605.70
.01	.65	1.86	.64	.060	.040	.060	.039	603.20	155.37
.000223	37.	37.	37.	2	0	8	0.00	132.32	287.70
600.10	6.84	610.34	0.00	0.00	610.37	.04	.01	.00	605.40
600.	127.	191.	282.	130.	81.	255.	1.	0.	605.40
.02	.98	2.36	1.10	.060	.040	.060	.039	603.50	123.36
.000382	50.	50.	50.	2	0	1	0.00	149.19	272.54

CCHV= .200 CEHV= .400

600.50	5.43	610.53	0.00	0.00	610.70	.16	.27	.05	607.00
600.	91.	280.	229.	65.	63.	144.	4.	2.	607.00
.06	1.41	4.47	1.58	.080	.045	.080	.043	605.10	141.63
.002444	350.	350.	350.	3	0	1	0.00	127.16	268.79

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	IWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
601.00	4.96	611.76	0.00	0.00	612.13	.37	1.35	.08	611.20
600.	5.	329.	266.	8.	53.	110.	6.	2.	608.70
.08	.67	6.23	2.41	.080	.045	.080	.044	606.80	152.37
.006974	350.	350.	350.	2	0	1	0.00	107.64	260.01
601.10	6.62	617.92	0.00	0.00	618.30	.38	6.16	.00	614.60
600.	140.	420.	40.	42.	76.	16.	11.	5.	614.50
.16	3.34	5.53	2.56	.045	.040	.045	.041	611.30	149.63
.003218	1350.	1350.	1350.	5	0	1	0.00	44.52	194.16

CCHV= .400 CEHV= .800

****D/S FACE GREENHILLS DR.

601.98	6.97	618.17	0.00	0.00	618.78	.61	.29	.18	613.80
600.	11.	588.	1.	12.	93.	3.	11.	5.	612.70
.16	.93	6.33	.52	.045	.040	.045	.041	611.20	112.55
.002690	100.	100.	100.	2	0	1	0.00	55.88	168.43

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.30	2.70	150.00	4.20	0.00	12.60	0.00	611.20	611.20

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
699.15	618.78	0.00	502.	99.	13.	614.20	619.20	30.00

602.02	9.06	620.26	0.00	0.00	620.35	.09	1.58	0.00	613.80
600.	146.	365.	89.	137.	122.	99.	11.	5.	612.70
.17	1.07	2.99	.89	.045	.040	.045	.041	611.20	68.17
.000415	52.	52.	52.	2	0	8	0.00	165.07	233.24
602.10	7.87	620.27	0.00	0.00	620.49	.21	.04	.10	617.10
600.	72.	268.	260.	39.	57.	93.	11.	5.	616.80
.17	1.83	4.74	2.79	.045	.030	.045	.041	612.40	168.35
.001532	50.	50.	50.	2	0	1	0.00	83.59	251.94

WATER EL=X5 CARD= 620.474

****FOOTBRIDGE

602.15	8.07	620.47	0.00	0.00	620.66	.18	.00	.01	617.10
600.	81.	256.	263.	48.	58.	100.	11.	5.	616.80
.17	1.69	4.40	2.62	.045	.030	.045	.041	612.40	165.85

.001273	1.	1.	1.	0	0	1	0.00	87.54	253.39

CCHV= .150 CEHV= .350

602.20	7.61	620.61	0.00	0.00	620.76	.16	.10	.00	616.30
600.	102.	460.	38.	64.	130.	25.	12.	5.	616.30
.18	1.60	3.53	1.54	.045	.040	.045	.041	613.00	182.38
.000854	100.	100.	100.	2	0	1	0.00	67.05	249.44

CCHV= .200 CEHV= .400

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
603.00	5.82	621.62	0.00	0.00	621.66	.05	.88	.02	618.90
600.	285.	262.	53.	237.	114.	64.	20.	9.	619.90
.36	1.20	2.30	.83	.060	.045	.060	.042	615.80	155.47
.000749	1100.	1100.	1100.	3	0	1	0.00	180.90	336.38

CCHV= .150 CEHV= .350

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 620.60 ELREA= 622.90

603.10	4.37	622.57	0.00	0.00	623.12	.55	1.28	.18	620.60
540.	36.	504.	0.	15.	82.	0.	24.	10.	622.90
.40	2.34	6.13	0.00	.060	.045	.060	.043	618.20	181.42
.009117	750.	750.	750.	3	0	1	0.00	44.16	225.58

CCHV= .300 CEHV= .500

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 632.00 ELREA= 632.00

603.98	5.48	623.48	0.00	0.00	624.62	1.14	1.20	.30	622.30
540.	0.	540.	0.	0.	63.	0.	25.	11.	622.00
.40	0.00	8.59	0.00	.060	.045	.060	.043	618.00	294.00
.014827	105.	105.	105.	3	0	1	0.00	12.00	311.41

NORMAL BRIDGE,NRD= 2 MIN ELTRD= 632.00 MAX ELLC= 625.10

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 632.00 ELREA= 632.00

****D/S FACE STERNS RD

603.99	5.68	623.68	0.00	0.00	624.67	.99	.01	.05	625.10
540.	0.	540.	0.	0.	68.	0.	25.	11.	625.10
.40	0.00	8.00	0.00	.060	.022	.060	.043	618.00	294.02
.003369	1.	1.	1.	2	0	1	0.00	11.96	305.98

NORMAL BRIDGE,NRD= 2 MIN ELTRD= 632.00 MAX ELLC= 625.10

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 632.00 ELREA= 632.00

604.01	5.92	623.92	0.00	0.00	624.83	.92	.14	.02	625.10
540.	0.	540.	0.	0.	70.	0.	25.	11.	625.10
.41	0.00	7.68	0.00	.060	.022	.060	.042	618.00	294.02
.003019	43.	43.	43.	2	0	1	0.00	11.97	305.98

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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 632.00 ELREA= 632.00

604.02	5.89	623.89	0.00	0.00	624.87	.98	.01	.03	622.30
540.	0.	540.	0.	0.	68.	0.	25.	11.	622.00
.41	0.00	7.96	0.00	.060	.045	.060	.042	618.00	294.00
.011828	1.	1.	1.	2	0	1	0.00	12.00	312.92

3280 CROSS SECTION 604.10 EXTENDED 2.98 FEET

604.10	7.58	625.18	0.00	0.00	625.21	.03	.05	.29	619.60
540.	131.	139.	270.	150.	74.	248.	25.	11.	619.90
.42	.87	1.87	1.09	.080	.050	.060	.043	617.60	189.94
.000347	50.	50.	50.	3	0	1	0.00	120.06	310.00

50+50+12 = 112

CCHV= .200 CEHV= .400

604.50	5.19	625.49	0.00	0.00	625.51	.03	.30	.00	621.80
540.	286.	148.	106.	321.	74.	137.	32.	13.	623.20
.56	.89	2.01	.77	.085	.055	.085	.044	620.30	98.43
.000798	600.	600.	600.	3	0	1	0.00	240.51	338.93
604.70	4.04	625.94	0.00	0.00	626.06	.11	.51	.04	623.40
540.	252.	215.	73.	158.	55.	59.	35.	15.	624.80
.59	1.59	3.88	1.23	.085	.055	.085	.045	621.90	126.62
.004346	325.	325.	325.	2	0	1	0.00	194.56	321.18
605.00	4.00	627.40	0.00	0.00	627.53	.12	1.47	.00	624.90
540.	250.	219.	72.	153.	55.	57.	37.	16.	626.30
.63	1.64	3.99	1.25	.085	.055	.085	.045	623.40	128.70
.004683	325.	325.	325.	1	0	1	0.00	191.63	320.33
605.05	3.95	630.45	0.00	0.00	630.58	.13	3.05	.00	628.00
540.	248.	223.	69.	147.	54.	54.	41.	19.	629.40
.70	1.69	4.13	1.28	.085	.055	.085	.046	626.50	131.00
.005093	625.	625.	625.	2	0	1	0.00	188.38	319.38
605.10	3.97	633.57	0.00	0.00	633.70	.13	3.12	.00	631.10
540.	249.	221.	70.	150.	54.	56.	44.	22.	632.50
.76	1.66	4.06	1.27	.085	.055	.085	.047	629.60	129.90

.004891	625.	625.	625.	2	0	1	0.00	189.94	319.84

CCHV= .400 CEHV= .800

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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
605.50	2.69	635.29	0.00	0.00	635.33	.04	1.59	.04	634.50
540.	8.	510.	23.	12.	322.	21.	49.	24.	632.90
.88	.61	1.58	1.10	.060	.060	.060	.048	632.60	274.74
.001563	625.	625.	625.	3	0	1	0.00	199.43	474.17
606.00	1.72	637.42	0.00	0.00	637.57	.15	2.15	.09	637.60
540.	0.	524.	16.	0.	170.	7.	53.	27.	636.00
.93	0.00	3.08	2.22	.060	.060	.060	.049	635.70	309.49
.012857	625.	625.	625.	3	0	1	0.00	157.69	467.17
606.03	3.28	641.78	0.00	0.00	641.87	.09	4.28	.02	640.00
450.	268.	54.	128.	112.	16.	75.	55.	29.	640.00
1.00	2.40	3.32	1.71	.060	.055	.060	.049	638.50	35.97
.004848	550.	550.	550.	5	0	1	0.00	158.76	194.73
606.06	3.22	644.62	0.00	0.00	644.71	.10	2.84	.01	642.90
450.	269.	56.	125.	108.	16.	70.	57.	31.	642.90
1.06	2.50	3.49	1.79	.060	.055	.060	.050	641.40	36.15
.005514	550.	550.	550.	2	0	1	0.00	155.83	191.98
606.10	3.25	647.55	0.00	0.00	647.64	.09	2.93	.00	645.80
450.	269.	55.	126.	110.	16.	72.	60.	33.	645.80
1.13	2.45	3.39	1.75	.060	.055	.060	.050	644.30	36.05
.005140	550.	550.	550.	2	0	1	0.00	157.41	193.47

CCHV= .300 CEHV= .500

****D/S FACE SECOR RD

606.98	2.73	648.43	0.00	0.00	648.68	.25	.96	.08	647.20
450.	277.	76.	97.	73.	13.	35.	60.	33.	647.20
1.13	3.77	5.82	2.79	.060	.055	.060	.050	645.70	37.75
.020316	105.	105.	105.	2	0	1	0.00	130.58	168.33

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	1.60	2.70	150.00	8.00	0.00	17.60	0.00	645.70	645.70

PRESSURE AND WFIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS

664.67	651.28	0.00	273.	178.	18.	647.90	650.20	30.00	
607.02	5.22	650.92	0.00	0.00	650.97	.04	2.29	0.00	649.80
450.	1.	220.	230.	1.	104.	200.	60.	33.	649.80
1.14	.55	2.11	1.15	.060	.055	.060	.050	645.70	129.00
.001289	45.	45.	45.	2	0	6	0.00	185.49	314.49

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
607.10	5.28	650.98	0.00	0.00	651.03	.04	.06	.00	649.80
450.	0.	226.	223.	1.	106.	209.	61.	34.	649.80
1.15	.39	2.14	1.07	.080	.050	.060	.050	645.70	128.90
.001067	50.	50.	50.	2	0	1	0.00	186.76	315.66
CCHV= .200	CEHV= .400								
608.00	4.34	652.84	0.00	0.00	652.90	.06	1.87	.01	650.40
450.	81.	292.	77.	71.	124.	72.	69.	38.	651.00
1.33	1.15	2.35	1.06	.085	.060	.085	.051	648.50	147.87
.002384	1220.	1220.	1220.	3	0	1	0.00	154.70	302.57
608.10 Q	3.45	654.35	0.00	0.00	654.41	.06	1.51	.00	652.10
450.	202.	175.	73.	138.	69.	60.	73.	41.	652.50
1.43	1.47	2.53	1.21	.065	.055	.065	.051	650.90	54.74
.001950	700.	700.	700.	3	0	1	0.00	159.68	214.41

3280 CROSS SECTION 608.30 EXTENDED 1.90 FEET

X 608.30	3.19	654.39	0.00	0.00	654.75	.36	.22	.12	652.40
450.	67.	335.	48.	21.	64.	16.	74.	41.	652.80
1.44	3.12	5.27	2.91	.065	.055	.065	.051	651.20	131.00
.009444	60.	60.	60.	2	0	1	0.00	44.00	175.00

CCHV= .200 CEHV= .400

1645 INT SEC ADDED BY RAISING SEC 608.98, -.150FT AND MULTIPLYING BY 1.271

3280 CROSS SECTION 1.01 EXTENDED 2.15 FEET

1.01	3.44	654.79	0.00	0.00	654.98	.18	.19	.03	651.45
450.	125.	233.	92.	48.	57.	38.	74.	41.	651.35
1.44	2.58	4.10	2.43	.065	.055	.065	.051	651.35	131.00
.004454	31.	31.	31.	2	0	1	0.00	55.91	186.91

1645 INT SEC ADDED BY RAISING SEC 1.01, .150FT AND MULTIPLYING BY .787

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

3280 CROSS SECTION 608.98 EXTENDED 2.05 FEET

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	IOC	ICONT	CORAR	TOPWID	ENDST
608.98	3.35	654.85	654.85	0.00	656.52	1.67	.29	0.00	651.60
450.	0.	450.	0.	0.	43.	0.	74.	41.	651.50
1.44	0.00	10.38	0.00	.065	.055	.065	.051	651.50	147.00
.033399	31.	31.	31.	30	8	1	0.00	13.00	160.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 659.30 ELREA= 659.30

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	2.00	1.65	2.70	150.00	13.53	.01	40.60	0.00	651.50	651.50

3280 CROSS SECTION 609.07 EXTENDED 4.68 FEET

3301 HV CHANGED MORE THAN HVINS

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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
658.00	656.52	.03	0.	450.	41.	654.50	659.30	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 659.30 ELREA= 659.30

609.07	5.97	657.47	0.00	0.00	658.00	.52	1.47	0.00	651.60
450.	0.	450.	0.	0.	78.	0.	74.	41.	651.50
1.44	0.00	5.80	0.00	.065	.055	.065	.051	651.50	147.00
.005717	29.	29.	29.	2	0	1	0.00	13.00	160.00

3280 CROSS SECTION 609.10 EXTENDED 3.71 FEET

609.10	6.31	658.11	0.00	0.00	658.12	.01	.02	.10	653.80
450.	105.	221.	124.	149.	232.	164.	74.	41.	653.00
1.46	.70	.95	.76	.060	.055	.060	.051	651.80	117.00
.000129	50.	50.	50.	2	0	1	0.00	116.00	233.00
609.20	4.89	658.19	0.00	0.00	658.20	.01	.08	.00	655.30
450.	124.	199.	126.	172.	172.	161.	79.	43.	654.50
1.59	.72	1.16	.79	.060	.055	.060	.051	653.30	71.47
.000283	440.	440.	440.	2	0	1	0.00	195.86	267.32
CCHV= .150	CEHV= .350								
609.30	4.28	658.28	0.00	0.00	658.31	.03	.10	.01	656.00
450.	96.	249.	105.	124.	147.	120.	82.	44.	655.20
1.63	.77	1.70	.87	.085	.060	.085	.052	654.00	79.02
.000894	220.	220.	220.	2	0	1	0.00	180.62	259.64
609.90	3.87	658.57	0.00	0.00	658.78	.21	.41	.06	656.60
450.	45.	359.	46.	33.	88.	39.	83.	45.	657.00
1.65	1.36	4.09	1.17	.085	.060	.085	.052	654.70	266.17
.006119	220.	220.	220.	2	0	1	0.00	111.79	377.96
609.95	4.26	659.66	0.00	0.00	659.80	.13	1.00	.01	657.30
450.	55.	330.	65.	48.	98.	61.	84.	45.	657.70
1.67	1.16	3.35	1.08	.085	.060	.085	.052	655.40	259.60
.003514	220.	220.	220.	2	0	1	0.00	126.27	385.87
610.00	4.24	660.44	0.00	0.00	660.58	.13	.78	.00	658.10
450.	55.	330.	65.	47.	98.	60.	85.	46.	658.50
1.70	1.16	3.37	1.08	.085	.060	.085	.052	656.20	259.80
.003573	220.	220.	220.	1	0	1	0.00	126.00	385.80

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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   HUD-FIA H-4705 T-06
T2   BEDFORD TWP FIS
T3      SPRING BROOK -  100 YEAR FLOW  Q=600 CFS  - ENCROACHMENT OPTION

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

     -1.        6.        0.        0.  0.000000      0.00      1.0        0.   606.480     0.000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

    15.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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CCHV=    .400 CEHV=    .800
 2800 NAT Q1=     100.88  WSEL=     606.48  ENC Q1=     101.71  WSEL=     606.58  RATIO=  -.0083
 NAT Q1=     107.  RATIOS LOB,CH,ROB=    .0345    .9508    .0147  WSEL=     606.58
   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


3470 ENCROACHMENT STATIONS=      220.0      260.0  TYPE=      4  TARGET=         .049

       ****CONFLUENCE WITH HALFWAY CREEK (UPPER PORTION)

   599.90      3.98    606.48      0.00    606.48    606.85       .37      0.00      0.00    605.00
     600.         0.      600.         0.        0.     124.         0.        0.        0.     605.00
     0.00       .02      4.85       .02      .060      .040      .060     0.000    602.50    220.00
  .003870         0.        0.         0.         0         0         1      0.00     40.00    260.00


 2800 NAT Q1=      86.41  WSEL=     606.93  ENC Q1=      88.74  WSEL=     607.03  RATIO=  -.0270
 NAT Q1=      92.  RATIOS LOB,CH,ROB=    .0253    .9640    .0108  WSEL=     607.03

3470 ENCROACHMENT STATIONS=      220.0      260.0  TYPE=      4  TARGET=         .036

       ****D/S FACE PRIVATE DRIVE

   599.98      3.76    606.96      0.00    606.93    607.38       .42       .49       .05    605.70
     600.         0.      600.         0.        0.     115.         0.        0.        0.     605.70
       .01       .02      5.22       .02      .060      .040      .060      .040    603.20    220.00
  .004948       113.      113.       113.         2         0         1      0.00     40.00    260.00


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        2.30        2.70      125.00        3.14        0.00       12.60        0.00     603.00      603.00


 2800 NAT Q1=     401.67  WSEL=     610.32  ENC Q1=     401.67  WSEL=     610.42  RATIO=    .0000
 NAT Q1=     415.  RATIOS LOB,CH,ROB=    .1642    .7660    .0698  WSEL=     610.42
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      160.6      281.6  TYPE=      4  TARGET=         .033
   600.02      7.15    610.35      0.00    610.32    610.39       .04       .02       .15    605.70
     600.       100.      455.        44.       150.      250.        62.        1.        0.     605.70
       .01       .67      1.82       .72      .060      .040      .060      .039    603.20    160.62
  .000212        37.       37.        37.         0         0         8      0.00    120.98    281.60


 2800 NAT Q1=     306.99  WSEL=     610.34  ENC Q1=     306.99  WSEL=     610.44  RATIO=    .0000
 NAT Q1=     320.  RATIOS LOB,CH,ROB=    .2149    .3127    .4725  WSEL=     610.44
   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
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3470 ENCROACHMENT STATIONS=      146.8      263.0  TYPE=      4  TARGET=          .042
   600.10      6.86    610.36      0.00    610.34    610.40       .04       .01       .00    605.40
     600.       121.       195.       283.       109.        81.       245.        1.         0.     605.40
      .02       1.11       2.40       1.16       .060       .040       .060       .039    603.50    146.83
  .000395        50.        50.        50.          2          0          1       0.00    116.18    263.01


CCHV=     .200 CEHV=     .400
 2800 NAT Q1=      121.37  WSEL=      610.53  ENC Q1=      121.37  WSEL=      610.63  RATIO=   0.0000
 NAT Q1=     128.  RATIOS LOB,CH,ROB=    .1561    .4568    .3871  WSEL=      610.63

3470 ENCROACHMENT STATIONS=      151.7      241.9  TYPE=      4  TARGET=          .055
   600.50      5.47    610.57      0.00    610.53    610.74       .17       .28       .05    607.00
     600.        96.       284.       219.        61.        63.       127.        4.         1.     607.00
      .05       1.57       4.50       1.73       .080       .045       .080       .043    605.10    151.72
  .002459       350.       350.       350.          3          0          1       0.00     90.19    241.91


 2800 NAT Q1=       71.85  WSEL=      611.76  ENC Q1=       71.85  WSEL=      611.86  RATIO=    .0000
 NAT Q1=      76.  RATIOS LOB,CH,ROB=    .0120    .5358    .4522  WSEL=      611.86

3470 ENCROACHMENT STATIONS=      179.0      237.8  TYPE=      4  TARGET=          .060
   601.00      5.00    611.80      0.00    611.76    612.20       .40       1.37       .09    611.20
     600.         0.       338.       262.         C.        53.        99.        5.         2.     608.70
      .07        .02       6.34       2.66       .080       .045       .080       .044    606.80    179.00
  .007149       350.       350.       350.          2          0          1       0.00     58.76    237.76


 2800 NAT Q1=      105.77  WSEL=      617.92  ENC Q1=      105.77  WSEL=      618.02  RATIO=    .0000
 NAT Q1=     111.  RATIOS LOB,CH,ROB=    .2369    .6941    .0691  WSEL=      618.02

3470 ENCROACHMENT STATIONS=      152.6      191.5  TYPE=      4  TARGET=          .043
   601.10      6.63    617.93      0.00    617.92    618.30       .37       6.10       .01    614.60
     600.       142.       415.        43.        41.        76.        14.        10.         3.     614.50
      .15       3.48       5.45       3.00       .045       .040       .045       .041    611.30    152.57
  .003111       1350.      1350.      1350.         5          0          1       0.00     38.91    191.48


CCHV=     .400 CEHV=     .800
 2800 NAT Q1=      115.68  WSEL=      618.17  ENC Q1=      116.23  WSEL=      618.27  RATIO=  -.0048
 NAT Q1=     120.  RATIOS LOB,CH,ROB=    .0250    .9711    .0039  WSEL=      618.27

3470 ENCROACHMENT STATIONS=      142.0      156.0  TYPE=      4  TARGET=          .029

       ****D/S FACE GREENHILLS DR.

   601.98      6.97    618.17      0.00    618.17    618.82       .65       .29       .22    613.80
     600.         0.       600.         0.         0.        93.         0.        10.         3.     612.70
      .16        .02       6.46        .02       .045       .040       .045       .041    611.20    142.00
  .002798       100.       100.       100.          ?          0          1       0.00     14.00    156.00


SPECIAL BRIDGE

SB  XK          XKOR       COEQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       2.30       2.70     150.00       4.20       0.00      12.60       0.00     611.20     611.20

 2800 NAT Q1=      294.70  WSEL=      620.26  ENC Q1=      294.70  WSEL=      620.36  RATIC=    .0000
 NAT Q1=     309.  RATIOS LOB,CH,ROB=    .2524    .5913    .1564  WSEL=      620.36
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WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

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

3470 ENCROACHMENT STATIONS= 82.6 198.4 TYPE= 4 TARGET= .046

602.02	9.07	620.27	0.00	620.26	620.36	.10	.05	.22	613.80
600.	142.	377.	81.	124.	122.	78.	10.	3.	612.70
.16	1.15	3.08	1.04	.045	.040	.045	.041	611.20	82.65
.000441	52.	52.	52.	0	0	8	0.00	115.71	198.35

2800 NAT Q1= 153.27 WSEL= 620.27 ENC Q1= 153.27 WSEL= 620.37 RATIO= .0000
NAT Q1= 161. RATIOS LOB,CH,ROB= .1271 .4371 .4358 WSEL= 620.37

3470 ENCROACHMENT STATIONS= 196.8 243.2 TYPE= 4 TARGET= .046

602.10	7.88	620.28	0.00	620.27	620.52	.24	.04	.11	617.10
600.	66.	277.	256.	29.	57.	85.	11.	3.	616.80
.17	2.28	4.89	3.01	.045	.030	.045	.041	612.40	196.75
.001632	50.	50.	50.	2	0	1	0.00	46.44	243.20

WATER EL=X5 CARD= 620.475
2800 NAT Q1= 168.16 WSEL= 620.47 ENC Q1= 168.16 WSEL= 620.57 RATIO= .0000
NAT Q1= 176. RATIOS LOB,CH,ROB= .1430 .4177 .4393 WSEL= 620.57

3470 ENCROACHMENT STATIONS= 193.1 243.4 TYPE= 4 TARGET= .044

****FOOTBRIDGE

602.15	8.17	620.57	0.00	620.47	620.77	.19	.00	.02	617.10
600.	78.	261.	261.	38.	59.	93.	11.	3.	616.80
.17	2.07	4.42	2.79	.045	.030	.045	.041	612.40	193.13
.001262	1.	1.	1.	0	0	1	0.00	50.28	243.40

CCHV= .150 CEHV= .350
2800 NAT Q1= 205.32 WSEL= 620.61 ENC Q1= 205.32 WSEL= 620.71 RATIO= 0.0000
NAT Q1= 213. RATIOS LOB,CH,ROB= .1742 .7592 .0666 WSEL= 620.71

3470 ENCROACHMENT STATIONS= 184.7 238.9 TYPE= 4 TARGET= .034

602.20	7.72	620.72	0.00	620.61	620.87	.15	.10	.01	616.30
600.	111.	455.	34.	67.	133.	18.	11.	4.	616.30
.18	1.67	3.42	1.86	.045	.040	.045	.041	613.00	184.70
.000785	100.	100.	100.	2	0	1	0.00	54.18	238.88

CCHV= .200 CEHV= .400
2800 NAT Q1= 219.26 WSEL= 621.62 ENC Q1= 219.26 WSEL= 621.72 RATIO= .0000
NAT Q1= 232. RATIOS LOB,CH,ROB= .4789 .4279 .0931 WSEL= 621.72

3470 ENCROACHMENT STATIONS= 167.1 318.0 TYPE= 4 TARGET= .054

603.00	5.88	621.68	0.00	621.62	621.73	.05	.84	.02	618.90
600.	286.	267.	47.	230.	116.	50.	19.	6.	619.90
.36	1.24	2.31	.93	.060	.045	.060	.042	615.80	167.09
.000740	1100.	1100.	1100.	3	0	1	0.00	150.90	317.99

```
CCHV=    .150 CEHV=    .350
 2800 NAT Q1=      56.56  WSEL=    622.57  ENC Q1=      56.56  WSEL=    622.67  RATIO=  0.0000
 NAT Q1=     60.  RATIOS LOB,CH,ROB=   .0713   .9287  0.0000  WSEL=    622.67

3301 HV CHANGED MORE THAN HVINS

   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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=     192.6     226.0  TYPE=     4  TARGET=        .052

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      620.60 ELREA=      622.90

   603.10      4.41   622.61      0.00   622.57   623.18      .57      1.27      .18   620.60
     540.       26.      514.       0.       8.       83.       0.       23.       8.    622.90
      .39      3.40      6.18      0.00     .060     .045     .060     .043   618.20   192.63
  .009148       750.      750.      750.        3        0        1     0.00    32.99   225.63


CCHV=    .300 CEHV=    .500
 2800 NAT Q1=      44.35  WSEL=    623.48  ENC Q1=      45.62  WSEL=    623.58  RATIO=  -.0287
 NAT Q1=     46.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    623.58

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     294.0     306.0  TYPE=     4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      632.00 ELREA=      632.00

   603.98      5.53   623.53      0.00   623.48   624.65     1.12      1.19      .28   622.30
     540.       0.      540.       0.       0.       63.       0.       23.       8.    622.00
      .39      0.00      8.51      0.00     .060     .045     .060     .043   618.00   294.00
  .014410       105.      105.      105.        3        0        1     0.00    12.00   306.00


 2800 NAT Q1=      93.04  WSEL=    623.68  ENC Q1=      95.17  WSEL=    623.78  RATIO=  -.0228
 NAT Q1=     95.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    623.78

NORMAL BRIDGE,NRD= 2 MIN ELTRD=  632.00 MAX ELLC=  625.10


3470 ENCROACHMENT STATIONS=     294.0     306.0  TYPE=     4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      632.00 ELREA=      632.00


      ****D/S FACE STERNS RD

   603.99      5.72   623.72      0.00   623.68   624.70      .98      .01       .04   625.10
     540.       0.      540.       0.       0.       68.       0.       23.       8.    625.10
      .39      0.00      7.94      0.00     .060     .022     .060     .043   618.00   294.02
  .003307         1.        1.        1.        2        0        1     0.00    11.96   305.98


 2800 NAT Q1=      98.29  WSEL=    623.92  ENC Q1=     100.49  WSEL=    624.02  RATIO=  -.0224
 NAT Q1=    100.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    624.02
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NORMAL BRIDGE,NRD= 2 MIN ELTRD=  632.00 MAX ELLC=  625.10

3470 ENCROACHMENT STATIONS=     294.0     306.0  TYPE=     4  TARGET=       0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      632.00 ELREA=      632.00

   604.01      5.95   623.95      0.00   623.92   624.86      .91      .13      .02   625.10
     540.        0.     540.        0.       0.     71.        0.     23.        8.    625.10
      .40       0.00    7.63       0.00     .060     .022     .060     .042   618.00   294.02
  .002974        43.     43.        43.        2        0        1     0.00    11.97   305.98

 2800 NAT Q1=     49.65  WSEL=    623.89  ENC Q1=     50.96  WSEL=    623.99  RATIO=  -.0263
 NAT Q1=     51.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=    623.99
   SECND     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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=     294.0     306.0  TYPE=     4  TARGET=       0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      632.00 ELREA=      632.00

   604.02      5.92   623.92      0.00   623.89   624.89      .97      .01      .03   622.30
     540.        0.     540.        0.       0.     68.        0.     23.        8.    622.00
      .40       0.00    7.91       0.00     .060     .045     .060     .042   618.00   294.00
 .011623          1.      1.         1.        2        0        1     0.00    12.00   306.00

 2800 NAT Q1=    289.77  WSEL=    625.18  ENC Q1=    289.77  WSEL=    625.28  RATIO=   .0000
 NAT Q1=    301.  RATIOS LOB,CH,ROB=   .2439   .2536   .5025  WSEL=    625.28
3280 CROSS SECTION    604.10 EXTENDED       2.99 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     200.0     306.9  TYPE=     4  TARGET=        .038
   604.10      7.60   625.20      0.00   625.18   625.23      .03      .05      .28   619.60
     540.      126.     144.      270.     132.      74.     239.      24.       8.    619.90
      .41       .96     1.93      1.13     .080     .050     .060     .043   617.60   200.04
  .000371        50.     50.        50.        2        0        1     0.00   106.83   306.87


CCHV=    .200 CEHV=    .400
 2800 NAT Q1=    191.20  WSEL=    625.49  ENC Q1=    191.20  WSEL=    625.59  RATIO=   .0000
 NAT Q1=    203.  RATIOS LOB,CH,ROB=   .5322   .2675   .2003  WSEL=    625.59

3470 ENCROACHMENT STATIONS=     117.0     321.8  TYPE=     4  TARGET=        .060
   604.50      5.22   625.52      0.00   625.49   625.54      .03      .31      .00   621.80
     540.      285.     148.      106.     311.      74.     127.      30.      10.    623.20
      .55       .92     2.00       .84     .085     .055     .085     .044   620.30   116.98
  .000781       600.    600.       600.        3        0        1     0.00   204.81   321.79

 2800 NAT Q1=     81.92  WSEL=    625.94  ENC Q1=     81.92  WSEL=    626.04  RATIO=  0.0000
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 NAT Q1=      89.  RATIOS LOB,CH,ROB=    .4733    .3839    .1428  WSEL=     626.04

3470 ENCROACHMENT STATIONS=      167.3      294.6  TYPE=      4  TARGET=         .081
   604.70      4.06    625.96      0.00    625.94    626.09       .13       .51       .04    623.40
      540.      255.      224.       62.      142.       56.       42.       33.       11.     624.80
       .58      1.79      4.02      1.47      .085      .055      .085      .045    621.90    167.34
  .004621      325.      325.      325.         2         0         1      0.00    127.21    294.56


 2800 NAT Q1=      78.91  WSEL=     627.40  ENC Q1=      78.91  WSEL=     627.50  RATIO=   0.0000
 NAT Q1=      86.  RATIOS LOB,CH,ROB=    .4705    .3894    .1401  WSEL=     627.50
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       ARCB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XICH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      172.7      292.0  TYPE=      4  TARGET=         .085
   605.00      4.08    627.48      0.00    627.40    627.61       .14      1.52       .00    624.90
      540.      255.      227.       58.      138.       56.       39.       35.       12.     626.30
       .61      1.84      4.06      1.49      .085      .055      .085      .045    623.40    172.69
  .004705      325.      325.      325.         1         0         1      0.00    119.32    292.01


 2800 NAT Q1=      75.67  WSEL=     630.45  ENC Q1=      75.67  WSEL=     630.55  RATIO=   .0000
 NAT Q1=      82.  RATIOS LOB,CH,ROB=    .4666    .3973    .1361  WSEL=     630.55

3470 ENCROACHMENT STATIONS=      174.5      292.0  TYPE=      4  TARGET=         .081
   605.05      4.03    630.53      0.00    630.45    630.67       .15      3.06       .00    628.00
      540.      252.      231.       57.      133.       55.       37.       38.       14.     629.40
       .67      1.90      4.19      1.51      .085      .055      .085      .046    626.50    174.53
  .005093      625.      625.      625.         2         0         1      0.00    117.48    292.01


 2800 NAT Q1=      77.22  WSEL=     633.57  ENC Q1=      77.22  WSEL=     633.67  RATIO=   .0000
 NAT Q1=      84.  RATIOS LOB,CH,ROB=    .4684    .3937    .1379  WSEL=     633.67

3470 ENCROACHMENT STATIONS=      173.0      292.4  TYPE=      4  TARGET=         .082
   605.10      4.05    633.65      0.00    633.57    633.79       .14      3.11       .00    631.10
      540.      253.      229.       58.      136.       56.       39.       41.       16.     632.50
       .74      1.86      4.12      1.50      .085      .055      .085      .047    629.60    172.98
  .004878      625.      625.      625.         2         0         1      0.00    119.47    292.45


CCHV=    .400 CEHV=    .800
 2800 NAT Q1=     136.59  WSEL=     635.29  ENC Q1=     139.22  WSEL=     635.39  RATIO=  -.0193
 NAT Q1=     148.  RATIOS LOB,CH,ROB=    .0175    .9397    .0428  WSEL=     635.39

3470 ENCROACHMENT STATIONS=      300.0      457.0  TYPE=      4  TARGET=         .060
   605.50      2.77    635.37      0.00    635.29    635.41       .04      1.58       .04    634.50
      540.        0.      540.        0.        0.      335.        0.       45.       18.     632.90
       .84       .01      1.61       .01      .060      .060      .060      .048    632.60    300.00
  .001544      625.      625.      625.         3         0         1      0.00    157.00    457.00


 2800 NAT Q1=      47.62  WSEL=     637.42  ENC Q1=      51.98  WSEL=     637.52  RATIO=  -.0916
 NAT Q1=      54.  RATIOS LOB,CH,ROB=  0.0000    .9684    .0316  WSEL=     637.52

3470 ENCROACHMENT STATIONS=      300.0      457.0  TYPE=      4  TARGET=         .032
   606.00      1.76    637.46      0.00    637.42    637.60       .15      2.10       .08    637.60
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    540.       0.     540.       0.       0.     176.       0.      49.      20.    636.00
     .90      0.00     3.06      .03     .060     .060     .060     .049   635.70   307.19
 .012300      625.     625.     625.        2        0        1     0.00   149.81   457.00

 2800 NAT Q1=      64.63  WSEL=    641.78  ENC Q1=      64.63  WSEL=    641.88  RATIO=   0.0000
 NAT Q1=      72.  RATIOS LOB,CH,ROB=    .5909    .1154    .2937  WSEL=    641.88
   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


3470 ENCROACHMENT STATIONS=       45.0      178.1  TYPE=      4  TARGET=         .099
   606.03      3.30   641.80      0.00   641.78   641.89      .09      4.27      .02   640.00
     450.       255.      56.      139.      102.      16.      73.       51.      22.    640.00
      .96      2.50     3.38     1.92      .060      .055     .060      .049   638.50    45.00
 .005000       550.     550.     550.         4         0        1     0.00   133.11   178.11

 2800 NAT Q1=      60.60  WSEL=    644.62  ENC Q1=      60.60  WSEL=    644.72  RATIO=   0.0000
 NAT Q1=      67.  RATIOS LOB,CH,ROB=    .5941    .1187    .2873  WSEL=    644.72

3470 ENCROACHMENT STATIONS=       45.0      175.2  TYPE=      4  TARGET=         .099
   606.06      3.26   644.66      0.00   644.62   644.76      .10      2.86      .00   642.90
     450.       256.      57.      137.      100.      16.      69.       54.      23.    642.90
     1.02      2.56     3.49     1.98      .060      .055     .060      .050   641.40    45.02
 .005415       550.     550.     550.         2         0        1     0.00   130.21   175.23

 2800 NAT Q1=      62.76  WSEL=    647.55  ENC Q1=      62.76  WSEL=    647.65  RATIO=   .0000
 NAT Q1=      70.  RATIOS LOB,CH,ROB=    .5923    .1168    .2908  WSEL=    647.65

3470 ENCROACHMENT STATIONS=       45.0      176.7  TYPE=      4  TARGET=         .100
   606.10      3.28   647.58      0.00   647.55   647.68      .10      2.92      .00   645.80
     450.       256.      56.      138.      101.      16.      71.       56.      25.    645.80
     1.09      2.53     3.43     1.95      .060      .055     .060      .050   644.30    45.05
 .005194       550.     550.     550.         2         0        1     0.00   131.63   176.67


CCHV=    .300 CEHV=    .500
 2800 NAT Q1=      31.57  WSEL=    648.43  ENC Q1=      31.57  WSEL=    648.53  RATIO=   .0000
 NAT Q1=      37.  RATIOS LOB,CH,ROB=    .6135    .1562    .2304  WSEL=    648.53

3470 ENCROACHMENT STATIONS=       47.7      140.6  TYPE=      4  TARGET=         .145

       ****D/S FACE SECOR RD

   606.99      2.76   648.46      0.00   648.43   648.76      .30       .98      .10   647.20
     450.       270.      81.       99.       67.      13.      28.       56.      25.    647.20
     1.09      4.05     6.09     3.56      .060      .055     .060      .050   645.70    47.72
 .021790       105.     105.     105.         2         0        1     0.00    92.88   140.60


SPECIAL BRIDGE

SB  XK          XKOR       COEQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       1.60       2.70     150.00       8.00       0.00      17.60       0.00     645.70     645.70
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 2800 NAT Q1=     125.34  WSEL=     650.92  ENC Q1=     125.34  WSEL=     651.02  RATIO=    .0000
 NAT Q1=     136.  RATIOS LOB,CH,ROB=    .0016    .4726    .5258  WSEL=     651.02
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      131.0      260.6  TYPE=      4  TARGET=          .078
   607.02      5.26    650.96      0.00    650.92    651.01       .05       .16       .07    649.80
     450.        0.       231.      219.        0.       105.      167.       57.       25.     649.80
     1.10       .01      2.20      1.31      .060      .055      .060      .050    645.70    131.00
  .001376       45.       45.       45.         0         0         6      0.00    129.60    260.60


 2800 NAT Q1=     137.75  WSEL=     650.98  ENC Q1=     137.75  WSEL=     651.08  RATIO=    .0000
 NAT Q1=     149.  RATIOS LOB,CH,ROB=    .0012    .4879    .5108  WSEL=     651.08
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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=      131.0      261.4  TYPE=      4  TARGET=          .075
   607.10      5.32    651.02      0.00    650.98    651.07       .05       .06       .00    649.80
     450.        0.       238.      212.        0.       107.      174.       57.       25.     649.80
     1.11       .01      2.22      1.22      .080      .050      .060      .050    645.70    131.00
  .001137       50.       50.       50.         2         0         1      0.00    130.44    261.44


CCHV=     .200 CEHV=     .400
 2800 NAT Q1=      92.16  WSEL=     652.84  ENC Q1=      92.16  WSEL=     652.94  RATIO=    .0000
 NAT Q1=     100.  RATIOS LOB,CH,ROB=    .1855    .6367    .1778  WSEL=     652.94

3470 ENCROACHMENT STATIONS=      168.0      280.0  TYPE=      4  TARGET=          .075
   608.00      4.43    652.93      0.00    652.84    653.00       .07      1.92       .01    650.40
     450.       78.       303.      69.       61.       128.      58.       64.       29.     651.00
     1.28       1.29      2.36      1.18      .085      .060      .085      .051    648.50    168.04
  .002314       1220.     1220.     1220.        3         0         1      0.00    112.00    280.04


 2800 NAT Q1=     101.91  WSEL=     654.35  ENC Q1=     101.91  WSEL=     654.45  RATIO=    .0000
 NAT Q1=     111.  RATIOS LOB,CH,ROB=    .4537    .3784    .1679  WSEL=     654.45

3470 ENCROACHMENT STATIONS=       71.8      193.9  TYPE=      4  TARGET=          .079
   608.10      3.51    654.41      0.00    654.35    654.47       .06      1.47       .00    652.10
     450.       206.      180.      64.       133.      71.       47.       68.       31.     652.50
     1.38       1.56      2.54      1.36      .065      .055      .065      .051    650.90     71.78
  .001922       700.      700.      700.        3         0         1      0.00    122.10    193.87


 2800 NAT Q1=      46.31  WSEL=     654.39  ENC Q1=      46.31  WSEL=     654.49  RATIO=    .0000
 NAT Q1=      49.  RATIOS LOB,CH,ROB=    .1502    .7389    .1109  WSEL=     654.49
3280 CROSS SECTION     608.30 EXTENDED       1.94 FEET


3470 ENCROACHMENT STATIONS=      133.3      172.0  TYPE=      4  TARGET=          .061
   608.30      3.23    654.43      0.00    654.39    654.83       .39       .22       .13    652.40
     450.       63.       349.      38.       17.       65.       12.       69.       31.     652.80
     1.38       3.59      5.41      3.05      .065      .055      .065      .051    651.20    133.25
  .009816       60.       60.       60.         2         0         1      0.00     38.70    171.95
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CCHV=    .200 CEHV=    .400
 2800 NAT Q1=      24.62  WSEL=     654.85  ENC Q1=      25.79  WSEL=     654.95  RATIO=  -.0473
 NAT Q1=      26.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     654.95

7185 MIN SPECIFIC ENERGY


3720 ASSUMED CRITICAL DEPTH

3280 CROSS SECTION     608.98 EXTENDED       2.04 FEET

   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


3470 ENCROACHMENT STATIONS=      147.0      160.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      659.30 ELREA=      659.30

   608.98      3.34    654.84    654.84    654.85    656.52      1.68      1.07      0.00    651.60
     450.        0.      450.        0.        0.       43.        0.        69.       31.     651.50
     1.38      0.00     10.41      0.00      .065      .055      .065      .051    651.50    147.00
  .040209       61.       61.       61.         2         8         1      0.00     13.00    160.00


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     2.00      1.65      2.70    150.00     13.53       .01     40.60      0.00    651.50    651.50

 PRESS FLOW BECAUSE EGLWC OF     658.08  EXCEEDS 1.5 DEPTH
 2800 NAT Q1=      59.51  WSEL=     657.47  ENC Q1=      60.89  WSEL=     657.57  RATIO=  -.0232
 NAT Q1=      61.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     657.57
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION     609.07 EXTENDED       4.67 FEET

   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


3470 ENCROACHMENT STATIONS=      147.0      160.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      659.30 ELREA=      659.30

   609.07      5.97    657.47      0.00    657.47    657.99       .53       .41       .23    651.60
     450.        0.      450.        0.        0.       77.        0.        69.       31.     651.50
     1.39      0.00      5.82      0.00      .065      .055      .065      .051    651.50    147.00
  .007063       29.       29.       29.         0         0         1      0.00     13.00    160.00


 2800 NAT Q1=     396.61  WSEL=     658.11  ENC Q1=     396.61  WSEL=     658.21  RATIO=  0.0000
 NAT Q1=     411.  RATIOS LOB,CH,ROB=   .2340   .4894   .2766  WSEL=     658.21
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3280 CROSS SECTION     609.10 EXTENDED       3.70 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=       120.5       230.0  TYPE=       4  TARGET=          .034
   609.10       6.30    658.10       0.00    658.11    658.12       .01       .02       .10    653.80
     450.       101.       229.       121.       136.       232.       152.        69.        31.     653.00
     1.40        .74        .99        .79        .060       .055       .060       .051    651.80    120.53
  .000138       50.        50.        50.          2          0          1       0.00    109.47    229.99


 2800 NAT Q1=     267.47  WSEL=     658.19  ENC Q1=     267.47  WSEL=     658.29  RATIO=    .0000
 NAT Q1=     283.  RATIOS LOB,CH,ROB=    .2803    .4366    .2830  WSEL=     658.29

3470 ENCROACHMENT STATIONS=        93.6       246.7  TYPE=       4  TARGET=          .055
   609.20       4.89    658.19       0.00    658.19    658.20       .02       .09       .00    655.30
     450.       121.       204.       125.       152.       172.       144.        74.        32.     654.50
     1.52        .79       1.19        .87        .060       .055       .060       .051    653.30     93.62
  .000297       440.       440.       440.          2          0          1       0.00    153.13    246.75


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     150.52  WSEL=     658.28  ENC Q1=     150.52  WSEL=     658.38  RATIO=  0.0000
 NAT Q1=     160.  RATIOS LOB,CH,ROB=    .2194    .5447    .2359  WSEL=     658.38

3470 ENCROACHMENT STATIONS=       102.8       235.6  TYPE=       4  TARGET=          .061
   609.30       4.28    658.28       0.00    658.28    658.32       .03       .11       .01    656.00
     450.        89.       262.        98.       102.       147.        98.        76.        33.     655.20
     1.57        .87       1.79       1.01        .085       .060       .085       .052    654.00    102.81
  .000988       220.       220.       220.          2          0          1       0.00    132.81    235.62


 2800 NAT Q1=      57.53  WSEL=     658.57  ENC Q1=      57.53  WSEL=     658.67  RATIO=    .0000
 NAT Q1=      62.  RATIOS LOB,CH,ROB=    .1066    .7820    .1114  WSEL=     658.67
   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


3470 ENCROACHMENT STATIONS=       275.6       365.2  TYPE=       4  TARGET=          .066
   609.90       3.91    658.61       0.00    658.57    658.81       .19       .43       .06    656.60
     450.        49.       350.        51.        32.        89.        38.        77.        34.     657.00
     1.59       1.56       3.94       1.33        .085       .060       .085       .052    654.70    275.55
  .005596       220.       220.       220.          2          0          1       0.00     89.68    365.24


 2800 NAT Q1=      75.91  WSEL=     659.66  ENC Q1=      75.91  WSEL=     659.76  RATIO=    .0000
 NAT Q1=      82.  RATIOS LOB,CH,ROB=    .1277    .7149    .1574  WSEL=     659.76

3470 ENCROACHMENT STATIONS=       269.3       372.5  TYPE=       4  TARGET=          .069
   609.95       4.24    659.64       0.00    659.66    659.78       .13       .96       .01    657.30
     450.        59.       326.        66.        44.        98.        55.        78.        34.     657.70
     1.61       1.32       3.33       1.19        .085       .060       .085       .052    655.40    269.30
  .003502       220.       220.       220.          2          0          1       0.00    103.16    372.46
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 2800 NAT Q1=      75.28  WSEL=    660.44  ENC Q1=      75.28  WSEL=    660.54  RATIO=    .0000
 NAT Q1=      80.  RATIOS LOB,CH,ROB=    .1267   .7185   .1548  WSEL=    660.54

3470 ENCROACHMENT STATIONS=      268.6     373.4  TYPE=      4  TARGET=         .063
   610.00      4.22   660.42      0.00   660.44   660.55      .13      .78      .00   658.10
    450.       58.     327.       65.     44.      98.       55.      79.      35.    658.50
     1.63      1.31     3.35      1.19    .085     .060      .085     .052   656.20   268.63
 .003562       220.     220.      220.       1        0         1     0.00   104.79   373.41
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SUMMARY PRINTOUT FOR MULTIPLE PROFILES

SPRING BROOK - 100 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
Natural 599.900	600.00	606.48	606.48	100.88	606.80	69.60	0.00	0.00	606.48	-I	-I	606.48
Encroached 599.900	600.00	606.48	606.48	96.45	606.85	40.00	220.00	260.00	606.48	0.00	0.00	606.48
599.980	600.00	606.93	606.93	86.41	607.32	64.56	0.00	0.00	0.00	606.48	606.48	0.00
599.980	600.00	606.96	606.96	85.29	607.38	40.00	220.00	260.00	606.93	606.48	606.48	606.93
600.020	600.00	610.32	610.32	401.67	610.36	132.32	0.00	0.00	0.00	0.00	0.00	0.00
600.020	600.00	610.35	610.35	411.69	610.39	120.98	160.62	281.60	610.32	606.93	606.93	610.32
600.100	600.00	610.34	610.34	306.99	610.37	149.19	0.00	0.00	0.00	0.00	0.00	0.00
600.100	600.00	610.36	610.36	301.72	610.40	116.18	146.83	263.01	610.34	610.32	610.32	610.34
600.500	600.00	610.53	610.53	121.37	610.70	127.16	0.00	0.00	0.00	0.00	0.00	0.00
600.500	600.00	610.57	610.57	121.00	610.74	90.19	151.72	241.91	610.53	610.34	610.34	610.53
601.000	600.00	611.76	611.76	71.85	612.13	107.64	0.00	0.00	0.00	0.00	0.00	0.00
601.000	600.00	611.80	611.80	70.96	612.20	58.76	179.00	237.76	611.76	610.53	610.53	611.76
601.100	600.00	617.92	617.92	105.77	618.30	44.52	0.00	0.00	0.00	0.00	0.00	0.00
601.100	600.00	617.93	617.93	107.57	618.30	38.91	152.57	191.49	617.92	611.76	611.76	617.92
601.980	600.00	618.17	618.17	115.68	618.78	55.88	0.00	0.00	0.00	0.00	0.00	0.00
601.980	600.00	618.17	618.17	113.42	618.82	14.00	142.00	156.00	618.17	617.92	617.92	618.17
602.020	600.00	620.26	620.26	294.70	620.35	165.07	0.00	0.00	0.00	0.00	0.00	0.00
602.020	600.00	620.27	620.27	285.73	620.36	115.71	82.65	198.35	620.26	618.17	618.17	620.26
602.100	600.00	620.27	620.27	153.27	620.49	83.59	0.00	0.00	0.00	0.00	0.00	0.00
602.100	600.00	620.28	620.28	148.52	620.52	46.44	196.75	243.20	620.27	620.26	620.26	620.27
602.150	600.00	620.47	620.47	168.16	620.66	87.54	0.00	0.00	0.00	0.00	0.00	0.00
602.150	600.00	620.57	620.57	168.91	620.77	50.28	193.13	243.41	620.47	620.27	620.27	620.47
602.200	600.00	620.61	620.61	205.32	620.76	67.05	0.00	0.00	0.00	0.00	0.00	0.00
602.200	600.00	620.72	620.72	214.10	620.87	54.18	184.70	238.88	620.61	620.47	620.47	620.61
603.000	600.00	621.62	621.62	219.26	621.66	180.90	0.00	0.00	0.00	0.00	0.00	0.00
603.000	600.00	621.68	621.68	220.60	621.73	150.90	167.09	317.99	621.62	620.61	620.61	621.62
603.100	540.00	622.57	622.57	56.56	623.12	44.16	0.00	0.00	0.00	0.00	0.00	0.00
603.100	540.00	622.61	622.61	56.46	623.18	32.99	192.63	226.00	622.57	621.62	621.62	622.57
603.980	540.00	623.48	623.48	44.35	624.62	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	540.00	623.53	623.53	44.98	624.65	12.00	294.00	306.00	623.48	622.57	622.57	623.48
603.990	540.00	623.68	623.68	93.04	624.67	11.96	0.00	0.00	0.00	0.00	0.00	0.00
603.990	540.00	623.72	623.72	93.91	624.70	11.96	294.00	306.00	623.68	623.48	623.48	623.68
604.010	540.00	623.92	623.92	98.29	624.83	11.97	0.00	0.00	0.00	0.00	0.00	0.00
604.010	540.00	623.95	623.95	99.03	624.86	11.97	294.00	306.00	623.92	623.68	623.68	623.92

604.020	540.00	623.89	623.89	49.65	624.87	12.00	0.00	0.00	0.00	C.00	0.00	0.00
604.020	540.00	623.92	623.92	50.09	624.89	12.00	294.00	306.00	623.89	623.92	623.92	623.89

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
604.100	540.00	625.18	625.18	289.77	625.21	120.06	0.00	0.00	0.00	0.00	0.00	0.00
604.100	540.00	625.20	625.20	280.46	625.23	106.83	200.04	306.87	625.18	623.89	623.89	625.18
604.500	540.00	625.49	625.49	191.20	625.51	240.51	0.00	0.00	0.00	0.00	0.00	0.00
604.500	540.00	625.52	625.52	193.25	625.54	204.81	116.98	321.79	625.49	625.18	625.18	625.49
604.700	540.00	625.94	625.94	81.92	626.06	194.56	0.00	0.00	0.00	0.00	0.00	0.00
604.700	540.00	625.96	625.96	79.44	626.09	127.21	167.34	294.56	625.94	625.49	625.49	625.94
605.000	540.00	627.40	627.40	78.91	627.53	191.63	0.00	0.00	0.00	0.00	0.00	0.00
605.000	540.00	627.48	627.48	78.73	627.61	119.32	172.69	292.01	627.40	625.94	625.94	627.40
605.050	540.00	630.45	630.45	75.67	630.58	188.38	0.00	0.00	0.00	0.00	0.00	0.00
605.050	540.00	630.53	630.53	75.67	630.67	117.48	174.53	292.01	630.45	627.40	627.40	630.45
605.100	540.00	633.57	633.57	77.22	633.70	189.94	0.00	0.00	0.00	0.00	0.00	0.00
605.100	540.00	633.65	633.65	77.31	633.79	119.47	172.98	292.45	633.57	630.45	630.45	633.57
605.500	540.00	635.29	635.29	136.59	635.33	199.43	0.00	0.00	0.00	0.00	0.00	0.00
605.500	540.00	635.37	635.37	137.41	635.41	157.00	300.00	457.00	635.29	633.57	633.57	635.29
606.000	540.00	637.42	637.42	47.62	637.57	157.69	0.00	0.00	0.00	0.00	0.00	0.00
606.000	540.00	637.46	637.46	48.69	637.60	149.81	300.00	457.00	637.42	635.29	635.29	637.42
606.030	450.00	641.78	641.78	64.63	641.87	158.76	0.00	0.00	0.00	0.00	0.00	0.00
606.030	450.00	641.80	641.80	63.64	641.89	133.11	45.00	178.11	641.78	637.42	637.42	641.78
606.060	450.00	644.62	644.62	60.60	644.71	155.83	0.00	0.00	0.00	0.00	0.00	0.00
606.060	450.00	644.66	644.66	61.15	644.76	130.21	45.02	175.23	644.62	641.78	641.78	644.62
606.100	450.00	647.55	647.55	62.76	647.64	157.41	0.00	0.00	0.00	0.00	0.00	0.00
606.100	450.00	647.58	647.58	62.44	647.68	131.63	45.05	176.67	647.55	644.62	644.62	647.55
606.980	450.00	648.43	648.43	31.57	648.68	130.58	0.00	0.00	0.00	0.00	0.00	0.00
606.980	450.00	648.46	648.46	30.49	648.76	92.88	47.72	140.60	648.43	647.55	647.55	648.43
607.020	450.00	650.92	650.92	125.34	650.97	185.49	0.00	0.00	0.00	0.00	0.00	0.00
607.020	450.00	650.96	650.96	121.30	651.01	129.60	131.00	260.61	650.92	648.43	648.43	650.92
607.100	450.00	650.98	650.98	137.75	651.03	186.76	0.00	0.00	0.00	0.00	0.00	0.00
607.100	450.00	651.02	651.02	133.46	651.07	130.44	131.00	261.44	650.98	650.92	650.92	650.98
608.000	450.00	652.84	652.84	92.16	652.90	154.70	0.00	0.00	0.00	0.00	0.00	0.00
608.000	450.00	652.93	652.93	93.55	653.00	112.00	168.04	280.04	652.84	650.98	650.98	652.84
608.100	450.00	654.35	654.35	101.91	654.41	159.68	0.00	0.00	0.00	0.00	0.00	0.00
608.100	450.00	654.41	654.41	102.64	654.47	122.10	71.78	193.87	654.35	652.84	652.84	654.35
608.300	450.00	654.39	654.39	46.31	654.75	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	450.00	654.43	654.43	45.42	654.83	38.70	133.25	171.95	654.39	654.35	654.35	654.39
608.980	450.00	654.85	654.85	24.62	656.52	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	450.00	654.84	654.84	22.44	656.52	13.00	147.00	160.00	654.85	654.39	654.39	654.85

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
609.070	450.00	657.47	657.47	59.51	658.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	450.00	657.47	657.47	53.55	657.99	13.00	147.00	160.00	657.47	654.85	654.85	657.47
609.100	450.00	658.11	658.11	396.61	658.12	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	450.00	658.10	658.10	382.82	658.12	109.47	120.53	229.99	658.11	657.47	657.47	658.11
609.200	450.00	658.19	658.19	267.47	658.20	195.86	0.00	0.00	0.00	0.00	0.00	0.00
609.200	450.00	658.19	658.19	261.32	658.20	153.13	93.62	246.75	658.19	658.11	658.11	658.19
609.300	450.00	658.28	658.28	150.52	658.31	180.62	0.00	0.00	0.00	0.00	0.00	0.00
609.300	450.00	658.28	658.28	143.17	658.32	132.81	102.81	235.62	658.28	658.19	658.19	658.28
609.900	450.00	658.57	658.57	57.53	658.78	111.79	0.00	0.00	0.00	0.00	0.00	0.00
609.900	450.00	658.61	658.61	60.16	658.81	89.68	275.55	365.24	658.57	658.28	658.28	658.57
609.950	450.00	659.66	659.66	75.91	659.80	126.27	0.00	0.00	0.00	0.00	0.00	0.00
609.950	450.00	659.64	659.64	76.04	659.78	103.16	269.30	372.46	659.66	658.57	658.57	659.66
610.000	450.00	660.44	660.44	75.28	660.58	126.00	0.00	0.00	0.00	0.00	0.00	0.00
610.000	450.00	660.42	660.42	75.40	660.55	104.79	268.63	373.41	660.44	659.66	659.66	660.44

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
599.900	600.000	606.480	0.000	0.000	0.000	69.600	0.000	0.000
599.900	600.000	606.480	0.000	0.000	0.000	40.001	29.599	0.000
599.980	600.000	606.929	0.000	.449	0.000	64.562	0.000	113.000
599.980	600.000	606.961	.032	.481	.032	40.001	24.561	113.000
600.020	600.000	610.316	0.000	3.387	0.000	132.325	0.000	37.000
600.020	600.000	610.348	.032	3.387	.032	120.978	11.347	37.000
600.100	600.000	610.335	0.000	.019	0.000	149.186	0.000	50.000
600.100	600.000	610.362	.027	.014	.027	116.182	33.004	50.000
600.500	600.000	610.535	0.000	.200	0.000	127.165	0.000	350.000
600.500	600.000	610.566	.031	.204	.031	90.186	36.979	350.000
601.000	600.000	611.762	0.000	1.227	0.000	107.637	0.000	350.000
601.000	600.000	611.798	.036	1.232	.036	58.762	48.875	350.000
601.100	600.000	617.918	0.000	6.156	0.000	44.521	0.000	1350.000
601.100	600.000	617.928	.010	6.130	.010	38.914	5.607	1350.000
601.980	600.000	618.165	0.000	.247	0.000	55.881	0.000	100.000
601.980	600.000	618.168	.002	.240	.002	14.001	41.880	100.000
602.020	600.000	620.263	0.000	2.098	0.000	165.069	0.000	52.000
602.020	600.000	620.265	.002	2.098	.002	115.705	49.364	52.000
602.100	600.000	620.274	0.000	.011	0.000	83.591	0.000	50.000
602.100	600.000	620.275	.001	.010	.001	46.444	37.147	50.000
602.150	600.000	620.474	0.000	.200	0.000	87.538	0.000	1.000
602.150	600.000	620.574	.100	.299	.100	50.276	37.262	1.000
602.200	600.000	620.605	0.000	.131	0.000	67.051	0.000	100.000

602.200	600.000	620.723	.118	.149	.118	54.178	12.873	100.000
603.000	600.000	621.615	0.000	1.010	0.000	180.901	0.000	1100.000
603.000	600.000	621.681	.066	.958	.066	150.895	30.005	1100.000
603.100	540.000	622.570	0.000	.955	0.000	44.165	0.000	750.000
603.100	540.000	622.611	.041	.930	.041	32.994	11.170	750.000
603.980	540.000	623.476	0.000	.905	0.000	12.000	0.000	105.000
603.980	540.000	623.526	.050	.915	.050	12.000	0.000	105.000
603.990	540.000	623.679	0.000	.203	0.000	11.960	0.000	1.000
603.990	540.000	623.718	.040	.193	.040	11.961	-.001	1.000
604.010	540.000	623.917	0.000	.239	0.000	11.967	0.000	43.000
604.010	540.000	623.950	.033	.232	.033	11.968	-.001	43.000
604.020	540.000	623.888	0.000	-.029	0.000	12.000	0.000	1.000
604.020	540.000	623.922	.034	-.028	.034	12.000	0.000	1.000
604.100	540.000	625.184	0.000	1.296	0.000	120.061	0.000	50.000
604.100	540.000	625.202	.018	1.280	.018	106.830	13.231	50.000
604.500	540.000	625.487	0.000	.303	0.000	240.507	0.000	600.000
604.500	540.000	625.517	.030	.315	.030	204.807	35.700	600.000
604.700	540.000	625.942	0.000	.455	0.000	194.560	0.000	325.000
604.700	540.000	625.964	.022	.447	.022	127.212	67.348	325.000
605.000	540.000	627.402	0.000	1.461	0.000	191.629	0.000	325.000
605.000	540.000	627.476	.073	1.512	.073	119.324	72.305	325.000
605.050	540.000	630.447	0.000	3.045	0.000	188.378	0.000	625.000
605.050	540.000	630.528	.080	3.052	.080	117.478	70.900	625.000
605.100	540.000	633.572	0.000	3.125	0.000	189.940	0.000	625.000
605.100	540.000	633.650	.078	3.122	.078	119.466	70.474	625.000
605.500	540.000	635.293	0.000	1.721	0.000	199.434	0.000	625.000
605.500	540.000	635.371	.078	1.721	.078	157.001	42.433	625.000
606.000	540.000	637.420	0.000	2.127	0.000	157.685	0.000	625.000
606.000	540.000	637.455	.035	2.084	.035	149.814	7.871	625.000
606.030	450.000	641.780	0.000	4.360	0.000	158.759	0.000	550.000
606.030	450.000	641.799	.019	4.344	.019	133.105	25.654	550.000
606.060	450.000	644.618	0.000	2.839	0.000	155.832	0.000	550.000
606.060	450.000	644.658	.040	2.859	.040	130.210	25.622	550.000
606.100	450.000	647.552	0.000	2.934	0.000	157.415	0.000	550.000
606.100	450.000	647.579	.027	2.921	.027	131.627	25.788	550.000
606.980	450.000	648.428	0.000	.876	0.000	130.576	0.000	105.000
606.980	450.000	648.463	.035	.884	.035	92.880	37.695	105.000
607.020	450.000	650.925	0.000	2.497	0.000	185.493	0.000	45.000
607.020	450.000	650.959	.035	2.497	.035	129.604	55.889	45.000
607.100	450.000	650.983	0.000	.058	0.000	186.764	0.000	50.000
607.100	450.000	651.022	.039	.062	.039	130.444	56.320	50.000

608.000	450.000	652.842	0.000	1.859	0.000	154.702	0.000	1220.000
608.000	450.000	652.931	.089	1.909	.089	111.998	42.704	1220.000
608.100	450.000	654.353	0.000	1.511	0.000	159.677	0.000	700.000
608.100	450.000	654.409	.056	1.479	.056	122.097	37.580	700.000
608.300	450.000	654.394	0.000	.041	0.000	44.000	0.000	60.000
608.300	450.000	654.432	.037	.022	.037	38.701	5.300	60.000
608.980	450.000	654.850	0.000	.455	0.000	13.000	0.000	30.500
608.980	450.000	654.842	-.008	.410	-.008	13.000	-.000	30.500
609.070	450.000	657.474	0.000	2.625	0.000	13.000	0.000	29.000
609.070	450.000	657.466	-.008	2.625	-.008	13.000	-.000	29.000
609.100	450.000	658.108	0.000	.634	0.000	116.001	0.000	50.000
609.100	450.000	658.103	-.004	.637	-.004	109.466	6.535	50.000
609.200	450.000	658.187	0.000	.079	0.000	195.856	0.000	440.000
609.200	450.000	658.187	.000	.084	.000	153.128	42.728	440.000
609.300	450.000	658.279	0.000	.092	0.000	180.620	0.000	220.000
609.300	450.000	658.284	.005	.097	.005	132.808	47.812	220.000
609.900	450.000	658.572	0.000	.293	0.000	111.787	0.000	220.000
609.900	450.000	658.611	.039	.327	.039	89.681	22.107	220.000
609.950	450.000	659.664	0.000	1.092	0.000	126.266	0.000	220.000
609.950	450.000	659.644	-.020	1.034	-.020	103.157	23.109	220.000
610.000	450.000	660.442	0.000	.778	0.000	126.004	0.000	220.000
610.000	450.000	660.420	-.022	.776	-.022	104.787	21.217	220.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	45.744	0.000
2	4.000	.063	34.557	-11.187

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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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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty drain

4) DOCUMENT TYPE: 100 yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

SPRING BROOK - 100 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
599.900	600.00	606.48	606.48	100.88	606.80	69.60	0.00	0.00	606.48	-1	-1	606.48
599.900	600.00	606.25	606.25	87.64	606.64	65.01	0.00	0.00	606.48	0.00	0.00	606.48
599.900	600.00	606.76	606.76	118.50	607.02	75.21	0.00	0.00	606.48	0.00	0.00	606.48
599.900	600.00	606.93	606.93	100.02	607.16	78.62	0.00	0.00	606.48	0.00	0.00	606.48
599.900	600.00	605.91	605.91	99.64	606.43	58.14	0.00	0.00	606.48	0.00	0.00	606.48
599.980	600.00	606.93	606.93	86.41	607.32	64.56	0.00	0.00	0.00	606.48	606.48	0.00
599.980	600.00	606.82	606.82	80.41	607.25	62.34	0.00	0.00	0.00	606.48	606.48	0.00
599.980	600.00	607.10	607.10	95.92	607.44	67.92	0.00	0.00	0.00	606.48	606.48	0.00
599.980	600.00	607.39	607.39	87.35	607.66	73.69	0.00	0.00	0.00	606.48	606.48	0.00
599.980	600.00	606.37	606.37	83.49	607.02	53.29	0.00	0.00	0.00	606.48	606.48	0.00
600.020	600.00	610.32	610.32	401.67	610.36	132.32	0.00	0.00	0.00	0.00	0.00	0.00
600.020	600.00	610.31	610.31	401.19	610.36	132.26	0.00	0.00	0.00	0.00	0.00	0.00
600.020	600.00	610.32	610.32	402.39	610.36	132.43	0.00	0.00	0.00	0.00	0.00	0.00
600.020	600.00	610.33	610.33	310.52	610.37	132.62	0.00	0.00	0.00	0.00	0.00	0.00
600.020	600.00	606.80	606.80	113.17	607.24	61.88	0.00	0.00	0.00	0.00	0.00	0.00
600.100	600.00	610.34	610.34	306.99	610.37	149.19	0.00	0.00	0.00	0.00	0.00	0.00
600.100	600.00	610.33	610.33	306.53	610.37	149.13	0.00	0.00	0.00	0.00	0.00	0.00
600.100	600.00	610.34	610.34	307.70	610.38	149.27	0.00	0.00	0.00	0.00	0.00	0.00
600.100	600.00	610.36	610.36	238.70	610.40	149.56	0.00	0.00	0.00	0.00	0.00	0.00
600.100	600.00	607.56	607.56	83.70	608.27	86.29	0.00	0.00	0.00	0.00	0.00	0.00
600.500	600.00	610.53	610.53	121.37	610.70	127.16	0.00	0.00	0.00	0.00	0.00	0.00
600.500	600.00	610.53	610.53	121.17	610.70	127.07	0.00	0.00	0.00	0.00	0.00	0.00
600.500	600.00	610.54	610.54	121.67	610.70	127.30	0.00	0.00	0.00	0.00	0.00	0.00
600.500	600.00	610.73	610.73	104.53	610.86	131.23	0.00	0.00	0.00	0.00	0.00	0.00
600.500	600.00	609.46	609.46	87.80	610.02	95.12	0.00	0.00	0.00	0.00	0.00	0.00
601.000	600.00	611.76	611.76	71.85	612.13	107.64	0.00	0.00	0.00	0.00	0.00	0.00
601.000	600.00	611.76	611.76	71.85	612.13	107.64	0.00	0.00	0.00	0.00	0.00	0.00
601.000	600.00	611.76	611.76	71.84	612.13	107.63	0.00	0.00	0.00	0.00	0.00	0.00
601.000	600.00	612.25	612.25	75.00	612.46	127.52	0.00	0.00	0.00	0.00	0.00	0.00
601.000	600.00	611.31	611.31	75.56	611.93	77.52	0.00	0.00	0.00	0.00	0.00	0.00
601.100	600.00	617.92	617.92	105.77	618.30	44.52	0.00	0.00	0.00	0.00	0.00	0.00
601.100	600.00	617.92	617.92	105.76	618.30	44.52	0.00	0.00	0.00	0.00	0.00	0.00
601.100	600.00	617.92	617.92	105.77	618.30	44.52	0.00	0.00	0.00	0.00	0.00	0.00
601.100	600.00	618.44	618.44	101.73	618.71	48.02	0.00	0.00	0.00	0.00	0.00	0.00
601.100	600.00	617.18	617.18	106.22	617.82	39.64	0.00	0.00	0.00	0.00	0.00	0.00
601.980	600.00	618.17	618.17	115.68	618.78	55.88	0.00	0.00	0.00	0.00	0.00	0.00
601.980	600.00	618.17	618.17	115.68	618.78	55.88	0.00	0.00	0.00	0.00	0.00	0.00
601.980	600.00	618.17	618.17	115.69	618.78	55.89	0.00	0.00	0.00	0.00	0.00	0.00
601.980	600.00	618.73	618.73	109.75	619.15	94.87	0.00	0.00	0.00	0.00	0.00	0.00
601.980	600.00	617.40	617.40	132.01	618.23	14.19	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
602.020	600.00	620.26	620.26	294.70	620.35	165.07	0.00	0.00	0.00	0.00	0.00	0.00
602.020	600.00	620.26	620.26	294.70	620.35	165.07	0.00	0.00	0.00	0.00	0.00	0.00
602.020	600.00	620.26	620.26	294.70	620.35	165.07	0.00	0.00	0.00	0.00	0.00	0.00
602.020	600.00	620.29	620.29	229.07	620.37	165.77	0.00	0.00	0.00	0.00	0.00	0.00
602.020	600.00	620.24	620.24	415.76	620.33	164.23	0.00	0.00	0.00	0.00	0.00	0.00
602.100	600.00	620.27	620.27	153.27	620.49	83.59	0.00	0.00	0.00	0.00	0.00	0.00
602.100	600.00	620.27	620.27	153.27	620.49	83.59	0.00	0.00	0.00	0.00	0.00	0.00
602.100	600.00	620.27	620.27	153.27	620.49	83.59	0.00	0.00	0.00	0.00	0.00	0.00
602.100	600.00	620.32	620.32	120.41	620.53	85.39	0.00	0.00	0.00	0.00	0.00	0.00
602.100	600.00	620.23	620.23	214.49	620.45	81.08	0.00	0.00	0.00	0.00	0.00	0.00
602.150	600.00	620.47	620.47	168.16	620.66	87.54	0.00	0.00	0.00	0.00	0.00	0.00
602.150	600.00	620.47	620.47	168.16	620.66	87.54	0.00	0.00	0.00	0.00	0.00	0.00
602.150	600.00	620.47	620.47	168.16	620.66	87.54	0.00	0.00	0.00	0.00	0.00	0.00
602.150	600.00	620.52	620.52	132.10	620.69	88.17	0.00	0.00	0.00	0.00	0.00	0.00
602.150	600.00	620.43	620.43	235.32	620.62	86.92	0.00	0.00	0.00	0.00	0.00	0.00
602.200	600.00	620.61	620.61	205.32	620.76	67.05	0.00	0.00	0.00	0.00	0.00	0.00
602.200	600.00	620.61	620.61	205.32	620.76	67.05	0.00	0.00	0.00	0.00	0.00	0.00
602.200	600.00	620.61	620.61	205.32	620.76	67.05	0.00	0.00	0.00	0.00	0.00	0.00
602.200	600.00	620.72	620.72	164.21	620.86	68.65	0.00	0.00	0.00	0.00	0.00	0.00
602.200	600.00	620.51	620.51	283.32	620.67	65.64	0.00	0.00	0.00	0.00	0.00	0.00
603.000	600.00	621.62	621.62	219.26	621.66	180.90	0.00	0.00	0.00	0.00	0.00	0.00
603.000	600.00	621.62	621.62	219.26	621.66	180.90	0.00	0.00	0.00	0.00	0.00	0.00
603.000	600.00	621.62	621.62	219.26	621.66	180.90	0.00	0.00	0.00	0.00	0.00	0.00
603.000	600.00	621.99	621.99	209.35	622.02	182.98	0.00	0.00	0.00	0.00	0.00	0.00
603.000	600.00	621.20	621.20	237.40	621.28	178.55	0.00	0.00	0.00	0.00	0.00	0.00
603.100	540.00	622.57	622.57	56.56	623.12	44.16	0.00	0.00	0.00	0.00	0.00	0.00
603.100	540.00	622.57	622.57	56.56	623.12	44.16	0.00	0.00	0.00	0.00	0.00	0.00
603.100	540.00	622.57	622.57	56.56	623.12	44.16	0.00	0.00	0.00	0.00	0.00	0.00
603.100	540.00	623.10	623.10	74.78	623.28	146.98	0.00	0.00	0.00	0.00	0.00	0.00
603.100	540.00	622.78	622.78	90.73	623.25	46.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	540.00	623.48	623.48	44.35	624.62	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	540.00	623.48	623.48	44.35	624.62	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	540.00	623.48	623.48	44.35	624.62	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	540.00	623.65	623.65	35.87	624.73	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	540.00	622.88	622.88	52.94	624.33	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.990	540.00	623.68	623.68	93.04	624.67	11.96	0.00	0.00	0.00	0.00	0.00	0.00
603.990	540.00	623.68	623.68	93.04	624.67	11.96	0.00	0.00	0.00	0.00	0.00	0.00
603.990	540.00	623.68	623.68	93.04	624.67	11.96	0.00	0.00	0.00	0.00	0.00	0.00
603.990	540.00	623.83	623.83	74.14	624.77	11.96	0.00	0.00	0.00	0.00	0.00	0.00
603.990	540.00	623.26	623.26	119.62	624.42	11.95	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
604.010	540.00	623.92	623.92	98.29	624.83	11.97	0.00	0.00	0.00	0.00	0.00	0.00
604.010	540.00	623.92	623.92	98.29	624.83	11.97	0.00	0.00	0.00	0.00	0.00	0.00
604.010	540.00	623.92	623.92	98.29	624.83	11.97	0.00	0.00	0.00	0.00	0.00	0.00
604.010	540.00	624.18	624.18	80.16	625.02	11.97	0.00	0.00	0.00	0.00	0.00	0.00
604.010	540.00	623.46	623.46	126.00	624.53	11.95	0.00	0.00	0.00	0.00	0.00	0.00
604.020	540.00	623.89	623.89	49.65	624.87	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	540.00	623.89	623.89	49.65	624.87	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	540.00	623.89	623.89	49.65	624.87	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	540.00	624.16	624.16	40.89	625.05	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	540.00	623.41	623.41	62.24	624.59	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.100	540.00	625.18	625.18	289.77	625.21	120.06	0.00	0.00	0.00	0.00	0.00	0.00
604.100	540.00	625.18	625.18	289.77	625.21	120.06	0.00	0.00	0.00	0.00	0.00	0.00
604.100	540.00	625.18	625.18	289.77	625.21	120.06	0.00	0.00	0.00	0.00	0.00	0.00
604.100	540.00	625.37	625.37	239.09	625.39	120.08	0.00	0.00	0.00	0.00	0.00	0.00
604.100	540.00	625.15	625.15	407.64	625.17	120.06	0.00	0.00	0.00	0.00	0.00	0.00
604.500	540.00	625.49	625.49	191.20	625.51	240.51	0.00	0.00	0.00	0.00	0.00	0.00
604.500	540.00	625.49	625.49	191.20	625.51	240.51	0.00	0.00	0.00	0.00	0.00	0.00
604.500	540.00	625.49	625.49	191.20	625.51	240.51	0.00	0.00	0.00	0.00	0.00	0.00
604.500	540.00	625.78	625.78	175.73	625.80	242.23	0.00	0.00	0.00	0.00	0.00	0.00
604.500	540.00	625.31	625.31	242.55	625.34	239.44	0.00	0.00	0.00	0.00	0.00	0.00
604.700	540.00	625.94	625.94	81.92	626.06	194.56	0.00	0.00	0.00	0.00	0.00	0.00
604.700	540.00	625.94	625.94	81.92	626.06	194.56	0.00	0.00	0.00	0.00	0.00	0.00
604.700	540.00	625.94	625.94	81.92	626.06	194.56	0.00	0.00	0.00	0.00	0.00	0.00
604.700	540.00	626.31	626.31	84.62	626.38	219.19	0.00	0.00	0.00	0.00	0.00	0.00
604.700	540.00	625.56	625.56	82.71	625.77	168.78	0.00	0.00	0.00	0.00	0.00	0.00
605.000	540.00	627.40	627.40	78.91	627.53	191.63	0.00	0.00	0.00	0.00	0.00	0.00
605.000	540.00	627.40	627.40	78.91	627.53	191.63	0.00	0.00	0.00	0.00	0.00	0.00
605.000	540.00	627.40	627.40	78.91	627.53	191.63	0.00	0.00	0.00	0.00	0.00	0.00
605.000	540.00	627.72	627.72	79.05	627.79	213.26	0.00	0.00	0.00	0.00	0.00	0.00
605.000	540.00	627.01	627.01	78.13	627.25	164.85	0.00	0.00	0.00	0.00	0.00	0.00
605.050	540.00	630.45	630.45	75.67	630.58	188.38	0.00	0.00	0.00	0.00	0.00	0.00
605.050	540.00	630.45	630.45	75.67	630.58	188.38	0.00	0.00	0.00	0.00	0.00	0.00
605.050	540.00	630.45	630.45	75.67	630.58	188.38	0.00	0.00	0.00	0.00	0.00	0.00
605.050	540.00	630.76	630.76	75.61	630.84	209.46	0.00	0.00	0.00	0.00	0.00	0.00
605.050	540.00	630.07	630.07	75.95	630.32	162.92	0.00	0.00	0.00	0.00	0.00	0.00
605.100	540.00	633.57	633.57	77.22	633.70	189.94	0.00	0.00	0.00	0.00	0.00	0.00
605.100	540.00	633.57	633.57	77.22	633.70	189.94	0.00	0.00	0.00	0.00	0.00	0.00
605.100	540.00	633.57	633.57	77.22	633.70	189.94	0.00	0.00	0.00	0.00	0.00	0.00
605.100	540.00	633.89	633.89	77.17	633.97	211.20	0.00	0.00	0.00	0.00	0.00	0.00
605.100	540.00	633.19	633.19	77.18	633.43	164.01	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
605.500	540.00	635.29	635.29	136.59	635.33	199.43	0.00	0.00	0.00	0.00	0.00	0.00
605.500	540.00	635.29	635.29	136.59	635.33	199.43	0.00	0.00	0.00	0.00	0.00	0.00
605.500	540.00	635.29	635.29	136.59	635.33	199.43	0.00	0.00	0.00	0.00	0.00	0.00
605.500	540.00	635.60	635.60	134.04	635.62	202.00	0.00	0.00	0.00	0.00	0.00	0.00
605.500	540.00	634.96	634.96	142.92	635.01	190.99	0.00	0.00	0.00	0.00	0.00	0.00
606.000	540.00	637.42	637.42	47.62	637.57	157.69	0.00	0.00	0.00	0.00	0.00	0.00
606.000	540.00	637.42	637.42	47.62	637.57	157.69	0.00	0.00	0.00	0.00	0.00	0.00
606.000	540.00	637.42	637.42	47.62	637.57	157.69	0.00	0.00	0.00	0.00	0.00	0.00
606.000	540.00	637.70	637.70	51.50	637.79	173.36	0.00	0.00	0.00	0.00	0.00	0.00
606.000	540.00	637.06	637.06	41.35	637.35	135.96	0.00	0.00	0.00	0.00	0.00	0.00
606.030	450.00	641.78	641.78	64.63	641.87	158.76	0.00	0.00	0.00	0.00	0.00	0.00
606.030	450.00	641.78	641.78	64.63	641.87	158.76	0.00	0.00	0.00	0.00	0.00	0.00
606.030	450.00	641.78	641.78	64.63	641.87	158.76	0.00	0.00	0.00	0.00	0.00	0.00
606.030	450.00	641.98	641.98	61.21	642.05	185.55	0.00	0.00	0.00	0.00	0.00	0.00
606.030	450.00	641.02	641.02	32.48	641.43	120.49	0.00	0.00	0.00	0.00	0.00	0.00
606.060	450.00	644.62	644.62	60.60	644.71	155.83	0.00	0.00	0.00	0.00	0.00	0.00
606.060	450.00	644.62	644.62	60.60	644.71	155.83	0.00	0.00	0.00	0.00	0.00	0.00
606.060	450.00	644.62	644.62	60.60	644.71	155.83	0.00	0.00	0.00	0.00	0.00	0.00
606.060	450.00	644.90	644.90	62.36	644.96	190.20	0.00	0.00	0.00	0.00	0.00	0.00
606.060	450.00	644.61	644.61	86.49	644.71	155.79	0.00	0.00	0.00	0.00	0.00	0.00
606.100	450.00	647.55	647.55	62.76	647.64	157.41	0.00	0.00	0.00	0.00	0.00	0.00
606.100	450.00	647.55	647.55	62.76	647.64	157.41	0.00	0.00	0.00	0.00	0.00	0.00
606.100	450.00	647.55	647.55	62.76	647.64	157.41	0.00	0.00	0.00	0.00	0.00	0.00
606.100	450.00	647.79	647.79	61.80	647.85	188.01	0.00	0.00	0.00	0.00	0.00	0.00
606.100	450.00	647.06	647.06	47.85	647.28	132.56	0.00	0.00	0.00	0.00	0.00	0.00
606.980	450.00	648.43	648.43	31.57	648.68	130.58	0.00	0.00	0.00	0.00	0.00	0.00
606.980	450.00	648.43	648.43	31.57	648.68	130.58	0.00	0.00	0.00	0.00	0.00	0.00
606.980	450.00	648.43	648.43	31.57	648.68	130.58	0.00	0.00	0.00	0.00	0.00	0.00
606.980	450.00	648.67	648.67	34.32	648.82	143.03	0.00	0.00	0.00	0.00	0.00	0.00
606.980	450.00	648.27	648.27	35.14	648.63	122.76	0.00	0.00	0.00	0.00	0.00	0.00
607.020	450.00	650.92	650.92	125.34	650.97	185.49	0.00	0.00	0.00	0.00	0.00	0.00
607.020	450.00	650.92	650.92	125.34	650.97	185.49	0.00	0.00	0.00	0.00	0.00	0.00
607.020	450.00	650.92	650.92	125.34	650.97	185.49	0.00	0.00	0.00	0.00	0.00	0.00
607.020	450.00	650.94	650.94	97.70	650.98	185.84	0.00	0.00	0.00	0.00	0.00	0.00
607.020	450.00	650.91	650.91	177.48	650.96	185.26	0.00	0.00	0.00	0.00	0.00	0.00
607.100	450.00	650.98	650.98	137.75	651.03	186.76	0.00	0.00	0.00	0.00	0.00	0.00
607.100	450.00	650.98	650.98	137.75	651.03	186.76	0.00	0.00	0.00	0.00	0.00	0.00
607.100	450.00	650.98	650.98	137.75	651.03	186.76	0.00	0.00	0.00	0.00	0.00	0.00
607.100	450.00	651.04	651.04	110.41	651.08	187.90	0.00	0.00	0.00	0.00	0.00	0.00
607.100	450.00	650.94	650.94	190.54	650.99	185.89	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
608.000	450.00	652.84	652.84	92.16	652.90	154.70	0.00	0.00	0.00	0.00	0.00	0.00
608.000	450.00	652.84	652.84	92.16	652.90	154.70	0.00	0.00	0.00	0.00	0.00	0.00
608.000	450.00	652.84	652.84	92.16	652.90	154.70	0.00	0.00	0.00	0.00	0.00	0.00
608.000	450.00	653.30	653.30	98.83	653.34	166.39	0.00	0.00	0.00	0.00	0.00	0.00
608.000	450.00	652.26	652.26	78.21	652.39	137.87	0.00	0.00	0.00	0.00	0.00	0.00
608.100	450.00	654.35	654.35	101.91	654.41	159.68	0.00	0.00	0.00	0.00	0.00	0.00
608.100	450.00	654.35	654.35	101.91	654.41	159.68	0.00	0.00	0.00	0.00	0.00	0.00
608.100	450.00	654.35	654.35	101.91	654.41	159.68	0.00	0.00	0.00	0.00	0.00	0.00
608.100	450.00	654.69	654.69	102.67	654.73	168.36	0.00	0.00	0.00	0.00	0.00	0.00
608.100	450.00	653.99	653.99	105.10	654.09	150.59	0.00	0.00	0.00	0.00	0.00	0.00
608.300	450.00	654.39	654.39	46.31	654.75	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	450.00	654.39	654.39	46.31	654.75	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	450.00	654.39	654.39	46.31	654.75	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	450.00	654.78	654.78	45.31	655.04	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	450.00	653.91	653.91	46.30	654.50	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	450.00	654.85	654.85	24.62	656.52	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	450.00	654.85	654.85	24.62	656.52	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	450.00	654.85	654.85	24.62	656.52	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	450.00	654.84	654.84	18.88	656.52	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.990	450.00	654.84	654.84	35.04	656.52	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	450.00	657.47	657.47	59.51	658.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	450.00	657.47	657.47	59.51	658.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	450.00	657.47	657.47	59.51	658.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	450.00	657.47	657.47	45.69	657.99	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	450.00	657.46	657.46	84.82	657.99	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	450.00	658.11	658.11	396.61	658.12	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	450.00	658.11	658.11	396.61	658.12	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	450.00	658.11	658.11	396.61	658.12	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	450.00	658.11	658.11	305.79	658.13	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	450.00	658.09	658.09	563.15	658.10	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.200	450.00	658.19	658.19	267.47	658.20	195.86	0.00	0.00	0.00	0.00	0.00	0.00
609.200	450.00	658.19	658.19	267.47	658.20	195.86	0.00	0.00	0.00	0.00	0.00	0.00
609.200	450.00	658.19	658.19	267.47	658.20	195.86	0.00	0.00	0.00	0.00	0.00	0.00
609.200	450.00	658.25	658.25	212.17	658.26	197.28	0.00	0.00	0.00	0.00	0.00	0.00
609.200	450.00	658.13	658.13	370.56	658.14	194.46	0.00	0.00	0.00	0.00	0.00	0.00
609.300	450.00	658.28	658.28	150.52	658.31	180.62	0.00	0.00	0.00	0.00	0.00	0.00
609.300	450.00	658.28	658.28	150.52	658.31	180.62	0.00	0.00	0.00	0.00	0.00	0.00
609.300	450.00	658.28	658.28	150.52	658.31	180.62	0.00	0.00	0.00	0.00	0.00	0.00
609.300	450.00	658.39	658.39	124.41	658.42	183.53	0.00	0.00	0.00	0.00	0.00	0.00
609.300	450.00	658.17	658.17	200.83	658.20	177.95	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
609.900	450.00	658.57	658.57	57.53	658.78	111.79	0.00	0.00	0.00	0.00	0.00	0.00
609.900	450.00	658.57	658.57	57.53	658.78	111.79	0.00	0.00	0.00	0.00	0.00	0.00
609.900	450.00	658.57	658.57	57.53	658.78	111.79	0.00	0.00	0.00	0.00	0.00	0.00
609.900	450.00	658.87	658.87	54.73	659.02	124.25	0.00	0.00	0.00	0.00	0.00	0.00
609.900	450.00	658.24	658.24	63.61	658.56	95.32	0.00	0.00	0.00	0.00	0.00	0.00
609.950	450.00	659.66	659.66	75.91	659.80	126.27	0.00	0.00	0.00	0.00	0.00	0.00
609.950	450.00	659.66	659.66	75.91	659.80	126.27	0.00	0.00	0.00	0.00	0.00	0.00
609.950	450.00	659.66	659.66	75.91	659.80	126.27	0.00	0.00	0.00	0.00	0.00	0.00
609.950	450.00	660.01	660.01	74.04	660.10	134.10	0.00	0.00	0.00	0.00	0.00	0.00
609.950	450.00	659.22	659.22	79.02	659.45	109.19	0.00	0.00	0.00	0.00	0.00	0.00
610.000	450.00	660.44	660.44	75.28	660.58	126.00	0.00	0.00	0.00	0.00	0.00	0.00
610.000	450.00	660.44	660.44	75.28	660.58	126.00	0.00	0.00	0.00	0.00	0.00	0.00
610.000	450.00	660.44	660.44	75.28	660.58	126.00	0.00	0.00	0.00	0.00	0.00	0.00
610.000	450.00	660.82	660.82	74.51	660.91	134.32	0.00	0.00	0.00	0.00	0.00	0.00
610.000	450.00	659.96	659.96	75.34	660.20	106.07	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
599.900	600.000	606.480	0.000	0.000	0.000	69.600	0.000	0.000
599.900	600.000	606.251	-.229	0.000	0.000	65.010	4.590	0.000
599.900	600.000	606.761	.510	0.000	0.000	75.212	-5.612	0.000
599.900	600.000	606.931	.171	0.000	0.000	78.624	-9.024	0.000
599.900	600.000	605.907	-1.024	0.000	0.000	58.140	11.460	0.000
599.980	600.000	606.929	0.000	.449	0.000	64.562	0.000	113.000
599.980	600.000	606.817	-.112	.567	0.000	62.337	2.225	113.000
599.980	600.000	607.097	.280	.337	0.000	67.922	-3.360	113.000
599.980	600.000	607.385	.288	.454	0.000	73.689	-9.127	113.000
599.980	600.000	606.366	-1.020	.459	0.000	53.295	11.267	113.000
600.020	600.000	610.316	0.000	3.387	0.000	132.325	0.000	37.000
600.020	600.000	610.313	-.003	3.495	0.000	132.255	.070	37.000
600.020	600.000	610.322	.009	3.224	0.000	132.432	-.107	37.000
600.020	600.000	610.331	.009	2.946	0.000	132.620	-.295	37.000
600.020	600.000	606.802	-3.529	.436	0.000	61.884	70.441	37.000
600.100	600.000	610.335	0.000	.019	0.000	149.186	0.000	50.000
600.100	600.000	610.332	-.003	.019	0.000	149.134	.052	50.000
600.100	600.000	610.341	.009	.019	0.000	149.265	-.079	50.000
600.100	600.000	610.360	.019	.029	0.000	149.555	-.369	50.000
600.100	600.000	607.556	-2.804	.754	0.000	86.285	62.900	50.000
600.500	600.000	610.535	0.000	.200	0.000	127.165	0.000	350.000
600.500	600.000	610.532	-.003	.200	0.000	127.074	.090	350.000
600.500	600.000	610.539	.007	.199	0.000	127.303	-.139	350.000
600.500	600.000	610.730	.191	.370	0.000	131.229	-4.064	350.000
600.500	600.000	609.461	-1.270	1.905	0.000	95.122	32.043	350.000
601.000	600.000	611.762	0.000	1.227	0.000	107.637	0.000	350.000
601.000	600.000	611.762	.000	1.230	0.000	107.644	-.007	350.000
601.000	600.000	611.761	-.000	1.222	0.000	107.626	.011	350.000
601.000	600.000	612.246	.485	1.516	0.000	127.520	-19.884	350.000
601.000	600.000	611.307	-.940	1.846	0.000	77.519	30.118	350.000
601.100	600.000	617.918	0.000	6.156	0.000	44.521	0.000	1350.000

601.100	600.000	617.918	-.000	6.156	0.000	44.521	.000	1350.000
601.100	600.000	617.918	.000	6.157	0.000	44.521	-.001	1350.000
601.100	600.000	618.435	.517	6.189	0.000	48.021	-3.500	1350.000
601.100	600.000	617.184	-1.251	5.877	0.000	39.644	4.877	1350.000
601.980	600.000	618.165	0.000	.247	0.000	55.881	0.000	100.000
601.980	600.000	618.165	-.000	.247	0.000	55.878	.003	100.000
601.980	600.000	618.166	.000	.247	0.000	55.885	-.004	100.000
601.980	600.000	618.728	.563	.293	0.000	94.873	-38.992	100.000
601.980	600.000	617.399	-1.329	.216	0.000	14.192	41.689	100.000
602.020	600.000	620.263	0.000	2.098	0.000	165.069	0.000	52.000
602.020	600.000	620.263	-.000	2.098	0.000	165.069	.000	52.000
602.020	600.000	620.263	.000	2.098	0.000	165.069	-.000	52.000
602.020	600.000	620.285	.022	1.557	0.000	165.766	-.697	52.000
602.020	600.000	620.237	-.048	2.838	0.000	164.233	.836	52.000
602.100	600.000	620.274	0.000	.011	0.000	83.591	0.000	50.000
602.100	600.000	620.274	-.000	.011	0.000	83.591	.000	50.000
602.100	600.000	620.274	.000	.011	0.000	83.591	-.000	50.000
602.100	600.000	620.321	.046	.035	0.000	85.390	-1.799	50.000
602.100	600.000	620.229	-.091	-.008	0.000	81.084	2.507	50.000
602.150	600.000	620.474	0.000	.200	0.000	87.538	0.000	1.000
602.150	600.000	620.474	-.000	.200	0.000	87.538	.000	1.000
602.150	600.000	620.474	.000	.200	0.000	87.538	-.000	1.000
602.150	600.000	620.521	.046	.200	0.000	88.172	-.635	1.000
602.150	600.000	620.429	-.091	.200	0.000	86.918	.620	1.000
602.200	600.000	620.605	0.000	.131	0.000	67.051	0.000	100.000
602.200	600.000	620.605	-.000	.131	0.000	67.051	.000	100.000
602.200	600.000	620.605	.000	.131	0.000	67.051	-.000	100.000
602.200	600.000	620.715	.110	.195	0.000	68.648	-1.598	100.000
602.200	600.000	620.508	-.207	.079	0.000	65.644	1.407	100.000
603.000	600.000	621.615	0.000	1.010	0.000	180.901	0.000	1100.000
603.000	600.000	621.615	-.000	1.010	0.000	180.901	.000	1100.000
603.000	600.000	621.615	.000	1.010	0.000	180.901	-.000	1100.000
603.000	600.000	621.987	.372	1.272	0.000	182.981	-2.081	1100.000
603.000	600.000	621.202	-.785	.694	0.000	178.547	2.354	1100.000
603.100	540.000	622.570	0.000	.955	0.000	44.165	0.000	750.000
603.100	540.000	622.570	.000	.955	0.000	44.165	-.000	750.000
603.100	540.000	622.570	-.000	.955	0.000	44.165	.000	750.000
603.100	540.000	623.100	.529	1.113	0.000	146.978	-102.813	750.000
603.100	540.000	622.779	-.320	1.578	0.000	45.998	-1.833	750.000
603.980	540.000	623.476	0.000	.905	0.000	12.000	0.000	105.000
603.980	540.000	623.476	.000	.905	0.000	12.000	0.000	105.000
603.980	540.000	623.476	-.000	.905	0.000	12.000	0.000	105.000
603.980	540.000	623.655	.179	.555	0.000	12.000	0.000	105.000
603.980	540.000	622.878	-.776	.099	0.000	12.000	0.000	105.000
603.990	540.000	623.679	0.000	.203	0.000	11.960	0.000	1.000
603.990	540.000	623.679	.000	.203	0.000	11.960	-.000	1.000
603.990	540.000	623.679	-.000	.203	0.000	11.960	.000	1.000
603.990	540.000	623.831	.152	.176	0.000	11.964	-.004	1.000
603.990	540.000	623.263	-.567	.385	0.000	11.948	.012	1.000
604.010	540.000	623.917	0.000	.239	0.000	11.967	0.000	43.000
604.010	540.000	623.917	.000	.239	0.000	11.967	-.000	43.000

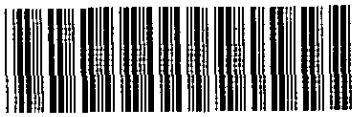
604.010	540.000	623.917	-.000	.239	0.000	11.967	.000	43.000
604.010	540.000	624.177	.260	.346	0.000	11.974	-.007	43.000
604.010	540.000	623.458	-.719	.195	0.000	11.954	.013	43.000
604.020	540.000	623.888	0.000	-.029	0.000	12.000	0.000	1.000
604.020	540.000	623.888	.000	-.029	0.000	12.000	0.000	1.000
604.020	540.000	623.888	-.000	-.029	0.000	12.000	0.000	1.000
604.020	540.000	624.155	.267	-.021	0.000	12.000	0.000	1.000
604.020	540.000	623.413	-.742	-.045	0.000	12.000	0.000	1.000
604.100	540.000	625.184	0.000	1.296	0.000	120.061	0.000	50.000
604.100	540.000	625.184	.000	1.296	0.000	120.061	-.000	50.000
604.100	540.000	625.184	-.000	1.296	0.000	120.061	.000	50.000
604.100	540.000	625.365	.181	1.210	0.000	120.080	-.019	50.000
604.100	540.000	625.145	-.220	1.732	0.000	120.057	.004	50.000
604.500	540.000	625.487	0.000	.303	0.000	240.507	0.000	600.000
604.500	540.000	625.487	.000	.303	0.000	240.507	-.000	600.000
604.500	540.000	625.487	-.000	.303	0.000	240.507	.000	600.000
604.500	540.000	625.777	.290	.412	0.000	242.228	-1.721	600.000
604.500	540.000	625.308	-.469	.163	0.000	239.443	1.064	600.000
604.700	540.000	625.942	0.000	.455	0.000	194.560	0.000	325.000
604.700	540.000	625.942	.000	.455	0.000	194.560	-.000	325.000
604.700	540.000	625.942	-.000	.455	0.000	194.560	.000	325.000
604.700	540.000	626.308	.366	.530	0.000	219.194	-24.633	325.000
604.700	540.000	625.555	-.753	.247	0.000	168.778	25.782	325.000
605.000	540.000	627.402	0.000	1.461	0.000	191.629	0.000	325.000
605.000	540.000	627.402	-.000	1.461	0.000	191.629	.000	325.000
605.000	540.000	627.402	.000	1.461	0.000	191.629	-.000	325.000
605.000	540.000	627.717	.315	1.410	0.000	213.257	-21.628	325.000
605.000	540.000	627.006	-.711	1.451	0.000	164.848	26.781	325.000
605.050	540.000	630.447	0.000	3.045	0.000	188.378	0.000	625.000
605.050	540.000	630.447	.000	3.045	0.000	188.378	-.000	625.000
605.050	540.000	630.447	-.000	3.045	0.000	188.378	.000	625.000
605.050	540.000	630.762	.314	3.044	0.000	209.463	-21.085	625.000
605.050	540.000	630.069	-.693	3.063	0.000	162.917	25.461	625.000
605.100	540.000	633.572	0.000	3.125	0.000	189.940	0.000	625.000
605.100	540.000	633.572	-.000	3.125	0.000	189.940	.000	625.000
605.100	540.000	633.572	.000	3.125	0.000	189.940	-.000	625.000
605.100	540.000	633.888	.316	3.127	0.000	211.200	-21.260	625.000
605.100	540.000	633.186	-.702	3.118	0.000	164.013	25.927	625.000
605.500	540.000	635.293	0.000	1.721	0.000	199.434	0.000	625.000
605.500	540.000	635.293	.000	1.721	0.000	199.434	0.000	625.000
605.500	540.000	635.293	-.000	1.721	0.000	199.434	.000	625.000
605.500	540.000	635.595	.302	1.707	0.000	202.001	-2.567	625.000
605.500	540.000	634.958	-.637	1.771	0.000	190.989	8.444	625.000
606.000	540.000	637.420	0.000	2.127	0.000	157.685	0.000	625.000
606.000	540.000	637.420	0.000	2.127	0.000	157.685	-.000	625.000
606.000	540.000	637.420	.000	2.127	0.000	157.685	-.000	625.000
606.000	540.000	637.700	.280	2.105	0.000	173.357	-15.672	625.000
606.000	540.000	637.056	-.644	2.098	0.000	135.956	21.730	625.000
606.030	450.000	641.780	0.000	4.360	0.000	158.759	0.000	550.000
606.030	450.000	641.780	-.000	4.360	0.000	158.759	0.000	550.000
606.030	450.000	641.780	.000	4.360	0.000	158.759	.000	550.000

606.030	450.000	641.982	.202	4.282	0.000	185.546	-26.786	550.000
606.030	450.000	641.020	-.962	3.963	0.000	120.483	38.276	550.000
606.060	450.000	644.618	0.000	2.839	0.000	155.832	0.000	550.000
606.060	450.000	644.618	-.000	2.839	0.000	155.832	.000	550.000
606.060	450.000	644.618	.000	2.839	0.000	155.832	0.000	550.000
606.060	450.000	644.902	.283	2.920	0.000	190.205	-34.373	550.000
606.060	450.000	644.614	-.288	3.594	0.000	155.789	.043	550.000
606.100	450.000	647.552	0.000	2.934	0.000	157.415	0.000	550.000
606.100	450.000	647.552	0.000	2.934	0.000	157.415	0.000	550.000
606.100	450.000	647.552	0.000	2.934	0.000	157.415	0.000	550.000
606.100	450.000	647.791	.239	2.890	0.000	188.012	-30.597	550.000
606.100	450.000	647.055	-.736	2.442	0.000	132.565	24.850	550.000
606.980	450.000	648.428	0.000	.876	0.000	130.576	0.000	105.000
606.980	450.000	648.428	0.000	.876	0.000	130.576	0.000	105.000
606.980	450.000	648.428	0.000	.876	0.000	130.576	0.000	105.000
606.980	450.000	648.668	.240	.877	0.000	143.026	-12.451	105.000
606.980	450.000	648.265	-.403	1.210	0.000	122.761	7.814	105.000
607.020	450.000	650.925	0.000	2.497	0.000	185.493	0.000	45.000
607.020	450.000	650.925	0.000	2.497	0.000	185.493	0.000	45.000
607.020	450.000	650.925	0.000	2.497	0.000	185.493	0.000	45.000
607.020	450.000	650.941	.016	2.272	0.000	185.842	-.349	45.000
607.020	450.000	650.914	-.027	2.649	0.000	185.263	.230	45.000
607.100	450.000	650.983	0.000	.058	0.000	186.764	0.000	50.000
607.100	450.000	650.983	0.000	.058	0.000	186.764	0.000	50.000
607.100	450.000	650.983	0.000	.058	0.000	186.764	0.000	50.000
607.100	450.000	651.036	.053	.096	0.000	187.896	-1.132	50.000
607.100	450.000	650.943	-.093	.029	0.000	185.891	.873	50.000
608.000	450.000	652.842	0.000	1.859	0.000	154.702	0.000	1220.000
608.000	450.000	652.842	0.000	1.859	0.000	154.702	0.000	1220.000
608.000	450.000	652.842	0.000	1.859	0.000	154.702	0.000	1220.000
608.000	450.000	653.298	.456	2.262	0.000	166.394	-11.693	1220.000
608.000	450.000	652.256	-1.042	1.313	0.000	137.871	16.831	1220.000
608.100	450.000	654.353	0.000	1.511	0.000	159.677	0.000	700.000
608.100	450.000	654.353	0.000	1.511	0.000	159.677	0.000	700.000
608.100	450.000	654.353	0.000	1.511	0.000	159.677	0.000	700.000
608.100	450.000	654.695	.342	1.396	0.000	168.359	-8.683	700.000
608.100	450.000	653.993	-.701	1.737	0.000	150.592	9.085	700.000
608.300	450.000	654.394	0.000	.041	0.000	44.000	0.000	60.000
608.300	450.000	654.394	0.000	.041	0.000	44.000	0.000	60.000
608.300	450.000	654.394	0.000	.041	0.000	44.000	0.000	60.000
608.300	450.000	654.784	.390	.090	0.000	44.000	-.000	60.000
608.300	450.000	653.913	-.971	-.080	0.000	44.000	.000	60.000
608.980	450.000	654.850	0.000	.455	0.000	13.000	0.000	30.500
608.980	450.000	654.850	0.000	.455	0.000	13.000	0.000	30.500
608.980	450.000	654.850	0.000	.455	0.000	13.000	0.000	30.500
608.980	450.000	654.843	-.007	.059	0.000	13.000	0.000	30.500
608.980	450.000	654.842	-.001	.928	0.000	13.000	-.000	30.500
609.070	450.000	657.474	0.000	2.625	0.000	13.000	0.000	29.000
609.070	450.000	657.474	0.000	2.625	0.000	13.000	0.000	29.000
609.070	450.000	657.474	0.000	2.625	0.000	13.000	0.000	29.000
609.070	450.000	657.466	-.008	2.623	0.000	13.000	0.000	29.000

609.070	450.000	657.464	-.002	2.623	0.000	13.000	-.000	29.000
609.100	450.000	658.108	0.000	.634	0.000	116.001	0.000	50.000
609.100	450.000	658.108	0.000	.634	0.000	116.001	0.000	50.000
609.100	450.000	658.108	0.000	.634	0.000	116.001	0.000	50.000
609.100	450.000	658.115	.007	.649	0.000	116.001	-.000	50.000
609.100	450.000	658.090	-.024	.626	0.000	116.001	.000	50.000
609.200	450.000	658.187	0.000	.079	0.000	195.856	0.000	440.000
609.200	450.000	658.187	0.000	.079	0.000	195.856	0.000	440.000
609.200	450.000	658.187	0.000	.079	0.000	195.856	0.000	440.000
609.200	450.000	658.246	.059	.131	0.000	197.276	-1.420	440.000
609.200	450.000	658.129	-.117	.039	0.000	194.462	1.394	440.000
609.300	450.000	658.279	0.000	.092	0.000	180.620	0.000	220.000
609.300	450.000	658.279	0.000	.092	0.000	180.620	0.000	220.000
609.300	450.000	658.279	0.000	.092	0.000	180.620	0.000	220.000
609.300	450.000	658.395	.116	.149	0.000	183.531	-2.911	220.000
609.300	450.000	658.172	-.223	.043	0.000	177.947	2.673	220.000
609.900	450.000	658.572	0.000	.293	0.000	111.787	0.000	220.000
609.900	450.000	658.572	0.000	.293	0.000	111.787	0.000	220.000
609.900	450.000	658.572	0.000	.293	0.000	111.787	0.000	220.000
609.900	450.000	658.871	.299	.476	0.000	124.251	-12.464	220.000
609.900	450.000	658.239	-.632	.067	0.000	95.324	16.463	220.000
609.950	450.000	659.664	0.000	1.092	0.000	126.266	0.000	220.000
609.950	450.000	659.664	0.000	1.092	0.000	126.266	0.000	220.000
609.950	450.000	659.664	0.000	1.092	0.000	126.266	0.000	220.000
609.950	450.000	660.015	.351	1.144	0.000	134.101	-7.835	220.000
609.950	450.000	659.225	-.790	.986	0.000	109.193	17.073	220.000
610.000	450.000	660.442	0.000	.778	0.000	126.004	0.000	220.000
610.000	450.000	660.442	0.000	.778	0.000	126.004	0.000	220.000
610.000	450.000	660.442	0.000	.778	0.000	126.004	0.000	220.000
610.000	450.000	660.824	.381	.809	0.000	134.320	-8.316	220.000
610.000	450.000	659.961	-.863	.736	0.000	106.072	19.932	220.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	45.744	0.000
2	0.000	0.000	45.733	-.011
3	0.000	0.000	45.758	.014
4	0.000	0.000	50.215	4.471
5	0.000	0.000	50.489	4.745



1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly drain

4) DOCUMENT TYPE: 100yr.

JOB NO. UM8212 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 11:28:45 07-06-79

GOOD

BRAGDEN
100 YR FLOOD

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM        MM  NN        NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM      MMM  NNN       NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM    MMMM  NNNN      NN  EE                TT
MM MM  MM MM  NN NN     NN  EE                TT
MM  MMMM  MM  NN  NN    NN  EE                TT
MM   MM   MM  NN   NN   NN  EEEEEEEE          TT
MM        MM  NN    NN  NN  EEEEEEEE          TT
MM        MM  NN     NN NN  EE                TT
MM        MM  NN      NNNN  EE                TT
MM        MM  NN       NNN  EE                TT
MM        MM  NN        NN  EEEEEEEEEEEE      TT
MM        MM  NN         N  EEEEEEEEEEEE      TT

XX        XX   SSSSSSSSSS   NN        NN  LL
XX        XX  SSSSSSSSSSSS  NNN       NN  LL
 XX      XX   SS        SS  NNNN      NN  LL
  XX    XX    SS            NN NN     NN  LL
   XX  XX     SSS           NN  NN    NN  LL
    XXXX       SSSSSSSSS    NN   NN   NN  LL
    XXXX        SSSSSSSSS   NN    NN  NN  LL
   XX  XX              SSS  NN     NN NN  LL
  XX    XX              SS  NN      NNNN  LL
 XX      XX   SS        SS  NN       NNN  LL
XX        XX  SSSSSSSSSSSS  NN        NN  LLLLLLLLLLLL
XX        XX   SSSSSSSSSS   NN         N  LLLLLLLLLLLL
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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  HUD-FIA H-4705
T2  BEDFORD TWP FIS
T3  BRAGDEN DITCH   100 YEAR FLOW = 515 CFS
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J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ	
	-1.	4.	0.	0.	0.000000	0.00	1.0	0.	597.300	0.000	
J3	1.000	34.000	3.000	4.000	27.000	28.000	9.000	0.000	0.000	0.000	
NC	.080	.080	.040	.100	.300	0.000	0.000	0.000	0.000	0.000	
QT	5.000	295.000	440.000	515.000	715.000	515.000	0.000	0.000	0.000	0.000	
ET	0.000	0.000	0.000	0.000	0.000	1.400	0.000	0.000	0.000	0.000	
X1	1.210	12.000	1355.000	1365.000	0.000	0.000	0.000	0.000	0.000	0.000	
GR	604.000	1045.000	599.000	1115.000	597.000	1180.000	596.000	1195.000	595.100	1335.000	
GR	595.000	1355.000	593.800	1360.000	595.000	1365.000	596.600	1375.000	597.000	1410.000	
GR	600.000	1515.000	605.000	1585.000	0.000	0.000	0.000	0.000	0.000	0.000	
X1	1.330	15.000	1185.000	1205.000	450.000	450.000	450.000	0.000	0.000	0.000	
GR	607.000	1000.000	606.000	1015.000	605.000	1040.000	600.000	1080.000	599.000	1085.000	
GR	598.000	1105.000	597.000	1125.000	596.000	1185.000	594.000	1190.000	596.000	1195.000	
GR	597.000	1205.000	598.000	1250.000	599.000	1270.000	600.000	1275.000	605.000	1315.000	
X1	1.340	14.000	1215.000	1235.000	450.000	450.000	450.000	0.000	0.000	0.000	
GR	610.000	1000.000	609.000	1075.000	605.000	1110.000	600.000	1160.000	599.000	1175.000	
GR	598.000	1215.000	596.000	1220.000	594.500	1225.000	597.000	1230.000	598.000	1235.000	
GR	599.000	1315.000	600.000	1330.000	605.000	1370.000	610.000	1460.000	0.000	0.000	
X1	1.350	14.000	1200.000	1240.000	350.000	350.000	350.000	0.000	0.000	0.000	
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	605.000	605.000	0.000	
GR	613.000	1000.000	612.000	1015.000	611.000	1040.000	610.000	1045.000	605.000	1075.000	
GR	602.000	1100.000	599.000	1200.000	598.000	1210.000	595.000	1225.000	600.000	1240.000	
GR	602.000	1280.000	610.000	1350.000	611.000	1380.000	612.000	1450.000	0.000	0.000	
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000	
X1	1.380	15.000	1218.000	1231.000	50.000	50.000	50.000	0.000	0.000	0.000	
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	606.000	606.000	0.000	
GR	613.000	1000.000	612.000	1015.000	611.000	1040.000	610.000	1045.000	605.000	1075.000	
GR	602.000	1100.000	599.000	1205.000	598.000	1210.000	597.200	1218.000	597.200	1231.000	
GR	600.000	1235.000	602.000	1280.000	610.000	1350.000	611.000	1380.000	612.000	1450.000	
SB	0.000	2.800	2.700	300.000	12.850	0.000	36.000	0.000	597.200	597.200	
X1	1.420	10.000	141.000	154.000	116.000	116.000	116.000	0.000	0.000	0.000	
X2	0.000	0.000	1.000	600.000	610.300	0.000	0.000	0.000	0.000	0.000	
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	610.300	610.300	0.000	
GR	606.200	0.000	604.700	15.000	600.100	69.000	599.400	132.000	597.200	141.000	
GR	597.200	145.000	597.200	152.000	600.000	154.000	599.100	226.000	606.200	259.000	
X1	15.750	10.000	132.000	155.000	100.000	100.000	100.000	0.000	0.000	0.000	
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

GR	604.000	22.000	604.000	23.000	600.100	69.000	599.400	132.000	597.400	140.000
GR	597.200	145.000	597.500	152.000	600.000	155.000	604.000	236.000	604.000	237.000
NC	.050	.050	.045	.100	.300	0.000	0.000	0.000	0.000	0.000
X1	18.000	7.000	131.000	158.000	510.000	510.000	510.000	0.000	0.000	0.000
GR	607.300	0.000	601.800	50.000	600.800	131.000	597.800	143.000	601.300	158.000
GR	601.300	265.000	605.700	282.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	100.980	8.000	131.000	158.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	602.000	602.000	0.000
GR	607.300	0.000	601.800	50.000	600.800	131.000	598.000	143.000	598.000	148.000
GR	601.300	158.000	601.300	265.000	605.700	282.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	0.000	3.140	0.000	12.570	0.000	598.000	598.000
X1	101.020	8.000	127.000	158.000	30.000	30.000	30.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	602.000	603.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.000	.300	3.300
BT	15.000	0.000	609.900	0.000	50.000	609.100	0.000	130.000	604.100	0.000
BT	192.000	603.800	0.000	196.000	603.300	0.000	196.400	603.300	0.000	197.200
BT	603.300	0.000	198.000	603.300	0.000	198.800	603.300	0.000	199.600	603.300
BT	0.000	200.000	603.300	0.000	206.000	604.400	0.000	315.000	606.400	0.000
BT	375.000	608.800	0.000	400.000	610.500	0.000	0.000	0.000	0.000	0.000
GR	608.800	0.000	605.300	32.000	602.300	127.000	598.000	143.000	598.000	148.000
GR	604.000	158.000	605.000	298.000	608.800	329.000	0.000	0.000	0.000	0.000
X1	101.210	7.000	127.000	158.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	608.800	0.000	605.300	32.000	602.300	127.000	598.200	138.000	604.000	158.000
GR	605.000	298.000	608.800	329.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	101.900	12.000	188.000	215.000	330.000	330.000	330.000	0.000	-.100	0.000
GR	611.100	0.000	610.100	40.000	608.100	57.000	605.000	100.000	602.700	188.000
GR	599.400	196.000	598.900	200.000	599.300	203.000	604.500	215.000	607.800	288.000
GR	611.500	320.000	613.100	372.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	101.950	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.050	.050	.050	.050	.050	0.000	0.000	0.000	0.000
X1	102.000	0.000	0.000	0.000	49.000	49.000	49.000	0.000	.100	0.000
NC	0.000	0.000	0.000	.200	.400	0.000	0.000	0.000	0.000	0.000
X1	102.260	12.000	188.000	215.000	194.000	194.000	194.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.400	603.400	0.000
GR	611.100	0.000	610.100	40.000	608.100	57.000	605.000	100.000	602.700	188.000
GR	599.400	194.000	599.400	200.000	599.400	204.000	604.500	215.000	607.800	288.000
GR	611.500	320.000	613.100	372.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.800	250.000	3.140	0.000	12.570	0.000	599.400	599.400
X1	102.280	12.000	188.000	215.000	12.000	12.000	12.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	603.400	603.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.900	603.900	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	599.400	194.000	599.400	200.000	599.900	210.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	102.500	12.000	188.000	215.000	94.000	94.000	94.000	0.000	0.000	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	600.000	196.000	599.500	200.000	599.900	203.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000

X1	102.980	12.000	188.000	215.000	70.000	70.000	70.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	603.800	603.800	0.000
GR	611.700	0.000	610.700	40.000	608.700	57.000	605.700	100.000	603.400	188.000
GR	599.800	194.000	599.800	200.000	599.900	210.000	605.100	215.000	608.400	288.000
GR	612.100	320.000	613.700	372.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.700	2.800	250.000	3.140	0.000	12.570	0.000	599.800	599.800
X1	103.020	8.000	185.000	215.000	59.000	59.000	59.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	603.800	609.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	609.200	609.200	0.000
GR	609.300	0.000	607.200	50.000	605.400	100.000	604.700	185.000	599.800	197.000
GR	599.800	205.000	604.100	215.000	611.700	298.000	0.000	0.000	0.000	0.000
X1	103.290	7.000	185.000	215.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	609.300	0.000	607.200	50.000	605.400	100.000	604.700	185.000	600.100	200.000
GR	604.100	215.000	611.700	298.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.060	.060	.050	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	104.000	11.000	230.000	268.000	370.000	370.000	370.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.400	0.000	0.000
GR	608.500	0.000	607.300	50.000	605.300	150.000	608.400	208.000	606.500	230.000
GR	601.700	247.000	601.700	251.000	608.700	268.000	610.100	300.000	612.300	370.000
GR	612.800	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	104.500	0.000	0.000	0.000	330.000	330.000	330.000	0.000	-.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.300	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	104.980	11.000	230.000	268.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	606.600	606.600	0.000
GR	608.500	0.000	607.300	50.000	605.300	150.000	608.400	208.000	606.500	230.000
GR	601.600	245.000	601.600	254.000	608.700	268.000	610.100	300.000	612.300	370.000
GR	612.800	450.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.800	2.800	0.000	5.040	0.000	25.200	0.000	601.600	601.600
X1	105.020	9.000	186.000	216.000	81.000	81.000	81.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	606.600	607.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	607.600	607.800	0.000
BT	15.000	0.000	613.600	0.000	100.000	610.500	0.000	183.000	607.300	0.000
BT	193.000	607.500	0.000	196.750	607.600	0.000	197.500	607.700	0.000	198.500
BT	607.700	0.000	200.000	607.800	0.000	201.500	607.800	0.000	202.500	607.900
BT	0.000	203.250	607.900	0.000	204.000	608.000	0.000	217.000	608.500	0.000
BT	300.000	610.300	0.000	400.000	611.600	0.000	0.000	0.000	0.000	0.000
GR	611.900	0.000	608.700	60.000	607.300	115.000	606.900	173.000	606.200	186.000
GR	601.600	190.000	601.600	200.000	607.200	216.000	610.900	336.000	0.000	0.000
X1	105.410	8.000	186.000	216.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	611.900	0.000	608.700	60.000	607.300	115.000	606.900	173.000	606.200	186.000
GR	601.900	200.000	607.200	216.000	610.900	336.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	105.480	7.000	183.000	221.000	950.000	950.000	950.000	0.000	0.000	0.000
GR	612.800	0.000	610.300	100.000	610.200	183.000	604.600	200.000	611.500	221.000
GR	612.600	300.000	612.900	320.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	105.980	8.000	183.000	221.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	608.900	608.900	0.000
GR	612.800	0.000	610.300	100.000	610.200	183.000	604.900	190.000	604.900	200.000
GR	611.500	221.000	612.600	300.000	612.900	320.000	0.000	0.000	0.000	0.000

SB	0.000	1.200	2.900	125.000	3.140	0.000	12.570	0.000	604.900	604.900
X1	106.020	8.000	79.000	120.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	608.900	610.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	611.000	611.000	0.000
GR	614.600	0.000	613.200	79.000	604.900	100.000	604.900	110.000	611.000	120.000
GR	611.600	200.000	612.700	280.000	614.600	300.000	0.000	0.000	0.000	0.000
X1	106.530	7.000	79.000	120.000	100.000	100.000	100.000	0.000	0.000	0.000
GR	614.600	0.000	613.200	79.000	605.200	100.000	611.000	120.000	611.600	200.000
GR	612.700	280.000	614.600	300.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	106.580	6.000	79.000	120.000	1080.000	1080.000	1080.000	0.000	0.000	0.000
GR	621.600	0.000	616.000	79.000	608.000	100.000	613.900	120.000	614.400	200.000
GR	615.500	380.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	106.590	0.000	0.000	0.000	820.000	820.000	820.000	0.000	2.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
QT	5.000	255.000	380.000	450.000	620.000	450.000	0.000	0.000	0.000	0.000
X1	106.980	7.000	79.000	120.000	100.000	100.000	100.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	615.900	615.900	0.000
GR	624.000	0.000	618.000	79.000	610.400	90.000	610.400	107.000	616.300	120.000
GR	616.800	200.000	618.500	380.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.700	600.000	7.500	0.000	41.250	0.000	610.400	610.400
X1	107.020	16.000	550.000	568.000	33.500	33.500	33.500	0.000	0.000	0.000
X2	0.000	0.000	1.000	615.900	618.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	618.500	618.500	0.000
GR	621.400	0.000	620.500	100.000	618.100	200.000	616.400	300.000	614.400	400.000
GR	613.200	500.000	612.900	550.000	610.400	555.000	610.400	562.000	610.400	567.000
GR	613.000	568.000	614.500	584.000	613.900	602.000	616.100	700.000	619.500	800.000
GR	619.700	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.065	.065	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	107.100	16.000	550.000	568.000	100.000	100.000	100.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	614.800	0.000
GR	621.400	0.000	620.500	100.000	618.100	200.000	616.400	300.000	614.400	400.000
GR	613.200	500.000	612.900	550.000	610.800	558.000	610.400	562.000	610.500	565.000
GR	613.000	568.000	614.500	584.000	613.900	602.000	616.100	700.000	619.500	800.000
GR	619.700	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000
NH	5.000	.065	500.000	.100	550.000	.055	568.000	.100	600.000	.065
NH	900.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	108.000	0.000	0.000	0.000	890.000	890.000	890.000	0.000	2.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	617.100	0.000
NC	.045	.045	.040	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	109.000	15.000	367.000	396.000	2350.000	2350.000	2350.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	622.400	0.000	621.200	100.000	620.700	200.000	620.600	300.000	619.800	367.000
GR	619.300	373.000	617.400	376.000	617.000	380.000	616.700	384.000	617.000	388.000
GR	619.300	396.000	619.300	397.000	619.400	500.000	619.500	600.000	620.700	700.000
X1	109.050	9.000	870.000	890.000	300.000	300.000	300.000	0.000	0.000	0.000
GR	625.000	500.000	621.900	502.000	620.000	800.000	619.800	870.000	617.300	875.000
GR	617.300	885.000	619.800	890.000	620.000	900.000	625.000	1220.000	0.000	0.000
X1	109.100	16.000	770.000	799.000	1160.000	1160.000	1160.000	0.000	0.000	0.000

GR	630.000	0.000	625.500	10.000	625.000	650.000	623.500	750.000	622.500	770.000
GR	620.400	780.000	620.200	781.000	619.500	783.000	620.200	785.000	620.400	788.000
GR	622.500	799.000	623.500	871.000	624.400	950.000	626.600	1116.000	629.500	1177.000
GR	633.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	109.980	16.000	770.000	799.000	115.000	115.000	115.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	623.800	623.800	0.000
GR	630.000	0.000	625.500	10.000	625.000	650.000	623.500	750.000	622.500	770.000
GR	620.500	780.000	620.500	781.000	620.500	783.000	620.500	785.000	620.500	788.000
GR	622.500	799.000	623.500	871.000	624.400	950.000	626.600	1116.000	629.500	1177.000
GR	633.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.900	3.000	0.000	5.340	0.000	17.100	0.000	620.500	620.500
X1	110.020	14.000	112.000	143.000	72.000	72.000	72.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	623.800	625.900	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	625.900	625.900	0.000
BT	21.000	0.000	630.000	0.000	10.000	627.000	0.000	600.000	626.700	0.000
BT	700.000	626.200	0.000	750.000	626.000	0.000	790.000	625.900	0.000	795.000
BT	625.900	0.000	797.000	625.900	0.000	797.600	625.900	0.000	797.900	625.900
BT	0.000	800.000	625.900	0.000	802.100	625.900	0.000	802.400	625.900	0.000
BT	803.000	625.900	0.000	805.000	625.900	0.000	812.000	625.900	0.000	822.000
BT	625.900	0.000	850.000	625.900	0.000	900.000	626.000	0.000	1000.000	627.700
BT	0.000	1100.000	631.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	120.000
GR	620.700	122.000	620.500	126.000	620.700	130.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
X1	110.050	14.000	112.000	143.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	123.000
GR	621.100	124.000	620.700	126.000	621.100	128.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
X1	110.100	0.000	0.000	0.000	160.000	160.000	160.000	0.000	.400	0.000
X1	110.200	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.180	.250	.250	.370	.250	0.000	0.000	0.000	0.000
X1	110.980	14.000	112.000	143.000	180.000	180.000	180.000	0.000	1.700	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	626.200	626.200	0.000
GR	628.800	0.000	628.300	42.000	624.900	112.000	624.400	116.000	621.800	120.000
GR	620.700	122.000	620.500	126.000	620.700	130.000	622.800	134.000	625.000	143.000
GR	625.800	182.000	626.200	200.000	628.900	241.000	629.200	260.000	0.000	0.000
SB	0.000	1.700	2.900	0.000	3.140	0.000	12.570	0.000	622.200	622.200
X1	111.020	18.000	167.000	207.000	38.000	38.000	38.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	626.200	629.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	629.300	629.300	0.000
BT	23.000	0.000	632.000	0.000	100.000	632.000	0.000	200.000	631.300	0.000
BT	300.000	630.100	0.000	350.000	629.600	0.000	362.000	629.500	0.000	386.000
BT	629.300	0.000	396.000	629.300	0.000	398.000	629.300	0.000	398.200	629.300
BT	0.000	398.800	629.300	0.000	400.000	629.300	0.000	401.200	629.300	0.000
BT	401.800	629.300	0.000	402.000	629.300	0.000	403.000	629.300	0.000	410.000
BT	629.400	0.000	420.000	629.500	0.000	443.000	629.600	0.000	458.000	629.700
BT	0.000	500.000	630.100	0.000	600.000	631.600	0.000	680.000	631.700	0.000
GR	632.100	0.000	630.800	63.000	629.600	78.000	628.100	167.000	626.800	178.000
GR	623.400	180.000	623.000	181.000	622.200	183.000	622.200	192.000	622.200	193.000
GR	623.300	194.000	623.500	197.000	626.600	207.000	627.300	245.000	628.700	299.000
GR	630.600	335.000	632.600	349.000	632.800	400.000	0.000	0.000	0.000	0.000
X1	111.100	18.000	167.000	207.000	50.000	50.000	50.000	0.000	0.000	0.000

GR	632.100	0.000	630.800	63.000	629.600	78.000	628.100	167.000	626.800	178.000
GR	623.400	187.000	623.000	190.000	622.300	191.000	622.400	192.000	622.400	193.000
GR	623.300	194.000	623.500	197.000	626.600	207.000	627.000	245.000	628.700	299.000
GR	630.600	335.000	632.600	349.000	632.800	400.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	111.200	11.000	140.000	173.000	510.000	510.000	510.000	0.000	0.000	0.000
GR	629.200	0.000	627.600	140.000	625.900	146.000	624.900	148.000	624.400	153.000
GR	624.500	162.000	624.900	165.000	625.200	167.000	627.700	173.000	629.900	300.000
GR	631.800	340.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	111.280	11.000	140.000	173.000	142.000	142.000	142.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	626.300	626.300	0.000
GR	629.200	0.000	627.600	140.000	625.900	146.000	624.900	148.000	624.300	153.000
GR	624.300	162.000	624.900	165.000	625.200	167.000	627.700	173.000	629.900	300.000
GR	631.800	340.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.300	2.700	0.000	2.440	0.000	4.880	0.000	624.300	624.300
X1	111.320	12.000	194.000	236.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	626.300	627.800	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	627.800	627.800	0.000
BT	20.000	0.000	630.900	0.000	90.000	629.000	0.000	100.000	628.800	0.000
BT	134.000	628.000	0.000	139.000	627.900	0.000	143.000	627.800	0.000	143.500
BT	627.800	0.000	143.600	627.800	0.000	144.100	627.800	0.000	145.000	627.800
BT	0.000	145.900	627.800	0.000	146.400	627.800	0.000	146.500	627.800	0.000
BT	147.000	627.800	0.000	150.000	627.800	0.000	161.000	627.900	0.000	195.000
BT	628.000	0.000	200.000	628.000	0.000	230.000	628.200	0.000	340.000	631.900
BT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	631.000	0.000	629.000	89.000	627.000	194.000	625.900	200.000	624.300	205.000
GR	624.300	209.000	624.300	214.000	624.300	218.000	625.100	225.000	626.600	236.000
GR	628.900	300.000	630.000	340.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	111.400	12.000	194.000	236.000	42.000	42.000	42.000	0.000	0.000	0.000
GR	631.000	0.000	629.000	89.000	627.000	194.000	625.900	200.000	624.100	204.000
GR	624.400	209.000	624.200	214.000	624.300	221.000	625.100	225.000	626.600	236.000
GR	628.900	300.000	630.000	340.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	112.000	10.000	200.000	228.000	640.000	640.000	640.000	0.000	0.000	0.000
GR	632.600	0.000	629.500	100.000	627.200	200.000	625.600	207.000	624.700	210.000
GR	624.700	222.000	627.700	228.000	628.200	248.000	629.300	327.000	630.200	400.000
X1	112.100	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000
X5	-5.000	.010	.020	.020	.020	.020	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1.21	3.50	597.30	0.00	597.30	597.36	.06	0.00	0.00	595.00
515.	387.	101.	27.	303.	29.	34.	0.	0.	595.00
0.00	1.28	3.48	.79	.080	.040	.080	0.000	593.80	1170.25
.002204	0.	0.	0.	0	0	1	0.00	250.25	1420.50
1.33	4.49	598.49	0.00	0.00	598.63	.15	1.25	.03	596.00
515.	203.	232.	50.	141.	55.	47.	3.	2.	597.00
.05	1.65	4.25	1.07	.080	.040	.080	.040	594.00	1095.28
.003602	450.	450.	450.	3	0	1	0.00	164.43	1259.72
1.34	5.38	599.88	0.00	0.00	600.06	.18	1.42	.01	598.00
515.	71.	305.	139.	61.	70.	117.	6.	4.	598.00
.09	1.16	4.35	1.19	.080	.040	.080	.040	594.50	1161.70
.002790	450.	450.	450.	2	0	1	0.00	166.59	1328.30

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 605.00 ELREA= 605.00

1.35	5.72	600.72	0.00	0.00	600.95	.23	.87	.01	599.00
515.	0.	515.	0.	0.	134.	0.	7.	5.	600.00
.11	0.00	3.85	0.00	.080	.040	.080	.040	595.00	1200.00
.002252	350.	350.	350.	2	0	1	0.00	40.00	1254.40

CCHV= .200 CEHV= .400
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 606.00 ELREA= 606.00

1.38	3.64	600.84	600.84	0.00	602.68	1.84	.24	0.00	597.20
515.	0.	515.	0.	0.	47.	0.	7.	5.	597.20
.11	0.00	10.89	0.00	.080	.040	.080	.040	597.20	1218.00
.016126	50.	50.	50.	30	14	1	0.00	13.00	1231.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.90	2.70	300.00	12.85	0.00	36.00	0.00	597.20	597.20

3280 CROSS SECTION 1.42 EXTENDED 3.37 FEET

3301 HV CHANGED MORE THAN HVINS

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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
609.74	602.92	0.00	0.	515.	36.	600.00	610.30	10.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 610.30 ELREA= 610.30

1.42	12.37	609.57	0.00	0.00	609.74	.16	7.06	0.00	597.20
515.	0.	515.	0.	0.	158.	0.	8.	5.	600.00
.12	0.00	3.26	0.00	.080	.040	.080	.040	597.20	141.00
.000604	116.	116.	116.	2	0	1	0.00	13.00	154.00

3280 CROSS SECTION 15.75 EXTENDED 5.77 FEET

15.75	12.57	609.77	0.00	0.00	609.77	.00	.00	.03	599.40
515.	233.	148.	134.	992.	273.	635.	10.	5.	600.00
.21	.23	.54	.21	.080	.040	.080	.040	597.20	22.00
.000008	100.	100.	100.	2	0	1	0.00	215.00	237.00

CCHV= .100 CEHV= .300
3280 CROSS SECTION 18.00 EXTENDED 4.07 FEET

18.00	11.97	609.77	0.00	0.00	609.78	.00	.00	.00	600.80
515.	203.	81.	231.	948.	279.	1013.	34.	8.	601.30
.82	.21	.29	.23	.050	.045	.050	.041	597.80	0.00
.000004	510.	510.	510.	2	0	1	0.00	282.00	282.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 100.98 EXTENDED 4.07 FEET

100.98	11.77	609.77	0.00	0.00	609.78	.00	.00	.00	600.80
515.	202.	83.	230.	948.	285.	1013.	39.	9.	601.30
.94	.21	.29	.23	.050	.045	.050	.041	598.00	0.00
.000004	100.	100.	100.	2	0	1	0.00	282.00	282.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	0.00	3.14	0.00	12.57	0.00	598.00	598.00

3280 CROSS SECTION 101.02 EXTENDED 1.01 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
651.48	609.78	0.00	500.	15.	13.	602.00	603.30	30.00

101.02	11.81	609.81	0.00	0.00	609.81	.00	.03	0.00	602.30
515.	178.	126.	211.	659.	302.	833.	41.	9.	604.00
.97	.27	.42	.25	.050	.045	.050	.041	598.00	0.00
.000008	30.	30.	30.	0	0	7	0.00	329.00	329.00

3280 CROSS SECTION 101.21 EXTENDED 1.01 FEET

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	HTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
101.21	11.61	609.81	0.00	0.00	609.81	.00	.00	.00	602.30
515.	182.	115.	217.	659.	279.	833.	45.	10.	604.00
1.06	.28	.41	.26	.050	.045	.050	.041	598.20	0.00
.000009	100.	100.	100.	2	0	1	0.00	329.00	329.00
CCHV=	.150	CEHV=	.350						
101.90	11.01	609.81	0.00	0.00	609.81	.00	.00	.00	602.60
515.	278.	147.	90.	692.	243.	294.	56.	12.	604.40
1.27	.40	.61	.31	.050	.045	.050	.042	598.80	41.60
.000020	330.	330.	330.	2	0	1	0.00	264.66	306.26
WATER EL=X5		CARD=	609.861						
101.95	11.06	609.86	0.00	0.00	609.86	.00	.00	.00	602.60
515.	278.	146.	91.	699.	244.	298.	56.	12.	604.40
1.27	.40	.60	.30	.050	.045	.050	.042	598.80	41.18
.000019	1.	1.	1.	0	0	1	0.00	265.52	306.69
102.00	10.96	609.86	0.00	0.00	609.87	.00	.00	.00	602.70
515.	278.	148.	89.	685.	241.	289.	58.	12.	604.50
1.30	.41	.61	.31	.050	.045	.050	.042	598.90	42.02
.000020	49.	49.	49.	2	0	1	0.00	263.82	305.84
CCHV=	.200	CEHV=	.400						
102.26	10.47	609.87	0.00	0.00	609.87	.00	.00	.00	602.70

515.	276.	150.	89.	685.	245.	290.	63.	13.	604.50
1.42	.40	.61	.31	.050	.045	.050	.042	599.40	41.99
.000020	194.	194.	194.	2	0	1	0.00	263.88	305.87

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.80	250.00	3.14	0.00	12.57	0.00	599.40	599.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
651.57	609.87	0.00	501.	16.	13.	603.40	603.90	30.00

102.28	10.50	609.90	0.00	0.00	609.90	.00	.03	0.00	603.40
515.	258.	179.	78.	594.	254.	240.	63.	13.	605.10
1.42	.44	.71	.32	.050	.045	.050	.042	599.40	46.76
.000027	12.	12.	12.	0	0	6	0.00	254.24	301.01
102.50	10.40	609.90	0.00	0.00	609.91	.00	.00	.00	603.40
515.	272.	161.	82.	593.	226.	240.	66.	14.	605.10
1.47	.46	.71	.34	.050	.045	.050	.042	599.50	46.78
.000030	94.	94.	94.	2	0	1	0.00	254.21	300.99

CCHV= .400 CEHV= .800

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	WIN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
102.98	10.10	609.90	0.00	0.00	609.91	.00	.00	.00	603.40
515.	261.	175.	79.	594.	248.	240.	67.	14.	605.10
1.51	.44	.71	.33	.050	.045	.050	.042	599.80	46.76
.000028	70.	70.	70.	2	0	1	0.00	254.25	301.01

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.80	250.00	3.14	0.00	12.57	0.00	599.80	599.80

3280 CROSS SECTION 103.02 EXTENDED .78 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
654.22	609.91	0.00	482.	32.	13.	603.80	609.20	30.00

103.02	10.28	610.08	0.00	0.00	610.08	.00	.17	0.00	604.70
515.	280.	174.	61.	708.	257.	195.	69.	15.	604.10
1.55	.39	.68	.31	.050	.045	.050	.042	599.80	0.00
.000026	59.	59.	59.	0	0	8	0.00	280.30	280.30

3280 CROSS SECTION 103.29 EXTENDED .78 FEET

103.29	9.98	610.08	0.00	0.00	610.08	.00	.00	.00	604.70
515.	292.	159.	64.	708.	235.	195.	70.	15.	604.10
1.58	.41	.68	.33	.050	.045	.050	.042	600.10	0.00
.000028	50.	50.	50.	2	0	1	0.00	280.28	280.28

CCHV= .150 CEHV= .350
3280 CROSS SECTION 104.00 EXTENDED 1.59 FEET

104.00	8.39	610.09	0.00	0.00	610.10	.01	.02	.00	606.50
515.	341.	171.	4.	735.	219.	22.	79.	17.	608.70
1.76	.46	.78	.16	.060	.050	.060	.043	601.70	0.00
.000072	370.	370.	370.	2	0	1	0.00	299.80	299.80

3280 CROSS SECTION 104.50 EXTENDED 1.71 FEET

104.50	8.51	610.11	0.00	0.00	610.12	.00	.02	.00	606.40
515.	343.	167.	5.	763.	223.	26.	87.	20.	608.60
1.93	.45	.75	.17	.060	.050	.060	.044	601.60	0.00
.000064	330.	330.	330.	2	0	1	0.00	303.65	303.65

CCHV= .400 CEHV= .800
3280 CROSS SECTION 104.98 EXTENDED 1.61 FEET

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
104.98	8.52	610.12	0.00	0.00	610.13	.01	.01	.00	606.50
515.	327.	184.	4.	740.	237.	23.	89.	20.	608.70
1.97	.44	.78	.16	.060	.050	.060	.044	601.60	0.00
.000065	100.	100.	100.	0	0	1	0.00	300.47	300.47

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.80	2.80	0.00	5.04	0.00	25.20	0.00	601.60	601.60

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS

621.79	610.13	0.00	459.	51.	25.	606.60	607.30	30.00	
105.02	8.62	610.22	0.00	0.00	610.23	.01	.11	0.00	606.20
515.	214.	243.	58.	374.	205.	149.	91.	21.	607.20
2.00	.57	1.19	.39	.060	.050	.060	.044	601.60	31.35
.000140	81.	81.	81.	1	0	8	0.00	282.84	314.20
105.41	8.34	610.24	0.00	0.00	610.25	.01	.02	.00	606.20
515.	235.	217.	63.	375.	178.	150.	92.	22.	607.20
2.03	.63	1.22	.42	.060	.050	.060	.044	601.90	31.18
.000168	100.	100.	100.	2	0	1	0.00	283.31	314.49

CCHV= .150 CEHV= .350

105.48	5.90	610.50	0.00	0.00	610.83	.34	.47	.11	610.20
515.	16.	499.	0.	21.	106.	0.	101.	26.	611.50
2.09	.75	4.73	0.00	.060	.050	.060	.045	604.60	92.13
.006205	950.	950.	950.	4	0	1	0.00	125.81	217.95

CCHV= .400 CEHV= .800

105.98	6.20	611.10	0.00	0.00	611.22	.12	.30	.09	610.20
515.	72.	443.	0.	83.	148.	0.	102.	26.	611.50
2.10	.87	2.99	0.00	.060	.050	.060	.045	604.90	68.07
.001740	100.	100.	100.	2	0	1	0.00	151.65	219.72

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.20	2.90	125.00	3.14	0.00	12.57	0.00	604.90	604.90

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
642.37	611.22	0.00	427.	88.	13.	608.90	610.90	30.00

106.02	7.00	611.90	0.00	0.00	612.02	.12	.80	0.00	613.20
515.	0.	483.	32.	0.	172.	51.	102.	26.	611.00
2.10	0.00	2.82	.62	.060	.050	.060	.045	604.90	82.29
.001324	20.	20.	20.	2	0	7	0.00	139.55	221.84

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
106.53	6.86	612.06	0.00	0.00	612.20	.14	.17	.02	613.20
515.	0.	453.	62.	0.	141.	69.	102.	27.	611.00
2.11	0.00	3.21	.91	.060	.050	.060	.045	605.20	81.99
.002181	100.	100.	100.	2	0	1	0.00	151.63	233.62

CCHV= .150 CEHV= .350

106.58	6.70	614.70	0.00	0.00	614.88	.18	2.66	.01	616.00
515.	0.	474.	41.	0.	134.	51.	107.	31.	613.90
2.20	0.00	3.54	.81	.060	.050	.060	.046	608.00	82.42
.002805	1080.	1080.	1080.	2	0	1	0.00	166.30	248.71
106.59	6.83	616.83	0.00	0.00	616.98	.15	2.10	.00	618.00
515.	0.	458.	57.	0.	139.	70.	111.	34.	615.90
2.28	0.00	3.30	.82	.060	.050	.060	.047	610.00	82.07
.002347	820.	820.	820.	2	0	1	0.00	188.34	270.41

CCHV= .400 CEHV= .800

106.98	6.67	617.07	0.00	0.00	617.14	.07	.13	.03	618.00
450.	0.	431.	19.	0.	194.	45.	111.	34.	616.30
2.29	0.00	2.23	.42	.060	.050	.060	.047	610.40	80.35
.000753	100.	100.	100.	2	0	1	0.00	147.87	228.22

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.70	600.00	7.50	0.00	41.25	0.00	610.40	610.40

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
620.02	617.32	0.00	120.	332.	41.	615.90	618.50	30.00

107.02	8.28	618.68	0.00	0.00	618.68	.00	1.54	0.00	612.90
450.	275.	53.	122.	1246.	141.	617.	112.	35.	613.00
2.33	.22	.38	.20	.060	.050	.060	.047	610.40	175.99
.000012	34.	34.	34.	0	0	5	0.00	599.79	775.77
107.10	7.98	618.68	0.00	0.00	618.68	.00	.00	.00	613.20
450.	277.	52.	121.	1136.	127.	556.	117.	36.	613.30
2.44	.24	.41	.22	.065	.055	.065	.047	610.70	188.46
.000019	100.	100.	100.	2	0	1	0.00	578.50	766.97

CCHV= .100 CEHV= .300

1490 NH CARD USED

108.00	5.71	618.71	0.00	0.00	618.72	.01	.04	.00	615.50
450.	260.	108.	82.	458.	86.	181.	143.	46.	615.60
2.79	.57	1.25	.45	.076	.055	.072	.048	613.00	314.34
.000279	890.	890.	890.	2	0	1	0.00	386.05	700.39

CCHV= .150 CEHV= .350

SECNO	DEPTH	CWSEL	CRTWS	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

109.00	3.47	620.17	0.00	0.00	620.26	.09	1.51	.03	619.80
450.	3.	205.	242.	6.	64.	174.	169.	65.	619.30
3.08	.56	3.22	1.39	.045	.040	.045	.046	616.70	336.52
.002752	2350.	2350.	2350.	3	0	1	0.00	318.82	655.33
109.05	3.63	620.93	0.00	0.00	621.04	.12	.77	.01	619.80
450.	186.	220.	44.	140.	60.	38.	170.	67.	619.80
3.12	1.33	3.67	1.16	.045	.040	.045	.046	617.30	654.30
.002429	300.	300.	300.	2	0	1	0.00	305.15	959.45
109.10	4.39	623.89	0.00	0.00	624.06	.17	2.99	.02	622.50
450.	31.	312.	106.	23.	82.	71.	176.	74.	622.50
3.22	1.37	3.82	1.50	.045	.040	.045	.045	619.50	724.07
.002744	1160.	1160.	1160.	4	0	1	0.00	181.07	905.14

CCHV= .400 CEHV= .800

109.98	3.73	624.23	0.00	0.00	624.31	.09	.23	.03	622.50
450.	47.	258.	145.	42.	87.	112.	177.	74.	622.50
3.23	1.12	2.96	1.29	.045	.040	.045	.045	620.50	701.31
.001486	115.	115.	115.	2	0	1	0.00	233.80	935.11

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BHP	BAREA	SS	ELCHU	ELCHD
	0.00	1.90	3.00	0.00	5.34	0.00	17.10	0.00	620.50	620.50

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
644.66	625.32	0.00	300.	152.	17.	623.80	625.90	30.00

110.02	5.93	626.43	0.00	0.00	626.56	.13	2.24	0.00	624.90
450.	24.	373.	54.	24.	119.	48.	177.	74.	625.00
3.24	.99	3.14	1.11	.045	.040	.045	.045	620.50	80.56
.001285	72.	72.	72.	2	0	9	0.00	122.89	203.45
110.05	5.79	626.49	0.00	0.00	626.63	.14	.07	.00	624.90
450.	29.	356.	65.	26.	109.	52.	177.	75.	625.00
3.25	1.11	3.27	1.26	.045	.040	.045	.045	620.70	79.28
.001526	50.	50.	50.	2	0	1	0.00	125.11	204.39
110.10	5.66	626.76	0.00	0.00	626.92	.16	.27	.02	625.30
450.	25.	369.	56.	22.	105.	44.	178.	75.	625.40
3.26	1.15	3.51	1.28	.045	.040	.045	.045	621.10	81.99
.001857	160.	160.	160.	2	0	1	0.00	120.40	202.39

WATER EL=X5 CARD= 627.009

SECNO	DEPTH	CHSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA

SLOPE	XLOBL	YLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
110.20	5.91	627.01	0.00	0.00	627.13	.12	.00	.02	625.30
450.	32.	345.	73.	30.	113.	59.	178.	75.	625.40
3.26	1.06	3.06	1.23	.045	.040	.045	.045	621.10	76.82
.001282	1.	1.	1.	0	0	1	0.00	129.38	206.20
110.98	5.14	627.34	0.00	0.00	627.66	.32	.37	.16	626.60
450.	6.	435.	9.	6.	94.	10.	178.	75.	626.70
3.27	1.04	4.61	.95	.045	.040	.045	.045	622.20	96.80
.003767	180.	180.	180.	2	0	1	0.00	77.31	174.12

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.90	0.00	3.14	0.00	12.57	0.00	622.20	622.20

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
561.17	627.60	0.00	318.	133.	13.	626.20	629.30	30.00

111.02	8.09	630.29	0.00	0.00	630.30	.01	2.65	0.00	628.10
450.	50.	230.	170.	132.	226.	289.	179.	76.	626.60
3.29	.38	1.02	.59	.045	.040	.045	.045	622.20	69.28
.000083	38.	38.	38.	1	0	9	0.00	259.99	329.27
111.10	8.00	630.30	0.00	0.00	630.31	.01	.00	.00	628.10
450.	54.	213.	183.	132.	203.	289.	179.	76.	626.60
3.30	.41	1.05	.63	.045	.040	.045	.045	622.30	69.30
.000096	50.	50.	50.	2	0	1	0.00	259.95	329.24

CCHV= .150 CEHV= .350
3280 CROSS SECTION 111.20 EXTENDED 1.14 FEET

111.20	5.95	630.35	0.00	0.00	630.36	.01	.06	.00	627.60
450.	157.	195.	98.	272.	164.	198.	187.	79.	627.70
3.47	.58	1.19	.49	.045	.040	.045	.045	624.40	0.00
.000127	510.	510.	510.	2	0	1	0.00	309.35	309.35

CCHV= .400 CEHV= .800
3280 CROSS SECTION 111.28 EXTENDED 1.17 FEET

111.28	6.07	630.37	0.00	0.00	630.38	.01	.02	.00	627.60
450.	156.	196.	98.	276.	167.	202.	189.	80.	627.70
3.52	.57	1.18	.49	.045	.040	.045	.045	624.30	0.00
.000121	142.	142.	142.	2	0	1	0.00	309.88	309.88

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.30	2.70	0.00	2.44	0.00	4.88	0.00	624.30	624.30

3280 CROSS SECTION 111.32 EXTENDED .43 FEET

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

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
802.02	630.38	0.00	438.	9.	5.	626.30	627.80	30.00

111.32	6.13	630.43	0.00	0.00	630.43	.01	.05	0.00	627.00
450.	139.	208.	103.	301.	221.	211.	189.	80.	626.60
3.53	.46	.94	.49	.045	.040	.045	.045	624.30	25.20
.000071	16.	16.	16.	0	0	10	0.00	314.80	340.00

3280 CROSS SECTION 111.40 EXTENDED .43 FEET

111.40	6.33	630.43	0.00	0.00	630.44	.01	.00	.00	627.00
450.	138.	210.	102.	300.	224.	211.	190.	81.	626.60
3.55	.46	.94	.49	.045	.040	.045	.045	624.10	25.44
.000070	42.	42.	42.	2	0	1	0.00	314.56	340.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 112.00 EXTENDED .29 FEET

112.00	5.79	630.49	0.00	0.00	630.50	.01	.06	.00	627.20
450.	143.	176.	132.	229.	140.	242.	200.	85.	627.70
3.76	.62	1.26	.55	.045	.040	.045	.044	624.70	68.19
.000141	640.	640.	640.	2	0	1	0.00	331.81	400.00

WATER EL=X5 CARD= 630.507
3280 CROSS SECTION 112.10 EXTENDED .31 FEET

112.10	5.81	630.51	0.00	0.00	630.52	.01	.00	.00	627.20
450.	143.	174.	133.	232.	140.	245.	200.	85.	627.70
3.76	.62	1.24	.54	.045	.040	.045	.044	624.70	67.51
.000137	1.	1.	1.	0	0	1	0.00	332.49	400.00

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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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TI   HUD-FIA H-4705
T2   BEDFORD TWP FIS
T3   BRAGDEN DITCH  100 YEAR FLOW = 515 CFS  ENCROACHMENT OPTION

J1   ICHECK    INQ       NINV      IDIP      STRT      METRIC    HVINS     Q         WSEL      FQ

      -1.        6.        0.        0.  0.000000      0.00       1.0        0.   597.300     0.000

J2   NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     15.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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CCHV=    .100 CEHV=    .300
 2800 NAT Q1=     109.69  WSEL=     597.30  ENC Q1=     109.69  WSEL=     597.40  RATIO=    .0000
 NAT Q1=     120.  RATIOS LOB,CH,ROB=    .7525   .1894   .0581  WSEL=     597.40
   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


3470 ENCROACHMENT STATIONS=     1200.3     1369.3  TYPE=      4  TARGET=          .087
     1.21      3.50    597.30      0.00    597.30    597.37       .07      0.00      0.00    595.00
     515.      395.      108.       12.      283.      29.         8.        0.        0.     595.00
     0.00      1.40      3.71      1.44      .080      .040       .080     0.000    593.80   1200.29
  .002504        0.        0.        0.         0         0          1      0.00    169.03   1369.33


 2800 NAT Q1=      85.80  WSEL=     598.49  ENC Q1=      85.80  WSEL=     598.59  RATIO=    .0000
 NAT Q1=      93.  RATIOS LOB,CH,ROB=    .4546   .4398   .1056  WSEL=     598.59

3470 ENCROACHMENT STATIONS=     1121.6     1233.4  TYPE=      4  TARGET=          .082
     1.33      4.57    598.57      0.00    598.49    598.72       .16      1.33       .03    596.00
     515.      229.      241.       45.      129.      56.        35.         3.        1.     597.00
      .04      1.78      4.28      1.28      .080      .040       .080      .040    594.00   1121.62
  .003532      450.      450.      450.         2         0          1      0.00    111.77   1233.39


 2800 NAT Q1=      97.50  WSEL=     599.88  ENC Q1=      97.50  WSEL=     599.98  RATIO=    .0000
 NAT Q1=     105.  RATIOS LOB,CH,ROB=    .1441   .5755   .2804  WSEL=     599.98

3470 ENCROACHMENT STATIONS=     1183.2     1306.8  TYPE=      4  TARGET=          .072
     1.34      5.44    599.94      0.00    599.88    600.14       .19      1.40       .01    598.00
     515.       64.      313.      138.       49.       71.       108.        5.        3.     598.00
      .08      1.31      4.38      1.28      .080      .040       .080      .040    594.50   1183.17
  .002767      450.      450.      450.         2         0          1      0.00    123.65   1306.83


 2800 NAT Q1=     108.53  WSEL=     600.72  ENC Q1=     114.12  WSEL=     600.82  RATIO=   -.0515
 NAT Q1=     114.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     600.82

3470 ENCROACHMENT STATIONS=     1200.0     1240.0  TYPE=      4  TARGET=          0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      605.00 ELREA=      605.00

     1.35      5.79    600.79      0.00    600.72    601.01       .22       .86       .01    599.00
     515.        0.      515.        0.        0.      136.         0.        7.        3.     600.00
      .11      0.00      3.78      0.00      .080      .040       .080      .040    595.00   1200.00
  .002215      350.      350.      350.         2         0          1      0.00     40.00   1240.00


CCHV=    .200 CEHV=    .400
 2800 NAT Q1=      40.55  WSEL=     600.84  ENC Q1=      42.37  WSEL=     600.94  RATIO=   -.0448
 NAT Q1=      42.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     600.94
3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY
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3720 ASSUMED CRITICAL DEPTH

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

3470 ENCROACHMENT STATIONS= 1218.0 1231.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 606.00 ELREA= 606.00

1.38	3.64	600.84	600.84	600.84	602.68	1.84	.25	0.00	597.20
515.	0.	515.	0.	0.	47.	0.	7.	3.	597.20
.11	0.00	10.89	0.00	.080	.040	.080	.040	597.20	1218.00
.021314	50.	50.	50.	30	14	1	0.00	13.00	1231.00

SPECIAL BRIDGE

SB	XK	XKOR	COPQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.80	2.70	300.00	12.85	0.00	36.00	0.00	597.20	597.20

PRESS FLOW BECAUSE EGLWC OF 609.83 EXCEEDS 1.5 DEPTH
2800 NAT Q1= 209.53 WSEL= 609.57 ENC Q1= 211.84 WSEL= 609.67 RATIO= -.0110
NAT Q1= 212. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 609.67
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION 1.42 EXTENDED 3.37 FEET

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

3470 ENCROACHMENT STATIONS= 141.0 154.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 610.30 ELREA= 610.30

1.42	12.37	609.57	0.00	609.57	609.74	.16	.24	.34	597.20
515.	0.	515.	0.	0.	158.	0.	7.	3.	600.00
.12	0.00	3.26	0.00	.080	.040	.080	.040	597.20	141.00
.000723	116.	116.	116.	0	0	1	0.00	13.00	154.00

2800 NAT Q1= 1776.61 WSEL= 609.77 ENC Q1= 1776.61 WSEL= 609.87 RATIO= .0000
NAT Q1= 1808. RATIOS LOB,CH,ROB= .4522 .2869 .2609 WSEL= 609.87
3280 CROSS SECTION 15.75 EXTENDED 5.77 FEET

3470 ENCROACHMENT STATIONS= 25.6 233.9 TYPE= 4 TARGET= .018

15.75	12.57	609.77	0.00	609.77	609.77	.00	.00	.03	599.40
515.	233.	150.	132.	971.	273.	617.	9.	4.	600.00
.21	.24	.55	.21	.080	.040	.080	.040	597.20	25.62
.000009	100.	100.	100.	2	0	1	0.00	208.24	233.86

```
CCHV=    .100 CEHV=    .300
 2800 NAT Q1=   2728.37  WSEL=    609.77  ENC Q1=   2728.37  WSEL=    609.87  RATIO=   .0000
 NAT Q1=   2784.  RATIOS LOB,CH,ROB=   .3941   .1566   .4493  WSEL=    609.87
3280 CROSS SECTION     18.00 EXTENDED      4.07 FEET


3470 ENCROACHMENT STATIONS=       6.0     277.6  TYPE=     4  TARGET=        .020
    18.00    11.97   609.77     0.00   609.77   609.78      .00      .00      .00   600.80
     515.     204.     81.     230.     931.     279.     993.      33.       6.    601.30
      .81      .22      .29      .23     .050     .045     .050     .041   597.80     5.98
  .000004     510.     510.     510.        2        0        1     0.00   271.66   277.64

CCHV=    .400 CEHV=    .800
 2800 NAT Q1=   2742.04  WSEL=    609.77  ENC Q1=   2742.04  WSEL=    609.87  RATIO=   .0000
 NAT Q1=   2798.  RATIOS LOB,CH,ROB=   .3922   .1607   .4471  WSEL=    609.87
3280 CROSS SECTION    100.98 EXTENDED      4.07 FEET


3470 ENCROACHMENT STATIONS=       6.0     277.6  TYPE=     4  TARGET=        .020
   100.98    11.77   609.77     0.00   609.77   609.78      .00      .00      .00   600.80
     515.     203.     84.     229.     931.     285.     993.      38.       7.    601.30
      .92      .22      .29      .23     .050     .045     .050     .041   598.00     5.98
  .000004     100.     100.     100.        2        0        1     0.00   271.65   277.63


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.60      2.80      0.00      3.14      0.00     12.57      0.00    598.00    598.00

 2800 NAT Q1=   1771.15  WSEL=    609.81  ENC Q1=   1771.15  WSEL=    609.91  RATIO=   .0000
 NAT Q1=   1821.  RATIOS LOB,CH,ROB=   .3456   .2421   .4122  WSEL=    609.91
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    101.02 EXTENDED      1.01 FEET

   SECNO     DEPTH     CHSEL     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=      14.9     315.6  TYPE=     4  TARGET=        .027
   101.02    11.81   609.81     0.00   609.81   609.81      .00      .00      .00   602.30
     515.     177.     127.     211.     632.     302.     809.      39.       7.    604.00
      .95      .28      .42      .26     .050     .045     .050     .041   598.00    14.92
  .000009      30.      30.      30.        0        0        7     0.00   300.67   315.59


 2800 NAT Q1=   1723.84  WSEL=    609.81  ENC Q1=   1723.84  WSEL=    609.91  RATIO=   .0000
 NAT Q1=   1774.  RATIOS LOB,CH,ROB=   .3548   .2219   .4233  WSEL=    609.91
3280 CROSS SECTION    101.21 EXTENDED      1.01 FEET
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3470 ENCROACHMENT STATIONS=      15.1      315.5  TYPE=      4  TARGET=         .028
   101.21     11.61    609.81     0.00    609.81    609.81      .00       .00       .00    602.30
      515.      182.      117.      217.      631.      279.      808.       43.        8.     604.00
     1.04       .29       .42       .27       .050      .045      .050      .041    598.20     15.05
  .000009      100.      100.      100.         2         0         1      0.00    300.42    315.47


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=    1161.75  WSEL=     609.81  ENC Q1=    1161.75  WSEL=     609.91  RATIO=    .0000
 NAT Q1=    1197.  RATIOS LOB,CH,ROB=    .5403    .2820    .1777  WSEL=     609.91

3470 ENCROACHMENT STATIONS=      62.7      284.0  TYPE=      4  TARGET=         .030
   101.90     11.01    609.81     0.00    609.81    609.81      .00       .00       .00    602.60
      515.      279.      149.       87.      666.      243.      266.       54.       10.     604.40
     1.24       .42       .62       .33       .050      .045      .050      .042    598.80     62.71
  .000020      330.      330.      330.         2         0         1      0.00    221.33    284.04


 WATER EL=X5 CARD=    609.861
 2800 NAT Q1=    1179.54  WSEL=     609.86  ENC Q1=    1179.54  WSEL=     609.96  RATIO=  0.0000
 NAT Q1=    1216.  RATIOS LOB,CH,ROB=    .5406    .2804    .1790  WSEL=     609.96

3470 ENCROACHMENT STATIONS=      62.5      284.2  TYPE=      4  TARGET=         .030
   101.95     11.16    609.96     0.00    609.86    609.96      .00       .00       .00    602.60
      515.      279.      147.       89.      686.      247.      277.       54.       10.     604.40
     1.24       .41       .60       .32       .050      .045      .050      .042    598.80     62.50
  .000019        1.        1.        1.         0         0         1      0.00    221.71    284.21


 2800 NAT Q1=    1144.38  WSEL=     609.86  ENC Q1=    1144.38  WSEL=     609.96  RATIO=    .0000
 NAT Q1=    1180.  RATIOS LOB,CH,ROB=    .5400    .2837    .1763  WSEL=     609.96

3470 ENCROACHMENT STATIONS=      62.9      283.9  TYPE=      4  TARGET=         .030
   102.00     11.06    609.96     0.00    609.86    609.97      .00       .00       .00    602.70
      515.      279.      148.       88.      672.      244.      269.       56.       10.     604.50
     1.27       .41       .61       .33       .050      .045      .050      .042    598.90     62.92
  .000020       49.       49.       49.         2         0         1      0.00    220.94    283.86


CCHV=     .200 CEHV=     .400
 2800 NAT Q1=    1152.00  WSEL=     609.87  ENC Q1=    1152.00  WSEL=     609.97  RATIO=    .0000
 NAT Q1=    1189.  RATIOS LOB,CH,ROB=    .5372    .2873    .1755  WSEL=     609.97
   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


3470 ENCROACHMENT STATIONS=      62.9      283.9  TYPE=      4  TARGET=         .030
   102.26     10.57    609.97     0.00    609.87    609.97      .00       .00       .00    602.70
      515.      277.      150.       87.      673.      247.      269.       61.       11.     604.50
     1.39       .41       .61       .32       .050      .045      .050      .042    599.40     62.90
  .000019      194.      194.      194.         2         0         1      0.00    220.97    283.87


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.60        2.80      250.00        3.14        0.00       12.57        0.00      599.40      599.40
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 2800 NAT Q1=    990.47  WSEL=    609.90  ENC Q1=    990.47  WSEL=    610.00  RATIO=   .0000
 NAT Q1=   1021.  RATIOS LOB,CH,ROB=   .5031   .3428   .1541  WSEL=    610.00
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=      65.4     282.0  TYPE=      4  TARGET=         .030
   102.28    10.60   610.00     0.00   609.90   610.00      .00      .00      .00   603.40
      515.     259.     178.      77.     587.     256.     227.      61.      11.    605.10
     1.40      .44      .70      .34     .050     .045     .050     .042   599.40    65.40
  .000026      12.      12.      12.        0        0        6     0.00   216.64   282.04


 2800 NAT Q1=    939.58  WSEL=    609.90  ENC Q1=    939.58  WSEL=    610.00  RATIO=  0.0000
 NAT Q1=    972.  RATIOS LOB,CH,ROB=   .5293   .3084   .1622  WSEL=    610.00

3470 ENCROACHMENT STATIONS=      65.7     281.8  TYPE=      4  TARGET=         .033
   102.50    10.50   610.00     0.00   609.90   610.01      .00      .00      .00   603.40
      515.     273.     161.      81.     586.     228.     227.      64.      12.    605.10
     1.45      .47      .70      .36     .050     .045     .050     .042   599.50    65.74
  .000029      94.      94.      94.        2        0        1     0.00   216.03   281.77


CCHV=    .400 CEHV=    .800
 2800 NAT Q1=    979.67  WSEL=    609.90  ENC Q1=    979.67  WSEL=    610.00  RATIO=   .0000
 NAT Q1=   1012.  RATIOS LOB,CH,ROB=   .5087   .3354   .1559  WSEL=    610.00

3470 ENCROACHMENT STATIONS=      65.8     281.7  TYPE=      4  TARGET=         .032
   102.98    10.20   610.00     0.00   609.90   610.01      .00      .00      .00   603.40
      515.     262.     175.      78.     586.     251.     227.      65.      12.    605.10
     1.48      .45      .70      .35     .050     .045     .050     .042   599.80    65.78
  .000026      70.      70.      70.        2        0        1     0.00   215.96   281.74


SPECIAL BRIDGE

SB  XK        XKOR      COPQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.00      1.70      2.80    250.00      3.14      0.00     12.57      0.00    599.80    599.80

 2800 NAT Q1=   1012.09  WSEL=    610.08  ENC Q1=   1012.09  WSEL=    610.18  RATIO=   .0000
 NAT Q1=   1045.  RATIOS LOB,CH,ROB=   .5462   .3339   .1199  WSEL=    610.18
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    103.02 EXTENDED       .88 FEET

   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


3470 ENCROACHMENT STATIONS=      18.8     272.6  TYPE=      4  TARGET=         .032
   103.02    10.38   610.18     0.00   610.08   610.18      .00      .00      .00   604.70
      515.     278.     172.      66.     702.     260.     198.      67.      12.    604.10
     1.52      .40      .66      .33     .050     .045     .050     .042   599.80    18.82
  .000024      59.      59.      59.        0        0        8     0.00   253.82   272.63


 2800 NAT Q1=    966.59  WSEL=    610.08  ENC Q1=    966.59  WSEL=    610.18  RATIO=   .0000
 NAT Q1=   1001.  RATIOS LOB,CH,ROB=   .5708   .3039   .1253  WSEL=    610.18
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3280 CROSS SECTION     103.29 EXTENDED        .88 FEET


3470 ENCROACHMENT STATIONS=        19.4       272.4  TYPE=      4  TARGET=          .034
   103.29      10.08    610.18       0.00    610.08    610.18       .00       .00       .00    604.70
      515.       290.       156.       69.       701.       238.       198.       68.       13.    604.10
     1.55        .41        .66        .35       .050       .045       .050       .042   600.10    19.37
  .000026       50.        50.        50.          2          0          1       0.00   253.01    272.38


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     608.12  WSEL=     610.09  ENC Q1=     608.12  WSEL=     610.19  RATIO=    .0000
 NAT Q1=     636.  RATIOS LOB,CH,ROB=    .6655    .3260    .0085  WSEL=     610.19
3280 CROSS SECTION     104.00 EXTENDED       1.69 FEET


3470 ENCROACHMENT STATIONS=        23.1       268.0  TYPE=      4  TARGET=          .044
   104.00       8.49    610.19       0.00    610.09    610.20       .01       .02       .00    606.50
      515.       344.       171.        0.       712.       222.        0.        77.       15.    608.70
     1.72        .48        .77       0.00      .060       .050       .060       .043   601.70    23.09
  .000072       370.       370.       370.          2          0          1       0.00   244.91    268.00


 2800 NAT Q1=     642.16  WSEL=     610.11  ENC Q1=     642.16  WSEL=     610.21  RATIO=    .0000
 NAT Q1=     670.  RATIOS LOB,CH,ROB=    .6697    .3201    .0102  WSEL=     610.21
3280 CROSS SECTION     104.50 EXTENDED       1.81 FEET


3470 ENCROACHMENT STATIONS=        20.4       268.0  TYPE=      4  TARGET=          .042
   104.50       8.61    610.21       0.00    610.11    610.22       .01       .02       .00    606.40
      515.       348.       167.        0.       744.       227.        0.        84.       17.    608.60
     1.89        .47        .74       0.00      .060       .050       .060       .044   601.60    20.36
  .000064       330.       330.       330.          2          0          1       0.00   247.64    268.00


CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     640.76  WSEL=     610.12  ENC Q1=     640.76  WSEL=     610.22  RATIO=    .0000
 NAT Q1=     670.  RATIOS LOB,CH,ROB=    .6402    .3513    .0085  WSEL=     610.22
3280 CROSS SECTION     104.98 EXTENDED       1.71 FEET


   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


3470 ENCROACHMENT STATIONS=        24.4       268.0  TYPE=      4  TARGET=          .044
   104.98       8.62    610.22       0.00    610.12    610.23       .01       .01       .00    606.50
      515.       330.       185.        0.       714.       241.        0.        86.       17.    608.70
     1.94        .46        .77       0.00      .060       .050       .060       .044   601.60    24.38
  .000065       100.       100.       100.          0          0          1       0.00   243.62    268.00


SPECIAL BRIDGE
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SB  KK          XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00        1.80       2.80       0.00       5.04       0.00      25.20       0.00     601.60     601.60

 2800 NAT Q1=     434.51  WSEL=     610.22  ENC Q1=     434.51  WSEL=     610.32  RATIO=    .0000
 NAT Q1=     454.  RATIOS LOB,CH,ROB=    .4210    .4630    .1160  WSEL=     610.32
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=       64.3      298.7  TYPE=      4  TARGET=          .043
   105.02      8.72    610.32       0.00    610.22    610.33       .01       .01       .01    606.20
      515.      210.       240.       65.       356.       208.       153.       89.       18.    607.20
     1.97       .59       1.16       .43       .060       .050       .060      .044    601.60     64.32
  .000131        81.        81.        81.          0          0          8      0.00    234.33    298.66


 2800 NAT Q1=     397.69  WSEL=     610.24  ENC Q1=     397.69  WSEL=     610.34  RATIO=    .0000
 NAT Q1=     418.  RATIOS LOB,CH,ROB=    .4612    .4113    .1275  WSEL=     610.34

3470 ENCROACHMENT STATIONS=       64.7      298.3  TYPE=      4  TARGET=          .049
   105.41      8.43    610.33       0.00    610.24    610.35       .01       .01       .00    606.20
      515.      230.       214.       72.       357.       181.       154.       90.       18.    607.20
     2.00       .64       1.18       .47       .060       .050       .060      .044    601.90     64.66
  .000155       100.       100.       100.          2          0          1      0.00    233.63    298.29


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=      65.38  WSEL=     610.50  ENC Q1=      66.50  WSEL=     610.60  RATIO=   -.0171
 NAT Q1=      70.  RATIOS LOB,CH,ROB=    .0518    .9482  0.0000  WSEL=     610.60

3470 ENCROACHMENT STATIONS=      183.0      221.0  TYPE=      4  TARGET=          .052
   105.48      5.95    610.55       0.00    610.50    610.91       .36       .44       .12    610.20
      515.         0.      515.         0.         0.      108.         0.      98.       21.    611.50
     2.05       .02       4.79       0.00       .060       .050       .060      .045    604.60    193.00
  .006251       950.       950.       950.          3          0          1      0.00     35.12    218.12


CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     123.46  WSEL=     611.10  ENC Q1=     123.46  WSEL=     611.20  RATIO=  0.0000
 NAT Q1=     131.  RATIOS LOB,CH,ROB=    .1607    .8393  0.0000  WSEL=     611.20

3470 ENCROACHMENT STATIONS=      122.6      221.0  TYPE=      4  TARGET=          .057
   105.98      6.27    611.17       0.00    611.10    611.30       .13       .30       .09    610.20
      515.       56.       459.         0.       56.       151.         0.      99.       21.    611.50
     2.06      1.00       3.05       0.00       .060       .050       .060      .045    604.90    122.59
  .001775       100.       100.       100.          2          0          1      0.00     97.37    219.95


SPECIAL BRIDGE

SB  XK          XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00        1.20       2.90     125.00       3.14       0.00      12.57       0.00     604.90     604.90

 2800 NAT Q1=     141.55  WSEL=     611.90  ENC Q1=     141.55  WSEL=     612.00  RATIO=    .0000
 NAT Q1=     149.  RATIOS LOB,CH,ROB=  0.0000    .9231    .0769  WSEL=     612.00
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   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
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3470 ENCROACHMENT STATIONS=       79.0      152.1  TYPE=      4  TARGET=          .047
   106.02      7.07    611.97      0.00    611.90    612.09       .12       .03       .00    613.20
     515.        0.       493.       22.        0.       174.       27.       99.       21.    611.00
     2.07      0.00      2.83       .81      .060      .050      .060      .045    604.90     82.10
  .001314       20.       20.       20.         0         0         7      0.00     70.03    152.13


 2800 NAT Q1=     110.29  WSEL=     612.06  ENC Q1=     110.29  WSEL=     612.16  RATIO=  0.0000
 NAT Q1=     118.  RATIOS LOB,CH,ROB=  0.0000    .8580    .1420  WSEL=     612.16

3470 ENCROACHMENT STATIONS=       79.0      168.5  TYPE=      4  TARGET=          .062
   106.53      6.93    612.13      0.00    612.06    612.28       .15       .17       .02    613.20
     515.        0.       464.       51.        0.       144.       46.       99.       21.    611.00
     2.07      0.00      3.22       1.11      .060      .050      .060      .045    605.20     81.80
  .002159       100.      100.      100.         2         0         1      0.00     86.75    168.55


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=      97.25  WSEL=     614.70  ENC Q1=      97.25  WSEL=     614.80  RATIO=  0.0000
 NAT Q1=     104.  RATIOS LOB,CH,ROB=  0.0000    .8971    .1029  WSEL=     614.80

3470 ENCROACHMENT STATIONS=       79.0      153.0  TYPE=      4  TARGET=          .065
   106.58      6.76    614.76      0.00    614.70    614.95       .19      2.65       .01    616.00
     515.        0.       488.       27.        0.       136.       25.      104.       23.    613.90
     2.16      0.00      3.58       1.09      .060      .050      .060      .046    608.00     82.26
  .002821      1080.     1080.     1080.         2         0         1      0.00     70.70    152.96


 2800 NAT Q1=     106.31  WSEL=     616.83  ENC Q1=     106.31  WSEL=     616.93  RATIO=  0.0000
 NAT Q1=     114.  RATIOS LOB,CH,ROB=  0.0000    .8643    .1357  WSEL=     616.93

3470 ENCROACHMENT STATIONS=       79.0      168.1  TYPE=      4  TARGET=          .067
   106.59      6.90    616.90      0.00    616.83    617.06       .16      2.10       .00    618.00
     515.        0.       471.       44.        0.       142.       41.      107.       25.    615.90
     2.23      0.00      3.33       1.08      .060      .050      .060      .047    610.00     81.88
  .002340       820.      820.      820.         1         0         1      0.00     86.19    168.07


CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     163.99  WSEL=     617.07  ENC Q1=     163.99  WSEL=     617.17  RATIO=   .0000
 NAT Q1=     172.  RATIOS LOB,CH,ROB=  0.0000    .9451    .0549  WSEL=     617.17

3470 ENCROACHMENT STATIONS=       79.0      137.0  TYPE=      4  TARGET=          .044
   106.98      6.74    617.14      0.00    617.07    617.22       .08       .13       .03    618.00
     450.        0.       442.        8.        0.       197.       13.      107.       25.    616.30
     2.25      0.00      2.25        .58      .060      .050      .060      .047    610.40     80.25
  .000757       100.      100.      100.         2         0         1      0.00     56.70    136.95


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.60        2.70      600.00        7.50        0.00       41.25        0.00      610.40      610.40

 2800 NAT Q1=    1296.80  WSEL=     618.68  ENC Q1=    1296.80  WSEL=     618.78  RATIO=   .0000
 NAT Q1=    1350.  RATIOS LOB,CH,ROB=   .6115    .1157    .2728  WSEL=     618.78
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG          HV          HL          OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH         AROB        VOL         TWA     LEFT/RIGHT
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   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      250.6      712.8  TYPE=      4  TARGET=          .039
   107.02      8.35    618.75      0.00    618.68    618.75       .00       .00       .03    612.90
     450.      277.       54.      120.     1210.      143.      560.      108.       25.     613.00
     2.28       .23       .38       .21      .060      .050      .060      .047    610.40    250.63
  .000012       34.       34.       34.         0         0         5      0.00    462.18    712.81


 2800 NAT Q1=    1044.58  WSEL=     618.68  ENC Q1=    1044.58  WSEL=     618.78  RATIO=  0.0000
 NAT Q1=    1091.  RATIOS LOB,CH,ROB=    .6160    .1135    .2705  WSEL=     618.78

3470 ENCROACHMENT STATIONS=      270.8      699.1  TYPE=      4  TARGET=          .042
   107.10      8.05    618.75      0.00    618.68    618.75       .00       .00       .00    613.20
     450.      281.       53.      116.     1092.      128.      488.      112.       26.     613.30
     2.39       .26       .41       .24      .065      .055      .065      .047    610.70    270.76
  .000019      100.      100.      100.         2         0         1      0.00    428.33    699.09


CCHV=     .100 CEHV=     .300
1490 NH CARD USED
 2800 NAT Q1=     269.21  WSEL=     618.71  ENC Q1=     269.21  WSEL=     618.81  RATIO=   .0000
 NAT Q1=     289.  RATIOS LOB,CH,ROB=    .5791    .2316    .1893  WSEL=     618.81

3470 ENCROACHMENT STATIONS=      360.8      668.4  TYPE=      4  TARGET=          .069
   108.00      5.78    618.78      0.00    618.71    618.79       .01       .04       .00    615.50
     450.      258.      105.       86.      450.       88.      177.      137.       34.     615.60
     2.74       .57      1.20       .49      .076      .055      .072      .048    613.00    360.77
  .000252      890.      890.      890.         2         0         1      0.00    307.60    668.37


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=      85.78  WSEL=     620.17  ENC Q1=      85.78  WSEL=     620.27  RATIO=   .0000
 NAT Q1=     102.  RATIOS LOB,CH,ROB=    .0115    .4164    .5721  WSEL=     620.27

3470 ENCROACHMENT STATIONS=      367.0      556.8  TYPE=      4  TARGET=          .155
   109.00      3.48    620.18      0.00    620.17    620.31       .13      1.47       .04    619.80
     450.         0.      234.      216.         0.       64.      128.      161.       47.     619.30
     2.98       .02      3.66      1.69      .045      .040      .045      .046    616.70    367.00
  .003532     2350.     2350.     2350.         3         0         1      0.00    189.80    556.80


 2800 NAT Q1=      91.30  WSEL=     620.93  ENC Q1=      91.30  WSEL=     621.03  RATIO=  0.0000
 NAT Q1=     104.  RATIOS LOB,CH,ROB=    .4399    .4526    .1076  WSEL=     621.03

3470 ENCROACHMENT STATIONS=      698.5      905.9  TYPE=      4  TARGET=          .125
   109.05      3.71    621.01      0.00    620.93    621.12       .11       .80       .00    619.80
     450.      209.      215.       27.      148.       62.       17.      163.       49.     619.80
     3.01      1.41      3.48      1.58      .045      .040      .045      .046    617.30    698.53
  .002102      300.      300.      300.         1         0         1      0.00    207.40    905.92


 2800 NAT Q1=      85.91  WSEL=     623.89  ENC Q1=      85.91  WSEL=     623.99  RATIO=  0.0000
 NAT Q1=      95.  RATIOS LOB,CH,ROB=    .0785    .6630    .2584  WSEL=     623.99
   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
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3470 ENCROACHMENT STATIONS=      761.3      860.7  TYPE=      4  TARGET=          .098
   109.10      4.37   623.87      0.00   623.89   624.07       .20      2.92       .03   622.50
      450.       20.      327.      103.       10.       81.       58.      168.       53.    622.50
     3.11      2.01      4.03      1.76      .045      .040      .045      .045   619.50   761.33
  .003069     1160.     1160.     1160.         4         0         1      0.00    99.34   860.68


CCHV=    .400 CEHV=    .800
 2800 NAT Q1=     116.74  WSEL=     624.23  ENC Q1=     116.74  WSEL=     624.33  RATIO=    .0000
 NAT Q1=     129.  RATIOS LOB,CH,ROB=    .1144    .5475    .3382  WSEL=     624.33

3470 ENCROACHMENT STATIONS=      753.4      870.0  TYPE=      4  TARGET=          .093
   109.98      3.75   624.25      0.00   624.23   624.36       .11       .25       .04   622.50
      450.       36.      275.      140.       22.       88.       89.      168.       53.    622.50
     3.12      1.63      3.13      1.56      .045      .040      .045      .045   620.50   753.45
  .001647      115.      115.      115.         2         0         1      0.00   116.60   870.05


SPECIAL BRIDGE

SB   XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        1.90        3.00         0.00        5.34        0.00        17.10        0.00      620.50      620.50

 2800 NAT Q1=     125.55  WSEL=     626.43  ENC Q1=     125.55  WSEL=     626.53  RATIO=    .0000
 NAT Q1=     134.  RATIOS LOB,CH,ROB=    .0583    .8088    .1328  WSEL=     626.53
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS=       96.9      176.6  TYPE=      4  TARGET=          .064
   110.02      5.95   626.45      0.00   626.43   626.59       .14       .11       .02   624.90
      450.       24.      379.       47.       18.      120.       37.      169.       53.    625.00
     3.13      1.33      3.17      1.27      .045      .040      .045      .045   620.50    96.94
  .001301        72.       72.       72.         0         0         9      0.00    79.63   176.57


 2800 NAT Q1=     115.21  WSEL=     626.49  ENC Q1=     115.21  WSEL=     626.59  RATIO=    .0000
 NAT Q1=     124.  RATIOS LOB,CH,ROB=    .0702    .7694    .1604  WSEL=     626.59

3470 ENCROACHMENT STATIONS=       95.6      177.5  TYPE=      4  TARGET=          .074
   110.05      5.82   626.52      0.00   626.49   626.66       .14       .07       .01   624.90
      450.       29.      363.       57.       20.      110.       40.      169.       53.    625.00
     3.13      1.48      3.31      1.44      .045      .040      .045      .045   620.70    95.55
  .001556        50.       50.       50.         2         0         1      0.00    81.98   177.53


 2800 NAT Q1=     104.42  WSEL=     626.76  ENC Q1=     104.42  WSEL=     626.86  RATIO=  0.0000
 NAT Q1=     113.  RATIOS LOB,CH,ROB=    .0620    .7975    .1405  WSEL=     626.86

3470 ENCROACHMENT STATIONS=       98.8      175.3  TYPE=      4  TARGET=          .073
   110.10      5.69   626.79      0.00   626.76   626.96       .17       .27       .02   625.30
      450.       24.      375.       50.       15.      106.       34.      169.       54.    625.40
     3.15      1.58      3.54      1.48      .045      .040      .045      .045   621.10    98.75
  .001870        160.      160.      160.         2         0         1      0.00    76.53   175.28


 WATER EL=X5 CARD=   627.037
 2800 NAT Q1=     125.67  WSEL=     627.01  ENC Q1=     125.67  WSEL=     627.11  RATIO=    .0000
 NAT Q1=     135.  RATIOS LOB,CH,ROB=    .0770    .7469    .1761  WSEL=     627.11
```

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	HTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 91.4 180.0 TYPE= 4 TARGET= .069

110.20	6.01	627.11	0.00	627.01	627.22	.11	.00	.02	625.30
450.	37.	346.	67.	27.	116.	49.	169.	54.	625.40
3.15	1.36	2.99	1.37	.045	.040	.045	.045	621.10	91.40
.001179	1.	1.	1.	0	0	1	0.00	88.59	180.00

2800 NAT Q1= 73.32 WSEL= 627.34 ENC Q1= 74.68 WSEL= 627.44 RATIO= -.0186
NAT Q1= 78. RATIOS LOB,CH,ROB= .0170 .9544 .0286 WSEL= 627.44

3470 ENCROACHMENT STATIONS= 112.0 143.0 TYPE= 4 TARGET= .046

110.98	5.21	627.41	0.00	627.34	627.75	.34	.35	.18	626.60
450.	0.	450.	0.	0.	97.	0.	170.	54.	626.70
3.16	.02	4.66	.02	.045	.040	.045	.045	622.20	112.00
.003738	180.	180.	180.	2	0	1	0.00	31.00	143.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.90	0.00	3.14	0.00	12.57	0.00	622.20	622.20

2800 NAT Q1= 494.97 WSEL= 630.29 ENC Q1= 494.97 WSEL= 630.39 RATIO= .0000
NAT Q1= 519. RATIOS LOB,CH,ROB= .1179 .5005 .3816 WSEL= 630.39
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE

3470 ENCROACHMENT STATIONS= 94.8 296.4 TYPE= 4 TARGET= .047

111.02	8.17	630.37	0.00	630.29	630.38	.01	.01	.13	628.10
450.	50.	233.	167.	120.	229.	267.	170.	54.	626.60
3.17	.42	1.02	.63	.045	.040	.045	.045	622.20	94.84
.000081	38.	38.	38.	0	0	9	0.00	201.51	296.35

2800 NAT Q1= 459.12 WSEL= 630.30 ENC Q1= 459.12 WSEL= 630.40 RATIO= .0000
NAT Q1= 485. RATIOS LOB,CH,ROB= .1269 .4631 .4100 WSEL= 630.40

3470 ENCROACHMENT STATIONS= 95.6 296.0 TYPE= 4 TARGET= .052

111.10	8.07	630.37	0.00	630.30	630.38	.01	.00	.00	628.10
450.	54.	216.	180.	119.	206.	267.	171.	54.	626.60
3.19	.45	1.05	.68	.045	.040	.045	.045	622.30	95.58
.000094	50.	50.	50.	2	0	1	0.00	200.45	296.03

CCHV= .150 CEHV= .350
2800 NAT Q1= 399.59 WSEL= 630.35 ENC Q1= 399.59 WSEL= 630.45 RATIO= 0.0000
NAT Q1= 429. RATIOS LOB,CH,ROB= .3546 .4189 .2265 WSEL= 630.45
3280 CROSS SECTION 111.20 EXTENDED 1.22 FEET

3470 ENCROACHMENT STATIONS= 13.7 281.1 TYPE= 4 TARGET= .069

111.20	6.03	630.43	0.00	630.35	630.44	.01	.05	.00	627.60
450.	155.	193.	101.	265.	166.	193.	178.	57.	627.70

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    3.36      .59     1.16      .53     .045     .040     .045     .045   624.40    13.68
 .000118     510.     510.     510.        2        0        1     0.00   267.38   281.06


CCHV=    .400 CEHV=    .800
 2800 NAT Q1=    409.68  WSEL=    630.37  ENC Q1=    409.68  WSEL=    630.47  RATIO=  0.0000
 NAT Q1=    438.  RATIOS LOB,CH,ROB=   .3529   .4208   .2263  WSEL=    630.47
3280 CROSS SECTION    111.28 EXTENDED      1.24 FEET

   SECNO     DEPTH     CESEL     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=      12.7     282.6  TYPE=     4  TARGET=        .064
   111.28     6.14   630.44     0.00   630.37   630.45      .01      .02      .00   627.60
    450.      155.     193.     101.     269.     169.     196.     180.      58.    627.70
     3.41      .58     1.14      .52     .045     .040     .045     .045   624.30    12.71
 .000112     142.     142.     142.        2        0        1     0.00   269.85   282.56


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    0.00      1.30      2.70      0.00      2.44      0.00      4.88      0.00    624.30    624.30

 2800 NAT Q1=    533.28  WSEL=    630.43  ENC Q1=    533.28  WSEL=    630.53  RATIO=   .0000
 NAT Q1=    561.  RATIOS LOB,CH,ROB=   .3150   .4519   .2331  WSEL=    630.53
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    111.32 EXTENDED       .50 FEET


3470 ENCROACHMENT STATIONS=      86.4     303.1  TYPE=     4  TARGET=        .049
   111.32     6.20   630.50     0.00   630.43   630.51      .01      .00      .00   627.00
    450.      137.     214.      99.     266.     224.     181.     180.      58.    626.60
     3.41      .52      .96      .55     .045     .040     .045     .045   624.30    86.45
 .000073      16.      16.      16.        0        0       10     0.00   216.70   303.15


 2800 NAT Q1=    536.61  WSEL=    630.43  ENC Q1=    536.61  WSEL=    630.53  RATIO=   .0000
 NAT Q1=    567.  RATIOS LOB,CH,ROB=   .3125   .4564   .2312  WSEL=    630.53
3280 CROSS SECTION    111.40 EXTENDED       .50 FEET


3470 ENCROACHMENT STATIONS=      89.4     300.0  TYPE=     4  TARGET=        .053
   111.40     6.40   630.50     0.00   630.43   630.51      .01      .00      .00   627.00
    450.      135.     218.      97.     262.     227.     176.     181.      58.    626.60
     3.43      .52      .96      .55     .045     .040     .045     .045   624.10    89.41
 .000072      42.      42.      42.        2        0        1     0.00   210.59   300.00


CCHV=    .150 CEHV=    .350
 2800 NAT Q1=    379.33  WSEL=    630.49  ENC Q1=    379.33  WSEL=    630.59  RATIO=  0.0000
 NAT Q1=    407.  RATIOS LOB,CH,ROB=   .3210   .3765   .3026  WSEL=    630.59
3280 CROSS SECTION    112.00 EXTENDED       .36 FEET
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3470 ENCROACHMENT STATIONS=      107.5      344.2  TYPE=      4  TARGET=          .067
   112.00      5.86    630.56      0.00    630.49    630.57       .01       .06       .00    627.20
    450.       143.       178.      129.      212.      142.      215.      190.       61.     627.70
     3.63       .67       1.25       .60       .045      .040      .045      .044   624.70    107.52
 .000138      640.      640.      640.         2         0         1      0.00    236.73    344.25


 WATER EL=X5 CARD=   630.580
 2800 NAT Q1=     384.94  WSEL=     630.51  ENC Q1=     384.94  WSEL=     630.61  RATIO=    .0000
 NAT Q1=     412.  RATIOS LOB,CH,ROB=    .3217    .3738    .3044  WSEL=     630.61
3280 CROSS SECTION     112.10 EXTENDED        .41 FEET

   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


3470 ENCROACHMENT STATIONS=      107.2      346.5  TYPE=      4  TARGET=          .066
   112.10      5.91    630.61      0.00    630.51    630.62       .01       .00       .00    627.20
    450.       144.       175.      131.      217.      143.      223.      190.       61.     627.70
     3.63       .66       1.22       .59       .045      .040      .045      .044   624.70    107.22
 .000129        1.        1.        1.         0         0         1      0.00    239.30    346.52
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1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty Drain

4) DOCUMENT TYPE: 100yr

JOB NO. UM3303 UNIVERSITY OF MICHIGAN TERMINAL SYSTEM MERIT NET 19:53:59 07-23-79

KELLY

PARAMETERS: ,ID=XSNL,PW=,ROUTE=NUBS

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MM          MM  NN          NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMM        MMM  NNN         NN  EEEEEEEEEEEE  TTTTTTTTTTTT
MMMM      MMMM  NNNN        NN  EE                    TT
MM MM    MM MM  NN NN       NN  EE                    TT
MM  MMMM  MM MM  NN  NN     NN  EE                    TT
MM   MM   MM MM  NN   NN    NN  EEEEEEEE              TT
MM        MM MM  NN    NN   NN  EEEEEEEE              TT
MM        MM MM  NN     NN  NN  EE                    TT
MM        MM MM  NN      NN NN  EE                    TT
MM        MM MM  NN       NNNN  EE                    TT
MM        MM MM  NN        NNN  EE                    TT
MM        MM MM  NN         NN  EEEEEEEEEEEE        TT
MM        MM MM  NN          N  EEEEEEEEEEEE        TT

XX        XX   SSSSSSSSS   NN          NN  LL
XX        XX  SSSSSSSSSSS  NNN         NN  LL
 XX      XX   SS         SS NNNN       NN  LL
  XX    XX    SS            NN NN      NN  LL
   XX  XX     SSS           NN  NN     NN  LL
    XXXX       SSSSSSSSS    NN   NN    NN  LL
    XXXX        SSSSSSSSS   NN    NN   NN  LL
   XX  XX             SSS   NN     NN  NN  LL
  XX    XX            SS    NN      NNNN  LL
 XX      XX   SS      SS    NN       NNN  LL
XX        XX  SSSSSSSSSSS  NN        NN  LLLLLLLLLLL
XX        XX   SSSSSSSSS   NN         N  LLLLLLLLLLL
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1       HUD-FIA   H-4705
T2       BEDFORD TOWNSHIP  FIS
T3       KELLY OOTY DRAIN 100 YEAR FLOW=465 CFS

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       -1.       4.        0.        0.  0.000000      0.00      1.0       0.   589.940    0.000

J3      1.000    34.000     3.000     4.000    27.000    28.000     9.000    0.000    0.000    0.000
NC       .060      .060      .045      .150      .350     0.000     0.000    0.000    0.000    0.000
QT      5.000   265.000   395.000   465.000   650.000   465.000     0.000    0.000    0.000    0.000
ET      0.000     0.000     0.000     0.000     0.000     1.400     0.000    0.000    0.000    0.000

X1    402.000    12.000   357.000   385.000     0.000     0.000     0.000    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  589.500    0.000    0.000
GR    589.900     0.000   589.900   100.000   589.800   200.000   588.700  300.000  589.300  357.000
GR    582.900   366.000   582.800   372.000   583.000   376.000   588.700  385.000  588.600  400.000
GR    589.700   500.000   589.900   700.000     0.000     0.000     0.000    0.000    0.000    0.000

X1    403.000    10.000   619.000   644.000  1350.000  1350.000  1350.000    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000    0.000    0.000    0.000
GR    592.600     0.000   592.400   300.000   591.000   500.000   590.700  600.000  591.200  619.000
GR    585.000   627.000   584.600   632.000   584.800   637.000   591.100  644.000  592.100  700.000

X1    404.000     9.000   240.000   300.000   650.000   650.000   650.000    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  594.000  594.000    0.000
GR    593.300   238.000   591.800   240.000   591.800   254.000   585.600  263.000  584.800  265.000
GR    585.700   269.000   590.700   296.000   590.700   300.000   590.800  310.000    0.000    0.000
NC      0.000     0.000     0.000      .100      .300     0.000     0.000    0.000    0.000    0.000

X1    404.980     6.000   120.000   130.000   100.000   100.000   100.000    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  594.000  594.000    0.000
GR    597.500     0.000   592.000   120.000   585.900   120.100   585.900  129.900  592.000  130.000
GR    597.500   250.000     0.000     0.000     0.000     0.000     0.000    0.000    0.000    0.000
SB      1.050     1.400     2.600   325.000    10.000      .010    62.500    0.000  585.900  585.900

X1    405.020     0.000     0.000     0.000    53.000    53.000    53.000    0.000    0.000    0.000
X2      0.000     0.000     1.000   592.000   597.500     0.000     0.000    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  597.500  597.500    0.000

X1    405.100     9.000   254.000   279.000    24.500    24.500    24.500    0.000    1.100    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  597.500  597.500    0.000
GR    593.300     0.000   591.800   200.000   591.800   254.000   585.600  263.000  584.800  265.000
GR    585.700   269.000   590.700   279.000   590.400   300.000   591.700  400.000    0.000    0.000

X1    405.980     6.000   120.000   130.000    24.500    24.500    24.500    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  597.500  597.500    0.000
GR    597.500     0.000   592.000   120.000   585.900   120.100   585.900  129.900  592.000  130.000
GR    597.500   250.000     0.000     0.000     0.000     0.000     0.000    0.000    0.000    0.000
SB      1.050     1.400     2.600   250.000    10.000      .010    62.500    0.000  585.900  585.900

X1    406.020     0.000     0.000     0.000    37.000    37.000    37.000    0.000    0.000    0.000
X2      0.000     0.000     1.000   592.000   597.500     0.000     0.000    0.000    0.000    0.000
X3     10.000     0.000     0.000     0.000     0.000     0.000     0.000  597.500  597.500    0.000

X1    407.000     8.000   210.000   232.000    50.000    50.000    50.000    0.000    0.000    0.000
GR    592.000   150.000   591.400   200.000   590.900   210.000   586.400  215.000  585.600  220.000
GR    586.700   225.000   591.800   232.000   592.000   270.000     0.000    0.000    0.000    0.000

X1    411.000     9.000   300.000   327.000   200.000   200.000   200.000    0.000    0.000    0.000
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GR	594.300	75.000	594.300	100.000	591.700	300.000	585.900	308.000	586.000	311.000
GR	586.600	314.000	593.000	327.000	593.100	400.000	593.400	600.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	411.980	9.000	230.000	257.000	270.000	270.000	270.000	0.000	-.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	593.000	593.000	0.000
GR	594.300	0.000	592.200	200.000	592.100	230.000	586.800	241.000	587.000	244.000
GR	587.000	248.000	591.400	257.000	593.000	300.000	593.100	400.000	0.000	0.000
SB	1.250	1.800	2.600	375.000	23.320	1.320	90.240	0.000	586.300	586.300
X1	412.020	9.000	230.000	257.000	68.000	68.000	68.000	0.000	-.500	0.000
X2	0.000	0.000	1.000	591.300	594.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	594.000	594.000	0.000
GR	594.300	0.000	592.200	200.000	592.100	230.000	586.800	241.000	587.000	244.000
GR	587.000	248.000	591.400	257.000	593.000	300.000	593.100	400.000	0.000	0.000
X1	412.100	9.000	230.000	257.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	594.300	0.000	592.200	200.000	592.100	230.000	586.800	241.000	587.000	244.000
GR	587.000	248.000	591.400	257.000	593.000	300.000	593.100	400.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	413.000	9.000	200.000	225.000	430.000	430.000	430.000	0.000	0.000	0.000
GR	594.900	0.000	593.300	100.000	592.500	200.000	587.900	210.000	587.400	213.000
GR	587.600	216.000	593.700	225.000	593.700	300.000	594.600	500.000	0.000	0.000
X1	413.100	12.000	235.000	275.000	250.000	250.000	250.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	595.000	0.000	594.100	57.000	593.000	100.000	593.600	200.000	594.100	235.000
GR	588.400	260.000	587.800	262.000	587.300	265.000	593.500	275.000	593.600	300.000
GR	594.900	400.000	595.000	500.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.300	.500	0.000	0.000	0.000	0.000	0.000
X1	413.980	0.000	0.000	0.000	128.000	128.000	128.000	0.000	.500	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.700	300.000	3.310	0.000	11.910	0.000	587.800	587.800
X1	414.020	0.000	0.000	0.000	42.000	42.000	42.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	591.400	594.200	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	414.050	17.000	538.000	565.000	50.000	50.000	50.000	0.000	-2.900	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	594.000	0.000	0.000
GR	597.300	322.000	596.800	323.000	596.800	324.000	596.800	325.000	596.800	400.000
GR	596.800	500.000	596.800	508.000	596.800	514.000	596.800	525.000	596.500	538.000
GR	591.000	548.000	590.800	552.000	591.100	557.000	596.900	565.000	596.400	600.000
GR	595.600	700.000	595.600	775.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.150	.350	0.000	0.000	0.000	0.000	0.000
X1	414.060	17.000	538.000	565.000	90.000	90.000	90.000	0.000	-2.800	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	597.300	502.000	596.800	503.000	596.800	504.000	596.800	505.000	596.800	506.000
GR	596.800	507.000	596.800	508.000	596.800	514.000	596.800	525.000	596.500	538.000
GR	591.000	548.000	590.800	552.000	591.100	557.000	596.600	565.000	596.400	600.000
GR	595.600	700.000	595.600	800.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.350	.700	0.000	0.000	0.000	0.000	0.000
X1	414.080	0.000	0.000	0.000	40.000	40.000	40.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.600	2.600	300.000	6.000	0.000	27.000	0.000	588.000	588.000

X1	414.120	0.000	0.000	0.000	16.000	16.000	16.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.500	594.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	414.150	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	414.180	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	1.700	2.800	300.000	3.753	0.000	15.010	0.000	588.600	588.600
X1	414.220	0.000	0.000	0.000	40.000	40.000	40.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.600	595.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	414.250	0.000	0.000	0.000	30.000	30.000	30.000	0.000	.600	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	414.280	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.700	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	2.050	2.800	300.000	3.330	0.000	8.650	0.000	590.000	590.000
X1	414.320	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	592.600	595.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	414.350	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	415.000	0.000	0.000	0.000	190.000	190.000	190.000	0.000	.700	0.000
X1	415.050	0.000	0.000	0.000	150.000	150.000	150.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	415.080	0.000	0.000	0.000	85.000	85.000	85.000	0.000	.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	2.050	2.800	300.000	3.330	0.000	8.650	0.000	591.000	591.000
X1	415.120	14.000	517.000	544.000	26.000	26.000	26.000	0.000	-.900	0.000
X2	0.000	0.000	1.000	593.600	597.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.100	0.000	0.000
GR	597.900	482.000	597.900	483.000	597.900	484.000	597.900	485.000	597.900	500.000
GR	597.900	511.000	597.300	517.000	592.300	526.000	591.900	531.000	593.000	535.000
GR	596.800	544.000	596.600	600.000	596.600	700.000	596.800	800.000	0.000	0.000
X1	415.150	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.200	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	597.300	0.000	0.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000
X1	415.200	0.000	0.000	0.000	250.000	250.000	250.000	0.000	.700	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	598.000	0.000	0.000
QT	5.000	195.000	295.000	355.000	495.000	355.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	415.980	11.000	517.000	540.000	140.000	140.000	140.000	0.000	-.600	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	598.400	200.000	597.700	453.000	598.100	511.000	598.200	517.000	593.000	528.000
GR	592.800	530.000	593.100	532.000	598.900	540.000	599.600	595.000	599.800	600.000

GR	600.000	700.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	3.800	2.800	475.000	3.342	0.000	11.030	0.000	592.800	592.200
X1	416.020	13.000	410.000	435.000	286.000	286.000	286.000	0.000	-.900	0.000
X2	0.000	0.000	1.000	596.100	599.600	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	599.700	0.000
GR	598.500	190.000	598.700	195.000	598.400	200.000	598.000	410.000	594.000	413.000
GR	593.700	416.000	593.900	420.000	599.000	426.000	600.000	435.000	600.000	446.000
GR	600.000	465.000	598.500	600.000	598.500	700.000	0.000	0.000	0.000	0.000
X1	416.500	11.000	410.000	435.000	125.000	125.000	125.000	0.000	-.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	599.700	0.000
GR	598.500	0.000	598.700	100.000	598.400	200.000	598.000	410.000	594.000	413.000
GR	593.700	416.000	593.900	420.000	599.000	426.000	600.000	435.000	600.000	446.000
GR	600.000	465.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	416.980	0.000	0.000	0.000	80.000	80.000	80.000	0.000	.400	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.100	0.000
SB	0.000	2.000	2.800	400.000	3.930	0.000	12.570	0.000	593.700	593.700
X1	417.020	0.000	0.000	0.000	40.000	40.000	40.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	596.900	599.300	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.100	0.000
X1	417.050	11.000	410.000	435.000	130.000	130.000	130.000	0.000	.200	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.300	0.000
GR	598.500	159.000	598.700	160.000	598.400	200.000	598.000	410.000	594.000	413.000
GR	593.700	416.000	593.900	420.000	599.000	426.000	600.000	435.000	600.000	446.000
GR	600.000	465.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	417.080	0.000	0.000	0.000	160.000	160.000	160.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.600	0.000
SB	0.000	2.000	2.800	300.000	3.930	0.000	12.570	0.000	594.200	594.200
X1	417.120	0.000	0.000	0.000	88.000	88.000	88.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	597.400	601.000	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	601.100	0.000
X1	417.130	0.000	0.000	0.000	50.000	50.000	50.000	0.000	.200	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	600.800	0.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000
X1	417.150	0.000	0.000	0.000	400.000	400.000	400.000	0.000	1.100	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	601.900	0.000
NC	0.000	0.000	0.000	.400	.800	0.000	0.000	0.000	0.000	0.000
X1	417.180	0.000	0.000	0.000	220.000	220.000	220.000	0.000	.800	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	602.700	0.000
SB	0.000	2.900	2.800	400.000	3.342	0.000	11.030	0.000	596.600	596.300
X1	417.220	8.000	200.000	222.000	143.000	143.000	143.000	0.000	-.300	0.000
X2	0.000	0.000	1.000	599.900	602.500	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	600.600	0.000	601.100	100.000	602.600	200.000	597.600	209.000	596.900	211.000
GR	597.500	216.000	601.700	222.000	602.600	436.000	0.000	0.000	0.000	0.000
X1	417.300	0.000	0.000	0.000	40.000	40.000	40.000	0.000	.300	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	.100	.300	0.000	0.000	0.000	0.000	0.000
X1	418.000	10.000	300.000	327.000	420.000	420.000	420.000	0.000	0.000	0.000

X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	602.500	0.000
GR	600.600	0.000	601.100	100.000	601.000	200.000	601.400	300.000	597.600	306.000
GR	597.000	309.000	597.900	314.000	601.100	320.000	602.100	327.000	602.400	336.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CCHV= .150 CEHV= .350
3280 CROSS SECTION 402.00 EXTENDED .04 FEET

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
402.00	7.14	589.94	0.00	589.94	590.00	.06	0.00	0.00	589.30
465.	69.	332.	63.	136.	142.	126.	0.	0.	588.70
0.00	.51	2.34	.50	.060	.045	.060	0.000	582.80	0.00
.000679	0.	0.	0.	0	0	1	0.00	700.00	700.00

****VALLEY SECTION ABOUT 400 FT U/S OF CORPORATE LIMITS

403.00	6.73	591.33	0.00	0.00	591.52	.19	1.47	.05	591.20
465.	40.	425.	0.	63.	115.	1.	9.	14.	591.10
.11	.63	3.68	.26	.060	.045	.060	.045	584.60	452.80
.002027	1350.	1350.	1350.	2	0	1	0.00	204.10	656.90

3280 CROSS SECTION 404.00 EXTENDED 1.56 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

404.00	7.56	592.36	0.00	0.00	592.44	.08	.90	.02	591.80
465.	0.	465.	0.	0.	203.	0.	12.	16.	590.70
.19	0.00	2.30	0.00	.060	.045	.060	.045	584.80	240.00
.001011	650.	650.	650.	3	0	1	0.00	60.00	300.00

CCHV= .100 CEHV= .300

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

*****D/S FACE RAILROAD BRIDGE

404.98	6.13	592.03	0.00	0.00	592.94	.91	.25	.25	592.00
465.	0.	465.	0.	0.	61.	0.	12.	16.	592.00
.19	0.00	7.66	0.00	.060	.045	.060	.045	585.90	120.00
.013955	100.	100.	100.	3	0	1	0.00	10.00	130.61

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.40	2.60	325.00	10.00	.01	62.50	0.00	585.90	585.90

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT

TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
593.23	592.94	.00	0.	465.	63.	592.00	597.50	10.00

513.45

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.50 ELREA= 597.50

405.02	6.53	592.43	0.00	0.00	593.23	.80	.29	0.00	592.00
465.	0.	465.	0.	0.	65.	0.	12.	16.	592.00
.19	0.00	7.19	0.00	.060	.045	.060	.045	585.90	120.00
.011556	53.	53.	53.	3	0	1	0.00	10.00	139.33

3280 CROSS SECTION 405.10 EXTENDED .32 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.50 ELREA= 597.50

405.10	7.22	593.12	0.00	0.00	593.41	.28	.12	.05	592.90
465.	0.	465.	0.	0.	109.	0.	12.	16.	591.80
.20	0.00	4.27	0.00	.060	.045	.060	.045	585.90	254.00
.002803	25.	25.	25.	3	0	1	0.00	25.00	279.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.50 ELREA= 597.50

****D/S FACE RAILROAD BRIDGE

405.98	7.05	592.95	0.00	0.00	593.64	.69	.11	.12	592.00
465.	0.	465.	0.	0.	70.	0.	12.	16.	592.00
.20	0.00	6.65	0.00	.060	.045	.060	.045	585.90	120.00
.009182	25.	25.	25.	2	0	1	0.00	10.00	150.81

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.40	2.60	250.00	10.00	.01	62.50	0.00	585.90	585.90

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
594.16	593.64	.00	0.	465.	63.	592.00	597.50	10.00

594.37

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.50 ELREA= 597.50

406.02	7.68	593.58	0.00	0.00	594.16	.58	.52	0.00	592.00
465.	0.	465.	0.	0.	76.	0.	12.	16.	592.00
.20	0.00	6.10	0.00	.060	.045	.060	.045	585.90	120.00
.007141	37.	37.	37.	2	0	1	0.00	10.00	164.55

3280 CROSS SECTION 407.00 EXTENDED 2.22 FEET

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
407.00	8.62	594.22	0.00	0.00	594.25	.04	.04	.05	590.90
465.	129.	268.	68.	157.	144.	88.	13.	16.	591.80
.21	.82	1.86	.77	.060	.045	.060	.045	585.60	150.00
.000316	50.	50.	50.	2	0	1	0.00	120.00	270.00

3280 CROSS SECTION 411.00 EXTENDED .89 FEET

411.00	8.39	594.29	0.00	0.00	594.31	.02	.05	.00	591.70
465.	118.	225.	122.	259.	151.	299.	15.	18.	593.00
.27	.46	1.49	.41	.060	.045	.060	.045	585.90	100.55
.000239	200.	200.	200.	2	0	1	0.00	499.45	600.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 411.98 EXTENDED 1.75 FEET

****D/S FACE TELEGRAPH RD

411.98	8.05	594.35	0.00	0.00	594.36	.01	.04	.00	591.60
465.	155.	183.	127.	400.	165.	294.	20.	20.	590.90
.38	.39	1.11	.43	.060	.045	.060	.045	586.30	0.00
.000112	270.	270.	270.	2	0	1	0.00	400.00	400.00

SPECIAL BRIDGE

1" = 0.01'

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.80	2.60	375.00	23.32	1.32	90.24	0.00	586.30	586.30

3280 CROSS SECTION 412.02 EXTENDED 1.86 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
595.09	594.36	.00	281.	185.	90.	591.30	594.00	30.00

7676 T.O. submerged
no effect on Q

412.02	8.16	594.46	0.00	0.00	594.46	.01	.11	0.00	591.60
465.	160.	176.	129.	427.	169.	310.	21.	21.	590.90
.41	.37	1.04	.42	.060	.045	.060	.045	586.30	0.00
.000097	68.	68.	68.	0	0	3	0.00	400.00	400.00

21 ac ft out of 295 ac ft.

3280 CROSS SECTION 412.10 EXTENDED 1.36 FEET

412.10	7.66	594.46	0.00	0.00	594.48	.02	.01	.01	592.10
465.	135.	213.	117.	312.	155.	239.	22.	21.	591.40
.42	.43	1.38	.49	.060	.045	.060	.045	586.80	0.00
.000188	50.	50.	50.	2	0	1	0.00	400.00	400.00

CCHV= .150 CEHV= .350

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALCB	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

413.00	7.18	594.58	0.00	0.00	594.61	.04	.13	.01	592.50
465.	157.	246.	63.	219.	121.	151.	28.	26.	593.70
.51	.72	2.03	.41	.060	.045	.060	.045	587.40	20.21
.000533	430.	430.	430.	2	0	1	0.00	474.60	494.81

413.10	7.41	594.71	0.00	0.00	594.74	.03	.13	.00	594.10
465.	141.	290.	34.	231.	164.	76.	31.	28.	593.50
.56	.61	1.77	.45	.060	.045	.060	.045	587.30	18.76
.000472	250.	250.	250.	2	0	1	0.00	366.14	384.90

CCHV= .300 CEHV= .500

**D/S FACE KIRTWOOD RD

413.98	6.97	594.77	0.00	0.00	594.84	.07	.08	.02	594.60
465.	100.	347.	18.	145.	147.	36.	32.	29.	594.00
.58	.69	2.36	.50	.060	.045	.060	.045	587.80	45.91
.000979	128.	128.	128.	2	0	1	0.00	306.02	351.93

SPECIAL BRIDGE

if 1.74 due to in

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.70	300.00	3.31	0.00	11.91	0.00	587.80	587.80

PRESSURE AND WEIR FLOW

Quoted k 28.94 ft for 1 pulse H

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
632.64	594.84	0.00	439.	30.	12.	591.40	594.20	30.00

for Q = 30.22 cfs & XKOR = 1.74 ∴ H = 0.17 > 0.16 0.01 close enough.

414.02	7.07	594.87	0.00	0.00	594.93	.06	.09	0.00	594.60
465.	111.	332.	22.	164.	151.	44.	33.	29.	594.00
.59	.68	2.20	.49	.060	.045	.060	.045	587.80	39.63

.000823	42.	42.	42.	2	0	8	0.00	319.93	359.56

3280 CROSS SECTION 414.05 EXTENDED 2.26 FEET

414.05	7.05	594.95	0.00	0.00	594.96	.01	.02	.01	593.60
465.	89.	146.	230.	232.	134.	399.	33.	30.	594.00
.61	.39	1.09	.58	.060	.055	.060	.045	587.90	322.00
.000221	50.	50.	50.	1	0	1	0.00	453.00	775.00

CCHV= .150 CEHV= .350
3280 CROSS SECTION 414.06 EXTENDED 2.17 FEET

414.06	6.97	594.97	0.00	0.00	594.99	.01	.02	.00	593.70
465.	16.	165.	285.	37.	133.	440.	35.	31.	593.80
.64	.43	1.24	.65	.060	.055	.060	.045	588.00	502.00
.000288	90.	90.	90.	2	0	1	0.00	298.00	800.00

CCHV= .350 CEHV= .700
3280 CROSS SECTION 414.08 EXTENDED 2.18 FEET

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

******D/S FACE DRIVEWAY

414.08	6.99	594.99	0.00	0.00	595.00	.01	.01	.00	593.70
465.	16.	164.	285.	37.	133.	441.	35.	31.	593.80
.65	.43	1.23	.65	.060	.055	.060	.045	588.00	502.00
.000286	40.	40.	40.	1	0	1	0.00	298.00	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.60	2.60	300.00	6.00	0.00	27.00	0.00	588.00	588.00

3280 CROSS SECTION 414.12 EXTENDED 2.25 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
602.36	595.00	0.00	420.	46.	27.	592.50	594.00	30.00

414.12	7.05	595.05	0.00	0.00	595.06	.01	.06	0.00	593.70
465.	17.	160.	288.	40.	135.	458.	35.	31.	593.80
.66	.42	1.18	.63	.060	.055	.060	.045	588.00	502.00

.000258	16.	16.	16.	1	0	7	0.00	298.00	800.00

3280 CROSS SECTION 414.15 EXTENDED 1.96 FEET

414.15	6.76	595.06	0.00	0.00	595.07	.02	.01	.00	594.00
465.	12.	179.	273.	29.	127.	389.	36.	31.	594.10
.67	.43	1.41	.70	.060	.055	.060	.045	588.30	502.00
.000396	40.	40.	40.	2	0	1	0.00	298.00	800.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 414.18 EXTENDED 1.68 FEET

*****D/S FACE DRIVEWAY

414.18	6.48	595.08	0.00	0.00	595.10	.02	.02	.01	594.30
465.	8.	203.	254.	19.	120.	322.	36.	32.	594.40
.68	.41	1.70	.79	.060	.055	.060	.045	588.60	502.05
.000627	40.	40.	40.	2	0	1	0.00	297.95	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	1.70	2.80	300.00	3.75	0.00	15.01	0.00	588.60	588.60

3280 CROSS SECTION 414.22 EXTENDED 2.68 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
620.41	595.10	0.00	374.	93.	15.	592.60	595.50	30.00

414.22	7.48	596.08	0.00	0.00	596.08	.01	.98	0.00	594.30
465.	22.	139.	304.	55.	147.	559.	37.	32.	594.40
.69	.40	.95	.54	.060	.055	.060	.046	588.60	502.00
.000149	40.	40.	40.	0	0	7	0.00	298.00	800.00

3280 CROSS SECTION 414.25 EXTENDED 2.08 FEET

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

414.25	6.88	596.08	0.00	0.00	596.09	.01	.01	.01	594.90
465.	14.	171.	280.	33.	131.	418.	37.	32.	595.00
.70	.43	1.30	.67	.060	.055	.060	.046	589.20	502.00
.000330	30.	30.	30.	2	0	1	0.00	298.00	800.00

3280 CROSS SECTION 414.28 EXTENDED 1.40 FEET

*****D/S FACE DRIVEWAY

414.28	6.20	596.10	0.00	0.00	596.14	.04	.02	.02	595.60
465.	3.	235.	227.	9.	112.	257.	38.	32.	595.70
.71	.33	2.09	.88	.060	.055	.060	.046	589.90	502.60
.001035	40.	40.	40.	2	0	1	0.00	297.40	800.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.05	2.80	300.00	3.33	0.00	8.65	0.00	590.00	590.00

3280 CROSS SECTION 414.32 EXTENDED 1.45 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
688.09	596.24	0.00	451.	15.	9.	592.60	595.30	30.00

414.32	6.25	596.15	0.00	0.00	596.19	.04	.05	0.00	595.60
465.	4.	228.	234.	11.	114.	270.	38.	33.	595.70
.71	.35	2.00	.86	.060	.055	.060	.046	589.90	502.49
.000932	20.	20.	20.	2	0	10	0.00	297.51	800.00

3280 CROSS SECTION 414.35 EXTENDED 1.31 FEET

414.35	6.11	596.21	0.00	0.00	596.25	.05	.05	.01	595.80
465.	2.	247.	216.	6.	110.	235.	38.	33.	595.90
.72	.29	2.25	.92	.060	.055	.060	.046	590.10	502.79
.001237	50.	50.	50.	2	0	1	0.00	297.21	800.00

CCHV= .400 CEHV= .800

3265 DIVIDED FLOW

3280 CROSS SECTION 415.00 EXTENDED .92 FEET

415.00	5.73	596.53	0.00	0.00	596.63	.11	.33	.05	596.50
465.	0.	309.	156.	0.	100.	146.	40.	34.	596.60
.74	.01	3.10	1.07	.060	.055	.060	.046	590.80	536.92
.002665	190.	190.	190.	2	0	1	0.00	249.83	800.00

3280 CROSS SECTION 415.05 EXTENDED 1.27 FEET

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
415.05	6.07	596.87	0.00	0.00	596.93	.05	.27	.02	596.50
465.	1.	251.	212.	5.	109.	228.	41.	35.	596.60
.77	.26	2.31	.93	.060	.055	.060	.046	590.80	502.85
.001314	150.	150.	150.	3	0	1	0.00	297.15	800.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 415.08 EXTENDED 1.28 FEET

****D/S FACE DRIVEWAY

415.08	6.09	596.99	0.00	0.00	597.04	.05	.11	.00	596.60
465.	1.	251.	213.	5.	109.	229.	41.	36.	596.70
.78	.26	2.30	.93	.060	.055	.060	.047	590.90	502.84
.001299	85.	85.	85.	1	0	1	0.00	297.16	800.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.05	2.80	300.00	3.33	0.00	8.65	0.00	591.00	591.00

3280 CROSS SECTION 415.12 EXTENDED 1.73 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
688.98	597.14	0.00	426.	39.	9.	593.60	597.00	30.00

415.12	6.62	597.62	0.00	0.00	597.64	.01	.60	0.00	596.40
465.	8.	148.	309.	24.	123.	479.	42.	36.	595.90
.79	.33	1.21	.65	.060	.055	.060	.047	591.00	482.00
.000295	26.	26.	26.	1	0	9	0.00	318.00	800.00

3280 CROSS SECTION 415.15 EXTENDED 1.54 FEET

415.15	6.44	597.64	0.00	0.00	597.65	.01	.01	.00	596.60
465.	5.	160.	299.	17.	118.	429.	42.	36.	596.10
.80	.31	1.36	.70	.060	.055	.060	.047	591.20	482.00
.000398	40.	40.	40.	2	0	1	0.00	318.00	800.00

CCHV= .100 CEHV= .300
3280 CROSS SECTION 415.20 EXTENDED .98 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 596.80

415.20	5.88	597.78	0.00	0.00	597.81	.04	.16	.01	597.30
465.	0.	211.	254.	0.	102.	286.	45.	38.	596.80
.85	0.00	2.06	.89	.060	.055	.060	.047	591.90	517.00
.001109	250.	250.	250.	2	0	1	0.00	283.00	800.00

CCHV= .400 CEHV= .800
3280 CROSS SECTION 415.98 EXTENDED .18 FEET

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

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.60 ELREA= 598.30

****D/S FACE STERNS RD

415.98	5.78	597.98	0.00	0.00	598.05	.07	.21	.03	597.60
355.	146.	209.	0.	176.	76.	0.	46.	39.	598.30
.87	.83	2.75	0.00	.060	.055	.060	.047	592.20	200.00
.002413	140.	140.	140.	2	0	1	0.00	339.56	539.56

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.80	2.80	475.00	3.34	0.00	11.03	0.00	592.80	592.20

3280 CROSS SECTION 416.02 EXTENDED 2.36 FEET

flow distribution between 415.98 & 416.02 LOB

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
659.10	598.60	0.00	292.	64.	11.	596.10	599.60	30.00

416.02	7.16	599.96	0.00	0.00	599.96	.00	1.91	0.00	597.10
355.	187.	44.	125.	582.	103.	480.	51.	42.	599.10
1.13	.32	.43	.26	.060	.055	.060	.048	592.80	190.00
.000046	286.	286.	286.	0	0	9	0.00	510.00	700.00

3280 CROSS SECTION 416.50 EXTENDED 1.87 FEET

416.50	6.67	599.97	0.00	0.00	599.97	.00	.01	.00	597.60
355.	304.	50.	1.	815.	90.	11.	54.	43.	599.60
1.21	.37	.55	.12	.060	.055	.060	.048	593.30	0.00
.000091	125.	125.	125.	2	0	1	0.00	465.00	465.00

3280 CROSS SECTION 416.98 EXTENDED 1.48 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 600.00

****D/S FACE DRIVEWAY

416.98	6.28	599.98	0.00	0.00	599.98	.00	.01	.00	598.00
355.	297.	58.	0.	654.	81.	0.	55.	44.	600.00
1.26	.45	.72	0.00	.060	.055	.060	.048	593.70	0.00
.000178	80.	80.	80.	2	0	1	0.00	434.81	434.81

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.00	2.80	400.00	3.93	0.00	12.57	0.00	593.70	593.70

3280 CROSS SECTION 417.02 EXTENDED 1.53 FEET

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	IOC	ICONT	CORAR	TOPWID	ENDST

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
624.75	599.98	0.00	339.	16.	13.	596.90	599.30	30.00

417.02	6.32	600.02	0.00	0.00	600.03	.00	.04	0.00	598.00
355.	299.	56.	0.	674.	82.	1.	56.	44.	600.00
1.28	.44	.69	.03	.060	.055	.060	.048	593.70	0.00
.000163	40.	40.	40.	0	0	8	0.00	465.00	465.00

3280 CROSS SECTION 417.05 EXTENDED 1.35 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 600.20

417.05	6.15	600.05	0.00	0.00	600.06	.01	.03	.00	598.20
355.	272.	83.	0.	401.	78.	0.	58.	45.	600.20
1.33	.68	1.07	0.00	.060	.055	.060	.048	593.90	159.00
.000399	130.	130.	130.	2	0	1	0.00	274.69	433.69

3280 CROSS SECTION 417.08 EXTENDED 1.13 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 598.50 ELREA= 600.50

******D/S FACE DRIVEWAY

417.08	5.93	600.13	0.00	0.00	600.14	.01	.08	.00	598.50
355.	259.	96.	0.	345.	72.	0.	59.	46.	600.50
1.38	.75	1.32	0.00	.060	.055	.060	.048	594.20	159.00
.000599	160.	160.	160.	2	0	1	0.00	272.68	431.68

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.00	2.80	300.00	3.93	0.00	12.57	0.00	594.20	594.20

3280 CROSS SECTION 417.12 EXTENDED 2.48 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
624.90	600.14	0.00	275.	83.	13.	597.40	601.00	30.00

417.12	7.27	601.47	0.00	0.00	601.48	.00	1.33	0.00	598.50
355.	289.	59.	6.	682.	105.	29.	61.	47.	600.50
1.43	.42	.56	.21	.060	.055	.060	.048	594.20	159.00
.000077	88.	88.	88.	0	0	7	0.00	306.00	465.00

3280 CROSS SECTION 417.13 EXTENDED 2.28 FEET

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
417.13	7.08	601.48	0.00	0.00	601.48	.00	.00	.00	598.70
355.	288.	62.	5.	632.	100.	23.	62.	47.	600.70
1.46	.46	.62	.21	.060	.055	.060	.048	594.40	159.00
.000099	50.	50.	50.	2	0	1	0.00	306.00	465.00

CCHV= .100 CEHV= .300
3280 CROSS SECTION 417.15 EXTENDED 1.24 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 599.80 ELREA= 601.80

417.15	6.05	601.55	0.00	0.00	601.56	.01	.08	.00	599.80
355.	266.	89.	0.	373.	75.	0.	67.	50.	601.80
1.60	.71	1.19	0.00	.060	.055	.060	.049	595.50	159.00
.000486	400.	400.	400.	2	0	1	0.00	273.69	432.69

CCHV= .400 CEHV= .800
3280 CROSS SECTION 417.18 EXTENDED .62 FEET

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 600.60 ELREA= 602.60

*******D/S END OF CULVERT-RUNS ALONG STERNS RD AND CRABB RD

417.18	5.42	601.72	0.00	0.00	601.77	.04	.18	.03	600.60
355.	207.	148.	0.	216.	63.	0.	69.	51.	602.60
1.64	.96	2.36	0.00	.060	.055	.060	.049	596.30	159.00
.001782	220.	220.	220.	2	0	1	0.00	268.07	427.07

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.90	2.80	400.00	3.34	0.00	11.03	0.00	596.60	596.30

3280 CROSS SECTION 417.22 EXTENDED 2.62 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
648.37	602.29	0.00	301.	57.	11.	599.90	602.50	30.00

417.22	6.31	602.91	0.00	0.00	602.92	.01	1.15	0.00	602.30
355.	195.	80.	80.	373.	92.	228.	71.	52.	601.40
1.71	.52	.88	.35	.060	.055	.060	.049	596.60	0.00
.000183	143.	143.	143.	0	0	8	0.00	436.00	436.00

3280 CROSS SECTION 417.30 EXTENDED 2.32 FEET

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
417.30	6.02	602.92	0.00	0.00	602.93	.01	.01	.00	602.60
355.	198.	95.	62.	314.	85.	165.	71.	53.	601.70
1.72	.63	1.11	.38	.060	.055	.060	.049	596.90	0.00
.000326	40.	40.	40.	2	0	1	0.00	436.00	436.00

CCHV= .100 CEHV= .300
3280 CROSS SECTION 418.00 EXTENDED 2.42 FEET

418.00	6.01	603.01	0.00	0.00	603.02	.00	.09	.00	601.40
355.	282.	71.	2.	596.	97.	7.	77.	57.	602.10

1.94	.47	.73	.25	.060	.055	.060	.050	597.00	0.00
.000147	420.	420.	420.	0	0	1	0.00	336.00	336.00

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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       HUD-FIA   H-4705
T2       BEDFORD TOWNSHIP  FIS
T3       KELLY DOTY DRAIN 100 YEAR FLOW=465 CFS - ENCROACHMENT OPTION
J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
      -1.       6.        0.        0.  0.000000      0.00      1.0       0.   589.940     0.000
J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
     2.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
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CCHV=    .150 CEHV=    .350
 2800 NAT Q1=     178.44  WSEL=     589.94  ENC Q1=     178.44  WSEL=     590.04  RATIO=   0.0000
 NAT Q1=     197.  RATIOS LOB,CH,ROB=    .1736   .6673   .1591  WSEL=     590.04
3280 CROSS SECTION    402.00 EXTENDED       .04 FEET

   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


3470 ENCROACHMENT STATIONS=      241.9      475.9  TYPE=      4  TARGET=          .096
   402.00      7.14    589.94      0.00    589.94    590.01       .07      0.00      0.00    589.30
     465.       67.       339.       59.       107.       142.       89.        0.        0.     588.70
     0.00       .63      2.39       .66       .060       .045       .060     0.000    582.80    241.94
  .000707        0.        0.        0.         0          0          1      0.00    233.98    475.92


 2800 NAT Q1=     103.27  WSEL=     591.33  ENC Q1=     103.27  WSEL=     591.43  RATIO=    .0000
 NAT Q1=     110.  RATIOS LOB,CH,ROB=    .1123   .8857   .0020  WSEL=     591.43

3470 ENCROACHMENT STATIONS=      556.9      644.0  TYPE=      4  TARGET=          .063

      ****VALLEY SECTION ABOUT 400 FT U/S OF CORPORATE LIMITS

   403.00      6.77    591.37      0.00    591.33    591.58       .21      1.53       .05    591.20
     465.       27.       438.        0.        34.       116.        0.        8.        5.     591.10
      .10        .77      3.77       .01       .060       .045       .060       .045    584.60    556.87
  .002092     1350.     1350.     1350.         2          0          1      0.00     87.13    644.01


 2800 NAT Q1=     146.28  WSEL=     592.36  ENC Q1=     153.23  WSEL=     592.46  RATIO=  -.0475
 NAT Q1=     153.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     592.46
3280 CROSS SECTION    404.00 EXTENDED      1.62 FEET


3470 ENCROACHMENT STATIONS=      240.0      300.0  TYPE=      4  TARGET=          0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      594.00 ELREA=      594.00

   404.00      7.61    592.41      0.00    592.36    592.49       .08       .89       .02    591.80
     465.        0.       465.        0.         0.       206.        0.       10.        6.     590.70
      .18       0.00      2.26       0.00       .060       .045       .060       .045    584.80    240.00
  .000968      650.      650.      650.         3          0          1      0.00     60.00    300.00


CCHV=    .100 CEHV=    .300
 2800 NAT Q1=      39.36  WSEL=     592.03  ENC Q1=      40.32  WSEL=     592.13  RATIO=  -.0242
 NAT Q1=      40.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     592.13

3301 HV CHANGED MORE THAN HVINS

   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
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   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IOC       ICONT     CORAR     TOPWID     ENDST

3470 ENCROACHMENT STATIONS=      120.0      130.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       594.00 ELREA=       594.00

       *****D/S FACE RAILROAD BRIDGE

   404.98      6.18    592.08      0.00    592.03    592.98       .90       .24       .24    592.00
     465.        0.      465.        0.        0.       61.        0.       11.        6.     592.00
      .19      0.00      7.59      0.00      .060      .045      .060      .045    585.90    120.00
  .013570      100.      100.      100.         3         0         1      0.00     10.00    130.00


SPECIAL BRIDGE

SB  XK          XKCR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      1.05       1.40       2.60     325.00      10.00        .01      62.50       0.00     585.90     585.90

CLASS A LOW FLOW

BRIDGE W.S.=     592.08  BRIDGE VELOCITY=       7.53

  EGPRS      EGLWC        H3        QWEIR       QPR        BAREA      ELLC      ELTRD     CLASS

   593.29     593.31       .00          0.      465.         63.     592.00     597.50       1.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       597.50 ELREA=       597.50

   405.02      6.63    592.53      0.00    592.43    593.31       .78       .33       0.00    592.00
     465.        0.      465.        0.        0.       66.        0.       11.        6.     592.00
      .19      0.00      7.08      0.00      .060      .045      .060      .045    585.90    120.00
  .011047       53.       53.       53.         0         0         1      0.00     10.00    141.50


 2800 NAT Q1=      87.83  WSEL=     593.12  ENC Q1=      91.10  WSEL=     593.22  RATIO=  -.0373
 NAT Q1=      91.  RATIOS LOB,CH,ROB=  0.0000  1.0000  0.0000  WSEL=     593.22
3280 CROSS SECTION    405.10 EXTENDED        .40 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      254.0      279.0  TYPE=      4  TARGET=        0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=       597.50 ELREA=       597.50

   405.10      7.30    593.20      0.00    593.12    593.47       .27       .12       .05    592.90
     465.        0.      465.        0.        0.      111.        0.       11.        6.     591.80
      .19      0.00      4.20      0.00      .060      .045      .060      .045    585.90    254.00
  .002662       25.       25.       25.         3         0         1      0.00     25.00    279.00


 2800 NAT Q1=      48.53  WSEL=     592.95  ENC Q1=      49.54  WSEL=     593.05  RATIO=  -.0209
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NAT Q1= 50. RATIOS LOB,CH,ROB= 0.0000 1.0000 0.0000 WSEL= 593.05

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

3470 ENCROACHMENT STATIONS= 120.0 130.0 TYPE= 4 TARGET= 0.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.50 ELREA= 597.50

****D/S FACE RAILROAD BRIDGE

405.98	7.13	593.03	0.00	592.95	593.70	.67	.11	.12	592.00
465.	0.	465.	0.	0.	71.	0.	11.	6.	592.00
.19	0.00	6.58	0.00	.060	.045	.060	.045	585.90	120.00
.008893	25.	25.	25.	2	0	1	0.00	10.00	130.00

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.40	2.60	250.00	10.00	.01	62.50	0.00	585.90	585.90

CLASS A LOW FLOW

BRIDGE W.S.= 593.03 BRIDGE VELOCITY= 6.53

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
594.23	594.24	.00	0.	465.	63.	592.00	597.50	1.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.50 ELREA= 597.50

406.02	7.78	593.68	0.00	593.58	594.24	.56	.54	0.00	592.00
465.	0.	465.	0.	0.	77.	0.	11.	6.	592.00
.19	0.00	6.02	0.00	.060	.045	.060	.045	585.90	120.00
.006888	37.	37.	37.	0	0	1	0.00	10.00	166.63

2800 NAT Q1= 261.41 WSEL= 594.22 ENC Q1= 261.41 WSEL= 594.32 RATIO= .0000
NAT Q1= 272. RATIOS LOB,CH,ROB= .2818 .5675 .1507 WSEL= 594.32
3280 CROSS SECTION 407.00 EXTENDED 2.30 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 154.5 265.0 TYPE= 4 TARGET= .040

407.00	8.70	594.30	0.00	594.22	594.34	.04	.04	.05	590.90
465.	130.	272.	63.	151.	146.	80.	11.	6.	591.80
.20	.86	1.87	.79	.060	.045	.060	.045	585.60	154.52
.000313	50.	50.	50.	2	0	1	0.00	110.48	264.99

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 2800 NAT Q1=     300.87  WSEL=     594.29  ENC Q1=     300.87  WSEL=     594.39  RATIO=  0.0000
 NAT Q1=     327.  RATIOS LOB,CH,ROB=    .2630    .4580    .2790  WSEL=     594.39
3280 CROSS SECTION     411.00 EXTENDED        .97 FEET


3470 ENCROACHMENT STATIONS=      130.7      557.0  TYPE=      4  TARGET=         .081
   411.00      8.47    594.37      0.00    594.29    594.39       .02       .05       .00    591.70
     465.      131.      219.      115.      267.      154.      278.       14.        7.     593.00
      .26       .49      1.43       .41      .060      .045      .060      .045    585.90    130.68
  .000215      200.      200.      200.         2         0         1      0.00    426.28    556.96


CCHV=    .400  CEHV=    .800
 2800 NAT Q1=     440.03  WSEL=     594.35  ENC Q1=     440.03  WSEL=     594.45  RATIO=    .0000
 NAT Q1=     468.  RATIOS LOB,CH,ROB=    .3431    .3806    .2763  WSEL=     594.45
3280 CROSS SECTION     411.98 EXTENDED       1.83 FEET


   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    ICC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=       23.7      380.3  TYPE=      4  TARGET=         .060

      ****D/S FACE TELEGRAPH RD

   411.98      8.13    594.43      0.00    594.35    594.43       .01       .04       .00    591.60
     465.      163.      184.      118.      400.      168.      269.       18.       10.     590.90
      .37       .41      1.10       .44      .060      .045      .060      .045    586.30     23.71
  .000108      270.      270.      270.         2         0         1      0.00    356.63    380.35


SPECIAL BRIDGE

SB   XK         XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      1.25       1.80       2.60     375.00      23.32       1.32      90.24       0.00     586.30     586.30

 2800 NAT Q1=     473.32  WSEL=     594.46  ENC Q1=     473.32  WSEL=     594.56  RATIO=  0.0000
 NAT Q1=     500.  RATIOS LOB,CH,ROB=    .3527    .3668    .2805  WSEL=     594.56
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION     412.02 EXTENDED       1.93 FEET


3470 ENCROACHMENT STATIONS=       20.4      383.0  TYPE=      4  TARGET=         .054
   412.02      8.23    594.53      0.00    594.46    594.54       .01       .01       .00    591.60
     465.      167.      177.      121.      426.      170.      287.       20.       10.     590.90
      .40       .39      1.04       .42      .060      .045      .060      .045    586.30     20.35
  .000094       68.       68.       68.         0         0         4      0.00    362.61    382.96


 2800 NAT Q1=     339.51  WSEL=     594.46  ENC Q1=     339.51  WSEL=     594.56  RATIO=    .0000
 NAT Q1=     364.  RATIOS LOB,CH,ROB=    .3022    .4399    .2579  WSEL=     594.56
3280 CROSS SECTION     412.10 EXTENDED       1.44 FEET
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3470 ENCROACHMENT STATIONS=      31.8      374.9  TYPE=      4  TARGET=         .068
   412.10      7.74   594.54      0.00   594.46   594.55       .01       .01       .01   592.10
     465.      146.      212.      107.      317.      157.      213.       21.       11.    591.40
      .42       .46      1.35       .50      .060      .045      .060      .045   586.80    31.77
  .000177       50.       50.       50.         2         0         1      0.00   343.18   374.94


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     201.44  WSEL=     594.58  ENC Q1=     201.44  WSEL=     594.68  RATIO=   0.0000
 NAT Q1=     221.  RATIOS LOB,CH,ROB=    .3439    .4986    .1575  WSEL=     594.68
3280 CROSS SECTION     413.00 EXTENDED        .05 FEET



3470 ENCROACHMENT STATIONS=      86.3      386.8  TYPE=      4  TARGET=         .087
   413.00      7.25   594.65      0.00   594.58   594.68       .04       .12       .01   592.50
     465.      152.      245.       68.      192.      123.      136.       26.       14.    593.70
      .51       .79      1.99       .50      .060      .045      .060      .045   587.40    86.33
  .000506      430.      430.      430.         2         0         1      0.00   300.43   386.76


 2800 NAT Q1=     213.94  WSEL=     594.71  ENC Q1=     213.94  WSEL=     594.81  RATIO=    .0000
 NAT Q1=     232.  RATIOS LOB,CH,ROB=    .3210    .5975    .0815  WSEL=     594.81
   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
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3470 ENCROACHMENT STATIONS=      77.0      306.6  TYPE=      4  TARGET=         .079
   413.10      7.47   594.77      0.00   594.71   594.80       .03       .12       .00   594.10
     465.      143.      299.       23.      213.      167.       38.       29.       16.    593.50
      .56       .67      1.79       .61      .060      .045      .060      .045   587.30    76.97
  .000477      250.      250.      250.         2         0         1      0.00   229.63   306.60


CCHV=     .300 CEHV=     .500
 2800 NAT Q1=     148.68  WSEL=     594.77  ENC Q1=     148.68  WSEL=     594.87  RATIO=    .0000
 NAT Q1=     162.  RATIOS LOB,CH,ROB=    .2386    .7151    .0463  WSEL=     594.87

3470 ENCROACHMENT STATIONS=      93.2      279.8  TYPE=      4  TARGET=         .082

       **D/S FACE KIRTWOOD RD

   413.98      7.04   594.84      0.00   594.77   594.91       .07       .09       .02   594.60
     465.      100.      362.        3.      129.      149.        4.       30.       16.    594.00
      .57       .77      2.42       .69      .060      .045      .060      .045   587.80    93.23
  .001010      128.      128.      128.         2         0         1      0.00   186.56   279.78


SPECIAL BRIDGE

SB   XK         XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       1.60       2.70     300.00       3.31       0.00      11.91       0.00    587.80     587.80

 2800 NAT Q1=     162.13  WSEL=     594.87  ENC Q1=     162.13  WSEL=     594.97  RATIO=    .0000
 NAT Q1=     177.  RATIOS LOB,CH,ROB=    .2604    .6851    .0545  WSEL=     594.97
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
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3470 ENCROACHMENT STATIONS=      88.8      285.8  TYPE=      4  TARGET=         .082
   414.02      7.14    594.94      0.00    594.87    595.00       .06       .04       .00    594.60
     465.       112.      346.       7.      149.      153.       10.       30.       16.     594.00
      .58       .75      2.26       .68      .060      .045      .060      .045    587.80     88.82
  .000844       42.       42.       42.         0         0         7      0.00    197.02    285.84


 2800 NAT Q1=     312.64  WSEL=     594.95  ENC Q1=     312.64  WSEL=     595.05  RATIO=   0.0000
 NAT Q1=     336.  RATIOS LOB,CH,ROB=    .2043    .3006    .4952  WSEL=     595.05
3280 CROSS SECTION     414.05 EXTENDED       2.33 FEET


3470 ENCROACHMENT STATIONS=      360.3      763.5  TYPE=      4  TARGET=         .071
   414.05      7.12    595.02      0.00    594.95    595.03       .01       .02       .02    593.60
     465.       83.      152.      230.      203.      136.      386.       31.       17.     594.00
      .60       .41      1.11       .60      .060      .055      .060      .045    587.90    360.27
  .000229       50.       50.       50.         1         0         1      0.00    403.22    763.50


CCHV=     .150 CEHV=     .350
 2800 NAT Q1=     274.07  WSEL=     594.97  ENC Q1=     274.07  WSEL=     595.07  RATIO=    .0000
 NAT Q1=     294.  RATIOS LOB,CH,ROB=    .0367    .3414    .6219  WSEL=     595.07
3280 CROSS SECTION     414.06 EXTENDED       2.25 FEET

   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

3470 ENCROACHMENT STATIONS=      535.4      789.9  TYPE=      4  TARGET=         .067
   414.06      7.05    595.05      0.00    594.97    595.06       .01       .02       .00    593.70
     465.         2.      172.      292.         3.      135.      433.       32.       17.     593.80
      .63       .51      1.27       .67      .060      .055      .060      .045    588.00    535.43
  .000299       90.       90.       90.         2         0         1      0.00    254.42    789.85


CCHV=     .350 CEHV=     .700
 2800 NAT Q1=     275.19  WSEL=     594.99  ENC Q1=     275.19  WSEL=     595.09  RATIO=    .0000
 NAT Q1=     296.  RATIOS LOB,CH,ROB=    .0370    .3400    .6230  WSEL=     595.09
3280 CROSS SECTION     414.08 EXTENDED       2.25 FEET


3470 ENCROACHMENT STATIONS=      536.7      789.3  TYPE=      4  TARGET=         .071

       ******D/S FACE DRIVEWAY

   414.08      7.06    595.06      0.00    594.99    595.07       .01       .01       .00    593.70
     465.         1.      172.      292.         2.      135.      434.       32.       18.     593.80
      .64       .52      1.27       .67      .060      .055      .060      .045    588.00    536.67
  .000299       40.       40.       40.         1         0         1      0.00    252.65    789.32


SPECIAL BRIDGE
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SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
     0.00        1.60        2.60      300.00        6.00        0.00       27.00        0.00      588.00      588.00

 2800 NAT Q1=     289.41  WSEL=     595.05  ENC Q1=     289.41  WSEL=     595.15  RATIO=    .0000
 NAT Q1=     309.  RATIOS LOB,CH,ROB=    .0387   .3329   .6283  WSEL=     595.15
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION     414.12 EXTENDED       2.32 FEET


3470 ENCROACHMENT STATIONS=      531.7       790.7  TYPE=      4  TARGET=          .062
   414.12       7.12    595.12       0.00    595.05    595.13       .01        .00        .00     593.70
     465.         4.       166.       294.       8.       137.      452.        33.        18.      593.80
      .64        .49       1.21       .65      .060       .055      .060       .045     588.00     531.73
  .000267       16.        16.        16.         0          0         7       0.00     258.96     790.69

 2800 NAT Q1=     233.53  WSEL=     595.06  ENC Q1=     233.53  WSEL=     595.16  RATIO=    .0000
 NAT Q1=     252.  RATIOS LOB,CH,ROB=    .0300   .3702   .5998  WSEL=     595.16
3280 CROSS SECTION     414.15 EXTENDED       2.03 FEET


3470 ENCROACHMENT STATIONS=      538.0       787.0  TYPE=      4  TARGET=          .073
   414.15       6.83    595.13       0.00    595.06    595.15       .02        .01        .00     594.00
     465.         0.       188.       277.       0.       129.      379.        33.        18.      594.10
      .65        .01       1.45       .73      .060       .055      .060       .045     588.30     538.00
  .000413       40.        40.        40.         2          0         1       0.00     248.99     786.99

CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     185.73  WSEL=     595.08  ENC Q1=     185.73  WSEL=     595.18  RATIO=    .0000
 NAT Q1=     202.  RATIOS LOB,CH,ROB=    .0203   .4173   .5624  WSEL=     595.18
3280 CROSS SECTION     414.18 EXTENDED       1.75 FEET

   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       XICH        XLOBR       ITRIAL      IDC         ICONT       CORAR       TOPWID        ENDST


3470 ENCROACHMENT STATIONS=      538.0       781.1  TYPE=      4  TARGET=          .081

       *****D/S FACE DRIVEWAY

   414.18       6.55    595.15       0.00    595.08    595.18       .03        .02        .01     594.30
     465.         0.       213.       252.       0.       122.      306.        34.        18.      594.40
      .66        .01       1.75       .82      .060       .055      .060       .045     588.60     538.00
  .000655       40.        40.        40.         2          0         1       0.00     243.11     781.11


SPECIAL BRIDGE

SB  XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
     0.00        1.70        2.80      300.00        3.75        0.00       15.01        0.00      588.60      588.60

 2800 NAT Q1=     381.33  WSEL=     596.08  ENC Q1=     381.33  WSEL=     596.18  RATIO=    .0000
 NAT Q1=     403.  RATIOS LOB,CH,ROB=    .0493   .2918   .6589  WSEL=     596.18
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 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    414.22 EXTENDED      2.75 FEET


3470 ENCROACHMENT STATIONS=      522.7      792.2  TYPE=      4  TARGET=          .053
   414.22      7.55    596.15      0.00    596.08    596.16       .01       .01       .01    594.30
     465.       11.       144.      310.       26.      149.      553.       34.       18.     594.40
      .68       .43       .97       .56      .060      .055      .060      .046    588.60    522.71
  .000153       40.       40.       40.         0         0         7      0.00    269.44    792.15


 2800 NAT Q1=     256.15  WSEL=     596.08  ENC Q1=     256.15  WSEL=     596.18  RATIO=    .0000
 NAT Q1=     275.  RATIOS LOB,CH,ROB=    .0339    .3532    .6129  WSEL=     596.18
3280 CROSS SECTION    414.25 EXTENDED      2.15 FEET


3470 ENCROACHMENT STATIONS=      538.0      789.2  TYPE=      4  TARGET=          .069
   414.25      6.95    596.15      0.00    596.08    596.17       .02       .01       .01    594.90
     465.         0.       178.      287.         0.      133.      411.       35.       19.     595.00
      .69       .00      1.34       .70      .060      .055      .060      .046    589.20    538.00
  .000342       30.       30.       30.         2         0         1      0.00    251.22    789.22


 2800 NAT Q1=     144.55  WSEL=     596.10  ENC Q1=     144.55  WSEL=     596.20  RATIO=    .0000
 NAT Q1=     159.  RATIOS LOB,CH,ROB=    .0099    .4785    .5116  WSEL=     596.20
3280 CROSS SECTION    414.28 EXTENDED      1.47 FEET


3470 ENCROACHMENT STATIONS=      538.0      774.4  TYPE=      4  TARGET=          .088

       *****D/S FACE DRIVEWAY

   414.28      6.27    596.17      0.00    596.10    596.21       .04       .02       .02    595.60
     465.         0.       247.      218.         0.      114.      237.       35.       19.     595.70
      .70       .01      2.16       .92      .060      .055      .060      .046    589.90    538.00
  .001083       40.       40.       40.         2         0.        1      0.00    236.44    774.44


SPECIAL BRIDGE

SB   XK          XKOR        COFQ        RDLEN       BWC         BWP         BAREA       SS          ELCHU       ELCHD
      0.00        2.05        2.80      300.00        3.33        0.00        8.65        0.00      590.00      590.00

 2800 NAT Q1=     152.35  WSEL=     596.15  ENC Q1=     152.35  WSEL=     596.25  RATIO=    .0000
 NAT Q1=     167.  RATIOS LOB,CH,ROB=    .0120    .4646    .5234  WSEL=     596.25
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    414.32 EXTENDED      1.53 FEET


   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


3470 ENCROACHMENT STATIONS=      538.0      775.7  TYPE=      4  TARGET=          .087
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  414.32      6.33    596.23      0.00    596.15    596.27      .04      .02      .00    595.60
    465.         0.      240.      225.        0.      116.      250.      35.      19.     595.70
     .70        .01      2.07       .90      .060      .055      .060     .046   589.90    538.00
.000976        20.       20.        20.         0         0        12     0.00   237.68    775.68

 2800 NAT Q1=     132.20  WSEL=     596.21  ENC Q1=     132.20  WSEL=     596.31  RATIO=    .0000
 NAT Q1=     146.  RATIOS LOB,CH,ROB=    .0066    .5026    .4908  WSEL=     596.31
3280 CROSS SECTION     414.35 EXTENDED       1.38 FEET


3470 ENCROACHMENT STATIONS=      538.0      771.7  TYPE=      4  TARGET=         .092
  414.35      6.18    596.28      0.00    596.21    596.33      .05      .06      .01    595.80
    465.         0.      260.      205.        0.      112.      214.      35.      19.     595.90
     .71        .01      2.33       .96      .060      .055      .060     .046   590.10    538.00
.001294        50.       50.        50.         2         0         1     0.00   233.70    771.70

CCHV=     .400 CEHV=     .800
 2800 NAT Q1=      90.07  WSEL=     596.53  ENC Q1=      90.07  WSEL=     596.63  RATIO=    .0000
 NAT Q1=     100.  RATIOS LOB,CH,ROB=    .0001    .6246    .3753  WSEL=     596.63
3280 CROSS SECTION     415.00 EXTENDED       1.01 FEET


3470 ENCROACHMENT STATIONS=      538.0      762.1  TYPE=      4  TARGET=         .098
  415.00      5.81    596.61      0.00    596.53    596.73      .12      .35      .05    596.50
    465.         0.      325.      140.        0.      102.      128.      37.      20.     596.60
     .73        .01      3.19      1.10      .060      .055      .060     .046   590.80    538.00
.002744       190.      190.       190.         2         0         1     0.00   224.05    762.05

 2800 NAT Q1=     128.28  WSEL=     596.87  ENC Q1=     128.28  WSEL=     596.97  RATIO=    .0000
 NAT Q1=     141.  RATIOS LOB,CH,ROB=    .0056    .5111    .4833  WSEL=     596.97
3280 CROSS SECTION     415.05 EXTENDED       1.38 FEET


3470 ENCROACHMENT STATIONS=      538.0      770.8  TYPE=      4  TARGET=         .092
  415.05      6.17    596.97      0.00    596.87    597.03      .05      .27      .02    596.50
    465.         0.      261.      204.        0.      112.      212.      38.      21.     596.60
     .75        .01      2.34       .96      .060      .055      .060     .046   590.80    538.00
.001305       150.      150.       150.         2         0         1     0.00   232.84    770.84

CCHV=     .400 CEHV=     .800
 2800 NAT Q1=     129.01  WSEL=     596.99  ENC Q1=     129.01  WSEL=     597.09  RATIO=    .0000
 NAT Q1=     143.  RATIOS LOB,CH,ROB=    .0060    .5078    .4862  WSEL=     597.09
3280 CROSS SECTION     415.08 EXTENDED       1.38 FEET

   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALCB      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=      538.0      769.4  TYPE=      4  TARGET=         .097
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****D/S FACE DRIVEWAY

415.08	6.19	597.09	0.00	596.99	597.14	.05	.11	.00	596.60
465.	0.	262.	203.	0.	112.	210.	38.	21.	596.70
.77	.01	2.35	.96	.060	.055	.060	.047	590.90	538.00
.001314	85.	85.	85.	1	0	1	0.00	231.36	769.36

SPECIAL BRIDGE

SB	XK	XKCR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	2.05	2.80	300.00	3.33	0.00	8.65	0.00	591.00	591.00

2800 NAT Q1= 270.87 WSEL= 597.62 ENC Q1= 270.87 WSEL= 597.72 RATIO= .0000
NAT Q1= 290. RATIOS LOB,CH,ROB= .0196 .3076 .6728 WSEL= 597.72
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION 415.12 EXTENDED 1.82 FEET

3470 ENCROACHMENT STATIONS= 517.0 781.4 TYPE= 4 TARGET= .067

415.12	6.72	597.72	0.00	597.62	597.74	.01	.01	.02	596.40
465.	0.	153.	312.	0.	125.	468.	39.	22.	595.90
.77	.00	1.22	.67	.060	.055	.060	.047	591.00	517.00
.000293	26.	26.	26.	0	0	9	0.00	264.36	781.36

2800 NAT Q1= 233.09 WSEL= 597.64 ENC Q1= 233.09 WSEL= 597.74 RATIO= .0000
NAT Q1= 252. RATIOS LOB,CH,ROB= .0144 .3304 .6552 WSEL= 597.74
3280 CROSS SECTION 415.15 EXTENDED 1.64 FEET

3470 ENCROACHMENT STATIONS= 517.0 774.9 TYPE= 4 TARGET= .076

415.15	6.54	597.74	0.00	597.64	597.75	.02	.01	.00	596.60
465.	0.	166.	299.	0.	120.	413.	39.	22.	596.10
.79	.00	1.38	.73	.060	.055	.060	.047	591.20	517.00
.000395	40.	40.	40.	2	0	1	0.00	257.89	774.89

CCHV= .100 CEHV= .300
2800 NAT Q1= 139.66 WSEL= 597.78 ENC Q1= 139.66 WSEL= 597.88 RATIO= .0000
NAT Q1= 154. RATIOS LOB,CH,ROB= 0.0000 .4293 .5707 WSEL= 597.88
3280 CROSS SECTICN 415.20 EXTENDED 1.07 FEET

3470 ENCROACHMENT STATIONS= 517.0 755.2 TYPE= 4 TARGET= .095

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.00 ELREA= 596.80

415.20	5.97	597.87	0.00	597.78	597.91	.04	.15	.01	597.30
465.	0.	218.	247.	0.	105.	260.	42.	23.	596.80
.83	0.00	2.08	.95	.060	.055	.060	.047	591.90	517.00
.001106	250.	250.	250.	2	0	1	0.00	238.18	755.18

CCHV= .400 CEHV= .800
2800 NAT Q1= 72.27 WSEL= 597.98 ENC Q1= 72.27 WSEL= 598.08 RATIO= 0.0000
NAT Q1= 84. RATIOS LOB,CH,ROB= .4670 .5330 0.0000 WSEL= 598.08

3280 CROSS SECTION 415.98 EXTENDED .27 FEET

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

3470 ENCROACHMENT STATIONS= 298.3 540.0 TYPE= 4 TARGET= .135

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 597.60 ELREA= 598.30

****D/S FACE STERNS RD

415.98	5.87	598.07	0.00	597.98	598.13	.06	.20	.02	597.60
355.	153.	202.	0.	164.	78.	0.	43.	24.	598.30
.85	.93	2.58	0.00	.060	.055	.060	.047	592.20	298.29
.002072	140.	140.	140.	2	0	1	0.00	241.39	529.68

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.00	3.80	2.80	475.00	3.34	0.00	11.03	0.00	592.80	592.20

2800 NAT Q1= 523.35 WSEL= 599.96 ENC Q1= 523.35 WSEL= 600.06 RATIO= 0.0000
NAT Q1= 559. RATIOS LOB,CH,ROB= .5223 .1199 .3577 WSEL= 600.06
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION 416.02 EXTENDED 2.45 FEET

3470 ENCROACHMENT STATIONS= 206.4 683.8 TYPE= 4 TARGET= .064

416.02	7.25	600.05	0.00	599.96	600.05	.00	.04	.03	597.10
355.	186.	46.	123.	561.	105.	463.	47.	26.	599.10
1.10	.33	.43	.27	.060	.055	.060	.048	592.80	206.42
.000047	286.	286.	286.	0	0	9	0.00	477.42	683.83

2800 NAT Q1= 373.11 WSEL= 599.97 ENC Q1= 373.11 WSEL= 600.07 RATIO= .0000
NAT Q1= 403. RATIOS LOB,CH,ROB= .8596 .1351 .0052 WSEL= 600.07
3280 CROSS SECTION 416.50 EXTENDED 1.96 FEET

3470 ENCROACHMENT STATIONS= 40.5 435.0 TYPE= 4 TARGET= .075

416.50	6.76	600.06	0.00	599.97	600.06	.00	.01	.00	597.60
355.	303.	52.	0.	773.	92.	0.	50.	28.	599.60
1.18	.39	.56	.00	.060	.055	.060	.048	593.30	40.51
.000093	125.	125.	125.	2	0	1	0.00	394.49	435.00

2800 NAT Q1= 265.92 WSEL= 599.98 ENC Q1= 265.92 WSEL= 600.08 RATIO= .0000
NAT Q1= 292. RATIOS LOB,CH,ROB= .8443 .1553 .0004 WSEL= 600.08
3280 CROSS SECTION 416.98 EXTENDED 1.57 FEET

3470 ENCROACHMENT STATIONS= 54.3 435.0 TYPE= 4 TARGET= .088

****D/S FACE DRIVEWAY

416.98	6.37	600.07	0.00	599.98	600.07	.00	.01	.00	598.00
355.	294.	61.	0.	608.	83.	0.	51.	28.	600.00
1.23	.48	.74	.00	.060	.055	.060	.048	593.70	54.34
.000183	80.	80.	80.	2	0	1	0.00	380.67	435.00

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.00	2.00	2.80	400.00	3.93	0.00	12.57	0.00	593.70	593.70

2800 NAT Q1= 278.18 WSEL= 600.02 ENC Q1= 278.18 WSEL= 600.12 RATIO= .0000
NAT Q1= 304. RATIOS LOB,CH,ROB= .8467 .1525 .0008 WSEL= 600.12
WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION 417.02 EXTENDED 1.61 FEET

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

3470 ENCROACHMENT STATIONS= 50.9 435.0 TYPE= 4 TARGET= .084

417.02	6.41	600.11	0.00	600.02	600.12	.00	.01	.00	598.00
355.	295.	60.	0.	630.	84.	0.	52.	29.	600.00
1.25	.47	.71	.00	.060	.055	.060	.048	593.70	50.94
.000167	40.	40.	40.	0	0	10	0.00	384.06	435.00

2800 NAT Q1= 177.67 WSEL= 600.05 ENC Q1= 177.67 WSEL= 600.15 RATIO= 0.0000
NAT Q1= 193. RATIOS LOB,CH,ROB= .7781 .2219 0.0000 WSEL= 600.15
3280 CROSS SECTION 417.05 EXTENDED 1.44 FEET

3470 ENCROACHMENT STATIONS= 195.4 435.0 TYPE= 4 TARGET= .081

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 598.20 ELREA= 600.20

417.05	6.24	600.14	0.00	600.05	600.15	.01	.03	.01	598.20
355.	269.	86.	0.	373.	80.	0.	54.	30.	600.20
1.29	.72	1.08	0.00	.060	.055	.060	.048	593.90	195.40
.000405	130.	130.	130.	2	0	1	0.00	239.10	434.49

2800 NAT Q1= 145.06 WSEL= 600.13 ENC Q1= 145.06 WSEL= 600.23 RATIO= .0000
NAT Q1= 159. RATIOS LOB,CH,ROB= .7475 .2525 0.0000 WSEL= 600.23
3280 CROSS SECTION 417.08 EXTENDED 1.22 FEET

3470 ENCROACHMENT STATIONS= 201.9 435.0 TYPE= 4 TARGET= .089

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OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      598.50 ELREA=      600.50

       ******D/S FACE DRIVEWAY

   417.08      6.02   600.22      0.00   600.13   600.24      .01      .08      .00   598.50
     355.      256.      99.        0.     317.      74.        0.      55.      30.    600.50
     1.34       .81     1.33      0.00     .060     .055     .060     .048   594.20   201.91
  .000608      160.     160.      160.        2        0        1     0.00   230.58   432.49


SPECIAL BRIDGE

SB  XK         XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
     0.00       2.00       2.80     300.00       3.93       0.00      12.57       0.00     594.20     594.20

 2800 NAT Q1=     403.42  WSEL=     601.47  ENC Q1=     403.42  WSEL=     601.57  RATIO=    .0000
 NAT Q1=     427.  RATIOS LOB,CH,ROB=    .8164    .1640    .0195  WSEL=     601.57
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION     417.12 EXTENDED       2.56 FEET


3470 ENCROACHMENT STATIONS=      172.7      435.0  TYPE=      4  TARGET=         .055
   417.12      7.36   601.56      0.00   601.47   601.57      .00      .01      .00   598.50
     355.      295.      60.        0.     671.     108.        0.      57.      31.    600.50
     1.39       .44       .56      0.00     .060     .055     .060     .048   594.20   172.72
  .000079      88.      88.       88.         0        0        7     0.00   262.27   435.00
 2800 NAT Q1=     356.91  WSEL=     601.48  ENC Q1=     356.91  WSEL=     601.58  RATIO=    .0000
 NAT Q1=     380.  RATIOS LOB,CH,ROB=    .8137    .1706    .0157  WSEL=     601.58
3280 CROSS SECTION     417.13 EXTENDED       2.37 FEET

   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


3470 ENCROACHMENT STATIONS=      176.5      435.0  TYPE=      4  TARGET=         .061
   417.13      7.17   601.57      0.00   601.48   601.57      .00      .00      .00   598.70
     355.      292.      63.        0.     616.     103.        0.      57.      31.    600.70
     1.42       .47       .62      0.00     .060     .055     .060     .048   594.40   176.49
  .000100      50.      50.       50.         2        0        1     0.00   258.51   435.00


CCHV=     .100 CEHV=     .300
 2800 NAT Q1=     161.09  WSEL=     601.55  ENC Q1=     161.09  WSEL=     601.65  RATIO=  0.0000
 NAT Q1=     176.  RATIOS LOB,CH,ROB=    .7644    .2356  0.0000  WSEL=     601.65
3280 CROSS SECTION     417.15 EXTENDED       1.33 FEET


3470 ENCROACHMENT STATIONS=      199.5      435.0  TYPE=      4  TARGET=         .087

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      599.80 ELREA=      601.80
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  417.15      6.14    601.64      0.00    601.55    601.65       .01       .08       .00    599.80
    355.      263.       92.        0.      344.       77.        0.       63.       34.     601.80
    1.55       .76      1.20      0.00      .060      .055      .060      .049    595.50    199.49
 .000495      400.      400.      400.         2         0         1      0.00    234.02    433.51


CCHV=    .400 CEHV=    .800
 2800 NAT Q1=      84.10  WSEL=    601.72  ENC Q1=      84.10  WSEL=    601.82  RATIO=  0.0000
 NAT Q1=     95.  RATIOS LOB,CH,ROB=   .6245   .3755  0.0000  WSEL=    601.82
3280 CROSS SECTION    417.18 EXTENDED       .71 FEET


3470 ENCROACHMENT STATIONS=     221.9     435.0  TYPE=     4  TARGET=        .114

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      600.60 ELREA=      602.60

       *******D/S END OF CULVERT-RUNS ALONG STERNS RD AND CRABB RD

  417.18      5.52    601.82      0.00    601.72    601.86       .05       .19       .03    600.60
    355.      206.      149.        0.      194.       64.        0.       64.       35.     602.60
    1.58      1.06      2.32      0.00      .060      .055      .060      .049    596.30    221.91
 .001754      220.      220.      220.         2         0         1      0.00    206.00    427.91


SPECIAL BRIDGE

SB   XK         XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
      0.00       2.90       2.80     400.00       3.34       0.00      11.03       0.00     596.60     596.30

 2800 NAT Q1=     262.42  WSEL=    602.91  ENC Q1=     262.42  WSEL=    603.01  RATIO=   .0000
 NAT Q1=     285.  RATIOS LOB,CH,ROB=   .5458   .2159   .2383  WSEL=    603.01
 WATER EL=CHANGE FROM NATURAL PROFILES BRIDGE
3280 CROSS SECTION    417.22 EXTENDED      2.70 FEET

   SECND      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS     BANK ELEV
   Q          OLOB       QCH        QROB       ALCB       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=      10.5     399.8  TYPE=     4  TARGET=        .081
  417.22      6.40    603.00      0.00    602.91    603.01       .01       .06       .02    602.30
    355.      191.       82.       83.      362.       94.      219.       66.       36.     601.40
    1.65       .53       .87       .38      .060      .055      .060      .049    596.60     10.53
 .000177      143.      143.      143.         0         0         8      0.00    389.30    399.83


 2800 NAT Q1=     196.56  WSEL=    602.92  ENC Q1=     196.56  WSEL=    603.02  RATIO=   .0000
 NAT Q1=     218.  RATIOS LOB,CH,ROB=   .5552   .2516   .1931  WSEL=    603.02
3280 CROSS SECTION    417.30 EXTENDED      2.41 FEET


3470 ENCROACHMENT STATIONS=      11.9     382.2  TYPE=     4  TARGET=        .097
  417.30      6.11    603.01      0.00    602.92    603.02       .01       .01       .00    602.60
    355.      192.       96.       67.      304.       87.      156.       66.       36.     601.70
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    1.67       .63      1.10       .43      .060      .055      .060      .049    596.90     11.91
 .000310       40.       40.       40.         2         0         1      0.00    370.33    382.24


CCHV=     .100 CEHV=     .300
 2800 NAT Q1=     292.69  WSEL=     603.01  ENC Q1=     292.69  WSEL=     603.11  RATIO=    .0000
 NAT Q1=     314.  RATIOS LOB,CH,ROB=    .7994    .1950    .0056  WSEL=     603.11
3280 CROSS SECTION     418.00 EXTENDED       2.51 FEET


3470 ENCROACHMENT STATIONS=       20.5      327.0  TYPE=       4  TARGET=         .068
   418.00      6.10    603.10      0.00    603.01    603.11       .00       .09       .00    601.40
      355.      282.       73.        0.       573.      100.        0.       72.       39.    602.10
     1.88       .49       .74      0.00      .060      .055      .060      .050    597.00     20.53
 .000151       420.      420.      420.         0         0         1      0.00    306.47    327.00
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1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty Drain

4) DOCUMENT TYPE: 100yr. Convergence

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

Convergence

KELLY DOTY DRAIN 100 YF

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
400.000	465.00	587.26	587.26	106.39	587.43	60.95	0.00	0.00	587.26	-I	-I	587.26
400.000	465.00	588.26	588.26	167.37	588.35	70.00	0.00	0.00	588.26	0.00	0.00	588.26
400.000	465.00	586.26	586.26	65.10	586.62	30.61	0.00	0.00	586.26	0.00	0.00	586.26
400.980	465.00	587.38	587.38	71.73	587.90	14.00	0.00	0.00	0.00	587.26	587.26	0.00
400.980	465.00	588.25	588.25	88.04	588.64	14.00	0.00	0.00	0.00	588.26	588.26	0.00
400.980	465.00	586.71	586.71	59.65	587.37	14.00	0.00	0.00	0.00	586.26	586.26	0.00
401.020	465.00	588.11	588.11	89.14	588.49	14.00	0.00	0.00	0.00	0.00	0.00	0.00
401.020	465.00	589.07	589.07	108.00	589.36	14.00	0.00	0.00	0.00	0.00	0.00	0.00
401.020	465.00	587.32	587.32	74.42	587.82	14.00	0.00	0.00	0.00	0.00	0.00	0.00
401.100	465.00	588.54	588.54	103.15	588.68	86.14	0.00	0.00	0.00	0.00	0.00	0.00
401.100	465.00	589.43	589.43	169.72	589.49	111.25	0.00	0.00	0.00	0.00	0.00	0.00
401.100	465.00	587.75	587.75	64.76	588.08	33.32	0.00	0.00	0.00	0.00	0.00	0.00
402.000	465.00	589.94	589.94	178.85	590.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
402.000	465.00	590.14	590.14	218.91	590.18	700.00	0.00	0.00	0.00	0.00	0.00	0.00
402.000	465.00	589.91	589.91	172.27	589.97	700.00	0.00	0.00	0.00	0.00	0.00	0.00
403.000	465.00	591.32	591.32	102.92	591.52	203.10	0.00	0.00	0.00	0.00	0.00	0.00
403.000	465.00	591.20	591.20	94.98	591.43	178.45	0.00	0.00	0.00	0.00	0.00	0.00
403.000	465.00	591.35	591.35	104.73	591.54	208.24	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
400.000	465.000	587.260	0.000	0.000	0.000	60.953	0.000	0.000
400.000	465.000	588.260	1.000	0.000	0.000	70.000	-9.048	0.000
400.000	465.000	586.260	-2.000	0.000	0.000	30.614	30.338	0.000
400.980	465.000	587.382	0.000	.122	0.000	14.000	0.000	108.000
400.980	465.000	588.252	.870	-.008	0.000	14.000	0.000	108.000
400.980	465.000	586.706	-1.546	.446	0.000	14.000	0.000	108.000
401.020	465.000	588.107	0.000	.726	0.000	14.000	0.000	44.000
401.020	465.000	589.067	.960	.816	0.000	14.000	0.000	44.000
401.020	465.000	587.324	-1.744	.617	0.000	14.000	0.000	44.000
401.100	465.000	588.545	0.000	.438	0.000	86.143	0.000	50.000
401.100	465.000	589.426	.881	.359	0.000	111.253	-25.110	50.000
401.100	465.000	587.745	-1.681	.422	0.000	33.315	52.828	50.000
402.000	465.000	589.937	0.000	1.392	0.000	700.000	0.000	1200.000
402.000	465.000	590.139	.202	.713	0.000	700.000	-.000	1200.000
402.000	465.000	589.905	-.234	2.160	0.000	700.000	.000	1200.000
403.000	465.000	591.321	0.000	1.384	0.000	203.097	0.000	1350.000
403.000	465.000	591.201	-.120	1.062	0.000	178.452	24.645	1350.000
403.000	465.000	591.348	.148	1.443	0.000	208.242	-5.145	1350.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	24.987	0.000
2	0.000	0.000	24.977	-.010
3	0.000	0.000	24.271	-.716

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty drain

4) DOCUMENT TYPE: 100 yr. Sensitivity

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

KELLY DOTY DRAIN 100 YEA Sensitivity

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
402.000	465.00	589.94	589.94	178.44	590.00	700.00	0.00	0.00	589.94		-I		-I	589.94
402.000	465.00	589.94	589.94	137.26	590.00	700.00	0.00	0.00	589.94		0.00		0.00	589.94
402.000	465.00	589.94	589.94	254.91	590.00	700.00	0.00	0.00	589.94		0.00		0.00	589.94
403.000	465.00	591.33	591.33	103.27	591.52	204.10	0.00	0.00	0.00		589.94		589.94	0.00
403.000	465.00	591.80	591.80	111.76	591.90	297.87	0.00	0.00	0.00		589.94		589.94	0.00
403.000	465.00	590.64	590.64	107.52	590.99	23.78	0.00	0.00	0.00		589.94		589.94	0.00
404.000	465.00	592.36	592.36	146.28	592.44	60.00	0.00	0.00	0.00		0.00		0.00	0.00
404.000	465.00	592.76	592.76	135.26	592.82	60.00	0.00	0.00	0.00		0.00		0.00	0.00
404.000	465.00	591.63	591.63	169.30	591.76	45.75	0.00	0.00	0.00		0.00		0.00	0.00
404.980	465.00	592.03	592.03	39.36	592.94	10.00	0.00	0.00	0.00		0.00		0.00	0.00
404.980	465.00	592.56	592.56	34.32	593.33	10.00	0.00	0.00	0.00		0.00		0.00	0.00
404.980	465.00	591.03	591.03	44.40	592.33	9.97	0.00	0.00	0.00		0.00		0.00	0.00
405.020	465.00	592.43	592.43	43.26	593.23	10.00	0.00	0.00	0.00		0.00		0.00	0.00
405.020	465.00	593.11	593.11	38.63	593.77	10.00	0.00	0.00	0.00		0.00		0.00	0.00
405.020	465.00	591.04	591.04	44.45	592.34	9.97	0.00	0.00	0.00		0.00		0.00	0.00
405.100	465.00	593.12	593.12	87.83	593.41	25.00	0.00	0.00	0.00		0.00		0.00	0.00
405.100	465.00	593.74	593.74	83.56	593.95	25.00	0.00	0.00	0.00		0.00		0.00	0.00
405.100	465.00	592.06	592.06	82.74	592.55	23.78	0.00	0.00	0.00		0.00		0.00	0.00
405.980	465.00	592.95	592.95	48.53	593.64	10.00	0.00	0.00	0.00		0.00		0.00	0.00
405.980	465.00	593.62	593.62	42.62	594.19	10.00	0.00	0.00	0.00		0.00		0.00	0.00
405.980	465.00	591.84	591.84	53.92	592.81	9.99	0.00	0.00	0.00		0.00		0.00	0.00
406.020	465.00	593.58	593.58	55.03	594.16	10.00	0.00	0.00	0.00		0.00		0.00	0.00
406.020	465.00	594.35	594.35	48.60	594.82	10.00	0.00	0.00	0.00		0.00		0.00	0.00
406.020	465.00	592.17	592.17	58.21	593.04	10.00	0.00	0.00	0.00		0.00		0.00	0.00
407.000	465.00	594.22	594.22	261.41	594.25	120.00	0.00	0.00	0.00		0.00		0.00	0.00
407.000	465.00	594.89	594.89	261.80	594.91	120.00	0.00	0.00	0.00		0.00		0.00	0.00
407.000	465.00	593.08	593.08	214.13	593.18	120.00	0.00	0.00	0.00		0.00		0.00	0.00
411.000	465.00	594.29	594.29	300.87	594.31	499.45	0.00	0.00	0.00		0.00		0.00	0.00
411.000	465.00	594.95	594.95	385.91	594.96	525.00	0.00	0.00	0.00		0.00		0.00	0.00
411.000	465.00	593.17	593.17	167.70	593.31	256.94	0.00	0.00	0.00		0.00		0.00	0.00
411.980	465.00	594.35	594.35	440.03	594.36	400.00	0.00	0.00	0.00		0.00		0.00	0.00
411.980	465.00	594.98	594.98	487.90	594.99	400.00	0.00	0.00	0.00		0.00		0.00	0.00
411.980	465.00	593.41	593.41	325.35	593.45	363.29	0.00	0.00	0.00		0.00		0.00	0.00
412.020	465.00	594.46	594.46	473.32	594.46	400.00	0.00	0.00	0.00		0.00		0.00	0.00
412.020	465.00	595.03	595.03	499.74	595.03	400.00	0.00	0.00	0.00		0.00		0.00	0.00
412.020	465.00	594.07	594.07	523.82	594.08	400.00	0.00	0.00	0.00		0.00		0.00	0.00
412.100	465.00	594.46	594.46	339.51	594.48	400.00	0.00	0.00	0.00		0.00		0.00	0.00
412.100	465.00	595.03	595.03	378.69	595.04	400.00	0.00	0.00	0.00		0.00		0.00	0.00
412.100	465.00	594.07	594.07	364.76	594.10	377.93	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
413.000	465.00	594.58	594.58	201.44	594.61	474.60	0.00	0.00	0.00		0.00		0.00	0.00
413.000	465.00	595.12	595.12	250.87	595.13	500.00	0.00	0.00	0.00		0.00		0.00	0.00
413.000	465.00	594.15	594.15	197.25	594.23	354.98	0.00	0.00	0.00		0.00		0.00	0.00
413.100	465.00	594.71	594.71	213.94	594.74	366.14	0.00	0.00	0.00		0.00		0.00	0.00
413.100	465.00	595.21	595.21	246.31	595.22	500.00	0.00	0.00	0.00		0.00		0.00	0.00
413.100	465.00	594.30	594.30	216.70	594.36	309.23	0.00	0.00	0.00		0.00		0.00	0.00
413.980	465.00	594.77	594.77	148.68	594.84	306.02	0.00	0.00	0.00		0.00		0.00	0.00
413.980	465.00	595.26	595.26	172.67	595.29	374.47	0.00	0.00	0.00		0.00		0.00	0.00
413.980	465.00	594.32	594.32	131.22	594.52	80.95	0.00	0.00	0.00		0.00		0.00	0.00
414.020	465.00	594.87	594.87	162.13	594.93	319.93	0.00	0.00	0.00		0.00		0.00	0.00
414.020	465.00	595.30	595.30	178.52	595.33	380.30	0.00	0.00	0.00		0.00		0.00	0.00
414.020	465.00	594.77	594.77	211.62	594.84	305.44	0.00	0.00	0.00		0.00		0.00	0.00
414.050	465.00	594.95	594.95	312.64	594.96	453.00	0.00	0.00	0.00		0.00		0.00	0.00
414.050	465.00	595.35	595.35	323.39	595.36	453.00	0.00	0.00	0.00		0.00		0.00	0.00
414.050	465.00	594.86	594.86	410.07	594.87	453.00	0.00	0.00	0.00		0.00		0.00	0.00
414.060	465.00	594.97	594.97	274.07	594.99	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.060	465.00	595.37	595.37	273.99	595.38	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.060	465.00	594.87	594.87	361.86	594.88	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.080	465.00	594.99	594.99	275.19	595.00	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.080	465.00	595.38	595.38	274.96	595.39	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.080	465.00	594.87	594.87	361.86	594.89	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.120	465.00	595.05	595.05	289.41	595.06	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.120	465.00	595.43	595.43	285.97	595.44	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.120	465.00	594.94	594.94	383.06	594.95	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.150	465.00	595.06	595.06	233.53	595.07	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.150	465.00	595.44	595.44	237.04	595.46	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.150	465.00	594.94	594.94	304.80	594.96	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.180	465.00	595.08	595.08	185.73	595.10	297.95	0.00	0.00	0.00		0.00		0.00	0.00
414.180	465.00	595.46	595.46	194.40	595.48	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.180	465.00	594.95	594.95	238.13	594.98	297.71	0.00	0.00	0.00		0.00		0.00	0.00
414.220	465.00	596.08	596.08	381.33	596.08	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.220	465.00	596.10	596.10	296.70	596.10	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.220	465.00	596.07	596.07	542.99	596.08	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.250	465.00	596.08	596.08	256.15	596.09	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.250	465.00	596.10	596.10	200.44	596.12	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.250	465.00	596.07	596.07	363.61	596.09	298.00	0.00	0.00	0.00		0.00		0.00	0.00
414.280	465.00	596.10	596.10	144.55	596.14	297.40	0.00	0.00	0.00		0.00		0.00	0.00
414.280	465.00	596.13	596.13	115.07	596.17	297.47	0.00	0.00	0.00		0.00		0.00	0.00
414.280	465.00	596.08	596.08	202.76	596.12	297.36	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
414.320	465.00	596.15	596.15	152.35	596.19	297.51	0.00	0.00	0.00		0.00		0.00	0.00
414.320	465.00	596.18	596.18	120.41	596.22	297.57	0.00	0.00	0.00		0.00		0.00	0.00
414.320	465.00	596.14	596.14	214.44	596.18	297.48	0.00	0.00	0.00		0.00		0.00	0.00
414.350	465.00	596.21	596.21	132.20	596.25	297.21	0.00	0.00	0.00		0.00		0.00	0.00
414.350	465.00	596.26	596.26	107.72	596.31	297.33	0.00	0.00	0.00		0.00		0.00	0.00
414.350	465.00	596.16	596.16	181.20	596.21	297.13	0.00	0.00	0.00		0.00		0.00	0.00
415.000	465.00	596.53	596.53	90.07	596.63	249.83	0.00	0.00	0.00		0.00		0.00	0.00
415.000	465.00	596.71	596.71	83.47	596.78	270.96	0.00	0.00	0.00		0.00		0.00	0.00
415.000	465.00	596.34	596.34	107.63	596.50	219.19	0.00	0.00	0.00		0.00		0.00	0.00
415.050	465.00	596.87	596.87	128.28	596.93	297.15	0.00	0.00	0.00		0.00		0.00	0.00
415.050	465.00	597.07	597.07	119.32	597.11	297.55	0.00	0.00	0.00		0.00		0.00	0.00
415.050	465.00	596.65	596.65	145.02	596.73	268.14	0.00	0.00	0.00		0.00		0.00	0.00
415.080	465.00	596.99	596.99	129.01	597.04	297.16	0.00	0.00	0.00		0.00		0.00	0.00
415.080	465.00	597.20	597.20	122.59	597.24	297.61	0.00	0.00	0.00		0.00		0.00	0.00
415.080	465.00	596.74	596.74	145.08	596.82	268.16	0.00	0.00	0.00		0.00		0.00	0.00
415.120	465.00	597.62	597.62	270.87	597.64	318.00	0.00	0.00	0.00		0.00		0.00	0.00
415.120	465.00	597.64	597.64	210.21	597.65	318.00	0.00	0.00	0.00		0.00		0.00	0.00
415.120	465.00	597.62	597.62	385.00	597.63	318.00	0.00	0.00	0.00		0.00		0.00	0.00
415.150	465.00	597.64	597.64	233.09	597.65	318.00	0.00	0.00	0.00		0.00		0.00	0.00
415.150	465.00	597.66	597.66	182.32	597.67	318.00	0.00	0.00	0.00		0.00		0.00	0.00
415.150	465.00	597.62	597.62	329.31	597.64	318.00	0.00	0.00	0.00		0.00		0.00	0.00
415.200	465.00	597.78	597.78	139.66	597.81	283.00	0.00	0.00	0.00		0.00		0.00	0.00
415.200	465.00	597.89	597.89	119.07	597.92	283.00	0.00	0.00	0.00		0.00		0.00	0.00
415.200	465.00	597.69	597.69	182.51	597.73	283.00	0.00	0.00	0.00		0.00		0.00	0.00
415.980	355.00	597.98	597.98	72.27	598.05	339.56	0.00	0.00	0.00		0.00		0.00	0.00
415.980	355.00	598.15	598.15	70.33	598.19	339.79	0.00	0.00	0.00		0.00		0.00	0.00
415.980	355.00	597.81	597.81	79.14	597.94	339.32	0.00	0.00	0.00		0.00		0.00	0.00
416.020	355.00	599.96	599.96	523.35	599.96	510.00	0.00	0.00	0.00		0.00		0.00	0.00
416.020	355.00	599.96	599.96	403.19	599.97	510.00	0.00	0.00	0.00		0.00		0.00	0.00
416.020	355.00	599.96	599.96	746.48	599.96	510.00	0.00	0.00	0.00		0.00		0.00	0.00
416.500	355.00	599.97	599.97	373.11	599.97	465.00	0.00	0.00	0.00		0.00		0.00	0.00
416.500	355.00	599.98	599.98	288.70	599.98	465.00	0.00	0.00	0.00		0.00		0.00	0.00
416.500	355.00	599.96	599.96	530.40	599.97	465.00	0.00	0.00	0.00		0.00		0.00	0.00
416.980	355.00	599.98	599.98	265.92	599.98	434.81	0.00	0.00	0.00		0.00		0.00	0.00
416.980	355.00	599.99	599.99	207.17	600.00	434.94	0.00	0.00	0.00		0.00		0.00	0.00
416.980	355.00	599.97	599.97	376.02	599.97	434.71	0.00	0.00	0.00		0.00		0.00	0.00
417.020	355.00	600.02	600.02	278.18	600.03	465.00	0.00	0.00	0.00		0.00		0.00	0.00
417.020	355.00	600.04	600.04	216.65	600.04	465.00	0.00	0.00	0.00		0.00		0.00	0.00
417.020	355.00	600.01	600.01	393.71	600.02	465.00	0.00	0.00	0.00		0.00		0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	D	#	D	WSELK
417.050	355.00	600.05	600.05	177.67	600.06	274.69	0.00	0.00	0.00		0.00		0.00	0.00
417.050	355.00	600.09	600.09	140.63	600.10	274.99	0.00	0.00	0.00		0.00		0.00	0.00
417.050	355.00	600.03	600.03	248.21	600.04	274.46	0.00	0.00	0.00		0.00		0.00	0.00
417.080	355.00	600.13	600.13	145.06	600.14	272.68	0.00	0.00	0.00		0.00		0.00	0.00
417.080	355.00	600.21	600.21	119.70	600.22	273.35	0.00	0.00	0.00		0.00		0.00	0.00
417.080	355.00	600.07	600.07	195.16	600.08	272.12	0.00	0.00	0.00		0.00		0.00	0.00
417.120	355.00	601.47	601.47	403.42	601.48	306.00	0.00	0.00	0.00		0.00		0.00	0.00
417.120	355.00	601.47	601.47	310.80	601.48	306.00	0.00	0.00	0.00		0.00		0.00	0.00
417.120	355.00	601.47	601.47	575.59	601.47	306.00	0.00	0.00	0.00		0.00		0.00	0.00
417.130	355.00	601.48	601.48	356.91	601.48	306.00	0.00	0.00	0.00		0.00		0.00	0.00
417.130	355.00	601.48	601.48	275.52	601.49	306.00	0.00	0.00	0.00		0.00		0.00	0.00
417.130	355.00	601.47	601.47	508.47	601.48	306.00	0.00	0.00	0.00		0.00		0.00	0.00
417.150	355.00	601.55	601.55	161.09	601.56	273.69	0.00	0.00	0.00		0.00		0.00	0.00
417.150	355.00	601.60	601.60	129.71	601.61	274.15	0.00	0.00	0.00		0.00		0.00	0.00
417.150	355.00	601.50	601.50	221.93	601.52	273.34	0.00	0.00	0.00		0.00		0.00	0.00
417.180	355.00	601.72	601.72	84.10	601.77	268.07	0.00	0.00	0.00		0.00		0.00	0.00
417.180	355.00	601.86	601.86	75.42	601.89	269.27	0.00	0.00	0.00		0.00		0.00	0.00
417.180	355.00	601.60	601.60	103.84	601.66	267.00	0.00	0.00	0.00		0.00		0.00	0.00
417.220	355.00	602.91	602.91	262.42	602.92	436.00	0.00	0.00	0.00		0.00		0.00	0.00
417.220	355.00	602.91	602.91	202.40	602.92	436.00	0.00	0.00	0.00		0.00		0.00	0.00
417.220	355.00	602.91	602.91	374.00	602.91	436.00	0.00	0.00	0.00		0.00		0.00	0.00
417.300	355.00	602.92	602.92	196.56	602.93	436.00	0.00	0.00	0.00		0.00		0.00	0.00
417.300	355.00	602.93	602.93	152.68	602.94	436.00	0.00	0.00	0.00		0.00		0.00	0.00
417.300	355.00	602.91	602.91	278.62	602.92	436.00	0.00	0.00	0.00		0.00		0.00	0.00
418.000	355.00	603.01	603.01	292.69	603.02	336.00	0.00	0.00	0.00		0.00		0.00	0.00
418.000	355.00	603.08	603.08	234.80	603.08	336.00	0.00	0.00	0.00		0.00		0.00	0.00
418.000	355.00	602.96	602.96	400.12	602.97	336.00	0.00	0.00	0.00		0.00		0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
402.000	465.000	589.940	0.000	0.000	0.000	700.000	0.000	0.000
402.000	465.000	589.940	0.000	0.000	0.000	700.000	0.000	0.000
402.000	465.000	589.940	0.000	0.000	0.000	700.000	0.000	0.000
403.000	465.000	591.326	0.000	1.386	0.000	204.099	0.000	1350.000
403.000	465.000	591.802	.476	1.862	0.000	297.869	-93.770	1350.000
403.000	465.000	590.644	-1.158	.704	0.000	23.777	180.322	1350.000
404.000	465.000	592.357	0.000	1.031	0.000	60.000	0.000	650.000
404.000	465.000	592.756	.399	.954	0.000	60.000	0.000	650.000
404.000	465.000	591.627	-1.129	.983	0.000	45.748	14.252	650.000
404.980	465.000	592.026	0.000	-.330	0.000	10.000	0.000	100.000
404.980	465.000	592.564	.537	-.192	0.000	10.000	0.000	100.000
404.980	465.000	591.028	-1.536	-.599	0.000	9.968	.032	100.000
405.020	465.000	592.427	0.000	.400	0.000	10.000	0.000	53.000
405.020	465.000	593.112	.685	.548	0.000	10.000	0.000	53.000
405.020	465.000	591.036	-2.076	.008	0.000	9.968	.032	53.000

405.100	465.000	593.122	0.000	.695	0.000	25.000	0.000	24.500
405.100	465.000	593.736	.614	.623	0.000	25.000	0.000	24.500
405.100	465.000	592.062	-1.674	1.026	0.000	23.782	1.218	24.500
405.980	465.000	592.953	0.000	-.168	0.000	10.000	0.000	24.500
405.980	465.000	593.620	.667	-.115	0.000	10.000	0.000	24.500
405.980	465.000	591.838	-1.783	-.224	0.000	9.995	.005	24.500
406.020	465.000	593.579	0.000	.626	0.000	10.000	0.000	37.000
406.020	465.000	594.346	.767	.726	0.000	10.000	0.000	37.000
406.020	465.000	592.170	-2.176	.333	0.000	10.000	0.000	37.000
407.000	465.000	594.219	0.000	.640	0.000	120.000	0.000	50.000
407.000	465.000	594.891	.672	.545	0.000	120.001	-.000	50.000
407.000	465.000	593.080	-1.811	.910	0.000	120.000	.000	50.000
411.000	465.000	594.292	0.000	.074	0.000	499.449	0.000	200.000
411.000	465.000	594.951	.658	.059	0.000	525.000	-25.552	200.000
411.000	465.000	593.166	-1.785	.085	0.000	256.936	242.513	200.000
411.980	465.000	594.348	0.000	.055	0.000	400.000	0.000	270.000
411.980	465.000	594.983	.636	.033	0.000	400.000	-.000	270.000
411.980	465.000	593.414	-1.569	.249	0.000	363.292	36.708	270.000
412.020	465.000	594.457	0.000	.109	0.000	400.000	0.000	68.000
412.020	465.000	595.025	.568	.042	0.000	400.000	-.000	68.000
412.020	465.000	594.065	-.960	.651	0.000	400.000	.000	68.000
412.100	465.000	594.462	0.000	.005	0.000	400.000	0.000	50.000
412.100	465.000	595.030	.568	.005	0.000	400.000	-.000	50.000
412.100	465.000	594.068	-.962	.003	0.000	377.931	22.070	50.000
413.000	465.000	594.575	0.000	.113	0.000	474.598	0.000	430.000
413.000	465.000	595.120	.545	.090	0.000	500.000	-25.402	430.000
413.000	465.000	594.149	-.971	.081	0.000	354.983	119.615	430.000
413.100	465.000	594.706	0.000	.131	0.000	366.140	0.000	250.000
413.100	465.000	595.207	.501	.087	0.000	500.000	-133.860	250.000
413.100	465.000	594.298	-.909	.149	0.000	309.225	56.915	250.000
413.980	465.000	594.773	0.000	.067	0.000	306.021	0.000	128.000
413.980	465.000	595.262	.489	.056	0.000	374.467	-68.446	128.000
413.980	465.000	594.323	-.939	.025	0.000	80.949	225.072	128.000
414.020	465.000	594.874	0.000	.101	0.000	319.930	0.000	42.000
414.020	465.000	595.305	.431	.042	0.000	380.301	-60.371	42.000
414.020	465.000	594.771	-.534	.447	0.000	305.437	14.493	42.000
414.050	465.000	594.954	0.000	.080	0.000	453.000	0.000	50.000
414.050	465.000	595.351	.396	.046	0.000	453.001	-.000	50.000
414.050	465.000	594.855	-.495	.085	0.000	453.000	.000	50.000
414.060	465.000	594.975	0.000	.020	0.000	298.000	0.000	90.000
414.060	465.000	595.371	.396	.020	0.000	298.001	-.000	90.000
414.060	465.000	594.866	-.505	.010	0.000	298.000	.000	90.000
414.080	465.000	594.986	0.000	.012	0.000	298.000	0.000	40.000
414.080	465.000	595.382	.396	.012	0.000	298.001	-.000	40.000
414.080	465.000	594.872	-.510	.007	0.000	298.000	.000	40.000

414.120	465.000	595.047	0.000	.061	0.000	298.000	0.000	16.000
414.120	465.000	595.433	.386	.051	0.000	298.001	-.000	16.000
414.120	465.000	594.937	-.496	.065	0.000	298.000	.000	16.000
414.150	465.000	595.058	0.000	.011	0.000	298.000	0.000	40.000
414.150	465.000	595.445	.387	.012	0.000	298.000	-.000	40.000
414.150	465.000	594.943	-.502	.005	0.000	298.000	.000	40.000
414.180	465.000	595.076	0.000	.018	0.000	297.952	0.000	40.000
414.180	465.000	595.463	.387	.018	0.000	298.000	-.048	40.000
414.180	465.000	594.952	-.510	.009	0.000	297.706	.247	40.000
414.220	465.000	596.076	0.000	1.000	0.000	298.001	0.000	40.000
414.220	465.000	596.095	.019	.632	0.000	298.001	-.000	40.000
414.220	465.000	596.070	-.025	1.118	0.000	298.001	.000	40.000
414.250	465.000	596.081	0.000	.005	0.000	298.000	0.000	30.000
414.250	465.000	596.104	.024	.009	0.000	298.000	-.000	30.000
414.250	465.000	596.072	-.032	.002	0.000	298.000	.000	30.000
414.280	465.000	596.097	0.000	.016	0.000	297.396	0.000	40.000
414.280	465.000	596.134	.037	.030	0.000	297.469	-.073	40.000
414.280	465.000	596.077	-.057	.005	0.000	297.358	.038	40.000
414.320	465.000	596.154	0.000	.057	0.000	297.509	0.000	20.000
414.320	465.000	596.183	.029	.049	0.000	297.567	-.059	20.000
414.320	465.000	596.138	-.045	.061	0.000	297.477	.032	20.000
414.350	465.000	596.205	0.000	.051	0.000	297.211	0.000	50.000
414.350	465.000	596.265	.060	.081	0.000	297.330	-.119	50.000
414.350	465.000	596.163	-.102	.025	0.000	297.126	.084	50.000
415.000	465.000	596.526	0.000	.321	0.000	249.834	0.000	190.000
415.000	465.000	596.709	.182	.444	0.000	270.962	-21.128	190.000
415.000	465.000	596.339	-.370	.176	0.000	219.193	30.641	190.000
415.050	465.000	596.875	0.000	.348	0.000	297.149	0.000	150.000
415.050	465.000	597.075	.200	.366	0.000	297.547	-.398	150.000
415.050	465.000	596.648	-.427	.309	0.000	268.144	29.006	150.000
415.080	465.000	596.986	0.000	.112	0.000	297.161	0.000	85.000
415.080	465.000	597.203	.217	.128	0.000	297.606	-.445	85.000
415.080	465.000	596.736	-.467	.087	0.000	268.163	28.998	85.000
415.120	465.000	597.625	0.000	.638	0.000	318.000	0.000	26.000
415.120	465.000	597.637	.012	.434	0.000	318.000	-.000	26.000
415.120	465.000	597.618	-.019	.882	0.000	318.000	.000	26.000
415.150	465.000	597.638	0.000	.013	0.000	318.000	0.000	40.000
415.150	465.000	597.658	.021	.022	0.000	318.000	-.000	40.000
415.150	465.000	597.624	-.034	.006	0.000	318.000	.000	40.000
415.200	465.000	597.778	0.000	.140	0.000	283.000	0.000	250.000
415.200	465.000	597.885	.107	.227	0.000	283.000	-.000	250.000
415.200	465.000	597.687	-.199	.063	0.000	283.000	.000	250.000
415.980	355.000	597.980	0.000	.202	0.000	339.559	0.000	140.000
415.980	355.000	598.145	.165	.260	0.000	339.786	-.227	140.000
415.980	355.000	597.805	-.340	.119	0.000	339.320	.239	140.000
416.020	355.000	599.962	0.000	1.982	0.000	510.000	0.000	286.000

416.020	355.000	599.964	.002	1.819	0.000	510.000	-.000	286.000
416.020	355.000	599.960	-.004	2.155	0.000	510.000	.000	286.000
416.500	355.000	599.970	0.000	.008	0.000	465.000	0.000	125.000
416.500	355.000	599.977	.008	.013	0.000	465.000	-.000	125.000
416.500	355.000	599.963	-.014	.004	0.000	465.000	.000	125.000
416.980	355.000	599.979	0.000	.010	0.000	434.813	0.000	80.000
416.980	355.000	599.993	.014	.016	0.000	434.938	-.126	80.000
416.980	355.000	599.968	-.025	.005	0.000	434.712	.100	80.000
417.020	355.000	600.024	0.000	.045	0.000	465.000	0.000	40.000
417.020	355.000	600.038	.013	.044	0.000	465.000	-.000	40.000
417.020	355.000	600.014	-.024	.046	0.000	465.000	.000	40.000
417.050	355.000	600.055	0.000	.030	0.000	274.691	0.000	130.000
417.050	355.000	600.088	.033	.050	0.000	274.991	-.300	130.000
417.050	355.000	600.029	-.059	.015	0.000	274.459	.232	130.000
417.080	355.000	600.131	0.000	.077	0.000	272.677	0.000	160.000
417.080	355.000	600.206	.075	.118	0.000	273.353	-.676	160.000
417.080	355.000	600.069	-.138	.040	0.000	272.117	.560	160.000
417.120	355.000	601.472	0.000	1.341	0.000	306.000	0.000	88.000
417.120	355.000	601.475	.003	1.268	0.000	306.000	-.000	88.000
417.120	355.000	601.470	-.005	1.401	0.000	306.000	.000	88.000
417.130	355.000	601.476	0.000	.004	0.000	306.000	0.000	50.000
417.130	355.000	601.482	.006	.007	0.000	306.000	-.000	50.000
417.130	355.000	601.472	-.010	.002	0.000	306.000	.000	50.000
417.150	355.000	601.546	0.000	.070	0.000	273.694	0.000	400.000
417.150	355.000	601.600	.054	.118	0.000	274.153	-.460	400.000
417.150	355.000	601.504	-.096	.032	0.000	273.336	.358	400.000
417.180	355.000	601.724	0.000	.178	0.000	268.072	0.000	220.000
417.180	355.000	601.859	.135	.260	0.000	269.270	-1.198	220.000
417.180	355.000	601.598	-.261	.094	0.000	266.998	1.074	220.000
417.220	355.000	602.911	0.000	1.188	0.000	436.000	0.000	143.000
417.220	355.000	602.914	.003	1.055	0.000	436.000	-.000	143.000
417.220	355.000	602.909	-.006	1.311	0.000	436.000	.000	143.000
417.300	355.000	602.920	0.000	.009	0.000	436.000	0.000	40.000
417.300	355.000	602.930	.009	.015	0.000	436.000	-.000	40.000
417.300	355.000	602.913	-.017	.004	0.000	436.000	.000	40.000
418.000	355.000	603.014	0.000	.093	0.000	336.000	0.000	420.000
418.000	355.000	603.076	.062	.146	0.000	336.000	-.000	420.000
418.000	355.000	602.964	-.112	.051	0.000	336.000	.000	420.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	56.562	0.000
2	0.000	0.000	59.926	3.364
3	0.000	0.000	48.833	-7.729

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp

3) WATERCOURSE: Spring Brook, Kelly Drain Dtch

4) DOCUMENT TYPE: 500yr.

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

SPRING BROOK - 500 YEAR

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
599.900	345.00	605.63	605.63	57.10	605.86	52.69	0.00	0.00	606.48	-I	-I	606.48
599.900	510.00	606.20	606.20	84.91	606.49	64.02	0.00	0.00	606.48	0.00	0.00	606.48
599.900	835.00	607.06	607.06	139.19	607.46	81.22	0.00	0.00	606.48	0.00	0.00	606.48
599.980	345.00	606.11	606.11	47.72	606.39	48.22	0.00	0.00	0.00	606.48	606.48	0.00
599.980	510.00	606.66	606.66	72.41	607.02	59.22	0.00	0.00	0.00	606.48	606.48	0.00
599.980	835.00	607.51	607.51	121.58	607.99	76.14	0.00	0.00	0.00	606.48	606.48	0.00
600.020	345.00	606.36	606.36	58.15	606.57	53.16	0.00	0.00	0.00	0.00	0.00	0.00
600.020	510.00	606.92	606.92	86.05	607.20	64.43	0.00	0.00	0.00	0.00	0.00	0.00
600.020	835.00	610.68	610.68	453.19	610.75	139.63	0.00	0.00	0.00	0.00	0.00	0.00
600.100	345.00	606.84	606.84	32.27	607.51	62.29	0.00	0.00	0.00	0.00	0.00	0.00
600.100	510.00	607.29	607.29	47.39	608.04	77.53	0.00	0.00	0.00	0.00	0.00	0.00
600.100	835.00	610.72	610.72	360.23	610.78	154.88	0.00	0.00	0.00	0.00	0.00	0.00
600.500	345.00	609.40	609.40	59.04	609.60	93.50	0.00	0.00	0.00	0.00	0.00	0.00
600.500	510.00	609.97	609.97	86.25	610.19	109.82	0.00	0.00	0.00	0.00	0.00	0.00
600.500	835.00	611.00	611.00	156.48	611.20	135.14	0.00	0.00	0.00	0.00	0.00	0.00
601.000	345.00	610.97	610.97	41.75	611.29	66.05	0.00	0.00	0.00	0.00	0.00	0.00
601.000	510.00	611.55	611.55	62.21	611.89	93.20	0.00	0.00	0.00	0.00	0.00	0.00
601.000	835.00	612.34	612.34	103.27	612.71	129.82	0.00	0.00	0.00	0.00	0.00	0.00
601.100	345.00	616.88	616.88	63.10	617.15	37.62	0.00	0.00	0.00	0.00	0.00	0.00
601.100	510.00	617.58	617.58	90.38	617.92	42.25	0.00	0.00	0.00	0.00	0.00	0.00
601.100	835.00	618.59	618.59	140.83	619.09	49.07	0.00	0.00	0.00	0.00	0.00	0.00
601.980	345.00	617.09	617.09	84.42	617.40	14.18	0.00	0.00	0.00	0.00	0.00	0.00
601.980	510.00	617.82	617.82	104.04	618.33	30.84	0.00	0.00	0.00	0.00	0.00	0.00
601.980	835.00	618.87	618.87	151.61	619.59	104.47	0.00	0.00	0.00	0.00	0.00	0.00
602.020	345.00	619.85	619.85	240.81	619.89	151.82	0.00	0.00	0.00	0.00	0.00	0.00
602.020	510.00	620.13	620.13	276.24	620.20	160.78	0.00	0.00	0.00	0.00	0.00	0.00
602.020	835.00	620.57	620.57	340.81	620.70	174.94	0.00	0.00	0.00	0.00	0.00	0.00
602.100	345.00	619.85	619.85	126.22	619.95	60.15	0.00	0.00	0.00	0.00	0.00	0.00
602.100	510.00	620.14	620.14	143.90	620.31	75.93	0.00	0.00	0.00	0.00	0.00	0.00
602.100	835.00	620.59	620.59	177.68	620.90	89.20	0.00	0.00	0.00	0.00	0.00	0.00
602.150	345.00	620.00	620.00	135.71	620.09	68.83	0.00	0.00	0.00	0.00	0.00	0.00
602.150	510.00	620.34	620.34	159.00	620.48	85.67	0.00	0.00	0.00	0.00	0.00	0.00
602.150	835.00	620.89	620.89	202.33	621.14	93.21	0.00	0.00	0.00	0.00	0.00	0.00
602.200	345.00	620.08	620.08	168.65	620.15	59.26	0.00	0.00	0.00	0.00	0.00	0.00
602.200	510.00	620.45	620.45	193.90	620.57	64.74	0.00	0.00	0.00	0.00	0.00	0.00
602.200	835.00	621.04	621.04	239.68	621.28	73.51	0.00	0.00	0.00	0.00	0.00	0.00
603.000	345.00	620.75	620.75	117.80	620.79	168.64	0.00	0.00	0.00	0.00	0.00	0.00
603.000	510.00	621.34	621.34	184.03	621.39	179.38	0.00	0.00	0.00	0.00	0.00	0.00
603.000	835.00	622.26	622.26	315.09	622.32	184.53	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSEL										
603.100	310.00	621.91	621.91	36.37	622.25	38.04	0.00	0.00	0.00	0.00	0.00	0.00
603.100	455.00	622.35	622.35	49.20	622.82	42.09	0.00	0.00	0.00	0.00	0.00	0.00
603.100	740.00	623.15	623.16	102.97	623.47	148.92	0.00	0.00	0.00	0.00	0.00	0.00
603.980	310.00	622.62	622.62	34.05	623.16	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	455.00	623.20	623.20	40.95	624.11	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.980	740.00	623.91	623.91	49.95	625.74	12.00	0.00	0.00	0.00	0.00	0.00	0.00
603.990	310.00	622.70	622.70	71.81	623.18	11.93	0.00	0.00	0.00	0.00	0.00	0.00
603.990	455.00	623.35	623.35	85.76	624.15	11.95	0.00	0.00	0.00	0.00	0.00	0.00
603.990	740.00	624.37	624.37	108.27	625.86	11.98	0.00	0.00	0.00	0.00	0.00	0.00
604.010	310.00	622.81	622.81	74.03	623.26	11.94	0.00	0.00	0.00	0.00	0.00	0.00
604.010	455.00	623.53	623.53	89.76	624.28	11.96	0.00	0.00	0.00	0.00	0.00	0.00
604.010	740.00	624.79	624.79	118.07	626.10	11.99	0.00	0.00	0.00	0.00	0.00	0.00
604.020	310.00	622.79	622.79	36.02	623.29	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	455.00	623.51	623.51	44.76	624.31	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.020	740.00	624.76	624.76	61.29	626.14	12.00	0.00	0.00	0.00	0.00	0.00	0.00
604.100	310.00	623.47	623.47	124.91	623.50	115.65	0.00	0.00	0.00	0.00	0.00	0.00
604.100	455.00	624.57	624.57	223.15	624.60	119.88	0.00	0.00	0.00	0.00	0.00	0.00
604.100	740.00	626.91	626.91	515.01	626.93	120.24	0.00	0.00	0.00	0.00	0.00	0.00
604.500	310.00	624.09	624.09	65.74	624.14	177.85	0.00	0.00	0.00	0.00	0.00	0.00
604.500	455.00	624.96	624.96	133.09	625.00	233.55	0.00	0.00	0.00	0.00	0.00	0.00
604.500	740.00	627.06	627.06	428.84	627.08	249.82	0.00	0.00	0.00	0.00	0.00	0.00
604.700	310.00	625.17	625.17	38.82	625.32	142.70	0.00	0.00	0.00	0.00	0.00	0.00
604.700	455.00	625.61	625.61	60.73	625.75	172.14	0.00	0.00	0.00	0.00	0.00	0.00
604.700	740.00	627.22	627.22	207.34	627.26	241.27	0.00	0.00	0.00	0.00	0.00	0.00
605.000	310.00	626.88	626.88	48.40	626.98	156.65	0.00	0.00	0.00	0.00	0.00	0.00
605.000	455.00	627.25	627.25	69.10	627.36	181.52	0.00	0.00	0.00	0.00	0.00	0.00
605.000	740.00	627.86	627.86	114.25	627.98	222.55	0.00	0.00	0.00	0.00	0.00	0.00
605.050	310.00	629.83	629.83	41.50	629.96	146.82	0.00	0.00	0.00	0.00	0.00	0.00
605.050	455.00	630.23	630.23	62.34	630.36	174.00	0.00	0.00	0.00	0.00	0.00	0.00
605.050	740.00	630.79	630.79	101.31	630.94	212.04	0.00	0.00	0.00	0.00	0.00	0.00
605.100	310.00	633.02	633.02	45.63	633.13	152.83	0.00	0.00	0.00	0.00	0.00	0.00
605.100	455.00	633.39	633.39	65.90	633.51	178.02	0.00	0.00	0.00	0.00	0.00	0.00
605.100	740.00	633.97	633.97	106.91	634.10	216.68	0.00	0.00	0.00	0.00	0.00	0.00
605.500	310.00	634.72	634.72	77.60	634.75	179.40	0.00	0.00	0.00	0.00	0.00	0.00
605.500	455.00	635.10	635.10	114.73	635.13	197.79	0.00	0.00	0.00	0.00	0.00	0.00
605.500	740.00	635.68	635.68	186.04	635.73	202.75	0.00	0.00	0.00	0.00	0.00	0.00
606.000	310.00	636.97	636.97	25.34	637.09	130.93	0.00	0.00	0.00	0.00	0.00	0.00
606.000	455.00	637.27	637.27	39.11	637.40	148.51	0.00	0.00	0.00	0.00	0.00	0.00
606.000	740.00	637.74	637.74	70.58	637.90	175.46	0.00	0.00	0.00	0.00	0.00	0.00

SECTION	DISCHARGE	CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
SECTION	DISCHARGE	CWSE_										
606.030	255.00	640.93	640.93	19.28	641.10	115.98	0.00	0.00	0.00	0.00	0.00	0.00
606.030	380.00	641.64	641.64	55.39	641.72	151.88	0.00	0.00	0.00	0.00	0.00	0.00
606.030	620.00	642.04	642.04	84.49	642.15	190.51	0.00	0.00	0.00	0.00	0.00	0.00
606.060	255.00	644.40	644.40	46.61	644.45	144.74	0.00	0.00	0.00	0.00	0.00	0.00
606.060	380.00	644.47	644.47	50.62	644.56	148.09	0.00	0.00	0.00	0.00	0.00	0.00
606.060	620.00	644.96	644.96	85.93	645.06	190.64	0.00	0.00	0.00	0.00	0.00	0.00
606.100	255.00	646.95	646.95	28.22	647.04	126.95	0.00	0.00	0.00	0.00	0.00	0.00
606.100	380.00	647.41	647.41	53.48	647.49	150.38	0.00	0.00	0.00	0.00	0.00	0.00
606.100	620.00	647.85	647.85	85.10	647.96	190.57	0.00	0.00	0.00	0.00	0.00	0.00
606.980	255.00	648.12	648.12	19.27	648.29	115.97	0.00	0.00	0.00	0.00	0.00	0.00
606.980	380.00	648.30	648.30	25.67	648.54	124.03	0.00	0.00	0.00	0.00	0.00	0.00
606.980	620.00	648.70	648.70	46.19	648.97	144.39	0.00	0.00	0.00	0.00	0.00	0.00
607.020	255.00	650.52	650.52	86.92	650.54	176.65	0.00	0.00	0.00	0.00	0.00	0.00
607.020	380.00	650.79	650.79	111.94	650.83	182.61	0.00	0.00	0.00	0.00	0.00	0.00
607.020	620.00	651.20	651.20	155.86	651.26	191.50	0.00	0.00	0.00	0.00	0.00	0.00
607.100	255.00	650.56	650.56	95.29	650.58	177.50	0.00	0.00	0.00	0.00	0.00	0.00
607.100	380.00	650.84	650.84	122.96	650.88	183.74	0.00	0.00	0.00	0.00	0.00	0.00
607.100	620.00	651.27	651.27	171.49	651.33	193.06	0.00	0.00	0.00	0.00	0.00	0.00
608.000	255.00	652.11	652.11	46.93	652.16	133.30	0.00	0.00	0.00	0.00	0.00	0.00
608.000	380.00	652.61	652.61	76.09	652.67	148.77	0.00	0.00	0.00	0.00	0.00	0.00
608.000	620.00	653.33	653.33	130.26	653.40	166.92	0.00	0.00	0.00	0.00	0.00	0.00
608.100	255.00	653.76	653.76	58.37	653.81	142.78	0.00	0.00	0.00	0.00	0.00	0.00
608.100	380.00	654.16	654.16	85.90	654.21	154.74	0.00	0.00	0.00	0.00	0.00	0.00
608.100	620.00	654.78	654.78	142.13	654.85	170.55	0.00	0.00	0.00	0.00	0.00	0.00
608.300	255.00	653.87	653.87	31.20	654.06	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	380.00	654.23	654.23	41.19	654.52	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.300	620.00	654.75	654.75	57.93	655.25	44.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	255.00	654.15	654.15	17.08	655.01	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	380.00	654.49	654.49	20.54	655.99	13.00	0.00	0.00	0.00	0.00	0.00	0.00
608.980	620.00	655.65	655.45	34.34	657.72	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	255.00	654.49	654.49	20.65	655.16	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	380.00	656.10	656.10	40.24	656.73	13.00	0.00	0.00	0.00	0.00	0.00	0.00
609.070	620.00	659.66	659.66	274.21	659.72	44.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	255.00	655.36	655.36	97.99	655.39	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	380.00	656.98	656.88	241.88	656.89	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.100	620.00	659.73	659.73	645.29	659.74	116.00	0.00	0.00	0.00	0.00	0.00	0.00
609.200	255.00	655.93	655.93	40.28	656.01	138.92	0.00	0.00	0.00	0.00	0.00	0.00
609.200	380.00	657.05	657.05	127.54	657.08	167.36	0.00	0.00	0.00	0.00	0.00	0.00
609.200	620.00	659.78	659.78	560.10	659.79	230.39	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TO	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
609.300	255.00	656.79	656.79	41.98	656.86	142.74	0.00	0.00	0.00	0.00	0.00	0.00
609.300	390.00	657.34	657.34	74.60	657.41	156.99	0.00	0.00	0.00	0.00	0.00	0.00
609.300	620.00	659.82	659.82	334.23	659.83	219.29	0.00	0.00	0.00	0.00	0.00	0.00
609.900	255.00	657.79	657.79	30.80	657.98	73.52	0.00	0.00	0.00	0.00	0.00	0.00
609.900	380.00	658.16	658.16	41.72	658.41	91.32	0.00	0.00	0.00	0.00	0.00	0.00
609.900	620.00	659.92	659.92	138.97	660.01	147.87	0.00	0.00	0.00	0.00	0.00	0.00
609.950	255.00	658.92	658.92	43.60	659.02	94.02	0.00	0.00	0.00	0.00	0.00	0.00
609.950	390.00	659.44	659.44	64.36	659.56	119.37	0.00	0.00	0.00	0.00	0.00	0.00
609.950	620.00	660.40	660.40	122.44	660.51	142.88	0.00	0.00	0.00	0.00	0.00	0.00
610.000	255.00	659.68	659.68	42.57	659.79	92.55	0.00	0.00	0.00	0.00	0.00	0.00
610.000	390.00	660.21	660.21	63.68	660.34	118.65	0.00	0.00	0.00	0.00	0.00	0.00
610.000	620.00	661.02	661.02	109.50	661.15	138.69	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH O	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
599.000	345.000	605.634	0.000	0.000	0.000	52.688	0.000	0.000
599.300	510.000	606.201	.566	0.000	0.000	64.016	-11.328	0.000
599.900	835.000	607.061	.860	0.000	0.000	81.217	-28.529	0.000
599.980	345.000	606.113	0.000	.478	0.000	48.223	0.000	113.000
599.980	510.000	606.662	.549	.461	0.000	59.220	-10.997	113.000
599.980	835.000	607.508	.846	.447	0.000	76.143	-27.920	113.000
600.020	345.000	606.356	0.000	.243	0.000	53.164	0.000	37.000
600.020	510.000	606.919	.562	.256	0.000	64.433	-11.269	37.000
600.020	835.000	610.681	3.763	3.174	0.000	139.627	-86.463	37.000
600.100	345.000	606.835	0.000	.479	0.000	62.286	0.000	50.000
600.100	510.000	607.288	.453	.370	0.000	77.529	-15.243	50.000
600.100	835.000	610.716	3.428	.035	0.000	154.884	-92.598	50.000
600.500	345.000	609.404	0.000	2.569	0.000	93.500	0.000	350.000
600.500	510.000	609.968	.564	2.680	0.000	109.820	-16.320	350.000
600.500	835.000	610.996	1.028	.279	0.000	135.138	-41.638	350.000
601.000	345.000	610.972	0.000	1.568	0.000	66.048	0.000	350.000
601.000	510.000	611.546	.574	1.578	0.000	93.203	-27.156	350.000
601.000	835.000	612.340	.794	1.344	0.000	129.819	-63.771	350.000
601.100	345.000	616.879	0.000	5.907	0.000	37.616	0.000	1350.000
601.100	510.000	617.577	.698	6.031	0.000	42.252	-4.636	1350.000
601.100	835.000	618.594	1.018	6.254	0.000	49.068	-11.452	1350.000
601.980	345.000	617.090	0.000	.211	0.000	14.177	0.000	100.000
601.980	510.000	617.818	.728	.241	0.000	30.838	-16.660	100.000
601.980	835.000	619.873	1.055	.279	0.000	104.468	-90.290	100.000
602.020	345.000	619.847	0.000	2.757	0.000	151.819	0.000	52.000
602.020	510.000	620.129	.281	2.311	0.000	160.777	-8.958	52.000
602.020	835.000	620.573	.444	1.700	0.000	174.938	-23.119	52.000
602.100	345.000	619.854	0.000	.007	0.000	60.147	0.000	50.000
602.100	510.000	620.138	.284	.010	0.000	75.928	-15.781	50.000
602.100	835.000	620.587	.449	.014	0.000	89.202	-29.055	50.000

602.150	345.000	620.004	0.000	.150	0.000	68.835	0.000	1.000
602.150	510.000	620.338	.334	.200	0.000	85.670	-16.835	1.000
602.150	835.000	620.887	.549	.300	0.000	93.206	-24.371	1.000
602.200	345.000	620.076	0.000	.071	0.000	59.257	0.000	100.000
602.200	510.000	620.448	.372	.110	0.000	64.737	-5.480	100.000
602.200	835.000	621.045	.597	.158	0.000	73.511	-14.254	100.000
603.000	345.000	620.746	0.000	.670	0.000	168.641	0.000	1100.000
603.000	510.000	621.344	.598	.896	0.000	179.376	-10.735	1100.000
603.000	835.000	622.264	.920	1.219	0.000	184.533	-15.892	1100.000
603.100	310.000	621.911	0.000	1.165	0.000	38.039	0.000	750.000
603.100	455.000	622.349	.438	1.005	0.000	42.090	-4.050	750.000
603.100	740.000	623.165	.816	.901	0.000	148.921	-110.882	750.000
603.980	310.000	622.624	0.000	.713	0.000	12.000	0.000	105.000
603.980	455.000	623.204	.580	.955	0.000	12.000	0.000	105.000
603.980	740.000	623.911	.708	.747	0.000	12.000	.000	105.000
603.990	310.000	622.701	0.000	.077	0.000	11.932	0.000	1.000
603.990	455.000	623.349	.649	.146	0.000	11.951	-.018	1.000
603.990	740.000	624.371	1.021	.459	0.000	11.979	-.047	1.000
604.010	310.000	622.805	0.000	.105	0.000	11.935	0.000	43.000
604.010	455.000	623.533	.727	.183	0.000	11.956	-.021	43.000
604.010	740.000	624.793	1.260	.422	0.000	11.991	-.056	43.000
604.020	310.000	622.789	0.000	-.016	0.000	12.000	0.000	1.000
604.020	455.000	623.508	.719	-.025	0.000	12.000	0.000	1.000
604.020	740.000	624.757	1.249	-.036	0.000	12.000	0.000	1.000
604.100	310.000	623.468	0.000	.579	0.000	115.648	0.000	50.000
604.100	455.000	624.574	1.105	1.066	0.000	119.878	-4.230	50.000
604.100	740.000	626.905	2.332	2.149	0.000	120.241	-4.593	50.000
604.500	310.000	624.088	0.000	.620	0.000	177.853	0.000	600.000
604.500	455.000	624.961	.873	.387	0.000	233.546	-55.693	600.000
604.500	740.000	627.063	2.102	.158	0.000	249.819	-71.966	600.000
604.700	310.000	625.175	0.000	1.086	0.000	142.702	0.000	325.000
604.700	455.000	625.613	.439	.652	0.000	172.138	-29.437	325.000
604.700	740.000	627.222	1.608	.159	0.000	241.271	-98.570	325.000
605.000	310.000	626.878	0.000	1.703	0.000	156.653	0.000	325.000
605.000	455.000	627.246	.368	1.632	0.000	181.522	-24.869	325.000
605.000	740.000	627.864	.619	.643	0.000	222.552	-65.899	325.000
605.050	310.000	629.831	0.000	2.953	0.000	146.817	0.000	625.000
605.050	455.000	630.228	.397	2.982	0.000	174.002	-27.185	625.000
605.050	740.000	630.793	.566	2.929	0.000	212.039	-65.221	625.000
605.100	310.000	633.021	0.000	3.190	0.000	152.829	0.000	625.000
605.100	455.000	633.391	.370	3.163	0.000	178.024	-25.195	625.000
605.100	740.000	633.967	.576	3.174	0.000	216.684	-63.854	625.000
605.500	310.000	634.723	0.000	1.702	0.000	179.401	0.000	625.000
605.500	455.000	635.100	.377	1.709	0.000	197.790	-18.389	625.000
605.500	740.000	635.683	.582	1.715	0.000	202.750	-23.349	625.000

606.000	310.000	636.972	0.000	2.249	0.000	130.932	0.000	625.000
606.000	455.000	637.266	.294	2.166	0.000	148.512	-17.580	625.000
606.000	740.000	637.739	.473	2.056	0.000	175.460	-44.529	625.000
606.030	255.000	640.930	0.000	3.958	0.000	115.977	0.000	137.500
606.030	280.000	641.644	.714	4.378	0.000	151.878	-35.901	137.500
606.030	620.000	642.040	.395	4.301	0.000	190.514	-74.537	137.500
606.060	255.000	644.404	0.000	3.474	0.000	144.738	0.000	550.000
606.060	380.000	644.469	.065	2.825	0.000	148.087	-3.349	550.000
606.060	620.000	644.955	.486	2.916	0.000	190.641	-45.903	550.000
606.100	255.000	646.949	0.000	2.545	0.000	126.952	0.000	550.000
606.100	380.000	647.410	.461	2.941	0.000	150.380	-23.428	550.000
606.100	620.000	647.846	.436	2.891	0.000	190.568	-63.616	550.000
606.980	255.000	648.121	0.000	1.172	0.000	115.967	0.000	105.000
606.980	380.000	648.297	.176	.887	0.000	124.033	-8.067	105.000
606.980	620.000	648.702	.406	.856	0.000	144.387	-28.420	105.000
607.020	255.000	650.519	0.000	2.397	0.000	176.649	0.000	45.000
607.020	380.000	650.792	.274	2.495	0.000	182.608	-5.960	45.000
607.020	620.000	651.200	.408	2.498	0.000	191.499	-14.850	45.000
607.100	255.000	650.557	0.000	.039	0.000	177.497	0.000	50.000
607.100	380.000	650.844	.287	.052	0.000	183.744	-6.247	50.000
607.100	620.000	651.272	.428	.072	0.000	193.061	-15.564	50.000
608.000	255.000	652.109	0.000	1.551	0.000	133.302	0.000	1220.000
608.000	380.000	652.610	.502	1.766	0.000	148.773	-15.470	1220.000
608.000	620.000	653.326	.716	2.054	0.000	166.920	-33.617	1220.000
608.100	255.000	653.764	0.000	1.655	0.000	142.782	0.000	700.000
608.100	380.000	654.158	.394	1.548	0.000	154.736	-11.954	700.000
608.100	620.000	654.782	.624	1.456	0.000	170.552	-27.770	700.000
608.300	255.000	653.867	0.000	.103	0.000	44.000	0.000	60.000
608.300	380.000	654.225	.359	.068	0.000	44.000	-.000	60.000
608.300	620.000	654.751	.525	-.031	0.000	44.000	-.000	60.000
608.980	255.000	654.154	0.000	.287	0.000	13.000	0.000	61.000
608.980	380.000	654.487	.333	.262	0.000	13.000	.000	61.000
608.980	620.000	655.648	1.161	.897	0.000	13.000	0.000	61.000
609.020	255.000	654.493	0.000	.339	0.000	13.000	0.000	29.000
609.020	380.000	656.101	1.608	1.614	0.000	13.000	.000	29.000
609.020	620.000	659.656	3.555	4.008	0.000	44.001	-31.001	29.000
609.100	255.000	655.364	0.000	.871	0.000	116.000	0.000	50.000
609.100	380.000	656.876	1.512	.775	0.000	116.000	-.000	50.000
609.100	620.000	659.730	2.854	.074	0.000	116.001	-.001	50.000
609.200	255.000	655.926	0.000	.562	0.000	138.922	0.000	440.000
609.200	380.000	657.053	1.127	.177	0.000	167.364	-28.443	440.000
609.200	620.000	659.780	2.727	.049	0.000	230.390	-91.468	440.000
609.300	255.000	656.787	0.000	.861	0.000	142.739	0.000	220.000
609.300	380.000	657.343	.556	.290	0.000	156.987	-14.248	220.000
609.300	620.000	659.817	2.474	.037	0.000	219.286	-76.548	220.000
609.900	255.000	657.794	0.000	1.007	0.000	73.520	0.000	220.000

609.900	380.000	658.158	.364	.814	0.000	91.318	-17.799	220.000
609.900	620.000	659.921	1.763	.104	0.000	147.867	-74.348	220.000
609.950	255.000	658.915	0.000	1.122	0.000	94.024	0.000	220.000
609.950	390.000	659.435	.520	1.278	0.000	119.373	-25.349	220.000
609.950	620.000	660.402	.967	.481	0.000	142.875	-48.851	220.000
610.000	255.000	659.683	0.000	.768	0.000	92.546	0.000	220.000
610.000	380.000	660.209	.526	.774	0.000	118.647	-26.101	220.000
610.000	620.000	661.016	.907	.614	0.000	138.692	-46.146	220.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE END	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	46.040	0.000
2	0.000	0.000	42.893	-3.147
3	0.000	0.000	51.688	5.648

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook and Kelly Doty Drain

4) DOCUMENT TYPE: Report

FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 Bedford Twp., Monroe Co., Michigan

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Spring Brook

STUDY LIMITS: Confluence with Halfway Creek (Downstream Limit) to 400' upstream Dean Rd-Extended (Upstream Limit)

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: McNamee, Porter and Seeley Field Crew 1/16/79 - 1/29/79

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on April 5, 1979

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps - 1"=1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n"	.03*-.06
Overbank "n"	.045-.085
n values thru bridges	.015-.025
Contraction Coefficients	.15-.4
Expansion Coefficients	.35-.8

Bridge loss coefficients were chosen per References 1 and 2.

*concrete lined channel from section D to F

PHOTOGRAPHS: Enclosed for your review,please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS AND CALIBRATION:

No high water marks were available for use in calibrating the HEC-2 model for Spring Brook.

A sensitivity analysis was performed on the 100 year flow by raising and lowering all Manning "n" values by 30%. Water surface elevations in the major portion of the drain were within ± 0.3 feet, thus indicating a reasonable model.

Starting Conditions

Normal depth was assumed for the starting elevation. The slope-area method was used to determine this starting elevation for all flows utilizing the same value of slope determined from the field surveyed profile. A convergence test was performed on the 100 year flow by changing the profile slope by ± 30%. The results indicated good convergence about 540 feet upstream of the starting point. Should not this be very near the Same for both streams?

Designated Floodway

Halfway Q = 1270 cfs
WS 611.8

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcharge of 0.1 ft. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1" = 1000' topographic map for floodway delineation).

Computer Outputs

Enclosed are complete computer outputs for (i) 100 year natural and 100 year designated floodway, (ii) 10, 50 and 500 yr. flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

Comments

The following two modifications were made to the bridge data. The bridge at 608.98 - 609.07 was found to go to pressure flow for the 100 yr flood by modelling with the normal bridge where as with the special bridge, low flow was occurring. In order to model pressure flow with the special bridge routine, the ELLC was lowered from 657.3 to 654.5, keeping the bridge area the same. The bridge at 600.02 was experiencing low flow by special bridge for the 10 and 50 year flows. The ELLC was lowered from 607 to 606 for these two flows.

McNAMEE, PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Spring Brook DATE
COMPUTED DATE CHKD

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION No.		SECTION TYPE	REMARKS
599.9		4	Valley Section - Developed From 5' Topo USGS Map
599.98	A	3	D/S Face Private Drive - Repeat 599.9 + 0.7
600.02		3	U/S Face Private Drive - Repeat 599.9 + 0.7
600.1		3	Valley Section - Repeat 601 - 3.3
600.5		3	Valley Section + Repeat 601 - 1.7
601	B	1	Valley Section
601.1	C	2	Valley Section - Modified to more closely resemble overall channel shape
601.98	D	3	D/S Face Green Hills Dr - Repeat 602.02
602.02		2	U/S Face Green Hills Dr - Overbanks extended to accomodate overbank flow
602.1	E	1	Valley Section
602.15		3	Footbridge - Repeat 602.1 - Input Loss w/ X5
602.2	F	2	Valley Section - Overbanks extended from 602.1
603	G	1	Valley Section
603.1	H	1	Valley Section
603.98		2	D/S Face Sterns Rd - modified channel to model bridge opening - Repeat of 604.02
603.99		4	Model of Bridge Opening - developed from 604.02
604.01	I	4	Model of Bridge Opening - developed from 604.02
604.02		2	U/S Face Sterns Rd - modified channel to model bridge opening
604.1	J	2	Valley Section - Modified for 1 on 1 U/S expansion
604.5		3	Valley Section - Repeat 605 - 3.1
604.7		3	Valley Section - Repeat 605 - 1.5
605	K	1	Valley Section
605.05		3	Valley Section - Repeat 605 + 3.1

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Spring Brook
COMPUTED BY DATE CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, Partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
605.1		3	Valley Section - Repeat 605 + 6.2
605.5		3	Valley Section - Repeat 606 - 3.1
606	L	1	Valley Section
606.03		3	Valley Section - Repeat 606.1 - 5.8
606.06		3	Valley Section - Repeat 606.1 - 2.9
606.1	M	1	Valley Section
606.98		3	D/S Face Secor Rd - Repeat 606.1 + 1.4
607.02	N	3	u/s Face Secor Rd - Repeat 607.1
607.1	O	1	Valley Section
608	P	1	Valley Section
608.1	Q	1	Valley Section
608.3		4	Valley Section - Repeat 608.1, but modified for 1 on 4 D/S expansion
608.98	R	4	D/S Face Monroe Rd - Repeat 608.1, modified channel to model bridge opening
609.07		4	U/S Face Monroe Rd - Repeat 608.98
609.1	S	2	Valley Section - Modified for 1 on 1 u/s expansion and ineffective overbank flow area
609.2		4	Valley Section - Repeat 609.1 - modified only for ineffective overbank flow area, not changed for expansion limit (+ 1.5 invert chng)
609.3		4	Valley Section - Repeat 609.2 + 0.7
609.9		3	Valley Section - Repeat 610 - 1.5
609.95		3	Valley Section - Repeat 610 - 0.8
610	T	1	Valley Section

HUD - FIA H-4705

SUBJECT COMMUNITY: BEDFORD

WATERCOURSE: SPRING BROOK

DATE

TABLE 2 — XKOR CALCULATIONS

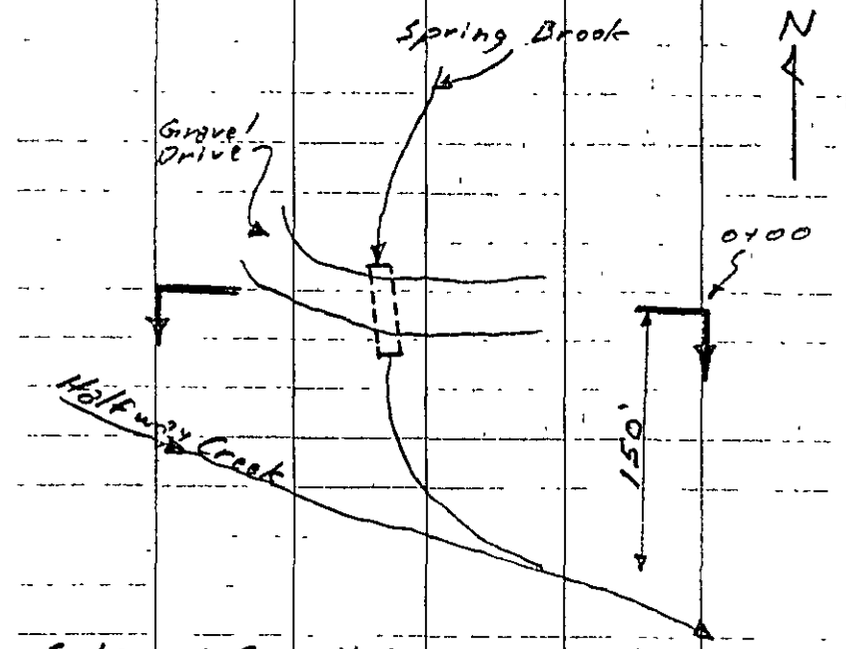
$XKOR = 1 + K_e + K_F \qquad K_F = \frac{29 n^2 l}{R^{4/3}} \qquad R = \frac{A}{P}$

Cross Section Location	K_e	A	P	R	n	l	K_F	XKOR	REMARKS
599.98 - 600.02	0.5	12.6	14.28	0.88	.025	37	0.8	2.3	Dirt + Debris in Pipe
601.98 - 602.02	0.4	12.6	14.28	0.88	.022	52	0.9	2.3	Brick lined channel U/S of culvert
606.98 - 607.02	0.3	17.6	20.4	0.86	.015	45	0.4	1.6	
608.98 - 609.07	0.25	40.6	33.06	1.23	.025	29	0.4	1.65	Some deposition in box culvert

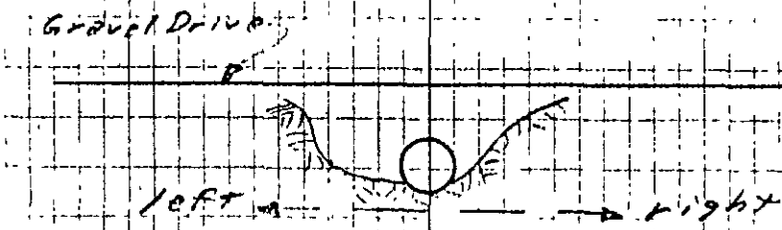
472-D/67

Spring Brook
X-Section 600.1 ℄
Culvert 150' u/s from Halfway Creek

1-16-79 D. Cain ϕ
N. Shamart π



Looking Downstream

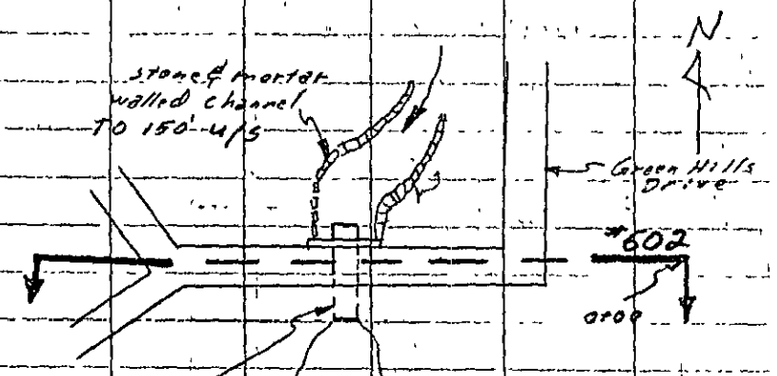


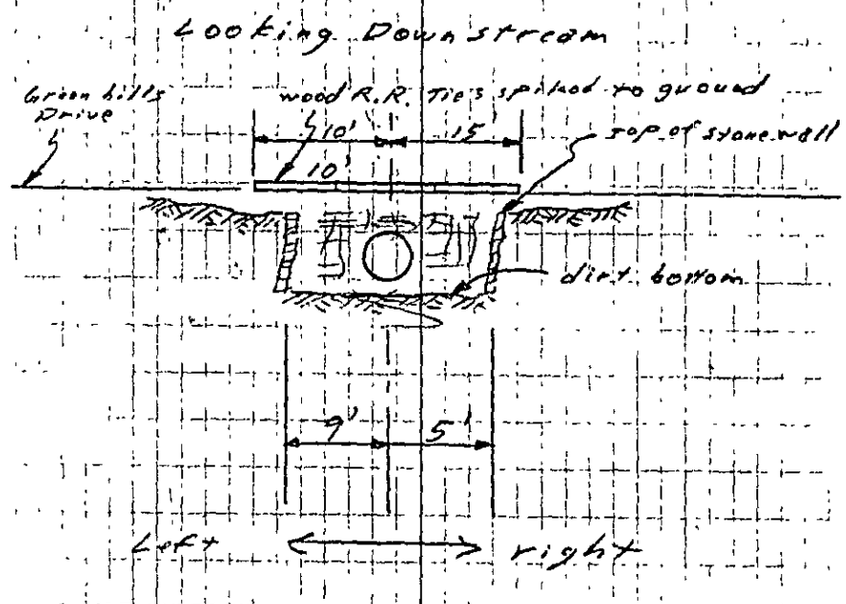
Culvert = 4' Dia, 37' long

Sta	+S	HI	-S	Elev	Description
BM153				609.62	
	3.77	613.39			
			10.4	603.0	u/s invert of culvert
			~~5.1~~ 10.2	603.1	Ground at ℄ culvert
			~~8.7~~ 5.1	608.3	" 10' left of culvert
			8.9	604.5	" 5' left of culvert
			9.6	603.8	" 3' right of culvert
			4.9	608.5	" 8' right of culvert

Spring Brook
X-Section 602 and bridge
Detail at Green Hills Drive

1-16-79 D. Cain T.M. 47-2/57
N. Shamart ϕ



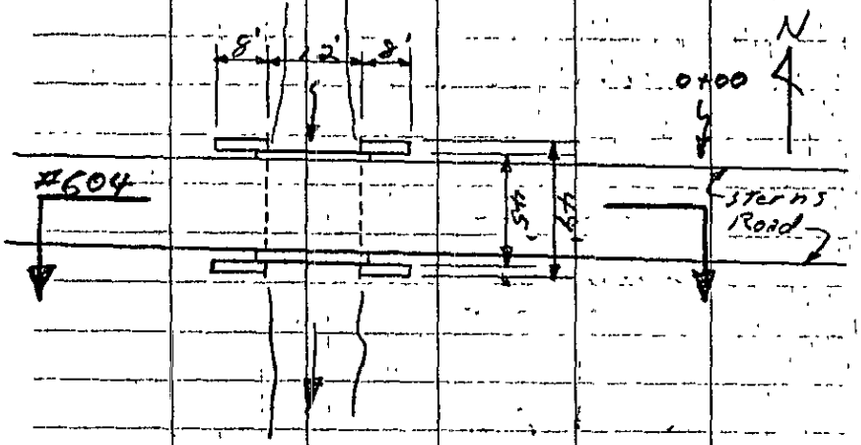


Std	+S	HI	-S	Elev	Description
BM156		636.38'		635.60'	
	0.78	635.38			
TP			7.38	624.00'	
	2.54	631.54'			
0+00			3.2	628.3'	on lawn @ edge of house
0+18			4.8	626.7'	
0+33			8.9	622.6'	← emit (small valley in Lawn)
0+53			6.6	624.9'	

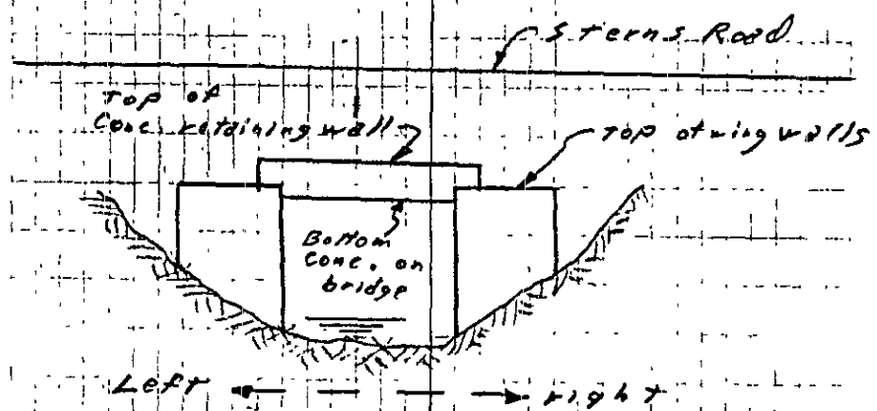
0+65	6290
1+00	6275
1+38	6247
1+67	6203
1+91	6198
2+00	6186
2+10	6171
2+17	6172
2+17	6129
2+18	6168
2+44	6170
2+45	6193
2+70	6218
2+96	6229
3+50	6219
3+55	6214
3+68	6228
3+90	6231
4+00	6229
4+35	6217
4+55	6294

Spring Brook
X-Section 604 and bridge detail at Sterns Rd.

1-16-79 D. Cain ⊼ 1??
N. Shamart ϕ



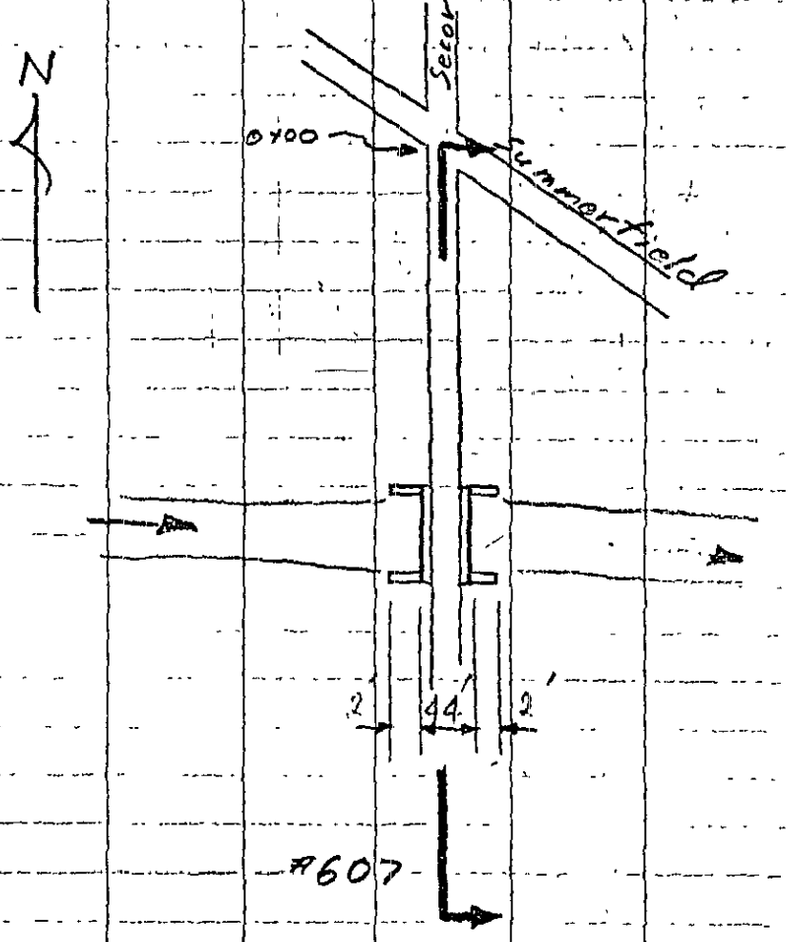
Looking downstream



Sta	+S	HI	-S	Elev	Description
Bm 82				627.61'	
	11.17	638.78'			
			11.5	627.3'	✓Top of Conc. retaining wall
			13.7	625.1'	✓Bottom Conc. on bridge
			13.6	625.2'	✓Top of wing walls
			16.5	622.3'	✓Ground at outside of left wing wall
			20.5	618.3'	✓Ground at inside of left wing wall
			20.8	618.0'	✓ " " ℄ creek
			19.5	619.3'	✓ " " inside of right wing wall
			14.2	624.6'	✓ " " outside of right wing wall

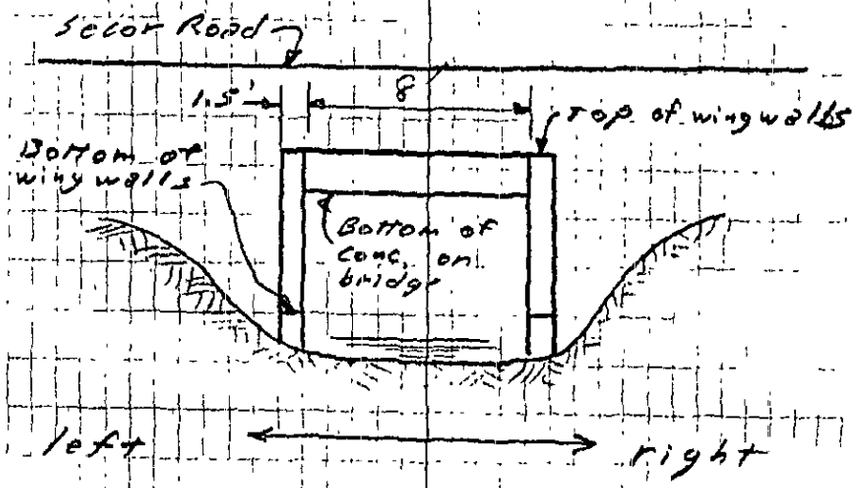
472-D/60A

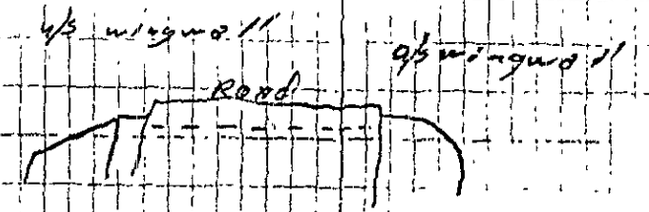
Spring Brook
X-Section 607 and bridge
Detail at Secor Road



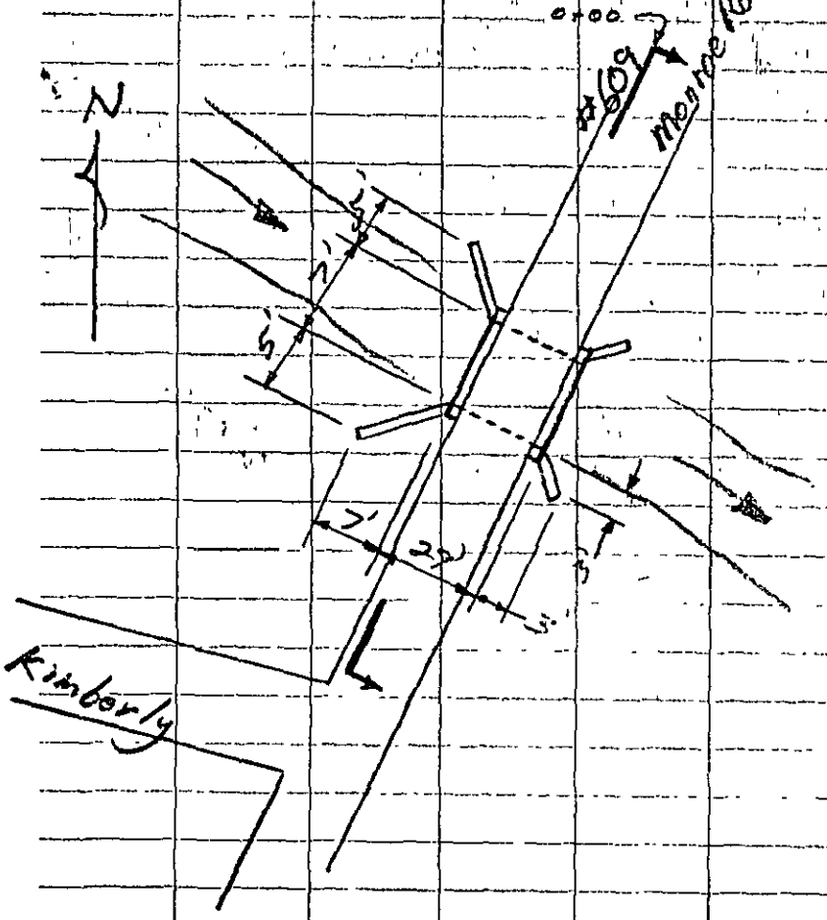
1-16-79 D. Cain ϕ
N. Shamart π ⊠

Looking Downstream





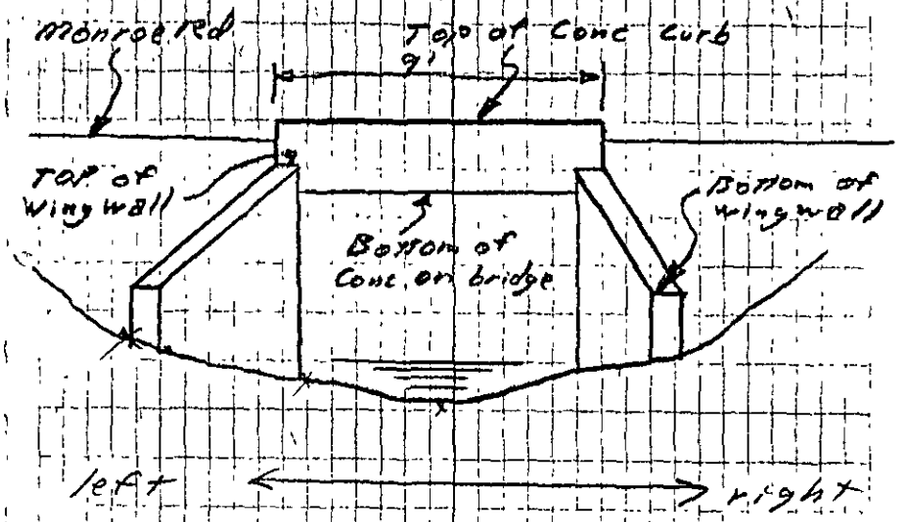
Spring Brook
X-Section 609 and bridge
detail at Monroe Road



1-16-79 D. Cain ϕ
N. Shamart π ⊠

472-D/63

Looking Downstream



FLOOD INSURANCE STUDY HYDRAULIC REPORT

PROJECT: HUD-FIA-H-4705 Bedford Twp., Monroe Co., Michigan

CONSULTING FIRM: McNamee, Porter and Seeley/Smith, Hinchman and Grylls

WATERCOURSE: Kelly-Doty Drain

STUDY LIMITS: Corporate Limits-South of Sterns Rd. (Downstream Limit) to downstream of Crabbe Rd. (Upstream Limit)

DATE OF AERIAL SURVEY:

DATE OF LAND SURVEY: McNamee, Porter and Seeley Field Crew 2/5/79 - 2/7/79

SOURCE OF FLOWS: Discharges were computed by MP&S/SH&G and approved by MDNR on April 5, 1979

TOPOGRAPHIC INFORMATION: USGS 5 foot topographic maps - 1"=1000'

METHOD OF ANALYSIS: HEC-2 water surface profile computer program

VARIABLES AND COEFFICIENTS:

Channel "n"	.045-.055
Overbank "n"	.06
n values thru bridges	.012-.025
Contraction Coefficients	.1-.3
Expansion Coefficients	.4-.8

Bridge loss coefficients were chosen per References 1 and 2.

PHOTOGRAPHS: Enclosed for your review,please return.

CROSS-SECTIONS: See Table 1 for cross-section description. Cross-section plots enclosed.

XKOR CALCULATIONS: See Table 2

REFERENCES:

1. "Hec-2 Water Surface Profiles", Users Manual, U.S. Army Corps of Engineers, Feb. 1972.
2. "Application of the Hec-2 Bridge Routines", U.S. Army Corps of Engineers, June 1974.
3. "Roughness Characteristics of Natural Channels", Barnes, Harry H. Jr., Geological Survey Water Supply Paper 1849.
4. "Floodway Determination using computer Program Hec-2", Bonner, Vernon R., U.S. Army Corps of Engineers Hec Training Document 5, May 1974.

HIGH WATER MARKS & CALIBRATION:

No high water marks were available for use in calibrating the HEC-2 model for Kelly-Doty Drain.

A sensitivity analysis was performed on the 100 year flow by raising and lowering all Manning "n" values by 30%. Water surface elevations differed from +0.5 to -1.5 in the beginning of the run and fell to less than ±0.2 by the end of run, indicating that the Manning n values used are reasonable.

Starting Conditions

Field information was obtained about 2400 ft. downstream of the corporate limits of Bedford Twp. in order to establish a good starting elevation at the corporate limits. Normal depth was assumed for the starting elevation. The slope-area method was used to determine this starting elevation for all flows, utilizing the same value of slope determined from the field surveyed profile. A convergence test was run on the 100 year flow by changing the starting elevation determined by the slope-area method by ±1 foot. The convergence test was run to just inside the corporate limits, with the results indicating very close convergence at this point.

Designated Floodway

Encroachment method 4 in the HEC-2 program was used to determine encroachment stations based on an allowable surcharge of 0.1 ft. At field surveyed sections the designated floodway was established using the computer determined encroachment stations. Between field surveyed sections, the available topographic information was used to complete the floodway delineation. (See the enclosed 1"=1000' topographic map for floodway delineation.)

Computer Outputs

Enclosed are complete computer outputs for (i) 100 year natural and 1000 yr designated floodway (ii) 10, 50 and 500 yr. flood plain elevations and (iii) convergence test and sensitivity analysis for your review.

Comments

At the US-24 (400.98-401.02) bridge, pressure flow occurs for the 500, 100 and 50 year floods. Therefore the special bridge routine is used. The ELLC was lowered from 587.2 to 586 for the 10 year flood. At two railroad bridges (404.98-405.2 and 405.98-406.02), the FLLC was lowered from 592 to 591 for the 10-year flood.

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

Section No.	Section Type	Remarks
400	2	Valley Section - Modified for 1 on 4 D/S expansion
400.98	4	D/S Face US-25 - Repeat 400 + channel modified to match bridge opening width +0.2
401.02	4	U/S Face US-25 - Repeat 400.98
401.1	2	Valley Section - modified for 1 on 1 U/S expansion
402	2	Valley Section - modified to exclude ineffective overbank flow areas
403 A	1	Valley Section
404 B	2	Valley Section - Modified for 1 on 4 D/S expansion
404.98	2	D/S Face Railroad Bridge - Modified channel to match bridge opening width
C		
405.02	4	U/S Face Railroad Bridge - Repeat 404.98
405.1	4	Valley Section - Repeat 404 without modifications for expansion + 1.1'
405.98	4	D/S Face Railroad Bridge - Repeat 404.98 (identical bridges
D		
406.02	4	U/S Face Railroad Bridge - Repeat 404.98
407 E	2	Valley Section - modified for 1 on 1 U/S expansion
411 F	1	Valley Section
411.98	2	D/S Face Telegraph Rd - Repeat 412.1 -0.5'
G		
412.02	2	U/S Face Telegraph Rd - Repeat 412.1 -0.5
412.1 H	1	Valley Section
413 I	1	Valley Section
413.1 J	2	Valley Section - Modified left overbank to allow effective flow area
413.98	4	D/S Face Kirkwood - Repeat 413.1 + 0.5'
414.02 K	4	U/S Face Kirkwood - Repeat 413.1 + 0.5'
414.05	4	Valley Section - Developed from 415 - modified overbanks on 415 to not allow flow on north side of Stevens Rd - Elev @ 415 - 2.9'
414.06	4	Valley Section - Repeat 415 - 2.8'

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR MICHIGAN

JOB: HUD-FLA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Kelly-Doty Drain COMPUTED BY CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MRS and/or Abrams)
2	Field Survey Section, partly modified for modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

SECTION NO.		SECTION TYPE	REMARKS
414.08		4	D/S Face Driveway - Repeat 414.06
414.12	L	4	U/S Face Driveway - Repeat 414.06
414.15		4	Valley Section - Repeat 414.06 + 0.3'
414.18		4	D/S Face Driveway - Repeat 414.06 + 0.6'
	M		
414.22		4	U/S Face Driveway - Repeat 414.06 + 0.6'
414.25		4	Valley Section Repeat 414.06 + 1.2'
414.28		4	D/S Face Driveway - Repeat 414.06 + 1.9'
414.32	N		U/S Face Driveway - Repeat 414.06 + 1.9'
414.35		4	Valley Section - Repeat 414.06 + 2.1'
415	O	2	Valley Section - Modified so as not to allow flow on north side of Sterns Rd.
415.05		3	Valley Section - Repeat 415
415.08		3	D/S Face Driveway - Repeat 415 + 0.1'
415.12	P	3	U/S Face Driveway - Repeat 415.1 - 0.9'
415.15		3	Valley Section - Repeat 415.1 - 0.7'
415.2	Q	1	Valley Section
415.98		2	D/S Face Sterns Rd - Modified overbanks and channel to fit bridge opening
	R		
416.02		4	U/S face Sterns Rd - Repeat 416.98 - 0.9' Modified banks to limit top width
416.5		4	Valley Section - Repeat 416.98 - 0.4'
416.98		2	D/S Face Driveway - Modified so as to allow no flow south of Sterns Rd
	S		
417.02		3	U/S Face Driveway - Repeat 416.98
417.05		4	Valley Section - Repeat 416.98 + 0.2' - Modified to limit top width
417.08	T	3	D/S Face Driveway - Repeat 417.05 + 0.3'
417.12		3	U/S Face Driveway - Repeat 417.05 + 0.3'

McNAMEE PORTER & SEELEY
CONSULTING ENGINEERS
ANN ARBOR, MICHIGAN

JOB: HUD-FIA H-4705 SHEET NO
COMMUNITY: Bedford FILE NO
WATERCOURSE: Kelly-Doty Drain DATE
COMPUTED BY CHK BY DATE

TABLE 1 - SECNO

Section Types	Description
1	Surveyed (See Remarks if Other Than MPS and/or Abrams)
2	Field Survey Section, Partly modified For modelling
3	Synthetic - Repeat of nearby surveyed section with an invert adjustment (See Remarks)
4	Synthetic - Developed from topo, surveyed sections, or other information

Section No.	Section Type	Remarks
417.13	3	Valley Section - Repeat 417.05 + 0.5'
417.15	3	Valley Section - Repeat 417.05 + 1.6'
417.18	3	D/S Face Culvert along Sterns + Crabb Rds - Repeat 417.05 + 2.4'
U		
417.22	3	u/s Face Culvert along Sterns + Crabb Rds - Repeat 417.31 - 0.3'
417.3	V 1	Valley Section
418	W 2	Valley Section - Modified so as to not allow Flow west of Crabb Rd

COMMUNITY: Bedford

WATERCOURSE: Kelly-Doty Drain

TABLE B2 - XKOR - CALCULATIONS

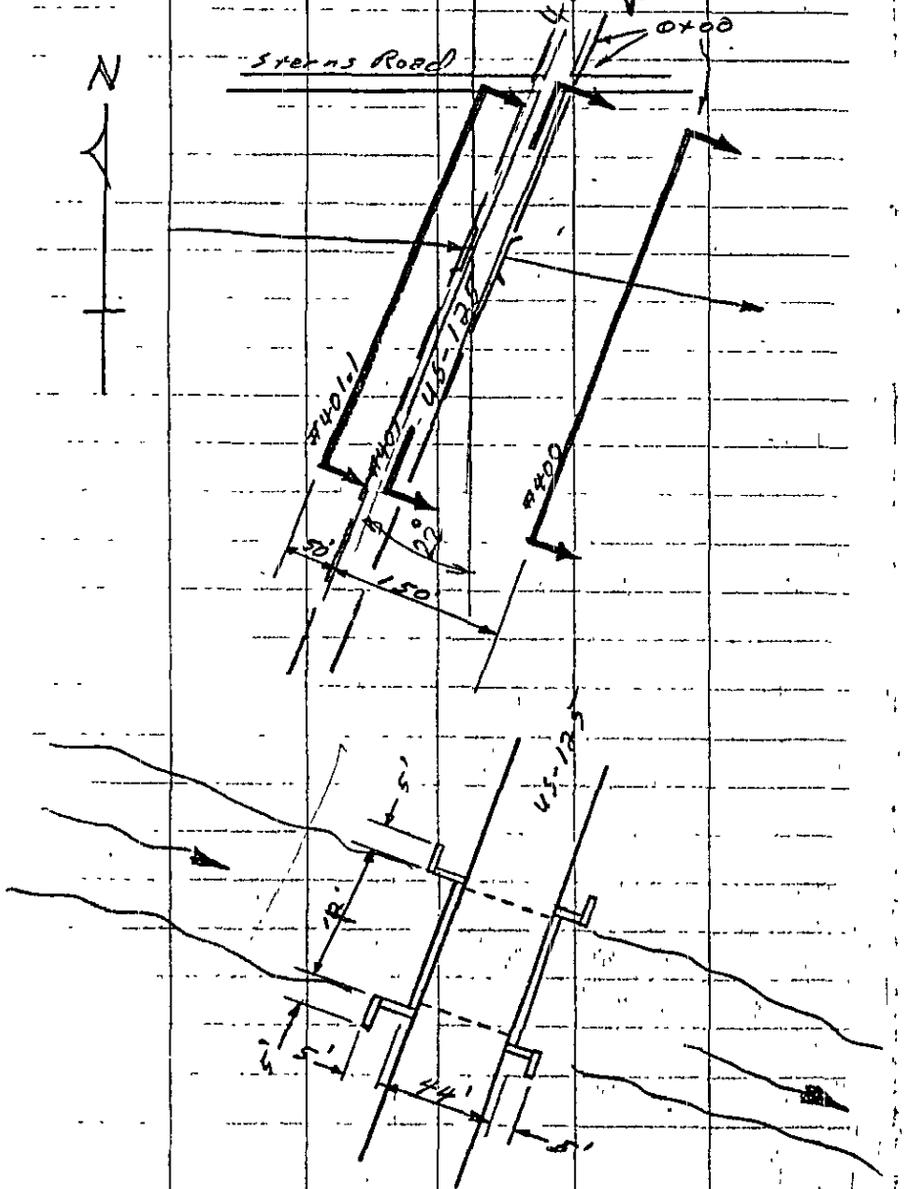
$XKOR = \Sigma K_e + K_F \qquad K_F = \frac{29 n l^2}{R^{4/3}} \qquad R = \frac{A}{P}$

Cross Section Location	K_e	A	P	R	n	l	K_F	XKOR	REMARKS
400.98-401.02	0.3	69.6	35.6	1.96	.025	44	0.3	1.6	
404.98-405.02	0.15	62.5	32.2	1.94	.020	53	0.25	1.4 1.65	
405.98-406.02	0.15	62.5	32.2	1.94	.025	37	0.25	1.4 1.65	
411.98-412.02	0.3	90.24	56.64	1.59	.022	68	0.50	1.8	
413.98-414.02	0.4	11.91	13.82	0.86	.012 .015	42	0.20 .24	1.6 1.74	
414.08-414.12	0.4	27	21	1.29	.025	16	0.20	1.6	
414.18-414.22	0.5	15.01	15.51	0.97	.013	40	0.20	1.7	
414.28-414.32	0.5	8.65	11.86	0.73	.025	20	0.55	2.05	
415.08-415.12	0.5	8.65	11.86	0.73	.022	26	0.55	2.05	
415.98-416.02	0.5(+0.5)	11.03	13.28	0.83	.013	286	1.8	3.8	K_e = 0.5+0.5 due to 90° bend in pipe
416.98-417.02	0.5	12.57	14.36	0.88	.018	40	0.5	2.0	
417.08-417.12	0.5	12.57	14.36	0.88	.013	88	0.5	2.0	
417.18-417.22	0.5(+0.5)	11.03	13.284	0.83	.013	143	0.9	2.9	K_e = 0.5+0.5 due to 90° bend in pipe

472-F
55

Kelly-Doty Drain

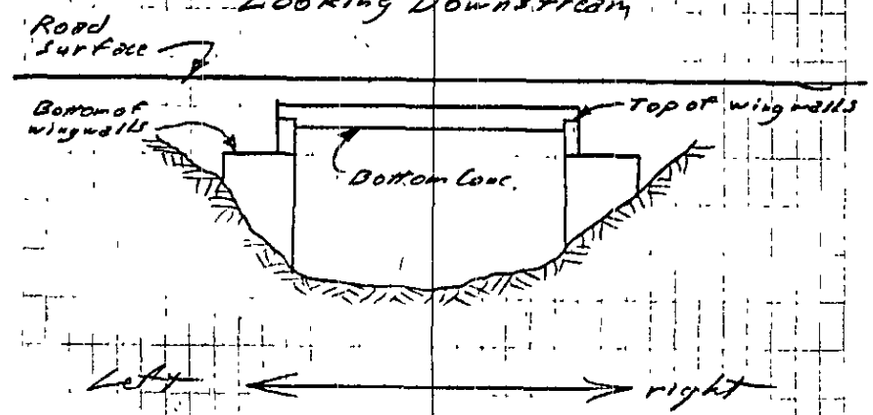
X-Sections 400, 401, & 401.1



2-5-79

D. Cain
N. Shamart ϕ
J. Magnusen π

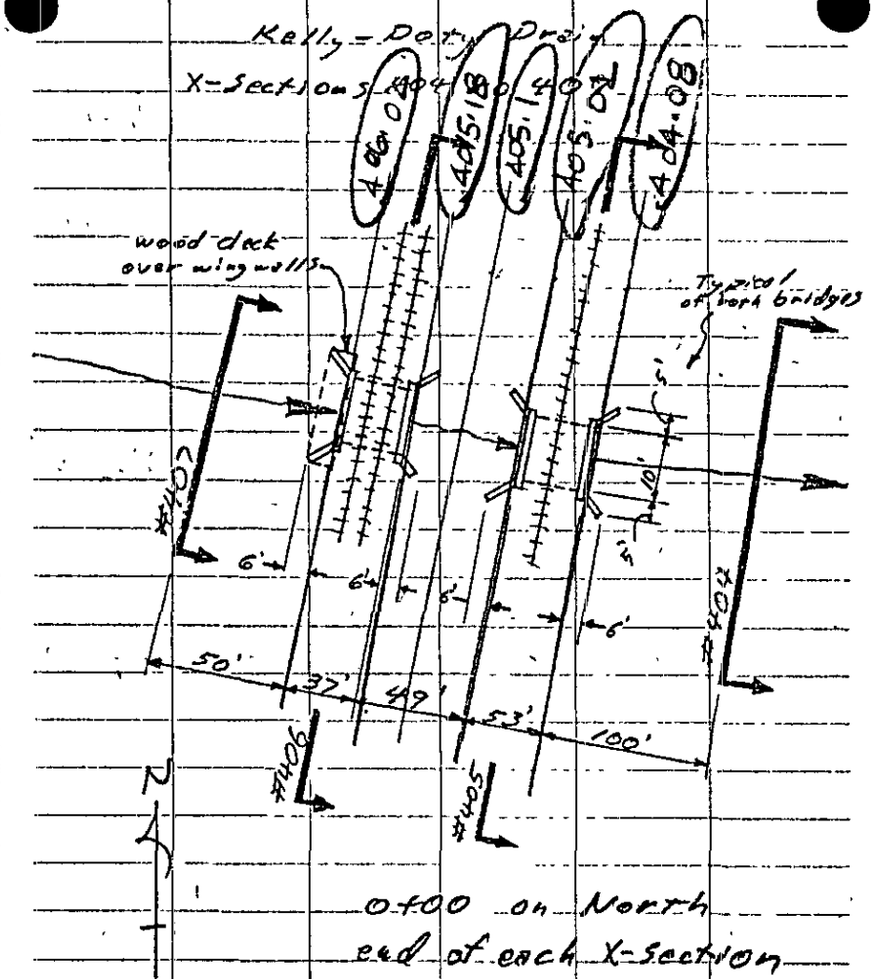
Looking Downstream



Pictures 6, 7 & 8
Film 116

Kelly-Doty Drain

X-Sections 404.08 to 407

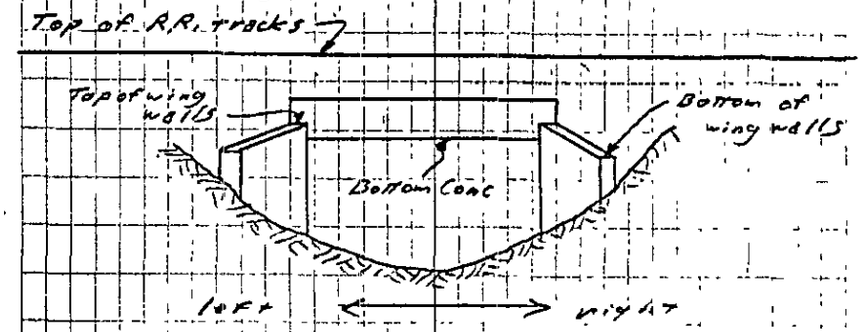


0+00 on North end of each X-Section

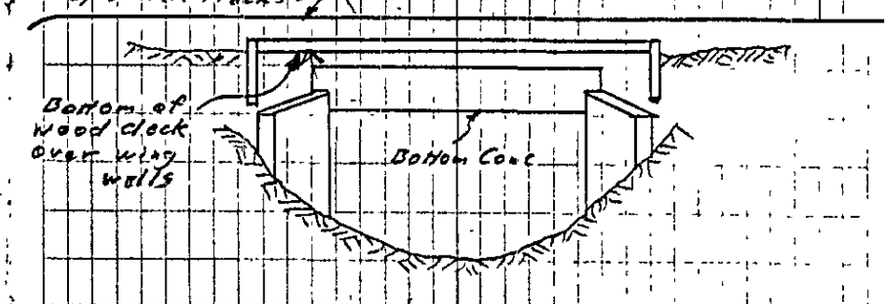
Pictures 9-12
Film 116

2-6-79 D. Cain
clear - 5° N. Shamart
J. Magnusen

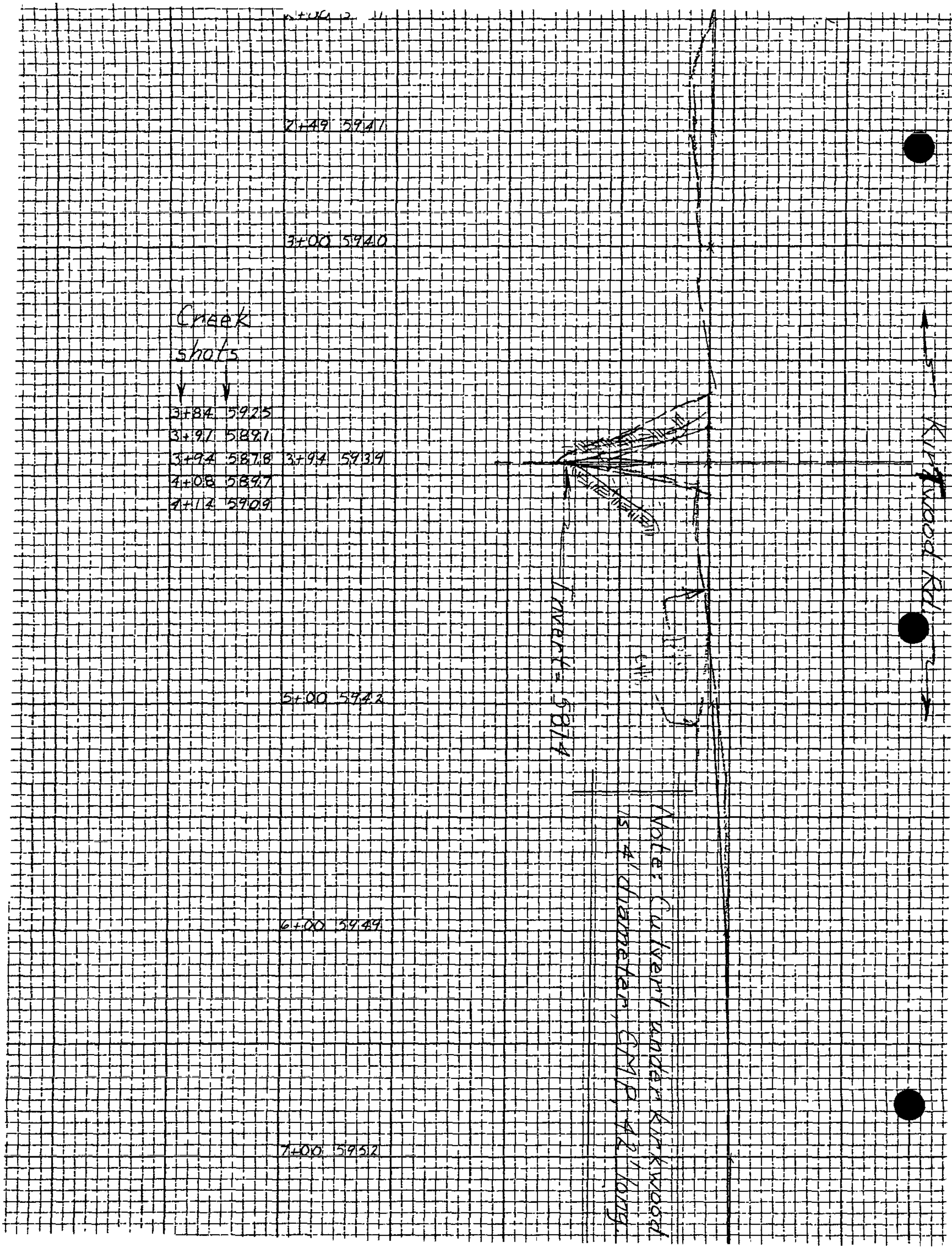
Bridge at #405
Looking Downstream



Bridge at #406
Looking Downstream

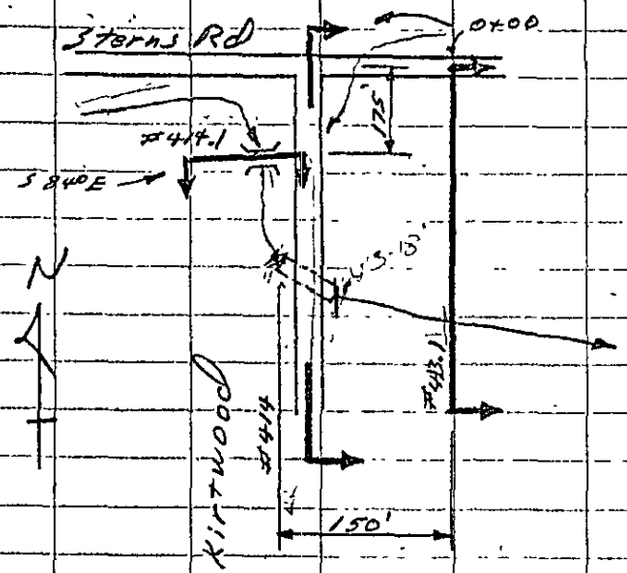


Kelly-Doty Drain
X-Sections Sta 42+12.1
Looking Downstream
Top of Telegraph Road
Top of wing walls
Bottom Conc.
Top of Curbs
Telegraph Road
Sta 42+12.1
Sta 42+12.2
Sta 44+11
Sta 0+00
N
200'
60'
63'
6'
7'
6'
1.5'
8'
8.27'
Lt. 19
Rt. 19
Rt. 19
Lt. 19
Clear = 10.0'
2-6-69
47d-68

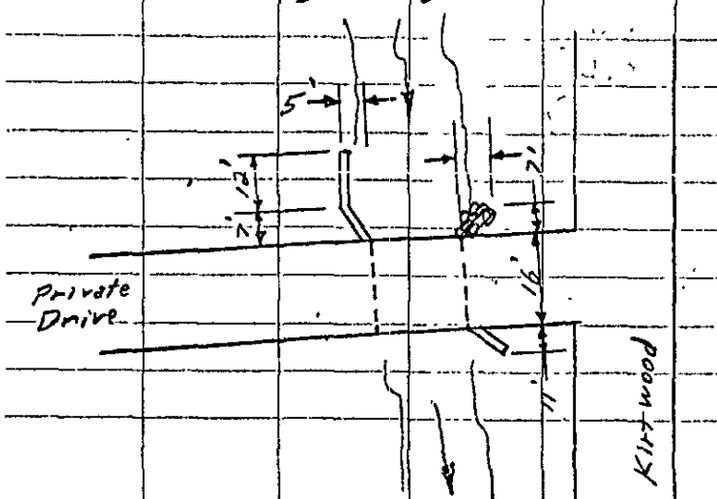

2+49 5941
3+00 5940
Creek shots
3+84 5925
3+91 5891
3+94 5878
4+08 5897
4+14 5909
3+94 5939
5+00 5942
6+00 5949
7+00 5952
Kirkwood Rd
Invert = 5874
Note Culvert under Kirkwood is 4' diameter CMP 42' long.

Kelly - Doty Drain

X-Sections 413.1, 414 & 414.1



Driveway Bridge at # 414.1



2-6-79 D. Cain

N. Shamart ϕ

J. Magnusen π ⊞

Culvert under Kirtwood is 4' Dia

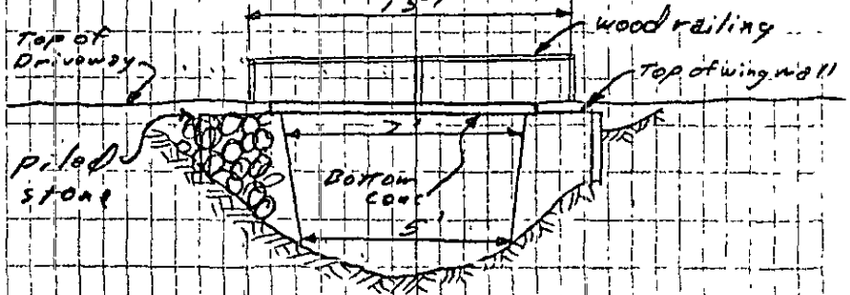
CMP & 42' long

Pictures 15 & 16

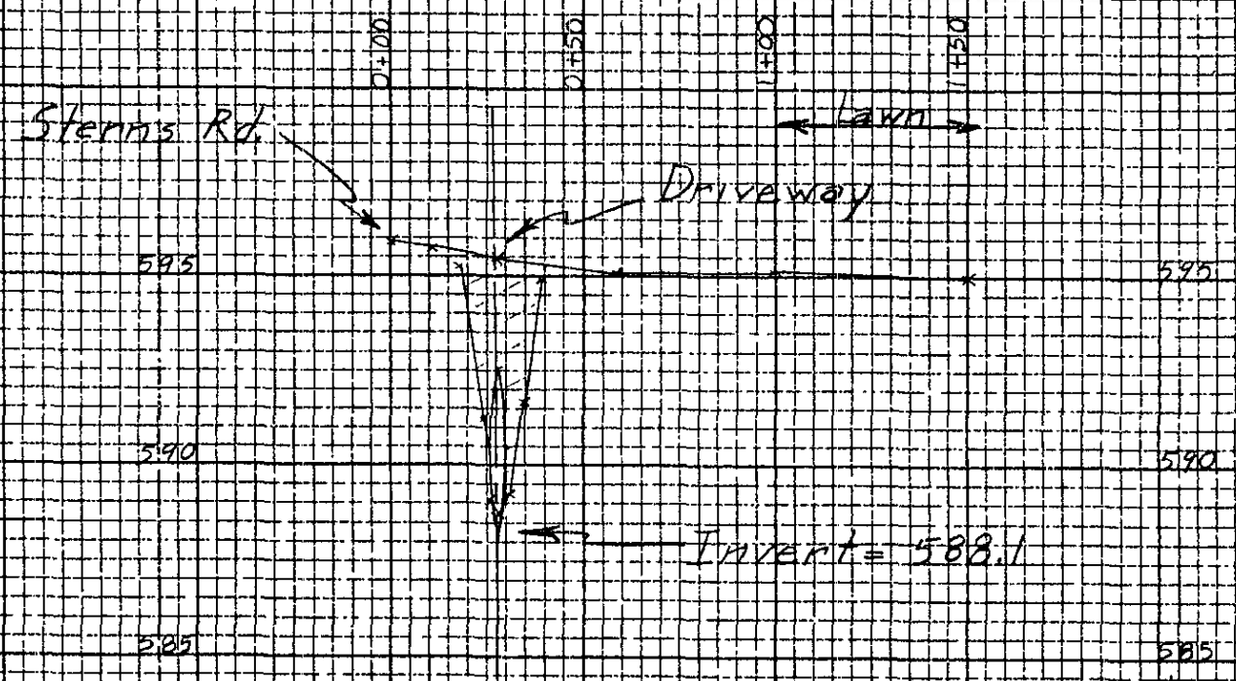
Film 116

Driveway bridge at # 414.1

Looking Downstream

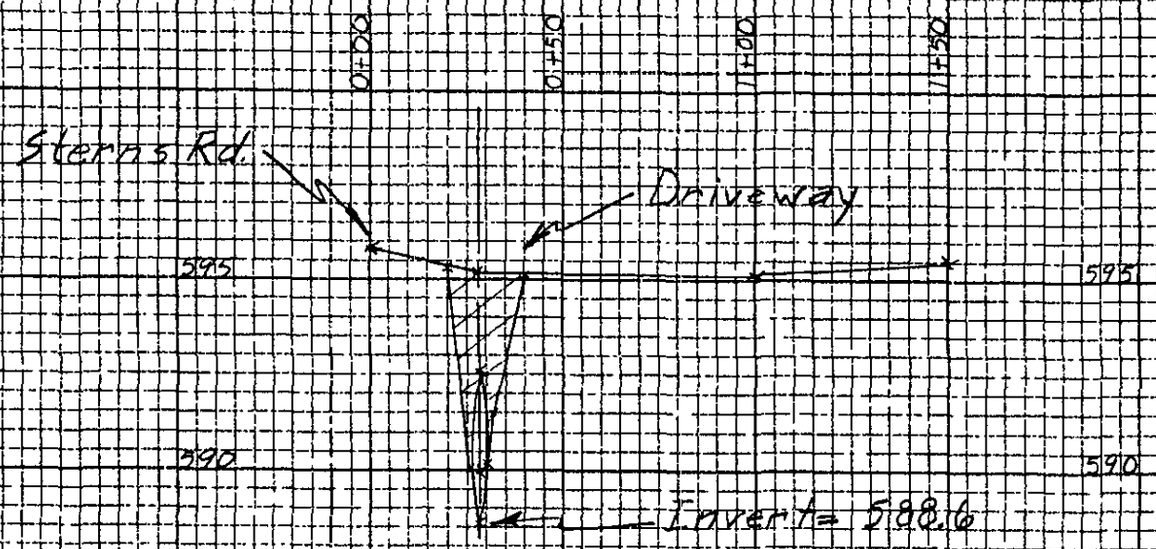


472-F
74



Note: Culvert is 4.5' o
RCP. See F.B. 472-G R
details. L=40'

Ground shots	Road elevations
0+00	595.9
0+11	595.8
0+28	595.5
0+59	595.2
1+00	595.2
1+50	595.0
0+16	595.3
0+24	591.3
0+26	589.1
0+28	588.6
0+30	589.2
0+34	591.7
0+38	594.9

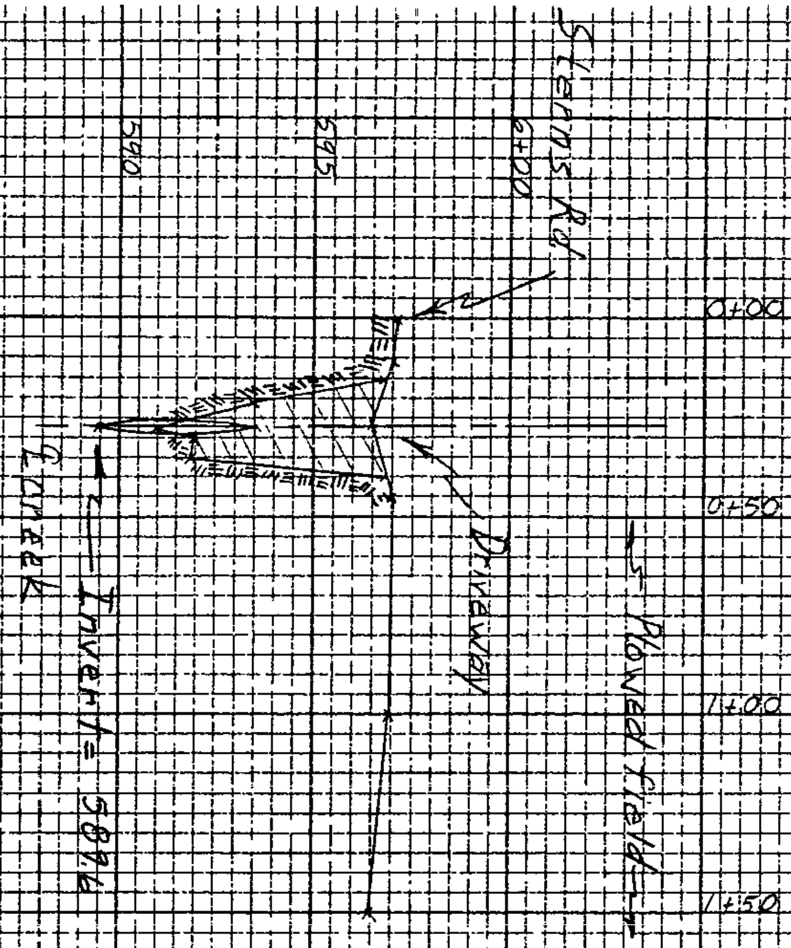


Note: Culvert 4' diameter, CMP See F.B. 472-G pg. 2 for details. L = 20'

0+00 595.8
0+28 595.3
1+00 595.2
1+50 595.5

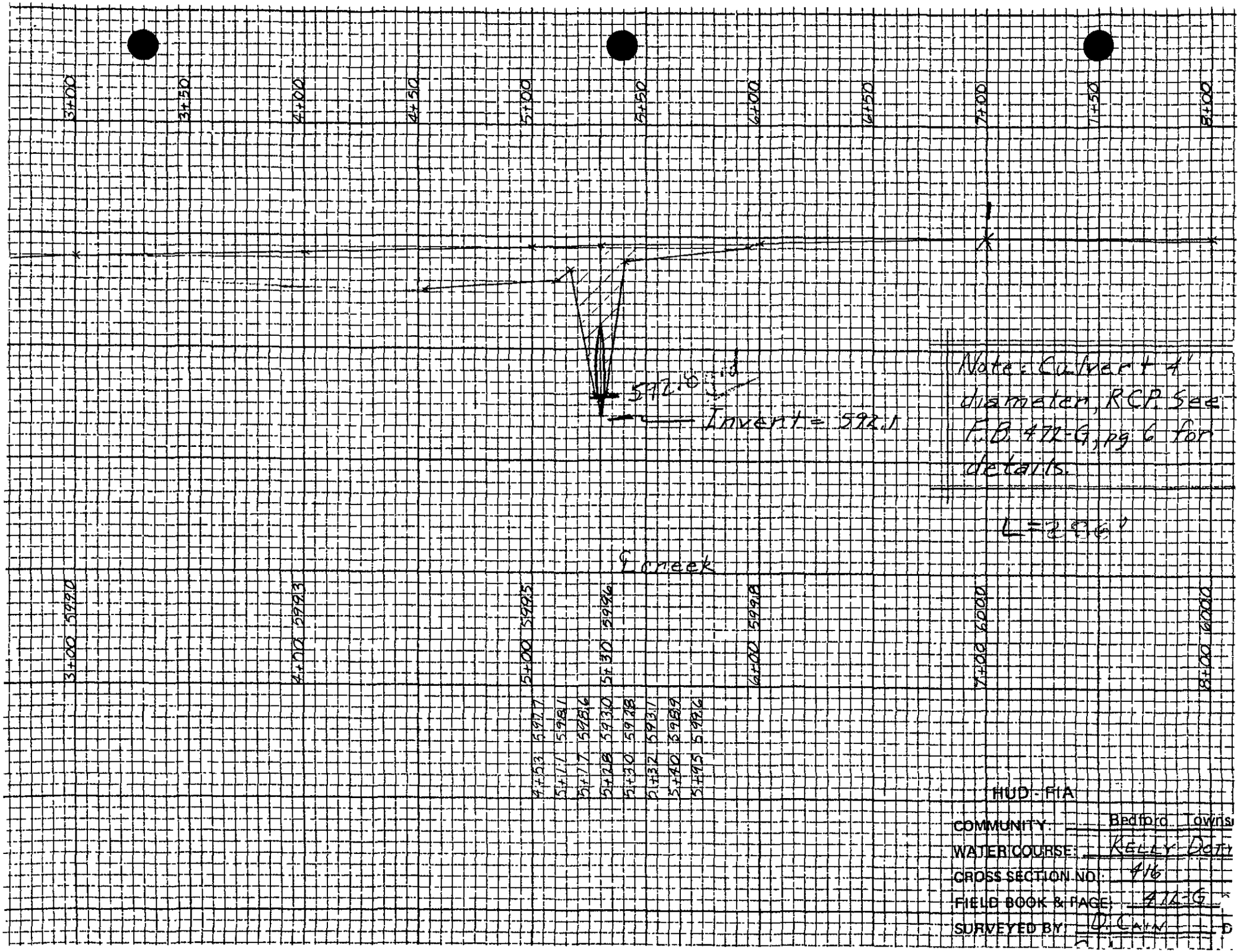
0+19 595.4
0+26 590.0
0+28 590.0
0+30 590.2
0+32 591.5
0+41 595.4

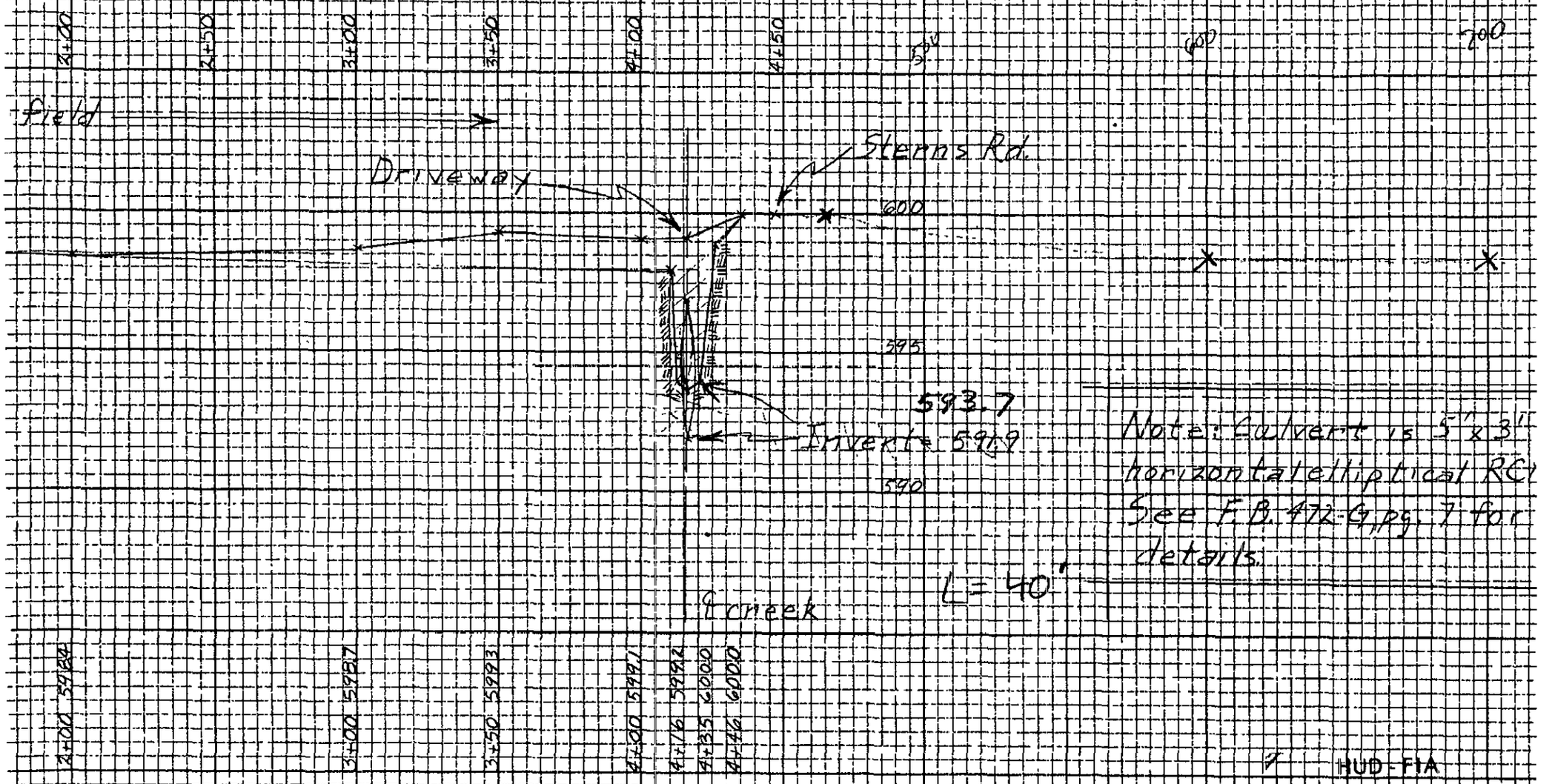
Ground shots		Road elevations	
		0+00	597.2
		0+11	597.1
0+17	596.9		
0+22	593.5		
0+27	591.0	0+27	596.5
0+30	591.9		
0+36	597.8		
0+41	597.1		
		0+45	597.1
		1+00	596.9
		1+50	596.5



Note Culvert 4' diameter, RCP. See F.B. 472-G, pg. 4 for details

L = 26'

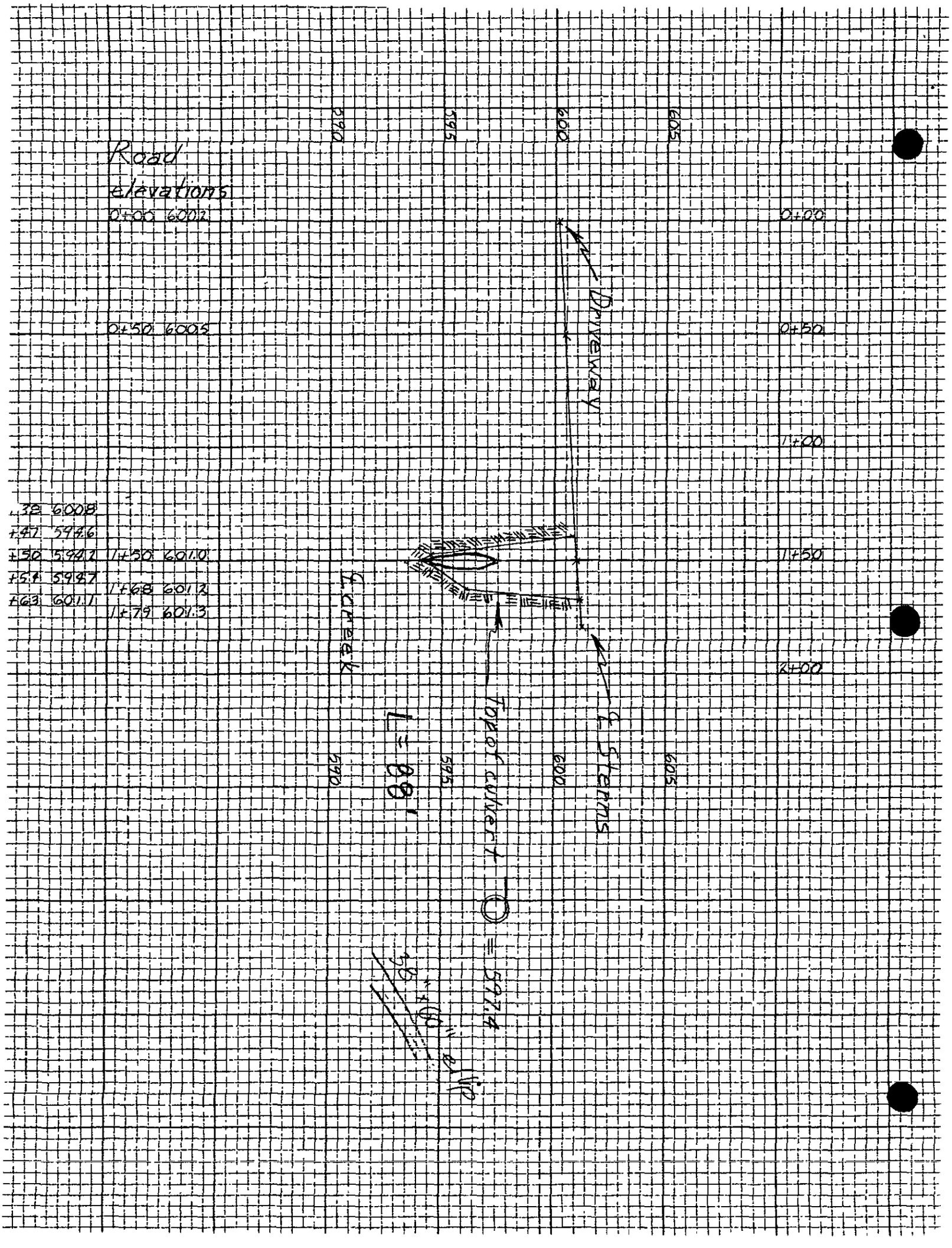

3+00
3+50
4+00
4+50
5+00
5+50
6+00
6+50
7+00
7+50
8+00
592.8
Invert = 592.1
Note: Culvert 4' diameter, RCP. See F.B. 472-G, pg 6 for details.
L = 296'
℄ creek
3+00 599.0
4+00 599.3
5+00 599.5
5+30 599.6
6+00 599.8
7+00 600.0
8+00 600.0
4+53 597.7
5+11 598.1
5+17 598.6
5+28 593.0
5+30 592.8
5+32 593.1
5+40 598.9
5+95 599.6
HUD - FIA
COMMUNITY: Bedford Towns
WATER COURSE: KELLY DOTY
CROSS SECTION NO: 416
FIELD BOOK & PAGE: 472-G
SURVEYED BY: D. CAIN



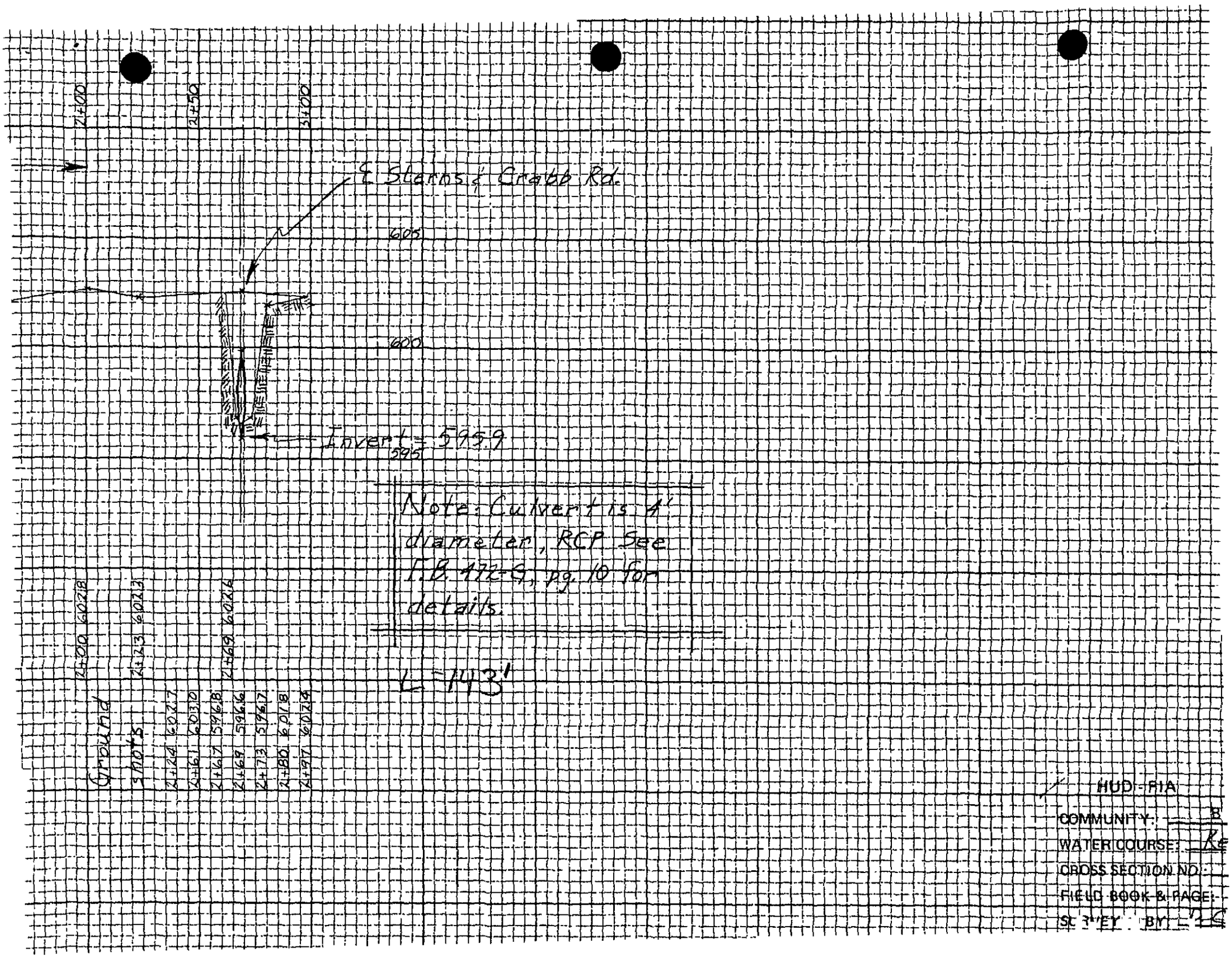
Note: Culvert is 5' x 3' horizontal elliptical RC
See F.B. 472-G, pg. 7 for details.

HUD - FIA

COMMUNITY: Bedf
WATER COURSE: Kell
CROSS SECTION NO.: 4
FIELD BOOK & PAGE: 4
SURVEYED BY: D. Ca
PLOTTED BY: G. Al
SCALE: Horz. 1" = 5



Road elevations
0+00 600.2
0+50 600.5
1+50 601.0
1+68 601.2
1+79 601.3
.38 600.8
+47 594.6
+50 594.2
+54 594.7
+63 601.1
590
595
600
605
0+00
0+50
1+00
1+50
2+00
Driveway
℄ Creek
℄ Sterns
Top of culvert
L = 88'
38" x 60" elip



HUD - FIA

COMMUNITY: [illegible]

WATER COURSE: [illegible]

CROSS SECTION NO.:

FIELD BOOK & PAGE:

SURVEY BY: [illegible]

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty Drain

4) DOCUMENT TYPE: Summery

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

DEN DITCH 100 YEAR FLOW

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
1.210	515.00	597.30	597.30	109.69	597.36	250.25	0.00	0.00	597.30	-I	-I	597.30
1.210	515.00	597.30	597.30	102.91	597.37	169.03	1200.29	1369.33	597.30	0.00	0.00	597.30
1.330	515.00	598.49	598.49	85.80	598.63	164.43	0.00	0.00	0.00	597.30	597.30	0.00
1.330	515.00	598.57	598.57	86.66	598.72	111.77	1121.62	1233.39	598.49	597.30	597.30	598.49
1.340	515.00	599.88	599.88	97.50	600.06	166.59	0.00	0.00	0.00	0.00	0.00	0.00
1.340	515.00	599.94	599.94	97.90	600.14	123.65	1183.17	1306.83	599.88	598.49	598.49	599.88
1.350	515.00	600.72	600.72	108.53	600.95	40.00	0.00	0.00	0.00	0.00	0.00	0.00
1.350	515.00	600.79	600.79	109.43	601.01	40.00	1200.00	1240.00	600.72	599.88	599.88	600.72
1.380	515.00	600.84	600.84	40.55	602.68	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.380	515.00	600.84	600.84	35.28	602.68	13.00	1218.00	1231.00	600.84	600.72	600.72	600.84
1.420	515.00	609.57	609.57	209.53	609.74	13.00	0.00	0.00	0.00	0.00	0.00	0.00
1.420	515.00	609.57	609.57	191.58	609.74	13.00	141.00	154.00	609.57	600.84	600.84	609.57
15.750	515.00	609.77	609.77	1776.61	609.77	215.00	0.00	0.00	0.00	0.00	0.00	0.00
15.750	515.00	609.77	609.77	1756.33	609.77	208.24	25.62	233.86	609.77	609.57	609.57	609.77
18.000	515.00	609.77	609.77	2728.37	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
18.000	515.00	609.77	609.77	2714.86	609.78	271.66	5.98	277.64	609.77	609.77	609.77	609.77
100.980	515.00	609.77	609.77	2742.04	609.78	282.00	0.00	0.00	0.00	0.00	0.00	0.00
100.980	515.00	609.77	609.77	2728.49	609.78	271.65	5.98	277.64	609.77	609.77	609.77	609.77
101.020	515.00	609.81	609.81	1771.15	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.020	515.00	609.81	609.81	1754.68	609.81	300.67	14.92	315.59	609.81	609.77	609.77	609.81
101.210	515.00	609.81	609.81	1723.84	609.81	329.00	0.00	0.00	0.00	0.00	0.00	0.00
101.210	515.00	609.81	609.81	1707.74	609.81	300.42	15.05	315.47	609.81	609.81	609.81	609.81
101.900	515.00	609.81	609.81	1161.75	609.81	264.66	0.00	0.00	0.00	0.00	0.00	0.00
101.900	515.00	609.81	609.81	1144.64	609.81	221.33	62.71	284.04	609.81	609.81	609.81	609.81
101.950	515.00	609.86	609.86	1179.54	609.86	265.52	0.00	0.00	0.00	0.00	0.00	0.00
101.950	515.00	609.96	609.96	1195.52	609.96	221.71	62.50	284.22	609.86	609.81	609.81	609.86
102.000	515.00	609.86	609.86	1144.38	609.87	263.82	0.00	0.00	0.00	0.00	0.00	0.00
102.000	515.00	609.96	609.96	1161.26	609.97	220.94	62.92	283.86	609.86	609.86	609.86	609.86
102.260	515.00	609.87	609.87	1152.00	609.87	263.88	0.00	0.00	0.00	0.00	0.00	0.00
102.260	515.00	609.97	609.97	1168.83	609.97	220.97	62.90	283.87	609.87	609.86	609.86	609.87
102.280	515.00	609.90	609.90	990.47	609.90	254.24	0.00	0.00	0.00	0.00	0.00	0.00
102.280	515.00	610.00	610.00	1010.68	610.00	216.64	65.40	282.04	609.90	609.87	609.87	609.90
102.500	515.00	609.90	609.90	939.58	609.91	254.21	0.00	0.00	0.00	0.00	0.00	0.00
102.500	515.00	610.00	610.00	960.48	610.01	216.03	65.74	281.77	609.90	609.90	609.90	609.90

102.980	515.00	609.90	609.90	979.67	609.91	254.25	0.00	0.00	0.00	0.00	0.00	0.00
102.980	515.00	610.00	610.00	1000.67	610.01	215.96	65.78	281.74	609.90	609.90	609.90	609.90

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
103.020	515.00	610.08	610.08	1012.09	610.08	280.30	0.00	0.00	0.00	0.00	0.00	0.00
103.020	515.00	610.18	610.18	1047.24	610.18	253.82	18.82	272.63	610.08	609.90	609.90	610.08
103.290	515.00	610.08	610.08	966.59	610.08	280.28	0.00	0.00	0.00	0.00	0.00	0.00
103.290	515.00	610.18	610.18	1002.52	610.18	253.01	19.37	272.38	610.08	610.08	610.08	610.08
104.000	515.00	610.09	610.09	608.12	610.10	299.80	0.00	0.00	0.00	0.00	0.00	0.00
104.000	515.00	610.19	610.19	608.79	610.20	244.91	23.09	268.00	610.09	610.08	610.08	610.09
104.500	515.00	610.11	610.11	642.16	610.12	303.65	0.00	0.00	0.00	0.00	0.00	0.00
104.500	515.00	610.21	610.21	642.55	610.22	247.64	20.36	268.00	610.11	610.09	610.09	610.11
104.980	515.00	610.12	610.12	640.76	610.13	300.47	0.00	0.00	0.00	0.00	0.00	0.00
104.980	515.00	610.22	610.22	639.33	610.23	243.62	24.38	268.00	610.12	610.11	610.11	610.12
105.020	515.00	610.22	610.22	434.51	610.23	282.84	0.00	0.00	0.00	0.00	0.00	0.00
105.020	515.00	610.32	610.32	450.21	610.33	234.33	64.32	298.66	610.22	610.12	610.12	610.22
105.410	515.00	610.24	610.24	397.69	610.25	283.31	0.00	0.00	0.00	0.00	0.00	0.00
105.410	515.00	610.33	610.33	414.00	610.35	233.63	64.66	298.29	610.24	610.22	610.22	610.24
105.480	515.00	610.50	610.50	65.38	610.83	125.81	0.00	0.00	0.00	0.00	0.00	0.00
105.480	515.00	610.55	610.55	65.14	610.91	35.12	183.00	221.00	610.50	610.24	610.24	610.50
105.980	515.00	611.10	611.10	123.46	611.22	151.65	0.00	0.00	0.00	0.00	0.00	0.00
105.980	515.00	611.17	611.17	122.24	611.30	97.37	122.59	221.00	611.10	610.50	610.50	611.10
106.020	515.00	611.90	611.90	141.55	612.02	139.55	0.00	0.00	0.00	0.00	0.00	0.00
106.020	515.00	611.97	611.97	142.10	612.09	70.03	79.00	152.13	611.90	611.10	611.10	611.90
106.530	515.00	612.06	612.06	110.29	612.20	151.63	0.00	0.00	0.00	0.00	0.00	0.00
106.530	515.00	612.13	612.13	110.83	612.28	86.75	79.00	168.55	612.06	611.90	611.90	612.06
106.580	515.00	614.70	614.70	97.25	614.88	166.30	0.00	0.00	0.00	0.00	0.00	0.00
106.580	515.00	614.76	614.76	96.97	614.95	70.70	79.00	152.96	614.70	612.06	612.06	614.70
106.590	515.00	616.83	616.83	106.31	616.98	188.34	0.00	0.00	0.00	0.00	0.00	0.00
106.590	515.00	616.90	616.90	106.47	617.06	86.19	79.00	168.07	616.83	614.70	614.70	616.83
106.980	450.00	617.07	617.07	163.99	617.14	147.87	0.00	0.00	0.00	0.00	0.00	0.00
106.980	450.00	617.14	617.14	163.56	617.22	56.70	79.00	136.95	617.07	616.83	616.83	617.07
107.020	450.00	618.68	618.68	1296.80	618.68	599.79	0.00	0.00	0.00	0.00	0.00	0.00
107.020	450.00	618.75	618.75	1305.02	618.75	462.18	250.63	712.81	618.68	617.07	617.07	618.68
107.100	450.00	618.68	618.68	1044.58	618.68	578.50	0.00	0.00	0.00	0.00	0.00	0.00
107.100	450.00	618.75	618.75	1042.99	618.75	428.33	270.76	699.09	618.68	618.68	618.68	618.68
108.000	450.00	618.71	618.71	269.21	618.72	386.05	0.00	0.00	0.00	0.00	0.00	0.00
108.000	450.00	618.78	618.78	283.55	618.79	307.60	360.77	668.37	618.71	618.68	618.68	618.71
109.000	450.00	620.17	620.17	85.78	620.26	318.82	0.00	0.00	0.00	0.00	0.00	0.00
109.000	450.00	620.18	620.18	75.72	620.31	189.80	367.00	556.80	620.17	618.71	618.71	620.17

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	#	#	WSELK
109.050	450.00	620.93	620.93	91.30	621.04	305.15	0.00	0.00	0.00	0.00	0.00	0.00
109.050	450.00	621.01	621.01	98.16	621.12	207.40	698.53	905.92	620.93	620.17	620.17	620.93
109.100	450.00	623.89	623.89	85.91	624.06	181.07	0.00	0.00	0.00	0.00	0.00	0.00
109.100	450.00	623.87	623.87	81.23	624.07	99.34	761.33	860.68	623.89	620.93	620.93	623.89
109.980	450.00	624.23	624.23	116.74	624.31	233.80	0.00	0.00	0.00	0.00	0.00	0.00
109.980	450.00	624.25	624.25	110.90	624.36	116.60	753.45	870.05	624.23	623.89	623.89	624.23
110.020	450.00	626.43	626.43	125.55	626.56	122.89	0.00	0.00	0.00	0.00	0.00	0.00
110.020	450.00	626.45	626.45	124.74	626.59	79.63	96.94	176.57	626.43	624.23	624.23	626.43
110.050	450.00	626.49	626.49	115.21	626.63	125.11	0.00	0.00	0.00	0.00	0.00	0.00
110.050	450.00	626.52	626.52	114.09	626.66	81.98	95.55	177.53	626.49	626.43	626.43	626.49
110.100	450.00	626.76	626.76	104.42	626.92	120.40	0.00	0.00	0.00	0.00	0.00	0.00
110.100	450.00	626.79	626.79	104.06	626.96	76.53	98.75	175.28	626.76	626.49	626.49	626.76
110.200	450.00	627.01	627.01	125.67	627.13	129.38	0.00	0.00	0.00	0.00	0.00	0.00
110.200	450.00	627.11	627.11	131.07	627.22	88.59	91.40	180.00	627.01	626.76	626.76	627.01
110.980	450.00	627.34	627.34	73.32	627.66	77.31	0.00	0.00	0.00	0.00	0.00	0.00
110.980	450.00	627.41	627.41	73.60	627.75	31.00	112.00	143.00	627.34	627.01	627.01	627.34
111.020	450.00	630.29	630.29	494.97	630.30	259.99	0.00	0.00	0.00	0.00	0.00	0.00
111.020	450.00	630.37	630.37	499.22	630.38	201.51	94.84	296.35	630.29	627.34	627.34	630.29
111.100	450.00	630.30	630.30	459.12	630.31	259.95	0.00	0.00	0.00	0.00	0.00	0.00
111.100	450.00	630.37	630.37	463.90	630.38	200.45	95.58	296.03	630.30	630.29	630.29	630.30
111.200	450.00	630.35	630.35	399.59	630.36	309.35	0.00	0.00	0.00	0.00	0.00	0.00
111.200	450.00	630.43	630.43	414.79	630.44	267.38	13.68	281.06	630.35	630.30	630.30	630.35
111.280	450.00	630.37	630.37	409.68	630.38	309.88	0.00	0.00	0.00	0.00	0.00	0.00
111.280	450.00	630.44	630.44	424.63	630.45	269.85	12.71	282.56	630.37	630.35	630.35	630.37
111.320	450.00	630.43	630.43	533.28	630.43	314.80	0.00	0.00	0.00	0.00	0.00	0.00
111.320	450.00	630.50	630.50	528.26	630.51	216.70	86.45	303.15	630.43	630.37	630.37	630.43
111.400	450.00	630.43	630.43	536.61	630.44	314.56	0.00	0.00	0.00	0.00	0.00	0.00
111.400	450.00	630.50	630.50	529.96	630.51	210.59	89.41	300.00	630.43	630.43	630.43	630.43
112.000	450.00	630.49	630.49	379.33	630.50	331.81	0.00	0.00	0.00	0.00	0.00	0.00
112.000	450.00	630.56	630.56	383.62	630.57	236.73	107.52	344.25	630.49	630.43	630.43	630.49
112.100	450.00	630.51	630.51	384.94	630.52	332.49	0.00	0.00	0.00	0.00	0.00	0.00
112.100	450.00	630.61	630.61	395.92	630.62	239.30	107.22	346.52	630.51	630.49	630.49	630.51

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
1.210	515.000	597.300	0.000	0.000	0.000	250.250	0.000	0.000
1.210	515.000	597.300	0.000	0.000	0.000	169.032	81.218	0.000
1.330	515.000	598.486	0.000	1.186	0.000	164.434	0.000	450.000
1.330	515.000	598.566	.081	1.266	.081	111.775	52.659	450.000
1.340	515.000	599.881	0.000	1.396	0.000	166.594	0.000	450.000

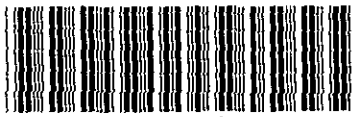
1.340	515.000	599.944	.063	1.378	.063	123.654	42.940	450.000
1.350	515.000	600.723	0.000	.842	0.000	40.000	0.000	350.000
1.350	515.000	600.787	.064	.842	.064	40.000	0.000	350.000
1.380	515.000	600.839	0.000	.116	0.000	13.000	0.000	50.000
1.380	515.000	600.839	-.000	.052	-.000	13.000	0.000	50.000
1.420	515.000	609.572	0.000	8.733	0.000	13.000	0.000	116.000
1.420	515.000	609.572	-.000	8.733	-.000	13.000	0.000	116.000
15.750	515.000	609.771	0.000	.198	0.000	215.001	0.000	100.000
15.750	515.000	609.770	-.000	.198	-.000	208.239	6.762	100.000
18.000	515.000	609.774	0.000	.004	0.000	282.001	0.000	510.000
18.000	515.000	609.774	.000	.004	.000	271.662	10.339	510.000
100.980	515.000	609.775	0.000	.000	0.000	282.301	0.000	100.000
100.980	515.000	609.775	.000	.000	.000	271.650	10.351	100.000
101.020	515.000	609.807	0.000	.033	0.000	329.000	0.000	30.000
101.020	515.000	609.808	.000	.033	.000	300.667	28.334	30.000
101.210	515.000	609.808	0.000	.001	0.000	329.000	0.000	100.000
101.210	515.000	609.808	.000	.001	.000	300.417	28.583	100.000
101.900	515.000	609.811	0.000	.003	0.000	264.658	0.000	330.000
101.900	515.000	609.811	.000	.003	.000	221.330	43.329	330.000
101.950	515.000	609.861	0.000	.050	0.000	265.515	0.000	1.000
101.950	515.000	609.961	.100	.150	.100	221.712	43.803	1.000
102.000	515.000	609.862	0.000	.001	0.000	263.815	0.000	49.000
102.000	515.000	609.962	.100	.001	.100	220.943	42.872	49.000
102.260	515.000	609.866	0.000	.004	0.000	263.883	0.000	194.000
102.260	515.000	609.966	.100	.004	.100	220.967	42.916	194.000
102.280	515.000	609.900	0.000	.034	0.000	254.245	0.000	12.000
102.280	515.000	610.000	.100	.034	.100	216.638	37.606	12.000
102.500	515.000	609.902	0.000	.003	0.000	254.213	0.000	94.000
102.500	515.000	610.002	.100	.003	.100	216.027	38.186	94.000
102.980	515.000	609.905	0.000	.002	0.000	254.251	0.000	70.000
102.980	515.000	610.004	.100	.002	.100	215.962	38.289	70.000
103.020	515.000	610.076	0.000	.171	0.000	280.304	0.000	59.000
103.020	515.000	610.175	.100	.171	.100	253.816	26.487	59.000
103.290	515.000	610.077	0.000	.001	0.000	280.276	0.000	50.000
103.290	515.000	610.177	.100	.001	.100	253.012	27.265	50.000
104.000	515.000	610.092	0.000	.015	0.000	299.803	0.000	370.000
104.000	515.000	610.191	.099	.014	.099	244.906	54.898	370.000
104.500	515.000	610.115	0.000	.023	0.000	303.653	0.000	330.000
104.500	515.000	610.214	.099	.023	.099	247.640	56.013	330.000
104.980	515.000	610.121	0.000	.006	0.000	300.472	0.000	100.000
104.980	515.000	610.220	.099	.006	.099	243.622	56.849	100.000

105.020	515.000	610.221	0.000	.100	0.000	282.844	0.000	81.000
105.020	515.000	610.320	.099	.100	.099	234.334	48.510	81.000
105.410	515.000	610.237	0.000	.015	0.000	283.306	0.000	100.000
105.410	515.000	610.334	.098	.014	.098	233.626	49.680	100.000
105.480	515.000	610.496	0.000	.260	0.000	125.812	0.000	950.000
105.480	515.000	610.550	.054	.216	.054	35.120	90.693	950.000
105.980	515.000	611.095	0.000	.599	0.000	151.650	0.000	100.000
105.980	515.000	611.168	.073	.619	.073	97.367	54.283	100.000
106.020	515.000	611.900	0.000	.805	0.000	139.554	0.000	20.000
106.020	515.000	611.973	.073	.805	.073	70.030	69.524	20.000
106.530	515.000	612.062	0.000	.162	0.000	151.631	0.000	100.000
106.530	515.000	612.134	.071	.160	.071	86.749	64.882	100.000
106.580	515.000	614.698	0.000	2.636	0.000	166.296	0.000	1080.000
106.580	515.000	614.760	.062	2.626	.062	70.700	95.596	1080.000
106.590	515.000	616.830	0.000	2.132	0.000	188.337	0.000	820.000
106.590	515.000	616.897	.067	2.138	.067	86.190	102.147	820.000
106.980	450.000	617.066	0.000	.236	0.000	147.867	0.000	100.000
106.980	450.000	617.139	.072	.242	.072	56.704	91.163	100.000
107.020	450.000	618.675	0.000	1.609	0.000	599.789	0.000	33.500
107.020	450.000	618.748	.072	1.609	.072	462.177	137.612	33.500
107.100	450.000	618.677	0.000	.001	0.000	578.504	0.000	100.000
107.100	450.000	618.749	.072	.001	.072	428.331	150.173	100.000
108.000	450.000	618.713	0.000	.036	0.000	386.049	0.000	890.000
108.000	450.000	618.785	.072	.036	.072	307.597	78.451	890.000
109.000	450.000	620.171	0.000	1.458	0.000	318.818	0.000	2350.000
109.000	450.000	620.181	.010	1.396	.010	189.804	129.014	2350.000
109.050	450.000	620.929	0.000	.758	0.000	305.149	0.000	300.000
109.050	450.000	621.012	.083	.830	.083	207.396	97.753	300.000
109.100	450.000	623.887	0.000	2.958	0.000	181.066	0.000	1160.000
109.100	450.000	623.872	-.015	2.861	-.015	99.343	81.723	1160.000
109.980	450.000	624.226	0.000	.338	0.000	233.801	0.000	115.000
109.980	450.000	624.250	.024	.377	.024	116.599	117.202	115.000
110.020	450.000	626.426	0.000	2.200	0.000	122.893	0.000	72.000
110.020	450.000	626.450	.024	2.200	.024	79.627	43.266	72.000
110.050	450.000	626.495	0.000	.069	0.000	125.113	0.000	50.000
110.050	450.000	626.520	.025	.069	.025	81.976	43.137	50.000
110.100	450.000	626.759	0.000	.264	0.000	120.399	0.000	160.000
110.100	450.000	626.787	.028	.267	.028	76.527	43.872	160.000
110.200	450.000	627.009	0.000	.250	0.000	129.382	0.000	1.000
110.200	450.000	627.109	.100	.322	.100	88.593	40.788	1.000

110.980	450.000	627.336	0.000	.328	0.000	77.315	0.000	180.000
110.980	450.000	627.412	.076	.303	.076	31.001	46.314	180.000
111.020	450.000	630.292	0.000	2.956	0.000	259.990	0.000	38.000
111.020	450.000	630.368	.076	2.956	.076	201.506	58.484	38.000
111.100	450.000	630.297	0.000	.004	0.000	259.947	0.000	50.000
111.100	450.000	630.372	.075	.004	.075	200.446	59.501	50.000
111.200	450.000	630.352	0.000	.055	0.000	309.355	0.000	510.000
111.200	450.000	630.425	.073	.053	.073	267.375	41.979	510.000
111.280	450.000	630.370	0.000	.018	0.000	309.884	0.000	142.000
111.280	450.000	630.442	.072	.017	.072	269.849	40.035	142.000
111.320	450.000	630.425	0.000	.056	0.000	314.797	0.000	16.000
111.320	450.000	630.498	.072	.056	.072	216.698	98.099	16.000
111.400	450.000	630.428	0.000	.003	0.000	314.564	0.000	42.000
111.400	450.000	630.501	.072	.003	.072	210.587	103.977	42.000
112.000	450.000	630.487	0.000	.059	0.000	331.812	0.000	640.000
112.000	450.000	630.560	.073	.059	.073	236.731	95.080	640.000
112.100	450.000	630.507	0.000	.020	0.000	332.491	0.000	1.000
112.100	450.000	630.607	.100	.047	.100	239.300	93.191	1.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	85.409	0.000
2	4.000	.066	61.302	-24.107



1) COUNTY: Monroe

2) STUDY NAME: Bedford twp.

3) WATERCOURSE: Spring Brook, Kelly Doty drain

4) DOCUMENT TYPE: Summery

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

KELLY DOTY DRAIN 200 YEA

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
402.000	465.00	589.94	589.94	178.44	590.00	700.00	0.00	0.00	589.94	-I	-I	589.94
402.000	465.00	589.94	589.94	174.90	590.01	233.98	241.94	475.92	589.94	0.00	0.00	589.94
402.000	395.00	589.69	589.69	144.63	589.76	289.09	0.00	0.00	589.69	603.01	603.01	589.69
402.000	650.00	590.49	590.49	313.57	590.52	700.00	0.00	0.00	590.49	0.00	0.00	590.49
403.000	465.00	591.33	591.33	103.27	591.52	204.10	0.00	0.00	0.00	589.94	589.94	0.00
403.000	465.00	591.37	591.37	101.67	591.58	87.13	556.87	644.01	591.33	589.94	589.94	591.33
403.000	395.00	591.16	591.16	88.47	591.36	27.75	0.00	0.00	0.00	589.69	589.69	0.00
403.000	650.00	591.54	591.54	120.03	591.82	246.86	0.00	0.00	0.00	590.49	590.49	0.00
404.000	465.00	592.36	592.36	146.28	592.44	60.00	0.00	0.00	0.00	0.00	0.00	0.00
404.000	465.00	592.41	592.41	149.45	592.49	60.00	240.00	300.00	592.36	591.33	591.33	592.36
404.000	395.00	592.15	592.15	131.55	592.21	60.00	0.00	0.00	0.00	0.00	0.00	0.00
404.000	650.00	592.89	592.89	186.74	593.01	60.00	0.00	0.00	0.00	0.00	0.00	0.00
404.980	465.00	592.03	592.03	39.36	592.94	10.00	0.00	0.00	0.00	0.00	0.00	0.00
404.980	465.00	592.08	592.08	39.92	592.98	10.00	120.00	130.00	592.03	592.36	592.36	592.03
404.980	395.00	591.93	591.93	38.55	592.61	10.00	0.00	0.00	0.00	0.00	0.00	0.00
404.980	650.00	592.16	592.16	40.64	593.86	10.00	0.00	0.00	0.00	0.00	0.00	0.00
405.020	465.00	592.43	592.43	43.26	593.23	10.00	0.00	0.00	0.00	0.00	0.00	0.00
405.020	465.00	592.53	592.53	44.24	593.31	10.00	0.00	0.00	592.43	592.03	592.03	592.43
405.020	395.00	592.18	592.18	40.89	592.80	10.00	0.00	0.00	0.00	0.00	0.00	0.00
405.020	650.00	593.28	593.28	51.94	594.51	10.00	0.00	0.00	0.00	0.00	0.00	0.00
405.100	465.00	593.12	593.12	87.83	593.41	25.00	0.00	0.00	0.00	0.00	0.00	0.00
405.100	465.00	593.20	593.20	90.12	593.47	25.00	254.00	279.00	593.12	592.43	592.43	593.12
405.100	395.00	592.70	592.70	75.31	592.95	24.73	0.00	0.00	0.00	0.00	0.00	0.00
405.100	650.00	594.39	594.39	131.91	594.72	25.00	0.00	0.00	0.00	0.00	0.00	0.00
405.980	465.00	592.95	592.95	48.53	593.64	10.00	0.00	0.00	0.00	0.00	0.00	0.00
405.980	465.00	593.03	593.03	49.31	593.70	10.00	120.00	130.00	592.95	593.12	593.12	592.95
405.980	395.00	592.60	592.60	44.96	593.15	10.00	0.00	0.00	0.00	0.00	0.00	0.00
405.980	650.00	594.03	594.03	59.72	595.03	10.00	0.00	0.00	0.00	0.00	0.00	0.00
406.020	465.00	593.58	593.58	55.03	594.16	10.00	0.00	0.00	0.00	0.00	0.00	0.00
406.020	465.00	593.68	593.68	56.03	594.24	10.00	0.00	0.00	593.58	592.95	592.95	593.58
406.020	395.00	592.98	592.98	48.79	593.47	10.00	0.00	0.00	0.00	0.00	0.00	0.00
406.020	650.00	595.68	595.68	78.04	596.38	10.00	0.00	0.00	0.00	0.00	0.00	0.00
407.000	465.00	594.22	594.22	261.41	594.25	120.00	0.00	0.00	0.00	0.00	0.00	0.00
407.000	465.00	594.30	594.30	262.84	594.34	110.48	154.52	265.00	594.22	593.58	593.58	594.22
407.000	395.00	593.52	593.52	190.20	593.57	120.00	0.00	0.00	0.00	0.00	0.00	0.00
407.000	650.00	596.44	596.44	559.17	596.46	120.00	0.00	0.00	0.00	0.00	0.00	0.00
411.000	465.00	594.29	594.29	300.87	594.31	499.45	0.00	0.00	0.00	0.00	0.00	0.00
411.000	465.00	594.37	594.37	317.02	594.39	426.28	130.68	556.96	594.29	594.22	594.22	594.29
411.000	395.00	593.62	593.62	167.99	593.67	447.49	0.00	0.00	0.00	0.00	0.00	0.00
411.000	650.00	596.48	596.48	1157.67	596.48	525.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
411.980	465.00	594.35	594.35	440.03	594.36	400.00	0.00	0.00	0.00	0.00	0.00	0.00
411.980	465.00	594.43	594.43	447.94	594.43	356.63	23.71	380.35	594.35	594.29	594.29	594.35
411.980	395.00	593.74	593.74	289.61	593.76	394.61	0.00	0.00	0.00	0.00	0.00	0.00
411.980	650.00	596.48	596.48	1216.45	596.49	400.00	0.00	0.00	0.00	0.00	0.00	0.00
412.020	465.00	594.46	594.46	473.32	594.46	400.00	0.00	0.00	0.00	0.00	0.00	0.00
412.020	465.00	594.53	594.53	479.81	594.54	362.61	20.35	382.96	594.46	594.35	594.35	594.46
412.020	395.00	594.13	594.13	384.87	594.14	400.00	0.00	0.00	0.00	0.00	0.00	0.00
412.020	650.00	596.53	596.53	1236.49	596.53	400.00	0.00	0.00	0.00	0.00	0.00	0.00
412.100	465.00	594.46	594.46	339.51	594.48	400.00	0.00	0.00	0.00	0.00	0.00	0.00
412.100	465.00	594.54	594.54	349.35	594.55	343.18	31.77	374.95	594.46	594.46	594.46	594.46
412.100	395.00	594.14	594.14	268.98	594.16	384.75	0.00	0.00	0.00	0.00	0.00	0.00
412.100	650.00	596.53	596.53	1022.09	596.53	400.00	0.00	0.00	0.00	0.00	0.00	0.00
413.000	465.00	594.58	594.58	201.44	594.61	474.60	0.00	0.00	0.00	0.00	0.00	0.00
413.000	465.00	594.65	594.65	206.79	594.68	300.43	86.33	386.76	594.58	594.46	594.46	594.58
413.000	395.00	594.27	594.27	153.37	594.32	388.30	0.00	0.00	0.00	0.00	0.00	0.00
413.000	650.00	596.55	596.55	829.70	596.55	500.00	0.00	0.00	0.00	0.00	0.00	0.00
413.100	465.00	594.71	594.71	213.94	594.74	366.14	0.00	0.00	0.00	0.00	0.00	0.00
413.100	465.00	594.77	594.77	212.91	594.80	229.63	76.97	306.60	594.71	594.58	594.58	594.71
413.100	395.00	594.43	594.43	170.12	594.47	327.75	0.00	0.00	0.00	0.00	0.00	0.00
413.100	650.00	596.56	596.56	777.53	596.57	500.00	0.00	0.00	0.00	0.00	0.00	0.00
413.980	465.00	594.77	594.77	148.68	594.84	306.02	0.00	0.00	0.00	0.00	0.00	0.00
413.980	465.00	594.84	594.84	146.35	594.91	186.56	93.23	279.79	594.77	594.71	594.71	594.77
413.980	395.00	594.50	594.50	100.15	594.62	95.20	0.00	0.00	0.00	0.00	0.00	0.00
413.980	650.00	596.57	596.57	588.07	596.58	500.00	0.00	0.00	0.00	0.00	0.00	0.00
414.020	465.00	594.87	594.87	162.13	594.93	319.93	0.00	0.00	0.00	0.00	0.00	0.00
414.020	465.00	594.94	594.94	160.03	595.00	197.02	88.82	285.84	594.87	594.77	594.77	594.87
414.020	395.00	594.74	594.74	144.10	594.79	301.04	0.00	0.00	0.00	0.00	0.00	0.00
414.020	650.00	596.63	596.63	611.58	596.64	500.00	0.00	0.00	0.00	0.00	0.00	0.00
414.050	465.00	594.95	594.95	312.64	594.96	453.00	0.00	0.00	0.00	0.00	0.00	0.00
414.050	465.00	595.02	595.02	307.08	595.03	403.22	360.27	763.50	594.95	594.87	594.87	594.95
414.050	395.00	594.81	594.81	274.82	594.82	453.00	0.00	0.00	0.00	0.00	0.00	0.00
414.050	650.00	596.64	596.64	883.90	596.64	453.00	0.00	0.00	0.00	0.00	0.00	0.00
414.060	465.00	594.97	594.97	274.07	594.99	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.060	465.00	595.05	595.05	269.05	595.06	254.42	535.43	789.85	594.97	594.95	594.95	594.97
414.060	395.00	594.83	594.83	247.00	594.84	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.060	650.00	596.64	596.64	684.17	596.65	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.080	465.00	594.99	594.99	275.19	595.00	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.080	465.00	595.06	595.06	269.12	595.07	252.65	536.67	789.32	594.99	594.97	594.97	594.99
414.080	395.00	594.84	594.84	247.94	594.85	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.080	650.00	596.65	596.65	684.17	596.65	298.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
414.120	465.00	595.05	595.05	289.41	595.06	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.120	465.00	595.12	595.12	284.37	595.13	258.96	531.73	790.69	595.05	594.99	594.99	595.05
414.120	395.00	594.90	594.90	261.25	594.91	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.120	650.00	596.70	596.70	703.45	596.71	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.150	465.00	595.06	595.06	233.53	595.07	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.150	465.00	595.13	595.13	228.92	595.15	248.99	538.00	786.99	595.06	595.05	595.05	595.06
414.150	395.00	594.91	594.91	207.41	594.92	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.150	650.00	596.71	596.71	616.24	596.71	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.180	465.00	595.08	595.08	185.73	595.10	297.95	0.00	0.00	0.00	0.00	0.00	0.00
414.180	465.00	595.15	595.15	181.76	595.18	243.11	538.00	781.11	595.08	595.06	595.06	595.08
414.180	395.00	594.92	594.92	162.54	594.95	297.65	0.00	0.00	0.00	0.00	0.00	0.00
414.180	650.00	596.71	596.71	535.88	596.72	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.220	465.00	596.08	596.08	381.33	596.08	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.220	465.00	596.15	596.15	375.39	596.16	269.44	522.71	792.16	596.08	595.08	595.08	596.08
414.220	395.00	596.00	596.00	363.35	596.00	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.220	650.00	596.79	596.79	559.74	596.80	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.250	465.00	596.08	596.08	256.15	596.09	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.250	465.00	596.15	596.15	251.43	596.17	251.22	538.00	789.22	596.08	596.08	596.08	596.08
414.250	395.00	596.00	596.00	241.41	596.01	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.250	650.00	596.80	596.80	407.85	596.81	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.280	465.00	596.10	596.10	144.55	596.14	297.40	0.00	0.00	0.00	0.00	0.00	0.00
414.280	465.00	596.17	596.17	141.29	596.21	236.44	538.00	774.44	596.10	596.08	596.08	596.10
414.280	395.00	596.01	596.01	133.53	596.05	297.23	0.00	0.00	0.00	0.00	0.00	0.00
414.280	650.00	596.81	596.81	261.78	596.84	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.320	465.00	596.15	596.15	152.35	596.19	297.51	0.00	0.00	0.00	0.00	0.00	0.00
414.320	465.00	596.23	596.23	148.86	596.27	237.68	538.00	775.68	596.15	596.10	596.10	596.15
414.320	395.00	596.07	596.07	140.29	596.10	297.33	0.00	0.00	0.00	0.00	0.00	0.00
414.320	650.00	596.86	596.86	272.02	596.89	298.00	0.00	0.00	0.00	0.00	0.00	0.00
414.350	465.00	596.21	596.21	132.20	596.25	297.21	0.00	0.00	0.00	0.00	0.00	0.00
414.350	465.00	596.28	596.28	129.28	596.33	233.70	538.00	771.70	596.21	596.15	596.15	596.21
414.350	395.00	596.11	596.11	120.41	596.15	297.02	0.00	0.00	0.00	0.00	0.00	0.00
414.350	650.00	596.90	596.90	240.24	596.93	298.00	0.00	0.00	0.00	0.00	0.00	0.00
415.000	465.00	596.53	596.53	90.07	596.63	249.83	0.00	0.00	0.00	0.00	0.00	0.00
415.000	465.00	596.61	596.61	88.76	596.73	224.05	538.00	762.06	596.53	596.21	596.21	596.53
415.000	395.00	596.40	596.40	79.23	596.50	226.06	0.00	0.00	0.00	0.00	0.00	0.00
415.000	650.00	597.09	597.09	157.20	597.16	297.58	0.00	0.00	0.00	0.00	0.00	0.00
415.050	465.00	596.87	596.87	128.28	596.93	297.15	0.00	0.00	0.00	0.00	0.00	0.00
415.050	465.00	596.97	596.97	128.74	597.03	232.84	538.00	770.84	596.87	596.53	596.53	596.87
415.050	395.00	596.73	596.73	110.88	596.78	271.88	0.00	0.00	0.00	0.00	0.00	0.00
415.050	650.00	597.33	597.33	194.16	597.37	298.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
415.080	465.00	596.99	596.99	129.01	597.04	297.16	0.00	0.00	0.00	0.00	0.00	0.00
415.080	465.00	597.09	597.09	128.27	597.14	231.36	538.00	769.36	596.99	596.87	596.87	596.99
415.080	395.00	596.84	596.84	110.87	596.89	271.88	0.00	0.00	0.00	0.00	0.00	0.00
415.080	650.00	597.42	597.42	193.97	597.47	298.00	0.00	0.00	0.00	0.00	0.00	0.00
415.120	465.00	597.62	597.62	270.87	597.64	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.120	465.00	597.72	597.72	271.63	597.74	264.36	517.00	781.36	597.62	596.99	596.99	597.62
415.120	395.00	597.55	597.55	257.11	597.56	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.120	650.00	597.82	597.82	312.53	597.84	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.150	465.00	597.64	597.64	233.09	597.65	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.150	465.00	597.74	597.74	233.99	597.75	257.89	517.00	774.90	597.64	597.62	597.62	597.64
415.150	395.00	597.56	597.56	219.26	597.58	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.150	650.00	597.84	597.84	272.51	597.86	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.200	465.00	597.78	597.78	139.66	597.81	283.00	0.00	0.00	0.00	0.00	0.00	0.00
415.200	465.00	597.87	597.87	139.82	597.91	238.18	517.00	755.18	597.78	597.64	597.64	597.78
415.200	395.00	597.68	597.68	126.37	597.71	283.00	0.00	0.00	0.00	0.00	0.00	0.00
415.200	650.00	598.03	598.03	178.47	598.08	318.00	0.00	0.00	0.00	0.00	0.00	0.00
415.980	355.00	597.98	597.98	72.27	598.05	339.56	0.00	0.00	0.00	0.00	0.00	0.00
415.980	355.00	598.07	598.07	77.98	598.13	241.39	298.29	540.00	597.98	597.78	597.78	597.98
415.980	295.00	597.86	597.86	60.37	597.94	339.40	0.00	0.00	0.00	0.00	0.00	0.00
415.980	495.00	598.25	598.25	105.59	598.32	339.94	0.00	0.00	0.00	0.00	0.00	0.00
416.020	355.00	599.96	599.96	523.35	599.96	510.00	0.00	0.00	0.00	0.00	0.00	0.00
416.020	355.00	600.05	600.05	520.20	600.05	477.42	206.42	683.83	599.96	597.98	597.98	599.96
416.020	295.00	599.91	599.91	504.39	599.91	510.00	0.00	0.00	0.00	0.00	0.00	0.00
416.020	495.00	600.07	600.07	564.13	600.08	510.00	0.00	0.00	0.00	0.00	0.00	0.00
416.500	355.00	599.97	599.97	373.11	599.97	465.00	0.00	0.00	0.00	0.00	0.00	0.00
416.500	355.00	600.06	600.06	368.85	600.06	394.49	40.51	435.00	599.97	599.96	599.96	599.97
416.500	295.00	599.92	599.92	357.08	599.92	465.00	0.00	0.00	0.00	0.00	0.00	0.00
416.500	495.00	600.09	600.09	407.95	600.09	465.00	0.00	0.00	0.00	0.00	0.00	0.00
416.980	355.00	599.98	599.98	265.92	599.98	434.81	0.00	0.00	0.00	0.00	0.00	0.00
416.980	355.00	600.07	600.07	262.08	600.07	380.67	54.34	435.00	599.98	599.97	599.97	599.98
416.980	295.00	599.92	599.92	252.26	599.93	434.30	0.00	0.00	0.00	0.00	0.00	0.00
416.980	495.00	600.10	600.10	297.13	600.11	465.00	0.00	0.00	0.00	0.00	0.00	0.00
417.020	355.00	600.02	600.02	278.18	600.03	465.00	0.00	0.00	0.00	0.00	0.00	0.00
417.020	355.00	600.11	600.11	274.31	600.12	384.06	50.94	435.00	600.02	599.98	599.98	600.02
417.020	295.00	599.96	599.96	262.30	599.96	434.68	0.00	0.00	0.00	0.00	0.00	0.00
417.020	495.00	600.16	600.16	314.51	600.16	465.00	0.00	0.00	0.00	0.00	0.00	0.00
417.050	355.00	600.05	600.05	177.67	600.06	274.69	0.00	0.00	0.00	0.00	0.00	0.00
417.050	355.00	600.14	600.14	176.44	600.15	239.10	195.40	435.00	600.05	600.02	600.02	600.05
417.050	295.00	599.99	599.99	167.17	599.99	274.07	0.00	0.00	0.00	0.00	0.00	0.00
417.050	495.00	600.20	600.20	201.39	600.22	306.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION SECTION	DISCHARGE DISCHARGE	CWSEL CWSEL	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	WSELK	# D	# D	WSELK
417.080	355.00	600.13	600.13	145.06	600.14	272.68	0.00	0.00	0.00	0.00	0.00	0.00
417.080	355.00	600.22	600.22	143.97	600.24	230.58	201.91	435.00	600.13	600.05	600.05	600.13
417.080	295.00	600.05	600.05	133.55	600.06	271.91	0.00	0.00	0.00	0.00	0.00	0.00
417.080	495.00	600.32	600.32	171.74	600.34	274.34	0.00	0.00	0.00	0.00	0.00	0.00
417.120	355.00	601.47	601.47	403.42	601.48	306.00	0.00	0.00	0.00	0.00	0.00	0.00
417.120	355.00	601.56	601.56	400.53	601.57	262.27	172.72	435.00	601.47	600.13	600.13	601.47
417.120	295.00	601.40	601.40	385.66	601.40	306.00	0.00	0.00	0.00	0.00	0.00	0.00
417.120	495.00	601.62	601.62	439.86	601.62	306.00	0.00	0.00	0.00	0.00	0.00	0.00
417.130	355.00	601.48	601.48	356.91	601.48	306.00	0.00	0.00	0.00	0.00	0.00	0.00
417.130	355.00	601.57	601.57	354.63	601.57	258.51	176.49	435.00	601.48	601.47	601.47	601.48
417.130	295.00	601.40	601.40	340.06	601.40	306.00	0.00	0.00	0.00	0.00	0.00	0.00
417.130	495.00	601.63	601.63	391.60	601.63	306.00	0.00	0.00	0.00	0.00	0.00	0.00
417.150	355.00	601.55	601.55	161.09	601.56	273.69	0.00	0.00	0.00	0.00	0.00	0.00
417.150	355.00	601.64	601.64	159.59	601.65	234.02	199.49	435.00	601.55	601.48	601.48	601.55
417.150	295.00	601.46	601.46	148.26	601.46	272.88	0.00	0.00	0.00	0.00	0.00	0.00
417.150	495.00	601.73	601.73	189.44	601.75	275.37	0.00	0.00	0.00	0.00	0.00	0.00
417.180	355.00	601.72	601.72	84.10	601.77	268.07	0.00	0.00	0.00	0.00	0.00	0.00
417.180	355.00	601.82	601.82	84.76	601.86	206.00	221.91	435.00	601.72	601.55	601.55	601.72
417.180	295.00	601.60	601.60	72.98	601.65	267.01	0.00	0.00	0.00	0.00	0.00	0.00
417.180	495.00	601.97	601.97	110.57	602.01	270.26	0.00	0.00	0.00	0.00	0.00	0.00
417.220	355.00	602.91	602.91	262.42	602.92	436.00	0.00	0.00	0.00	0.00	0.00	0.00
417.220	355.00	603.00	603.00	266.87	603.01	389.30	10.53	399.83	602.91	601.72	601.72	602.91
417.220	295.00	602.85	602.85	248.12	602.86	436.00	0.00	0.00	0.00	0.00	0.00	0.00
417.220	495.00	603.03	603.03	292.08	603.04	436.00	0.00	0.00	0.00	0.00	0.00	0.00
417.300	355.00	602.92	602.92	196.56	602.93	436.00	0.00	0.00	0.00	0.00	0.00	0.00
417.300	355.00	603.01	603.01	201.47	603.02	370.33	11.91	382.24	602.92	602.91	602.91	602.92
417.300	295.00	602.86	602.86	184.13	602.87	436.00	0.00	0.00	0.00	0.00	0.00	0.00
417.300	495.00	603.04	603.04	222.64	603.06	436.00	0.00	0.00	0.00	0.00	0.00	0.00
418.000	355.00	603.01	603.01	292.69	603.02	336.00	0.00	0.00	0.00	0.00	0.00	0.00
418.000	355.00	603.10	603.10	289.28	603.11	306.47	20.53	327.00	603.01	602.92	602.92	603.01
418.000	295.00	602.93	602.93	273.29	602.94	336.00	0.00	0.00	0.00	0.00	0.00	0.00
418.000	495.00	603.18	603.18	330.56	603.19	336.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
402.000	465.000	589.940	0.000	0.000	0.000	700.000	0.000	0.000
402.000	465.000	589.940	0.000	0.000	0.000	233.977	466.023	0.000
402.000	395.000	589.690	-.250	0.000	0.000	289.091	410.909	0.000
402.000	650.000	590.490	.800	0.000	0.000	700.000	-.000	0.000
403.000	465.000	591.326	0.000	1.386	0.000	204.099	0.000	1350.000
403.000	465.000	591.374	.048	1.434	0.000	87.133	116.965	1350.000
403.000	395.000	591.159	-.215	1.469	0.000	27.750	176.349	1350.000
403.000	650.000	591.544	.385	1.054	0.000	246.863	-42.764	1350.000
404.000	465.000	592.357	0.000	1.031	0.000	60.000	0.000	650.000
404.000	465.000	592.414	.057	1.040	0.000	60.000	0.000	650.000
404.000	395.000	592.147	-.267	.988	0.000	60.000	0.000	650.000
404.000	650.000	592.893	.746	1.349	0.000	60.000	0.000	650.000

404.980	465.000	592.026	0.000	-.330	0.000	10.000	0.000	100.000
404.980	465.000	592.084	.058	-.330	0.000	10.000	0.000	100.000
404.980	395.000	591.934	-.150	-.213	0.000	9.998	.002	100.000
404.980	650.000	592.155	.221	-.738	0.000	10.000	.000	100.000
405.020	465.000	592.427	0.000	.400	0.000	10.000	0.000	53.000
405.020	465.000	592.527	.100	.443	0.000	10.000	0.000	53.000
405.020	395.000	592.177	-.350	.243	0.000	10.000	0.000	53.000
405.020	650.000	593.284	1.107	1.129	0.000	10.000	.000	53.000
405.100	465.000	593.122	0.000	.695	0.000	25.000	0.000	24.500
405.100	465.000	593.200	.078	.673	0.000	25.000	0.000	24.500
405.100	395.000	592.704	-.496	.527	0.000	24.726	.274	24.500
405.100	650.000	594.385	1.681	1.101	0.000	25.000	0.000	24.500
405.980	465.000	592.953	0.000	-.168	0.000	10.000	0.000	24.500
405.980	465.000	593.030	.077	-.170	0.000	10.000	0.000	24.500
405.980	395.000	592.599	-.431	-.105	0.000	10.000	0.000	24.500
405.980	650.000	594.025	1.426	-.360	0.000	10.000	0.000	24.500
406.020	465.000	593.579	0.000	.626	0.000	10.000	0.000	37.000
406.020	465.000	593.679	.100	.649	0.000	10.000	0.000	37.000
406.020	395.000	592.976	-.703	.376	0.000	10.000	0.000	37.000
406.020	650.000	595.683	2.707	1.658	0.000	10.000	0.000	37.000
407.000	465.000	594.219	0.000	.640	0.000	120.000	0.000	50.000
407.000	465.000	594.302	.083	.623	0.000	110.476	9.524	50.000
407.000	395.000	593.522	-.779	.547	0.000	120.000	.000	50.000
407.000	650.000	596.444	2.922	.761	0.000	120.001	-.000	50.000
411.000	465.000	594.292	0.000	.074	0.000	499.449	0.000	200.000
411.000	465.000	594.375	.082	.073	0.000	426.277	73.171	200.000
411.000	395.000	593.617	-.757	.095	0.000	447.490	51.959	200.000
411.000	650.000	596.475	2.858	.031	0.000	525.001	-25.552	200.000
411.980	465.000	594.348	0.000	.055	0.000	400.000	0.000	270.000
411.980	465.000	594.425	.077	.050	0.000	356.634	43.366	270.000
411.980	395.000	593.744	-.682	.126	0.000	394.609	5.391	270.000
411.980	650.000	596.483	2.740	.008	0.000	400.001	-.000	270.000
412.020	465.000	594.457	0.000	.109	0.000	400.000	0.000	68.000
412.020	465.000	594.534	.077	.109	0.000	362.605	37.395	68.000
412.020	395.000	594.134	-.400	.391	0.000	400.000	.000	68.000
412.020	650.000	596.525	2.391	.042	0.000	400.001	-.000	68.000
412.100	465.000	594.462	0.000	.005	0.000	400.000	0.000	50.000
412.100	465.000	594.539	.077	.005	0.000	343.178	56.822	50.000
412.100	395.000	594.140	-.400	.005	0.000	384.750	15.250	50.000
412.100	650.000	596.527	2.387	.001	0.000	400.001	-.000	50.000
413.000	465.000	594.575	0.000	.113	0.000	474.598	0.000	430.000
413.000	465.000	594.646	.070	.106	0.000	300.425	174.173	430.000
413.000	395.000	594.270	-.375	.131	0.000	388.296	86.303	430.000
413.000	650.000	596.547	2.277	.021	0.000	500.000	-25.402	430.000
413.100	465.000	594.706	0.000	.131	0.000	366.140	0.000	250.000
413.100	465.000	594.770	.065	.125	0.000	229.625	136.514	250.000
413.100	395.000	594.433	-.338	.162	0.000	327.751	38.388	250.000
413.100	650.000	596.563	2.131	.016	0.000	500.000	-133.861	250.000
413.980	465.000	594.773	0.000	.067	0.000	306.021	0.000	128.000

413.980	465.000	594.837	.064	.066	0.000	186.557	119.464	128.000
413.980	395.000	594.499	-.338	.066	0.000	95.201	210.820	128.000
413.980	650.000	596.573	2.074	.010	0.000	500.000	-193.979	128.000
414.020	465.000	594.874	0.000	.101	0.000	319.930	0.000	42.000
414.020	465.000	594.938	.064	.101	0.000	197.022	122.908	42.000
414.020	395.000	594.740	-.198	.241	0.000	301.044	18.886	42.000
414.020	650.000	596.630	1.890	.056	0.000	500.000	-180.070	42.000
414.050	465.000	594.954	0.000	.080	0.000	453.000	0.000	50.000
414.050	465.000	595.025	.070	.087	0.000	403.222	49.779	50.000
414.050	395.000	594.813	-.212	.074	0.000	453.000	.000	50.000
414.050	650.000	596.640	1.827	.010	0.000	453.001	-.000	50.000
414.060	465.000	594.975	0.000	.020	0.000	298.000	0.000	90.000
414.060	465.000	595.046	.071	.021	0.000	254.424	43.577	90.000
414.060	395.000	594.832	-.214	.019	0.000	298.000	.000	90.000
414.060	650.000	596.644	1.812	.004	0.000	298.001	-.000	90.000
414.080	465.000	594.986	0.000	.012	0.000	298.000	0.000	40.000
414.080	465.000	595.058	.071	.012	0.000	252.652	45.349	40.000
414.080	395.000	594.842	-.215	.010	0.000	298.000	.000	40.000
414.080	650.000	596.648	1.806	.004	0.000	298.001	-.000	40.000
414.120	465.000	595.047	0.000	.061	0.000	298.000	0.000	16.000
414.120	465.000	595.118	.071	.061	0.000	258.963	39.038	16.000
414.120	395.000	594.898	-.220	.056	0.000	298.000	.000	16.000
414.120	650.000	596.704	1.806	.056	0.000	298.001	-.000	16.000
414.150	465.000	595.058	0.000	.011	0.000	298.000	0.000	40.000
414.150	465.000	595.130	.072	.011	0.000	248.986	49.014	40.000
414.150	395.000	594.908	-.222	.010	0.000	298.000	.000	40.000
414.150	650.000	596.707	1.799	.004	0.000	298.001	-.000	40.000
414.180	465.000	595.076	0.000	.018	0.000	297.952	0.000	40.000
414.180	465.000	595.148	.072	.019	0.000	243.110	54.843	40.000
414.180	395.000	594.925	-.224	.017	0.000	297.650	.303	40.000
414.180	650.000	596.712	1.788	.005	0.000	298.001	-.048	40.000
414.220	465.000	596.076	0.000	1.000	0.000	298.001	0.000	40.000
414.220	465.000	596.148	.072	1.000	0.000	269.442	28.558	40.000
414.220	395.000	595.997	-.151	1.073	0.000	298.001	.000	40.000
414.220	650.000	596.794	.796	.082	0.000	298.001	-.000	40.000
414.250	465.000	596.081	0.000	.005	0.000	298.000	0.000	30.000
414.250	465.000	596.153	.072	.005	0.000	251.221	46.779	30.000
414.250	395.000	596.001	-.152	.004	0.000	298.000	.000	30.000
414.250	650.000	596.798	.797	.004	0.000	298.001	-.000	30.000
414.280	465.000	596.097	0.000	.016	0.000	297.396	0.000	40.000
414.280	465.000	596.170	.073	.017	0.000	236.436	60.961	40.000
414.280	395.000	596.015	-.155	.013	0.000	297.231	.165	40.000
414.280	650.000	596.810	.796	.012	0.000	298.000	-.604	40.000
414.320	465.000	596.154	0.000	.057	0.000	297.509	0.000	20.000
414.320	465.000	596.227	.073	.057	0.000	237.681	59.828	20.000
414.320	395.000	596.067	-.160	.052	0.000	297.334	.175	20.000
414.320	650.000	596.864	.797	.054	0.000	298.000	-.492	20.000
414.350	465.000	596.205	0.000	.051	0.000	297.211	0.000	50.000
414.350	465.000	596.280	.075	.053	0.000	233.702	63.509	50.000

414.350	395.000	596.110	-.170	.044	0.000	297.021	.190	50.000
414.350	650.000	596.895	.785	.031	0.000	298.000	-.790	50.000
415.000	465.000	596.526	0.000	.321	0.000	249.834	0.000	190.000
415.000	465.000	596.613	.087	.333	0.000	224.055	25.779	190.000
415.000	395.000	596.396	-.217	.286	0.000	226.063	23.771	190.000
415.000	650.000	597.091	.695	.196	0.000	297.576	-47.742	190.000
415.050	465.000	596.875	0.000	.348	0.000	297.149	0.000	150.000
415.050	465.000	596.974	.100	.361	0.000	232.844	64.306	150.000
415.050	395.000	596.728	-.246	.332	0.000	271.881	25.269	150.000
415.050	650.000	597.327	.599	.236	0.000	298.000	-.851	150.000
415.080	465.000	596.986	0.000	.112	0.000	297.161	0.000	85.000
415.080	465.000	597.085	.099	.111	0.000	231.362	65.799	85.000
415.080	395.000	596.836	-.249	.108	0.000	271.877	25.284	85.000
415.080	650.000	597.422	.587	.095	0.000	298.000	-.839	85.000
415.120	465.000	597.625	0.000	.638	0.000	318.000	0.000	26.000
415.120	465.000	597.724	.099	.638	0.000	264.361	53.639	26.000
415.120	395.000	597.553	-.171	.717	0.000	318.000	.000	26.000
415.120	650.000	597.820	.267	.397	0.000	318.000	-.000	26.000
415.150	465.000	597.638	0.000	.013	0.000	318.000	0.000	40.000
415.150	465.000	597.736	.099	.013	0.000	257.894	60.106	40.000
415.150	395.000	597.563	-.173	.010	0.000	318.000	.000	40.000
415.150	650.000	597.839	.275	.019	0.000	318.000	-.000	40.000
415.200	465.000	597.778	0.000	.140	0.000	283.000	0.000	250.000
415.200	465.000	597.875	.097	.139	0.000	238.178	44.822	250.000
415.200	395.000	597.680	-.195	.116	0.000	283.000	.000	250.000
415.200	650.000	598.030	.350	.191	0.000	318.000	-35.000	250.000
415.980	355.000	597.980	0.000	.202	0.000	339.559	0.000	140.000
415.980	355.000	598.068	.088	.193	0.000	241.385	98.174	140.000
415.980	295.000	597.862	-.206	.182	0.000	339.396	.163	140.000
415.980	495.000	598.254	.392	.224	0.000	339.937	-.378	140.000
416.020	355.000	599.962	0.000	1.982	0.000	510.000	0.000	286.000
416.020	355.000	600.050	.088	1.982	0.000	477.415	32.585	286.000
416.020	295.000	599.909	-.141	2.048	0.000	510.000	.000	286.000
416.020	495.000	600.072	.163	1.818	0.000	510.000	-.000	286.000
416.500	355.000	599.970	0.000	.008	0.000	465.000	0.000	125.000
416.500	355.000	600.058	.088	.008	0.000	394.492	70.508	125.000
416.500	295.000	599.915	-.143	.006	0.000	465.000	.000	125.000
416.500	495.000	600.085	.170	.013	0.000	465.000	-.000	125.000
416.980	355.000	599.979	0.000	.010	0.000	434.813	0.000	80.000
416.980	355.000	600.068	.088	.010	0.000	380.665	54.147	80.000
416.980	295.000	599.922	-.145	.007	0.000	434.301	.512	80.000
416.980	495.000	600.100	.178	.015	0.000	465.000	-30.188	80.000
417.020	355.000	600.024	0.000	.045	0.000	465.000	0.000	40.000
417.020	355.000	600.113	.088	.045	0.000	384.062	80.938	40.000
417.020	295.000	599.961	-.151	.039	0.000	434.678	30.322	40.000
417.020	495.000	600.158	.197	.058	0.000	465.000	-.000	40.000
417.050	355.000	600.055	0.000	.030	0.000	274.691	0.000	130.000
417.050	355.000	600.144	.089	.031	0.000	239.096	35.595	130.000
417.050	295.000	599.985	-.159	.024	0.000	274.065	.626	130.000

417.050	495.000	600.204	.219	.046	0.000	306.000	-31.309	130.000
417.080	355.000	600.131	0.000	.077	0.000	272.677	0.000	160.000
417.080	355.000	600.221	.090	.078	0.000	230.580	42.096	160.000
417.080	295.000	600.046	-.175	.061	0.000	271.909	.768	160.000
417.080	495.000	600.316	.270	.112	0.000	274.340	-1.663	160.000
417.120	355.000	601.472	0.000	1.341	0.000	306.000	0.000	88.000
417.120	355.000	601.562	.090	1.341	0.000	262.275	43.726	88.000
417.120	295.000	601.398	-.164	1.352	0.000	306.000	.000	88.000
417.120	495.000	601.619	.221	1.303	0.000	306.000	-.000	88.000
417.130	355.000	601.476	0.000	.004	0.000	306.000	0.000	50.000
417.130	355.000	601.566	.090	.004	0.000	258.508	47.492	50.000
417.130	295.000	601.401	-.165	.003	0.000	306.000	.000	50.000
417.130	495.000	601.626	.224	.007	0.000	306.000	-.000	50.000
417.150	355.000	601.546	0.000	.070	0.000	273.694	0.000	400.000
417.150	355.000	601.637	.091	.070	0.000	234.019	39.674	400.000
417.150	295.000	601.455	-.181	.054	0.000	272.884	.810	400.000
417.150	495.000	601.734	.279	.109	0.000	275.371	-1.677	400.000
417.180	355.000	601.724	0.000	.178	0.000	268.072	0.000	220.000
417.180	355.000	601.816	.092	.179	0.000	206.001	62.070	220.000
417.180	295.000	601.605	-.211	.149	0.000	267.011	1.061	220.000
417.180	495.000	601.968	.363	.234	0.000	270.257	-2.186	220.000
417.220	355.000	602.911	0.000	1.188	0.000	436.000	0.000	143.000
417.220	355.000	603.003	.092	1.188	0.000	389.299	46.702	143.000
417.220	295.000	602.852	-.151	1.247	0.000	436.000	.000	143.000
417.220	495.000	603.029	.177	1.061	0.000	436.000	-.000	143.000
417.300	355.000	602.920	0.000	.009	0.000	436.000	0.000	40.000
417.300	355.000	603.012	.092	.009	0.000	370.330	65.670	40.000
417.300	295.000	602.859	-.153	.007	0.000	436.000	.000	40.000
417.300	495.000	603.043	.184	.014	0.000	436.000	-.000	40.000
418.000	355.000	603.014	0.000	.093	0.000	336.000	0.000	420.000
418.000	355.000	603.104	.091	.093	0.000	306.469	29.531	420.000
418.000	295.000	602.933	-.172	.074	0.000	336.000	.000	420.000
418.000	495.000	603.185	.252	.142	0.000	336.000	-.000	420.000

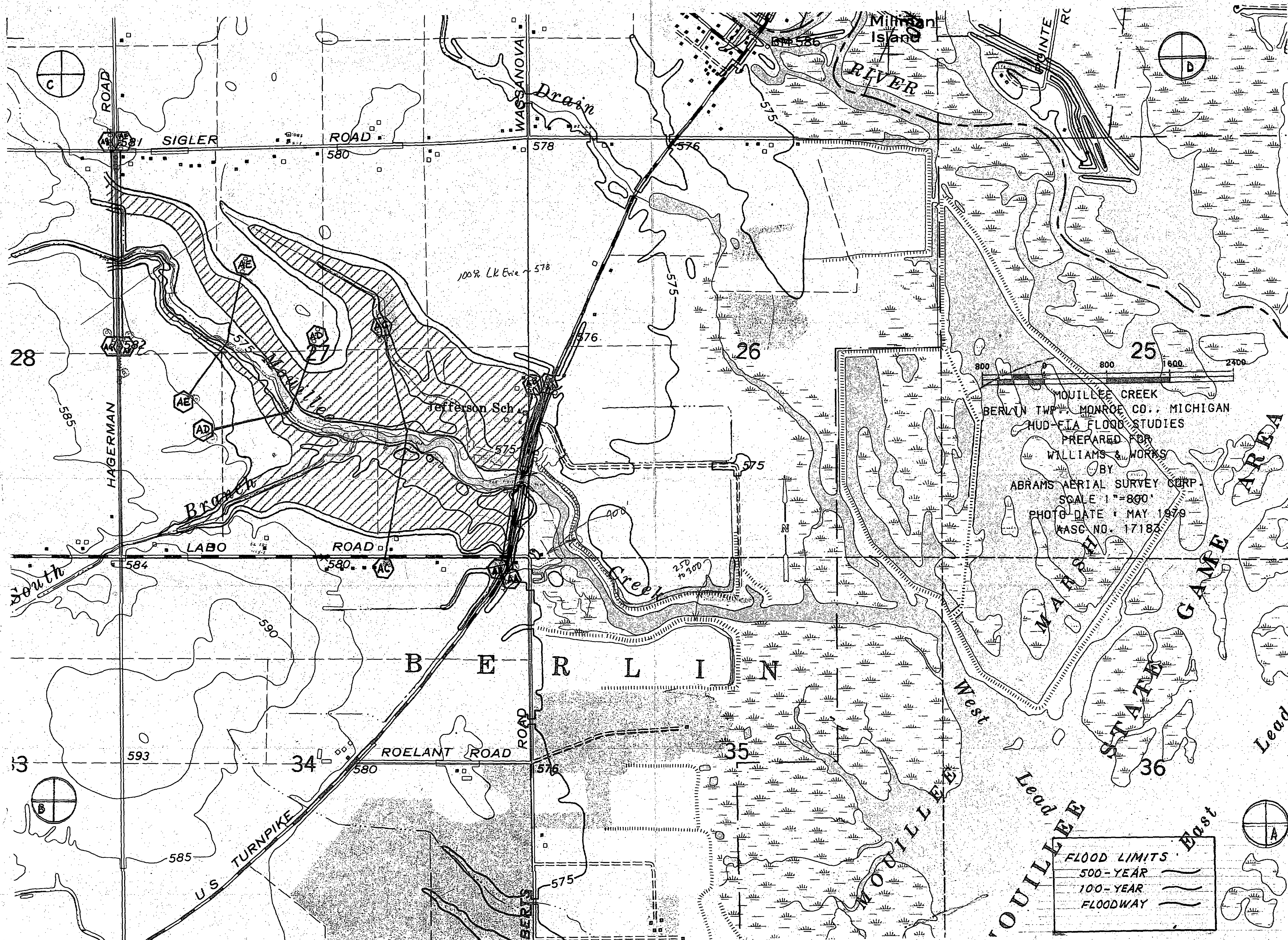
DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	0.000	56.562	0.000
2	4.000	.068	39.254	-17.308
3	0.000	0.000	44.220	-12.342
4	0.000	0.000	59.535	2.972

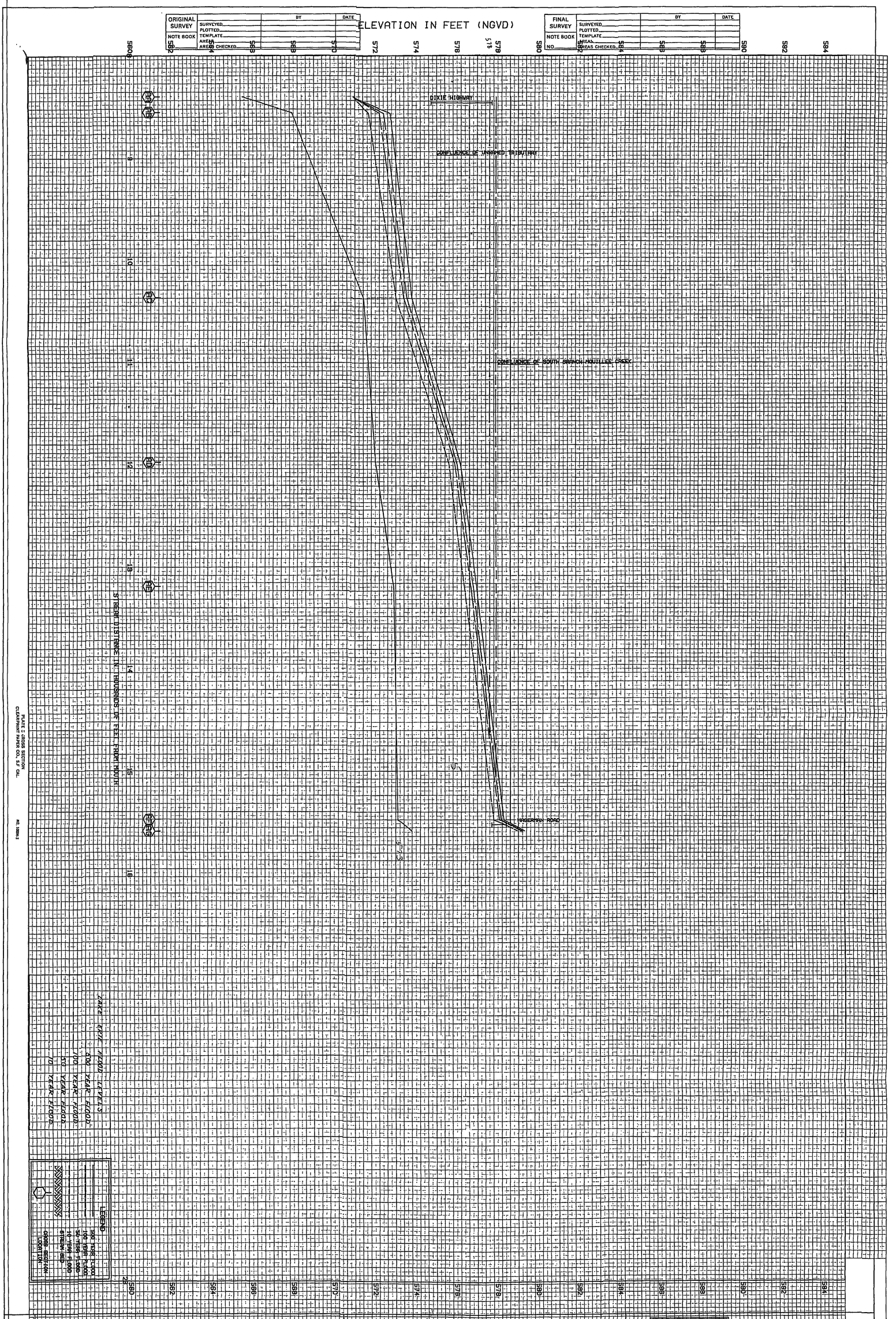
FINAL SURVEY	SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED	BY	DATE
NOTE BOOK			
NO.			

ORIGINAL SURVEY	SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED	BY	DATE
NOTE BOOK			
NO.			

PLATE 3 CROSS SECTION
CLEARPRINT PAPER CO., S.F. CAL. NO 1000H 3


MOUILLEE CREEK
BERLIN TWP., MONROE CO., MICHIGAN
HUD-FIA FLOOD STUDIES
PREPARED FOR
WILLIAMS & WORKS
BY
ABRAMS AERIAL SURVEY CORP.
SCALE 1"=800'
PHOTO DATE : MAY 1979
AASC NO. 17183
800 0 800 1600 2400
FLOOD LIMITS
500-YEAR
100-YEAR
FLOODWAY
Milliman Island
BM 586
RIVER
SIGLER ROAD
LABO ROAD
ROELANT ROAD
HAGERMAN ROAD
WASSANOVA
Drain
South Branch
Creek
Jefferson Sch
100% Lk Erie ~ 578
BERLIN
US TURNPIKE
MOUILLEE MARSH STATE GAME AREA
West Lead
East Lead
28
27
26
25
34
35
36
A
B
C
D

Scale 1"=800'



FLOOD PROFILES

MOUILLEE CREEK

TOWNSHIP OF BERLIN MI

(MONROE COUNTY)

WILLIAMS & WORKS
ENGINEERS/SURVEYORS/PLANNERS/GEOLOGISTS
811 CASCADE WEST PARKWAY S.E. GRAND RAPIDS, MICHIGAN 48506

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS CHECKED		
NO.			

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TRACINGS		
NO.	AREAS CHECKED		

ATTACHED COMMENTS

CALIFORNIA

DIVISION OF

HIGHWAYS

DIXIE

SCALE

HORIZONTAL 1" = 100'

VERTICAL 1" = 20'

MAY 1980

SHEET NO. 2 OF 2 SHEETS

SEE SHEET NO. 1 FOR CONTROL DIAGRAM

ALTERED COMMENTS

SCALE

HORIZONTAL 1" = 100'

VERTICAL 1" = 20'

MAY 1980

SWAIN CREEK BRIDGE

TOP OF ROAD ELEV. = 580.6

LOW CHORD ELEV. = 577.2

5.6%

5.6%

5.6%

TOP OF ROAD PROFILE

DISTANCE (FEET)

ELEVATION

TOP OF ROAD ELEV. = 584.2

LOW CHORD ELEV. = 584.2

TOP OF ROAD ELEV. = 590.0

5.7%

5.7%

5.7%

TOP OF ROAD PROFILE

DISTANCE (FEET)

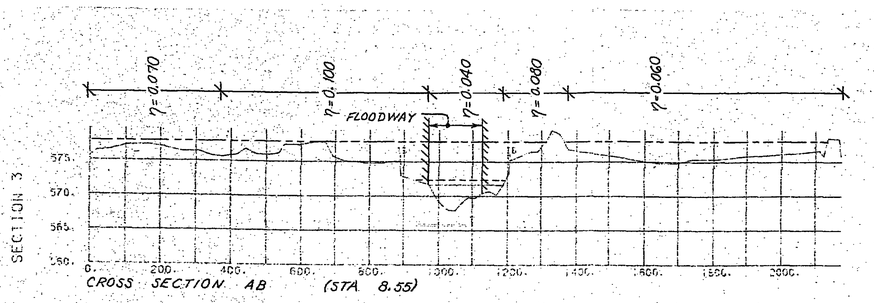
ELEVATION

RECEIVED

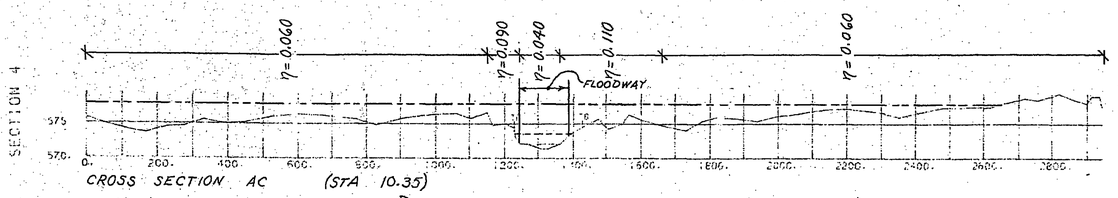
AUG 05 1980

RIGHT OF WAY MANAGEMENT

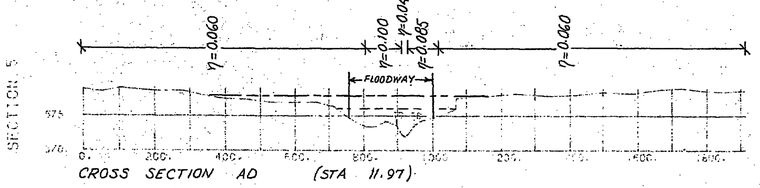
PLATE 2 CROSS SECTION
CLEARPRINT PAPER CO., S.F. CAL. NO 10003-3



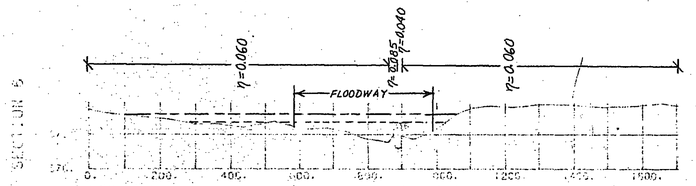
CROSS SECTION AB (STA 8.55)



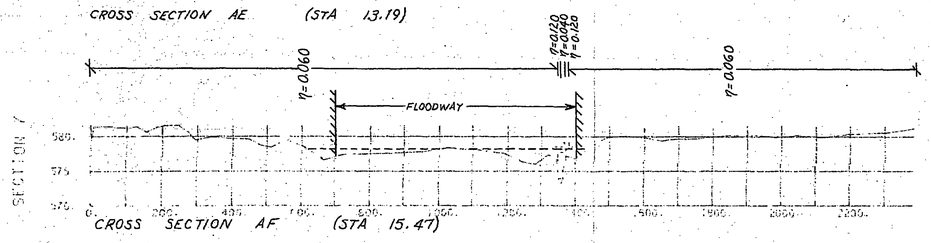
CROSS SECTION AC (STA 10.35)



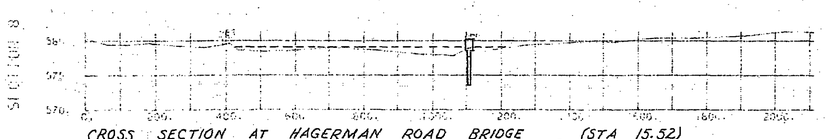
CROSS SECTION AD (STA 11.97)



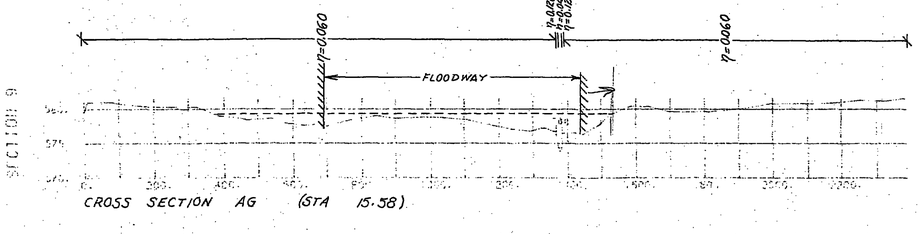
CROSS SECTION AE (STA 13.19)



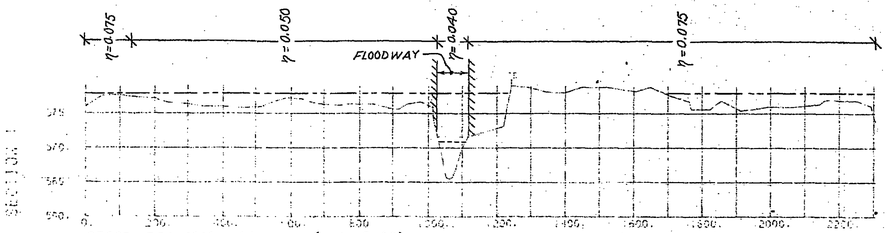
CROSS SECTION AF (STA 15.47)



CROSS SECTION AT HAGERMAN ROAD BRIDGE (STA 15.52)

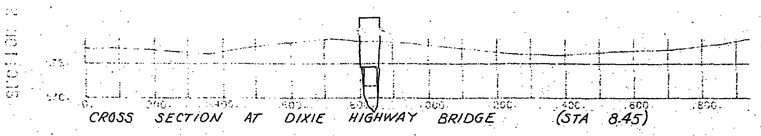


CROSS SECTION AG (STA 15.58)



CROSS SECTION AA (STA 8.40)

1st d/s section



CROSS SECTION AT DIXIE HIGHWAY BRIDGE (STA 8.45)

LEGEND

ENCROACHMENT LEFT

ENCROACHMENT RIGHT

100-YEAR CWSEL

100-YEAR LAKE ERIE FLOOD ELEVATION (SHOWN WHERE ABOVE CWSEL)

MUSKEGON FLOOD STUDIES FOR WILLIAMS WORKS - MOUNTAIN BEE CREEK, BERLIN TWP.

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED.		
NOTE BOOK	TEMPLATE.		
NO.	AREAS CHECKED.		

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED.		
NOTE BOOK	TEMPLATE.		
NO.	AREAS CHECKED.		

RECEIVED
AUG 05 1980
WATER MANAGEMENT

PLATE 3 CROSS SECTION
CLEARPRINT PAPER CO., S.F. CAL. NO. 1000H-3

SIGLER ROAD
Grundman Drain
Uden Drain
Swan Creek
Potter Cem
Colburn Drain
LABO ROAD
DETROIT
TOLEDO
PENN
CENTRAL
SHORE LINE
Mouillee Creek
South Branch
END OF APPROXIMATE STUDY
END OF DETAILED STUDY
START OF APPROXIMATE STUDY
DIXIE HIGHWAY
HAGERMAN
ZONE A1
ZONE A
ZONE A2
ZONE A3
ZONE A5
ZONE B
Vermet Channel
West Lead
East Lead
POINTE MOUILLEE STATE GAME AREA
B E R L I N
R10E R11E
T5S
T6S
US TURNPIKE
BRANDON
ROAD
NEWPORT ROAD
Lilac Golf Club
Bathgate Drain
BM 586 REAUME
Langton Drain
ARMSTRONG ROAD
BOMIEA ROAD
CHINAVERE
SUNLIGHT
Yoas Drain
Newport
Niedermeier Sch
Lakeside Ch
Oldport
MASSARANT
AREA NOT INCLUDED
Estral Beach
Old St Charles
Miller and Malosh Drain
Swan Creek
MENTEL
CONSTRUCTION
UNDER
LAKE ERIE FLOOD ELEVATIONS (NGVD)
100 YR FLOOD 577.9
500 YR FLOOD 578.6
RECEIVED
MAR 31 1981
WATER MANAGEMENT
0 400 800 1600
FEET
N
500 YR FLOOD BOUNDARY
100 YR FLOOD BOUNDARY
FLOODWAY FRINGE
FLOODWAY
500 YR FLOOD BOUNDARY
CROSS SECTION LINE
BASE FLOOD ELEVATION LINE WITH ELEVATION IN FEET NGVD
580
TOWNSHIP OF BERLIN
FLOOD INSURANCE STUDY
MONROE COUNTY, MICHIGAN
FLOOD BOUNDARY AND FLOODWAY/ INSURANCE RATE WORK MAP
(2 of 2)
PREPARED BY
WILLIAMS & WORKS, INC.
GRAND RAPIDS, MICHIGAN
(JOB No. 85376)
FOR
FEDERAL EMERGENCY MANAGEMENT AGENCY
FLOOD INSURANCE AND HAZARD MITIGATION OFFICE
FEDERAL CONTRACT NO H-3970

RECEIVED
AUG 05 1980
WATER MANAGEMENT

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

TOWNSHIP OF BERLIN F.I.S.
SWAN CREEK MAY '80

I-75 BRIDGE

J. SORG
JUNE '80

TOP OF ROAD PROFILE

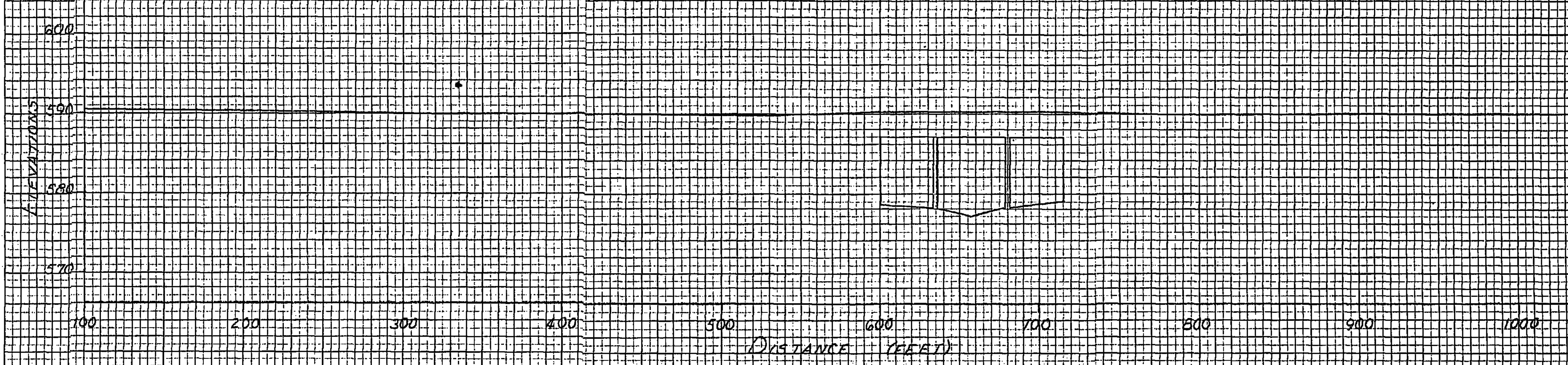
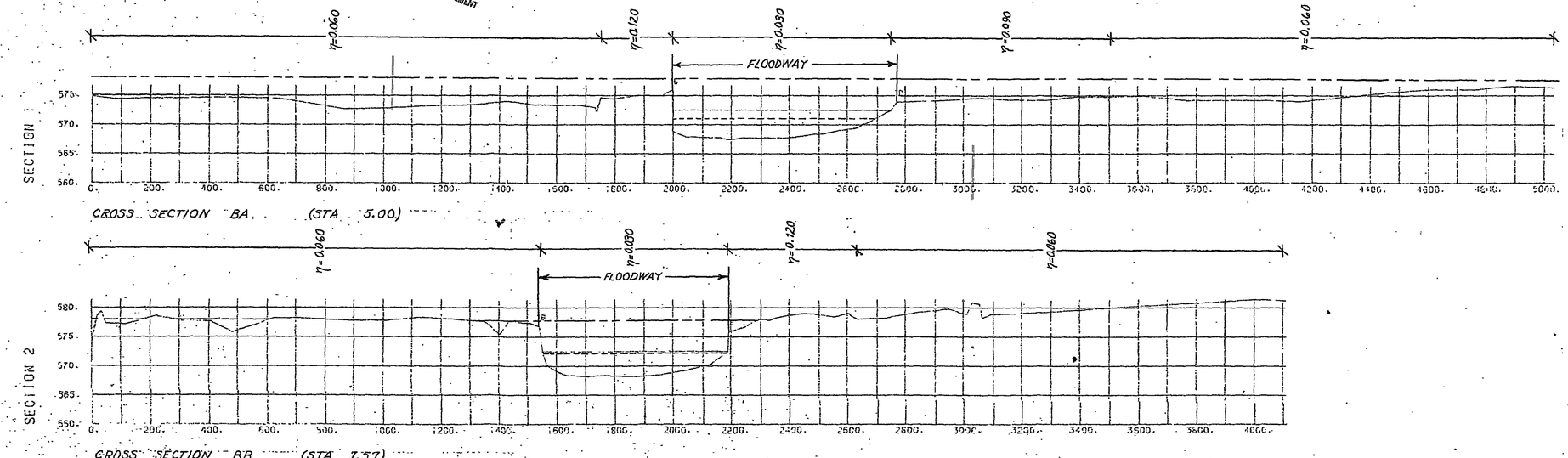


PLATE 3 CROSS SECTION
CLEARPRINT PAPER CO., S.F. CAL.
NO. 1000H-3

RECEIVED
AUG 05 1980
WATER MANAGEMENT



CROSS SECTION BA (STA 5.00)

CROSS SECTION BB (STA 7.57)

LEGEND

ENCROACHMENT LEFT

ENCROACHMENT RIGHT

100-YEAR CWSEL

100-YEAR LAKE ERIE FLOOD ELEVATION (SHOWN WHERE ABOVE CWSEL)

HUD-FIA FLOOD STUDIES FOR WILLIAMS & WORKS : SWAN CREEK, BERLIN TWP.

TOWNSHIP OF BERGEN FILE
SWAMP CREEK MAY 1980

RAIL ROAD BRIDGE

(ACROSS RAILROAD)

TOP OF ROAD ELEV. = 593.2

LOW CHORD ELEK. = 524.1

S 75° E

574.9

N 75° W

583.6

NEW YORK CENTRAL RAILROAD

(WEST OF DATE ST. & L. RAILROAD)

ATTACHED CO. OWENS

CANCELLED

DATE ST. STREET BRIDGE

TOP OF ROAD ELEV. = 582.0

LOW CHORD ELEK. = 580.1

S 75° E

574.7

N 75° W

578.1

1410 1420 1430 1440 1450

1400 1600 1800 2000 2200 2400 2600

DISTANCE (FEET)

1190 1200 1210 1220 1230 1240

1000 1200 1400 1600 1800 2000

DISTANCE (FEET)

TOP OF ROAD PROFILE

ELEVATION

565 570 575 580 585 590

TOP OF ROAD PROFILE

ELEVATION

565 570 575 580 585 590

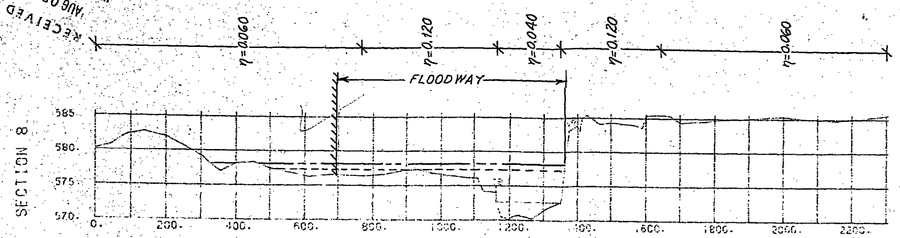
FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TRIANGULATION		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TRIANGULATION		
	AREAS		
NO.	AREAS CHECKED		

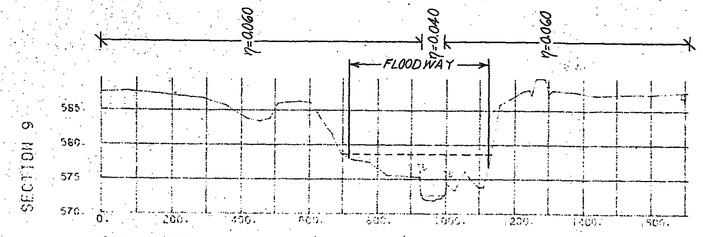
RECEIVED
AUG 05 1980
WATER MANAGEMENT

PLATE 3 CROSS SECTION
CLEARPRINT PAPER CO., S.F. CAL. NO. 10004-3

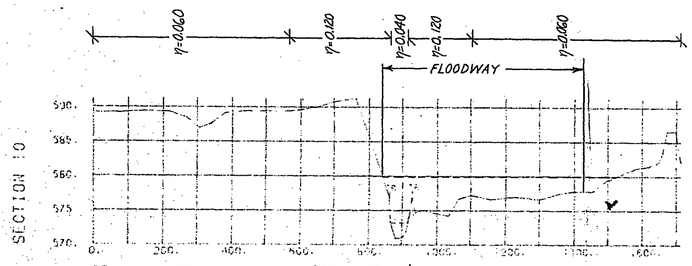
RECEIVED
AUG 05 1980
WATER MANAGEMENT



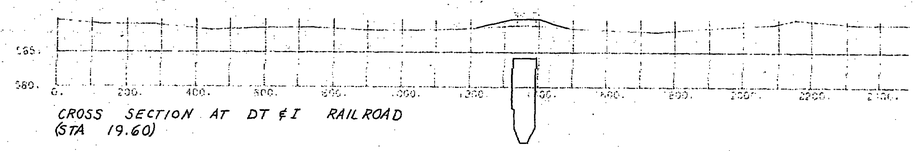
CROSS SECTION BG (STA 15.84)



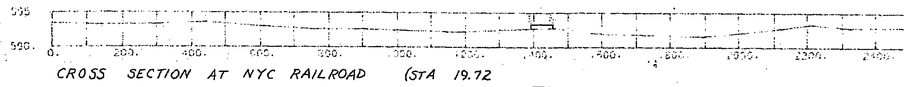
CROSS SECTION BH (STA 17.26)



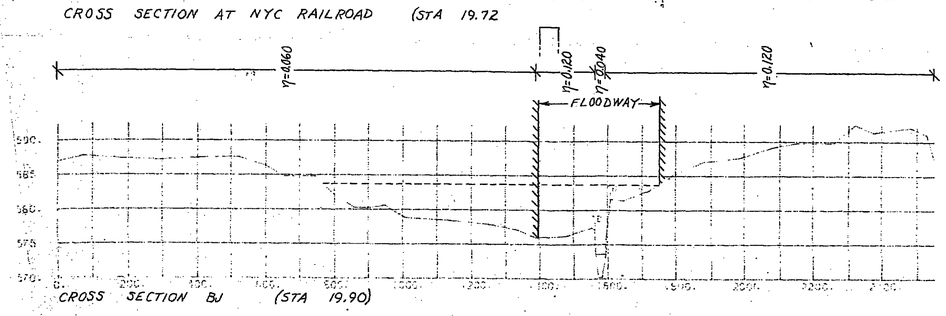
CROSS SECTION BI (STA 18.65)



CROSS SECTION AT DT & I RAILROAD (STA 19.60)



CROSS SECTION AT NYC RAILROAD (STA 19.72



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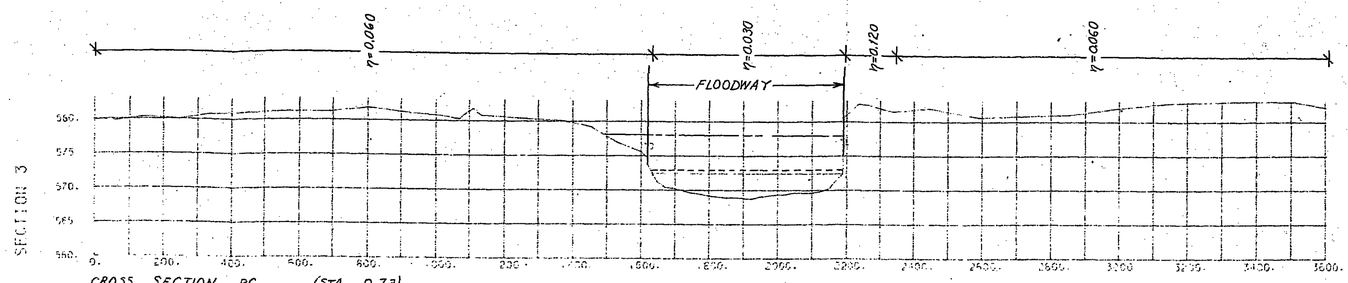

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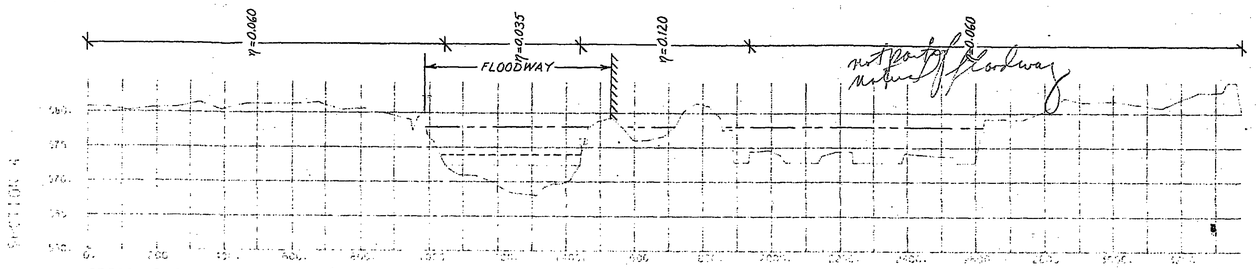
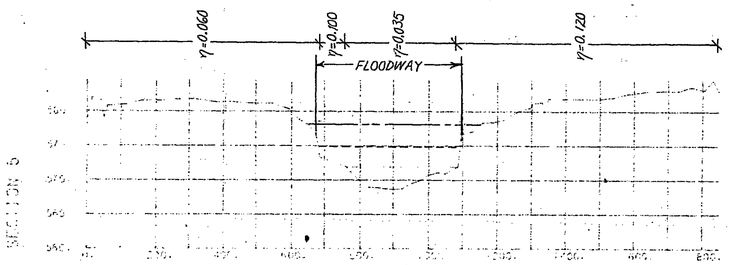
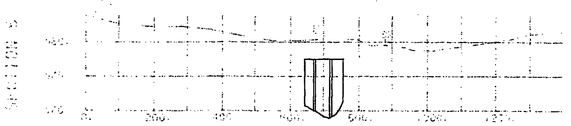


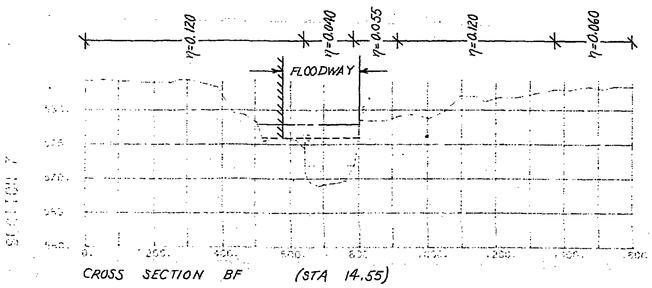
CROSS SECTION BD (STA 11.74)



CROSS SECTION BE (STA 13.55)



CROSS SECTION AT NORTH DIXIE HIGHWAY (STA 14.46)



CROSS SECTION BF (STA 14.55)

LEGEND

- ENCROACHMENT LEFT
- ENCROACHMENT RIGHT
- 100-YEAR CWSEL ----------
- 100-YEAR LAKE ERIE FLOOD ELEVATION (SHOWN WHERE ABOVE CWSEL) ——— ——— ———

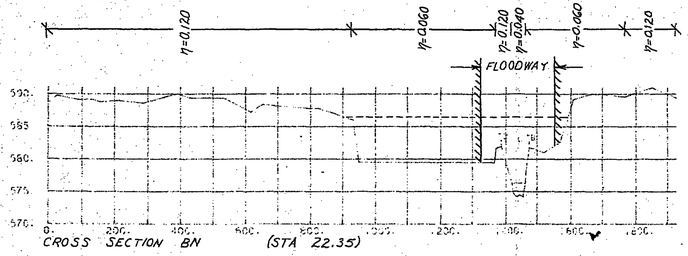
HUD-FIA FLOOD STUDIES FOR WILLIAMS & WORKS : SWAN CREEK, BERLIN TWP.

CAUTION

SEE
ATTACHED COMMENTS

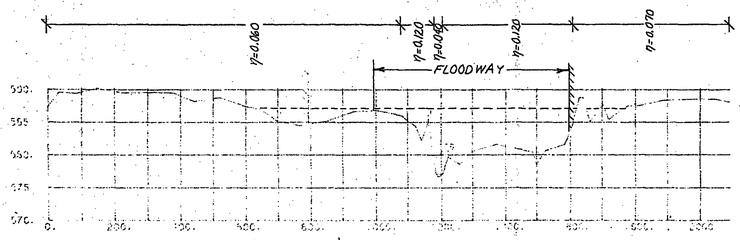
From unapproved submittal - changes may have occured

SECTION 20



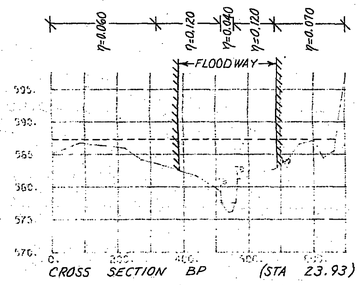
CROSS SECTION BN (STA 22.35)

SECTION 21



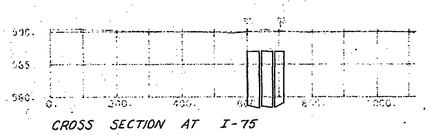
CROSS SECTION BO (STA 23.21)

SECTION 22



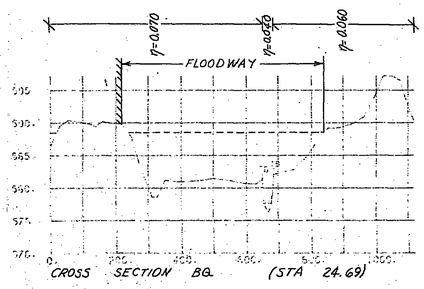
CROSS SECTION BP (STA 23.93)

SECTION 23



CROSS SECTION AT I-75

SECTION 24



CROSS SECTION BQ (STA 24.69)

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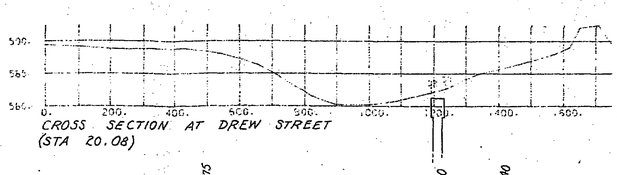
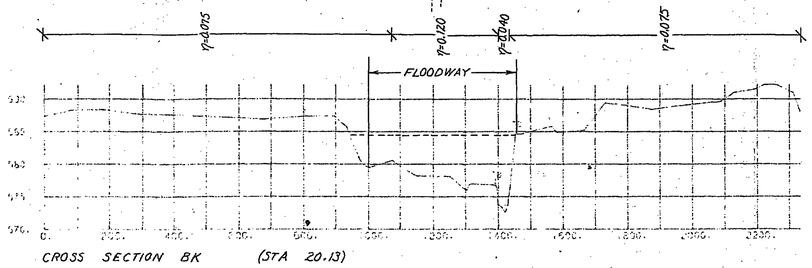
AUG 05 1980
WATER MANAGEMENT

SECTION 14



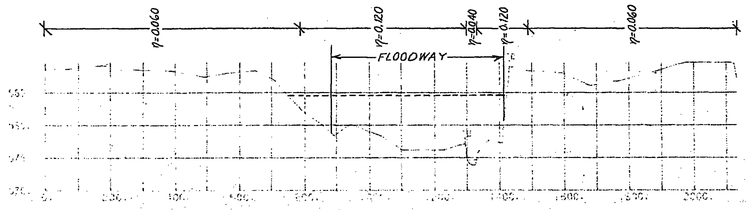
CROSS SECTION AT DREW STREET
(STA 20.08)

SECTION 15



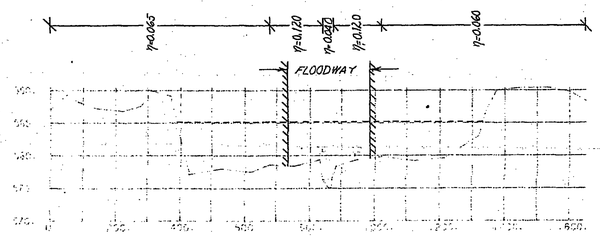
CROSS SECTION BK (STA 20.13)

SECTION 16



CROSS SECTION BL (STA 20.77)

SECTION 17

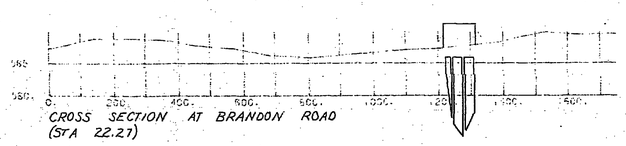


CROSS SECTION BM (STA 21.91)

SECTION 18

CROSS SECTION AT NYC RAILROAD
(STA 22.17)

SECTION 19



CROSS SECTION AT BRANDON ROAD
(STA 22.27)

LEGEND

ENCROACHMENT LEFT

ENCROACHMENT RIGHT

100-YEAR CWSEL ----------

100-YEAR LAKE ERIE FLOOD ELEVATION ——— — — ——— (SHOWN WHERE ABOVE CWSEL)

HUD-FIA FLOOD STUDIES FOR WILLIAMS & WORKS : SWAN CREEK, BERLIN TWP.

FLOOD PROFILES

SWAN CREEK

TOWNSHIP OF BERLIN, MI.

(MONROE COUNTY)

WILLIAMS & WORKS
ENGINEERS/SURVEYORS/PLANNERS/GEOLOGISTS
RACCOON ROAD, WEST PARKWAY 9-451

RECEIVED
MAR 31 1981
WATER MANAGEMENT

ELEVATION IN FEET (NGVD)

DOWNSTREAM LIMITS OF DETAILED STUDY

DOWNRIDGE OF LITTLE SWAN CREEK

PERTINENT HIGHWAY

STREAM DISTANCE IN THOUSANDS OF FEET FROM MOUTH

LEGEND
- 500 YEAR FLOOD
- 100 YEAR FLOOD
- 50 YEAR FLOOD
- 10 YEAR FLOOD
- STREAM BED
- CROSS SECTION LOCATION

CE140N
03/18/81

NO. 7294—CROSS SECTION 10 x 10
"CLEARPRINT PAPER CO."
MADE IN U.S.A.

FLOOD PROFILES

SWAN CREEK

TOWNSHIP OF BERLIN, MI
(MONROE COUNTY)

ELEVATION IN FEET (NGVD)

650
645
640
635
630
625
620
615
610
605
600
595
590
585
580
575
570
565

DETROIT TOLEDO & IRONTON RAILROAD
NEW YORK CENTRAL RAILROAD
DIKE
DIKE TOWER
NEW YORK CENTRAL RAILROAD
ERIE ROAD
INTERSTATE 75 NORTHBOUND
INTERSTATE 75 SOUTHBOUND
WESTERN LIMITS OF DETAILED STUDY

BJ BK BL BM BN BO BP BQ

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

STREAM DISTANCE IN THOUSANDS OF FEET FROM MOUTH

LEGEND
500 YEAR FLOOD
100 YEAR FLOOD
50 YEAR FLOOD
10 YEAR FLOOD
STREAM BED
CROSS SECTION LOCATION

RECEIVED
MAR 31 1981
WATER MANAGEMENT

WILLIAMS & WORKS
230 WEST BIG BEAVER ROAD/P.O. BOX 2753/TROY, MICHIGAN 48084/(313) 641-1313
811 CHURCH ST./FLINT, MICHIGAN 48502

GRAND RAPIDS – HOUGHTON – SAGINAW

GE141N
03/18/81

NO. 1294—CROSS SECTION 10 x 10
"CLEARPRINT PAPER CO."
MADE IN U.S.A.

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Mouillee

4) DOCUMENT TYPE: 100, 500, 50 and 10 year floods

00BREAK00

```
**********************************************
*  WATER SURFACE PROFILES                    *
*  VERSION OF NOVEMBER 1976                  *
*  UPDATED JULY 1979                         *
*                                            *
*  RUN DATE TUE, JUL 15, 1980, 11:01 AM      *
**********************************************
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**********************************
*  U.S. ARMY CORPS OF ENGINEERS  *
*  THE HYDROLOGIC ENGINEERING CENTER *
*  609 SECOND STREET, SUITE D    *
*  DAVIS, CALIFORNIA 95616       *
*  (916) 440-2105 (FTS) 448-2105 *
**********************************
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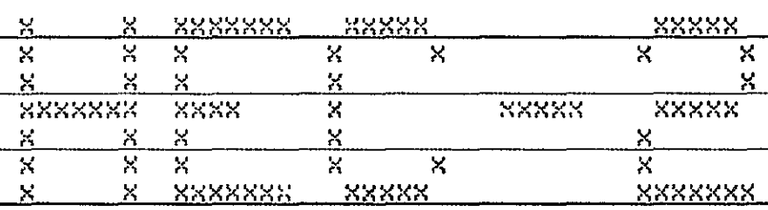

BERLIN TOWNSHIP
MOUILLEE CREEK
JULY 15, 1980

100-, 500-, 50-, AND
10-YEAR FLOODS

```
**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
**********************************************

C
T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WOPKS
T2      TOWNSHIP OF BERLIN      MOUILLEE CREEK
T3      BERLIN, MOUILLEE CREEK  100-YEAR FLOOD

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
        0.       2.        0.        0.   .000000       .00     -1.0        0.   570.900      .000

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

NC      .100      .100      .040      .100      .300      .000      .000      .000      .000      .000
QT     5.000   650.000   650.000   750.000   590.000   440.000      .000      .000      .000      .000
NH     4.000      .075   238.000      .050  1026.000      .040  1118.000      .075  2304.000      .000

          CROSS SECTION AA

X1     8.400   61.000  1026.000  1118.000      .000      .000      .000      .000      .000      .000
X3      .000      .000      .000  1026.000      .000  1118.000      .000      .000      .000      .000
GR   576.000      .000  577.600    46.000  577.700    92.000  577.400   146.000  577.200   200.000
GR   576.600   238.000  576.400   294.000  576.000   354.000  576.000   402.000  575.800   460.000
GR   576.000   516.000  576.800   556.000  577.300   586.000  577.200   628.000  576.600   662.000
GR   576.400   690.000  576.200   740.000  576.400   774.000  576.400   836.000  575.800   886.000
GR   575.600   916.000  576.400   940.000  576.700   980.000  575.900  1012.000  574.000  1014.000
GR   571.700  1026.000  570.200  1032.000  568.000  1042.000  565.700  1052.000  565.500  1062.000
GR   565.700  1072.000  567.000  1082.000  568.800  1092.000  570.200  1102.000  571.200  1112.000
GR   571.700  1118.000  573.100  1218.000  579.000  1242.000  578.800  1292.000  578.100  1344.000
GR   578.000  1396.000  578.800  1452.000  578.800  1518.000  578.200  1606.000  578.800  1650.000
GR   577.500  1710.000  576.800  1762.000  575.600  1768.000  575.600  1824.000  576.900  1856.000
GR   575.400  1914.000  576.000  1994.000  576.000  2062.000  576.200  2114.000  576.400  2142.000
GR   577.000  2158.000  577.000  2186.000  576.900  2206.000  576.900  2250.000  576.100  2292.000
GR   573.800  2304.000      .000      .000      .000      .000      .000      .000      .000      .000
NC      .000      .000      .000      .300      .500      .000      .000      .000      .000      .000

          CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

X1     8.450   25.000   810.500   851.500   56.000   56.000   50.000      .000      .000      .000
X3       000      .000      .000   810.500      .000   851.500      .000      .000      .000      .000
GR   577.100      .000  577.200    82.000  577.000   184.000  576.700   270.000  576.400   362.000
GR   577.200   464.000  578.000   588.000  578.600   722.000  578.200   800.000  577.600   800.000
GR   570.600   810.500  568.800   820.700  568.600   831.000  568.100   841.200  568.900   851.500
GR   577.300   862.000  578.200   862.000  578.000   930.000  577.000  1060.000  576.400  1248.000
GR   576.200  1388.000  576.800  1562.000  577.000  1708.000  577.800  1848.000  578.600  1938.000

X1     8.451      .000      .000      .000     1.000     1.000     1.000      .000      .000      .000
```

X2	.000	.000	.000	574.700	578.200	.000	.000	.000	.000	.000
X1	8.499	.000	.000	.000	44.000	44.000	44.000	.000	.000	.000
X2	.000	.000	.000	574.700	578.200	.000	.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

X1	8.500	.000	.000	.000	1.000	1.000	1.000	.000	.000	.000
X3	.000	.000	.000	810.500	.000	851.500	.000	.000	.000	.000
NH	5.000	.070	378.000	.100	973.000	.040	1198.000	.080	1376.000	.060
NH	2170.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AB

X1	8.550	64.000	973.000	1128.000	100.000	100.000	50.000	.000	.000	.000
X3	.000	.000	.000	973.000	.000	1128.000	.000	.000	.000	.000
GR	575.600	.000	576.400	16.000	576.600	56.000	577.200	102.000	577.300	166.000
GR	577.000	208.000	576.400	258.000	576.400	276.000	576.400	312.000	575.800	344.000
GR	575.600	378.000	576.000	418.000	576.800	440.000	576.000	472.000	576.000	510.000
GR	576.200	536.000	577.400	554.000	577.400	564.000	577.400	594.000	577.700	630.000
GR	577.700	670.000	575.800	692.000	575.100	726.000	574.800	784.000	574.800	838.000
GR	575.100	888.000	573.000	892.000	571.700	973.000	570.200	988.000	568.700	1008.000
GR	568.000	1028.000	567.900	1048.000	569.000	1068.000	569.800	1088.000	569.700	1108.000
GR	570.400	1128.000	570.700	1148.000	570.200	1168.000	571.700	1188.000	573.300	1203.000
GR	575.200	1205.000	575.800	1234.000	576.500	1266.000	576.500	1288.000	577.900	1312.000
GR	579.600	1330.000	579.000	1352.000	576.800	1376.000	576.400	1424.000	575.800	1514.000
GR	575.200	1580.000	574.800	1638.000	574.800	1694.000	575.400	1742.000	575.400	1812.000
GR	575.800	1890.000	576.000	1962.000	576.200	2026.000	576.400	2078.000	576.600	2112.000
GR	575.800	2122.000	578.400	2134.000	578.300	2164.000	575.800	2170.000	.000	.000
NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
NH	5.000	.060	1150.000	.090	1246.000	.040	1363.000	.110	1662.000	.060
NH	2942.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AC

X1	10.350	64.000	1246.000	1363.000	2000.000	1540.000	1800.000	.000	.000	.000
X3	.000	.000	.000	600.000	.000	1824.000	.000	.000	.000	.000
GR	575.800	.000	575.000	46.000	574.200	104.000	573.600	170.000	574.500	226.000
GR	574.600	276.000	575.600	332.000	575.000	388.000	575.200	450.000	576.000	522.000
GR	576.400	600.000	576.200	674.000	575.700	768.000	574.800	828.000	575.800	906.000
GR	576.400	992.000	576.500	1062.000	575.800	1104.000	576.600	1150.000	574.800	1166.000
GR	575.000	1202.000	574.400	1228.000	573.100	1231.000	572.100	1246.000	572.100	1268.000
GR	571.800	1288.000	571.400	1308.000	571.400	1328.000	571.800	1348.000	572.100	1363.000
GR	573.500	1393.000	574.500	1428.000	575.700	1478.000	574.200	1506.000	575.000	1546.000
GR	576.400	1564.000	575.600	1598.000	574.800	1662.000	574.000	1730.000	575.400	1774.000
GR	576.000	1824.000	575.800	1876.000	575.400	1938.000	576.000	1984.000	576.500	2062.000
GR	577.100	2138.000	577.200	2202.000	576.900	2262.000	576.600	2306.000	576.000	2348.000
GR	576.600	2404.000	577.300	2480.000	577.400	2556.000	577.400	2620.000	578.200	2680.000
GR	578.700	2716.000	578.400	2754.000	579.000	2800.000	579.400	2820.000	578.400	2868.000
GR	578.000	2898.000	579.000	2910.000	579.000	2934.000	577.400	2942.000	.000	.000
NH	5.000	.060	806.000	.100	913.000	.040	929.000	.085	1018.000	.060
NH	1914.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AD

X1	11.970	36.000	913.000	929.000	1280.000	1800.000	1620.000	.000	.000	.000
GR	578.800	.000	578.500	50.000	579.000	106.000	578.600	192.000	578.600	278.000
GR	577.600	382.000	577.400	460.000	577.000	532.000	577.000	586.000	577.000	660.000
GR	576.400	714.000	574.700	756.000	573.400	806.000	573.400	834.000	574.200	868.000
GR	573.600	898.000	572.300	913.000	572.000	921.000	572.300	929.000	573.500	948.000
GR	574.300	968.000	574.900	1018.000	576.000	1068.000	577.600	1070.000	577.800	1130.000
GR	578.000	1192.000	578.200	1254.000	577.900	1330.000	578.000	1422.000	578.400	1500.000
GR	578.200	1586.000	578.800	1664.000	579.000	1732.000	578.600	1788.000	578.500	1849.000
GR	578.600	1914.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	860.000	.085	882.000	.040	900.000	.060	1704.000	.000

CROSS SECTION AE

X1	13.190	33.000	882.000	900.000	1500.000	1100.000	1220.000	.000	.000	.000
GR	578.600	.000	578.000	66.000	577.600	152.000	577.300	222.000	576.600	296.000
GR	576.600	362.000	576.100	436.000	577.000	528.000	576.300	578.000	575.800	626.000
GR	576.000	682.000	575.400	742.000	574.400	792.000	574.100	832.000	573.800	860.000
GR	574.900	876.000	573.100	882.000	572.900	891.000	573.100	900.000	574.800	902.000
GR	574.300	936.000	575.200	980.000	576.700	1024.000	578.000	1058.000	578.900	1108.000
GR	579.200	1158.000	579.000	1224.000	579.400	1298.000	579.400	1372.000	579.000	1486.000
GR	579.200	1580.000	579.600	1658.000	579.200	1704.000	.000	.000	.000	.000
NH	5.000	.060	1346.000	.120	1351.000	.040	1363.000	.120	1369.000	.060
NH	2386.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AF

X1	15.470	51.000	1351.000	1363.000	2300.000	2300.000	2280.000	.000	.000	.000
X3	.000	.000	.000	556.000	.000	.000	.000	.000	.000	.000
GR	579.600	.000	581.400	6.000	581.400	10.000	581.400	50.000	581.200	86.000
GR	581.400	130.000	580.600	156.000	581.200	180.000	581.600	204.000	581.600	246.000
GR	580.500	274.000	579.500	292.000	579.900	340.000	579.700	398.000	579.600	446.000
GR	578.800	478.000	578.500	512.000	579.500	556.000	578.600	604.000	576.600	666.000
GR	577.400	720.000	577.500	780.000	577.600	856.000	577.800	946.000	578.400	1024.000
GR	578.100	1114.000	577.600	1188.000	576.400	1244.000	576.000	1286.000	577.400	1318.000
GR	576.600	1346.000	574.000	1351.000	573.100	1357.000	574.000	1363.000	577.200	1369.000
GR	576.800	1396.000	578.200	1436.000	579.800	1488.000	580.100	1544.000	579.800	1604.000
GR	579.400	1652.000	579.600	1684.000	579.700	1746.000	580.200	1844.000	580.200	1928.000
GR	579.900	1982.000	580.200	2046.000	579.900	2114.000	580.400	2202.000	580.600	2302.000
GR	581.200	2386.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.060	.060	.040	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

X1	15.520	32.000	1107.700	1116.700	60.000	60.000	50.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	1135.000	.000	.000	.000	.000
GR	580.400	.000	579.400	62.000	579.400	116.000	579.600	184.000	579.200	268.000
GR	579.000	346.000	579.400	390.000	579.600	408.000	578.600	434.000	578.400	510.000
GR	578.600	604.000	579.000	714.000	578.600	840.000	578.000	966.000	577.800	1062.000
GR	578.400	1106.000	578.400	1107.700	573.500	1107.700	573.500	1116.700	578.400	1116.700
GR	578.400	1118.500	578.500	1120.000	578.700	1178.000	579.400	1278.000	579.500	1336.000
GR	579.800	1416.000	579.800	1530.000	580.400	1646.000	580.400	1770.000	580.700	1908.000
GR	581.300	2030.000	581.200	2110.000	.000	.000	.000	.000	.000	.000
SB	.000	1.400	2.600	.000	9.000	.000	37.800	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

X1	15.530	.000	.000	.000	17.000	17.000	17.000	.000	.000	.000
X2	.000	000	1.000	577.700	577 800	.000	.000	.000	.000	.000
BT	12.000	966.000	578.000	578.000	1062.000	577.800	577.800	1106.000	578.400	578.400
BT	1106.000	580.400	578.400	1107.700	580.400	578.400	1107.700	580.400	577.700	1116.700
BT	580.400	577.700	1116.700	580.400	578.400	1118.500	580.400	578.400	1118.500	578.400
BT	578.400	1120.000	578.500	578.500	1178.000	578.700	578.700	.000	.000	.000
NH	5.000	.060	1366.000	.120	1369.000	.040	1380.000	.120	1385.000	.060
NH	2390.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AG

X1	15.580	46.000	1369.000	1380.000	60.000	60.000	50.000	.000	.000	.000
X3	.000	.000	.000	680.000	.000	1440.000	.000	.000	.000	.000
GR	579.600	.000	581.000	8.000	581.000	74.000	580.400	170.000	580.300	250.000
GR	580.300	324.000	579.000	386.000	578.400	470.000	578.600	540.000	577.900	586.000
GR	577.600	634.000	577.800	670.000	575.400	678.000	575.400	684.000	577.400	694.000
GR	578.400	768.000	579.000	848.000	578.600	902.000	578.800	974.000	578.700	1050.000
GR	578.400	1108.000	577.600	1184.000	577.100	1236.000	576.800	1294.000	577.300	1332.000
GR	576.700	1366.000	574.400	1369.000	573.800	1374.000	574.400	1380.000	576.500	1385.000
GR	576.600	1422.000	576.400	1448.000	577.700	1496.000	579.400	1530.000	580.400	1584.000
GR	580.400	1640.000	579.600	1696.000	579.600	1748.000	579.600	1812.000	580.000	1898.000
GR	580.800	1994.000	580.800	2098.000	580.900	2174.000	581.300	2252.000	581.200	2324.000
GR	581.600	2390.000	.000	.000	.000	.000	.000	.000	.000	.000
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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*PROF 1

CCHV=     .100 CEHV=     .300
1490 NH CARD USED
*SECNO 8.400
   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

3470 ENCROACHMENT STATIONS=     1026.0     1118.0  TYPE=      1  TARGET=      92.000
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why not a full section 200 ft wide?

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         CROSS SECTION AA

     8.40      5.40    570.90       .00    570.90    571.00       .10       .00       .00    571.70
     650.        0.      650.        0.        0.      257.        0.        0.        0. 100000.00
      .00       .00      2.52       .00      .000      .040      .000      .000    565.50   1029.20
  .000985        0.        0.        0.         0         0         0       .00     79.80   1109.00

CCHV=     .300 CEHV=     .500
*SECNO 8.450

3301 HV CHANGED MORE THAN HVINS

   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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      810.5      851.5  TYPE=      1  TARGET=      41.000

         CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

     8.45      2.68    570.78    570.78       .00    571.79      1.01       .13       .45    570.60
     650.        0.      650.        0.        0.       81.        0.        0.        0. 100000.00
      .00       .00      8.05       .00      .100      .040      .100      .039    568.10    810.50
  .020420       56.       50.       56.        20         8         0       .00     41.00    851.50

*SECNO 8.451

3370 NORMAL BRIDGE,NRD=  0 MIN ELTRD=  578.20 MAX ELLC=  574.70

     8.45      3.18    571.28       .00       .00    571.91       .63       .01       .11    570.60
     650.        0.      645.        5.        0.      101.        4.        0.        0.     568.90
      .00       .60      6.39      1.34      .100      .040      .100      .038    568.10    809.49
  .008939        1.        1.        1.         6         0         0       .00     44.98    854.47

*SECNO 8.499

3370 NORMAL BRIDGE,NRD=  0 MIN ELTRD=  578.20 MAX ELLC=  574.70
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8.50	3.73	571.83	.00	.00	572.25	.41	.27	.06	570.60
650.	1.	643.	6.	1.	124.	5.	0.	0.	568.90
.00	.64	5.19	1.09	.100	.040	.100	.039	568.10	808.65
.004495	44.	44.	44.	2	0	0	.00	46.52	855.17

*SECNO 8.500

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

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.50	3.73	571.83	.00	.00	572.26	.43	.00	.01	570.60
650.	0.	650.	0.	0.	124.	0.	0.	0.	100000.00
.00	.00	5.23	.00	.100	.040	.100	.038	568.10	810.50
.005184	1.	1.	1.	0	0	0	.00	41.00	851.50

1490 NH CARD USED
*SECNO 8.550

3470 ENCROACHMENT STATIONS= 973.0 1128.0 TYPE= 1 TARGET= 155.000

CROSS SECTION AB

8.55	4.49	572.39	.00	.00	572.42	.03	.04	.12	571.70
650.	0.	650.	0.	0.	488.	0.	1.	0.	100000.00
.01	.00	1.33	.00	.100	.040	.100	.039	567.90	973.00
.000286	100.	50.	100.	2	0	0	.00	155.00	1128.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 10.350

3470 ENCROACHMENT STATIONS= 600.0 1824.0 TYPE= 1 TARGET= 1224.000

CROSS SECTION AC

10.35	2.12	573.52	.00	.00	573.66	.14	1.21	.03	572.10
650.	12.	624.	13.	14.	206.	22.	16.	7.	572.10
.18	.87	3.03	.61	.090	.040	.110	.040	571.40	1230.01
.003119	2000.	1800.	1540.	3	0	0	.00	163.95	1393.96

1490 NH CARD USED
*SECNO 11.970

CROSS SECTION AD

11.97	3.98	575.98	.00	.00	576.02	.04	2.35	.01	572.30
650.	325.	166.	158.	372.	61.	196.	31.	16.	572.30
.51	.88	2.71	.81	.085	.040	.083	.041	572.00	724.26
.000889	1280.	1620.	1900.	3	0	0	.00	343.06	1067.31

1490 NH CARD USED
*SECNO 13.190

3265 DIVIDED FLOW

CROSS SECTION AE

13.19	3.88	576.78	.00	.00	576.80	.02	.77	.00	573.10
650.	370.	123.	157.	558.	68.	208.	54.	33.	573.10
.92	.66	1.81	.76	.062	.040	.060	.039	572.90	276.71
.000404	1500.	1220.	1100.	4	0	0	.00	711.68	1026.16

1490 NH CARD USED
*SECNO 15.470

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 556.0 2386.0 TYPE= 1 TARGET= -556.000

CROSS SECTION AF

15.47	5.06	578.16	.00	.00	578.22	.05	1.41	.01	574.00
650.	413.	182.	55.	505.	55.	73.	92.	70.	574.00
1.35	.82	3.29	.75	.062	.040	.072	.040	573.10	617.59
.001039	2300.	2280.	2300.	2	0	0	.00	714.88	1434.91

CCHV= .300 CEHV= .500
*SECNO 15.520

3265 DIVIDED FLOW

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1135.0 TYPE= 1 TARGET= 1134.999

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.52	5.28	578.78	578.78	.00	579.06	.28	.13	.11	578.40
650.	356.	290.	5.	235.	48.	5.	93.	71.	578.40
1.35	1.51	6.09	.93	.060	.040	.060	.040	573.50	429.21
.007801	60.	50.	60.	20	9	0	.00	578.46	1135.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	,00	1,40	2,60	,00	9,00	,00	37,80	,00	573,50	573,50

*SECNO 15,530

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
585,21	579,06	,00	496,	154,	38,	38,	577,70	577,80

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

15,53	5,57	579,07	,00	,00	579,14	,07	,08	,00	578,40
650,	440,	183,	28,	423,	50,	40,	93,	71,	578,40
1,35	1,04	3,64	,69	,060	,040	,060	,040	573,50	316,08
,002592	17,	17,	17,	2	0	5	,00	848,57	1231,82

1490 NH CARD USED

*SECNO 15,580

3470 ENCROACHMENT STATIONS= 680,0 1440,0 TYPE= 1 TARGET= 760,000

CROSS SECTION AG

15,58	5,39	579,19	,00	,00	579,20	,01	,04	,02	574,40
650,	427,	102,	121,	784,	56,	164,	94,	73,	574,40
1,37	,54	1,83	,74	,061	,040	,064	,039	573,80	680,00
,000280	60,	50,	60,	2	0	0	,00	760,00	1440,00

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  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
**********************************************

T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      MOUILLEE CREEK
T3      BERLIN, MOUILLEE CREEK  500-YEAR FLOOD

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.        4.        0.        0.  .000000       .00      -1.0        0.   570.900       .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

    2.000      .000    -1.000      .000      .000      .000      .000      .000      .000      .000
```

*PROF 2

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 8.400

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

3470 ENCROACHMENT STATIONS= 1026.0 1118.0 TYPE= 1 TARGET= 92.000

CROSS SECTION AA

8.40	5.40	570.90	.00	570.90	571.03	.13	.00	.00	571.70
750.	0.	750.	0.	0.	257.	0.	0.	0.	100000.00
.09	.00	2.91	.00	.000	.040	.000	.000	565.50	1029.20
.001311	0.	0.	0.	0	0	0	.00	79.80	1109.00

CCHV= .300 CEHV= .500
*SECNO 8.450

3301 HV CHANGED MORE THAN HVINS

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.45	2.88	570.98	570.98	.00	572.08	1.10	.17	.49	570.60
750.	0.	750.	0.	0.	89.	0.	0.	0.	100000.00
.00	.00	8.44	.00	.100	.040	.100	.039	568.10	810.50
.019974	56.	50.	56.	20	11	0	.00	41.00	851.50

*SECNO 8.451

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

8.45	3.46	571.56	.00	.00	572.23	.67	.01	.13	570.60
750.	1.	743.	6.	1.	113.	4.	0.	0.	568.90
.00	.73	6.60	1.38	.100	.040	.100	.038	568.10	809.06
.008265	1.	1.	1.	7	0	0	.00	45.76	854.82

*SECNO 8.499

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

8.50	3.98	572.08	.00	.00	572.55	.47	.26	.06	570.60
750.	1.	741.	7.	2.	134.	6.	0.	0.	568.90
.00	.73	5.52	1.16	.100	.040	.100	.039	568.10	808.27
.004579	44.	44.	44.	2	0	0	.00	47.21	855.48

*SECNO 8.500

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

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.50	3.98	572.08	.00	.00	572.57	.48	.00	.01	570.60
750.	0.	750.	0.	0.	134.	0.	0.	0.	100000.00
.00	.00	5.58	.00	.100	.040	.100	.038	568.10	810.50
.005377	1.	1.	1.	0	0	0	.00	41.00	851.50

1490 NH CARD USED
*SECNO 8.550

3470 ENCROACHMENT STATIONS= 973.0 1128.0 TYPE= 1 TARGET= 155.000

CROSS SECTION AB

8.55	4.81	572.71	.00	.00	572.74	.03	.04	.14	571.70
750.	0.	750.	0.	0.	537.	0.	1.	0.	100000.00
.01	.00	1.40	.00	.100	.040	.100	.039	567.90	973.00
.000277	100.	50.	100.	2	0	0	.00	155.00	1128.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 10.350

3470 ENCROACHMENT STATIONS= 600.0 1824.0 TYPE= 1 TARGET= 1224.000

CROSS SECTION AC

10.35	2.37	573.77	.00	.00	573.91	.14	1.14	.03	572.10
750.	17.	713.	20.	18.	235.	30.	18.	7.	572.10
.18	.93	3.03	.66	.090	.040	.110	.040	571.40	1229.45
.002633	2000.	1800.	1540.	3	0	0	.00	173.11	1402.56

1490 NH CARD USED
*SECNO 11.970

CROSS SECTION AD

11.97	4.15	576.15	.00	.00	576.19	.04	2.27	.01	572.30
750.	378.	182.	190.	404.	64.	220.	35.	16.	572.30
.50	.94	2.85	.86	.085	.040	.082	.041	572.00	720.12
.000927	1280.	1620.	1800.	2.	0	0	.00	348.07	1068.19

1490 NH CARD USED
*SECNO 13.190

3265 DIVIDED FLOW

CROSS SECTION AE

13.19	4.05	576.95	.00	.00	576.97	.02	.78	.00	573.10
750.	439.	131.	180.	658.	71.	229.	60.	34.	573.10
.91	.67	1.84	.78	.062	.040	.060	.039	572.90	258.85
.000395	1500.	1220.	1100.	4	0	0	.00	763.30	1030.58

1490 NH CARD USED
*SECNO 15.470

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 556.0 2386.0 TYPE= 1 TARGET= -556.000

CROSS SECTION AF

15.47	5.19	578.29	.00	.00	578.34	.05	1.37	.01	574.00
750.	498.	187.	65.	592.	57.	83.	105.	75.	574.00
1.35	.84	3.29	.78	.061	.040	.070	.040	573.10	613.49
.000999	2300.	2280.	2300.	2	0	0	.00	779.99	1439.05

CCHV= .300 CEHV= .500
*SECNO 15.520

3265 DIVIDED FLOW

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1135.0 TYPE= 1 TARGET= 1134.999

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.52	5.34	578.84	578.84	.00	579.12	.29	.13	.12	578.40
750.	436.	308.	7.	267.	48.	6.	106.	76.	578.40
1.36	1.63	6.40	1.09	.060	.040	.060	.040	573.50	427.78
.008496	60.	50.	60.	20	9	0	.00	612.41	1135.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.00	1.40	2.60	.00	9.00	.00	37.80	.00	573.50	573.50

*SECNO 15.530

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.40	579.12	.00	584.	166.	38.	38.	577.70	577.80

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.53	5.71	579.21	.00	.00	579.26	.05	.13	.00	578.40
750.	535.	174.	40.	521.	51.	56.	106.	76.	578.40
1.36	1.03	3.40	.72	.060	.040	.060	.039	573.50	266.76
.002189	17.	17.	17.	2	0	5	.00	933.92	1250.27

1490 NH CARD USED

+SECNO 15.580

3470 ENCROACHMENT STATIONS= 680.0 1440.0 TYPE= 1 TARGET= 760.000

CROSS SECTION AG

15.58	5.49	579.29	.00	.00	579.31	.01	.04	.01	574.40
750.	504.	111.	135.	859.	57.	171.	107.	77.	574.40
1.38	.59	1.94	.79	.061	.040	.064	.039	573.80	680.00
.000307	60.	50.	60.	2	0	0	.00	760.00	1440.00

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  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
**************************************************

T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      MOUILLEE CREEK
T3      BERLIN, MOUILLEE CREEK   50-YEAR FLOOD

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.       5.        0.        0.   ,000000       ,00      -1.0       0.   570.900      ,000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     3,000      ,000    -1,000      ,000      ,000      ,000      ,000      ,000      ,000      ,000
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*PROF 3

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 8.400

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
8.40	5.40	570.90	.00	570.90	570.98	.08	.00	.00	571.70
590.	0.	590.	0.	0.	257.	0.	0.	0.	100000.00
.00	.00	2.29	.00	.000	.040	.000	.000	565.50	1029.20
.000811	0.	0.	0.	0	0	0	.00	79.80	1109.00

3470 ENCROACHMENT STATIONS= 1026.0 1118.0 TYPE= 1 TARGET= 92.000

CROSS SECTION AA

CCHV= .300 CEHV= .500
*SECNO 8.450

3301 HV CHANGED MORE THAN HVINS

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

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.45	2.56	570.66	570.66	.00	571.60	.94	.11	.43	570.60
590.	0.	590.	0.	0.	76.	0.	0.	0.	100000.00
.00	.00	7.79	.00	.100	.040	.100	.039	568.10	810.50
.020705	56.	50.	56.	3	14	0	.00	41.00	851.50

*SECNO 8.451

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

8.45	3.03	571.13	.00	.00	571.72	.59	.01	.11	570.60
590.	0.	586.	4.	0.	95.	3.	0.	0.	568.90
.00	.51	6.18	1.29	.100	.040	.100	.038	568.10	809.71
.009115	1.	1.	1.	6	0	0	.00	44.56	854.28

*SECNO 8.499

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

8.50	3.57	571.67	.00	.00	572.05	.38	.27	.06	570.60
590.	1.	584.	5.	1.	117.	5.	0.	0.	568.90
.00	.58	4.98	1.05	.100	.040	.100	.039	568.10	808.89
.004455	44.	44.	44.	2	0	0	.00	46.08	854.97

*SECNO 8.500

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

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.50	3.57	571.67	.00	.00	572.06	.39	.00	.00	570.60
590.	0.	590.	0.	0.	118.	0.	0.	0.	100000.00
.00	.00	5.02	.00	.100	.040	.100	.038	568.10	810.50
.005080	1.	1.	1.	0	0	0	.00	41.00	851.50

1490 NH CARD USED
*SECNO 8.550

3470 ENCROACHMENT STATIONS= 973.0 1128.0 TYPE= 1 TARGET= 155.000

CROSS SECTION AB

8.55	4.29	572.19	.00	.00	572.21	.03	.04	.11	571.70
590.	0.	590.	0.	0.	456.	0.	1.	0.	100000.00
.02	.00	1.29	.00	.100	.040	.100	.039	567.90	973.00
.000293	100.	50.	100.	2	0	0	.00	155.00	1128.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 10.350

3470 ENCROACHMENT STATIONS= 600.0 1824.0 TYPE= 1 TARGET= 1224.000

CROSS SECTION AC

10.35	1.97	573.37	.00	.00	573.51	.14	1.27	.03	572.10
590.	10.	570.	10.	12.	189.	18.	15.	7.	572.10
.19	.82	3.02	.59	.090	.040	.110	.040	571.40	1230.36
.003484	2000.	1800.	1540.	3	0	0	.00	160.05	1390.41

1490 NH CARD USED
*SECNO 11.970

CROSS SECTION AD

11.97	3.87	575.87	.00	.00	575.91	.04	2.38	.01	572.30
590.	293.	156.	140.	352.	60.	182.	29.	15.	572.30
.52	.83	2.62	.77	.085	.040	.083	.041	572.00	726.85
.000858	1280.	1620.	1800.	3	0	0	.00	335.70	1062.55

1490 NH CARD USED
*SECNO 13.190

3265 DIVIDED FLOW

CROSS SECTION AE

13.19	3.76	576.66	.00	.00	576.68	.02	.77	.00	573.10
590.	329.	119.	143.	494.	66.	193.	50.	32.	573.10
.93	.67	1.80	.74	.063	.040	.060	.039	572.90	288.99
.000414	1500.	1220.	1100.	4	0	0	.00	676.06	1023.01

1490 NH CARD USED
*SECNO 15.470

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 556.0 2386.0 TYPE= 1 TARGET= -556.000

CROSS SECTION AF

15.47	4.98	578.08	.00	.00	578.13	.06	1.44	.01	574.00
590.	363.	179.	49.	452.	54.	67.	85.	67.	574.00
1.34	.80	3.29	.72	.062	.040	.072	.040	573.10	620.24
.001062	2300.	2280.	2300.	2	0	0	.00	676.59	1432.46

CCHV= .300 CEHV= .500
*SECNO 15.520

3265 DIVIDED FLOW

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1135.0 TYPE= 1 TARGET= 1134.999

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.52	5.25	578.75	578.75	.00	579.02	.27	.13	.11	578.40
590.	309.	278.	4.	216.	47.	4.	85.	68.	578.40
1.34	1.43	5.88	.83	.060	.040	.060	.040	573.50	430.14
.007330	60.	50.	60.	20	9	0	.00	556.34	1135.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.00	1.40	2.60	.00	9.00	.00	37.80	.00	573.50	573.50

*SECNO 15.530

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
584.04	579.02	.00	448.	147.	38.	38.	577.70	577.80

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.53	5.50	579.00	.00	.00	579.08	.08	.06	.00	578.40
590.	383.	187.	21.	369.	50.	32.	85.	68.	578.40
1.35	1.04	3.77	.66	.060	.040	.060	.040	573.50	345.77
.002829	17.	17.	17.	2	0	4	.00	797.65	1220.94

1490 NH CARD USED

*SECNO 15.580

3470 ENCROACHMENT STATIONS= 680.0 1440.0 TYPE= 1 TARGET= 760.000

CROSS SECTION AG

15.58	5.32	579.12	.00	.00	579.13	.01	.04	.02	574.40
590.	382.	97.	112.	741.	55.	160.	86.	69.	574.40
1.37	.52	1.75	.70	.061	.040	.064	.039	573.80	680.00
.000260	60.	50.	60.	2	0	0	.00	760.00	1440.00

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  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
**************************************************

T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      MOUILLEE CREEK
T3      BERLIN, MOUILLEE CREEK   10-YEAR FLOOD

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.        6.        0.        0.   .000000       .00      -1.0        0.   570.900       .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

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

*PROF 4

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 8.400

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

3470 ENCROACHMENT STATIONS= 1026.0 1118.0 TYPE= 1 TARGET= 92.000

CROSS SECTION AA

8.40	5.40	570.90	.00	570.90	570.95	.05	.00	.00	571.70
440.	0.	440.	0.	0.	257.	0.	0.	0.	100000.00
.00	.00	1.71	.00	.000	.040	.000	.000	565.50	1029.20
.000451	0.	0.	0.	0	0	0	.00	79.80	1109.00

CCHV= .300 CEHV= .500
*SECNO 8.450

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.45	2.65	570.75	.00	.00	571.22	.48	.06	.22	570.60
440.	0.	440.	0.	0.	79.	0.	0.	0.	100000.00
.00	.00	5.54	.00	.100	.040	.100	.039	568.10	810.50
.009876	56.	50.	56.	2	0	0	.00	41.00	851.50

*SECNO 8.451

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

8.45	2.69	570.79	.00	.00	571.24	.45	.01	.01	570.60
440.	0.	437.	3.	0.	81.	2.	0.	0.	568.90
.00	.01	5.39	1.12	.100	.040	.100	.038	568.10	810.21
.008500	1.	1.	1.	2	0	0	.00	43.66	853.87

*SECNO 8.499

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

8.50	3.15	571.25	.00	.00	571.54	.29	.26	.05	570.60
440.	0.	437.	3.	0.	100.	3.	0.	0.	568.90
.01	.40	4.37	.91	.100	.040	.100	.039	568.10	809.53
.004250	44.	44.	44.	2	0	0	.00	44.91	854.44

*SECNO 8.500

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

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.50	3.15	571.25	.00	.00	571.55	.30	.00	.00	570.60
440.	0.	440.	0.	0.	100.	0.	0.	0.	100000.00
.01	.00	4.39	.00	.100	.040	.100	.038	568.10	810.50
.004699	1.	1.	1.	0	0	0	.00	41.00	851.50

1490 NH CARD USED
*SECNO 8.550

3470 ENCROACHMENT STATIONS= 973.0 1128.0 TYPE= 1 TARGET= 155.000

CROSS SECTION AB

8.55	3.75	571.65	.00	.00	571.67	.02	.04	.08	571.70
440.	0.	440.	0.	0.	374.	0.	1.	0.	100000.00
.02	.00	1.18	.00	.100	.040	.100	.039	567.90	973.49
.000313	100.	50.	100.	2	0	0	.00	154.51	1128.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 10.350

3470 ENCROACHMENT STATIONS= 600.0 1824.0 TYPE= 1 TARGET= 1224.000

CROSS SECTION AC

10.35	1.60	573.00	.00	.00	573.14	.13	1.43	.03	572.10
440.	4.	431.	5.	6.	145.	9.	12.	6.	572.10
.19	.67	2.97	.55	.090	.040	.110	.040	571.40	1232.45
.004816	2000.	1800.	1540.	3	0	0	.00	149.91	1382.36

1490 NH CARD USED
*SECNO 11.970

CROSS SECTION AD

11.97	3.58	575.58	.00	.00	575.61	.03	2.47	.01	572.30
440.	213.	129.	98.	297.	55.	144.	23.	15.	572.30
.55	.72	2.35	.68	.086	.040	.084	.041	572.00	734.34
.000778	1280.	1620.	1800.	4	0	0	.00	314.41	1048.75

1490 NH CARD USED
*SECNO 13.190

3265 DIVIDED FLOW

CROSS SECTION AE

13.19	3.44	576.34	.00	.00	576.36	.02	.74	.00	573.10
440.	232.	103.	105.	357.	60.	156.	40.	28.	573.10
.96	.65	1.70	.68	.063	.040	.060	.040	572.90	398.67

.000419	1500.	1220.	1100.	4	0	0	.00	502.64	1013.80

1490 NH CARD USED
*SECNO 15.470

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 556.0 2386.0 TYPE= 1 TARGET= -556.000

CROSS SECTION AF

15.47	4.71	577.81	.00	.00	577.88	.07	1.51	.02	574.00
440.	237.	170.	33.	306.	51.	50.	65.	56.	574.00
1.33	.77	3.33	.66	.062	.040	.076	.040	573.10	628.43
.001181	2300.	2280.	2300.	2	0	0	.00	587.44	1424.92

CCHV= .300 CEHV= .500
*SECNO 15.520

3265 DIVIDED FLOW

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1135.0 TYPE= 1 TARGET= 1134.999

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.52	5.13	578.63	578.63	.00	578.89	.26	.13	.09	578.40
440.	191.	247.	1.	157.	46.	2.	66.	57.	578.40
1.33	1.22	5.36	.51	.060	.040	.060	.040	573.50	433.24
.006285	60.	50.	60.	20	9	0	.00	482.97	1135.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.00	1.40	2.60	.00	9.00	.00	37.80	.00	573.50	573.50

*SECNO 15.530
6870 D.S. ENERGY OF 578.89 HIGHER THAN COMPUTED ENERGY OF 578.87

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
581.57	578.89	.00	313.	127.	38.	38.	577.70	577.80

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.53	5.24	578.74	.00	.00	578.89	.15	.00	.00	578.40
440.	227.	209.	4.	212.	47.	9.	66.	57.	578.40
1.33	1.07	4.43	.46	.060	.040	.060	.040	573.50	430.36
.004173	17.	17.	17.	3	0	4	.00	599.82	1183.69

1490 NH CARD USED
*SECNO 15.580

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 680.0 1440.0 TYPE= 1 TARGET= 760.000

CROSS SECTION AG

15.58	5.15	578.95	.00	.00	578.96	.01	.03	.04	574.40
440.	273.	80.	88.	626.	53.	150.	67.	58.	574.40
1.36	.44	1.49	.58	.061	.040	.065	.040	573.80	680.00
.000198	60.	50.	60.	2	0	0	.00	747.85	1440.00

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Mouillee

4) DOCUMENT TYPE: 100 yr.

00BREAK00

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**********************************************
*  WATER SURFACE PROFILES                    *
*  VERSION OF NOVEMBER 1976                  *
*  UPDATED JULY 1979                         *
*                                            *
*  RUN DATE FRI, JUL 18, 1980, 11:02 AM      *
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*  U.S. ARMY CORPS OF ENGINEERS  *
*  THE HYDROLOGIC ENGINEERING CENTER *
*  609 SECOND STREET, SUITE D    *
*  DAVIS, CALIFORNIA 95616       *
*  (916) 440-2105 (FTS) 448-2105 *
**********************************
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BERLIN TOWNSHIP
MOUILLEE CREEK
JULY 18, 1980

100 - YEAR FLOOD AND
FLOODWAY

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**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
**********************************************

C
T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      MOUILLEE CREEK
T3      BERLIN, MOUILLEE CREEK  100-YEAR FLOOD

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ
        0.       2.         0.         0.   .000000        .00      -1.0         0.    570.900       .000

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

NC      .100       .100       .040       .100       .300       .000       .000       .000       .000       .000
QT     5.000   650.000    650.000    750.000    590.000    440.000       .000       .000       .000       .000
NH     4.000       .075    238.000       .050   1026.000       .040   1118.000       .075   2304.000       .000

      CROSS SECTION AA

X1     8.400    61.000  1026.000  1118.000      .000      .000      .000      .000      .000      .000
X3      .000      .000      .000  1026.000      .000  1118.000      .000      .000      .000      .000
GR   576.000      .000   577.600    46.000   577.700    92.000   577.400   146.000   577.200   200.000
GR   576.600   238.000   576.400   294.000   576.000   354.000   576.000   402.000   575.800   460.000
GR   576.000   516.000   576.800   556.000   577.300   586.000   577.200   628.000   576.600   662.000
GR   576.400   690.000   576.200   740.000   576.400   774.000   576.400   836.000   575.800   886.000
GR   575.600   916.000   576.400   940.000   576.700   980.000   575.900  1012.000   574.000  1014.000
GR   571.700  1026.000   570.200  1032.000   568.000  1042.000   565.700  1052.000   565.500  1062.000
GR   565.700  1072.000   567.000  1082.000   568.800  1092.000   570.200  1102.000   571.200  1112.000
GR   571.700  1118.000   573.100  1218.000   579.000  1242.000   578.800  1292.000   578.100  1344.000
GR   578.000  1396.000   578.800  1452.000   578.800  1518.000   578.200  1606.000   578.800  1650.000
GR   577.500  1710.000   576.800  1762.000   575.600  1768.000   575.600  1824.000   576.900  1856.000
GR   575.400  1914.000   576.000  1994.000   576.000  2062.000   576.200  2114.000   576.400  2142.000
GR   577.000  2158.000   577.000  2186.000   576.900  2206.000   576.900  2250.000   576.100  2292.000
GR   573.800  2304.000      .000     .000       .000     .000       .000     .000       .000     .000
NC      .000      .000      .000     .300       .500     .000       .000      000       .000     .000

      CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

X1     8.450    25.000   810.500   851.500    56.000    56.000    50.000      .000      .000      .000
X3      .000      .000      .000   810.500      .000   851.500      .000      .000      .000      .000
GR   577.100      .000   577.200    82.000   577.000   184.000   576.700   270.000   576.400   362.000
GR   577.200   464.000   578.000   588.000   578.600   722.000   578.200   800.000   577.600   800.000
GR   570.600   810.500   568.800   820.700   568.600   831.000   568.100   841.200   568.900   851.500
GR   577.300   862.000   578.200   862.000   578.000   930.000   577.000  1060.000   576.400  1248.000
GR   576.200  1388.000   576.800  1562.000   577.000  1708.000   577.800  1848.000   578.600  1938.000

X1     8.451      .000      .000      .000     1.000     1.000     1.000      .000      .000      .000
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X2	.000	.000	.000	574.700	578.200	.000	.000	.000	.000	.000
X3	.000	.000	.000	810.500	.000	851.500	.000	.000	.000	.000
X1	8.499	.000	.000	.000	44.000	44.000	44.000	.000	.000	.000
X2	.000	.000	.000	574.700	578.200	.000	.000	.000	.000	.000
X3	.000	.000	.000	810.500	.000	851.500	.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

X1	8.500	.000	.000	.000	1.000	1.000	1.000	.000	.000	.000
X3	.000	.000	.000	810.500	.000	851.500	.000	.000	.000	.000
NH	5.000	.070	378.000	.100	973.000	.040	1188.000	.080	1376.000	.060
NH	2170.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AB

X1	8.550	64.000	973.000	1128.000	100.000	100.000	50.000	.000	.000	.000
X3	.000	.000	.000	973.000	.000	1128.000	.000	.000	.000	.000
GR	575.600	.000	576.400	16.000	576.600	56.000	577.200	102.000	577.300	166.000
GR	577.000	208.000	576.400	258.000	576.400	276.000	576.400	312.000	575.800	344.000
GR	575.600	378.000	576.000	418.000	576.800	440.000	576.000	472.000	576.000	510.000
GR	576.200	536.000	577.400	554.000	577.400	564.000	577.400	594.000	577.700	630.000
GR	577.700	670.000	575.800	692.000	575.100	726.000	574.800	784.000	574.800	838.000
GR	575.100	888.000	573.000	892.000	571.700	973.000	570.200	988.000	568.700	1008.000
GR	568.000	1028.000	567.900	1048.000	569.000	1068.000	569.800	1088.000	569.700	1108.000
GR	570.400	1128.000	570.700	1148.000	570.200	1168.000	571.700	1188.000	573.300	1203.000
GR	579.600	1330.000	579.000	1352.000	576.800	1376.000	576.400	1424.000	575.800	1514.000
GR	575.200	1580.000	574.800	1638.000	574.800	1694.000	575.400	1742.000	575.400	1812.000
GR	575.800	1890.000	576.000	1962.000	576.200	2026.000	576.400	2078.000	576.600	2112.000
GR	575.800	2122.000	578.400	2134.000	578.300	2164.000	575.900	2170.000	.000	.000
NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	1240.000	1385.000
NH	5.000	.060	1150.000	.090	1246.000	.040	1363.000	.110	1662.000	.060
NH	2942.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AC

X1	10.350	64.000	1246.000	1363.000	2000.000	1540.000	1800.000	.000	.000	.000
GR	575.800	.000	575.000	46.000	574.200	104.000	573.600	170.000	574.500	226.000
GR	574.600	276.000	575.600	332.000	575.000	388.000	575.200	450.000	576.000	522.000
GR	576.400	600.000	576.200	674.000	575.700	768.000	574.800	828.000	575.800	906.000
GR	576.400	992.000	576.500	1062.000	575.800	1104.000	576.600	1150.000	574.800	1166.000
GR	575.000	1202.000	574.400	1228.000	573.100	1231.000	572.100	1246.000	572.100	1268.000
GR	571.800	1288.000	571.400	1308.000	571.400	1328.000	571.800	1348.000	572.100	1363.000
GR	573.500	1393.000	574.500	1428.000	575.700	1478.000	574.200	1506.000	575.000	1546.000
GR	576.400	1564.000	575.600	1598.000	574.800	1662.000	574.000	1730.000	575.400	1774.000
GR	576.000	1824.000	575.800	1876.000	575.400	1938.000	576.000	1984.000	576.500	2062.000
GR	577.100	2138.000	577.200	2202.000	576.900	2262.000	576.600	2306.000	576.000	2348.000
GR	576.600	2404.000	577.300	2480.000	577.400	2556.000	577.400	2620.000	578.200	2680.000
GR	578.700	2716.000	578.400	2754.000	579.000	2800.000	579.400	2820.000	578.400	2868.000
GR	578.000	2898.000	579.000	2910.000	579.000	2934.000	577.400	2942.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	760.000	1000.000
NH	5.000	.060	806.000	.100	913.000	.040	929.000	.085	1018.000	.060
NH	1914.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AD

X1	11.970	36.000	913.000	929.000	1280.000	1800.000	1620.000	.000	.000	.000
GR	578.800	.000	578.500	50.000	579.000	106.000	578.600	192.000	578.600	278.000
GR	577.600	382.000	577.400	460.000	577.000	532.000	577.000	586.000	577.000	660.000
GR	576.400	714.000	574.700	756.000	573.400	806.000	573.400	834.000	574.200	868.000
GR	573.600	898.000	572.300	913.000	572.000	921.000	572.300	929.000	573.500	948.000
GR	574.300	968.000	574.900	1018.000	576.000	1068.000	577.600	1070.000	577.800	1130.000
GR	578.000	1192.000	578.200	1254.000	577.900	1330.000	578.000	1422.000	578.400	1500.000
GR	578.200	1586.000	578.800	1664.000	579.000	1732.000	578.600	1788.000	578.500	1840.000
GR	578.600	1914.000	.000	.000	.000	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	590.000	990.000
NH	4.000	.060	860.000	.085	882.000	.040	900.000	.060	1704.000	.000

CROSS SECTION AE

X1	13.190	33.000	882.000	900.000	1500.000	1100.000	1220.000	.000	.000	.000
GR	578.600	.000	578.000	66.000	577.600	152.000	577.300	222.000	576.600	296.000
GR	576.600	362.000	576.100	436.000	577.000	528.000	576.300	578.000	575.800	626.000
GR	576.000	682.000	575.400	742.000	574.400	792.000	574.100	832.000	573.800	860.000
GR	574.900	876.000	573.100	882.000	572.900	891.000	573.100	900.000	574.800	902.000
GR	574.300	936.000	575.200	980.000	576.700	1024.000	578.000	1058.000	578.900	1108.000
GR	579.200	1158.000	579.000	1224.000	579.400	1298.000	579.400	1372.000	579.000	1486.000
GR	579.200	1580.000	579.600	1658.000	579.200	1704.000	.000	.000	.000	.000
NH	5.000	.060	1346.000	.120	1351.000	.040	1363.000	.120	1369.000	.060
NH	2386.000	.000	.000	.000	.000	.000	.000	.000	.000	000

CROSS SECTION AF

X1	15.470	51.000	1351.000	1363.000	2300.000	2300.000	2280.000	.000	.000	.000
X3	.000	.000	.000	700.000	.000	1400.000	.000	.000	.000	.000
GR	579.600	.000	581.400	6.000	581.400	10.000	581.400	50.000	581.200	86.000
GR	581.400	130.000	580.600	156.000	581.200	180.000	581.600	204.000	581.600	246.000
GR	580.500	274.000	579.500	292.000	579.900	340.000	579.700	398.000	579.600	446.000
GR	578.800	478.000	578.500	512.000	579.500	556.000	578.600	604.000	576.600	666.000
GR	577.400	720.000	577.500	780.000	577.600	856.000	577.800	946.000	578.400	1024.000
GR	578.100	1114.000	577.600	1188.000	576.400	1244.000	576.000	1286.000	577.400	1318.000
GR	576.600	1346.000	574.000	1351.000	573.100	1357.000	574.000	1363.000	577.200	1369.000
GR	576.800	1396.000	578.200	1436.000	579.800	1488.000	580.100	1544.000	579.800	1604.000
GR	579.400	1652.000	579.600	1684.000	579.700	1746.000	580.200	1844.000	580.200	1928.000
GR	579.900	1982.000	580.200	2046.000	579.900	2114.000	580.400	2202.000	580.600	2302.000
GR	581.200	2386.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.060	.060	.040	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

X1	15.520	32.000	1107.700	1116.700	60.000	60.000	50.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	1135.000	.000	.000	.000	.000
GR	580.400	.000	579.400	62.000	579.400	116.000	579.600	184.000	579.200	268.000
GR	579.000	346.000	579.400	390.000	579.600	408.000	578.600	434.000	578.400	510.000
GR	578.600	604.000	579.000	714.000	578.600	840.000	578.000	966.000	577.800	1062.000
GR	578.400	1106.000	578.400	1107.700	573.500	1107.700	573.500	1116.700	578.400	1116.700
GR	578.400	1118.500	578.500	1120.000	578.700	1178.000	579.400	1278.000	579.500	1336.000
GR	579.800	1416.000	579.800	1530.000	580.400	1646.000	580.400	1770.000	580.700	1908.000
GR	581.300	2030.000	581.200	2110.000	.000	.000	.000	.000	.000	.000
SB	.000	1.400	2.600	.000	9.000	.000	37.800	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

X1	15.530	.000	.000	.000	17.000	17.000	17.000	.000	.000	.000
X2	.000	.000	1.000	577.700	577.800	.000	.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	1240.000	.000	.000	.000	.000
BT	12.000	966.000	578.000	578.000	1062.000	577.800	577.800	1106.000	578.400	578.400
BT	1106.000	580.400	578.400	1107.700	580.400	578.400	1107.700	580.400	577.700	1116.700
BT	580.400	577.700	1116.700	580.400	578.400	1118.500	580.400	578.400	1118.500	578.400
BT	578.400	1120.000	578.500	578.500	1178.000	578.700	578.700	.000	.000	.000
NH	5.000	.060	1366.000	.120	1369.000	.040	1380.000	.120	1385.000	.060
NH	2390.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AG

X1	15.580	46.000	1369.000	1380.000	60.000	60.000	50.000	.000	.000	.000
X3	.000	.000	.000	700.000	.000	1440.000	.000	.000	.000	.000
GR	579.600	.000	581.000	8.000	581.000	74.000	580.400	170.000	580.300	250.000
GR	580.300	324.000	579.000	386.000	578.400	470.000	578.600	540.000	577.900	586.000
GR	577.600	634.000	577.800	670.000	575.400	678.000	575.400	684.000	577.400	694.000
GR	578.400	768.000	579.000	848.000	578.600	902.000	578.800	974.000	578.700	1050.000
GR	578.400	1108.000	577.600	1184.000	577.100	1236.000	576.800	1294.000	577.300	1332.000
GR	576.700	1366.000	574.400	1369.000	573.800	1374.000	574.400	1380.000	576.500	1385.000
GR	576.600	1422.000	576.400	1448.000	577.700	1496.000	579.400	1530.000	580.400	1584.000
GR	580.400	1640.000	579.600	1696.000	579.600	1748.000	579.600	1812.000	580.000	1898.000
GR	580.800	1994.000	580.800	2098.000	580.900	2174.000	581.300	2252.000	581.200	2324.000
GR	581.600	2390.000	.000	.000	.000	.000	.000	.000	.000	.000
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

*PROF 1

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 8.400

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

3470 ENCROACHMENT STATIONS= 1026.0 1118.0 TYPE= 1 TARGET= 92.000

CROSS SECTION AA

8.40	5.40	570.90	.00	570.90	571.00	.10	.00	.00	571.70
650.	0.	650.	0.	0.	257.	0.	0.	0.	100000.00
.00	.00	2.52	.00	.000	.040	.000	.000	565.50	1029.20
.000985	0.	0.	0.	0	0	0	.00	79.80	1109.00

CCHV= .300 CEHV= .500
*SECNO 8.450

3301 HV CHANGED MORE THAN HVINS

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.45	2.68	570.78	570.78	.00	571.79	1.01	.13	.45	570.60
650.	0.	650.	0.	0.	81.	0.	0.	0.	100000.00
.00	.00	8.05	.00	.100	.040	.100	.039	568.10	810.50
.020420	56.	50.	56.	20	8	0	.00	41.00	851.50

*SECNO 8.451

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

8.45	3.14	571.24	.00	.00	571.90	.66	.01	.10	570.60
650.	0.	650.	0.	0.	100.	0.	0.	0.	100000.00
.00	.00	6.52	.00	.100	.040	.100	.038	568.10	810.50
.010417	1.	1.	1.	8	0	0	.00	41.00	851.50

*SECNO 8.499

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

8.50	3.77	571.87	.00	.00	572.29	.42	.31	.07	570.60
650.	0.	650.	0.	0.	125.	0.	0.	0.	100000.00
.00	.00	5.19	.00	.100	.040	.100	.039	568.10	810.50
.005036	44.	44.	44.	2	0	0	.00	41.00	851.50

*SECNO 8.500

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

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.50	3.78	571.88	.00	.00	572.29	.42	.01	.00	570.60
650.	0.	650.	0.	0.	126.	0.	0.	0.	100000.00
.00	.00	5.17	.00	.100	.040	.100	.038	568.10	810.50
.004997	1.	1.	1.	.0	0	0	.00	41.00	851.50

1490 NH CARD USED

*SECNO 8.550

3470 ENCROACHMENT STATIONS= 973.0 1128.0 TYPE= 1 TARGET= 155.000

CROSS SECTION AB

8.55	4.52	572.42	.00	.00	572.44	.03	.04	.12	571.70
650.	0.	650.	0.	0.	492.	0.	1.	0.	100000.00
.01	.00	1.32	.00	.100	.040	.100	.039	567.90	973.00
.000277	100.	50.	100.	2	0	0	.00	155.00	1128.00

CCHV= .100 CEHV= .300

1490 NH CARD USED

*SECNO 10.350

CROSS SECTION AC

10.35	2.13	573.53	.00	.00	573.66	.14	1.19	.03	572.10
650.	12.	625.	13.	14.	206.	22.	16.	7.	572.10
.18	.87	3.04	.61	.090	.040	.110	.040	571.40	1230.02
.003145	2000.	1800.	1540.	3	0	0	.00	163.79	1393.81

1490 NH CARD USED

*SECNO 11.970

CROSS SECTION AD

11.97	3.99	575.99	.00	.00	576.02	.04	2.35	.01	572.30
650.	325.	166.	158.	372.	61.	197.	31.	16.	572.30

.51	.87	2.71	.80	.085	.040	.083	.041	572.00	724.18
.000885	1280.	1620.	1800.	3	0	0	.00	343.28	1067.46

1490 NH CARD USED
*SECNO 13.190

3265 DIVIDED FLOW

CROSS SECTION AE

13.19	3.88	576.78	.00	.00	576.80	.02	.77	.00	573.10
650.	370.	123.	157.	558.	68.	208.	54.	33.	573.10
.92	.66	1.81	.75	.062	.040	.060	.039	572.90	276.62
.000404	1500.	1220.	1100.	4	0	0	.00	711.92	1026.18

1490 NH CARD USED
*SECNO 15.470

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 700.0 1400.0 TYPE= 1 TARGET= 700.000

CROSS SECTION AF

15.47	5.12	578.22	.00	.00	578.29	.07	1.48	.02	574.00
650.	403.	199.	48.	453.	56.	54.	91.	68.	574.00
1.30	.89	3.55	.89	.062	.040	.075	.040	573.10	700.00
.001186	2300.	2280.	2300.	1	0	0	.00	621.06	1400.00

CCHV= .300 CEHV= .500
*SECNO 15.520

3265 DIVIDED FLOW

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1135.0 TYPE= 1 TARGET= 1134.999

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.52	5.28	578.78	578.78	.00	579.06	.28	.14	.11	578.40
650.	355.	291.	5.	234.	48.	5.	91.	69.	578.40

1.30	1.51	6.11	.93	.060	.040	.060	.040	573.50	429.27
.007963	60.	50.	60.	20	9	0	.00	577.13	1135.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XR	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.00	1.40	2.60	.00	9.00	.00	37.80	.00	573.50	573.50

+SECNO 15.530

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
585.21	579.06	.00	496.	154.	38.	38.	577.70	577.80

3470 ENCROACHMENT STATIONS= .0 1240.0 TYPE= 1 TARGET= 1239.999

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.53	5.57	579.07	.00	.00	579.14	.07	.08	.00	578.40
650.	440.	183.	27.	422.	50.	40.	91.	69.	578.40
1.30	1.04	3.65	.69	.060	.040	.060	.040	573.50	316.50
.002602	17.	17.	17.	2	0	5	.00	847.86	1231.66

1490 NH CARD USED
*SECNO 15.580

3470 ENCROACHMENT STATIONS= 700.0 1440.0 TYPE= 1 TARGET= 740.000

CROSS SECTION AG

15.58	5.39	579.19	.00	.00	579.20	.01	.04	.02	574.40
650.	413.	109.	128.	731.	56.	164.	92.	70.	574.40
1.32	.56	1.95	.78	.061	.040	.064	.039	573.80	700.00
.000317	60.	50.	60.	2	0	0	.00	740.00	1440.00

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  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  EPROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
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T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & MOPKS
T2      TOWNSHIP OF BERLIN      MOUILLEE CREEK
T3      BERLIN, MOUILLEE CREEK  100-YEAR FLOOD W/ENCR.

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
        0.       3.        0.        0.   ,000000       ,00     -1.0        0.    570.900      ,000

J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
   15.000       ,000    -1.000       ,000      ,000      ,000      ,000      ,000      ,000      ,000
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*PROF 2

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 8.400

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

3470 ENCROACHMENT STATIONS= 1026.0 1118.0 TYPE= 1 TARGET= 92.000

CROSS SECTION AA

8.40	5.40	570.90	.00	570.90	571.00	.10	.00	.00	571.70
650.	0.	650.	0.	0.	257.	0.	0.	0.	100000.00
.00	.00	2.52	.00	.000	.040	.000	.000	565.50	1029.20
.000985	0.	0.	0.	0	0	0	.00	79.80	1109.00

CCHV= .300 CEHV= .500
*SECNO 8.450

3301 HV CHANGED MORE THAN HVINS

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT DOWNSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.45	2.68	570.78	570.78	.00	571.79	1.01	.13	.45	570.60
650.	0.	650.	0.	0.	81.	0.	0.	0.	100000.00
.00	.00	8.05	.00	.100	.040	.100	.039	568.10	810.50
.020420	56.	50.	56.	20	8	0	.00	41.00	851.50

*SECNO 8.451

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

8.45	3.14	571.24	.00	.00	571.90	.66	.01	.10	570.60
650.	0.	650.	0.	0.	100.	0.	0.	0.	100000.00
.00	.00	6.52	.00	.100	.040	.100	.038	568.10	810.50
.010417	1.	1.	1.	8	0	0	.00	41.00	851.50

*SECNO 8.499

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 578.20 MAX ELLC= 574.70

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

8.50	3.77	571.87	.00	.00	572.29	.42	.31	.07	570.60
650.	0.	650.	0.	0.	125.	0.	0.	0.	100000.00
.00	.00	5.19	.00	.100	.040	.100	.039	568.10	810.50
.005036	44.	44.	44.	2	0	0	.00	41.00	851.50

*SECNO 8.500

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

3470 ENCROACHMENT STATIONS= 810.5 851.5 TYPE= 1 TARGET= 41.000

CROSS SECTION AT UPSTREAM FACE OF DIXIE HIGHWAY BRIDGE

8.50	3.78	571.88	.00	.00	572.29	.42	.01	.00	570.60
650.	0.	650.	0.	0.	126.	0.	0.	0.	100000.00
.00	.00	5.17	.00	.100	.040	.100	.038	568.10	810.50
.004997	1.	1.	1.	0	0	0	.00	41.00	851.50

1490 NH CARD USED

*SECNO 8.550

3470 ENCROACHMENT STATIONS= 973.0 1128.0 TYPE= 1 TARGET= 155.000

CROSS SECTION AB

8.55	4.52	572.42	.00	.00	572.44	.03	.04	.12	571.70
650.	0.	650.	0.	0.	492.	0.	1.	0.	100000.00
.01	.00	1.32	.00	.100	.040	100	.039	567.90	973.00
.000277	100.	50.	100.	2	0	0	.00	155.00	1128.00

CCHV= .100 CEHV= .300

1490 NH CARD USED

*SECNO 10.350

3470 ENCROACHMENT STATIONS= 1240.0 1385.0 TYPE= 1 TARGET= 145.000

CROSS SECTION AC

10.35	2.12	573.52	.00	573.53	573.66	.14	1.18	.03	572.10
650.	7.	629.	14.	7.	207.	20.	16.	6.	572.10
.18	.96	3.04	.71	.090	.040	.110	.040	571.40	1240.00
.003143	2000.	1800.	1540.	3	0	0	.00	145.00	1385.00

1490 NH CARD USED

*SECNO 11.970

3470 ENCROACHMENT STATIONS= 760.0 1000.0 TYPE= 1 TARGET= 240.000

CROSS SECTION AD

11.97	4.05	576.05	.00	575.99	576.09	.04	2.42	.01	572.30
650.	332.	176.	142.	358.	63.	153.	30.	13.	572.30
.48	.93	2.81	.93	.086	.040	.085	.041	572.00	760.00
.000929	1280.	1620.	1800.	2	0	0	.00	240.00	1000.00

1490 NH CARD USED
*SECNO 13.190

3470 ENCROACHMENT STATIONS= 590.0 990.0 TYPE= 1 TARGET= 400.000

CROSS SECTION AE

13.19	3.96	576.86	.00	576.78	576.87	.02	.78	.00	573.10
650.	368.	126.	156.	495.	69.	192.	50.	23.	573.10
.87	.74	1.81	.81	.063	.040	.060	.039	572.90	590.00
.000394	1500.	1220.	1100.	4	0	0	.00	400.00	990.00

1490 NH CARD USED
*SECNO 15.470

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 700.0 1400.0 TYPE= 1 TARGET= 700.000

CROSS SECTION AF

15.47	5.14	578.24	.00	578.22	578.31	.06	1.42	.01	574.00
650.	408.	194.	48.	469.	56.	55.	86.	51.	574.00
1.26	.87	3.44	.88	.062	.040	.074	.040	573.10	700.00
.001110	2300.	2280.	2300.	2	0	0	.00	633.17	1400.00

CCHV= .300 CEHV= .500
*SECNO 15.520

3265 DIVIDED FLOW

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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 1135.0 TYPE= 1 TARGET= 1134.999

CROSS SECTION AT DOWNSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.52	5.28	578.78	578.78	578.78	579.06	.28	.13	.11	578.40
650.	355.	290.	5.	235.	48.	5.	86.	51.	578.40
1.26	1.51	6.11	.93	.060	.040	.060	.040	573.50	429.25
.007844	60.	50.	60.	20	9	0	.00	577.53	1135.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB Xk	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
.00	1.40	2.60	.00	9.00	.00	37.80	.00	573.50	573.50

*SECNO 15.530

3265 DIVIDED FLOW

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
585.21	579.06	.00	496.	154.	38.	38.	577.70	577.80

3470 ENCROACHMENT STATIONS= .0 1240.0 TYPE= 1 TARGET= 1239.999

CROSS SECTION AT UPSTREAM FACE OF HAGERMAN ROAD BRIDGE

15.53	5.57	579.07	.00	579.07	579.14	.07	.08	.00	578.40
650.	440.	183.	27.	422.	50.	40.	86.	52.	578.40
1.27	1.04	3.64	.69	.060	.040	.060	.040	573.50	316.37
.002599	17.	17.	17.	2	0	5	.00	848.06	1231.71

1490 NH CARD USED
*SECNO 15.580

3470 ENCROACHMENT STATIONS= 700.0 1440.0 TYPE= 1 TARGET= 740.000

CROSS SECTION AG

15.58	5.39	579.19	.00	579.19	579.20	.01	.04	.02	574.40
650.	413.	109.	128.	731.	56.	164.	87.	53.	574.40
1.28	.56	1.95	.78	.061	.040	.064	.039	573.80	700.00
.000317	60.	50.	60.	2	0	0	.00	740.00	1440.00

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  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

BERLIN, MOUILLEE CREEK

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	8.400	.00	.00	.00	565.50	650.00	570.90	.00	571.00	9.85	2.52	257.43	207.13
	8.400	.00	.00	.00	565.50	650.00	570.90	.00	571.00	9.85	2.52	257.43	207.13
*	8.450	50.00	.00	.00	568.10	650.00	570.78	570.78	571.79	204.20	8.05	80.76	45.49
*	8.450	50.00	.00	.00	568.10	650.00	570.78	570.78	571.79	204.20	8.05	80.76	45.49
	8.451	1.00	578.20	574.70	568.10	650.00	571.24	.00	571.90	104.17	6.52	99.67	63.69
	8.451	1.00	578.20	574.70	568.10	650.00	571.24	.00	571.90	104.17	6.52	99.67	63.69
	8.499	44.00	578.20	574.70	568.10	650.00	571.87	.00	572.29	50.36	5.19	125.35	91.60
	8.500	1.00	.00	.00	568.10	650.00	571.88	.00	572.29	49.97	5.17	125.66	91.96
	8.500	1.00	.00	.00	568.10	650.00	571.88	.00	572.29	49.97	5.17	125.66	91.96
	8.550	50.00	.00	.00	567.90	650.00	572.42	.00	572.44	2.77	1.32	492.47	390.50
	8.550	50.00	.00	.00	567.90	650.00	572.42	.00	572.44	2.77	1.32	492.47	390.50
	10.350	1800.00	.00	.00	571.40	650.00	573.53	.00	573.66	31.45	3.04	241.53	115.91
	10.350	1800.00	.00	.00	571.40	650.00	573.52	.00	573.66	31.43	3.04	234.19	115.95
	11.970	1620.00	.00	.00	572.00	650.00	575.99	.00	576.02	8.85	2.71	630.62	218.47
	11.970	1620.00	.00	.00	572.00	650.00	576.05	.00	576.09	9.29	2.81	573.49	213.29
	13.190	1220.00	.00	.00	572.90	650.00	576.78	.00	576.80	4.04	1.81	834.18	323.57
	13.190	1220.00	.00	.00	572.90	650.00	576.86	.00	576.87	3.94	1.81	756.28	327.39
	15.470	2280.00	.00	.00	573.10	650.00	578.22	.00	578.29	11.86	3.55	562.73	188.76
	15.470	2280.00	.00	.00	573.10	650.00	578.24	.00	578.31	11.10	3.44	580.38	195.13
+	15.520	50.00	.00	.00	573.50	650.00	578.78	578.78	579.06	78.63	6.11	286.78	73.30
+	15.520	50.00	.00	.00	573.50	650.00	578.78	578.78	579.06	78.44	6.11	287.16	73.39
	15.530	17.00	577.80	577.70	573.50	650.00	579.07	.00	579.14	26.02	3.65	511.96	127.42
	15.530	17.00	577.80	577.70	573.50	650.00	579.07	.00	579.14	25.99	3.64	512.22	127.49
	15.580	50.00	.00	.00	573.80	650.00	579.19	.00	579.20	3.17	1.95	950.71	364.96
	15.580	50.00	.00	.00	573.80	650.00	579.19	.00	579.20	3.17	1.95	950.84	365.02

BERLIN, MOUILLEE CREEK

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	8.400	650.00	570.90	.00	.00	.00	79.80	.00
	8.400	650.00	570.90	.00	.00	.00	79.80	.00
*	8.450	650.00	570.78	.00	-.12	.00	41.00	50.00
*	8.450	650.00	570.78	.00	-.12	.00	41.00	50.00
	8.451	650.00	571.24	.00	.46	.00	41.00	1.00
	8.451	650.00	571.24	.00	.46	.00	41.00	1.00
	8.499	650.00	571.87	.00	.62	.00	41.00	44.00
	8.499	650.00	571.87	.00	.62	.00	41.00	44.00
	8.500	650.00	571.88	.00	.01	.00	41.00	1.00
	8.500	650.00	571.88	.00	.01	.00	41.00	1.00
	8.550	650.00	572.42	.00	.54	.00	155.00	50.00
	8.550	650.00	572.42	.00	.54	.00	155.00	50.00
	10.350	650.00	573.53	.00	1.11	.00	163.79	1800.00
	10.350	650.00	573.52	-.00	1.11	-.00	145.00	1800.00
	11.970	650.00	575.99	.00	2.46	.00	343.28	1620.00
	11.970	650.00	576.05	.06	2.53	.06	240.00	1620.00
	13.190	650.00	576.78	.00	.80	.00	711.92	1220.00
	13.190	650.00	576.86	.07	.80	.07	400.00	1220.00
	15.470	650.00	578.22	.00	1.44	.00	621.06	2280.00
	15.470	650.00	578.24	.02	1.39	.02	633.17	2280.00
*	15.520	650.00	578.78	.00	.56	.00	577.13	50.00
*	15.520	650.00	578.78	.00	.54	.00	577.53	50.00
	15.530	650.00	579.07	.00	.29	.00	847.86	17.00
	15.530	650.00	579.07	.00	.29	.00	848.06	17.00
	15.580	650.00	579.19	.00	.11	.00	740.00	50.00
	15.580	650.00	579.19	.00	.11	.00	740.00	50.00

SUMMARY OF ERRORS

CAUTION	SECNO=	8.450	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.450	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	8.450	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	8.450	PROFILE= 2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.450	PROFILE= 2	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	8.450	PROFILE= 2	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	15.520	PROFILE= 1	CRITICAL DEPTH ASSUMED

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 CAUTION  SECNO=    15.520  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION  SECNO=    15.520  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
 CAUTION  SECNO=    15.520  PROFILE= 2  CRITICAL DEPTH ASSUMED
 CAUTION  SECNO=    15.520  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION  SECNO=    15.520  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin Township

3) WATERCOURSE: Mouillee

4) DOCUMENT TYPE: Summary

00BREAK00

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HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
ERROR CORR - 01,02,03
MODIFICATION - 50,51,52,53
****

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

BERLIN, MOUILLEE CREEK

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	8.400	.00	.00	.00	565.50	650.00	570.90	.00	571.00	9.85	2.52	257.43	207.13
	8.400	.00	.00	.00	565.50	750.00	570.90	.00	571.03	13.11	2.91	257.43	207.13
	8.400	.00	.00	.00	565.50	590.00	570.90	.00	570.98	8.11	2.29	257.43	207.13
	8.400	.00	.00	.00	565.50	440.00	570.90	.00	570.95	4.51	1.71	257.43	207.13
*	8.450	50.00	.00	.00	568.10	650.00	570.78	570.78	571.79	204.20	8.05	80.76	45.49
*	8.450	50.00	.00	.00	568.10	750.00	570.98	570.98	572.08	199.74	8.44	88.91	53.07
*	8.450	50.00	.00	.00	568.10	590.00	570.66	570.66	571.60	207.05	7.79	75.71	41.00
	8.450	50.00	.00	.00	568.10	440.00	570.75	.00	571.22	98.76	5.54	79.42	44.28
	8.451	1.00	578.20	574.70	568.10	650.00	571.28	.00	571.91	89.39	6.39	104.88	68.75
	8.451	1.00	578.20	574.70	568.10	750.00	571.56	.00	572.23	82.65	6.60	117.70	82.50
	8.451	1.00	578.20	574.70	568.10	590.00	571.13	.00	571.72	91.15	6.18	98.09	61.80
	8.451	1.00	578.20	574.70	568.10	440.00	570.79	.00	571.24	85.00	5.39	83.50	47.72
	8.499	44.00	578.20	574.70	568.10	650.00	571.83	.00	572.25	44.95	5.19	130.48	96.95
	8.499	44.00	578.20	574.70	568.10	750.00	572.08	.00	572.55	45.79	5.52	142.20	110.83
	8.499	44.00	578.20	574.70	568.10	590.00	571.67	.00	572.05	44.55	4.98	122.99	88.39
	8.499	44.00	578.20	574.70	568.10	440.00	571.25	.00	571.54	42.50	4.37	103.67	67.50
	8.500	1.00	.00	.00	568.10	650.00	571.83	.00	572.26	51.84	5.23	124.20	90.28
	8.500	1.00	.00	.00	568.10	750.00	572.08	.00	572.57	53.77	5.58	134.45	102.28
	8.500	1.00	.00	.00	568.10	590.00	571.67	.00	572.06	50.80	5.02	117.57	82.78
	8.500	1.00	.00	.00	568.10	440.00	571.25	.00	571.55	46.99	4.39	100.16	64.19
AB	8.550	50.00	.00	.00	567.90	650.00	572.39	.00	572.42	2.86	1.33	487.87	384.54
	8.550	50.00	.00	.00	567.90	750.00	572.71	.00	572.74	2.77	1.40	537.42	450.59
	8.550	50.00	.00	.00	567.90	590.00	572.19	.00	572.21	2.93	1.29	456.44	344.73
	8.550	50.00	.00	.00	567.90	440.00	571.65	.00	571.67	3.13	1.18	373.69	248.59
AC	10.350	1800.00	.00	.00	571.40	650.00	573.52	.00	573.66	31.19	3.03	242.21	116.39
	10.350	1800.00	.00	.00	571.40	750.00	573.77	.00	573.91	26.33	3.03	283.62	146.16
	10.350	1800.00	.00	.00	571.40	590.00	573.37	.00	573.51	34.84	3.02	218.20	99.96
	10.350	1800.00	.00	.00	571.40	440.00	573.00	.00	573.14	48.16	2.97	159.82	63.40
AD	11.970	1620.00	.00	.00	572.00	650.00	575.98	.00	576.02	8.89	2.71	629.52	217.95
	11.970	1620.00	.00	.00	572.00	750.00	576.15	.00	576.19	9.27	2.85	687.44	246.37
	11.970	1620.00	.00	.00	572.00	590.00	575.87	.00	575.91	8.58	2.62	593.93	201.41
	11.970	1620.00	.00	.00	572.00	440.00	575.58	.00	575.61	7.78	2.35	495.30	157.76

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	13.190	1220.00	.00	.00	572.90	650.00	576.78	.00	576.80	4.04	1.81	833.62	323.34
	13.190	1220.00	.00	.00	572.90	750.00	576.95	.00	576.97	3.95	1.84	958.23	377.48
	13.190	1220.00	.00	.00	572.90	590.00	576.66	.00	576.68	4.14	1.80	752.97	289.93
	13.190	1220.00	.00	.00	572.90	440.00	576.34	.00	576.36	4.19	1.70	573.51	215.03
	15.470	2280.00	.00	.00	573.10	650.00	578.16	.00	578.22	10.39	3.29	633.09	201.68
	15.470	2280.00	.00	.00	573.10	750.00	578.29	.00	578.34	9.99	3.29	731.92	237.29
	15.470	2280.00	.00	.00	573.10	590.00	578.08	.00	578.13	10.62	3.29	573.64	181.04
	15.470	2280.00	.00	.00	573.10	440.00	577.81	.00	577.88	11.81	3.33	406.72	128.04
*	15.520	50.00	.00	.00	573.50	650.00	578.78	578.78	579.06	78.01	6.09	288.04	73.59
*	15.520	50.00	.00	.00	573.50	750.00	578.84	578.84	579.12	84.96	6.40	320.85	81.37
*	15.520	50.00	.00	.00	573.50	590.00	578.75	578.75	579.02	73.30	5.88	267.66	68.92
*	15.520	50.00	.00	.00	573.50	440.00	578.63	578.63	578.89	62.85	5.36	205.77	55.50
	15.530	17.00	577.80	577.70	573.50	650.00	579.07	.00	579.14	25.92	3.64	512.87	127.67
	15.530	17.00	577.80	577.70	573.50	750.00	579.21	.00	579.26	21.89	3.40	628.08	160.30
	15.530	17.00	577.80	577.70	573.50	590.00	579.00	.00	579.08	28.29	3.77	450.20	110.93
	15.530	17.00	577.80	577.70	573.50	440.00	578.74	.00	578.89	41.73	4.43	267.99	68.12
	15.580	50.00	.00	.00	573.80	650.00	579.19	.00	579.20	2.80	1.83	1004.01	388.19
	15.580	50.00	.00	.00	573.80	750.00	579.29	.00	579.31	3.07	1.94	1087.08	428.30
	15.580	50.00	.00	.00	573.80	590.00	579.12	.00	579.13	2.60	1.75	956.15	366.23
	15.580	50.00	.00	.00	573.80	440.00	578.95	.00	578.96	1.98	1.49	829.05	312.33

BERLIN, MOUILLEE CREEK

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	8.400	650.00	570.90	.00	.00	.00	79.80	.00
	8.400	750.00	570.90	.00	.00	.00	79.80	.00
	8.400	590.00	570.90	.00	.00	.00	79.80	.00
	8.400	440.00	570.90	.00	.00	.00	79.80	.00
*	8.450	650.00	570.78	.00	-.12	.00	41.00	50.00
*	8.450	750.00	570.98	.20	.08	.00	41.00	50.00
*	8.450	590.00	570.66	-.32	-.24	.00	41.00	50.00
	8.450	440.00	570.75	.09	-.15	.00	41.00	50.00
	8.451	650.00	571.28	.00	.50	.00	44.98	1.00
	8.451	750.00	571.56	.27	.58	.00	45.76	1.00
	8.451	590.00	571.13	-.43	.47	.00	44.56	1.00
	8.451	440.00	570.79	-.34	.05	.00	43.66	1.00
	8.499	650.00	571.83	.00	.55	.00	46.52	44.00
	8.499	750.00	572.08	.25	.53	.00	47.21	44.00
	8.499	590.00	571.67	-.41	.54	.00	46.08	44.00
	8.499	440.00	571.25	-.42	.46	.00	44.91	44.00
	8.500	650.00	571.83	.00	-.00	.00	41.00	1.00
	8.500	750.00	572.08	.25	-.00	.00	41.00	1.00
	8.500	590.00	571.67	-.41	.00	.00	41.00	1.00
	8.500	440.00	571.25	-.42	.00	.00	41.00	1.00
	8.550	650.00	572.39	.00	.55	.00	155.00	50.00
	8.550	750.00	572.71	.32	.63	.00	155.00	50.00
	8.550	590.00	572.19	-.52	.51	.00	155.00	50.00
	8.550	440.00	571.65	-.53	.40	.00	154.51	50.00
	10.350	650.00	573.52	.00	1.14	.00	163.95	1800.00
	10.350	750.00	573.77	.25	1.06	.00	173.11	1800.00
	10.350	590.00	573.37	-.40	1.19	.00	160.05	1800.00
	10.350	440.00	573.00	-.37	1.35	.00	149.91	1800.00
	11.970	650.00	575.98	.00	2.46	.00	343.06	1620.00
	11.970	750.00	576.15	.16	2.38	.00	348.07	1620.00
	11.970	590.00	575.87	-.28	2.50	.00	335.70	1620.00
	11.970	440.00	575.58	-.29	2.58	.00	314.41	1620.00
	13.190	650.00	576.78	.00	.80	.00	711.68	1220.00
	13.190	750.00	576.95	.17	.80	.00	763.30	1220.00
	13.190	590.00	576.66	-.29	.79	.00	676.06	1220.00
	13.190	440.00	576.34	-.32	.76	.00	502.64	1220.00
	15.470	650.00	578.16	.00	1.38	.00	714.88	2280.00
	15.470	750.00	578.29	.13	1.34	.00	779.99	2280.00
	15.470	590.00	578.08	-.22	1.41	.00	676.59	2280.00
	15.470	440.00	577.81	-.26	1.47	.00	587.44	2280.00
*	15.520	650.00	578.78	.00	.62	.00	578.46	50.00
*	15.520	750.00	578.84	.06	.55	.00	612.41	50.00

*	15.520	590.00	578.75	-.09	.67	.00	556.34	50.00
*	15.520	440.00	578.63	-.12	.82	.00	482.97	50.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
15.530	650.00	579.07	.00	.29	.00	848.57	17.00
15.530	750.00	579.21	.13	.37	.00	933.92	17.00
15.530	590.00	579.00	-.21	.25	.00	797.65	17.00
15.530	440.00	578.74	-.26	.11	.00	599.82	17.00
15.580	650.00	579.19	.00	.11	.00	760.00	50.00
15.580	750.00	579.29	.11	.09	.00	760.00	50.00
15.580	590.00	579.12	-.17	.12	.00	760.00	50.00
15.580	440.00	578.95	-.17	.22	.00	747.85	50.00

SUMMARY OF ERRORS

CAUTION SECNO= 8.450 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 8.450 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 8.450 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 8.450 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 8.450 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 8.450 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 8.450 PROFILE= 3 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 8.450 PROFILE= 3 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 15.520 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 15.520 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 15.520 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 15.520 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 15.520 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 15.520 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 15.520 PROFILE= 3 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 15.520 PROFILE= 3 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 15.520 PROFILE= 3 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 15.520 PROFILE= 4 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 15.520 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 15.520 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED JULY 1979
  ERROR CORR -  01,02,03
  MODIFICATION -  50,51,52,53
**************************************************
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00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: 10yr. flood

00BREAK00

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**********************************************
*  WATER SURFACE PROFILES                    *
*  VERSION OF NOVEMBER 1976                  *
*  UPDATED APRIL 1980                        *
*                                            *
*  RUN DATE FRI, MAR 13, 1981,  4:16 PM      *
**********************************************
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**********************************
*  U.S. ARMY CORPS OF ENGINEERS  *
*  THE HYDROLOGIC ENGINEERING CENTER *
*  609 SECOND STREET, SUITE D    *
*  DAVIS, CALIFORNIA 95616       *
*  (916) 440-2105 (FTS) 448-2105 *
**********************************
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X     X  XXXXXXX   XXXXX          XXXXX
X     X  X         X   X          X   X
X     X  X         X               X
XXXXXXX  XXXX      X      XXXXX    XXXXX
X     X  X         X               X
X     X  X         X   X           X
X     X  XXXXXXX   XXXXX           XXXXXXX
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TOWNSHIP OF BERLIN
SWAN CREEK
MARCH 13, 1981

FLOOD INSURANCE ZONE DATA
MDNR COPY

RECEIVED
MAR 31 1981
WATER MANAGEMENT

****
HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
ERROR CORR - 01,02,03,04
MODIFICATION - 50,51,52,53,54
****

C
T1 HUD FLOOD INSURANCE STUDIES H-3970 WILLIAMS & WORKS
T2 TOWNSHIP OF BERLIN SWAN CREEK
T3 BERLIN, SWAN CREEK 10-YEAR FLOOD

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	6.	0.	0.	.000000	.00	-1.0	0.	570.900	.000

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	150.000	202.000	-151.000	197.000	.000	.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
QT	5.000	4090.000	4090.000	4950.000	3650.000	2450.000	.000	.000	.000	.000
NH	5.000	.060	1748.000	.120	1998.000	.030	2747.000	.090	3506.000	.060
NH	5034.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BA

X1	5.000	61.000	1998.000	2747.000	.000	.000	.000	.000	.000	.000
GR	574.800	.000	574.300	86.000	574.500	188.000	574.500	296.000	574.600	388.000
GR	574.600	510.000	574.400	646.000	573.500	766.000	572.600	866.000	572.800	1010.000
GR	573.200	1158.000	573.400	1310.000	574.000	1436.000	573.400	1522.000	573.300	1610.000
GR	573.300	1682.000	572.900	1730.000	572.200	1736.000	574.600	1748.000	574.400	1796.000
GR	575.000	1876.000	575.000	1938.000	575.000	1958.000	575.800	1992.000	575.800	1997.000
GR	572.500	1998.000	568.900	1998.000	567.900	2042.000	567.800	2102.000	567.700	2157.000
GR	567.400	2192.000	567.700	2242.000	567.700	2292.000	567.700	2322.000	567.700	2382.000
GR	568.000	2442.000	568.300	2472.000	568.400	2512.000	568.900	2557.000	569.400	2627.000
GR	570.400	2672.000	572.500	2747.000	573.900	2772.000	574.000	2820.000	574.200	2934.000
GR	574.600	3052.000	574.300	3162.000	574.200	3268.000	574.800	3388.000	574.800	3506.000
GR	574.900	3616.000	574.200	3770.000	574.200	3906.000	574.200	4040.000	574.000	4154.000
GR	574.800	4318.000	575.600	4476.000	576.000	4598.000	576.000	4756.000	576.600	4880.000
GR	576.400	5034.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	1551.000	.030	2190.000	.120	2634.000	.060	4110.000	.000

CROSS SECTION BB

X1	7.570	61.000	1551.000	2190.000	3200.000	2500.000	2570.000	.000	.000	.000
GR	574.400	.000	578.600	18.000	579.400	32.000	577.400	46.000	577.200	116.000
GR	578.600	218.000	577.800	306.000	577.700	404.000	575.800	482.000	576.500	524.000
GR	578.200	622.000	578.200	716.000	578.000	784.000	577.800	886.000	577.800	1010.000
GR	578.300	1138.000	578.000	1248.000	577.600	1348.000	575.400	1404.000	577.800	1440.000
GR	577.400	1486.000	577.400	1510.000	576.800	1540.000	572.500	1551.000	570.200	1565.000
GR	568.900	1610.000	568.400	1640.000	568.200	1700.000	568.400	1765.000	568.200	1830.000
GR	568.200	1885.000	568.400	1940.000	568.700	1985.000	569.400	2060.000	570.300	2125.000
GR	572.500	2190.000	575.900	2192.000	576.600	2244.000	578.000	2294.000	577.800	2328.000
GR	578.400	2368.000	578.600	2392.000	579.000	2454.000	578.900	2478.000	578.400	2556.000
GR	579.000	2604.000	578.000	2634.000	578.200	2730.000	579.200	2840.000	579.800	2950.000
GR	578.800	3012.000	580.900	3028.000	580.600	3052.000	578.200	3062.000	578.800	3092.000
GR	579.200	3266.000	579.600	3388.000	580.200	3564.000	580.700	3776.000	581.400	4004.000
GR	581.200	4110.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	1633.000	.030	2188.000	.120	2342.000	.060	3602.000	.000

CROSS SECTION BC

X1	9.730	60.000	1633.000	2188.000	2080.000	2300.000	2160.000	.000	.000	.000
GR	579.900	.000	579.800	66.000	580.300	146.000	580.000	242.000	580.800	338.000
GR	581.000	444.000	581.200	556.000	581.200	686.000	581.800	806.000	581.200	910.000
GR	580.800	1000.000	580.300	1068.000	581.800	1110.000	580.800	1132.000	580.400	1254.000
GR	580.100	1364.000	579.200	1454.000	576.800	1532.000	575.600	1598.000	574.800	1617.000
GR	573.800	1618.000	572.400	1633.000	571.100	1648.000	570.400	1673.000	570.200	1698.000
GR	569.900	1723.000	569.600	1748.000	569.400	1773.000	569.200	1798.000	569.000	1823.000
GR	568.900	1848.000	568.900	1873.000	568.800	1898.000	568.700	1923.000	569.000	1948.000
GR	569.200	1973.000	569.300	1998.000	569.400	2023.000	569.600	2048.000	569.600	2073.000
GR	569.600	2098.000	569.800	2123.000	570.200	2148.000	572.400	2188.000	575.400	2189.000
GR	580.600	2192.000	582.600	2236.000	582.500	2262.000	581.900	2304.000	581.500	2342.000
GR	582.000	2444.000	580.600	2590.000	580.800	2716.000	581.000	2850.000	582.000	2990.000
GR	582.800	3140.000	582.900	3200.000	583.100	3370.000	583.000	3510.000	582.200	3602.000
QT	5.000	3690.000	3690.000	4470.000	3290.000	2210.000	.000	.000	.000	.000
NH	4.000	.060	1045.000	.035	1441.000	.120	1938.000	.060	3374.000	.000

CROSS SECTION BD

X1	11.740	85.000	1045.000	1441.000	2080.000	2100.000	2010.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	1534.000	.000	.000	.000	.000
GR	580.800	.000	580.700	56.000	580.200	122.000	580.600	184.000	580.700	256.000
GR	581.400	330.000	580.400	388.000	581.200	462.000	581.200	534.000	581.200	608.000
GR	581.400	676.000	580.400	746.000	580.600	810.000	579.800	882.000	579.000	944.000
GR	577.400	950.000	579.200	964.000	580.500	986.000	576.800	993.000	575.800	1011.000
GR	572.400	1045.000	571.700	1061.000	571.000	1086.000	570.900	1111.000	570.800	1136.000
GR	570.400	1161.000	569.900	1186.000	569.100	1211.000	568.400	1236.000	568.300	1261.000
GR	568.000	1311.000	569.200	1336.000	569.700	1361.000	569.700	1386.000	570.200	1411.000
GR	572.400	1441.000	574.300	1446.000	577.800	1466.000	578.000	1492.000	579.300	1534.000
GR	577.800	1566.000	576.000	1596.000	576.000	1640.000	576.600	1686.000	578.000	1718.000
GR	590.200	1744.000	581.400	1782.000	581.000	1816.000	579.400	1852.000	577.500	1858.000
GR	577.600	1886.000	572.800	1890.000	572.800	1934.000	574.400	1938.000	574.600	1992.000

GR	574.000	2026.000	572.800	2042.000	572.800	2136.000	573.800	2146.000	574.400	2186.000
GR	574.400	2236.000	572.800	2238.000	572.800	2382.000	574.200	2392.000	574.000	2446.000
GR	573.800	2500.000	573.800	2534.000	572.800	2542.000	572.800	2598.000	579.200	2626.000
GR	579.200	2678.000	579.100	2734.000	580.100	2790.000	582.200	2856.000	581.600	2910.000
GR	581.800	3000.000	581.300	3072.000	580.800	3142.000	582.000	3196.000	583.100	3248.000
GR	583.100	3288.000	583.200	3318.000	584.500	3334.000	584.500	3360.000	580.400	3374.000
NH	4.000	.060	687.000	.100	759.000	.035	1087.000	.120	1848.000	.000

CROSS SECTION BE

X1	13.550	56.000	759.000	1087.000	1760.000	1900.000	1810.000	.000	.000	.000
GR	579.000	.000	582.000	12.000	581.700	38.000	579.100	48.000	580.800	56.000
GR	581.000	112.000	581.600	164.000	581.600	212.000	581.000	266.000	581.800	320.000
GR	581.400	374.000	581.400	428.000	581.200	482.000	581.200	544.000	580.400	590.000
GR	578.800	622.000	578.000	648.000	576.600	674.000	573.300	687.000	571.900	759.000
GR	571.100	774.000	569.900	799.000	568.900	824.000	568.900	849.000	568.700	874.000
GR	568.600	899.000	568.700	924.000	569.500	949.000	569.900	974.000	570.700	999.000
GR	571.100	1024.000	570.900	1049.000	571.900	1087.000	576.600	1097.000	577.000	1126.000
GR	578.300	1154.000	579.400	1184.000	578.800	1220.000	580.000	1260.000	580.500	1294.000
GR	581.200	1304.000	581.300	1330.000	579.800	1336.000	581.800	1348.000	581.800	1396.000
GR	581.800	1444.000	581.800	1500.000	582.000	1534.000	582.600	1588.000	582.900	1630.000
GR	583.000	1684.000	583.000	1732.000	583.600	1766.000	583.100	1804.000	584.600	1832.000
GR	582.800	1848.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	687.000	.100	759.000	.035	1087.000	.120	1848.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

X1	14.400	.000	.000	.000	1000.000	800.000	855.000	.000	.300	.000
X3	.000	.000	.000	848.000	.000	998.000	.000	.000	.000	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

X1	14.460	30.000	642.000	758.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	642.000	.000	758.000	.000	.000	.000	.000
GR	583.800	.000	582.800	80.000	582.200	188.000	582.200	282.000	581.800	362.000
GR	581.000	448.000	580.200	548.000	580.200	622.000	580.600	642.000	570.600	642.000
GR	570.200	660.000	569.900	677.500	569.900	680.000	569.000	700.000	568.900	720.000
GR	568.900	722.500	569.800	740.000	571.000	758.000	580.600	758.000	580.400	794.000
GR	579.500	832.000	579.500	880.000	579.200	928.000	578.800	958.000	578.700	1014.000
GR	579.200	1084.000	579.700	1154.000	580.400	1242.000	581.100	1304.000	581.400	1394.000

DIVIDED FLOW DUE TO BRIDGE PIERS

X1	14.461	34.000	642.000	758.000	1.000	1.000	1.000	.000	.000	.000
X2	.000	.000	.000	577.200	580.600	.000	.000	.000	.000	.000
GR	583.800	.000	582.800	80.000	582.200	188.000	582.200	282.000	581.800	362.000
GR	581.000	448.000	580.200	548.000	580.200	622.000	580.600	642.000	570.600	642.000
GR	570.200	660.000	569.900	677.500	577.200	677.600	577.200	679.900	569.900	680.000
GR	569.000	700.000	568.900	720.000	577.200	720.100	577.200	722.400	568.900	722.500

GR	569.800	740.000	571.000	758.000	580.600	758.000	580.400	794.000	579.500	832.000
GR	579.500	880.000	579.200	928.000	578.800	958.000	578.700	1014.000	579.200	1084.000
GR	579.700	1154.000	580.400	1242.000	581.100	1304.000	581.400	1394.000	.000	.000

DIVIDED FLOW DUE TO BRIDGE PIERS

X1	14.499	.000	.000	.000	43.000	43.000	43.000	.000	.000	.000
X2	.000	.000	.000	577.200	580.600	.000	.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

X1	14.500	30.000	642.000	758.000	1.000	1.000	1.000	.000	.000	.000
X3	.000	.000	.000	642.000	.000	759.000	.000	.000	.000	.000
GR	583.800	.000	582.800	80.000	582.200	108.000	582.200	202.000	581.800	362.000
GR	581.000	448.000	580.200	548.000	580.200	622.000	580.600	642.000	570.600	642.000
GR	570.200	660.000	569.900	677.500	569.900	680.000	569.900	700.000	568.900	720.000
GR	568.900	722.500	569.800	740.000	571.000	758.000	580.600	758.000	580.400	794.000
GR	579.500	832.000	579.500	880.000	579.200	928.000	578.800	958.000	578.700	1014.000
GR	579.200	1084.000	579.700	1154.000	580.400	1242.000	581.100	1304.000	581.400	1394.000
NH	5.000	.120	643.000	.040	786.000	.055	916.000	.120	1374.000	.060
NH	1602.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION OF

X1	14.550	48.000	643.000	786.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	580.000	.000	.000	.000	.000	.000	.000
GR	584.200	.000	584.400	48.000	584.200	112.000	584.000	180.000	584.000	246.000
GR	584.400	274.000	584.400	304.000	583.800	350.000	583.300	386.000	581.000	412.000
GR	579.600	432.000	579.300	470.000	578.200	504.000	575.400	524.000	575.800	552.000
GR	575.800	586.000	575.600	616.000	574.400	642.000	571.900	643.000	570.800	644.000
GR	569.400	662.000	568.900	687.000	569.100	702.000	569.300	722.000	569.400	742.000
GR	569.700	762.000	571.900	786.000	573.500	792.000	578.500	803.000	578.400	836.000
GR	578.400	878.000	579.100	916.000	579.400	950.000	578.800	1004.000	579.800	1052.000
GR	581.000	1078.000	582.000	1094.000	582.000	1142.000	581.200	1166.000	581.800	1210.000
GR	581.800	1262.000	582.400	1314.000	583.000	1374.000	582.900	1416.000	583.400	1470.000
GR	583.000	1512.000	583.400	1544.000	583.400	1602.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
NH	5.000	.060	764.000	.120	1163.000	.040	1349.000	.120	1648.000	.060
NH	2304.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BG

X1	15.840	60.000	1163.000	1349.000	1400.000	1220.000	1290.000	.000	.000	.000
X3	.000	.000	.000	700.000	.000	2304.000	.000	.000	.000	.000
GR	580.200	.000	580.800	42.000	582.400	90.000	582.800	140.000	582.000	204.000
GR	580.400	260.000	579.000	308.000	577.000	356.000	578.200	398.000	578.400	450.000
GR	577.500	502.000	576.800	566.000	576.300	612.000	576.600	678.000	576.400	764.000
GR	576.600	822.000	577.100	880.000	577.400	932.000	576.800	976.000	576.400	1038.000
GR	576.200	1076.000	576.100	1110.000	574.200	1126.000	574.000	1162.000	572.700	1163.000
GR	570.500	1176.000	570.400	1186.000	570.000	1196.000	570.500	1206.000	570.700	1226.000

GR	570.500	1246.000	570.200	1266.000	570.900	1286.000	571.700	1306.000	572.200	1326.000
GR	572.700	1349.000	574.900	1355.000	583.100	1375.000	583.800	1390.000	583.100	1408.000
GR	585.000	1414.000	585.400	1428.000	584.800	1446.000	584.100	1468.000	584.300	1500.000
GR	584.000	1562.000	583.600	1588.000	585.400	1600.000	585.500	1648.000	585.400	1672.000
GR	584.400	1700.000	584.600	1766.000	584.900	1836.000	585.000	1884.000	585.200	1940.000
GR	585.400	1996.000	585.000	2070.000	584.800	2148.000	585.000	2222.000	585.600	2304.000
ET	.000	7.100	9.100	.000	.000	.000	.000	2304.000	710.000	1130.000
NH	3.000	.060	929.000	.040	996.000	.060	1708.000	.000	.000	.000

CROSS SECTION DH

X1	17.260	50.000	929.000	996.000	1520.000	1440.000	1420.000	.000	.000	.000
GR	587.600	.000	587.000	72.000	587.400	166.000	587.000	240.000	586.800	288.000
GR	585.700	356.000	583.600	414.000	583.400	454.000	583.800	484.000	586.000	508.000
GR	586.200	540.000	586.300	570.000	586.100	604.000	584.000	630.000	581.600	666.000
GR	578.600	696.000	577.800	732.000	577.500	776.000	575.600	826.000	575.300	926.000
GR	572.700	929.000	572.200	936.000	572.000	946.000	572.000	956.000	571.900	966.000
GR	572.200	976.000	572.200	986.000	572.700	996.000	573.300	1000.000	574.300	1002.000
GR	573.300	1026.000	576.200	1056.000	575.200	1072.000	573.800	1098.000	573.800	1112.000
GR	577.900	1130.000	585.800	1156.000	586.900	1192.000	587.800	1224.000	588.000	1242.000
GR	587.200	1250.000	589.600	1264.000	589.600	1290.000	587.400	1300.000	587.900	1310.000
GR	587.700	1372.000	587.200	1440.000	587.400	1534.000	587.400	1610.000	587.700	1708.000
ET	.800	7.100	9.100	.000	.000	.000	.000	1712.000	670.000	1425.000
NH	5.000	.060	570.000	.120	867.000	.040	918.000	.120	1102.000	.060
NH	1712.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BI

X1	18.650	45.000	867.000	918.000	1280.000	1340.000	1390.000	.000	.000	.000
GR	589.200	.000	589.200	76.000	589.400	146.000	589.300	216.000	588.400	268.000
GR	586.900	306.000	587.500	340.000	589.100	378.000	589.400	438.000	589.400	496.000
GR	589.400	570.000	589.600	600.000	590.000	648.000	590.800	708.000	591.200	762.000
GR	576.700	862.000	573.200	867.000	572.200	872.000	570.900	882.000	570.900	892.000
GR	571.000	902.000	571.900	912.000	573.200	918.000	576.800	928.000	574.700	938.000
GR	575.000	958.000	574.600	994.000	574.200	1034.000	576.700	1066.000	577.200	1102.000
GR	576.600	1154.000	577.000	1226.000	576.600	1300.000	577.400	1350.000	577.800	1398.000
GR	577.800	1456.000	579.400	1496.000	580.200	1536.000	581.100	1578.000	581.400	1618.000
GR	582.000	1650.000	583.400	1662.000	586.500	1674.000	586.600	1698.000	582.100	1712.000
NH	5.000	.060	570.000	.120	867.000	.040	918.000	.120	1102.000	.060
NH	1712.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BI

X1	19.540	.000	.000	.000	1100.000	1050.000	895.000	.000	.600	.000
X3	.000	.000	.000	852.500	.000	932.500	.000	.000	.000	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

X1	19.600	26.000	1343.000	1389.500	50.000	50.000	90.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.200	584.200	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AT DT & I RAILROAD BRIDGE

X1	19.601	26.000	1343.000	1389.500	1.000	1.000	1.000	.866	.000	.000
X2	.000	.000	.000	584.200	590.000	.000	.000	.000	.000	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AT DT & I RAILROAD BRIDGE

X1	19.619	26.000	1343.000	1389.500	28.000	28.000	28.000	.866	.000	.000
X2	.000	.000	.000	584.200	590.000	.000	.000	.000	.000	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

X1	19.620	26.000	1343.000	1389.500	1.000	1.000	1.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.200	584.200	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.050	.050	.030	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BETWEEN BRIDGES

X1	19.670	26.000	1343.000	1389.500	50.000	50.000	50.000	.866	.300	.000
X3	.000	.000	.000	1329.900	.000	1402.600	.000	.000	.000	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	577.800	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	574.600	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.030	.030	.030	.000	.000	.000	.060	.000	.000	.000

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

X1	19.720	29.000	1392.000	1453.000	50.000	50.000	50.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.100	584.100	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	430.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000

CROSS SECTION AT NYC RAILROAD BRIDGE

X1	19.722	29.000	1392.000	1453.000	2.000	2.000	2.000	.866	.000	.000
X2	.000	.000	.000	584.700	593.200	.000	.000	.000	.000	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000

CROSS SECTION AT NYC RAILROAD BRIDGE

X1	19.730	29.000	1392.000	1453.000	16.000	16.000	16.000	.866	.000	.000
X2	.000	.000	.000	584.700	593.200	.000	.000	.000	.000	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

X1	19.740	29.000	1392.000	1453.000	2.000	2.000	2.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.100	584.100	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.900	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000
NH	4.000	.060	1390.000	.120	1563.000	.040	1593.000	.120	2554.000	.000

CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE COPY SECTION BJ

X1	19.790	41.000	1563.000	1593.000	50.000	50.000	50.000	.000	.900	.000
X3	.000	.000	.000	1498.000	.000	1658.000	.000	.000	.000	.000
GR	587.000	.000	587.800	70.000	587.400	178.000	587.200	296.000	587.500	414.000
GR	587.600	520.000	586.400	598.000	584.600	654.000	584.800	746.000	582.400	792.000
GR	580.300	850.000	580.200	898.000	580.600	948.000	578.800	1006.000	578.400	1132.000
GR	577.800	1260.000	577.100	1332.000	576.000	1390.000	576.200	1478.000	576.700	1506.000
GR	577.400	1552.000	577.200	1563.000	573.600	1563.000	570.200	1572.000	570.200	1582.000
GR	573.600	1593.000	576.200	1597.000	581.600	1610.000	581.400	1648.000	582.800	1718.000
GR	585.000	1788.000	587.000	1878.000	587.600	1990.000	589.200	2082.000	589.800	2148.000
GR	589.800	2258.000	592.400	2318.000	591.300	2378.000	592.000	2482.000	591.000	2530.000
GR	587.500	2554.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
NH	4.000	.060	1390.000	.120	1563.000	.040	1593.000	.120	2554.000	.000

CROSS SECTION BJ

X1	19.900	.000	.000	.000	110.000	110.000	110.000	.000	.000	.000
X3	.000	.000	.000	1380.000	.000	1740.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

X1	20.010	.000	.000	.000	260.000	140.000	110.000	.000	1.100	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

X1	20.060	31.000	1193.000	1229.500	50.000	50.000	50.000	.000	.000	.000
GR	589.400	.000	589.100	104.000	588.700	224.000	588.000	332.000	588.800	432.000
GR	588.000	546.000	586.300	656.000	584.500	726.000	581.600	816.000	580.200	896.000
GR	580.200	1000.000	580.000	1088.000	582.000	1190.000	581.200	1193.000	578.100	1193.000
GR	578.100	1194.500	573.200	1194.500	572.600	1211.000	572.600	1220.000	574.700	1228.000
GR	578.100	1228.000	578.100	1229.500	581.200	1229.500	582.600	1232.500	584.900	1334.000
GR	586.600	1480.000	588.000	1574.000	589.000	1618.000	592.000	1650.000	592.400	1706.000
GR	589.600	1748.000	.000	.000	.000	.000	.000	.000	.000	.000

X1	20.061	.000	.000	.000	1.000	1.000	1.000	.000	.000	.000
X2	.000	.000	.000	581.200	582.000	.000	.000	.000	.000	.000
BT	31.000	.000	599.400	589.400	104.000	589.100	589.100	224.000	588.700	588.700
BT	332.000	588.000	588.800	432.000	588.800	588.200	546.000	588.000	588.000	656.000
BT	586.300	586.300	726.000	584.500	584.500	816.000	581.600	581.600	896.000	580.200
BT	580.200	1000.000	580.200	580.200	1068.000	580.800	580.800	1190.000	582.000	582.000
BT	1190.000	583.400	583.400	1193.000	583.400	583.400	1193.000	583.400	591.200	1194.500
BT	583.400	581.200	1211.000	583.400	581.200	1220.000	583.400	581.200	1228.000	583.400
BT	581.200	1229.500	583.400	581.200	1229.500	583.400	583.400	1232.500	583.400	583.400
BT	1232.500	582.600	582.600	1334.000	584.900	584.900	1489.000	586.600	586.600	1574.000
BT	589.000	588.000	1618.000	589.000	589.000	1650.000	592.000	592.000	1706.000	592.400
BT	592.400	1748.000	589.600	589.600	.000	.000	.000	.000	.000	.000
X1	20.079	.000	.000	.000	18.000	18.000	18.000	.000	.000	.000
X2	.000	.000	.000	581.200	582.000	.000	1.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

X1	20.080	.000	.000	.000	1.000	1.000	1.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	1000.000	1455.000
NH	4.000	.075	1072.000	.120	1399.000	.040	1429.000	.075	2334.000	.000

CROSS SECTION BK

X1	20.130	43.000	1399.000	1429.000	50.000	50.000	50.000	.000	.000	.000
GR	587.400	.000	588.300	78.000	588.400	178.000	587.700	292.000	587.700	384.000
GR	587.400	480.000	587.200	566.000	586.900	676.000	587.400	810.000	587.400	896.000
GR	585.800	934.000	580.600	972.000	579.400	998.000	580.600	1072.000	578.200	1146.000
GR	578.100	1250.000	576.000	1302.000	577.000	1312.000	576.800	1390.000	576.400	1395.000
GR	573.700	1399.000	573.400	1410.000	572.600	1420.000	573.700	1429.000	575.100	1431.000
GR	576.300	1435.000	584.600	1453.000	584.600	1472.000	585.200	1512.000	585.800	1564.000
GR	584.900	1580.000	585.200	1666.000	589.400	1730.000	589.100	1788.000	588.400	1874.000
GR	589.100	1982.000	589.600	2086.000	591.000	2128.000	591.500	2192.000	592.200	2222.000
GR	592.200	2262.000	591.000	2312.000	588.000	2334.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	880.000	1405.000
NH	5.000	.060	784.000	.120	1301.000	.040	1328.000	.120	1490.000	.060
NH	2132.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BL

X1	20.770	36.000	1301.000	1328.000	880.000	640.000	640.000	.000	.000	.000
GR	588.600	.000	588.700	66.000	589.200	174.000	588.500	290.000	588.400	386.000
GR	587.400	492.000	588.000	562.000	588.400	648.000	586.800	714.000	582.600	784.000
GR	580.000	854.000	578.400	892.000	580.100	942.000	578.400	1034.000	576.200	1102.000
GR	576.200	1226.000	577.200	1294.000	574.700	1301.000	574.200	1304.000	573.900	1314.000
GR	573.900	1324.000	574.700	1328.000	575.800	1332.000	577.700	1364.000	577.300	1406.000
GR	589.000	1430.000	588.400	1490.000	588.100	1590.000	586.100	1680.000	586.800	1766.000

GR	588.400	1890.000	589.600	1974.000	589.600	2009.000	589.600	2110.000	589.400	2124.000
GR	587.200	2132.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	5.000	.035	674.000	.120	841.000	.040	870.000	.120	1018.000	.060
NH	1652.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 8M

X1	21.910	34.000	841.000	870.000	960.000	900.000	1140.000	.000	.000	.000
X3	.000	.000	.000	730.500	.000	980.500	.000	.000	.000	.000
GR	587.000	.000	589.400	48.000	588.200	84.000	587.200	146.000	586.800	220.000
GR	587.600	276.000	590.000	312.000	589.200	370.000	581.800	402.000	577.100	428.000
GR	578.000	530.000	577.500	616.000	578.600	674.000	578.400	752.000	579.400	828.000
GR	576.300	841.000	575.700	846.000	575.100	858.000	575.100	868.000	576.300	870.000
GR	578.300	880.000	579.300	938.000	579.800	1018.000	579.200	1120.000	579.600	1214.000
GR	581.600	1276.000	583.000	1318.000	586.700	1340.000	590.000	1374.000	590.300	1432.000
GR	590.400	1472.000	590.400	1536.000	589.800	1598.000	588.400	1652.000	.000	.000
NH	5.000	.065	674.000	.120	841.000	.040	870.000	.120	1018.000	.060
NH	1652.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION 8M

X1	22.120	.000	.000	.000	220.000	220.000	210.000	.000	-1.500	.000
X3	.000	.000	.000	800.500	.000	910.500	.000	.000	.000	.000
NC	.035	.035	.035	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

X1	22.170	22.000	1120.500	1195.500	50.000	50.000	50.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.900	584.900	.000
GR	590.200	.000	590.000	76.000	590.100	188.000	590.000	314.000	589.800	464.000
GR	589.300	610.000	589.200	762.000	589.200	926.000	589.600	1118.000	584.900	1120.500
GR	577.800	1120.500	574.400	1138.000	574.400	1155.000	574.000	1161.000	573.300	1178.000
GR	573.300	1195.500	584.900	1195.500	589.600	1198.000	590.000	1340.000	590.600	1496.000
GR	590.500	1630.000	590.600	1740.000	.000	.000	.000	.000	.000	.000
SB	1.050	1.650	2.500	80.000	50.300	6.000	726.750	1.060	.000	.000

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

X1	22.190	.000	.000	.000	20.000	20.000	20.000	.000	.000	.000
X2	.000	.000	1.000	584.900	589.200	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	589.200	589.200	.000

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

X1	22.270	25.000	1208.000	1309.000	80.000	80.000	80.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.200	587.200	.000
GR	587.200	.000	587.800	54.000	588.800	140.000	588.800	256.000	588.600	350.000
GR	587.700	450.000	587.200	570.000	586.200	676.000	585.800	808.000	586.400	958.000
GR	587.000	1100.000	587.200	1206.000	583.000	1208.000	576.200	1239.000	576.200	1241.500

GR	574.400	1258.000	573.000	1273.900	574.500	1278.000	577.400	1309.000	587.800	1311.000
GR	588.200	1384.000	589.200	1470.000	589.800	1934.000	589.400	1630.000	589.500	1750.000
SB	1.050	1.710	2.800	.000	54.200	5.000	885.200	1.934	.000	.000

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

X1	22.300	.000	.000	.000	30.000	30.000	30.000	.000	.000	.000
X2	.000	.000	1.000	585.900	587.000	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.200	587.200	.000
BT	14.000	1100.000	587.000	587.000	1206.000	587.200	587.200	1206.000	591.400	587.200
BT	1208.000	591.400	583.000	1208.000	591.400	585.900	1239.000	591.400	585.900	1241.500
BT	591.400	585.900	1259.000	591.400	585.900	1275.500	591.400	585.900	1278.000	591.400
BT	585.900	1309.000	591.400	585.900	1309.000	591.400	577.400	1311.000	591.400	587.800
BT	1311.000	587.800	587.800	.000	.000	.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
NH	6.000	.120	932.000	.060	1370.000	.120	1420.000	.040	1463.000	.060
NH	1768.000	.120	1926.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BN

X1	22.350	39.000	1420.000	1463.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	1326.500	.000	1556.500	.000	.000	.000	.000
GR	588.600	.000	589.800	24.000	589.100	92.000	589.200	132.000	588.800	156.000
GR	589.000	214.000	588.600	286.000	589.600	356.000	590.000	392.000	589.400	432.000
GR	589.400	476.000	589.400	536.000	587.200	616.000	586.400	652.000	588.200	690.000
GR	587.800	792.000	587.800	824.000	587.000	872.000	586.000	932.000	579.500	950.000
GR	579.500	1366.000	581.700	1370.000	582.000	1386.000	578.400	1406.000	576.300	1420.000
GR	574.700	1426.000	574.200	1436.000	574.500	1446.000	574.200	1456.000	576.300	1463.000
GR	578.000	1465.000	581.800	1476.000	581.000	1520.000	582.600	1568.000	589.200	1608.000
GR	590.000	1668.000	589.600	1768.000	591.000	1854.000	589.400	1926.000	.000	.000
ET	.000	7.100	9.100	.000	.000	.000	794.000	1594.000	1000.000	1594.000
NH	5.000	.060	1080.000	.120	1184.000	.040	1204.000	.120	1608.000	.070
NH	2092.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BO

X1	23.210	44.000	1184.000	1204.000	640.000	740.000	960.000	.000	.000	.000
GR	587.400	.000	589.600	30.000	589.400	82.000	590.200	148.000	589.500	228.000
GR	589.600	320.000	589.500	378.000	588.200	440.000	588.800	520.000	587.400	600.000
GR	587.000	644.000	585.200	696.000	584.500	766.000	585.200	852.000	586.600	934.000
GR	586.800	1002.000	586.000	1080.000	584.400	1124.000	582.200	1142.000	585.200	1162.000
GR	577.100	1184.000	576.600	1192.000	577.100	1204.000	579.700	1222.000	578.600	1258.000
GR	580.600	1304.000	581.600	1372.000	580.800	1450.000	580.400	1488.000	578.600	1500.000
GR	580.600	1526.000	581.600	1582.000	584.000	1608.000	588.000	1628.000	588.800	1640.000
GR	585.100	1664.000	587.700	1702.000	585.400	1720.000	587.500	1774.000	587.600	1816.000
GR	588.400	1886.000	588.600	1966.000	588.600	2048.000	588.100	2092.000	.000	.000
NH	5.000	.060	322.000	.120	518.000	.040	560.000	.120	680.000	.070
NH	902.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BP

X1	23.930	25.000	518.000	560.000	480.000	760.000	720.000	.000	.000	.000
X3	.000	.000	.000	386.500	.000	691.500	.000	.000	.000	.000
GR	585.200	.000	585.800	36.000	586.800	84.000	586.400	150.000	586.000	220.000
GR	584.200	268.000	583.600	322.000	582.600	384.000	581.700	438.000	579.800	500.000
GR	579.300	515.000	577.600	519.000	576.600	530.000	576.100	540.000	576.200	550.000
GR	577.600	560.000	581.200	566.000	582.800	680.000	594.300	724.000	586.600	758.000
GR	587.200	802.000	584.400	830.000	585.500	864.000	594.400	892.000	597.600	902.000
NH	5.000	.060	322.000	.120	518.000	.040	560.000	.120	680.000	.070
NH	902.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BP

X1	24.160	.000	.000	.000	230.000	230.000	230.000	.000	.000	.000
X3	.000	.000	.000	464.000	.000	614.000	.000	.000	.000	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

X1	24.210	17.000	600.000	715.000	50.000	50.000	50.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.000	587.000	.000
GR	590.400	.000	590.400	90.000	590.200	178.000	590.000	306.000	590.000	438.000
GR	589.800	558.000	590.200	600.000	578.500	600.000	576.000	635.000	577.000	657.500
GR	578.000	680.000	579.000	715.000	590.200	715.000	589.900	790.000	590.000	924.000
GR	590.000	1056.000	589.800	1120.000	.000	.000	.000	.000	.000	.000
SB	.900	1.500	3.000	115.000	91.000	5.000	985.000	1.200	.000	.000

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

X1	24.260	.000	.000	.000	55.000	55.000	55.000	.000	.000	.000
X2	.000	.000	1.000	587.000	590.200	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	590.200	590.200	.000

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

X1	24.280	.000	.000	.000	20.000	20.000	20.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.000	587.000	.000
SB	.900	1.500	3.000	115.000	91.000	5.000	985.000	1.200	.000	.000

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

X1	24.340	.000	.000	.000	55.000	55.000	55.000	.000	.000	.000
X2	.000	.000	1.000	587.000	590.200	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	590.200	590.200	.000
NH	3.000	.070	655.000	.040	680.000	.060	1116.000	.000	.000	.000

CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION 80

X1	24.390	40.000	655.000	680.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	560.000	.000	775.000	.000	.000	.000	.000
GR	586.600	.000	589.600	28.000	590.400	54.000	590.100	92.000	589.800	124.000
GR	589.400	138.000	590.200	158.000	589.800	216.000	587.800	246.000	584.000	268.000
GR	578.600	312.000	578.600	328.000	581.200	350.000	581.000	394.000	581.100	448.000
GR	581.500	500.000	581.100	554.000	580.700	596.000	580.600	630.000	581.300	650.000
GR	577.700	655.000	577.100	660.000	576.300	670.000	577.700	680.000	578.700	681.000
GR	579.200	683.000	582.100	687.000	582.800	748.000	584.600	782.000	586.600	810.000
GR	589.200	852.000	589.200	886.000	589.800	926.000	590.900	962.000	594.000	994.000
GR	597.200	1022.000	597.200	1050.000	596.600	1076.000	593.700	1092.000	590.400	1116.000
NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
NH	3.000	.070	655.000	.040	680.000	.060	1116.000	.000	.000	.000

CROSS SECTION 80

X1	24.690	.000	.000	.000	200.000	310.000	310.000	.000	.000	.000
X3	.000	.000	.000	216.000	.000	.000	.000	.000	.000	.000
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

*PROF 1

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 5.000
CROSS SECTION BA

5.00	3.50	570.90	.00	570.90	570.93	.03	.00	.00	572.50
2450.	0.	2450.	0.	0.	1840.	0.	0.	0.	572.50
.00	.00	1.33	.00	.000	.030	.000	.000	567.40	1998.00
.000197	0.	0.	0.	0	0	0	.00	691.86	2689.86

1490 NH CARD USED
*SECNO 7.570
CROSS SECTION CB

7.57	3.28	571.48	.00	.00	571.52	.04	.59	.00	572.50
2450.	0.	2450.	0.	0.	1579.	0.	101.	30.	572.50
.46	.00	1.55	.00	.000	.030	.000	.040	568.20	1557.19
.000272	3200.	2570.	2500.	2	0	0	.00	602.79	2159.98

1490 NH CARD USED
*SECNO 9.730
CROSS SECTION DC

9.73	3.49	572.19	.00	.00	572.20	.05	.68	.00	572.40
2450.	0.	2450.	0.	0.	1389.	0.	174.	67.	572.40
.80	.00	1.76	.00	.000	.030	.000	.040	568.70	1635.85
.000367	2080.	2160.	2300.	2	0	0	.00	547.67	2183.52

1490 NH CARD USED
*SECNO 11.740

3470 ENCROACHMENT STATIONS= .0 1534.0 TYPE= 1 TARGET= 1533.999
CROSS SECTION BD

11.74	4.92	572.92	.00	.00	572.97	.05	.77	.00	572.40
2210.	0.	2210.	0.	1.	1223.	0.	235.	89.	572.40
1.11	.20	1.81	.10	.060	.035	.120	.040	568.00	1039.73
.000403	2080.	2010.	2100.	2	0	0	.00	402.60	1442.37

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

1490 NH CARD USED
*SECNO 13.550
CROSS SECTION BE

13.55	4.98	573.58	.00	.00	573.63	.05	.66	.00	571.90
2210.	19.	2191.	1.	71.	1200.	3.	287.	105.	571.90
1.39	.26	1.83	.19	.100	.035	.120	.040	568.60	685.90
.000328	1760.	1810.	1900.	2	0	0	.00	404.67	1090.57

1490 NH CARD USED
*SECNO 14.400

3470 ENCROACHMENT STATIONS= 848.0 998.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

14.40	5.03	573.93	.00	.00	574.10	.17	.44	.04	100000.00
2210.	0.	2210.	0.	0.	666.	0.	306.	111.	100000.00
1.46	.00	3.32	.00	.100	.035	.120	.040	568.90	848.00
.000894	1000.	855.	800.	2	0	0	.00	150.00	998.00

CCHV= .300 CEHV= .500
*SECNO 14.460

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000
CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.46	5.01	573.91	.00	.00	574.23	.32	.05	.00	580.60
2210.	0.	2210.	0.	0.	484.	0.	306.	111.	100000.00
1.46	.00	4.56	.00	.030	.030	.030	.040	568.90	642.00
.001354	50.	50.	50.	2	0	0	.00	116.00	758.00

*SECNO 14.461

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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
14.46	4.99	573.89	.00	.00	574.25	.36	.00	.02	580.60
2210.	0.	2210.	0.	0.	462.	0.	306.	111.	580.60
1.46	.00	4.79	.00	.030	.030	.030	.040	568.90	642.00
.001818	1.	1.	1.	1	0	0	.00	111.23	758.00

*SECNO 14.499

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

14.50	5.09	573.99	.00	.00	574.33	.34	.08	.00	580.60
2210.	0.	2210.	0.	0.	471.	0.	307.	111.	580.60
1.46	.00	4.69	.00	.030	.030	.030	.040	568.90	642.00
.001706	43.	43.	43.	2	0	0	.00	111.23	758.00

*SECNO 14.500

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.50	5.10	574.00	.00	.00	574.33	.33	.00	.00	580.60
2210.	0.	2210.	0.	0.	476.	0.	307.	111.	100000.00
1.46	.00	4.64	.00	.030	.030	.030	.040	568.90	642.00
.001439	1.	1.	1.	0	0	0	.00	116.00	758.00

1490 NH CARD USED

*SECNO 14.550

3470 ENCROACHMENT STATIONS= 580.0 1602.0 TYPE= 1 TARGET= -580.000

CROSS SECTION OF

14.55	5.37	574.27	.00	.00	574.44	.17	.06	.05	571.90
2210.	0.	2199.	11.	1.	663.	10.	308.	111.	571.90
1.47	.23	3.32	1.10	.120	.040	.035	.040	568.90	642.05
.001037	50.	50.	50.	2	0	0	.00	151.65	793.70

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 15.840

3470 ENCROACHMENT STATIONS= 700.0 2304.0 TYPE= 1 TARGET= 1604.000
CROSS SECTION BG

15.84	5.44	575.44	.00	.00	575.55	.11	1.10	.01	572.70
2210.	22.	2184.	4.	57.	818.	10.	331.	117.	572.70
1.60	.38	2.67	.43	.120	.040	.120	.040	570.00	1115.50
.000717	1400.	1290.	1220.	2	0	0	.00	240.73	1356.31

1490 NH CARD USED
*SECNO 17.260
CROSS SECTION BH

17.26	5.00	576.90	.00	.00	577.11	.21	1.52	.03	572.70
2210.	225.	1394.	590.	176.	310.	307.	359.	127.	572.70
1.72	1.28	4.39	1.92	.060	.040	.060	.040	571.90	791.80
.001755	1520.	1420.	1440.	2	0	0	.00	333.80	1125.61

1490 NH CARD USED
*SECNO 18.650
CROSS SECTION BI

18.65	7.99	578.49	.00	.00	578.62	.13	1.51	.01	573.20
2210.	16.	1318.	877.	29.	356.	1076.	394.	142.	573.20
1.87	.55	3.71	.82	.120	.040	.091	.040	570.90	849.67
.000754	1280.	1390.	1340.	2	0	0	.00	623.52	1473.19

1490 NH CARD USED
*SECNO 19.540

3470 ENCROACHMENT STATIONS= 852.5 932.5 TYPE= 1 TARGET= 80.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BI

19.54	7.76	579.26	.00	.00	579.77	.51	1.04	.11	573.80
2210.	28.	2131.	51.	31.	364.	47.	415.	150.	573.80
1.92	.90	5.85	1.08	.120	.040	.120	.040	571.50	852.50
.001820	1100.	895.	1050.	2	0	0	.00	80.00	932.50

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

CCHV= .300 CEHV= .500
*SECNO 19.600

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

19.60	7.48	579.08	.00	.00	580.19	1.12	.12	.30	590.00
2210.	0.	2210.	0.	0.	261.	0.	416.	150.	590.00
1.92	.00	8.48	.00	.030	.030	.030	.040	571.60	1163.04
.003340	50.	50.	50.	2	0	0	.00	40.27	1203.31

*SECNO 19.601

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.60	7.48	579.08	.00	.00	580.20	1.12	.00	.00	590.00
2210.	0.	2210.	0.	0.	261.	0.	416.	150.	590.00
1.92	.00	8.47	.00	.030	.030	.030	.040	571.60	1163.04
.003346	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.619

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.62	7.64	579.24	.00	.00	580.30	1.06	.09	.02	590.00
2210.	0.	2210.	0.	0.	267.	0.	416.	150.	590.00
1.92	.00	8.27	.00	.030	.030	.030	.040	571.60	1163.04
.003108	28.	28.	28.	2	0	0	.00	40.27	1203.31

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

*SECNO 19.620

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

CROSS SECTION AT UPSTREAM FACE OF BT & I RAILROAD BRIDGE

19.62	7.65	579.25	.00	.00	580.31	1.06	.00	.00	590.00
2210.	0.	2210.	0.	0.	267.	0.	416.	150.	590.00
1.92	.00	0.26	.00	.030	.030	.030	.040	571.60	1163.04
.003104	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.670

3470 ENCROACHMENT STATIONS= 1151.7 1214.7 TYPE= 1 TARGET= 72.700

CROSS SECTION BETWEEN BRIDGES

19.67	7.48	579.30	.00	.00	580.47	1.10	.15	.02	578.10
2210.	1.	2197.	12.	1.	261.	7.	416.	150.	574.90
1.92	.68	0.43	1.84	.050	.030	.050	.040	571.90	1161.95
.002828	50.	50.	50.	2	0	0	.00	44.38	1206.33

*SECNO 19.720

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

19.72	7.73	580.03	.00	.00	580.71	.68	.11	.13	593.20
2210.	0.	2210.	0.	0.	335.	0.	416.	150.	593.20
1.92	.00	6.60	.00	.030	.030	.030	.040	572.30	1207.64
.001792	50.	50.	50.	3	0	0	.00	48.50	1256.13

*SECNO 19.722

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	AROB	VOL	TOA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XKCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
19.72	7.74	580.04	.00	.00	580.71	.68	.00	.00	593.20
2210.	0.	2210.	0.	0.	335.	0.	416.	150.	593.20
1.92	.00	6.59	.00	.030	.030	.030	.040	572.30	1207.64
.001788	2.	2.	2.	0	0	0	.00	48.50	1256.13

*SECNO 19.738

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.74	7.78	580.08	.00	.00	580.74	.67	.03	.00	593.20
2210.	0.	2210.	0.	0.	337.	0.	417.	150.	593.20
1.92	.00	6.57	.00	.030	.030	.030	.040	572.30	1207.64
.001766	16.	16.	16.	0	0	0	.00	48.50	1256.13

*SECNO 19.740

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

19.74	7.78	580.08	.00	.00	580.75	.67	.00	.00	593.20
2210.	0.	2210.	0.	0.	337.	0.	417.	150.	593.20
1.92	.00	6.56	.00	.030	.030	.030	.040	572.30	1207.64
.001758	2.	2.	2.	0	0	0	.00	48.50	1256.13

1490 NH CARD USED
*SECNO 19.790

3470 ENCROACHMENT STATIONS= 1498.0 1658.0 TYPE= 1 TARGET= 160.000
CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE COPY SECTION 8J

19.79	8.93	580.03	.00	.00	581.05	1.02	.13	.18	578.10
2210.	173.	1995.	42.	136.	234.	27.	417.	150.	574.50
1.92	1.27	8.53	1.52	.120	.040	.120	.040	571.18	1498.00
.004141	50.	50.	50.	2	0	0	.00	106.06	1604.06

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 19.900

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1380.0 1740.0 TYPE= 1 TARGET= 360.000
CROSS SECTION BJ

19.90	9.99	581.09	.00	.00	581.37	.28	.24	.07	578.10
2210.	774.	1397.	39.	682.	266.	40.	419.	151.	574.50
1.93	1.14	5.26	.96	.114	.040	.120	.040	571.10	1380.00
.001330	110.	110.	110.	3	0	0	.00	226.60	1606.60

*SECNO 20.010
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

20.01	9.23	581.43	.00	.00	581.59	.15	.21	.01	579.20
2210.	1119.	1067.	24.	1102.	243.	31.	425.	153.	575.60
1.95	1.02	4.39	.79	.083	.040	.120	.039	572.20	985.59
.001044	260.	110.	140.	2	0	0	.00	619.19	1604.78

CCHV= .300 CEHV= .500
*SECNO 20.060

3265 DIVIDED FLOW

CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

20.06	8.73	581.33	.00	.00	581.81	.48	.06	.16	581.20
2210.	433.	1777.	0.	240.	289.	0.	426.	153.	581.20
1.95	1.81	6.15	.02	.030	.030	.030	.039	572.60	831.29
.001538	50.	50.	50.	2	0	0	.00	339.26	1229.78

*SECNO 20.061

3265 DIVIDED FLOW

SECNO	DEPTH	CUSEL	CRIWS	WSELK	EG	HV	ML	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.06	8.98	581.58	.00	.00	581.87	.29	.08	.06	581.20
2210.	775.	1435.	0.	319.	284.	0.	426.	154.	581.20
1.95	2.43	5.05	.57	.030	.030	.030	.039	572.60	817.11
.002186	1.	1.	1.	3	0	0	-13.89	375.97	1230.32

*SECNO 20.079

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.08	9.06	581.66	.00	.00	581.92	.26	.04	.01	581.20
2210.	835.	1375.	0.	346.	284.	0.	426.	154.	581.20
1.96	2.41	4.04	.62	.030	.030	.030	.039	572.60	814.16
.002008	18.	18.	18.	2	0	0	-16.76	386.07	1230.48

*SECNO 20.080

3265 DIVIDED FLOW

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

20.08	9.02	581.62	.00	.00	581.96	.35	.08	.04	581.20
2210.	590.	1620.	0.	332.	299.	0.	426.	154.	581.20
1.96	1.78	5.41	.55	.030	.030	.030	.039	572.60	815.46
.001136	1.	1.	1.	2	0	0	.00	380.97	1230.39

1490 NN CARD USED

*SECNO 20.130

CROSS SECTION BK

20.13	9.38	581.98	.00	.00	582.08	.09	.04	.08	573.70
2210.	1170.	949.	91.	1559.	262.	75.	428.	154.	573.70
1.96	.75	3.62	1.21	.114	.040	.075	.039	572.60	961.87
.000529	50.	50.	50.	2	0	0	.00	485.46	1447.33

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	MV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROD	XNL	XNCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	EXDST

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 20.770
CROSS SECTION BL

20.77	8.45	582.35	.00	.00	582.39	.03	.30	.01	574.70
2210.	1341.	590.	280.	2171.	224.	438.	473.	165.	574.70
2.15	.62	2.64	.64	.120	.040	.120	.039	573.90	790.61
.000303	880.	640.	640.	2	0	0	.00	625.75	1416.37

1490 NH CARD USED
*SECNO 21.910

3470 ENCROACHMENT STATIONS= 730.5 980.5 TYPE= 1 TARGET= 250.000
CROSS SECTION BM

21.91	7.69	582.79	.00	.00	583.04	.25	.59	.06	576.30
2210.	549.	1151.	510.	454.	213.	430.	516.	175.	576.30
2.23	1.21	5.41	1.19	.120	.040	.120	.039	573.10	730.50
.001517	960.	1140.	900.	2	0	0	.00	250.00	980.50

1490 NH CARD USED
*SECNO 22.120

3470 ENCROACHMENT STATIONS= 800.5 910.5 TYPE= 1 TARGET= 110.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BM

22.12	9.41	583.01	.00	.00	583.39	.38	.31	.04	574.80
2210.	313.	1536.	361.	232.	262.	253.	521.	175.	574.80
2.24	1.35	5.86	1.43	.120	.040	.120	.039	573.60	800.50
.001344	220.	210.	220.	1	0	0	.00	110.00	910.50

CCHV= .300 CEHV= .500
*SECNO 22.170

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 584.90 ELREA= 584.90

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

22.17	10.02	583.32	.00	.00	583.49	.17	.03	.06	584.90
2210.	0.	2210.	0.	0.	672.	0.	522.	176.	584.90
2.25	.00	3.29	.00	.035	.035	.035	.039	573.30	1120.50
.000416	50.	50.	50.	2	0	0	.00	75.00	1195.50

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COEFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.65	2.50	00.00	50.30	6.00	726.75	1.06	573.30	573.30

*SECNO 22.190
CLASS A LOW FLOW

3420 BRIDGE W.S.= 583.27 BRIDGE VELOCITY=, 4.04 CALCULATED CHANNEL AREA=, 547.

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	583.51	.02	0.	2210.	727.	657.	584.90	589.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.20 ELREA= 589.20

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

22.19	10.04	583.34	.00	.00	583.51	.17	.02	.00	584.90
2210.	0.	2210.	0.	0.	674.	0.	522.	176.	584.90
2.25	.00	3.28	.00	.035	.035	.035	.039	573.30	1120.50
.000413	20.	20.	20.	0	0	0	.00	75.00	1195.50

*SECNO 22.270

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

22.27	9.58	583.38	.00	.00	583.54	.16	.03	.00	583.00
2210.	0.	2210.	0.	0.	683.	0.	523.	176.	577.40
2.26	.00	3.23	.00	.035	.035	.035	.039	573.00	1208.00
.000460	80.	80.	80.	0	0	0	.00	101.00	1309.00

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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.71	2.80	.00	54.20	5.00	885.20	1.93	573.80	573.80

*SECNO 22.300
CLASS A LOW FLOW

3420 BRIDGE U.S.= 583.36 BRIDGE VELOCITY= 3.42 CALCULATED CHANNEL AREA= 647.

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	583.56	.01	0.	2210.	885.	878.	585.90	587.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

22.30	9.59	583.39	.00	.00	583.56	.16	.01	.00	583.00
2210.	0.	2210.	0.	0.	686.	0.	524.	176.	577.40
2.26	.00	3.22	.00	.035	.035	.035	.039	573.80	1208.00
.000455	30.	30.	30.	0	0	0	.00	101.00	1309.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 22.350

3470 ENCROACHMENT STATIONS= 1326.5 1556.5 TYPE= 1 TARGET= 230.000

CROSS SECTION BN

22.35	9.20	583.40	.00	.00	583.60	.20	.03	.01	576.30
2210.	401.	1573.	236.	338.	375.	204.	525.	176.	576.30
2.26	1.19	4.20	1.16	.082	.040	.060	.039	574.20	1326.50
.000724	50.	50.	50.	2	0	0	.00	230.00	1556.50

1490 NH CARD USED
*SECNO 23.210

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	WACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
3265 DIVIDED FLOW									
CROSS SECTION BO									
23.21	7.60	584.20	.00	.00	584.31	.11	.71	.01	577.10
2210.	74.	676.	1461.	90.	147.	1457.	548.	182.	577.10
2.37	.75	4.59	1.00	.120	.040	.120	.039	576.60	1125.62
.001071	840.	850.	740.	2	0	0	.00	468.17	1603.14
1490 NN CARD USED									
*SECNO 23.930									
3470 ENCROACHMENT STATIONS= 383.5 691.5 TYPE= 1 TARGET= 305.000									
CROSS SECTION BP									
23.93	8.71	584.01	.00	.00	585.02	.21	.67	.03	577.60
2210.	431.	1500.	279.	486.	342.	372.	571.	188.	577.60
2.43	.89	4.38	.75	.120	.040	.117	.039	576.10	386.50
.000851	480.	720.	760.	1	0	0	.00	305.00	691.50
1490 NN CARD USED									
*SECNO 24.160									
3470 ENCROACHMENT STATIONS= 464.0 614.0 TYPE= 1 TARGET= 150.000									
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BP									
24.16	8.86	584.96	.00	.00	585.26	.30	.22	.03	577.60
2210.	298.	1729.	183.	267.	349.	198.	577.	190.	577.60
2.45	1.12	4.95	.92	.120	.040	.120	.040	576.10	464.00
.001060	230.	230.	230.	2	0	0	.00	150.00	614.00
CCHV= .300 CEHV= .500									
*SECNO 24.210									
3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.00 ELREA= 587.00									
CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)									
24.21	8.23	585.23	.00	.00	585.34	.11	.02	.06	590.20
2210.	0.	2210.	0.	0.	828.	0.	578.	190.	590.20
2.45	.00	2.67	.00	.030	.030	.030	.039	577.00	600.00
.000241	50.	50.	50.	2	0	0	.00	115.00	715.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	MV	ML	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	UTH	ELMIN	SSTA
SLOPE	KLOBL	KLCH	KLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL BRIDGE

5070,VARIABLE ELCKU OR ELCKD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCKU	ELCKD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.260
CLASS A LOW FLOW

3420 BRIDGE U.S.= 585.22 BRIDGE VELOCITY=, 2.80 CALCULATED CHANNEL AREA=, 788.

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	585.35	.00	0.	2210.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.26	8.24	585.24	.00	.00	585.35	.11	.00	.00	590.20
2210.	0.	2210.	0.	0.	828.	0.	579.	190.	590.20
2.46	.00	2.67	.00	.030	.030	.030	.039	577.00	600.00
.000241	55.	55.	55.	0	0	0	.00	115.00	715.00

*SECNO 24.280

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.00 ELREA= 587.00

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.28	8.24	585.24	.00	.00	585.35	.11	.00	.00	590.20
2210.	0.	2210.	0.	0.	829.	0.	579.	190.	590.20
2.46	.00	2.67	.00	.030	.030	.030	.039	577.00	600.00
.000240	20.	20.	20.	0	0	0	.00	115.00	715.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	NL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	CQFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.340
CLASS A LOW FLOW

3420 BRIDGE W.S.= 585.23 BRIDGE VELOCITY=, 2.80 CALCULATED CHANNEL AREA=, 789.

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	585.35	.00	0.	2210.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.34	0.24	585.24	.00	.00	585.35	.11	.00	.00	590.20
2210.	0.	2210.	0.	0.	829.	0.	580.	190.	590.20
2.47	.00	2.66	.00	.030	.030	.030	.039	577.00	600.00
.000240	55.	55.	55.	0	0	0	.00	115.00	715.00

1490 NH CARD USED
*SECNO 24.390

3470 ENCROACHMENT STATIONS= 560.0 775.0 TYPE= 1 TARGET= 215.000
CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION 80

24.39	0.92	585.22	.00	.00	585.42	.20	.02	.05	577.70
2210.	779.	1023.	409.	426.	207.	253.	581.	190.	577.70
2.47	1.83	4.95	1.62	.070	.040	.060	.039	576.30	560.00
.001073	50.	50.	50.	2	0	0	.00	215.00	775.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 24.690

3470 ENCROACHMENT STATIONS= 216.0 1116.0 TYPE= 1 TARGET= -216.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	MV	ML	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	UTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
	CROSS SECTION BQ								
24.69	9.22	585.52	.00	.00	585.54	.03	.10	.02	577.70
2210.	1518.	476.	216.	1790.	214.	295.	590.	192.	577.70
2.53	.85	2.23	.73	.070	.040	.050	.039	576.30	259.22
.000207	200.	310.	310.	2	0	0	.00	535.61	794.83

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: 50yr. flood

00BREAK00

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**********
  HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
  ERROR CORR -  01,02,03,04
  MODIFICATION -  50,51,52,53,54
**********

T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      SWAN CREEK
T3      BERLIN, SWAN CREEK       50-YEAR FLOOD

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    MVINS     Q          USEL      FQ
        0.       5.        0.        0.   .000000       .00     -1.0        0.    570.900      .000
J2  NPROF      IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW        CHNIM     ITRACE
    2.000       .000    -1.000      .000      .000      .000      .000      .000       .000      .000
```

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

*PROF 2

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 5.000
CROSS SECTION 8A

5.00	3.50	570.90	.00	570.90	570.96	.06	.00	.00	572.50
3650.	0.	3650.	0.	0.	1840.	0.	0.	0.	572.50
.00	.00	1.98	.00	.000	.030	.000	.000	567.40	1990.00
.000437	0.	0.	0.	0	0	0	.00	691.86	2689.86

1490 NH CARD USED
*SECNO 7.570
CROSS SECTION 8B

7.57	3.73	571.93	.00	.00	571.99	.06	1.03	.00	572.50
3650.	0.	3650.	0.	0.	1851.	0.	109.	39.	572.50
.36	.00	1.97	.00	.000	.030	.000	.040	568.20	1554.48
.000368	3200.	2570.	2500.	2	0	0	.00	618.63	2173.11

1490 NH CARD USED
*SECNO 9.730
CROSS SECTION 8C

9.73	4.06	572.76	.00	.00	572.83	.07	.83	.00	572.40
3650.	0.	3650.	0.	1.	1722.	0.	197.	68.	572.40
.65	.16	2.12	.00	.060	.030	.120	.040	568.70	1629.19
.000404	2080.	2160.	2300.	2	0	0	.00	558.93	2188.12

1490 NH CARD USED
*SECNO 11.740

3470 ENCROACHMENT STATIONS= .0 1534.0 TYPE= 1 TARGET= 1533.999
CROSS SECTION 8D

11.74	5.61	573.61	.00	.00	573.69	.07	.86	.00	572.40
3290.	3.	3287.	0.	7.	1496.	2.	272.	90.	572.40
.90	.38	2.20	.18	.060	.035	.120	.040	568.00	1032.09
.000456	2080.	2010.	2100.	2	0	0	.00	411.30	1444.19

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	ML	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	HNL	XNCH	XNR	STN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO 13.550
CROSS SECTION BE

13.55	5.76	574.36	.00	.00	574.43	.08	.75	.00	571.90
3290.	54.	3235.	2.	129.	1456.	6.	336.	107.	571.90
1.13	.42	2.22	.26	.099	.035	.120	.040	560.60	682.83
.000375	1760.	1810.	1900.	2	0	0	.00	409.39	1092.23

1490 NH CARD USED
*SECNO 14.400

3470 ENCROACHMENT STATIONS= 848.0 998.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

14.40	5.84	574.74	.00	.00	575.01	.27	.52	.06	100000.00
3290.	0.	3290.	0.	0.	787.	0.	360.	113.	100000.00
1.19	.00	4.18	.00	.099	.035	.120	.040	568.90	848.00
.001153	1000.	855.	800.	1	0	0	.00	150.00	998.00

CCHV= .300 CEHV= .500
*SECNO 14.460

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000
CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.46	5.79	574.69	.00	.00	575.20	.51	.07	.12	580.60
3290.	0.	3290.	0.	0.	576.	0.	361.	113.	100000.00
1.19	.00	5.72	.00	.030	.030	.030	.040	568.90	642.00
.001718	50.	50.	50.	2	0	0	.00	116.00	758.00

*SECNO 14.461

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	ML	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XKCH	XNR	QTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
14.46	5.77	574.67	.00	.00	575.23	.56	.00	.03	580.60
3290.	0.	3290.	0.	0.	547.	0.	361.	113.	580.60
1.19	.00	6.01	.00	.030	.030	.030	.040	568.90	642.00
.002394	1.	1.	1.	2	0	0	.00	111.27	758.00

*SECNO 14.499

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

14.50	5.91	574.01	.00	.00	575.34	.53	.10	.01	580.60
3290.	0.	3290.	0.	0.	562.	0.	361.	113.	580.60
1.19	.00	5.85	.00	.030	.030	.030	.040	568.90	642.00
.002200	43.	43.	43.	2	0	0	.00	111.28	758.00

*SECNO 14.500

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.50	5.94	574.84	.00	.00	575.35	.51	.00	.01	580.60
3290.	0.	3290.	0.	0.	574.	0.	361.	113.	100000.00
1.19	.00	5.73	.00	.030	.030	.030	.040	568.90	642.00
.001730	1.	1.	1.	2	0	0	.00	116.00	758.00

1490 NH CARD USED

*SECNO 14.550

3470 ENCROACHMENT STATIONS= 580.0 1602.0 TYPE= 1 TARGET= -580.000

CROSS SECTION BF

14.55	6.34	575.24	.00	.00	575.49	.25	.07	.08	571.90
3290.	3.	3259.	29.	10.	801.	19.	362.	113.	571.90
1.19	.27	4.07	1.55	.120	.040	.055	.040	568.90	623.76
.001210	50.	50.	50.	2	0	0	.00	172.07	795.83

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 15.840

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 700.0 2304.0 TYPE= 1 TARGET= 1604.000
CROSS SECTION BG

15.84	6.55	576.55	.00	.00	576.70	.15	1.20	.01	572.70
3290.	69.	3210.	11.	146.	1025.	20.	392.	123.	572.70
1.31	.47	3.13	.57	.120	.040	.120	.040	570.00	700.89
.000732	1400.	1290.	1220.	2	0	0	.00	449.43	1359.02

1490 NH CARD USED
*SECNO 17.260
CROSS SECTION BH

17.26	6.05	577.95	.00	.00	578.15	.20	1.43	.02	572.70
3290.	549.	1775.	966.	347.	388.	446.	431.	137.	572.70
1.43	1.58	4.57	2.16	.060	.040	.060	.040	571.90	724.92
.001453	1520.	1420.	1440.	1	0	0	.00	405.27	1130.19

1490 NH CARD USED
*SECNO 18.650
CROSS SECTION BI

18.65	8.50	579.40	.00	.00	579.53	.13	1.37	.01	573.20
3290.	28.	1607.	1654.	48.	403.	1598.	481.	154.	573.20
1.58	.59	3.99	1.04	.120	.040	.084	.040	570.90	843.31
.000742	1280.	1390.	1340.	0	0	0	.00	653.18	1496.49

1490 NH CARD USED
*SECNO 19.540

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 852.5 932.5 TYPE= 1 TARGET= 80.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	ML	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	UTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
	CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE					REPEAT SECTION @I			
19.54	8.58	580.08	.00	.00	580.97	.89	1.21	.23	573.80
3290.	94.	3146.	89.	43.	406.	59.	511.	162.	573.80
1.62	1.28	7.75	1.51	.120	.040	.120	.040	571.50	852.50
.002760	1100.	895.	1050.	2	0	0	.00	80.00	932.50

CCHV= .300 CEHV= .900
*SECNO 19.600

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

19.60	8.08	579.68	.00	.00	581.75	2.06	.19	.59	590.00
3290.	0.	3290.	0.	0.	285.	0.	511.	162.	590.00
1.62	.00	11.53	.00	.030	.030	.030	.040	571.60	1163.04
.005670	50.	50.	50.	2	0	0	.00	40.27	1203.31

*SECNO 19.601

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.60	8.09	579.69	.00	.00	581.75	2.07	.01	.00	590.00
3290.	0.	3290.	0.	0.	285.	0.	511.	162.	590.00
1.62	.00	11.54	.00	.030	.030	.030	.040	571.60	1163.04
.005676	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.619

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

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

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.62	8.55	580.15	.00	.00	581.97	1.82	.14	.07	590.00
3290.	0.	3290.	0.	0.	304.	0.	511.	162.	590.00
1.62	.00	10.83	.00	.030	.030	.030	.040	571.60	1163.04
.004702	28.	28.	28.	3	0	0	.00	40.27	1203.31

*SECNO 19.620

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

19.62	8.56	580.16	.00	.00	581.98	1.82	.00	.00	590.00
3290.	0.	3290.	0.	0.	304.	0.	511.	162.	590.00
1.62	.00	10.82	.00	.030	.030	.030	.040	571.60	1163.04
.004691	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.670

3470 ENCROACHMENT STATIONS= 1151.7 1214.7 TYPE= 1 TARGET= 72.700

CROSS SECTION BETWEEN BRIDGES

19.67	8.49	580.39	.00	.00	582.19	1.80	.21	.00	578.10
3290.	3.	3262.	25.	2.	302.	10.	512.	162.	574.90
1.62	1.51	10.81	2.45	.050	.030	.050	.040	571.90	1161.08
.003826	50.	50.	50.	0	0	0	.00	45.93	1207.02

*SECNO 19.720

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

19.72	9.27	581.57	.00	.00	582.57	1.00	.14	.24	593.20
3290.	0.	3290.	0.	0.	409.	0.	512.	162.	593.20
1.62	.00	8.04	.00	.030	.030	.030	.040	572.30	1207.64
.002174	50.	50.	50.	3	0	0	.00	48.50	1256.13

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	MV	ML	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
*SECNO 19.722									
3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70									
CROSS SECTION AT NYC RAILROAD BRIDGE									
19.72	9.28	581.58	.00	.00	582.58	1.00	.00	.00	593.20
3290.	0.	3290.	0.	0.	410.	0.	512.	162.	593.20
1.62	.00	0.03	.00	.030	.030	.030	.040	572.30	1207.64
.002168	2.	2.	2.	0	0	0	.00	48.50	1256.13
*SECNO 19.738									
3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70									
CROSS SECTION AT NYC RAILROAD BRIDGE									
19.74	9.33	581.63	.00	.00	582.62	.99	.03	.00	593.20
3290.	0.	3290.	0.	0.	412.	0.	512.	162.	593.20
1.62	.00	7.99	.00	.030	.030	.030	.040	572.30	1207.64
.002137	16.	16.	16.	1	0	0	.00	48.50	1256.13
*SECNO 19.740									
3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10									
CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE									
19.74	9.33	581.63	.00	.00	582.62	.99	.00	.00	593.20
3290.	0.	3290.	0.	0.	412.	0.	512.	162.	593.20
1.62	.00	7.98	.00	.030	.030	.030	.040	572.30	1207.64
.002128	2.	2.	2.	0	0	0	.00	48.50	1256.13
1490 NH CARD USED									
*SECNO 19.790									
3470 ENCROACHMENT STATIONS= 1498.0 1658.0 TYPE= 1 TARGET= 160.000									
CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE COPY SECTION 8J									
19.79	10.55	581.65	.00	.00	582.90	1.24	.15	.13	578.10
3290.	448.	2755.	87.	241.	283.	48.	513.	163.	574.50
1.62	1.86	9.75	1.80	.120	.040	.120	.040	571.10	1490.00
.004210	50.	50.	50.	2	0	0	.00	109.96	1607.96

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 19.900

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1380.0 1740.0 TYPE= 1 TARGET= 360.000
CROSS SECTION DJ

19.90	11.03	582.93	.00	.00	583.21	.28	.22	.10	578.10
3290.	1405.	1803.	83.	1019.	321.	99.	515.	163.	574.50
1.63	1.38	5.62	.03	.115	.040	.120	.040	571.10	1380.00
.001179	110.	110.	110.	3	0	0	.00	299.59	1679.59

*SECNO 20.010
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION DJ

20.01	11.11	583.31	.00	.00	583.37	.05	.13	.02	579.20
3290.	2284.	971.	35.	2335.	299.	57.	526.	166.	575.60
1.66	.98	3.25	.61	.076	.040	.120	.039	572.20	827.30
.000432	260.	110.	140.	2	0	0	.00	781.91	1609.30

CCHV= .300 CEHV= .500
*SECNO 20.060
CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

20.06	10.70	583.30	.00	.00	583.42	.13	.02	.03	581.20
3290.	1916.	1364.	10.	1003.	361.	13.	529.	167.	581.20
1.67	1.91	3.78	.71	.030	.030	.030	.039	572.60	763.30
.000433	50.	50.	50.	2	0	0	.00	499.83	1263.20

*SECNO 20.061

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.06	10.73	583.33	.00	.00	583.43	.10	.00	.01	581.20
3290.	2478.	800.	12.	1017.	284.	16.	529.	167.	581.20
1.67	2.44	2.82	.76	.030	.030	.030	.039	572.60	762.32
.000697	1.	1.	1.	2	0	0	-77.74	502.39	1264.70

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

*SECNO 20.079

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.08	10.74	583.34	.00	.00	583.44	.10	.01	.00	581.20
3290.	2482.	796.	12.	1022.	284.	16.	529.	167.	581.20
1.67	2.43	2.80	.76	.030	.030	.030	.039	572.60	762.00
.000690	18.	18.	18.	0	0	0	-78.11	503.15	1265.15

*SECNO 20.080

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

20.08	10.73	583.33	.00	.00	583.45	.12	.00	.01	581.20
3290.	1932.	1347.	11.	1021.	362.	16.	529.	167.	581.20
1.67	1.89	3.72	.70	.030	.030	.030	.039	572.60	762.05
.000416	1.	1.	1.	1	0	0	.00	503.04	1265.09

1490 NH CARD USED

*SECNO 20.130

CROSS SECTION BK

20.13	10.79	583.39	.00	.00	583.48	.09	.02	.01	573.70
3290.	1965.	1190.	135.	2180.	304.	163.	532.	168.	573.70
1.68	.90	3.91	1.31	.112	.040	.075	.039	572.60	951.61
.000507	50.	50.	50.	2	0	0	.00	498.76	1450.37

CCHV= .100 CEHV= .300

1490 NH CARD USED

*SECNO 20.770

CROSS SECTION BL

20.77	9.86	583.76	.00	.00	583.80	.04	.31	.01	574.70
3290.	2097.	772.	421.	2908.	261.	564.	592.	179.	574.70
1.85	.72	2.95	.75	.120	.040	.120	.039	573.90	764.70
.000308	880.	640.	640.	2	0	0	.00	654.55	1419.25

1490 NH CARD USED

*SECNO 21.910

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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=		730.5	980.5	TYPE=	1	TARGET=	250.000		
CROSS SECTION BM									
21.91	9.08	584.10	.00	.00	584.47	.30	.60	.08	576.30
3290.	892.	1553.	845.	606.	252.	581.	649.	189.	576.30
1.93	1.47	6.15	1.45	.120	.040	.120	.039	575.10	730.50
.001559	960.	1140.	900.	0	0	0	.00	250.00	980.50

1490 NH CARD USED
*SECNO 22.120

3470 ENCROACHMENT STATIONS=		800.5	910.5	TYPE=	1	TARGET=	110.000		
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE						REPEAT SECTION BM			
22.12	10.72	584.32	.00	.00	584.92	.59	.36	.09	574.80
3290.	502.	2225.	563.	285.	301.	307.	655.	190.	574.80
1.94	1.76	7.40	1.84	.120	.040	.120	.039	573.60	800.50
.001789	220.	210.	220.	2	0	0	.00	110.00	910.50

CCHV= .300 CEHV= .500
*SECNO 22.170

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.90 ELREA= 584.90

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

22.17	11.48	584.78	.00	.00	585.06	.27	.05	.10	584.90
3290.	0.	3290.	0.	0.	782.	0.	656.	190.	584.90
1.95	.00	4.21	.00	.035	.035	.035	.039	573.30	1120.50
.000580	50.	50.	50.	2	0	0	.00	75.00	1195.50

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.65	2.50	80.00	50.30	6.00	726.75	1.06	573.30	573.30

*SECNO 22.190

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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
585.31	585.10	.04	0.	3290.	727.	657.	584.90	589.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.20 ELREA= 589.20

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

22.19	11.75	585.05	.00	.00	585.31	.26	.25	.00	584.90
3290.	0.	3290.	0.	0.	802.	0.	656.	190.	584.90
1.95	.00	4.10	.00	.035	.035	.035	.039	573.30	1120.50
.000536	20.	20.	20.	2	0	0	.00	75.00	1195.50

*SECNO 22.270

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

22.27	11.33	585.13	.00	.00	585.36	.23	.04	.01	583.00
3290.	0.	3290.	0.	0.	861.	0.	658.	190.	577.40
1.95	.00	3.82	.00	.035	.035	.035	.039	573.80	1208.00
.000471	80.	80.	80.	2	0	0	.00	101.00	1309.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.71	2.80	.00	54.20	5.00	885.20	1.93	573.80	573.80

*SECNO 22.300
CLASS A LOW FLOW

3420 BRIDGE W.S.= 585.10 BRIDGE VELOCITY=, 4.10 CALCULATED CHANNEL AREA=, 803.

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	585.38	.02	0.	3290.	885.	878.	585.90	587.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

22.30	11.35	505.15	.00	.00	585.38	.23	.02	.00	583.00
3290.	0.	3290.	0.	0.	863.	0.	659.	190.	577.40
1.95	.00	3.81	.00	.035	.035	.035	.039	573.80	1208.00
.000467	30.	30.	30.	0	0	0	.00	101.00	1309.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 22.350

3470 ENCROACHMENT STATIONS= 1326.5 1556.5 TYPE= 1 TARGET= 230.000

CROSS SECTION BN

22.35	11.01	585.21	.00	.00	585.41	.20	.03	.00	576.30
3290.	701.	2013.	576.	508.	453.	373.	660.	190.	576.30
1.96	1.38	4.45	1.54	.082	.040	.060	.039	574.20	1326.50
.000631	50.	50.	50.	2	0	0	.00	230.00	1556.50

1490 NH CARD USED
*SECNO 23.210

3265 DIVIDED FLOW

CROSS SECTION BO

23.21	9.29	585.89	.00	.00	585.97	.08	.55	.01	577.10
3290.	274.	788.	2228.	407.	181.	2149.	696.	199.	577.10
2.08	.67	4.36	1.04	.094	.040	.120	.039	576.60	676.19
.000733	840.	860.	740.	2	0	0	.00	779.14	1732.49

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

1490 NH CARD USED
*SECNO 23.930

3470 ENCROACHMENT STATIONS= 386.5 691.5 TYPE= 1 TARGET= 305.000
CROSS SECTION BP

23.93	10.23	586.33	.00	.00	586.56	.23	.55	.04	577.60
3290.	744.	1982.	564.	688.	407.	574.	731.	207.	577.60
2.14	1.08	4.87	.98	.120	.040	.116	.039	576.10	386.50
.000838	480.	720.	760.	0	0	0	.00	305.00	691.50

1490 NH CARD USED
*SECNO 24.160

3470 ENCROACHMENT STATIONS= 464.0 614.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BP

24.16	10.33	586.43	.00	.00	586.85	.42	.23	.06	577.60
3290.	491.	2459.	340.	346.	411.	277.	738.	208.	577.60
2.15	1.42	5.99	1.23	.120	.040	.120	.039	576.10	464.00
.001248	230.	230.	230.	2	0	0	.00	150.00	614.00

CCHV= .300 CEHV= .500
*SECNO 24.210

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.00 ELREA= 587.00

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.21	9.79	586.79	.00	.00	586.95	.17	.03	.08	590.20
3290.	0.	3290.	0.	0.	1007.	0.	739.	209.	590.20
2.16	.00	3.27	.00	.030	.030	.030	.039	577.00	600.00
.000287	50.	50.	50.	2	0	0	.00	115.00	715.00

SPECIAL BRIDGE

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

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.260
CLASS A LOW FLOW

3420 BRIDGE U.S.= 586.77 BRIDGE VELOCITY=, 3.45 CALCULATED CHANNEL AREA=, 955.

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	586.96	.01	0.	3290.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.26	9.80	586.80	.00	.00	586.96	.17	.01	.00	590.20
3290.	0.	3290.	0.	0.	1008.	0.	741.	209.	590.20
2.16	.00	3.26	.00	.030	.030	.030	.039	577.00	600.00
.000286	55.	55.	55.	0	0	0	.00	115.00	715.00

*SECNO 24.280

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.00 ELREA= 587.00

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.28	9.80	586.80	.00	.00	586.97	.17	.01	.00	590.20
3290.	0.	3290.	0.	0.	1008.	0.	741.	209.	590.20
2.16	.00	3.26	.00	.030	.030	.030	.039	577.00	600.00
.000286	20.	20.	20.	0	0	0	.00	115.00	715.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.340

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

CLASS A LOW FLOW

3420 BRIDGE W.S.= 586.78 BRIDGE VELOCITY=, 3.44 CALCULATED CHANNEL AREA=, 956.

EGPRS	EGLWC	M3	WWEIR	APR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
.00	586.97	.01	0.	3290.	985.	980.	587.00	590.20

3499 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.34	9.81	586.01	.00	.00	586.97	.17	.01	.00	590.20
3290.	0.	3290.	0.	0.	1009.	0.	742.	209.	590.20
2.17	.00	3.26	.00	.030	.030	.030	.039	577.00	600.00
.000285	55.	55.	55.	0	0	0	.00	115.00	715.00

1490 NH CARD USED
*SECNO 24.390

3470 ENCROACHMENT STATIONS= 560.0 775.0 TYPE= 1 TARGET= 215.000
CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION BQ

24.39	10.51	586.81	.00	.00	587.02	.20	.02	.02	577.70
3290.	1200.	1265.	805.	578.	246.	405.	744.	209.	577.70
2.17	2.08	5.22	1.99	.070	.040	.060	.039	576.30	560.00
.000940	50.	50.	50.	1	0	0	.00	215.00	775.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 24.690

3470 ENCROACHMENT STATIONS= 216.0 1116.0 TYPE= 1 TARGET= -216.000
CROSS SECTION BQ

24.69	10.80	587.10	.00	.00	587.12	.03	.09	.02	577.70
3290.	2288.	582.	420.	2422.	253.	494.	755.	211.	577.70
2.23	.94	2.30	.85	.070	.040	.060	.039	576.30	250.08
.000176	200.	310.	310.	2	0	0	.00	567.93	819.01

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: 100 yr.

00BREAK00

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*********************************************
*  WATER SURFACE PROFILES                   *
*  VERSION OF NOVEMBER 1976                 *
*  UPDATED APRIL 1980                       *
*                                           *
*  RUN DATE THU. MAR 12, 1981, 12:02 PM     *
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*  U.S. ARMY CORPS OF ENGINEERS *
*  THE HYDROLOGIC ENGINEERING CENTER *
*  609 SECOND STREET, SUITE D   *
*  DAVIS, CALIFORNIA 95616      *
*  (916) 440-2105 (FTS) 448-2105 *
*********************************
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TOWNSHIP OF BERLIN
SWAN CREEK
MARCH 12, 1981

FLOODWAY DATA
MDNR COPY

RECEIVED
MAR 31 1981
WATER MANAGEMENT

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**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
  ERROR CORR -  01,02,03,04
  MODIFICATION -  50,51,52,53,54
**********************************************
C
T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      SWAN CREEK
T3      BERLIN, SWAN CREEK      100-YEAR FLOOD
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J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	.000000	.00	-1.0	0.	570.900	.000

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	150.000	200.000	.000	.000	.000	.000	.000	.000	.000	.000

NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
QT	5.000	4090.000	4090.000	4950.000	3650.000	2450.000	.000	.000	.000	.000
NH	5.000	.060	1748.000	.120	1998.000	.030	2747.000	.090	3506.000	.060
NH	5034.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BA

X1	5.000	61.000	1998.000	2747.000	.000	.000	.000	.000	.000	.000
GP	574.800	.000	574.300	86.000	574.500	188.000	574.500	296.000	574.600	388.000
GR	574.600	510.000	574.400	646.000	573.500	766.000	572.600	866.000	572.800	1010.000
GR	573.200	1158.000	573.400	1310.000	574.000	1436.000	573.400	1522.000	573.300	1610.000
GR	573.300	1682.000	572.900	1730.000	572.200	1736.000	574.600	1748.000	574.400	1796.000
GR	575.000	1876.000	575.000	1938.000	575.000	1958.000	575.800	1992.000	575.800	1997.000
GR	572.500	1998.000	568.900	1998.000	567.900	2042.000	567.800	2102.000	567.700	2157.000
GR	567.400	2192.000	567.700	2242.000	567.700	2292.000	567.700	2322.000	567.700	2382.000
GR	568.000	2442.000	568.300	2472.000	568.400	2512.000	568.900	2557.000	569.400	2627.000
GR	570.400	2672.000	572.500	2747.000	573.900	2772.000	574.000	2820.000	574.200	2934.000
GR	574.600	3052.000	574.300	3162.000	574.200	3268.000	574.800	3388.000	574.800	3506.000
GR	574.900	3616.000	574.200	3770.000	574.200	3906.000	574.200	4040.000	574.000	4154.000
GR	574.800	4318.000	575.600	4476.000	576.000	4598.000	576.000	4756.000	576.600	4880.000
GR	576.400	5034.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	1551.000	.030	2190.000	.120	2634.000	.060	4110.000	.000

CROSS SECTION BB'

X1	7.570	61.000	1551.000	2190.000	3200.000	2500.000	2570.000	.000	.000	.000
GR	574.400	.000	578.600	18.000	579.400	32.000	577.400	46.000	577.200	116.000
GR	578.600	218.000	577.800	306.000	577.700	404.000	575.800	482.000	576.500	524.000
GR	578.200	622.000	578.200	716.000	578.000	784.000	577.800	886.000	577.800	1010.000
GR	578.300	1138.000	578.000	1248.000	577.600	1348.000	575.400	1404.000	577.800	1440.000
GR	577.400	1486.000	577.400	1510.000	576.800	1540.000	572.500	1551.000	570.200	1565.000
GR	568.900	1610.000	568.400	1640.000	568.200	1700.000	568.400	1765.000	568.200	1830.000
GR	568.200	1885.000	568.400	1940.000	568.700	1985.000	569.400	2060.000	570.300	2125.000
GR	572.500	2190.000	575.900	2192.000	576.600	2244.000	578.000	2294.000	577.800	2328.000
GR	578.400	2368.000	578.600	2392.000	579.000	2454.000	578.900	2478.000	578.400	2556.000
GR	579.000	2604.000	578.000	2634.000	578.200	2730.000	579.200	2840.000	579.800	2950.000
GR	578.800	3012.000	580.900	3028.000	580.600	3052.000	578.200	3062.000	578.800	3092.000
GR	579.200	3266.000	579.600	3388.000	580.200	3564.000	580.700	3776.000	581.400	4004.000
GR	581.200	4110.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	1633.000	.030	2188.000	.120	2342.000	.060	3602.000	.000

CROSS SECTION BC

LT RT Reach Lengths

X1	9.730	60.000	1633.000	2188.000	2080.000	2300.000	2160.000	.000	.000	.000
GR	579.900	.000	579.800	66.000	580.300	146.000	580.000	242.000	580.800	338.000
GR	581.000	444.000	581.200	556.000	581.200	686.000	581.800	806.000	581.200	910.000
GR	580.800	1000.000	580.300	1068.000	581.800	1110.000	580.800	1132.000	580.400	1254.000
GR	580.100	1364.000	579.200	1454.000	576.800	1532.000	575.600	1598.000	574.800	1617.000
GR	573.800	1618.000	572.400	1633.000	571.100	1648.000	570.400	1673.000	570.200	1698.000
GR	569.900	1723.000	569.600	1748.000	569.400	1773.000	569.200	1798.000	569.000	1823.000
GR	568.900	1848.000	568.900	1873.000	568.800	1898.000	568.700	1923.000	569.000	1948.000
GR	569.200	1973.000	569.300	1998.000	569.400	2023.000	569.600	2048.000	569.600	2073.000
GR	569.600	2098.000	569.800	2123.000	570.200	2148.000	572.400	2188.000	575.400	2189.000
GR	580.600	2192.000	582.600	2236.000	582.500	2262.000	581.900	2304.000	581.500	2342.000
GR	582.000	2444.000	580.600	2590.000	580.800	2716.000	581.000	2850.000	582.000	2990.000
GR	582.800	3140.000	582.900	3200.000	583.100	3370.000	583.000	3510.000	582.200	3602.000
GR	5.000	3690.000	3690.000	4470.000	3290.000	2210.000	.000	.000	.000	.000
NH	4.000	.060	1045.000	.035	1441.000	.120	1938.000	.060	3374.000	.000

CROSS SECTION BD

X1	11.740	85.000	1045.000	1441.000	2080.000	2100.000	2010.000	.000	.000	.000
X3	.000	.000	.000	.000	.000	1534.000	.000	.000	.000	.000
GR	580.800	.000	580.700	56.000	580.200	122.000	580.600	184.000	580.700	256.000
GR	581.400	330.000	580.400	388.000	581.200	462.000	581.200	534.000	581.200	608.000
GR	581.400	676.000	580.400	746.000	580.600	810.000	579.800	882.000	579.000	944.000
GR	577.400	950.000	579.200	964.000	580.500	986.000	576.800	993.000	575.800	1011.000
GR	572.400	1045.000	571.700	1061.000	571.000	1086.000	570.900	1111.000	570.800	1136.000
GR	570.400	1161.000	569.900	1186.000	569.100	1211.000	568.400	1236.000	568.300	1261.000
GR	568.000	1311.000	569.200	1336.000	569.700	1361.000	569.700	1386.000	570.200	1411.000
GR	572.400	1441.000	574.300	1446.000	577.800	1466.000	578.800	1492.000	579.300	1534.000
GR	577.800	1566.000	576.000	1596.000	576.000	1640.000	576.600	1686.000	578.000	1718.000
GR	580.200	1744.000	581.400	1782.000	581.000	1816.000	579.400	1852.000	577.500	1858.000
GR	577.600	1886.000	572.800	1890.000	572.800	1934.000	574.400	1938.000	574.600	1992.000

GR	574.000	2026.000	572.800	2042.000	572.800	2136.000	573.800	2146.000	574.400	2186.000
GR	574.400	2236.000	572.800	2238.000	572.800	2382.000	574.200	2392.000	574.000	2446.000
GP	573.800	2500.000	573.800	2534.000	572.800	2542.000	572.800	2598.000	579.200	2626.000
GP	579.200	2678.000	579.100	2734.000	580.100	2790.000	582.200	2856.000	581.600	2910.000
GR	581.800	3000.000	581.300	3072.000	580.800	3142.000	582.000	3196.000	583.100	3248.000
GR	583.100	3288.000	583.200	3318.000	584.500	3334.000	584.500	3360.000	580.400	3374.000
NH	4.000	.060	687.000	.100	759.000	.035	1087.000	.120	1848.000	.000

CROSS SECTION BE

X1	13.550	56.000	759.000	1087.000	1760.000	1900.000	1810.000	.000	.000	.000
GR	579.000	.000	582.000	12.000	581.700	38.000	579.100	48.000	580.800	56.000
GR	581.000	112.000	581.600	164.000	581.600	212.000	581.800	266.000	581.800	320.000
GR	581.400	374.000	581.400	428.000	581.200	482.000	581.200	544.000	580.400	590.000
GP	578.800	622.000	578.000	648.000	576.600	674.000	573.300	687.000	571.900	759.000
GR	571.100	774.000	569.900	799.000	568.900	824.000	568.900	849.000	568.700	874.000
GR	568.600	899.000	568.700	924.000	569.500	949.000	569.900	974.000	570.700	999.000
GR	571.100	1024.000	570.900	1049.000	571.900	1087.000	576.600	1097.000	577.000	1126.000
GR	578.300	1154.000	578.400	1184.000	578.800	1220.000	580.000	1260.000	580.500	1294.000
GR	581.200	1304.000	581.300	1330.000	579.800	1336.000	581.800	1348.000	581.800	1396.000
GR	581.800	1444.000	581.800	1500.000	582.000	1534.000	582.600	1588.000	582.900	1630.000
GR	583.000	1684.000	583.000	1732.000	583.600	1766.000	583.100	1804.000	584.600	1832.000
GR	582.800	1848.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	4.000	.060	687.000	.100	759.000	.035	1087.000	.120	1848.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

X1	14.400	.000	.000	.000	1000.000	800.000	855.000	.000	.300	.000
X3	.000	.000	.000	848.000	.000	998.000	.000	.000	.000	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

X1	14.460	30.000	642.000	758.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	642.000	.000	758.000	.000	.000	.000	.000
GR	583.800	.000	582.800	80.000	582.200	188.000	582.200	282.000	581.800	362.000
GP	581.000	448.000	580.200	548.000	580.200	622.000	580.600	642.000	570.600	642.000
GP	570.200	660.000	569.900	677.500	569.900	680.000	569.000	700.000	568.900	720.000
GR	568.900	722.500	569.800	740.000	571.000	758.000	580.600	758.000	580.400	794.000
GR	579.500	832.000	579.500	880.000	579.200	928.000	578.800	958.000	578.700	1014.000
GP	579.200	1084.000	579.700	1154.000	580.400	1242.000	581.100	1304.000	581.400	1394.000

DIVIDED FLOW DUE TO BRIDGE PIERS

X1	14.461	34.000	642.000	758.000	1.000	1.000	1.000	.000	.000	.000
X2	.000	.000	.000	577.200	580.600	.000	.000	.000	.000	.000
GR	583.800	.000	582.800	80.000	582.200	188.000	582.200	282.000	581.800	362.000
GR	581.000	448.000	580.200	548.000	580.200	622.000	580.600	642.000	570.600	642.000
GP	570.200	660.000	569.900	677.500	577.200	677.600	577.200	679.900	569.900	680.000
GR	569.000	700.000	568.900	720.000	577.200	720.100	577.200	722.400	568.900	722.500

GR	569.800	740.000	571.000	758.000	580.600	758.000	580.400	794.000	579.500	832.000
GR	579.500	880.000	579.200	928.000	578.800	958.000	578.700	1014.000	579.200	1084.000
GR	579.700	1154.000	580.400	1242.000	581.100	1304.000	581.400	1394.000	.000	.000

DIVIDED FLOW DUE TO BRIDGE PIERS

X1	14.499	.000	.000	.000	43.000	43.000	43.000	.000	.000	.000
X2	.000	.000	.000	577.200	580.600	.000	.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

X1	14.500	30.000	642.000	758.000	1.000	1.000	1.000	.000	.000	.000
X3	.000	.000	.000	642.000	.000	758.000	.000	.000	.000	.000
GR	583.800	.000	582.800	80.000	582.200	188.000	582.200	282.000	581.800	362.000
GR	581.000	448.000	580.200	548.000	580.200	622.000	580.600	642.000	570.600	642.000
GR	570.200	660.000	569.900	677.500	569.900	680.000	569.900	700.000	568.900	720.000
GR	568.900	722.500	569.800	740.000	571.000	758.000	580.600	758.000	580.400	794.000
GR	579.500	832.000	579.500	880.000	579.200	928.000	578.800	958.000	578.700	1014.000
GR	579.200	1084.000	579.700	1154.000	580.400	1242.000	581.100	1304.000	581.400	1394.000
NH	5.000	.120	643.000	.040	786.000	.055	916.000	.120	1374.000	.060
NH	1602.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BF.

X1	14.550	48.000	643.000	786.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	580.000	.000	.000	.000	.000	.000	.000
GP	584.200	.000	584.400	48.000	584.200	112.000	584.000	180.000	584.000	246.000
GR	584.400	274.000	584.400	304.000	583.800	350.000	583.300	386.000	581.000	412.000
GR	579.600	432.000	579.300	470.000	578.200	504.000	575.400	524.000	575.800	552.000
GR	575.800	586.000	575.600	616.000	574.400	642.000	571.900	643.000	570.800	644.000
GP	569.400	662.000	568.900	687.000	569.100	702.000	569.300	722.000	569.400	742.000
GR	569.700	762.000	571.900	786.000	573.500	792.000	578.500	803.000	578.400	836.000
GP	578.400	878.000	579.100	916.000	579.400	950.000	578.800	1004.000	579.800	1052.000
GR	581.000	1078.000	582.000	1094.000	582.000	1142.000	581.200	1166.000	581.800	1210.000
GP	581.800	1262.000	582.400	1314.000	583.000	1374.000	582.900	1416.000	583.400	1470.000
GP	583.000	1512.000	583.400	1544.000	583.400	1602.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
NH	5.000	.060	764.000	.120	1163.000	.040	1349.000	.120	1648.000	.060
NH	2304.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BG.

X1	15.840	60.000	1163.000	1349.000	1400.000	1220.000	1290.000	.000	.000	.000
X3	.000	.000	.000	700.000	.000	2304.000	.000	.000	.000	.000
GR	580.200	.000	580.800	42.000	582.400	90.000	582.800	140.000	582.000	204.000
GR	580.400	260.000	579.000	308.000	577.000	356.000	578.200	398.000	578.400	450.000
GR	577.500	502.000	576.800	566.000	576.300	612.000	576.600	678.000	576.400	784.000
GR	576.600	822.000	577.100	880.000	577.400	932.000	576.800	976.000	576.400	1038.000
GP	576.200	1076.000	576.100	1110.000	574.200	1126.000	574.000	1162.000	572.700	1163.000
GR	570.500	1176.000	570.400	1186.000	570.000	1196.000	570.500	1206.000	570.700	1226.000

GR	570.500	1246.000	570.200	1266.000	570.900	1286.000	571.700	1306.000	572.200	1326.000
GR	572.700	1349.000	574.900	1355.000	583.100	1375.000	583.800	1398.000	583.100	1408.000
GR	585.000	1414.000	585.400	1428.000	584.800	1446.000	584.100	1468.000	584.300	1500.000
GP	584.000	1562.000	583.600	1588.000	585.400	1600.000	585.500	1648.000	585.400	1672.000
GR	584.400	1700.000	584.600	1766.000	584.900	1836.000	585.000	1884.000	585.200	1940.000
GR	585.400	1996.000	585.000	2070.000	584.800	2148.000	585.000	2222.000	585.600	2304.000
ET	.000	7.100	9.100	.000	.000	.000	.000	2304.000	710.000	1130.000
NH	3.000	.060	929.000	.040	996.000	.060	1708.000	.000	.000	.000

CROSS SECTION BH

X1	17.260	50.000	929.000	996.000	1520.000	1440.000	1420.000	.000	.000	.000
GR	587.600	.000	587.800	72.000	587.400	166.000	587.000	240.000	586.800	288.000
GR	585.700	356.000	583.800	414.000	583.400	454.000	583.800	484.000	586.000	508.000
GR	586.200	540.000	586.300	570.000	586.100	604.000	584.000	630.000	581.600	666.000
GR	578.600	696.000	577.800	732.000	577.500	776.000	575.600	826.000	575.300	926.000
GR	572.700	929.000	572.200	936.000	572.000	946.000	572.000	956.000	571.900	966.000
GR	572.200	976.000	572.200	986.000	572.700	996.000	573.300	1000.000	574.300	1002.000
GR	573.300	1026.000	576.200	1056.000	575.200	1072.000	573.800	1098.000	573.800	1112.000
GR	577.900	1130.000	585.800	1156.000	586.900	1192.000	587.800	1224.000	588.000	1242.000
GR	587.200	1250.000	589.600	1264.000	589.600	1290.000	587.400	1300.000	587.900	1310.000
GP	587.700	1372.000	587.200	1440.000	587.400	1534.000	587.400	1610.000	587.700	1708.000
ET	.000	7.100	9.100	.000	.000	.000	.000	1712.000	670.000	1425.000
NH	5.000	.060	570.000	.120	867.000	.040	918.000	.120	1102.000	.060
NH	1712.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BI

X1	18.650	45.000	867.000	918.000	1280.000	1340.000	1390.000	.000	.000	.000
GR	589.200	.000	589.200	76.000	589.400	146.000	589.300	216.000	588.400	268.000
GR	586.900	306.000	587.500	340.000	589.100	378.000	589.400	438.000	589.400	496.000
GR	589.400	570.000	589.600	600.000	590.000	648.000	590.800	708.000	591.200	762.000
GR	576.700	862.000	573.200	867.000	572.200	872.000	570.900	882.000	570.900	892.000
GR	571.000	902.000	571.900	912.000	573.200	918.000	576.800	928.000	574.700	938.000
GP	575.000	958.000	574.600	994.000	574.200	1034.000	576.700	1066.000	577.200	1102.000
GR	576.600	1154.000	577.000	1226.000	576.600	1300.000	577.400	1350.000	577.800	1398.000
GR	577.800	1456.000	579.400	1496.000	580.200	1536.000	581.100	1578.000	581.400	1618.000
GP	582.000	1650.000	583.400	1662.000	586.500	1674.000	586.600	1698.000	582.100	1712.000
NH	5.000	.060	570.000	.120	867.000	.040	918.000	.120	1102.000	.060
NH	1712.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BI

X1	19.540	.000	.000	.000	1100.000	1050.000	895.000	.000	.600	.000
X3	.000	.000	.000	852.500	.000	932.500	.000	.000	.000	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

X1	19.600	26.000	1343.000	1389.500	50.000	50.000	50.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.200	584.200	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AT DT & I RAILROAD BRIDGE

X1	19.601	26.000	1343.000	1389.500	1.000	1.000	1.000	.866	.000	.000
X2	.000	.000	.000	584.200	590.000	.000	.000	.000	.000	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AT DT & I RAILROAD BRIDGE

X1	19.619	26.000	1343.000	1389.500	28.000	28.000	28.000	.866	.000	.000
X2	.000	.000	.000	584.200	590.000	.000	.000	.000	.000	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

X1	19.620	26.000	1343.000	1389.500	1.000	1.000	1.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.200	584.200	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	590.000	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	590.000	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GR	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.050	.050	.030	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BETWEEN BRIDGES

X1	19.670	26.000	1343.000	1389.500	50.000	50.000	50.000	.866	.300	.000
X3	.000	.000	.000	1329.900	.000	1402.600	.000	.000	.000	.000
GR	589.600	.000	589.000	132.000	589.000	276.000	588.200	442.000	588.500	580.000
GR	588.600	736.000	588.200	898.000	588.200	1038.000	588.400	1174.000	590.000	1331.000
GR	577.800	1343.000	576.800	1343.000	576.800	1345.500	573.900	1345.500	571.600	1360.500
GR	571.700	1374.500	573.600	1389.500	574.600	1389.500	590.000	1401.500	588.400	1518.000
GR	588.000	1748.000	588.800	1962.000	589.100	2088.000	589.800	2148.000	589.100	2332.000
GP	589.100	2482.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.030	.030	.030	.000	.000	.000	.000	.000	.000	.000

STOP (MON)

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

X1	19.720	29.000	1392.000	1453.000	50.000	50.000	50.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.100	584.100	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000

CROSS SECTION AT NYC RAILROAD BRIDGE

X1	19.722	29.000	1392.000	1453.000	2.000	2.000	2.000	.866	.000	.000
X2	.000	.000	.000	584.700	593.200	.000	.000	.000	.000	.000
GP	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000

CROSS SECTION AT NYC RAILROAD BRIDGE

X1	19.738	29.000	1392.000	1453.000	16.000	16.000	16.000	.866	.000	.000
X2	.000	.000	.000	584.700	593.200	.000	.000	.000	.000	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GR	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GR	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

X1	19.740	29.000	1392.000	1453.000	2.000	2.000	2.000	.866	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.100	584.100	.000
GR	593.400	.000	593.200	128.000	593.300	304.000	593.600	438.000	593.000	606.000
GP	592.600	754.000	592.600	900.000	592.400	1028.000	592.200	1178.000	592.700	1390.000
GR	593.200	1392.000	583.600	1392.000	583.600	1394.500	575.100	1394.500	572.700	1413.000
GP	572.300	1432.000	573.700	1450.500	583.600	1450.500	583.600	1453.000	593.200	1453.000
GR	592.800	1458.000	592.000	1584.000	591.800	1728.000	591.600	1890.000	592.100	2004.000
GR	592.800	2122.000	593.400	2210.000	592.900	2322.000	593.000	2478.000	.000	.000
NH	4.000	.060	1390.000	.120	1563.000	.040	1593.000	.120	2554.000	.000

CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE COPY SECTION BJ

X1	19.790	41.000	1563.000	1593.000	50.000	50.000	50.000	.000	.900	.000
X3	.000	.000	.000	1498.000	.000	1658.000	.000	.000	.000	.000
GP	587.000	.000	587.800	70.000	587.400	178.000	587.200	296.000	587.500	414.000
GR	587.600	520.000	586.400	598.000	584.800	654.000	584.800	746.000	582.400	792.000
GR	580.300	860.000	580.200	898.000	580.600	948.000	578.800	1006.000	578.400	1132.000
GR	577.800	1260.000	577.100	1332.000	576.000	1390.000	576.200	1478.000	576.700	1506.000
GR	577.400	1552.000	577.200	1563.000	573.600	1563.000	570.200	1572.000	570.200	1582.000
GR	573.600	1593.000	576.200	1597.000	581.600	1610.000	581.400	1648.000	582.800	1718.000
GR	585.000	1788.000	587.000	1878.000	587.600	1990.000	589.200	2082.000	589.800	2148.000
GR	589.800	2258.000	592.400	2318.000	591.300	2378.000	592.000	2482.000	591.000	2530.000
GR	587.500	2554.000	.000	.000	.000	.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
NH	4.000	.060	1390.000	.120	1563.000	.040	1593.000	.120	2554.000	.000

CROSS SECTION BJ

X1	19.900	.000	.000	.000	110.000	110.000	110.000	.000	.000	.000
X3	.000	.000	.000	1380.000	.000	1740.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

X1	20.010	.000	.000	.000	260.000	140.000	110.000	.000	1.100	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

X1	20.060	31.000	1193.000	1229.500	50.000	50.000	50.000	.000	.000	.000
GR	589.400	.000	589.100	104.000	588.700	224.000	588.300	332.000	588.800	432.000
GR	588.000	546.000	586.300	656.000	584.500	726.000	581.600	816.000	580.200	896.000
GR	580.200	1000.000	580.800	1088.000	582.000	1190.000	581.200	1193.000	578.100	1193.000
GR	578.100	1194.500	573.200	1194.500	572.600	1211.000	572.600	1220.000	574.700	1228.000
GR	578.100	1228.000	578.100	1229.500	581.200	1229.500	582.600	1232.500	584.900	1334.000
GR	586.600	1480.000	588.000	1574.000	589.000	1618.000	592.000	1650.000	592.400	1706.000
GR	589.600	1748.000	.000	.000	.000	.000	.000	.000	.000	.000

X1	20.061	.000	.000	.000	1.000	1.000	1.000	.000	.000	.000
X2	.000	.000	.000	581.200	582.000	.000	.000	.000	.000	.000
BT	31.000	.000	589.400	589.400	104.000	589.100	589.100	224.000	588.700	588.700
BT	332.000	588.800	588.800	432.000	588.800	588.800	546.000	588.000	588.000	656.000
BT	586.300	586.300	726.000	584.500	584.500	816.000	581.600	581.600	896.000	580.200
BT	580.200	1000.000	580.200	580.200	1088.000	580.800	580.800	1190.000	582.000	582.000
BT	1190.000	583.400	583.400	1193.000	583.400	583.400	1193.000	583.400	581.200	1194.500
BT	583.400	581.200	1211.000	583.400	581.200	1220.000	583.400	581.200	1228.000	583.400
BT	581.200	1229.500	583.400	581.200	1229.500	583.400	583.400	1232.500	583.400	583.400
BT	1232.500	582.600	582.600	1334.000	584.900	584.900	1480.000	586.600	586.600	1574.000
BT	588.000	588.000	1618.000	589.000	589.000	1650.000	592.000	592.000	1706.000	592.400
BT	592.400	1748.000	589.600	589.600	.000	.000	.000	.000	.000	.000
X1	20.079	.000	.000	.000	18.000	18.000	18.000	.000	.000	.000
X2	.000	.000	.000	581.200	582.000	.000	1.000	.000	.000	.000

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

X1	20.080	.000	.000	.000	1.000	1.000	1.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	1000.000	1455.000
NH	4.000	.075	1072.000	.120	1399.000	.040	1429.000	.075	2334.000	.000

CROSS SECTION BK

X1	20.130	43.000	1399.000	1429.000	50.000	50.000	50.000	.000	.000	.000
GP	587.400	.000	588.300	78.000	588.400	178.000	587.700	292.000	587.700	384.000
GR	587.400	480.000	587.200	566.000	586.900	676.000	587.400	810.000	587.400	896.000
GR	585.800	934.000	580.600	972.000	579.400	998.000	580.600	1072.000	578.200	1146.000
GP	578.100	1250.000	576.000	1302.000	577.000	1312.000	576.800	1390.000	576.400	1395.000
GR	573.700	1399.000	573.400	1410.000	572.600	1420.000	573.700	1429.000	575.100	1431.000
GP	576.300	1435.000	584.600	1453.000	584.600	1472.000	585.200	1512.000	585.800	1564.000
GR	584.900	1580.000	585.200	1666.000	589.400	1730.000	589.100	1788.000	588.400	1874.000
GR	589.100	1982.000	589.600	2086.000	591.000	2128.000	591.500	2192.000	592.200	2222.000
GR	592.200	2262.000	591.000	2312.000	588.000	2334.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
ET	.000	.000	9.100	.000	.000	.000	.000	.000	880.000	1405.000
NH	5.000	.060	784.000	.120	1301.000	.040	1328.000	.120	1490.000	.060
NH	2132.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BL

X1	20.770	36.000	1301.000	1328.000	880.000	640.000	640.000	.000	.000	.000
GR	588.600	.000	588.700	66.000	589.200	174.000	588.500	290.000	588.400	386.000
GP	587.400	492.000	588.000	562.000	588.400	648.000	586.800	714.000	582.600	784.000
GR	580.000	854.000	578.400	892.000	580.100	942.000	578.400	1034.000	576.200	1102.000
GR	576.200	1226.000	577.200	1294.000	574.700	1301.000	574.200	1304.000	573.900	1314.000
GR	573.900	1324.000	574.700	1328.000	575.800	1332.000	577.700	1364.000	577.300	1406.000
GR	589.000	1430.000	588.400	1490.000	588.100	1590.000	586.100	1680.000	586.800	1766.000

GR	588.400	1890.000	589.600	1974.000	589.600	2000.000	589.600	2110.000	589.400	2124.000
GR	587.200	2132.000	.000	.000	.000	.000	.000	.000	.000	.000
NH	5.000	.065	674.000	.120	841.000	.040	870.000	.120	1018.000	.060
NH	1652.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BM

X1	21.910	34.000	841.000	870.000	960.000	900.000	1140.000	.000	.000	.000
X3	.000	.000	.000	730.500	.000	980.500	.000	.000	.000	.000
GR	587.000	.000	589.400	48.000	588.200	84.000	587.200	146.000	586.800	220.000
GR	587.600	276.000	590.000	312.000	589.200	370.000	581.800	402.000	577.100	428.000
GR	578.000	530.000	577.500	616.000	578.600	674.000	578.400	752.000	579.400	828.000
GR	576.300	841.000	575.700	848.000	575.100	858.000	575.100	868.000	576.300	870.000
GR	578.300	880.000	579.300	938.000	579.800	1018.000	579.200	1120.000	579.600	1214.000
GR	581.600	1276.000	583.000	1318.000	586.700	1340.000	590.000	1374.000	590.300	1432.000
GR	590.400	1472.000	590.400	1536.000	589.800	1598.000	588.400	1652.000	.000	.000
NH	5.000	.065	674.000	.120	841.000	.040	870.000	.120	1018.000	.060
NH	1652.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BM

X1	22.120	.000	.000	.000	220.000	220.000	210.000	.000	-1.500	.000
X3	.000	.000	.000	800.500	.000	910.500	.000	.000	.000	.000
NC	.035	.035	.035	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

X1	22.170	22.000	1120.500	1195.500	50.000	50.000	50.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	584.900	584.900	.000
GR	590.200	.000	590.000	76.000	590.100	188.000	590.000	314.000	589.800	464.000
GR	589.300	610.000	589.200	762.000	589.200	926.000	589.600	1118.000	584.900	1120.500
GR	577.800	1120.500	574.400	1138.000	574.400	1155.000	574.000	1161.000	573.300	1178.000
GR	573.300	1195.500	584.900	1195.500	589.600	1198.000	590.000	1340.900	590.600	1496.000
GR	590.500	1630.000	590.600	1740.000	.000	.000	.000	.000	.000	.000
SB	1.050	1.650	2.500	80.000	50.300	6.000	726.750	1.060	.000	.000

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

X1	22.190	.000	.000	.000	20.000	20.000	20.000	.000	.000	.000
X2	.000	.000	1.000	584.900	589.200	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	589.200	589.200	.000

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

X1	22.270	25.000	1208.000	1309.000	80.000	80.000	80.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.200	587.200	.000
GR	587.200	.000	587.800	54.000	588.800	140.000	588.800	258.900	588.600	350.000
GR	587.700	450.000	587.200	570.000	586.200	676.000	585.800	808.000	586.400	958.000
GR	587.000	1100.000	587.200	1206.000	583.000	1208.000	576.200	1239.000	576.200	1241.500

GR	574.400	1258.000	573.800	1275.500	574.500	1278.000	577.400	1309.000	587.800	1311.000
GR	588.200	1384.000	589.200	1470.000	589.800	1534.000	589.400	1630.000	589.500	1750.000
SB	1.050	1.710	2.800	.000	54.200	5.000	885.200	1.934	.000	.000

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

X1	22.300	.000	.000	.000	30.000	30.000	30.000	.000	.000	.000
X2	.000	.000	1.000	585.900	587.000	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.200	587.200	.000
BT	14.000	1100.000	587.000	587.000	1206.000	587.200	587.200	1206.000	591.400	587.200
BT	1208.000	591.400	583.000	1208.000	591.400	585.900	1239.000	591.400	585.900	1241.500
BT	591.400	585.900	1258.000	591.400	585.900	1275.500	591.400	585.900	1278.000	591.400
BT	585.900	1309.000	591.400	585.900	1309.000	591.400	577.400	1311.000	591.400	587.800
BT	1311.000	587.800	587.800	.000	.000	.000	.000	.000	.000	.000
NC	.100	.100	.040	.100	.300	.000	.000	.000	.000	.000
NH	6.000	.120	932.000	.060	1370.000	.120	1420.000	.040	1463.000	.060
NH	1768.000	.120	1926.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BN

X1	22.350	39.000	1420.000	1463.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	1326.500	.000	1556.500	.000	.000	.000	.000
GP	588.600	.000	589.800	24.000	589.100	92.000	589.200	132.000	588.800	156.000
GR	589.000	214.000	588.600	286.000	589.600	356.000	590.000	392.000	589.400	432.000
GR	589.400	476.000	589.400	536.000	587.200	616.000	588.400	652.000	588.200	690.000
GR	587.800	792.000	587.800	824.000	587.000	872.000	586.000	932.000	579.500	950.000
GR	579.500	1366.000	581.700	1370.000	582.000	1386.000	578.400	1406.000	576.300	1420.000
GR	574.700	1426.000	574.200	1436.000	574.500	1446.000	574.200	1456.000	576.300	1463.000
GR	578.000	1465.000	581.800	1476.000	581.000	1520.000	582.600	1568.000	589.200	1608.000
GR	590.000	1668.000	589.600	1768.000	591.000	1854.000	589.400	1926.000	.000	.000
ET	.000	7.100	9.100	.000	.000	.000	794.000	1594.000	1000.000	1594.000
NH	5.000	.060	1080.000	.120	1184.000	.040	1204.000	.120	1608.000	.070
NH	2092.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION BO

X1	23.210	44.000	1184.000	1204.000	840.000	740.000	860.000	.000	.000	.000
GP	587.400	.000	589.600	30.000	589.400	82.000	590.200	148.000	589.500	228.000
GR	589.600	320.000	589.500	378.000	588.200	440.000	588.800	520.000	587.400	600.000
GR	587.000	644.000	585.200	696.000	584.500	765.000	585.200	852.000	586.600	934.000
GR	586.800	1002.000	586.000	1080.000	584.400	1124.000	582.200	1142.000	585.200	1162.000
GR	577.100	1184.000	576.600	1192.000	577.100	1204.000	579.700	1222.000	578.600	1258.000
GP	580.600	1304.000	581.600	1372.000	580.800	1450.000	580.400	1488.000	578.600	1500.000
GR	580.600	1526.000	581.600	1582.000	584.800	1608.000	588.800	1628.000	588.800	1640.000
GR	585.100	1664.000	587.700	1702.000	585.400	1720.000	587.500	1774.000	587.600	1816.000
GR	588.400	1886.000	588.600	1966.000	588.600	2048.000	588.100	2092.000	.000	.000
NH	5.000	.060	322.000	.120	518.000	.040	560.000	.120	680.000	.070
NH	902.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Next 9

CROSS SECTION BP

X1	23.930	25.000	518.000	560.000	480.000	760.000	720.000	.000	.000	.000
X3	.000	.000	.000	386.500	.000	691.500	.000	.000	.000	.000
GR	585.200	.000	585.800	36.000	586.800	84.000	586.400	150.000	586.000	220.000
GR	584.200	268.000	583.600	322.000	582.600	384.000	581.700	438.000	579.800	500.000
GR	579.300	515.000	577.600	518.000	576.600	530.000	576.100	540.000	576.200	550.000
GP	577.600	560.000	581.200	566.000	582.800	680.000	584.300	724.000	586.600	758.000
GR	587.200	802.000	584.400	830.000	585.500	864.000	594.400	892.000	597.600	902.000
NH	5.000	.060	322.000	.120	518.000	.040	560.000	.120	680.000	.070
NH	902.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BP

X1	24.160	.000	.000	.000	230.000	230.000	230.000	.000	.000	.000
X3	.000	.000	.000	464.000	.000	614.000	.000	.000	.000	.000
NC	.030	.030	.030	.300	.500	.000	.000	.000	.000	.000

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

X1	24.210	17.000	600.000	715.000	50.000	50.000	50.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.000	587.000	.000
GR	590.400	.000	590.400	90.000	590.200	178.000	590.000	306.000	590.000	438.000
GR	589.800	558.000	590.200	600.000	578.500	600.000	578.000	635.000	577.000	657.500
GR	578.000	680.000	579.000	715.000	590.200	715.000	589.900	790.000	590.000	924.000
GR	590.000	1056.000	589.800	1120.000	.000	.000	.000	.000	.000	.000
SB	.900	1.500	3.000	115.000	91.000	5.000	985.000	1.200	.000	.000

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

X1	24.260	.000	.000	.000	55.000	55.000	55.000	.000	.000	.000
X2	.000	.000	1.000	587.000	590.200	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	590.200	590.200	.000

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

X1	24.280	.000	.000	.000	20.000	20.000	20.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	587.000	587.000	.000
SB	.900	1.500	3.000	115.000	91.000	5.000	985.000	1.200	.000	.000

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

X1	24.340	.000	.000	.000	55.000	55.000	55.000	.000	.000	.000
X2	.000	.000	1.000	587.000	590.200	.000	.000	.000	.000	.000
X3	10.000	.000	.000	.000	.000	.000	.000	590.200	590.200	.000
NH	3.000	.070	655.000	.040	680.000	.060	1116.000	.000	.000	.000

CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION BQ

X1	24.390	40.000	655.000	680.000	50.000	50.000	50.000	.000	.000	.000
X3	.000	.000	.000	560.000	.000	775.000	.000	.000	.000	.000
GR	586.600	.000	589.600	28.000	590.400	54.000	590.100	92.000	589.800	124.000
GR	589.400	138.000	590.200	158.000	589.800	216.000	587.800	246.000	584.000	268.000
GR	578.600	312.000	578.600	328.000	581.200	350.000	581.000	394.000	581.100	448.000
GR	581.500	500.000	581.100	554.000	580.700	596.000	580.600	630.000	581.300	650.000
GR	577.700	655.000	577.100	660.000	576.300	670.000	577.700	680.000	578.700	681.000
GR	579.200	683.000	582.100	687.000	582.800	748.000	584.600	782.000	586.800	810.000
GR	589.200	852.000	589.200	886.000	589.800	926.000	590.900	962.000	594.000	994.000
GR	597.200	1022.000	597.200	1050.000	596.600	1076.000	593.700	1092.000	590.400	1116.000
NC	.000	.000	.000	.100	.300	.000	.000	.000	.000	.000
NH	3.000	.070	655.000	.040	680.000	.060	1116.000	.000	.000	.000

CROSS SECTION BQ

X1	24.690	.000	.000	.000	200.000	310.000	310.000	.000	.000	.000
X3	.000	.000	.000	216.000	.000	.000	.000	.000	.000	.000
EJ	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

*PROF 1

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 5.000
CROSS SECTION BA

5.00	3.50	570.90	.00	570.90	570.98	.08	.00	.00	572.50
4090.	0.	4090.	0.	0.	1840.	0.	0.	0.	572.50
.00	.00	2.22	.00	.000	.030	.000	.000	567.40	1998.00
.000549	0.	0.	0.	0	0	0	.00	691.86	2689.86

1490 NH CARD USED
*SECNO 7.570
CROSS SECTION BB

7.57	3.89	572.09	.00	.00	572.16	.07	1.18	.00	572.50
4090.	0.	4090.	0.	0.	1951.	0.	112.	39.	572.50
.34	.00	2.10	.00	.000	.030	.000	.040	568.20	1553.50
.000392	3200.	2570.	2500.	2	0	0	.00	624.38	2177.88

1490 NH CARD USED
*SECNO 9.730
CROSS SECTION BC

9.73	4.26	572.96	.00	.00	573.03	.08	.87	.00	572.40
4090.	0.	4090.	0.	2.	1833.	0.	206.	68.	572.40
.61	.21	2.23	.00	.060	.030	.120	.040	568.70	1627.05
.000413	2080.	2160.	2300.	2	0	0	.00	561.13	2188.19

1490 NH CARD USED
*SECNO 11.740

3470 ENCROACHMENT STATIONS= .0 1534.0 TYPE= 1 TARGET= 1533.999
CROSS SECTION BD

11.74	5.83	573.83	.00	.00	573.92	.08	.88	.00	572.40
3690.	4.	3685.	1.	10.	1584.	3.	285.	91.	572.40
.85	.43	2.33	.21	.060	.035	.120	.040	568.00	1030.65
.000473	2080.	2010.	2100.	2	0	0	.00	414.12	1444.78

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

1490 NH CARD USED
*SECNO 13.550
CROSS SECTION BE

13.55	6.01	574.61	.00	.00	574.69	.08	.78	.00	571.90
3690.	69.	3619.	2.	148.	1539.	8.	353.	108.	571.90
1.07	.47	2.35	.28	.099	.035	.120	.040	568.60	681.84
.000391	1760.	1810.	1900.	2	0	0	.00	410.93	1092.77

1490 NH CARD USED
*SECNO 14.400

3470 ENCROACHMENT STATIONS= 848.0 998.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

14.40	6.10	575.00	.00	.00	575.31	.31	.55	.07	100000.00
3690.	0.	3690.	0.	0.	826.	0.	378.	113.	100000.00
1.12	.00	4.47	.00	.099	.035	.120	.040	568.90	848.00
.001241	1000.	855.	800.	0	0	0	.00	150.00	998.00

CCHV= .300 CEHV= .500
*SECNO 14.460

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000
CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.46	6.04	574.94	.00	.00	575.52	.58	.07	.13	580.60
3690.	0.	3690.	0.	0.	604.	0.	379.	114.	100000.00
1.12	.00	6.11	.00	.030	.030	.030	.040	568.90	642.00
.001846	50.	50.	50.	2	0	0	.00	116.00	758.00

*SECNO 14.461

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

SECNO / TIME / SLOPE	DEPTH / QLOB / VLOB / XLOBL	CWSEL / QCH / VCH / XLCH	CRIWS / QROB / VROB / XLOBR	WSELK / ALOB / XNL / ITRIAL	EG / HACH / XNCH / IDC	HV / AROB / XNR / ICONT	HL / VOL / WTN / CORAR	OLOSS / TWA / ELMIN / TOPWID	BANK ELEV LEFT/RIGHT / SSTA / ENDST
14.46	6.01	574.91	.00	.00	575.55	.64	.00	.03	580.60
3690.	0.	3690.	0.	0.	574.	0.	379.	114.	580.60
1.12	.00	6.43	.00	.030	.030	.030	.040	568.90	642.00
.002597	1.	1.	1.	2	0	0	.00	111.28	758.00

*SECNO 14.499

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

14.50	6.17	575.07	.00	.00	575.67	.60	.11	.01	580.60
3690.	0.	3690.	0.	0.	591.	0.	380.	114.	580.60
1.12	.00	6.24	.00	.030	.030	.030	.040	568.90	642.00
.002374	43.	43.	43.	2	0	0	.00	111.29	758.00

*SECNO 14.500

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.50	6.21	575.11	.00	.00	575.68	.58	.00	.01	580.60
3690.	0.	3690.	0.	0.	605.	0.	380.	114.	100000.00
1.12	.00	6.10	.00	.030	.030	.030	.040	568.90	642.00
.001843	1.	1.	1.	2	0	0	.00	116.00	758.00

1490 NH CARD USED

*SECNO 14.550

3470 ENCROACHMENT STATIONS= 580.0 1602.0 TYPE= 1 TARGET= -580.000

CROSS SECTION BF

14.55	6.66	575.56	.00	.00	575.85	.28	.08	.09	571.90
3690.	5.	3648.	37.	17.	847.	22.	380.	114.	571.90
1.13	.32	4.30	1.68	.120	.040	.055	.040	568.90	616.81
.001260	50.	50.	50.	2	0	0	.00	179.73	796.54

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

CCHV= .700 CEHV= .300
1490 NH CARD USED
*SECNO 15.840

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 700.0 2304.0 TYPE= 1 TARGET= 1604.000
CROSS SECTION BG

15.84	6.91	576.91	.00	.00	577.07	.16	1.22	.01	572.70
3690.	114.	3562.	14.	258.	1091.	24.	414.	125.	572.70
1.24	.44	3.26	.61	.114	.040	.120	.040	570.00	700.00
.000730	1400.	1290.	1220.	2	0	0	.00	549.30	1359.89

1490 NH CARD USED
*SECNO 17.260
CROSS SECTION BH

17.26	6.39	578.29	.00	.00	578.49	.20	1.41	.01	572.70
3690.	688.	1902.	1099.	417.	411.	491.	459.	142.	572.70
1.36	1.65	4.63	2.24	.060	.040	.060	.040	571.90	709.96
.001386	1520.	1420.	1440.	2	0	0	.00	421.32	1131.28

1490 NH CARD USED
*SECNO 18.650
CROSS SECTION BI

18.65	8.81	579.71	.00	.00	579.84	.13	1.34	.01	573.20
3690.	33.	1704.	1953.	55.	418.	1771.	514.	158.	573.20
1.51	.61	4.08	1.10	.120	.040	.083	.040	570.90	841.28
.000738	1280.	1390.	1340.	0	0	0	.00	669.92	1511.20

1490 NH CARD USED
*SECNO 19.540

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 852.5 932.5 TYPE= 1 TARGET= 80.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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
	CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE					REPEAT SECTION BI			
19.54	8.82	580.32	.00	.00	581.37	1.05	1.26	.28	573.80
3690.	65.	3521.	104.	46.	419.	63.	546.	167.	573.80
1.54	1.41	8.41	1.66	.120	.040	.120	.040	571.50	852.50
.003121	1100.	895.	1050.	2	0	0	.00	80.00	932.50

CCHV= .300 CEHV= .500
+SECNO 19.600

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

19.60	8.22	579.82	.00	.00	582.32	2.51	.22	.73	590.00
3690.	0.	3690.	0.	0.	290.	0.	546.	167.	590.00
1.55	.00	12.70	.00	.030	.030	.030	.040	571.60	1163.04
.006764	50.	50.	50.	3	0	0	.00	40.27	1203.31

*SECNO 19.601

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.60	8.23	579.83	.00	.00	582.33	2.50	.01	.00	590.00
3690.	0.	3690.	0.	0.	291.	0.	546.	167.	590.00
1.55	.00	12.70	.00	.030	.030	.030	.040	571.60	1163.04
.006751	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.619

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

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

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.62	8.98	580.58	.00	.00	582.63	2.05	.16	.14	590.00
3690.	0.	3690.	0.	0.	321.	0.	547.	167.	590.00
1.55	.00	11.50	.00	.030	.030	.030	.040	571.60	1163.04
.005033	28.	28.	28.	4	0	0	.00	40.27	1203.31

*SECNO 19.620

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

19.62	8.99	580.59	.00	.00	582.63	2.05	.01	.00	590.00
3690.	0.	3690.	0.	0.	321.	0.	547.	167.	590.00
1.55	.00	11.49	.00	.030	.030	.030	.040	571.60	1163.04
.005021	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.670

3470 ENCROACHMENT STATIONS= 1151.7 1214.7 TYPE= 1 TARGET= 72.700

CROSS SECTION BETWEEN BRIDGES

19.67	8.99	580.89	.00	.00	582.87	1.98	.22	.02	578.10
3690.	6.	3653.	32.	3.	322.	12.	547.	167.	574.90
1.55	1.73	11.36	2.61	.050	.030	.050	.040	571.90	1160.66
.003880	50.	50.	50.	2	0	0	.00	46.69	1207.35

*SECNO 19.720

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

19.72	9.89	582.19	.00	.00	583.28	1.10	.14	.27	593.20
3690.	0.	3690.	0.	0.	439.	0.	547.	167.	593.20
1.55	.00	8.40	.00	.030	.030	.030	.040	572.30	1207.64
.002220	50.	50.	50.	3	0	0	.00	48.50	1256.13

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

*SECNO 19.722

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.72	9.90	582.20	.00	.00	583.29	1.09	.00	.00	593.20
3690.	0.	3690.	0.	0.	440.	0.	547.	167.	593.20
1.55	.00	8.39	.00	.030	.030	.030	.040	572.30	1207.64
.002213	2.	2.	2.	0	0	0	.00	48.50	1256.13

*SECNO 19.738

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.74	9.94	582.24	.00	.00	583.33	1.08	.04	.00	593.20
3690.	0.	3690.	0.	0.	442.	0.	548.	167.	593.20
1.55	.00	8.35	.00	.030	.030	.030	.040	572.30	1207.64
.002183	16.	16.	16.	1	0	0	.00	48.50	1256.13

*SECNO 19.740

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

19.74	9.95	582.25	.00	.00	583.33	1.08	.00	.00	593.20
3690.	0.	3690.	0.	0.	442.	0.	548.	167.	593.20
1.55	.00	8.34	.00	.030	.030	.030	.040	572.30	1207.64
.002174	2.	2.	2.	0	0	0	.00	48.50	1256.13

1490 NH CARD USED
*SECNO 19.790

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 1498.0 1658.0 TYPE= 1 TARGET= 160.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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
	CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE					COPY SECTION BJ			
19.79	11.20	582.30	.00	.00	583.57	1.27	.14	.09	578.10
3690.	572.	3009.	109.	284.	302.	59.	548.	168.	574.50
1.55	2.02	9.96	1.86	.120	.040	.120	.040	571.10	1498.00
.004020	50.	50.	50.	2	0	0	.00	112.10	1648.12

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 19.900

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1380.0 1740.0 TYPE= 1 TARGET= 360.000
CROSS SECTION BJ

19.90	12.50	583.60	.00	.00	583.88	.27	.21	.10	578.10
3690.	1636.	1928.	126.	1142.	341.	169.	551.	168.	574.50
1.56	1.43	5.65	.75	.115	.040	.120	.040	571.10	1380.00
.001100	110.	110.	110.	3	0	0	.00	333.23	1713.23

*SECNO 20.010
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

20.01	11.77	583.97	.00	.00	584.01	.05	.11	.02	579.20
3690.	2699.	948.	42.	2826.	319.	94.	564.	171.	575.60
1.60	.96	2.97	.45	.075	.040	.120	.039	572.20	806.07
.000333	260.	110.	140.	2	0	0	.00	870.21	1676.28

CCHV= .300 CEHV= .500
*SECNO 20.060
CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

20.06	11.36	583.96	.00	.00	584.05	.09	.02	.02	581.20
3690.	2380.	1275.	35.	1294.	385.	47.	567.	172.	581.20
1.60	1.84	3.31	.75	.030	.030	.030	.039	572.60	742.82
.000305	50.	50.	50.	2	0	0	.00	549.60	1292.43

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	@LOB	@CH	@ROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 20.061

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.06	11.37	583.97	.00	.00	584.05	.08	.00	.00	581.20
3690.	3045.	606.	39.	1298.	305.	47.	567.	172.	581.20
1.60	2.35	1.99	.83	.030	.030	.030	.039	572.60	742.58
.000499	1.	1.	1.	1	0	0	-80.30	550.20	1292.78

*SECNO 20.079

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.08	11.38	583.98	.00	.00	584.06	.08	.01	.00	581.20
3690.	3047.	603.	40.	1305.	305.	48.	568.	172.	581.20
1.61	2.34	1.98	.83	.030	.030	.030	.039	572.60	742.10
.000491	18.	18.	18.	0	0	0	-80.30	551.36	1293.46

*SECNO 20.080

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

20.08	11.38	583.98	.00	.00	584.07	.09	.00	.01	581.20
3690.	2387.	1266.	36.	1306.	386.	49.	568.	172.	581.20
1.61	1.83	3.28	.75	.030	.030	.030	.039	572.60	742.00
.000298	1.	1.	1.	0	0	0	.00	551.60	1293.60

1490 NH CARD USED

*SECNO 20.130

CROSS SECTION BK

20.13	11.40	584.00	.00	.00	584.09	.09	.02	.00	573.70
3690.	2282.	1256.	152.	2453.	323.	117.	570.	173.	573.70
1.61	.93	3.89	1.30	.111	.040	.075	.039	572.60	947.16
.000465	50.	50.	50.	0	0	0	.00	504.53	1451.70

CCHV= .100 CEHV= .300

1490 NH CARD USED

*SECNO 20.770

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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
	CROSS SECTION BL								
20.77	10.44	584.34	.00	.00	584.38	.04	.29	.01	574.70
3690.	2390.	827.	473.	3224.	277.	618.	638.	184.	574.70
1.79	.74	2.98	.77	.120	.040	.120	.039	573.90	754.94
.000291	880.	640.	640.	2	0	0	.00	665.51	1420.45

1490 NH CARD USED
*SECNO 21.910

3470 ENCROACHMENT STATIONS= 730.5 980.5 TYPE= 1 *TARGET= 250.000
CROSS SECTION BM

21.91	9.63	584.73	.00	.00	585.03	.30	.57	.08	576.30
3690.	1025.	1689.	976.	667.	269.	642.	701.	194.	576.30
1.86	1.54	6.29	1.52	.120	.040	.120	.039	575.10	730.50
.001500	960.	1140.	900.	0	0	0	.00	250.00	980.50

1490 NH CARD USED
*SECNO 22.120

3470 ENCROACHMENT STATIONS= 800.5 910.5 TYPE= 1 TARGET= 110.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BM

22.12	11.23	584.83	.00	.00	585.49	.66	.36	.11	574.80
3690.	575.	2475.	640.	306.	315.	327.	707.	195.	574.80
1.88	1.88	7.85	1.95	.120	.040	.120	.039	573.60	800.50
.001887	220.	210.	220.	2	0	0	.00	110.00	910.50

CCHV= .300 CEHV= .500
*SECNO 22.170
CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

22.17	12.04	585.34	.00	.00	585.65	.31	.05	.10	584.90
3690.	0.	3690.	0.	0.	824.	0.	708.	195.	584.90
1.88	.01	4.48	.01	.035	.035	.035	.039	573.30	1120.27
.000616	50.	50.	50.	2	0	0	.00	75.47	1195.73

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	MK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.65	2.50	80.00	50.30	6.00	726.75	1.06	573.30	573.30

*SECNO 22.190
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
586.00	585.69	.04	0.	3690.	727.	657.	584.90	589.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.20 ELREA= 589.20

CROSS SECTION AT UPSTREAM FACE OF N'YC RAILROAD BRIDGE

22.19	12.41	585.71	.00	.00	586.00	.29	.35	.00	584.90
3690.	0.	3690.	0.	0.	851.	0.	708.	195.	584.90
1.88	.00	4.33	.00	.035	.035	.035	.039	573.30	1120.50
.000552	20.	20.	20.	2	0	0	.00	75.00	1195.50

*SECNO 22.270

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

22.27	12.01	585.81	.00	.00	586.05	.24	.04	.01	583.00
3690.	0.	3690.	0.	0.	929.	0.	710.	196.	577.40
1.88	.00	3.97	.00	.035	.035	.035	.039	573.80	1208.00
.000460	80.	80.	80.	2	0	0	.00	101.00	1309.00

SPECIAL BRIDGE

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

5070.VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	AREA	SS	ELCHU	ELCHD
	1.05	1.71	2.80	.00	54.20	5.00	885.20	1.93	573.80	573.80

*SECNO 22.300
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	AREA	TRAPEZOID AREA	ELLC	ELTRD
586.27	586.07	.02	0.	3690.	885.	878.	585.90	587.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

22.30	12.24	586.04	.00	.00	586.27	.23	.22	.00	583.00
3690.	0.	3690.	0.	0.	952.	0.	711.	196.	577.40
1.89	.00	3.87	.00	.035	.035	.035	.039	573.80	1208.00
.000424	30.	30.	30.	2	0	0	.00	101.00	1309.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 22.350

3470 ENCROACHMENT STATIONS= 1326.5 1556.5 TYPE= 1 TARGET= 230.000

CROSS SECTION BN

22.35	11.91	586.11	.00	.00	586.30	.18	.02	.01	576.30
3690.	822.	2129.	739.	593.	492.	458.	712.	196.	576.30
1.89	1.39	4.33	1.61	.083	.040	.060	.039	574.20	1326.50
.000536	50.	50.	50.	2	0	0	.00	230.00	1556.50

1490 NH CARD USED
*SECNO 23.210

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 794.0 1594.0 TYPE= 1 TARGET= 800.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	APOB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNP	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
	CROSS SECTION BO								
23.21	10.09	586.69	.00	.00	586.77	.07	.46	.01	577.10
3690.	344.	826.	2519.	439.	197.	2423.	754.	205.	577.10
2.02	.69	4.20	1.04	.098	.040	.120	.039	576.60	794.00
.000606	840.	860.	740.	2	0	0	.00	753.05	1594.00
1Φ90 NH CARD USED									
*SECNO 23.930									
3470 ENCROACHMENT STATIONS=		386.5		691.5	TYPE=	1	TARGET=	305.000	
	CROSS SECTION BP								
23.93	10.96	587.06	.00	.00	587.28	.22	.47	.04	577.60
3690.	873.	2125.	692.	784.	438.	670.	793.	212.	577.60
2.08	1.11	4.86	1.03	.120	.040	.116	.039	576.10	386.50
.000755	480.	720.	760.	0	0	0	.00	305.00	691.50
1490 NH CARD USED									
*SECNO 24.160									
3470 ENCROACHMENT STATIONS=		464.0		614.0	TYPE=	1	TARGET=	150.000	
	CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE						REPEAT SECTION BP		
24.16	11.02	587.12	.00	.00	587.56	.44	.22	.07	577.60
3690.	569.	2712.	409.	383.	440.	314.	801.	214.	577.60
2.09	1.48	6.16	1.30	.120	.040	.120	.039	576.10	464.00
.001207	230.	230.	230.	2	0	0	.00	150.00	614.00
CCHV=	.300	CEHV=	.500						
*SECNO 24.210									
	CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)								
24.21	10.49	587.49	.00	.00	587.67	.18	.03	.08	590.20
3690.	0.	3690.	0.	0.	1088.	0.	802.	214.	590.20
2.10	.00	3.39	.00	.030	.030	.030	.039	577.00	600.00
.000283	50.	50.	50.	2	0	0	.00	115.00	715.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	AACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

+SECNO 24.260
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.82	587.68	.01	0.	3690.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.26	10.64	587.64	.00	.00	587.82	.17	.15	.00	590.20
3690.	0.	3690.	0.	0.	1105.	0.	804.	214.	590.20
2.10	.00	3.34	.00	.030	.030	.030	.039	577.00	600.00
.000269	55.	55.	55.	2	0	0	.00	115.00	715.00

+SECNO 24.280
CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.28	10.65	587.65	.00	.00	587.82	.17	.01	.00	590.20
3690.	0.	3690.	0.	0.	1106.	0.	804.	214.	590.20
2.10	.00	3.34	.00	.030	.030	.030	.039	577.00	600.00
.000269	20.	20.	20.	0	0	0	.00	115.00	715.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

+SECNO 24.340

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.98	587.83	.01	0.	3690.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.34	10.81	587.81	.00	.00	587.98	.17	.15	.00	590.20
3690.	0.	3690.	0.	0.	1124.	0.	806.	214.	590.20
2.11	.00	3.28	.00	.030	.030	.030	.039	577.00	600.00
.000255	55.	55.	55.	2	0	0	.00	115.00	715.00

1490 NH CARD USED
+SECNO 24.390

3470 ENCROACHMENT STATIONS= 560.0 775.0 TYPE= 1 TARGET= 215.000
CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION BQ

24.39	11.52	587.82	.00	.00	588.00	.18	.02	.00	577.70
3690.	1358.	1333.	999.	673.	272.	500.	807.	214.	577.70
2.11	2.02	4.91	2.00	.070	.040	.060	.039	576.30	560.00
.000732	50.	50.	50.	0	0	0	.00	215.00	775.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
+SECNO 24.690

3470 ENCROACHMENT STATIONS= 216.0 1116.0 TYPE= 1 TARGET= -216.000
CROSS SECTION BQ

24.69	11.76	588.06	.00	.00	588.08	.02	.07	.02	577.70
3690.	2566.	596.	528.	2815.	278.	634.	821.	217.	577.70
2.18	.91	2.15	.83	.070	.040	.060	.039	576.30	242.10
.000136	200.	310.	310.	2	0	0	.00	591.49	833.59

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: 100yr. Encroached

00BREAK00

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**********************************************
  HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
  ERROR CORR -  01,02,03,04
  MODIFICATION -  50,51,52,53,54
**********************************************

T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      SWAN CREEK
T3      BERLIN, SWAN CREEK      100-YEAR FLOOD W/ENCR.

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
        0.      3.        0.        0.   .000000       .00     -1.0       0.   570.900      .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
   15.000      .000    -1.000      .000      .000      .000      .000      .000      .000      .000
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	HROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 5.000
CROSS SECTION BA

5.00	3.50	570.90	.00	570.90	570.98	.08	.00	.00	572.50
4090.	0.	4090.	0.	0.	1840.	0.	0.	0.	572.50
.00	.00	2.22	.00	.000	.030	.000	.000	567.40	1998.00
.000549	0.	0.	0.	0	0	0	.00	691.86	2689.86

1490 NH CARD USED
*SECNO 7.570
CROSS SECTION BB

7.57	3.89	572.09	.00	.00	572.16	.07	1.18	.00	572.50
4090.	0.	4090.	0.	0.	1951.	0.	112.	39.	572.50
.34	.00	2.10	.00	.000	.030	.000	.040	568.20	1553.50
.000392	3200.	2570.	2500.	2	0	0	.00	624.38	2177.88

1490 NH CARD USED
*SECNO 9.730
CROSS SECTION BC

9.73	4.26	572.96	.00	.00	573.03	.08	.87	.00	572.40
4090.	0.	4090.	0.	2.	1833.	0.	206.	68.	572.40
.61	.21	2.23	.00	.060	.030	.120	.040	568.70	1627.05
.000413	2080.	2160.	2300.	2	0	0	.00	561.13	2188.19

1490 NH CARD USED
*SECNO 11.740

3470 ENCROACHMENT STATIONS= .0 1534.0 TYPE= 1 TARGET= 1533.999
CROSS SECTION BD

11.74	5.83	573.83	.00	.00	573.92	.08	.88	.00	572.40
3690.	4.	3685.	1.	10.	1584.	3.	285.	91.	572.40
.85	.43	2.33	.21	.060	.035	.120	.040	568.00	1030.65
.000473	2080.	2010.	2100.	2	0	0	.00	414.12	1444.78

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

1490 NH CARD USED
*SECNO 13.550
CROSS SECTION BE

13.55	6.01	574.61	.00	.00	574.69	.08	.78	.00	571.90
3690.	69.	3619.	2.	148.	1539.	8.	353.	108.	571.90
1.07	.47	2.35	.28	.099	.035	.120	.040	568.60	681.84
.000391	1760.	1810.	1900.	2	0	0	.00	410.93	1092.77

1490 NH CARD USED
*SECNO 14.400

3470 ENCROACHMENT STATIONS= 848.0 998.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

14.40	6.10	575.00	.00	.00	575.31	.31	.55	.07	100000.00
3690.	0.	3690.	0.	0.	826.	0.	378.	113.	100000.00
1.12	.00	4.47	.00	.099	.035	.120	.040	568.90	848.00
.001241	1000.	855.	800.	0.	0	0	.00	150.00	998.00

CCHV= .300 CEHV= .500
*SECNO 14.460

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000
CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.46	6.04	574.94	.00	.00	575.52	.58	.07	.13	580.60
3690.	0.	3690.	0.	0.	604.	0.	379.	114.	100000.00
1.12	.00	6.11	.00	.030	.030	.030	.040	568.90	642.00
.001846	50.	50.	50.	2	0	0	.00	116.00	758.00

*SECNO 14.461

3265 DIVIDED FLOW

3370 NORMAL BRIDGE.NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

SECNO / Q / TIME / SLOPE	DEPTH / QLOB / VLOB / XLOBL	CWSEL / QCH / VCH / XLCH	CRIWS / QROB / VROB / XLOBR	WSELK / ALOB / XNL / ITRIAL	EG / HACH / XNCH / IDC	HV / HROB / XNR / ICONT	HL / VOL / WTN / CORAR	OLOSS / TWA / ELMIN / TOPWID	BANK ELEV LEFT/RIGHT / SSTA / ENDST
14.46	6.01	574.91	.00	.00	575.55	.64	.00	.03	580.60
3690.	0.	3690.	0.	0.	574.	0.	379.	114.	580.60
1.12	.00	6.43	.00	.030	.030	.030	.040	568.90	642.00
.002597	1.	1.	1.	2	0	0	.00	111.28	758.00

*SECNO 14.499

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

14.50	6.17	575.07	.00	.00	575.67	.60	.11	.01	580.60
3690.	0.	3690.	0.	0.	591.	0.	380.	114.	580.60
1.12	.00	6.24	.00	.030	.030	.030	.040	568.90	642.00
.002374	43.	43.	43.	2	0	0	.00	111.29	758.00

*SECNO 14.500

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.50	6.21	575.11	.00	.00	575.68	.58	.00	.01	580.60
3690.	0.	3690.	0.	0.	605.	0.	380.	114.	100000.00
1.12	.00	6.10	.00	.030	.030	.030	.040	568.90	642.00
.001843	1.	1.	1.	2	0	0	.00	116.00	758.00

1490 NH CARD USED

*SECNO 14.550

3470 ENCROACHMENT STATIONS= 580.0 1602.0 TYPE= 1 TARGET= 580.000

CROSS SECTION BF

14.55	6.66	575.56	.00	.00	575.85	.28	.08	.09	571.90
3690.	5.	3648.	37.	17.	847.	22.	380.	114.	571.90
1.13	.32	4.30	1.68	.120	.040	.055	.040	568.90	616.81
.001260	50.	50.	50.	2	0	0	.00	179.73	796.54

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 15.840

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 700.0 2304.0 TYPE= 1 TARGET= 1604.000
CROSS SECTION BG

15.84	6.91	576.91	.00	.00	577.07	.16	1.22	.01	572.70
3690.	114.	3562.	14.	258.	1091.	24.	414.	125.	572.70
1.24	.44	3.26	.61	.114	.040	.120	.040	570.00	700.00
.000730	1400.	1290.	1220.	2	0	0	.00	549.30	1359.89

1490 NH CARD USED
*SECNO 17.260

3470 ENCROACHMENT STATIONS= 710.0 1130.0 TYPE= 1 TARGET= 420.000
CROSS SECTION BH

17.26	6.39	578.29	.00	578.29	578.49	.20	1.41	.01	572.70
3690.	689.	1903.	1099.	417.	411.	491.	459.	142.	572.70
1.36	1.65	4.63	2.24	.060	.040	.060	.040	571.90	710.00
.001387	1520.	1420.	1440.	2	0	0	.00	420.00	1130.00

1490 NH CARD USED
*SECNO 18.650

3470 ENCROACHMENT STATIONS= 670.0 1425.0 TYPE= 1 TARGET= 755.000
CROSS SECTION BI

18.65	8.83	579.73	.00	579.71	579.87	.14	1.37	.01	573.20
3690.	34.	1744.	1912.	55.	419.	1675.	512.	157.	573.20
1.51	.62	4.17	1.14	.120	.040	.084	.040	570.90	841.15
.000767	1280.	1390.	1340.	1	0	0	.00	583.85	1425.00

1490 NH CARD USED
*SECNO 19.540

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

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 852.5 932.5 TYPE= 1 TARGET= 80.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BI

19.54	8.88	580.38	.00	580.32	581.42	1.03	1.28	.27	573.80
3690.	66.	3519.	105.	47.	422.	63.	543.	165.	573.80
1.54	1.41	8.34	1.66	.120	.040	.120	.040	571.50	852.50
.003043	1100.	895.	1050.	2	0	0	.00	80.00	932.50

CCHV= .300 CEHV= .500
*SECNO 19.600

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

19.60	8.29	579.89	.00	579.82	582.35	2.46	.22	.71	590.00
3690.	0.	3690.	0.	0.	293.	0.	544.	165.	590.00
1.54	.00	12.58	.00	.030	.030	.030	.040	571.60	1163.04
.006573	50.	50.	50.	3	0	0	.00	40.27	1203.31

*SECNO 19.601

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.60	8.30	579.90	.00	579.83	582.35	2.46	.01	.00	590.00
3690.	0.	3690.	0.	0.	293.	0.	544.	165.	590.00
1.54	.00	12.57	.00	.030	.030	.030	.040	571.60	1163.04
.006561	1.	1.	1.	0	0	0	.00	40.27	1203.31

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

*SECNO 19.619

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.62	8.98	580.58	.00	580.58	582.63	2.06	.16	.12	590.00
3690.	0.	3690.	0.	0.	321.	0.	544.	165.	590.00
1.54	.00	11.50	.00	.030	.030	.030	.040	571.60	1163.04
.005045	28.	28.	28.	3	0	0	.00	40.27	1203.31

*SECNO 19.620

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

19.62	8.99	580.59	.00	580.59	582.64	2.05	.01	.00	590.00
3690.	0.	3690.	0.	0.	321.	0.	544.	165.	590.00
1.54	.00	11.48	.00	.030	.030	.030	.040	571.60	1163.04
.005018	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.670

3470 ENCROACHMENT STATIONS= 1151.7 1214.7 TYPE= 1 TARGET= 72.700

CROSS SECTION BETWEEN BRIDGES

19.67	9.00	580.90	.00	580.89	582.88	1.98	.22	.02	578.10
3690.	6.	3652.	32.	3.	322.	12.	544.	165.	574.90
1.54	1.73	11.34	2.61	.050	.030	.050	.040	571.90	1160.65
.003855	50.	50.	50.	2	0	0	.00	46.71	1207.36

*SECNO 19.720

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

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

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

19.72	9.89	582.19	.00	582.19	583.29	1.09	.14	.26	593.20
3690.	0.	3690.	0.	0.	440.	0.	545.	165.	593.20
1.54	.00	8.40	.00	.030	.030	.030	.040	572.30	1207.64
.002215	50.	50.	50.	3	0	0	.00	48.50	1256.13

*SECNO 19.722

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.72	9.90	582.20	.00	582.20	583.29	1.09	.00	.00	593.20
3690.	0.	3690.	0.	0.	440.	0.	545.	165.	593.20
1.54	.00	8.39	.00	.030	.030	.030	.040	572.30	1207.64
.002209	2.	2.	2.	0	0	0	.00	48.50	1256.13

*SECNO 19.738

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.74	9.95	582.25	.00	582.24	583.33	1.08	.04	.00	593.20
3690.	0.	3690.	0.	0.	442.	0.	545.	165.	593.20
1.54	.00	8.35	.00	.030	.030	.030	.040	572.30	1207.64
.002178	16.	16.	16.	1	0	0	.00	48.50	1256.13

*SECNO 19.740

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

19.74	9.96	582.26	.00	582.25	583.34	1.08	.00	.00	593.20
3690.	0.	3690.	0.	0.	443.	0.	545.	165.	593.20
1.54	.00	8.34	.00	.030	.030	.030	.040	572.30	1207.64
.002170	2.	2.	2.	0	0	0	.00	48.50	1256.13

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

1490 NH CARD USED
*SECNO 19.790

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 1498.0 1658.0 TYPE= 1 TARGET= 160.000
CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE COPY SECTION BJ

19.79	11.21	582.31	.00	582.30	583.57	1.27	.14	.09	578.10
3690.	572.	3008.	109.	284.	302.	59.	546.	165.	574.50
1.55	2.02	9.95	1.86	.120	.040	.120	.040	571.10	1498.00
.004010	50.	50.	50.	2	0	0	.00	113.60	1648.43

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 19.900

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1380.0 1740.0 TYPE= 1 TARGET= 360.000
CROSS SECTION BJ

19.90	12.51	583.61	.00	583.60	583.88	.27	.21	.10	578.10
3690.	1636.	1928.	126.	1143.	341.	169.	549.	166.	574.50
1.55	1.43	5.65	.75	.115	.040	.120	.040	571.10	1380.00
.001099	110.	110.	110.	3	0	0	.00	333.41	1713.41

*SECNO 20.010
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

20.01	11.77	583.97	.00	583.97	584.01	.05	.11	.02	579.20
3690.	2700.	948.	42.	2828.	319.	94.	562.	169.	575.60
1.59	.95	2.97	.45	.075	.040	.120	.039	572.20	805.97
.000332	260.	110.	140.	2	0	0	.00	870.46	1676.43

CCHV= .300 CEHV= .500
*SECNO 20.060

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	HROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
	CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE								
20.06	11.36	583.96	.00	583.96	584.05	.09	.02	.02	581.20
3690.	2381.	1274.	35.	1295.	385.	47.	565.	170.	581.20
1.60	1.84	3.31	.75	.030	.030	.030	.039	572.60	742.73
.000304	50.	50.	50.	2	0	0	.00	549.83	1292.56
*SECNO 20.061									
3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20									
20.06	11.38	583.98	.00	583.97	584.06	.08	.00	.00	581.20
3690.	3045.	605.	40.	1299.	385.	48.	565.	170.	581.20
1.60	2.34	1.99	.83	.030	.030	.030	.039	572.60	742.48
.000497	1.	1.	1.	1	0	0	-80.30	550.43	1292.91
*SECNO 20.079									
3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20									
20.08	11.39	583.99	.00	583.98	584.07	.08	.01	.00	581.20
3690.	3047.	603.	40.	1306.	385.	49.	565.	170.	581.20
1.60	2.33	1.97	.83	.030	.030	.030	.039	572.60	742.01
.000490	18.	18.	18.	0	0	0	-80.30	551.58	1293.59
*SECNO 20.080									
	CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE								
20.08	11.38	583.98	.00	583.98	584.07	.09	.00	.01	581.20
3690.	2388.	1265.	37.	1307.	386.	49.	565.	170.	581.20
1.60	1.83	3.28	.75	.030	.030	.030	.039	572.60	741.91
.000297	1.	1.	1.	0	0	0	.00	551.82	1293.73
1490 NH CARD USED									
*SECNO 20.130									
3470 ENCROACHMENT STATIONS= 1000.0 1455.0 TYPE= 1 TARGET= 455.000									
CROSS SECTION BK									

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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
20.13	11.40	584.00	.00	584.00	584.10	.10	.02	.01	573.70
3690.	2218.	1313.	159.	2299.	323.	117.	568.	171.	573.70
1.61	.96	4.07	1.36	.114	.040	.075	.039	572.60	1000.00
.000508	50.	50.	50.	0	0	0	.00	451.70	1451.70

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 20.770

3470 ENCROACHMENT STATIONS= 880.0 1405.0 TYPE= 1 TARGET= 525.000
CROSS SECTION BL

20.77	10.48	584.38	.00	584.34	584.42	.05	.32	.01	574.70
3690.	2354.	884.	452.	2872.	278.	562.	630.	180.	574.70
1.77	.82	3.18	.80	.120	.040	.120	.039	573.90	880.00
.000329	880.	640.	640.	2	0	0	.00	525.00	1405.00

1490 NH CARD USED
*SECNO 21.910

3470 ENCROACHMENT STATIONS= 730.5 980.5 TYPE= 1 TARGET= 250.000
CROSS SECTION BM

21.91	9.71	584.81	.00	584.73	585.10	.29	.61	.07	576.30
3690.	1028.	1682.	980.	676.	271.	651.	688.	189.	576.30
1.84	1.52	6.21	1.50	.120	.040	.120	.039	575.10	730.50
.001445	960.	1140.	900.	1	0	0	.00	250.00	980.50

1490 NH CARD USED
*SECNO 22.120

3470 ENCROACHMENT STATIONS= 800.5 910.5 TYPE= 1 TARGET= 110.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BM

22.12	11.31	584.91	.00	584.83	585.56	.65	.35	.11	574.80
3690.	577.	2472.	641.	309.	317.	330.	695.	189.	574.80
1.85	1.87	7.79	1.94	.120	.040	.120	.039	573.60	800.50
.001839	220.	210.	220.	2	0	0	.00	110.00	910.50

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	HROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
22.17	12.10	585.40	.00	585.34	585.71	.31	.05	.10	584.90
3690.	0.	3690.	0.	0.	829.	0.	696.	190.	584.90
1.86	.01	4.45	.01	.035	.035	.035	.039	573.30	1120.23
.000604	50.	50.	50.	2	0	0	.00	75.54	1195.77

CCHV= .300 CEHV= .500
+SECNO 22.170
CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	AK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.65	2.50	80.00	50.30	6.00	726.75	1.06	573.30	573.30

*SECNO 22.190
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
586.06	585.75	.04	0.	3690.	727.	657.	584.90	589.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.20 ELREA= 589.20

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

22.19	12.48	585.78	.00	585.71	586.06	.29	.35	.00	584.90
3690.	0.	3690.	0.	0.	857.	0.	696.	190.	584.90
1.86	.00	4.31	.00	.035	.035	.035	.039	573.30	1120.50
.000541	20.	20.	20.	2	0	0	.00	75.00	1195.50

*SECNO 22.270

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

22.27	12.08	585.88	.00	585.81	586.12	.24	.04	.01	583.00
3690.	0.	3690.	0.	0.	936.	0.	698.	190.	577.40
1.86	.00	3.94	.00	.035	.035	.035	.039	573.80	1208.00
.000449	80.	80.	80.	2	0	0	.00	101.00	1309.00

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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.71	2.80	.00	54.20	5.00	885.20	1.93	573.80	573.80

*SECNO 22.300
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
586.34	586.14	.02	0.	3690.	885.	878.	585.90	587.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

22.30	12.31	586.11	.00	586.04	586.34	.23	.22	.00	583.00
3690.	0.	3690.	0.	0.	960.	0.	698.	190.	577.40
1.86	.00	3.84	.00	.035	.035	.035	.039	573.80	1208.00
.000413	30.	30.	30.	2	0	0	.00	101.00	1309.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 22.350

3470 ENCROACHMENT STATIONS= 1326.5 1556.5 TYPE= 1 TARGET= 230.000

CROSS SECTION BN

22.35	11.99	586.19	.00	586.11	586.37	.18	.02	.01	576.30
3690.	824.	2120.	746.	599.	495.	465.	700.	190.	576.30
1.87	1.38	4.28	1.60	.083	.040	.060	.039	574.20	1326.50
.000520	50.	50.	50.	2	0	0	.00	230.00	1556.50

1490 NH CARD USED
*SECNO 23.210

3470 ENCROACHMENT STATIONS= 1000.0 1594.0 TYPE= 1 TARGET= 594.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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
		CROSS SECTION BO							
23.21	10.15	586.75	.00	586.69	586.83	.08	.46	.01	577.10
3690.	237.	849.	2604.	343.	198.	2447.	741.	197.	577.10
1.99	.69	4.29	1.06	.118	.040	.120	.039	576.60	1006.47
.000627	840.	860.	740.	2	0	0	.00	587.52	1594.00

1490 NH CARD USED
+SECNO 23.930

3470 ENCROACHMENT STATIONS= 386.5 691.5 TYPE= 1 TARGET= 305.000

		CROSS SECTION BP							
23.93	11.04	587.14	.00	587.06	587.35	.21	.48	.04	577.60
3690.	876.	2118.	696.	793.	440.	679.	779.	204.	577.60
2.06	1.10	4.81	1.03	.120	.040	.116	.039	576.10	386.50
.000734	480.	720.	760.	0	0	0	.00	305.00	691.50

1490 NH CARD USED
+SECNO 24.160

3470 ENCROACHMENT STATIONS= 464.0 614.0 TYPE= 1 TARGET= 150.000

		CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE				REPEAT SECTION BP			
24.16	11.09	587.19	.00	587.12	587.63	.43	.21	.07	577.60
3690.	571.	2708.	412.	387.	443.	318.	787.	205.	577.60
2.07	1.47	6.11	1.29	.120	.040	.120	.039	576.10	464.00
.001177	230.	230.	230.	2	0	0	.00	150.00	614.00

CCHV= .300 CEHV= .500

+SECNO 24.210

		CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)							
24.21	10.55	587.55	.00	587.49	587.73	.18	.03	.08	590.20
3690.	0.	3690.	0.	0.	1095.	0.	789.	205.	590.20
2.07	.00	3.37	.00	.030	.030	.030	.039	577.00	600.00
.000278	50.	50.	50.	2	0	0	.00	115.00	715.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.260
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.88	587.74	.01	0.	3690.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.26	10.71	587.71	.00	587.64	587.88	.17	.15	.00	590.20
3690.	0.	3690.	0.	0.	1113.	0.	790.	206.	590.20
2.08	.00	3.32	.00	.030	.030	.030	.039	577.00	600.00
.000264	55.	55.	55.	2	0	0	.00	115.00	715.00

*SECNO 24.280
CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.28	10.71	587.71	.00	587.65	587.88	.17	.01	.00	590.20
3690.	0.	3690.	0.	0.	1113.	0.	791.	206.	590.20
2.08	.00	3.31	.00	.030	.030	.030	.039	577.00	600.00
.000263	20.	20.	20.	0	0	0	.00	115.00	715.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.340

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
588.04	587.89	.01	0.	3690.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.34	10.88	587.88	.00	587.81	588.04	.17	.16	.00	590.20
3690.	0.	3690.	0.	0.	1132.	0.	792.	206.	590.20
2.08	.00	3.26	.00	.030	.030	.030	.039	577.00	600.00
.000250	55.	55.	55.	2	0	0	.00	115.00	715.00

1490 NH CARD USED
*SECNO 24.390

3470 ENCROACHMENT STATIONS= 560.0 775.0 TYPE= 1 TARGET= 215.000
CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION BQ

24.39	11.59	587.89	.00	587.82	588.06	.17	.02	.00	577.70
3690.	1359.	1327.	1004.	679.	273.	506.	794.	206.	577.70
2.09	2.00	4.86	1.98	.070	.040	.060	.039	576.30	560.00
.000711	50.	50.	50.	0	0	0	.00	215.00	775.00

CCHV= .100 CEHV= .300

1490 NH CARD USED
*SECNO 24.690

3470 ENCROACHMENT STATIONS= 216.0 1116.0 TYPE= 1 TARGET= -216.000
CROSS SECTION BQ

24.69	11.82	588.12	.00	588.06	588.14	.02	.06	.01	577.70
3690.	2566.	593.	531.	2841.	279.	644.	808.	208.	577.70
2.15	.90	2.12	.83	.070	.040	.060	.039	576.30	241.18
.000132	200.	310.	310.	2	0	0	.00	593.40	834.58

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Berlin Twp.

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: 100 yr Flood

00BREAK00

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
  ERROR CORR -  01,02,03,04
  MODIFICATION -  50,51,52,53,54
*****************************************************

T1      MUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN       SWAN CREEK
T3      BERLIN, SWAN CREEK       100-YEAR FLOOD

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   NVINS    Q        WSEL     FQ

      0.       2.       0.       0.   .000000     .00     -1.0      0.   570.900    .000

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

    3.000     .000   -1.000     .000     .000     .000     .000     .000     .000     .000
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	WACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	UTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 3

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 5.000
CROSS SECTION BA

5.00	3.50	570.90	.00	570.90	570.98	.08	.00	.00	572.50
4090.	0.	4090.	0.	0.	1840.	0.	0.	0.	572.50
.00	.00	2.22	.00	.000	.030	.000	.000	567.40	1990.00
.000549	0.	0.	0.	0	0	0	.00	691.86	2689.86

1490 NH CARD USED
*SECNO 7.570
CROSS SECTION BB

7.57	3.89	572.09	.00	.00	572.16	.07	1.18	.00	572.50
4090.	0.	4090.	0.	0.	1951.	0.	112.	39.	572.50
.34	.00	2.10	.00	.000	.030	.000	.040	568.20	1553.50
.000392	3200.	2570.	2500.	2	0	0	.00	624.38	2177.88

1490 NH CARD USED
*SECNO 9.730
CROSS SECTION BC

9.73	4.26	572.96	.00	.00	573.03	.08	.87	.00	572.40
4090.	0.	4090.	0.	2.	1833.	0.	206.	68.	572.40
.61	.21	2.23	.00	.060	.030	.120	.040	568.70	1627.05
.000413	2080.	2160.	2300.	2	0	0	.00	561.13	2188.19

1490 NH CARD USED
*SECNO 11.740

3470 ENCROACHMENT STATIONS= .0 1534.0 TYPE= 1 TARGET= 1533.999
CROSS SECTION BD

11.74	5.83	573.03	.00	.00	573.92	.08	.88	.00	572.40
3690.	4.	3685.	1.	10.	1584.	3.	285.	91.	572.40
.85	.43	2.33	.21	.060	.035	.120	.040	568.00	1030.65
.000473	2080.	2010.	2100.	2	0	0	.00	414.12	1444.78

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

1490 NH CARD USED
*SECNO 13.550
CROSS SECTION BE

13.55	6.01	574.61	.00	.00	574.69	.08	.78	.00	571.90
3690.	69.	3619.	2.	148.	1539.	8.	353.	108.	571.90
1.07	.47	2.35	.28	.099	.035	.120	.040	568.60	681.84
.000391	1760.	1910.	1900.	2	0	0	.00	410.93	1092.77

1490 NH CARD USED
*SECNO 14.400

3470 ENCROACHMENT STATIONS= 848.0 998.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

14.40	6.10	575.00	.00	.00	575.31	.31	.55	.07	100000.00
3690.	0.	3690.	0.	0.	826.	0.	376.	113.	100000.00
1.12	.00	4.47	.00	.099	.035	.120	.040	568.90	848.00
.001241	1000.	055.	800.	0	0	0	.00	150.00	998.00

CCHV= .300 CEHV= .500
*SECNO 14.460

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000
CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.46	6.04	574.94	.00	.00	575.52	.58	.07	.13	580.60
3690.	0.	3690.	0.	0.	604.	0.	379.	114.	100000.00
1.12	.00	6.11	.00	.030	.030	.030	.040	568.90	642.00
.001846	50.	90.	50.	2	0	0	.00	116.00	758.00

*SECNO 14.461

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	WV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
14.46	6.01	574.91	.00	.00	575.55	.64	.00	.03	580.60
3690.	0.	3690.	0.	0.	574.	0.	379.	114.	580.60
1.12	.00	6.43	.00	.030	.030	.030	.040	568.90	642.00
.002597	1.	1.	1.	2	0	0	.00	111.28	758.00

*SECNO 14.499

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

14.50	6.17	575.07	.00	.00	575.67	.60	.11	.01	580.60
3690.	0.	3690.	0.	0.	591.	0.	380.	114.	580.60
1.12	.00	6.24	.00	.030	.030	.030	.040	568.90	642.00
.002374	43.	43.	43.	2	0	0	.00	111.29	758.00

*SECNO 14.500

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.50	6.21	575.11	.00	.00	575.68	.58	.00	.01	580.60
3690.	0.	3690.	0.	0.	605.	0.	380.	114.	100000.00
1.12	.00	6.10	.00	.030	.030	.030	.040	568.90	642.00
.001843	1.	1.	1.	2	0	0	.00	116.00	758.00

1490 NM CARD USED

*SECNO 14.550

3470 ENCROACHMENT STATIONS= 580.0 1602.0 TYPE= 1 TARGET= -580.000

CROSS SECTION OF

14.55	6.66	575.56	.00	.00	575.85	.28	.08	.09	571.90
3690.	5.	3648.	37.	17.	847.	22.	380.	114.	571.90
1.13	.32	4.30	1.68	.120	.040	.055	.040	568.90	616.81
.001260	50.	50.	50.	2	0	0	.00	179.73	796.54

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 15.840

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 700.0 2304.0 TYPE= 1 TARGET= 1604.000
CROSS SECTION BC

15.84	6.91	576.91	.00	.00	577.07	.16	1.22	.01	572.70
3690.	114.	3562.	14.	258.	1091.	24.	414.	125.	572.70
1.24	.44	3.26	.61	.114	.040	.120	.040	570.00	700.00
.000730	1400.	1290.	1220.	2	0	0	.00	549.30	1359.89

1490 NH CARD USED
*SECNO 17.260
CROSS SECTION BW

17.26	6.39	578.29	.00	576.90	578.49	.20	1.41	.01	572.70
3690.	688.	1902.	1099.	417.	411.	491.	459.	142.	572.70
1.36	1.65	4.63	2.24	.060	.040	.060	.040	571.90	709.96
.001386	1520.	1420.	1440.	2	0	0	.00	421.32	1131.28

1490 NH CARD USED
*SECNO 18.650
CROSS SECTION BI

18.65	8.81	579.71	.00	578.49	579.84	.13	1.34	.01	573.20
3690.	33.	1704.	1953.	55.	418.	1771.	514.	158.	573.20
1.51	.61	4.08	1.10	.120	.040	.083	.040	570.90	841.28
.000738	1280.	1390.	1340.	0	0	0	.00	669.92	1511.20

1490 NH CARD USED
*SECNO 19.540

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 852.5 932.5 TYPE= 1 TARGET= 80.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	NACH	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

CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BI

19.54	8.82	580.32	.00	579.26	581.37	1.05	1.26	.28	573.80
3690.	65.	3521.	104.	46.	419.	63.	546.	167.	573.00
1.54	1.41	8.41	1.66	.120	.040	.120	.040	571.50	852.50
.003121	1100.	895.	1050.	2	0	0	.00	80.00	932.50

CCHV= .300 CEHV= .500
*SECNO 19.600

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

19.60	8.22	579.82	.00	579.08	582.32	2.51	.22	.73	590.00
3690.	0.	3690.	0.	0.	290.	0.	546.	167.	590.00
1.55	.00	12.70	.00	.030	.030	.030	.040	571.60	1163.04
.006764	50.	50.	50.	3	0	0	.00	40.27	1203.31

*SECNO 19.601

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.60	8.23	579.83	.00	579.08	582.33	2.50	.01	.00	590.00
3690.	0.	3690.	0.	0.	291.	0.	546.	167.	590.00
1.55	.00	12.70	.00	.030	.030	.030	.040	571.60	1163.04
.006751	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.619

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.62	8.98	580.58	.00	579.24	582.63	2.05	.16	.14	590.00
3690.	0.	3690.	0.	0.	321.	0.	547.	167.	590.00
1.55	.00	11.50	.00	.030	.030	.030	.040	571.60	1163.04
.005033	28.	28.	28.	4	0	0	.00	40.27	1203.31

*SECNO 19.620

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

19.62	8.99	580.59	.00	579.25	582.63	2.05	.01	.00	590.00
3690.	0.	3690.	0.	0.	321.	0.	547.	167.	590.00
1.55	.00	11.49	.00	.030	.030	.030	.040	571.60	1163.04
.005021	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.670

3470 ENCROACHMENT STATIONS= 1151.7 1214.7 TYPE= 1 TARGET= 72.700

CROSS SECTION BETWEEN BRIDGES

19.67	8.99	580.89	.00	579.38	582.87	1.98	.22	.02	578.10
3690.	6.	3653.	32.	3.	322.	12.	547.	167.	574.90
1.55	1.73	11.36	2.61	.050	.030	.050	.040	571.90	1160.66
.003880	50.	50.	50.	2	0	0	.00	46.69	1207.35

*SECNO 19.720

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

19.72	9.89	582.19	.00	580.03	583.28	1.10	.14	.27	593.20
3690.	0.	3690.	0.	0.	439.	0.	547.	167.	593.20
1.55	.00	8.40	.00	.030	.030	.030	.040	572.30	1207.64
.002220	50.	50.	50.	3	0	0	.00	48.50	1256.13

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

*SECNO 19.722

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.72	9.90	582.20	.00	580.04	583.29	1.09	.00	.00	593.20
3690.	0.	3690.	0.	0.	440.	0.	547.	167.	593.20
1.55	.00	8.39	.00	.030	.030	.030	.040	572.30	1207.64
.002213	2.	2.	2.	0	0	0	.00	48.50	1256.13

*SECNO 19.738

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.74	9.94	582.24	.00	580.08	583.33	1.08	.04	.00	593.20
3690.	0.	3690.	0.	0.	442.	0.	548.	167.	593.20
1.55	.00	8.35	.00	.030	.030	.030	.040	572.30	1207.64
.002183	16.	16.	16.	1	0	0	.00	48.50	1256.13

*SECNO 19.740

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

19.74	9.95	582.25	.00	580.08	583.33	1.08	.00	.00	593.20
3690.	0.	3690.	0.	0.	442.	0.	548.	167.	593.20
1.55	.00	8.34	.00	.030	.030	.030	.040	572.30	1207.64
.002174	2.	2.	2.	0	0	0	.00	48.50	1256.13

1490 NH CARD USED
*SECNO 19.790

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 1498.0 1658.0 TYPE= 1 TARGET= 160.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	AROB	VOL	TOA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
	CROSS SECTION 30 FEET UPSTREAM FROM BRIDGE					COPY SECTION BJ			
19.79	11.20	582.30	.00	580.03	583.57	1.27	.14	.09	578.10
3690.	572.	3009.	109.	284.	302.	59.	548.	168.	574.50
1.55	2.02	9.96	1.86	.120	.040	.120	.040	571.10	1498.00
.004020	50.	50.	50.	2	0	0	.00	112.10	1648.12

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 19.900

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1380.0 1740.0 TYPE= 1 TARGET= 360.000
CROSS SECTION BJ

19.90	12.50	583.60	.00	581.09	583.88	.27	.21	.10	578.10
3690.	1636.	1928.	126.	1142.	341.	169.	551.	168.	574.50
1.56	1.43	5.65	.75	.115	.040	.120	.040	571.10	1380.00
.001100	110.	110.	110.	3	0	0	.00	333.23	1713.23

*SECNO 20.010
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

20.01	11.77	583.97	.00	581.43	584.01	.05	.11	.02	579.20
3690.	2699.	948.	42.	2826.	319.	94.	564.	171.	575.60
1.60	.96	2.97	.45	.075	.040	.120	.039	572.20	806.07
.000333	260.	110.	140.	2	0	0	.00	870.21	1676.28

CCHV= .300 CEHV= .500
*SECNO 20.060
CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

20.06	11.36	583.96	.00	581.33	584.05	.09	.02	.02	581.20
3690.	2380.	1275.	35.	1294.	385.	47.	567.	172.	581.20
1.60	1.84	3.31	.75	.030	.030	.030	.039	572.60	742.82
.000305	50.	50.	50.	2	0	0	.00	549.60	1292.43

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

*SECNO 20.061

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.06	11.37	583.97	.00	581.58	584.05	.08	.00	.00	581.20
3690.	3045.	606.	39.	1298.	305.	47.	567.	172.	581.20
1.60	2.35	1.99	.83	.030	.030	.030	.039	572.60	742.58
.000499	1.	1.	1.	1	0	0	-80.30	550.20	1292.78

*SECNO 20.079

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.08	11.38	583.98	.00	581.66	584.06	.08	.01	.00	581.20
3690.	3047.	603.	40.	1305.	305.	48.	568.	172.	581.20
1.61	2.34	1.98	.83	.030	.030	.030	.039	572.60	742.10
.000491	18.	18.	18.	0	0	0	-80.30	551.36	1293.46

*SECNO 20.080

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

20.08	11.38	583.98	.00	581.62	584.07	.09	.00	.01	581.20
3690.	2387.	1266.	36.	1306.	386.	49.	568.	172.	581.20
1.61	1.83	3.20	.75	.030	.030	.030	.039	572.60	742.00
.000298	1.	1.	1.	0	0	0	.00	551.60	1293.60

1490 NH CARD USED

*SECNO 20.130

CROSS SECTION BK

20.13	11.40	584.00	.00	581.98	584.09	.09	.02	.00	573.70
3690.	2282.	1256.	152.	2453.	323.	117.	570.	173.	573.70
1.61	.93	3.89	1.30	.111	.040	.075	.039	572.60	947.16
.000465	50.	50.	50.	0	0	0	.00	504.53	1451.70

CCHV= .100 CEHV= .300

1490 NH CARD USED

*SECNO 20.770

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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
			CROSS SECTION BL						
20.77	10.44	584.34	.00	582.35	584.38	.04	.29	.01	574.70
3690.	2390.	827.	473.	3224.	277.	618.	638.	184.	574.70
1.79	.74	2.98	.77	.120	.040	.120	.039	573.90	754.94
.000291	880.	640.	640.	2	0	0	.00	665.51	1420.45

1490 NH CARD USED
*SECNO 21.910

3470 ENCROACHMENT STATIONS= 730.5 980.5 TYPE= 1 TARGET= 250.000
CROSS SECTION BM

21.91	9.63	584.73	.00	582.79	585.03	.30	.57	.08	576.30
3690.	1025.	1689.	976.	667.	269.	642.	701.	194.	576.30
1.86	1.54	6.29	1.52	.120	.040	.120	.039	575.10	730.50
.001500	960.	1140.	900.	0	0	0	.00	250.00	980.50

1490 NH CARD USED
*SECNO 22.120

3470 ENCROACHMENT STATIONS= 800.5 910.5 TYPE= 1 TARGET= 110.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BM

22.12	11.23	584.83	.00	583.01	585.49	.66	.36	.11	574.80
3690.	575.	2475.	640.	306.	315.	327.	707.	195.	574.80
1.88	1.88	7.85	1.95	.120	.040	.120	.039	573.60	800.50
.001887	220.	210.	220.	2	0	0	.00	110.00	910.50

CCHV= .300 CEHV= .500
*SECNO 22.170
CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

22.17	12.04	585.34	.00	583.32	585.65	.31	.05	.10	584.90
3690.	0.	3690.	0.	0.	824.	0.	708.	195.	584.90
1.88	.01	4.48	.01	.035	.035	.035	.039	573.30	1120.27
.000616	50.	50.	50.	2	0	0	.00	75.47	1195.73

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.65	2.50	80.00	50.30	6.00	726.75	1.06	573.30	573.30

*SECNO 22.190
PRESSURE FLOW

EGPRS	EGLOC	W3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
586.00	585.69	.04	0.	3690.	727.	657.	584.90	589.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.20 ELREA= 589.20

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

22.19	12.41	585.71	.00	583.34	586.00	.29	.35	.00	584.90
3690.	0.	3690.	0.	0.	851.	0.	708.	195.	584.90
1.88	.00	4.33	.00	.035	.035	.035	.039	573.30	1120.50
.000552	20.	20.	20.	2	0	0	.00	75.00	1195.50

*SECNO 22.270

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

22.27	12.01	585.81	.00	583.38	586.05	.24	.04	.01	583.00
3690.	0.	3690.	0.	0.	929.	0.	710.	196.	577.40
1.88	.00	3.97	.00	.035	.035	.035	.039	573.80	1208.00
.000460	80.	80.	80.	2	0	0	.00	101.00	1309.00

SPECIAL BRIDGE

SECNO	DEPTH	CWSEL	CRIWS	USELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.71	2.80	.00	54.20	5.00	885.20	1.93	573.80	573.80

*SECNO 22.300
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
586.27	586.07	.02	0.	3690.	885.	878.	585.90	587.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.20 ELREA= 587.20

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

22.30	12.24	586.04	.00	583.39	586.27	.23	.22	.00	583.00
3690.	0.	3690.	0.	0.	952.	0.	711.	196.	577.40
1.89	.00	3.87	.00	.035	.035	.035	.039	573.80	1208.00
.000424	30.	30.	30.	2	0	0	.00	101.00	1309.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 22.350

3470 ENCROACHMENT STATIONS= 1326.5 1556.5 TYPE= 1 TARGET= 230.000
CROSS SECTION ON

22.35	11.91	586.11	.00	583.40	586.30	.18	.02	.01	576.30
3690.	822.	2129.	739.	593.	492.	458.	712.	196.	576.30
1.89	1.39	4.33	1.61	.083	.040	.060	.039	574.20	1326.50
.000536	50.	50.	50.	2	0	0	.00	230.00	1556.50

1490 NH CARD USED
*SECNO 23.210

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 794.0 1594.0 TYPE= 1 TARGET= 800.000

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

CROSS SECTION BO

23.21	10.09	586.69	.00	584.20	586.77	.07	.46	.01	577.10
3690.	344.	826.	2519.	499.	197.	2423.	754.	205.	577.10
2.02	.69	4.20	1.04	.098	.040	.120	.039	576.60	794.00
.000606	840.	860.	740.	2	0	0	.00	753.05	1594.00

1490 NH CARD USED
*SECNO 23.930

3470 ENCROACHMENT STATIONS= 386.5 691.5 TYPE= 1 TARGET= 305.000
CROSS SECTION BP

23.93	10.96	587.06	.00	584.61	587.28	.22	.47	.04	577.60
3690.	873.	2125.	692.	784.	438.	670.	793.	212.	577.60
2.08	1.11	4.86	1.03	.120	.040	.116	.039	576.10	306.50
.000755	480.	720.	760.	0	0	0	.00	305.00	691.50

1490 NH CARD USED
*SECNO 24.160

3470 ENCROACHMENT STATIONS= 464.0 614.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BP

24.16	11.02	587.12	.00	584.96	587.56	.44	.22	.07	577.60
3690.	569.	2712.	409.	383.	440.	314.	801.	214.	577.60
2.09	1.48	6.16	1.30	.120	.040	.120	.039	576.10	464.00
.001207	230.	230.	230.	2	0	0	.00	150.00	614.00

CCHV= .300 CEHV= .500
*SECNO 24.210
CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.21	10.49	587.49	.00	585.23	587.67	.18	.03	.08	590.20
3690.	0.	3690.	0.	0.	1088.	0.	802.	214.	590.20
2.10	.00	3.39	.00	.030	.030	.030	.039	577.00	600.00
.000283	50.	50.	50.	2	0	0	.00	115.00	715.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.260
PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.82	587.68	.01	0.	3690.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.26	10.64	587.64	.00	585.24	587.82	.17	.15	.00	590.20
3690.	0.	3690.	0.	0.	1105.	0.	804.	214.	590.20
2.10	.00	3.34	.00	.030	.030	.030	.039	577.00	600.00
.000269	55.	55.	55.	2	0	0	.00	115.00	715.00

*SECNO 24.280
CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.28	10.65	587.65	.00	585.24	587.82	.17	.01	.00	590.20
3690.	0.	3690.	0.	0.	1106.	0.	804.	214.	590.20
2.10	.00	3.34	.00	.030	.030	.030	.039	577.00	600.00
.000269	20.	20.	20.	0	0	0	.00	115.00	715.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.340

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

PRESSURE FLOW

EGPRS	EGLOC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.98	587.83	.01	0.	3690.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.34	10.81	587.81	.00	585.24	587.98	.17	.15	.00	590.20
3690.	0.	3690.	0.	0.	1124.	0.	806.	214.	590.20
2.11	.00	3.28	.00	.030	.030	.030	.039	577.00	600.00
.000255	55.	55.	55.	2	0	0	.00	115.00	715.00

1490 NH CARD USED
*SECNO 24.390

3470 ENCROACHMENT STATIONS= 560.0 775.0 TYPE= 1 TARGET= 215.000
CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION BQ

24.39	11.52	587.82	.00	585.22	588.00	.18	.02	.00	577.70
3690.	1358.	1333.	999.	673.	272.	500.	807.	214.	577.70
2.11	2.02	4.91	2.00	.070	.040	.060	.039	576.30	560.00
.000732	50.	50.	50.	0	0	0	.00	215.00	775.00

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 24.690

3470 ENCROACHMENT STATIONS= 216.0 1116.0 TYPE= 1 TARGET= -216.000
CROSS SECTION BQ

24.69	11.76	588.06	.00	585.52	588.08	.02	.07	.02	577.70
3690.	2566.	596.	528.	2815.	278.	634.	821.	217.	577.70
2.18	.91	2.15	.83	.070	.040	.060	.039	576.30	242.10
.000136	200.	310.	310.	2	0	0	.00	591.49	833.59

1) COUNTY: Monroe

2) STUDY NAME: Berlin Twp

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: 500yr Flood

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**********
  HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
  ERROR CORR - 01,02,03,04
  MODIFICATION - 50,51,52,53,54
**********

T1      HUD FLOOD INSURANCE STUDIES  H-3970  WILLIAMS & WORKS
T2      TOWNSHIP OF BERLIN      SWAN CREEK
T3      BERLIN, SWAN CREEK      500-YEAR FLOOD

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
        0.      4.        0.        0.   .000000       .00     -1.0        0.   570.900      .000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
   15.000       .000    -1.000       .000      .000      .000      .000      .000      .000      .000
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	HACH	AROB	VOL	TOA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 4

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 5.000
CROSS SECTION BA

5.00	3.50	570.90	.00	570.90	571.01	.11	.00	.00	572.50
4950.	0.	4950.	0.	0.	1840.	0.	0.	0.	572.50
.00	.00	2.69	.00	.000	.030	.000	.000	567.40	1998.00
.000804	0.	0.	0.	0	0	0	.00	691.86	2689.86

1490 NH CARD USED
*SECNO 7.570
CROSS SECTION BB

7.57	4.20	572.40	.00	.00	572.48	.08	1.47	.00	572.50
4950.	0.	4950.	0.	0.	2148.	0.	118.	39.	572.50
.31	.00	2.30	.00	.060	.030	.120	.040	568.20	1551.60
.000427	3200.	2570.	2500.	3	0	0	.00	635.51	2187.11

1490 NH CARD USED
*SECNO 9.730
CROSS SECTION BC

9.73	4.62	573.32	.00	.00	573.41	.09	.92	.00	572.40
4950.	1.	4949.	0.	4.	2031.	0.	221.	69.	572.40
.56	.30	2.44	.07	.060	.030	.120	.040	568.70	1623.22
.000429	2080.	2160.	2300.	2	0	0	.00	565.08	2188.30

1490 NH CARD USED
*SECNO 11.740

3470 ENCROACHMENT STATIONS= .0 1534.0 TYPE= 1 TARGET= 1533.999
CROSS SECTION BD

11.74	6.24	574.24	.00	.00	574.34	.10	.93	.00	572.40
4470.	9.	4460.	1.	17.	1745.	4.	309.	92.	572.40
.77	.52	2.56	.25	.060	.035	.120	.040	568.00	1026.59
.000502	2080.	2010.	2100.	2	0	0	.00	419.25	1445.84

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

1490 NH CARD USED
*SECNO 13.550
CROSS SECTION BE.

13.55	6.47	575.07	.00	.00	575.17	.10	.83	.00	571.90
4470.	101.	4365.	3.	184.	1689.	11.	385.	109.	571.90
.97	.55	2.59	.32	.099	.035	.120	.040	568.60	680.04
.000417	1760.	1810.	1900.	2	0	0	.00	413.70	1093.74

1490 NH CARD USED
*SECNO 14.400

3470 ENCROACHMENT STATIONS= 648.0 998.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BE

14.40	6.56	575.46	.00	.00	575.85	.30	.60	.09	100000.00
4470.	0.	4470.	0.	0.	898.	0.	412.	115.	100000.00
1.02	.00	4.98	.00	.099	.035	.120	.040	568.90	648.00
.001388	1000.	855.	800.	0	0	0	.00	150.00	998.00

CCHV= .300 CEHV= .500
*SECNO 14.460

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000
CROSS SECTION AT DOWNSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.46	6.48	575.38	.00	.00	576.10	.72	.08	.17	580.60
4470.	0.	4470.	0.	0.	655.	0.	413.	115.	100000.00
1.02	.00	6.82	.00	.030	.030	.030	.040	568.90	642.00
.002089	50.	50.	50.	2	0	0	.00	116.00	758.00

*SECNO 14.461

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	QROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
14.46	6.44	575.34	.00	.00	576.14	.80	.00	.04	580.60
4470.	0.	4470.	0.	0.	622.	0.	413.	115.	580.60
1.02	.00	7.19	.00	.030	.030	.030	.040	568.90	642.00
.002989	1.	1.	1.	2	0	0	.00	111.30	758.00

*SECNO 14.499

3265 DIVIDED FLOW

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 580.60 MAX ELLC= 577.20

DIVIDED FLOW DUE TO BRIDGE PIERS

14.50	6.63	575.53	.00	.00	576.28	.75	.12	.02	580.60
4470.	0.	4470.	0.	0.	643.	0.	414.	115.	580.60
1.02	.00	6.95	.00	.030	.030	.030	.040	568.90	642.00
.002703	43.	43.	43.	2	0	0	.00	111.31	758.00

*SECNO 14.500

3470 ENCROACHMENT STATIONS= 642.0 758.0 TYPE= 1 TARGET= 116.000

CROSS SECTION AT UPSTREAM FACE OF NORTH DIXIE HIGHWAY BRIDGE

14.50	6.69	575.59	.00	.00	576.30	.71	.00	.01	580.60
4470.	0.	4470.	0.	0.	661.	0.	414.	115.	100000.00
1.02	.00	6.76	.00	.030	.030	.030	.040	568.90	642.00
.002035	1.	1.	1.	2	0	0	.00	116.00	758.00

1490 NH CARD USED

*SECNO 14.550

3470 ENCROACHMENT STATIONS= 580.0 1602.0 TYPE= 1 TARGET= -580.000

CROSS SECTION BF

14.55	7.25	576.15	.00	.00	576.49	.34	.08	.11	571.90
4470.	20.	4395.	54.	49.	932.	28.	415.	115.	571.90
1.03	.42	4.72	1.91	.120	.040	.055	.040	568.90	580.00
.001333	50.	50.	50.	2	0	0	.00	217.83	797.83

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 15.840

3470 ENCROACHMENT STATIONS= 700.0 2304.0 TYPE= 1 TARGET= 1604.000
CROSS SECTION BG

15.84	7.56	577.56	.00	.00	577.73	.17	1.23	.02	572.70
4470.	263.	4187.	21.	531.	1213.	31.	457.	129.	572.70
1.14	.50	3.45	.66	.109	.040	.120	.040	570.00	700.00
.000710	1400.	1290.	1220.	3	0	0	.00	661.49	1361.49

1490 NH CARD USED
*SECNO 17.260
CROSS SECTION BH

17.26	6.98	578.80	.00	.00	579.09	.20	1.34	.01	572.70
4470.	980.	2139.	1352.	553.	450.	572.	513.	147.	572.70
1.26	1.77	4.75	2.36	.060	.040	.050	.040	571.90	693.19
.001288	1520.	1420.	1440.	2	0	0	.00	440.04	1133.23

1490 NH CARD USED
*SECNO 18.650
CROSS SECTION BI

18.65	9.35	580.25	.00	.00	580.37	.13	1.28	.01	573.20
4470.	44.	1876.	2549.	70.	445.	2099.	577.	165.	573.20
1.41	.64	4.21	1.21	.120	.040	.081	.040	570.90	837.55
.000723	1280.	1390.	1340.	2	0	0	.00	700.58	1538.13

1490 NH CARD USED
*SECNO 19.540

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 852.5 932.5 TYPE= 1 TARGET= 80.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BI

19.54	9.20	580.70	.00	.00	582.09	1.39	1.34	.38	573.80
4470.	86.	4251.	133.	52.	438.	68.	614.	174.	573.80
1.44	1.67	9.71	1.95	.120	.040	.120	.040	571.50	852.50
.003920	1100.	895.	1050.	2	0	0	.00	80.00	932.50

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

CCHV= .300 CEHV= .500
*SECNO 19.600

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

SKEW FACTOR OF 0.866 APPLIED TO DT & I RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF DT & I RAILROAD BRIDGE

19.60	8.28	579.88	579.83	.00	583.49	3.61	.29	1.11	590.00
4470.	0.	4470.	0.	0.	293.	0.	615.	174.	590.00
1.44	.00	15.25	.00	.030	.030	.030	.040	571.60	1163.04
.009659	50.	50.	50.	6	11	0	.00	40.27	1203.31

*SECNO 19.601

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

CROSS SECTION AT DT & I RAILROAD BRIDGE

19.60	8.29	579.89	579.86	.00	583.50	3.61	.01	.00	590.00
4470.	0.	4470.	0.	0.	293.	0.	615.	174.	590.00
1.44	.00	15.24	.00	.030	.030	.030	.040	571.60	1163.04
.009645	1.	1.	1.	0	16	0	.00	40.27	1203.31

*SECNO 19.619

3301 HV CHANGED MORE THAN HVINS

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 590.00 MAX ELLC= 584.20

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
CROSS SECTION AT DT & I RAILROAD BRIDGE

19.62	10.27	581.87	579.86	.00	584.10	2.23	.18	.41	590.00
4470.	0.	4470.	0.	0.	373.	0.	615.	174.	590.00
1.44	.00	11.99	.00	.030	.030	.030	.040	571.60	1163.04
.004769	28.	28.	28.	23	16	0	.00	40.27	1203.31

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

*SECNO 19.620

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 584.20

CROSS SECTION AT UPSTREAM FACE OF DT & I RAILROAD BRIDGE

19.62	10.28	581.88	.00	.00	584.10	2.23	.00	.00	590.00
4470.	0.	4470.	0.	0.	373.	0.	615.	174.	590.00
1.44	.00	11.97	.00	.030	.030	.030	.040	571.60	1163.04
.004753	1.	1.	1.	0	0	0	.00	40.27	1203.31

*SECNO 19.670

3470 ENCROACHMENT STATIONS= 1151.7 1214.7 TYPE= 1 TARGET= 72.700

CROSS SECTION BETWEEN BRIDGES

19.67	10.34	582.24	.00	.00	584.34	2.10	.20	.04	578.10
4470.	15.	4404.	51.	7.	376.	18.	615.	174.	574.90
1.44	2.09	11.71	2.78	.050	.030	.050	.040	571.90	1159.51
.003348	50.	50.	50.	2	0	0	.00	48.75	1208.26

*SECNO 19.720

3301 HV CHANGED MORE THAN HVINS

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

SKEW FACTOR OF 0.866 APPLIED TO NYC RAILROAD BRIDGE

CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

19.72	11.21	583.51	.00	.00	584.74	1.22	.13	.26	593.20
4470.	0.	4470.	0.	0.	504.	0.	616.	174.	593.20
1.44	.00	8.88	.00	.030	.030	.030	.040	572.30	1207.64
.002179	50.	50.	50.	3	0	0	.00	48.50	1256.13

*SECNO 19.722

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.72	11.22	583.52	.00	.00	584.74	1.22	.00	.00	593.20
4470.	0.	4470.	0.	0.	504.	0.	616.	174.	593.20
1.44	.00	8.87	.00	.030	.030	.030	.040	572.30	1207.64
.002175	2.	2.	2.	0	0	0	.00	48.50	1256.13

*SECNO 19.738

3370 NORMAL BRIDGE,NRD= 0 MIN ELTRD= 593.20 MAX ELLC= 584.70

CROSS SECTION AT NYC RAILROAD BRIDGE

19.74	11.27	583.57	.00	.00	584.78	1.21	.03	.00	593.20
4470.	0.	4470.	0.	0.	506.	0.	616.	174.	593.20
1.44	.00	8.83	.00	.030	.030	.030	.040	572.30	1207.64
.002149	16.	16.	16.	1	0	0	.00	48.50	1256.13

*SECNO 19.740

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.10 ELREA= 584.10

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

19.74	11.28	583.58	.00	.00	584.78	1.21	.00	.00	593.20
4470.	0.	4470.	0.	0.	507.	0.	616.	174.	593.20
1.44	.00	8.83	.00	.030	.030	.030	.040	572.30	1207.64
.002143	2.	2.	2.	0	0	0	.00	48.50	1256.13

1490 NH CARD USED
*SECNO 19.790

3470 ENCROACHMENT STATIONS= 1498.0 1658.0 TYPE= 1 TARGET= 160.000
CROSS SECTION 50 FEET UPSTREAM FROM BRIDGE COPY SECTION BJ

19.79	12.65	583.75	.00	.00	584.93	1.18	.13	.01	578.10
4470.	832.	3416.	223.	378.	346.	148.	617.	175.	574.50
1.44	2.20	9.88	1.50	.120	.040	.120	.040	571.10	1498.00
.003308	50.	50.	50.	2	0	0	.00	160.00	1658.00

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

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 19.900

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1380.0 1740.0 TYPE= 1 TARGET= 360.000
CROSS SECTION BJ

19.90	13.85	584.95	.00	.00	585.19	.25	.17	.09	578.10
4470.	2063.	2127.	280.	1389.	382.	358.	621.	175.	574.50
1.45	1.49	5.57	.78	.115	.040	.120	.040	571.10	1360.00
.000921	110.	110.	110.	2	0	0	.00	360.00	1740.00

*SECNO 20.010
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BJ

20.01	13.06	585.26	.00	.00	585.29	.03	.08	.02	579.20
4470.	3475.	913.	82.	3830.	358.	242.	638.	179.	575.60
1.50	.91	2.55	.34	.073	.040	.120	.039	572.20	775.46
.000210	260.	110.	140.	2	0	0	.00	957.26	1732.72

CCHV= .300 CEHV= .500
*SECNO 20.060
CROSS SECTION AT DOWNSTREAM FACE OF DREW STREET BRIDGE

20.06	12.66	585.26	.00	.00	585.32	.06	.01	.01	581.20
4470.	3187.	1141.	143.	1908.	432.	169.	642.	180.	581.20
1.51	1.67	2.64	.85	.030	.030	.030	.039	572.60	696.52
.000165	50.	50.	50.	2	0	0	.00	668.22	1364.74

*SECNO 20.061

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.06	12.66	585.26	.00	.00	585.32	.06	.00	.00	581.20
4470.	3781.	529.	160.	1908.	352.	169.	642.	180.	581.20
1.51	1.98	1.50	.95	.030	.030	.030	.039	572.60	696.52
.000235	1.	1.	1.	0	0	0	-00.30	668.24	1364.76

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

*SECNO 20.079

3370 NORMAL BRIDGE,NRD= 31 MIN ELTRD= 582.00 MAX ELLC= 581.20

20.08	12.67	585.27	.00	.00	585.32	.06	.00	.00	581.20
4470.	3781.	528.	161.	1911.	352.	170.	643.	180.	581.20
1.51	1.98	1.50	.95	.030	.030	.030	.039	572.60	696.24
.000234	18.	18.	18.	0	0	0	-00.30	669.11	1365.36

*SECNO 20.080

CROSS SECTION AT UPSTREAM FACE OF DREW STREET BRIDGE

20.08	12.66	585.26	.00	.00	585.32	.06	.00	.00	581.20
4470.	3188.	1138.	144.	1912.	432.	170.	643.	180.	581.20
1.51	1.67	2.63	.85	.030	.030	.030	.039	572.60	696.20
.000165	1.	1.	1.	0	0	0	.00	669.25	1365.46

1490 NH CARD USED

*SECNO 20.130

3265 DIVIDED FLOW

CROSS SECTION @X

20.13	12.67	585.27	.00	.00	585.34	.08	.01	.01	573.70
4470.	2908.	1363.	200.	3036.	361.	196.	647.	181.	573.70
1.52	.96	3.78	1.02	.110	.040	.075	.039	572.60	937.84
.000377	50.	50.	50.	0	0	0	.00	674.46	1667.14

CCHV= .100 CEHV= .300

1490 NH CARD USED

*SECNO 20.770

CROSS SECTION @L

20.77	11.66	585.56	.00	.00	585.59	.04	.24	.00	574.70
4470.	2973.	925.	572.	3899.	310.	731.	728.	193.	574.70
1.70	.76	2.98	.78	.119	.040	.120	.039	573.90	734.74
.000251	880.	640.	640.	2	0	0	.00	688.20	1422.93

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

1490 NH CARD USED
*SECNO 21.910

3470 ENCROACHMENT STATIONS= 730.5 980.5 TYPE= 1 TARGET= 250.000
CROSS SECTION BR

21.91	10.76	585.86	.00	.00	586.16	.30	.49	.08	576.30
4470.	1290.	1942.	1238.	794.	302.	769.	804.	204.	576.30
1.77	1.63	6.43	1.61	.120	.040	.120	.039	575.10	730.50
.001343	960.	1140.	900.	0	0	0	.00	250.00	980.50

1490 NH CARD USED
*SECNO 22.120

3470 ENCROACHMENT STATIONS= 800.5 910.5 TYPE= 1 TARGET= 110.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BR

22.12	12.28	585.88	.00	.00	586.65	.78	.35	.14	574.80
4470.	721.	2956.	792.	348.	346.	370.	811.	205.	574.80
1.78	2.07	6.56	2.14	.120	.040	.120	.039	573.60	800.50
.001983	220.	210.	220.	2	0	0	.00	110.00	910.50

CCHV= .300 CEHV= .500
*SECNO 22.170
CROSS SECTION AT DOWNSTREAM FACE OF NYC RAILROAD BRIDGE

22.17	13.15	586.45	.00	.00	586.82	.38	.05	.12	584.90
4470.	0.	4469.	0.	1.	907.	1.	812.	205.	584.90
1.78	.55	4.93	.55	.035	.035	.035	.039	573.30	1119.68
.000656	50.	50.	50.	2	0	0	.00	76.65	1196.32

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.65	2.50	80.00	50.30	6.00	726.75	1.06	573.30	573.30

*SECNO 22.190

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

PRESSURE FLOW

EGPRS	EGLOC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.42	586.98	.06	0.	4470.	727.	657.	584.90	589.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.20 ELREA= 589.20

CROSS SECTION AT UPSTREAM FACE OF NYC RAILROAD BRIDGE

22.19	13.78	587.08	.00	.00	587.42	.34	.59	.00	584.90
4470.	0.	4470.	0.	0.	954.	0.	813.	205.	584.90
1.79	.00	4.68	.00	.035	.035	.035	.039	573.30	1120.50
.000554	20.	20.	20.	2	0	0	.00	75.00	1195.50

*SECNO 22.270

3265 DIVIDED FLOW

3280 CROSS SECTION 22.27 EXTENDED .09 FEET

CROSS SECTION AT DOWNSTREAM FACE OF BRANDON ROAD BRIDGE

22.27	13.49	587.29	.00	.00	587.49	.20	.03	.04	583.00
4470.	404.	4059.	7.	522.	1079.	9.	815.	206.	577.40
1.79	.77	3.76	.75	.035	.035	.035	.039	573.80	.00
.000338	80.	80.	80.	6	0	0	.00	771.24	1310.90

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BUC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.71	2.80	.00	54.20	5.00	885.20	1.93	573.80	573.80

*SECNO 22.300

3265 DIVIDED FLOW

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

3280 CROSS SECTION 22.30 EXTENDED .55 FEET

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	W3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
587.97	587.51	.02	209.	4221.	885.	878.	585.90	587.00

CROSS SECTION AT UPSTREAM FACE OF BRANDON ROAD BRIDGE

22.30	13.95	587.75	.00	.00	587.90	.15	.40	.00	583.00
4470.	694.	3769.	7.	861.	1125.	10.	816.	206.	577.40
1.80	.81	3.35	.67	.035	.035	.035	.039	573.80	.00
.000254	30.	30.	30.	2	0	3	.00	915.64	1310.99

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 22.350

3470 ENCROACHMENT STATIONS= 1326.5 1556.5 TYPE= 1 TARGET= 230.000
CROSS SECTION ON

22.35	13.95	587.75	.00	.00	587.92	.16	.02	.00	576.30
4470.	1050.	2368.	1051.	747.	563.	612.	818.	207.	576.30
1.80	1.41	4.21	1.72	.083	.040	.060	.039	574.20	1326.50
.000424	30.	30.	30.	0	0	0	.00	230.00	1556.50

1490 NH CARD USED
*SECNO 23.210

3265 DIVIDED FLOW

3280 CROSS SECTION 23.21 EXTENDED .77 FEET

CROSS SECTION BO

23.21	11.57	588.17	.00	.00	588.21	.03	.28	.01	577.10
4470.	1125.	716.	2629.	1579.	226.	3351.	882.	221.	577.10
2.00	.71	3.16	.78	.075	.040	.117	.039	576.60	.00
.000285	840.	860.	740.	2	0	0	.00	1308.49	2092.00

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

1490 NH CARD USED
*SECNO 23.930

3470 ENCROACHMENT STATIONS= 386.5 691.5 TYPE= 1 TARGET= 305.000
CROSS SECTION BP

23.93	12.23	588.33	.00	.00	588.54	.21	.28	.05	577.60
4470.	1119.	2416.	936.	951.	491.	837.	939.	232.	577.60
2.05	1.18	4.92	1.12	.120	.040	.116	.039	576.10	386.50
.000666	480.	720.	760.	2	0	0	.00	305.00	691.50

1490 NH CARD USED
*SECNO 24.160

3470 ENCROACHMENT STATIONS= 464.0 614.0 TYPE= 1 TARGET= 150.000
CROSS SECTION 50 FEET DOWNSTREAM FROM BRIDGE REPEAT SECTION BP

24.16	12.24	588.34	.00	.00	588.82	.49	.20	.08	577.60
4470.	720.	3206.	545.	449.	491.	380.	948.	234.	577.60
2.07	1.60	6.53	1.43	.120	.040	.120	.039	576.10	464.00
.001170	230.	230.	230.	2	0	0	.00	150.00	614.00

CCHV= .300 CEHV= .500
*SECNO 24.210
CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.21	11.73	588.73	.00	.00	588.93	.21	.03	.08	590.20
4470.	0.	4470.	0.	0.	1230.	0.	950.	234.	590.20
2.07	.00	3.63	.00	.030	.030	.030	.039	577.00	600.00
.000283	50.	50.	50.	2	0	0	.00	115.00	715.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.260

SECNO	DEPTH	CUSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	MACH	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

PRESSURE FLOW

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
589.21	588.94	.01	0.	4470.	985.	980.	587.00	590.20

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (NORTHBOUND LANE)

24.26	12.01	389.01	.00	.00	589.21	.19	.27	.00	590.20
4470.	0.	4470.	0.	0.	1263.	0.	951.	234.	590.20
2.07	.00	3.54	.00	.030	.030	.030	.039	577.00	600.00
.000261	55.	55.	55.	2	0	0	.00	115.00	715.00

*SECNO 24.280

CROSS SECTION AT DOWNSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.28	12.02	589.02	.00	.00	589.21	.19	.01	.00	590.20
4470.	0.	4470.	0.	0.	1263.	0.	952.	234.	590.20
2.08	.00	3.54	.00	.030	.030	.030	.039	577.00	600.00
.000260	20.	20.	20.	0	0	0	.00	115.00	715.00

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.50	3.00	115.00	91.00	5.00	985.00	1.20	577.00	577.00

*SECNO 24.340

PRESSURE FLOW

EGPRS	EGLWC	M3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
589.50	589.22	.01	0.	4470.	985.	980.	587.00	590.20

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.20 ELREA= 590.20

CROSS SECTION AT UPSTREAM FACE OF I-75 BRIDGE (SOUTHBOUND LANE)

24.34	12.31	589.31	.00	.00	589.50	.18	.29	.00	590.20
4470.	0.	4470.	0.	0.	1297.	0.	953.	234.	590.20
2.08	.00	3.45	.00	.030	.030	.030	.039	577.00	600.00
.000240	55.	55.	55.	2	0	0	.00	115.00	715.00

1490 NH CARD USED
*SECNO 24.390

3470 ENCROACHMENT STATIONS= 560.0 775.0 TYPE= 1 TARGET= 215.000
CROSS SECTION 50 UPSTREAM FROM BRIDGE COPY SECTION 80

24.39	13.06	589.36	.00	.00	589.52	.16	.02	.01	577.70
4470.	1657.	1473.	1340.	820.	310.	647.	955.	234.	577.70
2.09	2.02	4.75	2.07	.070	.040	.060	.039	576.30	560.00
.000575	50.	50.	50.	2	0	0	.00	215.00	775.00

CCHV= .100 CENV= .300
1490 NH CARD USED
*SECNO 24.690

3470 ENCROACHMENT STATIONS= -216.0 1116.0 TYPE= 1 TARGET= -216.000
CROSS SECTION 80

24.69	13.27	589.57	.00	.00	589.59	.02	.05	.01	577.70
4470.	3093.	642.	735.	3455.	315.	900.	973.	237.	577.70
2.15	.90	2.04	.82	.070	.040	.060	.039	576.30	219.47
.000103	200.	310.	310.	2	0	0	.00	691.11	910.58

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: Report

CAUTION

SEE

ATTACHED COMMENTS

This is from the original submittal; two submittals since this. See letter attached for Dec 8 changes. March 20 changes are the discharges at Little Swan Creek.

RECEIVED
APR 16 1980
WATER MANAGEMENT

HYDRAULIC ANALYSIS OF SWAN CREEK

BERLIN TOWNSHIP, MONROE COUNTY

A. Historical Flooding:

Although significant flooding along the lower reaches of Swan Creek in Berlin Township has occurred in the past, it has been mainly due to periods of high Lake Erie levels rather than to overflowing of the creek. The most significant flood in recent times occurred in April, 1973, as a result of high lake levels.

B. Hydraulic Computations:

The hydraulic computations were made utilizing the November, 1976 (updated July, 1979) version of the Corps of Engineers HEC-2 water surface profiles computer program.

The flood discharges used in the analysis were as follows:

			ABOVE LITTLE SWAN	
10-year	-	2450 CFS	2210	approved
50-year	-	3650 CFS	3290	
100-year	-	4090 CFS	3690	
500-year	-	4950 CFS	4470	

approved

These flows were determined in a separate hydrologic analysis by computer simulation techniques using the SCS TR-20 Hydrology Model. The computer output and resultant flows were submitted to and approved by letter by the Hydrologic Studies Unit - Water Management Division of the Michigan Department of Natural Resources on April 10, 1980.

Backwater computations were initiated at a point identified as cross Section BA, located approximately 0.94 miles (5000 feet) upstream from the mouth of Swan Creek. The computations are continued upstream approximately 3.73 miles (19,690 feet) to a point identified as cross section BQ, upstream from the I-75 crossing of Swan Creek. Seven bridges were also incorporated into the computations. These are described in a separate enclosure, including field photos of the bridges.

For each of the flood discharges, the starting water surface elevation utilized for the computations was 570.9 (USGS Datum), at the cross section BA. This is the approximate mean water level of Lake Erie, taken from the monthly Great Lakes Levels Bulletins, published by the U.S. Army Corps of Engineers.

The hydraulic analysis of Swan Creek indicates that Lake Erie flood levels exceed the computed riverine 100-year flood elvels for approximately 11,500 of the 19,690 linear feet of river studied within the Township; thus the lake flood levels are the controlling levels of flooding along the lower reaches of the river. These lake levels are as follows:

Recurrence Interval Flood	Lake Erie Elevation (USGS Datum)
500-year	578.6
100-year	577.9
50-year	577.6
10-year	576.6

These lake flood levels, also taken from the Great Lakes Levels Bulletins, are shown on the flood profiles along with computed riverine flood levels.

The Manning's roughness coefficients which were used in the hydraulic analysis are shown on the plotted cross sections. A roughness coefficient of 0.030 was used for the lower reaches of the channel as being representative of the fairly wide, clear channel section. This value was increased to 0.035 and then to 0.040 upstream of the Dixie Highway Crossing as the channel becomes increasingly winding and irregular. Side-bank and over-bank roughness coefficients were varied from 0.055 in areas of short grass and field crops to 0.120 in areas of heavy brush and tree growth. Expansion and contraction coefficients of 0.3 and 0.1, respectively, were used to represent the gradual nature of these transitions between cross sections. These coefficients were increased to 0.5 and 0.3 immediately upstream and downstream of the bridge sections to reflect more abrupt flow transitions at these points.

Artificial encroachments were utilized in the HEC-2 model to limit the effective conveyance area, particularly upstream and downstream from bridges and natural restrictions. Flow lines were assumed to expand at a 1:3 slope (Δ top width:. Δ reach length) and contract at a 1:1 slope for the purpose of computing effective top widths.

Initially, the floodway was determined using encroachment method No. 4 with a maximum allowable flood stage increase of 0.10 feet above the natural 100-year flood stage. These preliminary floodway encroachments were checked for reasonableness, modified where necessary, and re-inserted manually using encroachment method No. 1. Where artificial encroachments were utilized to define the effective flow areas, these encroachments also delineated the floodway limits. The floodway was determined from an initial starting elevation of 570.9 (mean Lake Erie level) at cross section BA.

In the lower reaches or estaury region of Swan Creek (downstream from the Dixie Highway crossing) the floodway was determined to lie within the natural banks of the channel. Fairly wide and deep channel sections in this region provide adequate conveyance for riverline flows and thus the overbank areas may be excluded.

Bridge losses were checked by hand to verify the accuracy of HEC-2 results, using techniques presented in the Bureau of Public Roads publication Hydraulics of Bridge Waterways. In all cases, close agreement with the HEC-2 analysis was found, and thus no changes were made. These computations are included with the bridge descriptions.

C. Results:

As historical flood profile or discharge data was not available for Swan Creek in Berlin Township, verification of the computer model by these means was not possible. However, computer representation of the channel-floodplain geometry and other characteristics, and the resultant flood stages were checked for reasonableness and found to be acceptable..

Flood stages determined for the 100-year and 500-year floods have been delineated on the attached work map as were the computed floodway limits. The 100-year flood stages and floodway limits are also shown on the cross section plots.

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WATER MANAGEMENT

BERLIN TOWNSHIP

SWAN CREEK

MONROE COUNTY

Cross Section Identification	River Stationing (Thousands of Feet)
BA	5.00
BB	7.57
BC	9.73
BD	11.74
BE	13.55
BF	14.55
BG	15.84
BH	17.26
BI	18.65
BJ	19.90
BK	20.13
BL	20.77
BM	21.91
BN	22.35
BO	23.21
BP	23.93
BQ	24.69

ENGINEERS / PLANNERS / ARCHITECTS / SURVEYORS / GEOLOGISTS / CHEMISTS • 611 CASCADE W PKWY, S E, P O. BOX 6510, GRAND RAPIDS, MI 49506 • PH (616) 942-9600

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DEC 11 1980
WATER MANAGEMENT

WILLIAMS & WORKS
T O WILLIAMS, 1861-1941 • F D WORKS, 1880-1931 • W B WILLIAMS 1895-1974

December 8, 1980 - 85376

Mr. Daniel H. Morgan, P.E., Chief
Michigan Department of Natural Resources
Flood Insurance Unit
Water Management Division
Stevens T. Mason Building
Lansing, Michigan 48909

RE: Berlin Township F.I.S., Swan Creek (Monroe County)

Dear Mr. Morgan:

In response to concerns raised in your letter of October 29, 1980 regarding your review of the Swan Creek hydraulic analysis, a field trip was made to Berlin Township to obtain further information. This field trip of November 14, 1980, resulted in the following:

1) After interviewing six residents living along the upper reaches of Swan Creek (between cross sections BL and BO) it was concluded that flooding of the low areas along Swan Creek in this area occurs on a yearly basis, usually in the spring. While none of the residents interviewed recalled noteably high water in April of 1979 as suggested in your letter, several mentioned April 1973 and April 1978 as dates of past high water.

   Many of the homes along the northeast side of Swan Creek Road near cross section BM are built low on the side of the road embankment. Residents of this area reported frequent flooding of their basements. One resident reported an approximate depth of 3 feet of water in the spring of 1978 in the area behind his home. This would be approximately at Sta. 1200 on cross section BM. Based on this information, it seems reasonable to assume that these homes are located within the 10-year flood plain.

   However, residents on the southwest side of Swan Creek Road are located on considerably higher ground and did not report any past flooding of their homes. Modifications have been made to the 100- and 500-year flood delineations on the work map based on observations made

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during this field trip regarding topography.

2) Addressing additional concerns:

a) With such considerable weir flow over the Drew Street Bridge, it has been converted to the normal bridge routine.

b) The D.T. & I and NYC Railroad bridges are skewed approximately 30^{0}, and a skew factor has been added to these sections in the model to reflect this.

c) Starting conditions - although there was observed during the field trip some extended land development on both sides of the mouth and an island of elevated land near the center, this is located in the estuary portion of the stream, and it appears that the conveyance area at the mouth is adequate and its effect on the flood profiles would be minimal.

We will be submitting to you under separate cover a revised work map and HEC-2 computer output for Swan Creek. We will proceed with preparation of the formal FIS report for the community using this data. If you have any questions or comments, please feel free to contact us.

Sincerely,

WILLIAMS & WORKS, INC.

Joellen C. Sorg

Joellen C. Sorg,
Design Engineer

JCS/clm

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GRAND RAPIDS MICHIGAN

Calculation Sheet

Computed by J. SORG	Subject BERLIN TWP. SWAN CREEK	Sheet 1 of 7
Checked by	Client FEMA FIS	Job No. 85376
		Date 29 JUL '80

BRIDGE ANALYSIS - SWAN CREEK (BERLIN TWP.)

NORTH DIXIE HIGHWAY BRIDGE

THE DIXIE HIGHWAY BRIDGE CROSSING SWAN CREEK CONSISTS OF A CONCRETE DECK SUPPORTED BY STEEL I-BEAMS. IT HAS A TOTAL SPAN OF 116 FEET, WIDTH OF 45 FEET, AND TWO INTERMEDIATE PIERS.

HEC-2 ANALYSIS INDICATES THAT THE BRIDGE WILL OPERATE UNDER LOW FLOW CONDITIONS FOR EACH OF THE FLOOD DISCHARGES. THE BRIDGE WAS ANALYZED USING THE NORMAL BRIDGE ROUTINE CONTAINED IN THE HEC-2 PROGRAM.

XSEC

DT & I RAILROAD BRIDGE

incorrect 46.5 ft based upon telephone call Oct 1, 1980

THIS BRIDGE HAS A TOTAL SPAN OF ~~52~~ FEET, SUPPORTED BY LARGE STEEL I-BEAMS. IT HAS A WIDTH OF 28 FEET AND NO INTERMEDIATE PIERS.

Very big loss here were bridge reduced ~~to~~ skew? They were not suggest a 30% reduction

LOW FLOW CONDITIONS RESULT AT THIS BRIDGE FOR EACH FLOOD DISCHARGE, FROM HEC-2 ANALYSIS. THE BRIDGE WAS MODELED USING THE NORMAL BRIDGE ROUTINE.

large loss here

NYC RAILROAD BRIDGE (WEST OF DT & I RAILROAD)

THIS RAILROAD BRIDGE CONSISTS OF LARGE STEEL I-BEAMS SUPPORTED BY CONCRETE ABUTMENTS, WITH NO INTERMEDIATE PIERS. THE BRIDGE SPANS 56 FEET AND HAS A WIDTH OF 16 FEET. IT IS APPROXIMATELY 100 FEET UPSTREAM FROM THE DT & I RAILROAD BRIDGE.

THE NYC RAILROAD BRIDGE ALSO EXPERIENCES LOW FLOW CONDITIONS FOR EACH OF FLOOD DISCHARGES AS PER HEC-2 ANALYSIS. THE NORMAL BRIDGE ROUTINE WAS USED IN THE ANALYSIS OF THIS BRIDGE.

DREW STREET BRIDGE

STEEL I-BEAMS SUPPORT A CONCRETE DECK THAT SPANS APPROXIMATELY 35 FEET AT THE DREW STREET CROSSING OF SWAN CREEK. THIS BRIDGE IS 20 FEET WIDE, HAS CONCRETE ABUTMENTS, AND NO INTERMEDIATE PIERS.

HEC-2 ANALYSIS INDICATES THAT BOTH PRESSURE AND WEIR FLOW CONDITIONS RESULT AT THIS BRIDGE FOR EACH FLOOD DISCHARGE. THE SPECIAL BRIDGE ROUTINE CONTAINED IN THE HEC-2 PROGRAM WAS USED TO REPRESENT THIS BRIDGE.

CALCULATION OF XKOR (LOSS COEFFICIENT)

$XKOR = 1.0 + \Sigma K$

	K
INTAKE	0.10
INTERMEDIATE PIERS	0.00
FRICTION	K_f

$$K_f = \frac{29.1\, n^2 L}{R^{4/3}}$$ MANNING'S EQ'N

$n = 0.030$ L = LENGTH = 20 FT

R = HYDRAULIC RADIUS = $A/P = \frac{284\ FT^2}{83\ FT} = 3.42\ FT$

$$K_f = \frac{29.1\,(0.030)^2\,20}{(3.42)^{4/3}} = 0.10$$

$XKOR = 0.1 + 0.00 + 0.10 + 1.0 = \underline{1.20}$

VERIFICATION OF HEC-2 RESULTS

ELEV. LOW CHORD = 581.2
ELEV. TOP OF ROAD = 582.0

SINCE WATER SURFACE DOWNSTREAM = 584.30, A COMBINATION OF WEIR AND PRESSURE FLOW IS PRESENT (FROM HEC-2 ANALYSIS).

$Q_{PR} = 0.8 (b_N z)(2g\,\Delta h)^{1/2}$

This is an XKOR of 1.5

ENERGY GRADIENT UPSTREAM (HEC-2) = 584.49
Δh = 584.49 - 584.30 = 0.19 FT
$(b_N z)$ = AREA OF OPENING = 284 FT^2

$Q_{PR} = 0.8 (284)[(2 \times 32.2)(0.19)]^{1/2}$

$= \underline{795 \text{ CFS}}$

QPR FROM HEC-2 ANALYSIS = 913 CFS, THUS RESULTS OF HEC-2 ARE IN CLOSE AGREEMENT.

NYC RAILROAD BRIDGE (EAST OF BRANDON ROAD)

THIS BRIDGE CONSISTS OF STEEL I-BEAMS SUPPORTED BY CEMENT BLOCK ABUTMENTS AND ONE INTERMEDIATE PIER. THE TOTAL SPAN IS 75 FEET AND WIDTH IS 20 FEET.

THE SPECIAL BRIDGE ROUTINE WAS USED TO MODEL THIS RAILROAD BRIDGE WHICH EXPERIENCES PRESSURE FLOW FOR EACH FLOOD DISCHARGE EXCEPT THE 10-YEAR FLOOD (LOW FLOW).

CALCULATION OF XKOR (LOSS COEFFICIENT)

	K
INTAKE	0.10
INTERMEDIATE PIERS	0.05
FRICTION	K_f

why so low

$n = 0.035$ L = LENGTH = 20 FT

$R = \frac{A}{P} = \frac{727}{167} = 4.35$ FT

$K_f = \frac{29.1 (0.035)^2 \, 20}{(4.35)^{4/3}} = 0.10$

XKOR = 0.10 + 0.05 + 0.10 + 1.0 = 1.25

VERIFICATION OF HEC-2 RESULTS

ELEV. LOW CHORD = 584.9
ELEV. TOP OF ROAD = 589.2

why so low when you use a C of .8 be consistant

SINCE WATER SURFACE DOWNSTREAM = 585.8, PRESSURE FLOW IS PRESENT. (FROM HEC-2 ANALYSIS).

$Q = 0.8 (b_N z)(2g\,\Delta h)^{1/2}$ $\quad (b_N z) = 727$ FT^2

$Q = 4090$ CFS

$\Delta h = \left[\frac{Q}{0.8(b_N z)}\right]^2 \times \frac{1}{2g}$

$= \left[\frac{4090}{0.8(727)}\right]^2 \times \frac{1}{2 \times 32.2} = 0.77$ FT

SINCE W.S. DOWNSTREAM = 585.8 AS PER HEC-2 ENERGY GRADIENT UPSTREAM = 585.8 + 0.77 = 586.57

HEC-2 ANALYSIS SHOWS ENERGY GRADIENT UPSTREAM AT 586.41, THUS RESULTS ARE IN CLOSE AGREEMENT.

BRANDON ROAD BRIDGE

THE BRANDON ROAD BRIDGE CONSISTS OF A CONCRETE DECK AND TWO INTERMEDIATE CONCRETE PIERS, SPANS APPROXIMATELY 100 FEET, AND IS APPROXIMATELY 30 FEET WIDE.

HEC-2 ANALYSIS INDICATES THE BRIDGE WILL OPERATE UNDER PRESSURE FLOW CONDITIONS FOR THE 100-YEAR FLOOD DISCHARGE, PRESSURE AND WEIR FLOW CONDITIONS FOR THE 500-YEAR FLOOD, AND LOW FLOW CONDITIONS FOR THE 50- AND 10-YEAR FLOODS. THE SPECIAL BRIDGE ROUTINE WAS USED TO MODEL THIS BRIDGE.

CALCULATION OF XKOR

	$\frac{k}{}$
INTAKE	0.10
INTERMEDIATE PIERS	0.05
FRICTION	k_f

$\eta = 0.035$ L = LENGTH = 30 FT

$R = \frac{A}{P} = \frac{885}{212} = 4.17$ FT

$k_f = \frac{29.1\,(0.035)^2\,(30)}{(4.17)^{4/3}} = 0.16$

XKOR = 0.10 + 0.05 + 0.16 + 1.0 = 1.31

VERIFICATION OF HEC-2 RESULTS

ELEV. LOW CHORD = 585.9
ELEV. TOP OF ROAD = 587.0

SINCE WATER SURFACE DOWNSTREAM = 586.20, PRESSURE FLOW IS PRESEINT. (FROM HEC-2 ANALYSIS).

$(b_N z) = 885$ FT^2 $Q = 4090$ CFS

$\Delta h = \left[\frac{Q}{0.8\,(b_N z)}\right]^2 \times \frac{1}{2g} = \left[\frac{4090}{0.8\,(885)}\right]^2 \times \frac{1}{2 \times 32.2} = 0.52$

SINCE W.S. DOWNSTREAM = 586.20 AS PER HEC-2, ENERGY GRADIENT UPSTREAM = 586.20 + 0.52 = 586.72

HEC-2 ANALYSIS SHOWS ENERGY GRADIENT UPSTREAM AT 586.63, THUS RESULTS ARE IN CLOSE AGREEMENT.

I-75 BRIDGE

THE I-75 BRIDGE CROSSING SWAN CREEK CONSISTS OF TWO IDENTICAL PARALLEL BRIDGES LOCATED APPROXIMATELY 20 FEET APART. EACH BRIDGE SPANS APPROXIMATELY 115 FEET, IS 55 FEET WIDE, AND HAS TWO INTERMEDIATE PIERS.

HEC-2 ANALYSIS REVEALS THAT EACH BRIDGE WILL OPERATE UNDER PRESSURE FLOW CONDITIONS FOR EACH FLOOD DISCHARGE EXCEPT THE 10-YEAR FLOOD (LOW FLOW).

CALCULATION OF XKOR (BOTH BRIDGES)

	K
INTAKE	0.10
INTERMEDIATE PIERS	0.05
FRICTION	K_f

$\eta = 0.030$ $\quad L$ = LENGTH = 55 FT

$$R = \frac{A}{P} = \frac{985}{247} = 3.98 \text{ FT}$$

$$K_f = \frac{29.1\,(0.030)^2(55)}{(3.98)^{4/3}} = 0.23$$

$$XKOR = 0.10 + 0.05 + 0.23 + 1.0 = \underline{1.38}$$

VERIFICATION OF HEC-2 RESULTS (BOTH BRIDGES)

ELEV. LOW CHORD = 587.0
ELEV. TOP OF ROAD = 590.2

SINCE WATER SURFACE DOWNSTREAM = 587.89, PRESSURE FLOW IS PRESENT (FROM HEC-2 ANALYSIS - NORTH BOUND LANE).

$(b_N z) = 985 \text{ FT}^2$ $\quad Q = 4090$ CFS

$$\Delta h = \left[\frac{Q}{0.8\,(b_N z)}\right]^2 \times \frac{1}{2g} = \left[\frac{4090}{0.8\,(985)}\right]^2 \times \frac{1}{2 \times 32.2} = 0.42 \text{ FT}$$

SINCE W.S. DOWNSTREAM = 587.89 AS PER HEC-2, ENERGY GRADIENT UPSTREAM = 587.89 + 0.42 = 588.31

HEC-2 ANALYSIS SHOWS ENERGY GRADIENT UPSTREAM AT 588.29, THUS RESULTS ARE IN CLOSE AGREEMENT.

SIMILAR CALCULATIONS FOR THE SOUTHBOUND LANES SHOW AN ENERGY GRADIENT UPSTREAM OF 588.11 + 0.42 = 588.53, AND FROM HEC-2 ANALYSIS 588.51.

FIELD PHOTOGRAPHS OF BRIDGES ARE ATTACHED, AND BRIDGE DRAWINGS ARE INCLUDED IN THE ENCLOSURES.

HYDRAULIC ANALYSIS OF

MOUILLEE CREEK

BERLIN TOWNSHIP, MONROE COUNTY

A. Historical Flooding:

While significant flooding along Mouillee Creek has occurred, it has been due primarily to periods of high Lake Erie levels rather than to overflowing of the creek itself. This is mainly due to the relatively small drainage area of Mouillee Creek (approximately 13 square miles).

B. Hydraulic Computations:

The hydraulic computations were made utilizing the November, 1976 (updated July, 1979) version of the Corps of Engineers HEC-2 water surface profiles computer program.

The flood discharges used in the analysis were as follows:

10-year	-	440 CFS
50-year	-	590 CFS
100-year	-	650 CFS
500-year	-	750 CFS

These flows were determined in a separate hydrologic analysis by computer simulation techniques using the SCS TR-20 Hydrology Model. The computer output and resultant flows were submitted to and approved by letter by the Hydrologic Studies Unit - Water Management Division of the Michigan Department of Natural Resources on March 11, 1980.

Backwater computations were initiated at a point identified as cross section AA, located approximately 1.59 miles (8400 feet) upstream from the mouth of Mouillee Creek. The computations are continued upstream approximately 1.34 miles (7190 feet) to the Hagerman Road Bridge. The Dixie Highway Bridge and Hagerman Road Bridge were also incorporated into the computations.

For each of the flood discharges, the starting water surface elevation utilized for the computations was 570.9 (USGS Datum), at the cross section AA. This is the approximate mean water level of Lake Erie, taken from the monthly Great Lakes Levels Bulletins, published by the U.S. Army Corps of Engineers.

but this is 1.6 miles w/ stream friction as any problem back lake stage by 6 ft over this

The hydraulic analysis of Mouillee Creek indicates that Lake Erie flood levels exceed the computed riverine 100-year flood levels for approximately 6650 of the 7180 linear feet of the river within the Township; thus the lake flood levels are the controlling levels of flooding along the lower reaches of the river. These lake flood levels, also taken from the Great Lakes Levels Bulletins, are shown on the flood profiles along with computed riverine flood levels.

The Manning's roughness coefficients which were used in the hydraulic analysis are shown on the plotted cross sections. A uniform roughness coefficient of 0.040 was used for the channel as being representative of the slightly irrigular channel section below normal water levels. Side-bank and over-bank roughness coefficients were varied from 0.060 in areas of short grass and field crops to 0.120 in areas of heavy brush and tree growth. Expansion and contraction coefficients of 0.3 and 0.1, respectively, were used to represent the gradual nature of these transitions between cross sections. These coefficients were increased to 0.5 and 0.3 immediately upstream and downstream of the bridge sections to reflect more abrupt flow transitions at these points.

Artificial encroachments were utilized in the HEC-2 model to limit the effective conveyance area, particularly upstream and downstream from bridges and natural restrictions. Flow lines were assumed to expand at a 1:3 slope (a top width: a reach length) and contract at a 1:1 slope for the purpose of computing effective top-widths.

Initially, the floodway was determined using encroachment method No. 4 with a maximum allowable flood stage increase of 0.10 feet above the natural 100-year flood stage. These preliminary floodway encroachments were checked for reasonableness, modified where necessary, and re-inserted manually using encroachment method No. 1. Where artificial encroachments were utilized to define the effective flow areas, these encroachments also

delineated the floodway limits.

Bridge losses were checked by hand to verify the accuracy of HEC-2 results, using techniques presented in the Bureau of Public Roads publication Hydraulics of Bridge Waterways. In all cases, close agreement with the HEC-2 analysis was found, and thus no changes were made. A copy of the computations is attached.

C. Results:

As historical flood profile or discharge data was not available for Mouillee Creek in Berlin Township, verification of the computer model by these means was not possible. However, computer representation of the channel-floodplain geometry and other characteristics, and the resultant flood stages were checked for reasonableness and found to be acceptable.

Flood stages determined for the 100-and 500-year floods have been delineated on the attached work map as were the computed floodway limits. The 100-year flood stages and floodway limits are also shown on the cross section plots.

BERLIN TOWNSHIP
MOUILLEE CREEK
MONROE COUNTY

Cross Section Identification	River Stationing (feet)
AA	8.40
AB	8.55
AC	10.35
AD	11.97
AE	13.19
AF	15.47
AG	15.58

BRIDGE ANALYSIS ~ MOUILLEE CREEK (BERLIN TWP.)

DIXIE HIGHWAY BRIDGE

THE DIXIE HIGHWAY BRIDGE CROSSING MOUILLEE CREEK IS A REINFORCED CONCRETE TYPE HAVING A TOTAL SPAN OF 41 FEET AND A WIDTH OF 46 FEET, INCLUDING RAILINGS. THE BRIDGE HAS LARGE CONCRETE ABUTMENTS AND NO INTERMEDIATE PIERS.

HEC-2 ANALYSIS INDICATES THAT THE BRIDGE WILL OPERATE UNDER LOW FLOW CONDITIONS FOR ALL OF THE FLOOD DISCHARGES. THE BRIDGE WAS ANALYZED USING THE NORMAL BRIDGE ROUTINE CONTAINED IN THE HEC-2 PROGRAM.

HAGERMAN ROAD BRIDGE

THIS BRIDGE CONSISTS OF CONCRETE WINGWALLS AND A CONCRETE DECK SPANNING APPROXIMATELY 9 FEET; AND IS 16.5 FEET WIDE, INCLUDING CONCRETE RAILINGS.

PRESSURE AND WEIR FLOW CONDITIONS RESULT AT THE BRIDGE FOR ALL OF THE FLOOD DISCHARGES FROM HEC-2 ANALYSIS. THE BRIDGE WAS ANALYZED USING THE SPECIAL BRIDGE ROUTINE CONTAINED IN THE HEC-2 PROGRAM.

CALCULATION OF XKOR (LOSS COEFFICIENT)

$XKOR = 1.0 + \Sigma k$

	k
INTAKE	0.10
INTERMEDIATE PIERS	0.00
FRICTION	K_f

$$k_f = \frac{29.1\ \eta^2\ L}{R^{4/3}}$$ MANNINGS EQ'N

$\eta = 0.040$ L = LENGTH = 17 FT

R = HYDRAULIC RADIUS = A/P

$$= \frac{37.8\ FT^2}{((4.2 \times 2) + 9)\ FT} = 2.17\ FT$$

$$k_f = \frac{(29.1)(0.04)^2(17)}{(2.17)^{4/3}} = 0.28$$

$XKOR = 0.10 + 0.00 + 0.28 + 1.0 = \underline{1.38}$

VERIFICATION OF HEC-2 RESULTS

ELEV. LOW CHORD = 577.7
ELEV. TOP OF ROAD = 577.8

SINCE WATER SURFACE DOWNSTREAM = 578.78, A COMBINATION OF WEIR AND PRESSURE FLOW IS PRESENT (FROM HEC-2 ANALYSIS).

$$Q_{PR} = 0.8\ (b_N z)(2g\Delta h)^{1/2}$$

ENERGY GRADIENT UPSTREAM (HEC-2) = 579.14
$\Delta h = 579.14 - 578.78 = 0.36$ FT
$(b_N z)$ = AREA OF OPENING = 37.8 FT^2

$$Q_{PR} = 0.8\ (37.8)\left[(2 \times 32.2)(0.36)\right]^{1/2}$$

$= 145.6$ CFS

Q_{PR} FROM HEC-2 ANALYSIS = 154 CFS, THUS RESULTS OF HEC-2 ARE IN CLOSE AGREEMENT.

FIELD PHOTOGRAPHS OF BOTH BRIDGES ARE ATTACHED, AND BRIDGE DRAWINGS ARE INCLUDED IN THE ENCLOSURES.

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp.

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: Summary

HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
ERROR CORR - 01,02,03,04
MODIFICATION - 50,51,52,53,54

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

BERLIN, SWAN CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
5.000	.00	.00	.00	567.40	4090.00	570.90	.00	570.98	5.49	2.22	1839.71	1745.69
5.000	.00	.00	.00	567.40	4090.00	570.90	.00	570.98	5.49	2.22	1839.71	1745.69
7.570	2570.00	.00	.00	568.20	4090.00	572.09	.00	572.16	3.92	2.10	1950.94	2064.99
7.570	2570.00	.00	.00	568.20	4090.00	572.09	.00	572.16	3.92	2.10	1950.94	2064.99
9.730	2160.00	.00	.00	568.70	4090.00	572.96	.00	573.03	4.13	2.23	1834.83	2013.75
9.730	2160.00	.00	.00	568.70	4090.00	572.96	.00	573.03	4.13	2.23	1834.83	2013.75
11.740	2010.00	.00	.00	568.00	3690.00	573.83	.00	573.92	4.73	2.33	1597.32	1697.08
11.740	2010.00	.00	.00	568.00	3690.00	573.83	.00	573.92	4.73	2.33	1597.32	1697.08
13.550	1810.00	.00	.00	568.60	3690.00	574.61	.00	574.69	3.91	2.35	1694.95	1866.98
13.550	1810.00	.00	.00	568.60	3690.00	574.61	.00	574.69	3.91	2.35	1694.95	1866.98
14.400	855.00	.00	.00	568.90	3690.00	575.00	.00	575.31	12.41	4.47	825.66	1047.56
14.400	855.00	.00	.00	568.90	3690.00	575.00	.00	575.31	12.41	4.47	825.66	1047.56
14.460	50.00	.00	.00	568.90	3690.00	574.94	.00	575.52	18.46	6.14	604.39	858.95
14.460	50.00	.00	.00	568.90	3690.00	574.94	.00	575.52	18.46	6.11	604.39	858.95
14.461	1.00	580.60	577.20	568.90	3690.00	574.91	.00	575.55	25.97	6.43	574.23	724.14
14.461	1.00	580.60	577.20	568.90	3690.00	574.91	.00	575.55	25.97	6.43	574.23	724.14
14.499	43.00	580.60	577.20	568.90	3690.00	575.07	.00	575.67	23.74	6.24	591.44	757.37
14.499	43.00	580.60	577.20	568.90	3690.00	575.07	.00	575.67	23.74	6.24	591.44	757.37
14.500	1.00	.00	.00	568.90	3690.00	575.11	.00	575.68	18.43	6.10	605.31	859.60
14.500	1.00	.00	.00	568.90	3690.00	575.11	.00	575.68	18.43	6.10	605.31	859.60
14.550	50.00	.00	.00	568.90	3690.00	575.56	.00	575.85	12.60	4.30	886.30	1039.70
14.550	50.00	.00	.00	568.90	3690.00	575.56	.00	575.85	12.60	4.30	886.30	1039.70

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
15.840	1290.00	.00	.00	570.00	3690.00	576.91	.00	577.07	7.30	3.26	1372.69	1365.57
15.840	1290.00	.00	.00	570.00	3690.00	576.91	.00	577.07	7.30	3.26	1372.69	1365.57
17.260	1420.00	.00	.00	571.90	3690.00	578.29	.00	578.49	13.86	4.63	1319.22	991.15
17.260	1420.00	.00	.00	571.90	3690.00	578.29	.00	578.49	13.87	4.63	1319.05	990.93
18.650	1390.00	.00	.00	570.90	3690.00	579.71	.00	579.84	7.38	4.08	2243.01	1358.63
18.650	1390.00	.00	.00	570.90	3690.00	579.73	.00	579.87	7.67	4.17	2148.46	1332.66
19.540	895.00	.00	.00	571.50	3690.00	580.32	.00	581.37	31.21	8.41	527.41	660.53
19.540	895.00	.00	.00	571.50	3690.00	580.38	.00	581.42	30.43	8.34	532.20	668.95
19.600	50.00	.00	.00	571.60	3690.00	579.82	.00	582.32	67.64	12.70	290.45	448.67
19.600	50.00	.00	.00	571.60	3690.00	579.89	.00	582.35	65.73	12.58	293.27	455.16
19.601	1.00	590.00	584.20	571.60	3690.00	579.83	.00	582.33	67.51	12.70	290.63	449.09
19.601	1.00	590.00	584.20	571.60	3690.00	579.90	.00	582.35	65.61	12.57	293.45	455.57
19.619	28.00	590.00	584.20	571.60	3690.00	580.58	.00	582.63	50.33	11.50	321.00	520.12
19.619	28.00	590.00	584.20	571.60	3690.00	580.58	.00	582.63	50.45	11.50	320.75	519.53
19.620	1.00	.00	.00	571.60	3690.00	580.59	.00	582.63	50.21	11.49	321.26	520.75
19.620	1.00	.00	.00	571.60	3690.00	580.59	.00	582.64	50.18	11.48	321.32	520.89
19.670	50.00	.00	.00	571.90	3690.00	580.89	.00	582.87	38.80	11.36	336.94	592.42
19.670	50.00	.00	.00	571.90	3690.00	580.90	.00	582.88	38.55	11.34	337.63	594.28
19.720	50.00	.00	.00	572.30	3690.00	582.19	.00	583.28	22.20	8.40	439.20	783.16
19.720	50.00	.00	.00	572.30	3690.00	582.19	.00	583.29	22.15	8.40	439.51	783.98
19.722	2.00	593.20	584.70	572.30	3690.00	582.20	.00	583.29	22.13	8.39	439.67	784.39
19.722	2.00	593.20	584.70	572.30	3690.00	582.20	.00	583.29	22.09	8.39	439.97	785.19
19.738	16.00	593.20	584.70	572.30	3690.00	582.24	.00	583.33	21.83	8.35	441.73	789.83
19.738	16.00	593.20	584.70	572.30	3690.00	582.25	.00	583.33	21.78	8.35	442.02	790.61
19.740	2.00	.00	.00	572.30	3690.00	582.25	.00	583.33	21.74	8.34	442.29	791.33
19.740	2.00	.00	.00	572.30	3690.00	582.26	.00	583.34	21.70	8.34	442.59	792.10
19.790	50.00	.00	.00	571.10	3690.00	582.30	.00	583.57	40.20	9.96	644.19	582.01
19.790	50.00	.00	.00	571.10	3690.00	582.31	.00	583.57	40.10	9.95	644.89	582.74
19.900	110.00	.00	.00	571.10	3690.00	583.60	.00	583.88	11.00	5.65	1652.14	1112.48
19.900	110.00	.00	.00	571.10	3690.00	583.61	.00	583.88	10.99	5.65	1653.31	1113.33
20.010	110.00	.00	.00	572.20	3690.00	583.97	.00	584.01	3.33	2.97	3238.72	2021.91
20.010	110.00	.00	.00	572.20	3690.00	583.97	.00	584.01	3.32	2.97	3241.36	2024.08
20.060	50.00	.00	.00	572.60	3690.00	583.96	.00	584.05	3.05	3.31	1725.60	2113.90
20.060	50.00	.00	.00	572.60	3690.00	583.96	.00	584.05	3.04	3.31	1727.27	2116.58

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
20.061	1.00	582.00	581.20	572.60	3690.00	583.97	.00	584.05	4.99	1.99	1649.68	1652.13
20.061	1.00	582.00	581.20	572.60	3690.00	583.98	.00	584.06	4.97	1.99	1651.34	1654.58
20.079	18.00	582.00	581.20	572.60	3690.00	583.98	.00	584.06	4.91	1.98	1658.16	1664.66
20.079	18.00	582.00	581.20	572.60	3690.00	583.99	.00	584.07	4.90	1.97	1659.79	1667.08
20.080	1.00	.00	.00	572.60	3690.00	583.98	.00	584.07	2.98	3.28	1740.22	2137.31
20.080	1.00	.00	.00	572.60	3690.00	583.98	.00	584.07	2.97	3.28	1741.85	2139.92
20.130	50.00	.00	.00	572.60	3690.00	584.00	.00	584.09	4.65	3.89	2892.60	1711.21
20.130	50.00	.00	.00	572.60	3690.00	584.00	.00	584.10	5.08	4.07	2738.59	1637.96
20.770	640.00	.00	.00	573.90	3690.00	584.34	.00	584.38	2.91	2.98	4119.31	2163.22
20.770	640.00	.00	.00	573.90	3690.00	584.38	.00	584.42	3.29	3.18	3712.56	2035.78
21.910	1140.00	.00	.00	575.10	3690.00	584.73	.00	585.03	15.00	6.29	1578.04	952.87
21.910	1140.00	.00	.00	575.10	3690.00	584.81	.00	585.10	14.45	6.21	1598.33	970.87
22.120	210.00	.00	.00	573.60	3690.00	584.83	.00	585.49	18.87	7.85	948.48	849.54
22.120	210.00	.00	.00	573.60	3690.00	584.91	.00	585.56	18.39	7.79	956.93	860.57
22.170	50.00	.00	.00	573.30	3690.00	585.34	.00	585.65	6.16	4.48	823.90	1486.27
22.170	50.00	.00	.00	573.30	3690.00	585.40	.00	585.71	6.04	4.45	828.85	1501.09
22.190	20.00	589.20	584.90	573.30	3690.00	585.71	.00	586.00	5.52	4.33	851.42	1570.24
22.190	20.00	589.20	584.90	573.30	3690.00	585.78	.00	586.06	5.41	4.31	856.60	1586.21
22.270	80.00	.00	.00	573.80	3690.00	585.81	.00	586.05	4.60	3.97	929.40	1720.68
22.270	80.00	.00	.00	573.80	3690.00	585.88	.00	586.12	4.49	3.94	936.30	1742.04
22.300	30.00	587.00	585.90	573.80	3690.00	586.04	.00	586.27	4.24	3.87	952.48	1792.50
22.300	30.00	587.00	585.90	573.80	3690.00	586.11	.00	586.34	4.13	3.84	959.74	1815.32
22.350	50.00	.00	.00	574.20	3690.00	586.11	.00	586.30	5.36	4.33	1542.47	1593.92
22.350	50.00	.00	.00	574.20	3690.00	586.19	.00	586.37	5.20	4.28	1559.06	1617.61
23.210	860.00	.00	.00	576.60	3690.00	586.69	.00	586.77	6.06	4.20	3119.00	1498.55
23.210	860.00	.00	.00	576.60	3690.00	586.75	.00	586.83	6.27	4.29	2988.17	1473.18
23.930	720.00	.00	.00	576.10	3690.00	587.06	.00	587.28	7.55	4.86	1892.23	1343.12
23.930	720.00	.00	.00	576.10	3690.00	587.14	.00	587.35	7.34	4.81	1911.54	1361.61
24.160	230.00	.00	.00	576.10	3690.00	587.12	.00	587.56	12.07	6.16	1137.66	1062.03
24.160	230.00	.00	.00	576.10	3690.00	587.19	.00	587.63	11.77	6.11	1148.14	1075.56
24.210	50.00	.00	.00	577.00	3690.00	587.49	.00	587.67	2.83	3.39	1087.62	2191.88
24.210	50.00	.00	.00	577.00	3690.00	587.55	.00	587.73	2.78	3.37	1094.76	2214.55
24.260	55.00	590.20	587.00	577.00	3690.00	587.64	.00	587.82	2.69	3.34	1105.27	2248.02
24.260	55.00	590.20	587.00	577.00	3690.00	587.71	.00	587.88	2.64	3.32	1112.68	2271.74

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
24.280	20.00	.00	.00	577.00	3690.00	587.65	.00	587.82	2.69	3.34	1105.89	2250.02
24.280	20.00	.00	.00	577.00	3690.00	587.71	.00	587.88	2.63	3.31	1113.29	2273.70
24.340	55.00	590.20	587.00	577.00	3690.00	587.81	.00	587.98	2.55	3.28	1124.27	2308.97
24.340	55.00	590.20	587.00	577.00	3690.00	587.88	.00	588.04	2.50	3.26	1131.93	2333.69
24.390	50.00	.00	.00	576.30	3690.00	587.82	.00	588.00	7.32	4.91	1444.68	1363.59
24.390	50.00	.00	.00	576.30	3690.00	587.89	.00	588.06	7.11	4.86	1458.94	1383.82
24.690	310.00	.00	.00	576.30	3690.00	588.06	.00	588.08	1.36	2.15	3727.31	3162.63
24.690	310.00	.00	.00	576.30	3690.00	588.12	.00	588.14	1.32	2.12	3763.57	3208.76

BEPLIN, SWAN CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
5.000	4090.00	570.90	.00	.00	.00	691.86	.00
5.000	4090.00	570.90	.00	.00	.00	691.86	.00
7.570	4090.00	572.09	.00	1.19	.00	624.38	2570.00
7.570	4090.00	572.09	.00	1.19	.00	624.38	2570.00
9.730	4090.00	572.96	.00	.86	.00	561.13	2160.00
9.730	4090.00	572.96	.00	.86	.00	561.13	2160.00
11.740	3690.00	573.83	.00	.88	.00	414.12	2010.00
11.740	3690.00	573.83	.00	.88	.00	414.12	2010.00
13.550	3690.00	574.61	.00	.78	.00	410.93	1810.00
13.550	3690.00	574.61	.00	.78	.00	410.93	1810.00
14.400	3690.00	575.00	.00	.39	.00	150.00	855.00
14.400	3690.00	575.00	.00	.39	.00	150.00	855.00
14.460	3690.00	574.94	.00	-.06	.00	116.00	50.00
14.460	3690.00	574.94	.00	-.06	.00	116.00	50.00
14.461	3690.00	574.91	.00	-.03	.00	111.28	1.00
14.461	3690.00	574.91	.00	-.03	.00	111.28	1.00
14.499	3690.00	575.07	.00	.15	.00	111.29	43.00
14.499	3690.00	575.07	.00	.15	.00	111.29	43.00
14.500	3690.00	575.11	.00	.04	.00	116.00	1.00
14.500	3690.00	575.11	.00	.04	.00	116.00	1.00
14.550	3690.00	575.56	.00	.46	.00	179.73	50.00
14.550	3690.00	575.56	.00	.46	.00	179.73	50.00
15.840	3690.00	576.91	.00	1.35	.00	549.30	1290.00
15.840	3690.00	576.91	.00	1.35	.00	549.30	1290.00
17.260	3690.00	578.29	.00	1.38	.00	421.32	1420.00
17.260	3690.00	578.29	.00	1.38	.00	420.00	1420.00
18.650	3690.00	579.71	.00	1.42	.00	669.92	1390.00
18.650	3690.00	579.73	.02	1.44	.02	583.85	1390.00
19.540	3690.00	580.32	.00	.61	.00	80.00	895.00
19.540	3690.00	580.38	.06	.65	.06	80.00	895.00
19.600	3690.00	579.82	.00	-.51	.00	40.27	50.00
19.600	3690.00	579.89	.07	-.50	.07	40.27	50.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	%LCH
19.601	3690.00	579.83	.00	.01	.00	40.27	1.00
19.601	3690.00	579.90	.07	.01	.07	40.27	1.00
19.619	3690.00	580.58	.00	.75	.00	40.27	28.00
19.619	3690.00	580.58	.00	.68	.00	40.27	28.00
19.620	3690.00	580.59	.00	.01	.00	40.27	1.00
19.620	3690.00	580.59	.01	.01	.01	40.27	1.00
19.670	3690.00	580.89	.00	.30	.00	46.69	50.00
19.670	3690.00	580.90	.01	.31	.01	46.71	50.00
19.720	3690.00	582.19	.00	1.30	.00	48.50	50.00
19.720	3690.00	582.19	.01	1.29	.01	48.50	50.00
19.722	3690.00	582.20	.00	.01	.00	48.50	2.00
19.722	3690.00	582.20	.01	.01	.01	48.50	2.00
19.738	3690.00	582.24	.00	.05	.00	48.50	16.00
19.738	3690.00	582.25	.01	.05	.01	48.50	16.00
19.740	3690.00	582.25	.00	.01	.00	48.50	2.00
19.740	3690.00	582.26	.01	.01	.01	48.50	2.00
19.790	3690.00	582.30	.00	.05	.00	112.10	50.00
19.790	3690.00	582.31	.01	.05	.01	113.60	50.00
19.900	3690.00	583.60	.00	1.30	.00	333.23	110.00
19.900	3690.00	583.61	.00	1.30	.00	333.41	110.00
20.010	3690.00	583.97	.00	.36	.00	870.21	110.00
20.010	3690.00	583.97	.00	.36	.00	870.46	110.00
20.060	3690.00	583.96	.00	-.01	.00	549.60	50.00
20.060	3690.00	583.96	.00	-.01	.00	549.83	50.00
20.061	3690.00	583.97	.00	.02	.00	550.20	1.00
20.061	3690.00	583.98	.00	.02	.00	550.43	1.00
20.079	3690.00	583.98	.00	.01	.00	551.36	18.00
20.079	3690.00	583.99	.00	.01	.00	551.58	18.00
20.080	3690.00	583.98	.00	-.01	.00	551.60	1.00
20.080	3690.00	583.98	.00	-.01	.00	551.82	1.00
20.130	3690.00	584.00	.00	.02	.00	504.53	50.00
20.130	3690.00	584.00	-.00	.01	-.00	451.70	50.00
20.770	3690.00	584.34	.00	.34	.00	665.51	640.00
20.770	3690.00	584.38	.03	.38	.03	525.00	640.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
21.910	3690.00	584.73	.00	.38	.00	250.00	1140.00
21.910	3690.00	584.81	.09	.44	.09	250.00	1140.00
22.120	3690.00	584.83	.00	.11	.00	110.00	210.00
22.120	3690.00	584.91	.08	.10	.08	110.00	210.00
22.170	3690.00	585.34	.00	.50	.00	75.47	50.00
22.170	3690.00	585.40	.07	.49	.07	75.54	50.00
22.190	3690.00	585.71	.00	.37	.00	75.00	20.00
22.190	3690.00	585.78	.07	.37	.07	75.00	20.00
22.270	3690.00	585.81	.00	.10	.00	101.00	80.00
22.270	3690.00	585.88	.07	.10	.07	101.00	80.00
22.300	3690.00	586.04	.00	.23	.00	101.00	30.00
22.300	3690.00	586.11	.07	.23	.07	101.00	30.00
22.350	3690.00	586.11	.00	.08	.00	230.00	50.00
22.350	3690.00	586.19	.07	.08	.07	230.00	50.00
23.210	3690.00	586.69	.00	.58	.00	753.05	860.00
23.210	3690.00	586.75	.06	.57	.06	587.52	860.00
23.930	3690.00	587.06	.00	.37	.00	305.00	720.00
23.930	3690.00	587.14	.07	.38	.07	305.00	720.00
24.160	3690.00	587.12	.00	.06	.00	150.00	230.00
24.160	3690.00	587.19	.07	.06	.07	150.00	230.00
24.210	3690.00	587.49	.00	.37	.00	115.00	50.00
24.210	3690.00	587.55	.06	.36	.06	115.00	50.00
24.260	3690.00	587.64	.00	.15	.00	115.00	55.00
24.260	3690.00	587.71	.06	.16	.06	115.00	55.00
24.280	3690.00	587.65	.00	.01	.00	115.00	20.00
24.280	3690.00	587.71	.06	.01	.06	115.00	20.00
24.340	3690.00	587.81	.00	.16	.00	115.00	55.00
24.340	3690.00	587.88	.07	.16	.07	115.00	55.00
24.390	3690.00	587.82	.00	.02	.00	215.00	50.00
24.390	3690.00	587.89	.07	.02	.07	215.00	50.00
24.690	3690.00	588.06	.00	.24	.00	591.49	310.00
24.690	3690.00	588.12	.06	.23	.06	593.40	310.00

FLOODWAY DATA, BERLIN, SWAN CREEK
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
5.000	692.	1840.	2.2	570.9	570.9	.0
7.570	624.	1951.	2.1	572.1	572.1	.0
9.730	561.	1835.	2.2	573.0	573.0	.0
11.740	414.	1597.	2.3	573.8	573.8	.0
13.550	411.	1695.	2.2	574.6	574.6	.0
14.400	150.	826.	4.5	575.0	575.0	.0
14.460	116.	604.	6.1	574.9	574.9	.0
14.461	116.	574.	6.4	574.9	574.9	.0
14.499	116.	591.	6.2	575.1	575.1	.0
14.500	116.	605.	6.1	575.1	575.1	.0
14.550	180.	886.	4.2	575.6	575.6	.0
15.840	660.	1373.	2.7	576.9	576.9	.0
17.260	420.	1319.	2.8	578.3	578.3	.0
18.650	584.	2148.	1.7	579.7	579.7	.0
19.540	80.	532.	6.9	580.4	580.3	.1
19.600	40.	293.	12.6	579.9	579.8	.1
19.601	40.	293.	12.6	579.9	579.8	.1
19.619	40.	321.	11.5	580.6	580.6	.0
19.620	40.	321.	11.5	580.6	580.6	.0
19.670	47.	338.	10.9	580.9	580.9	.0
19.720	48.	440.	8.4	582.2	582.2	.0
19.722	48.	440.	8.4	582.2	582.2	.0
19.738	48.	442.	8.3	582.2	582.2	.0
19.740	48.	443.	8.3	582.3	582.3	.0
19.790	150.	645.	5.7	582.3	582.3	.0
19.900	333.	1653.	2.2	583.6	583.6	.0
20.010	870.	3241.	1.1	584.0	584.0	.0
20.060	550.	1727.	2.1	584.0	584.0	.0
20.061	550.	1651.	2.2	584.0	584.0	.0
20.079	552.	1660.	2.2	584.0	584.0	.0
20.080	552.	1742.	2.1	584.0	584.0	.0
20.130	452.	2739.	1.3	584.0	584.0	.0
20.770	525.	3713.	1.0	584.3	584.3	.0
21.910	250.	1598.	2.3	584.8	584.7	.1
22.120	110.	957.	3.9	584.9	584.8	.1
22.170	76.	829.	4.5	585.4	585.3	.1
22.190	75.	857.	4.3	585.8	585.7	.1
22.270	101.	936.	3.9	585.9	585.8	.1
22.300	101.	960.	3.8	586.1	586.0	.1
22.350	230.	1559.	2.4	586.2	586.1	.1
23.210	588.	2988.	1.2	586.8	586.7	.1
23.930	305.	1912.	1.9	587.2	587.1	.1

FLOODWAY DATA. BERLIN, SWAN CREEK
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
24.160	150.	1148.	3.2	587.2	587.1	.1
24.210	115.	1095.	3.4	587.6	587.5	.1
24.260	115.	1113.	3.3	587.7	587.6	.1
24.280	115.	1113.	3.3	587.7	587.6	.1
24.340	115.	1132.	3.3	587.9	587.8	.1
24.390	215.	1459.	2.5	587.9	587.8	.1
24.690	593.	3764.	1.0	588.2	588.1	.1

1) COUNTY: Monroe

2) STUDY NAME: Berlin twp

3) WATERCOURSE: Swan Creek

4) DOCUMENT TYPE: Summary

****
HEC2 RELEASE DATED NOV 76 UPDATED APRIL 1980
ERROR CORR - 01,02,03,04
MODIFICATION - 50,51,52,53,54
****

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

BERLIN, SWAN CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
5.000	.00	.00	.00	567.40	2450.00	570.90	.00	570.93	1.97	1.33	1839.71	1745.69
5.000	.00	.00	.00	567.40	3650.00	570.90	.00	570.96	4.37	1.98	1839.71	1745.69
5.000	.00	.00	.00	567.40	4090.00	570.90	.00	570.98	5.49	2.22	1839.71	1745.69
5.000	.00	.00	.00	567.40	4950.00	570.90	.00	571.01	8.04	2.69	1839.71	1745.69
7.570	2570.00	.00	.00	568.20	2450.00	571.48	.00	571.52	2.72	1.55	1579.15	1486.26
7.570	2570.00	.00	.00	568.20	3650.00	571.93	.00	571.99	3.68	1.97	1850.71	1902.94
7.570	2570.00	.00	.00	568.20	4090.00	572.09	.00	572.16	3.92	2.10	1950.94	2064.99
7.570	2570.00	.00	.00	568.20	4950.00	572.40	.00	572.48	4.27	2.30	2147.67	2395.16
9.730	2160.00	.00	.00	568.70	2450.00	572.15	.00	572.20	3.67	1.76	1389.04	1279.45
9.730	2160.00	.00	.00	568.70	3650.00	572.76	.00	572.83	4.04	2.12	1723.09	1815.01
9.730	2160.00	.00	.00	568.70	4090.00	572.96	.00	573.03	4.13	2.23	1834.83	2013.75
9.730	2160.00	.00	.00	568.70	4950.00	573.32	.00	573.41	4.29	2.44	2036.06	2390.28
11.740	2010.00	.00	.00	568.00	2210.00	572.92	.00	572.97	4.03	1.81	1224.71	1101.05
11.740	2010.00	.00	.00	568.00	3290.00	573.61	.00	573.69	4.56	2.20	1505.08	1541.41
11.740	2010.00	.00	.00	568.00	3690.00	573.83	.00	573.92	4.73	2.33	1597.32	1697.08
11.740	2010.00	.00	.00	568.00	4470.00	574.24	.00	574.34	5.02	2.56	1766.39	1995.29
13.550	1810.00	.00	.00	568.60	2210.00	573.58	.00	573.63	3.28	1.83	1273.96	1220.74
13.550	1810.00	.00	.00	568.60	3290.00	574.36	.00	574.43	3.75	2.22	1591.23	1698.08
13.550	1810.00	.00	.00	568.60	3690.00	574.61	.00	574.69	3.91	2.35	1694.95	1866.98
13.550	1810.00	.00	.00	568.60	4470.00	575.07	.00	575.17	4.17	2.59	1883.05	2188.46
14.400	855.00	.00	.00	568.90	2210.00	573.93	.00	574.10	8.94	3.32	666.24	739.20
14.400	855.00	.00	.00	568.90	3290.00	574.74	.00	575.01	11.53	4.18	786.83	968.84
14.400	855.00	.00	.00	568.90	3690.00	575.00	.00	575.31	12.41	4.47	825.66	1047.56
14.400	855.00	.00	.00	568.90	4470.00	575.46	.00	575.85	13.88	4.98	897.78	1199.66
14.460	50.00	.00	.00	568.90	2210.00	573.91	.00	574.23	13.54	4.56	484.42	600.70
14.460	50.00	.00	.00	568.90	3290.00	574.69	.00	575.20	17.18	5.72	575.54	793.81
14.460	50.00	.00	.00	568.90	3690.00	574.94	.00	575.52	18.46	6.11	604.39	858.95
14.460	50.00	.00	.00	568.90	4470.00	575.38	.00	576.10	20.89	6.82	655.21	978.08

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
14.461	1.00	580.60	577.20	569.90	2210.00	573.89	.00	574.25	18.18	4.79	461.68	518.35
14.461	1.00	580.60	577.20	568.90	3290.00	574.67	.00	575.23	23.94	6.01	546.98	672.45
14.461	1.00	580.60	577.20	568.90	3690.00	574.91	.00	575.55	25.97	6.43	574.23	724.14
14.461	1.00	580.60	577.20	568.90	4470.00	575.34	.00	576.14	29.89	7.19	622.08	817.57
14.499	43.00	580.60	577.20	568.90	2210.00	573.99	.00	574.33	17.06	4.69	471.26	535.03
14.499	43.00	580.60	577.20	568.90	3290.00	574.81	.00	575.34	22.00	5.85	562.35	701.46
14.499	43.00	580.60	577.20	568.90	3690.00	575.07	.00	575.67	23.74	6.24	591.44	757.37
14.499	43.00	580.60	577.20	568.90	4470.00	575.53	.00	576.28	27.03	6.95	643.21	859.84
14.500	1.00	.00	.00	568.90	2210.00	574.00	.00	574.33	14.39	4.64	475.85	582.57
14.500	1.00	.00	.00	568.90	3290.00	574.84	.00	575.35	17.38	5.73	574.09	789.25
14.500	1.00	.00	.00	568.90	3690.00	575.11	.00	575.68	18.43	6.10	605.31	859.60
14.500	1.00	.00	.00	568.90	4470.00	575.59	.00	576.30	20.35	6.76	661.23	990.90
14.550	50.00	.00	.00	568.90	2210.00	574.27	.00	574.44	10.37	3.32	674.21	686.32
14.550	50.00	.00	.00	568.90	3290.00	575.24	.00	575.49	12.10	4.07	829.82	945.69
14.550	50.00	.00	.00	568.90	3690.00	575.56	.00	575.85	12.60	4.30	886.30	1039.70
14.550	50.00	.00	.00	568.90	4470.00	576.15	.00	576.49	13.33	4.72	1008.73	1224.20
15.840	1290.00	.00	.00	570.00	2210.00	575.44	.00	575.55	7.17	2.67	885.08	825.14
15.840	1290.00	.00	.00	570.00	3290.00	576.55	.00	576.70	7.32	3.13	1190.25	1215.86
15.840	1290.00	.00	.00	570.00	3690.00	576.91	.00	577.07	7.30	3.26	1372.69	1365.57
15.840	1290.00	.00	.00	570.00	4470.00	577.56	.00	577.73	7.10	3.45	1774.92	1677.76
17.260	1420.00	.00	.00	571.90	2210.00	576.90	.00	577.11	17.55	4.39	800.20	527.54
17.260	1420.00	.00	.00	571.90	3290.00	577.95	.00	578.15	14.53	4.57	1181.84	863.15
17.260	1420.00	.00	.00	571.90	3690.00	578.29	.00	578.49	13.86	4.63	1319.22	991.15
17.260	1420.00	.00	.00	571.90	4470.00	578.88	.00	579.09	12.88	4.75	1575.59	1245.37
18.650	1390.00	.00	.00	570.90	2210.00	578.49	.00	578.62	7.54	3.71	1459.82	804.74
18.650	1390.00	.00	.00	570.90	3290.00	579.40	.00	579.53	7.42	3.99	2048.38	1207.99
18.650	1390.00	.00	.00	570.90	3690.00	579.71	.00	579.84	7.38	4.08	2243.01	1358.63
18.650	1390.00	.00	.00	570.90	4470.00	580.25	.00	580.37	7.23	4.21	2614.23	1662.97
19.540	895.00	.00	.00	571.50	2210.00	579.26	.00	579.77	18.20	5.85	441.98	518.08
19.540	895.00	.00	.00	571.50	3290.00	580.09	.00	580.97	27.60	7.75	507.60	626.23
19.540	895.00	.00	.00	571.50	3690.00	580.32	.00	581.37	31.21	8.41	527.41	660.53
19.540	895.00	.00	.00	571.50	4470.00	580.70	.00	582.09	39.20	9.71	557.42	713.92
19.600	50.00	.00	.00	571.60	2210.00	579.08	.00	580.19	33.48	8.48	260.72	381.92
19.600	50.00	.00	.00	571.60	3290.00	579.68	.00	581.75	56.70	11.53	285.31	436.94
19.600	50.00	.00	.00	571.60	3690.00	579.82	.00	582.32	67.64	12.70	290.45	448.67
19.600	50.00	.00	.00	571.60	4470.00	579.88	579.83	583.49	96.59	15.25	293.13	454.83
19.601	1.00	590.00	584.20	571.60	2210.00	579.08	.00	580.20	33.46	8.47	260.77	382.05
19.601	1.00	590.00	584.20	571.60	3290.00	579.69	.00	581.75	56.76	11.54	285.20	436.69
19.601	1.00	590.00	584.20	571.60	3690.00	579.83	.00	582.33	67.51	12.70	290.63	449.09
19.601	1.00	590.00	584.20	571.60	4470.00	579.89	579.86	583.50	96.45	15.24	293.27	455.15

	SECNO	XLCN	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	19.619	28.00	590.00	584.20	571.60	2210.00	579.24	.00	580.30	31.08	8.27	267.29	396.42
	19.619	28.00	590.00	584.20	571.60	3290.00	580.15	.00	581.97	47.02	10.83	303.90	479.79
	19.619	28.00	590.00	584.20	571.60	3690.00	580.58	.00	582.63	50.33	11.50	321.00	520.12
*	19.619	28.00	590.00	584.20	571.60	4470.00	581.87	579.86	584.10	47.69	11.99	372.88	647.31
	19.620	1.00	.00	.00	571.60	2210.00	579.25	.00	580.31	31.04	8.26	267.41	396.68
	19.620	1.00	.00	.00	571.60	3290.00	580.16	.00	581.98	46.91	10.82	304.15	480.38
	19.620	1.00	.00	.00	571.60	3690.00	580.59	.00	582.63	50.21	11.49	321.26	520.75
	19.620	1.00	.00	.00	571.60	4470.00	581.80	.00	584.10	47.53	11.97	373.30	648.37
	19.670	50.00	.00	.00	571.90	2210.00	579.38	.00	580.47	28.28	8.43	268.04	415.60
	19.670	50.00	.00	.00	571.90	3290.00	580.39	.00	582.19	38.26	10.81	314.10	531.89
	19.670	50.00	.00	.00	571.90	3690.00	580.89	.00	582.87	38.80	11.36	336.94	592.42
	19.670	50.00	.00	.00	571.90	4470.00	582.24	.00	584.34	33.48	11.71	401.45	772.48
	19.720	50.00	.00	.00	572.30	2210.00	580.03	.00	580.71	17.92	6.60	334.94	522.07
	19.720	50.00	.00	.00	572.30	3290.00	581.57	.00	582.57	21.74	8.04	409.36	705.53
	19.720	50.00	.00	.00	572.30	3690.00	582.19	.00	583.28	22.20	8.40	439.20	783.16
	19.720	50.00	.00	.00	572.30	4470.00	583.51	.00	584.74	21.79	8.88	503.58	957.51
	19.722	2.00	593.20	584.70	572.30	2210.00	580.04	.00	580.71	17.88	6.59	335.18	522.62
	19.722	2.00	593.20	584.70	572.30	3290.00	581.58	.00	582.58	21.68	8.03	409.78	706.60
	19.722	2.00	593.20	584.70	572.30	3690.00	582.20	.00	583.29	22.13	8.39	439.67	784.39
	19.722	2.00	593.20	584.70	572.30	4470.00	583.52	.00	584.74	21.75	8.87	503.96	958.57
	19.738	16.00	593.20	584.70	572.30	2210.00	580.08	.00	580.74	17.66	6.57	336.58	525.93
	19.738	16.00	593.20	584.70	572.30	3290.00	581.63	.00	582.62	21.37	7.99	411.77	711.72
	19.738	16.00	593.20	584.70	572.30	3690.00	582.24	.00	583.33	21.83	8.35	441.73	789.83
	19.738	16.00	593.20	584.70	572.30	4470.00	583.57	.00	584.78	21.49	8.83	505.97	964.15
	19.740	2.00	.00	.00	572.30	2210.00	580.08	.00	580.75	17.58	6.56	337.09	527.15
	19.740	2.00	.00	.00	572.30	3290.00	581.63	.00	582.62	21.28	7.98	412.32	713.12
	19.740	2.00	.00	.00	572.30	3690.00	582.25	.00	583.33	21.74	8.34	442.29	791.33
	19.740	2.00	.00	.00	572.30	4470.00	583.58	.00	584.78	21.43	8.83	506.51	965.67
	19.790	50.00	.00	.00	571.10	2210.00	580.03	.00	581.05	41.41	8.53	397.32	343.44
	19.790	50.00	.00	.00	571.10	3290.00	581.65	.00	582.90	42.10	9.75	572.03	507.06
	19.790	50.00	.00	.00	571.10	3690.00	582.30	.00	583.57	40.20	9.96	644.19	582.01
	19.790	50.00	.00	.00	571.10	4470.00	583.75	.00	584.93	33.08	9.88	871.36	777.14
	19.900	110.00	.00	.00	571.10	2210.00	581.09	.00	581.37	13.30	5.26	987.51	605.95
	19.900	110.00	.00	.00	571.10	3290.00	582.93	.00	583.21	11.79	5.62	1439.25	958.31
	19.900	110.00	.00	.00	571.10	3690.00	583.60	.00	583.88	11.00	5.65	1652.14	1112.48
	19.900	110.00	.00	.00	571.10	4470.00	584.95	.00	585.19	9.21	5.57	2128.48	1473.08
	20.010	110.00	.00	.00	572.20	2210.00	581.43	.00	581.59	10.44	4.39	1375.87	683.99
	20.010	110.00	.00	.00	572.20	3290.00	583.31	.00	583.37	4.32	3.25	2690.92	1582.87
	20.010	110.00	.00	.00	572.20	3690.00	583.97	.00	584.01	3.33	2.97	3238.72	2021.91
	20.010	110.00	.00	.00	572.20	4470.00	585.26	.00	585.29	2.10	2.55	4429.95	3081.07

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
20.060	50.00	.00	.00	572.60	2210.00	581.33	.00	581.81	15.38	6.15	528.68	563.46
20.060	50.00	.00	.00	572.60	3290.00	583.30	.00	583.42	4.33	3.78	1378.10	1581.04
20.060	50.00	.00	.00	572.60	3690.00	583.96	.00	584.05	3.05	3.31	1725.60	2113.90
20.060	50.00	.00	.00	572.60	4470.00	585.26	.00	585.32	1.65	2.64	2508.54	3474.64
20.061	1.00	582.00	581.20	572.60	2210.00	581.58	.00	581.87	21.86	5.05	603.48	472.67
20.061	1.00	582.00	581.20	572.60	3290.00	583.33	.00	583.43	6.97	2.82	1317.44	1246.20
20.061	1.00	582.00	581.20	572.60	3690.00	583.97	.00	584.05	4.99	1.99	1649.68	1652.13
20.061	1.00	582.00	581.20	572.60	4470.00	585.26	.00	585.32	2.35	1.50	2428.36	2914.41
20.079	18.00	582.00	581.20	572.60	2210.00	581.66	.00	581.92	20.08	4.84	630.60	493.19
20.079	18.00	582.00	581.20	572.60	3290.00	583.34	.00	583.44	6.90	2.80	1322.17	1252.50
20.079	18.00	582.00	581.20	572.60	3690.00	583.98	.00	584.06	4.91	1.98	1658.16	1664.66
20.079	18.00	582.00	581.20	572.60	4470.00	585.27	.00	585.32	2.34	1.50	2433.03	2922.50
20.080	1.00	.00	.00	572.60	2210.00	581.62	.00	581.96	11.36	5.41	631.30	655.73
20.080	1.00	.00	.00	572.60	3290.00	583.33	.00	583.45	4.16	3.72	1399.52	1612.51
20.080	1.00	.00	.00	572.60	3690.00	583.98	.00	584.07	2.98	3.28	1740.22	2137.31
20.080	1.00	.00	.00	572.60	4470.00	585.26	.00	585.32	1.65	2.63	2514.09	3484.86
20.130	50.00	.00	.00	572.60	2210.00	581.98	.00	582.08	5.29	3.62	1896.23	960.59
20.130	50.00	.00	.00	572.60	3290.00	583.39	.00	583.48	5.07	3.91	2587.10	1461.30
20.130	50.00	.00	.00	572.60	3690.00	584.00	.00	584.09	4.65	3.89	2892.60	1711.21
20.130	50.00	.00	.00	572.60	4470.00	585.27	.00	585.34	3.77	3.78	3592.49	2303.50
20.770	640.00	.00	.00	573.90	2210.00	582.35	.00	582.39	3.03	2.64	2832.80	1270.01
20.770	640.00	.00	.00	573.90	3290.00	583.76	.00	583.80	3.08	2.95	3732.94	1875.70
20.770	640.00	.00	.00	573.90	3690.00	584.34	.00	584.38	2.91	2.98	4119.31	2163.22
20.770	640.00	.00	.00	573.90	4470.00	585.56	.00	585.59	2.51	2.98	4939.82	2823.92
21.910	1140.00	.00	.00	575.10	2210.00	582.79	.00	583.04	15.17	5.41	1096.33	567.49
21.910	1140.00	.00	.00	575.10	3290.00	584.18	.00	584.47	15.59	6.15	1439.01	833.28
21.910	1140.00	.00	.00	575.10	3690.00	584.73	.00	585.03	15.00	6.29	1578.04	952.87
21.910	1140.00	.00	.00	575.10	4470.00	585.86	.00	586.16	13.43	6.43	1864.99	1219.79
22.120	210.00	.00	.00	573.60	2210.00	583.01	.00	583.39	13.44	5.86	746.81	602.78
22.120	210.00	.00	.00	573.60	3290.00	584.32	.00	584.92	17.89	7.40	892.57	777.93
22.120	210.00	.00	.00	573.60	3690.00	584.83	.00	585.49	18.87	7.85	948.48	849.54
22.120	210.00	.00	.00	573.60	4470.00	585.88	.00	586.65	19.83	8.56	1063.28	1003.88
22.170	50.00	.00	.00	573.30	2210.00	583.32	.00	583.49	4.16	3.29	672.26	1083.60
22.170	50.00	.00	.00	573.30	3290.00	584.78	.00	585.06	5.80	4.21	782.35	1365.95
22.170	50.00	.00	.00	573.30	3690.00	585.34	.00	585.65	6.16	4.48	823.90	1486.27
22.170	50.00	.00	.00	573.30	4470.00	586.45	.00	586.82	6.56	4.93	908.36	1745.32
22.190	20.00	589.20	584.90	573.30	2210.00	583.34	.00	583.51	4.13	3.28	673.88	1087.60
22.190	20.00	589.20	584.90	573.30	3290.00	585.05	.00	585.31	5.36	4.10	802.19	1421.58
22.190	20.00	589.20	584.90	573.30	3690.00	585.71	.00	586.00	5.52	4.33	851.42	1570.24
22.190	20.00	589.20	584.90	573.30	4470.00	587.08	.00	587.42	5.54	4.68	954.15	1898.56

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
22.270	80.00	.00	.00	573.80	2210.00	583.38	.00	583.54	4.60	3.23	683.47	1030.91
22.270	80.00	.00	.00	573.80	3290.00	585.13	.00	585.36	4.71	3.82	861.38	1515.95
22.270	80.00	.00	.00	573.80	3690.00	585.81	.00	586.05	4.60	3.97	929.40	1720.68
22.270	80.00	.00	.00	573.80	4470.00	587.29	.00	587.49	3.38	3.76	1611.02	2431.62
22.300	30.00	587.00	585.90	573.80	2210.00	583.39	.00	583.56	4.55	3.22	685.72	1036.58
22.300	30.00	587.00	585.90	573.80	3290.00	585.15	.00	585.38	4.67	3.81	863.44	1522.00
22.300	30.00	587.00	585.90	573.80	3690.00	586.04	.00	586.27	4.24	3.87	952.48	1792.50
22.300	30.00	587.00	585.90	573.80	4470.00	587.75	.00	587.90	2.54	3.35	1996.91	2807.34
22.350	50.00	.00	.00	574.20	2210.00	583.40	.00	583.60	7.24	4.20	916.96	821.56
22.350	50.00	.00	.00	574.20	3290.00	585.21	.00	585.41	6.31	4.45	1334.03	1309.67
22.350	50.00	.00	.00	574.20	3690.00	586.11	.00	586.30	5.36	4.33	1542.47	1593.92
22.350	50.00	.00	.00	574.20	4470.00	587.75	.00	587.92	4.24	4.21	1921.45	2171.92
23.210	860.00	.00	.00	576.60	2210.00	584.20	.00	584.31	10.71	4.59	1702.71	675.20
23.210	860.00	.00	.00	576.60	3290.00	585.89	.00	585.97	7.33	4.36	2737.13	1214.89
23.210	860.00	.00	.00	576.60	3690.00	586.69	.00	586.77	6.06	4.20	3119.00	1498.55
23.210	860.00	.00	.00	576.60	4470.00	588.17	.00	588.21	2.85	3.16	5135.63	2648.65
23.930	720.00	.00	.00	576.10	2210.00	584.01	.00	585.02	8.51	4.38	1201.19	757.36
23.930	720.00	.00	.00	576.10	3290.00	586.33	.00	586.56	8.38	4.87	1668.24	1136.74
23.930	720.00	.00	.00	576.10	3690.00	587.06	.00	587.28	7.55	4.86	1892.23	1343.12
23.930	720.00	.00	.00	576.10	4470.00	588.33	.00	588.54	6.66	4.92	2277.76	1732.49
24.160	230.00	.00	.00	576.10	2210.00	584.96	.00	585.26	10.60	4.95	813.48	670.73
24.160	230.00	.00	.00	576.10	3290.00	586.43	.00	586.85	12.48	5.99	1033.57	931.41
24.160	230.00	.00	.00	576.10	3690.00	587.12	.00	587.56	12.07	6.16	1137.66	1062.03
24.160	230.00	.00	.00	576.10	4470.00	588.34	.00	588.82	11.70	6.53	1320.10	1307.03
24.210	50.00	.00	.00	577.00	2210.00	585.23	.00	585.34	2.41	2.67	827.85	1423.36
24.210	50.00	.00	.00	577.00	3290.00	586.79	.00	586.95	2.87	3.27	1007.02	1941.63
24.210	50.00	.00	.00	577.00	3690.00	587.49	.00	587.67	2.83	3.39	1087.62	2191.88
24.210	50.00	.00	.00	577.00	4470.00	588.73	.00	588.93	2.83	3.63	1229.97	2657.60
24.260	55.00	590.20	587.00	577.00	2210.00	585.24	.00	585.35	2.41	2.67	828.32	1424.65
24.260	55.00	590.20	587.00	577.00	3290.00	586.80	.00	586.96	2.86	3.26	1007.76	1943.87
24.260	55.00	590.20	587.00	577.00	3690.00	587.64	.00	587.82	2.69	3.34	1105.27	2248.02
24.260	55.00	590.20	587.00	577.00	4470.00	589.01	.00	589.21	2.61	3.54	1262.71	2768.79
24.280	20.00	.00	.00	577.00	2210.00	585.24	.00	585.35	2.40	2.67	828.88	1426.17
24.280	20.00	.00	.00	577.00	3290.00	586.80	.00	586.97	2.86	3.26	1008.42	1945.88
24.280	20.00	.00	.00	577.00	3690.00	587.65	.00	587.82	2.69	3.34	1105.89	2250.02
24.280	20.00	.00	.00	577.00	4470.00	589.02	.00	589.21	2.60	3.54	1263.33	2770.89
24.340	55.00	590.20	587.00	577.00	2210.00	585.24	.00	585.35	2.40	2.66	829.39	1427.57
24.340	55.00	590.20	587.00	577.00	3290.00	586.81	.00	586.97	2.85	3.26	1009.23	1948.35
24.340	55.00	590.20	587.00	577.00	3690.00	587.81	.00	587.98	2.55	3.28	1124.27	2308.97
24.340	55.00	590.20	587.00	577.00	4470.00	589.31	.00	589.50	2.40	3.45	1297.30	2687.81

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
24.390	50.00	.00	.00	576.30	2210.00	585.22	.00	585.42	10.73	4.95	885.49	674.72
24.390	50.00	.00	.00	576.30	3290.00	586.81	.00	587.02	9.40	5.22	1228.80	1072.85
24.390	50.00	.00	.00	576.30	3690.00	587.82	.00	588.00	7.32	4.91	1444.68	1363.59
24.390	50.00	.00	.00	576.30	4470.00	589.36	.00	589.52	5.75	4.75	1776.23	1864.74
24.690	310.00	.00	.00	576.30	2210.00	585.52	.00	585.54	2.07	2.23	2298.15	1536.55
24.690	310.00	.00	.00	576.30	3290.00	587.10	.00	587.12	1.76	2.30	3168.88	2479.56
24.690	310.00	.00	.00	576.30	3690.00	588.06	.00	588.08	1.36	2.15	3727.31	3162.63
24.690	310.00	.00	.00	576.30	4470.00	589.57	.00	589.59	1.03	2.04	4670.89	4398.91

BERLIN, SWAN CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
5.000	2450.00	570.90	.00	.00	.00	691.06	.00
5.000	3650.00	570.90	.00	.00	.00	691.06	.00
5.000	4090.00	570.90	.00	.00	.00	691.06	.00
5.000	4950.00	570.90	.00	.00	.00	691.06	.00
7.570	2450.00	571.48	.00	.58	.00	602.79	2570.00
7.570	3650.00	571.93	.45	1.03	.00	618.63	2570.00
7.570	4090.00	572.09	.16	1.19	.00	624.38	2570.00
7.570	4950.00	572.40	.31	1.50	.00	635.51	2570.00
9.730	2450.00	572.15	.00	.67	.00	547.67	2160.00
9.730	3650.00	572.76	.60	.83	.00	558.93	2160.00
9.730	4090.00	572.96	.20	.86	.00	561.13	2160.00
9.730	4950.00	573.32	.36	.92	.00	565.00	2160.00
11.740	2210.00	572.92	.00	.77	.00	402.60	2010.00
11.740	3290.00	573.61	.69	.86	.00	411.30	2010.00
11.740	3690.00	573.83	.22	.88	.00	414.12	2010.00
11.740	4470.00	574.24	.41	.92	.00	419.25	2010.00
13.550	2210.00	573.58	.00	.66	.00	404.67	1810.00
13.550	3290.00	574.36	.78	.75	.00	409.39	1810.00
13.550	3690.00	574.61	.25	.78	.00	410.93	1810.00
13.550	4470.00	575.07	.46	.83	.00	413.70	1810.00
14.400	2210.00	573.93	.00	.35	.00	150.00	855.00
14.400	3290.00	574.74	.81	.38	.00	150.00	855.00
14.400	3690.00	575.00	.26	.39	.00	150.00	855.00
14.400	4470.00	575.46	.46	.40	.00	150.00	855.00
14.460	2210.00	573.91	.00	-.02	.00	116.00	50.00
14.460	3290.00	574.69	.79	-.05	.00	116.00	50.00
14.460	3690.00	574.94	.25	-.06	.00	116.00	50.00
14.460	4470.00	575.38	.44	-.08	.00	116.00	50.00
14.461	2210.00	573.89	.00	-.01	.00	111.23	1.00
14.461	3290.00	574.67	.77	-.03	.00	111.27	1.00
14.461	3690.00	574.91	.24	-.03	.00	111.28	1.00
14.461	4470.00	575.34	.43	-.04	.00	111.30	1.00
14.499	2210.00	573.99	.00	.09	.00	111.23	43.00
14.499	3290.00	574.81	.82	.14	.00	111.28	43.00
14.499	3690.00	575.07	.26	.15	.00	111.29	43.00
14.499	4470.00	575.53	.46	.19	.00	111.31	43.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	14.500	2210.00	574.00	.00	.01	.00	116.00	1.00
	14.500	3290.00	574.84	.84	.03	.00	116.00	1.00
	14.500	3690.00	575.11	.27	.04	.00	116.00	1.00
	14.500	4470.00	575.59	.48	.05	.00	116.00	1.00
	14.550	2210.00	574.27	.00	.28	.00	151.65	50.00
	14.550	3290.00	575.24	.97	.40	.00	172.07	50.00
	14.550	3690.00	575.56	.32	.46	.00	179.73	50.00
	14.550	4470.00	576.15	.59	.56	.00	217.83	50.00
	15.840	2210.00	575.44	.00	1.17	.00	240.73	1290.00
	15.840	3290.00	576.55	1.11	1.31	.00	449.43	1290.00
	15.840	3690.00	576.91	.36	1.35	.00	549.30	1290.00
	15.840	4470.00	577.56	.65	1.41	.00	661.49	1290.00
	17.260	2210.00	576.90	.00	1.46	.00	333.60	1420.00
	17.260	3290.00	577.95	1.05	1.40	.00	405.27	1420.00
	17.260	3690.00	578.29	.34	1.38	1.39	421.32	1420.00
	17.260	4470.00	578.88	.59	1.32	.00	440.04	1420.00
	18.650	2210.00	578.49	.00	1.59	.00	623.52	1390.00
	18.650	3290.00	579.40	.92	1.45	.00	653.10	1390.00
	18.650	3690.00	579.71	.31	1.42	1.22	669.92	1390.00
	18.650	4470.00	580.25	.54	1.36	.00	700.58	1390.00
	19.540	2210.00	579.26	.00	.77	.00	80.00	895.00
	19.540	3290.00	580.08	.82	.67	.00	80.00	895.00
	19.540	3690.00	580.32	.25	.61	1.07	80.00	895.00
	19.540	4470.00	580.70	.37	.45	.00	80.00	895.00
	19.600	2210.00	579.08	.00	-.18	.00	40.27	50.00
	19.600	3290.00	579.68	.61	-.39	.00	40.27	50.00
	19.600	3690.00	579.82	.13	-.51	.74	40.27	50.00
	19.600	4470.00	579.88	.06	-.82	.00	40.27	50.00
	19.601	2210.00	579.08	.00	.00	.00	40.27	1.00
	19.601	3290.00	579.69	.61	.00	.00	40.27	1.00
	19.601	3690.00	579.83	.14	.01	.75	40.27	1.00
	19.601	4470.00	579.89	.07	.01	.00	40.27	1.00
	19.619	2210.00	579.24	.00	.16	.00	40.27	28.00
	19.619	3290.00	580.15	.91	.46	.00	40.27	28.00
	19.619	3690.00	580.58	.42	.75	1.33	40.27	28.00
*	19.619	4470.00	581.87	1.29	1.97	.00	40.27	28.00
	19.620	2210.00	579.25	.00	.00	.00	40.27	1.00
	19.620	3290.00	580.16	.91	.01	.00	40.27	1.00
	19.620	3690.00	580.59	.43	.01	1.34	40.27	1.00
	19.620	4470.00	581.88	1.29	.01	.00	40.27	1.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
19.670	2210.00	579.38	.00	.13	.00	44.38	50.00
19.670	3290.00	580.39	1.02	.23	.00	45.93	50.00
19.670	3690.00	580.89	.50	.30	1.51	46.69	50.00
19.670	4470.00	582.24	1.35	.36	.00	48.75	50.00
19.720	2210.00	580.03	.00	.66	.00	48.50	50.00
19.720	3290.00	581.57	1.54	1.18	.00	48.50	50.00
19.720	3690.00	582.19	.62	1.30	2.15	48.50	50.00
19.720	4470.00	583.51	1.33	1.27	.00	48.50	50.00
19.722	2210.00	580.04	.00	.00	.00	48.50	2.00
19.722	3290.00	581.58	1.54	.01	.00	48.50	2.00
19.722	3690.00	582.20	.62	.01	2.16	48.50	2.00
19.722	4470.00	583.52	1.33	.01	.00	48.50	2.00
19.738	2210.00	580.08	.00	.04	.00	48.50	16.00
19.738	3290.00	581.63	1.55	.05	.00	48.50	16.00
19.738	3690.00	582.24	.62	.05	2.17	48.50	16.00
19.738	4470.00	583.57	1.32	.05	.00	48.50	16.00
19.740	2210.00	580.08	.00	.01	.00	48.50	2.00
19.740	3290.00	581.63	1.55	.01	.00	48.50	2.00
19.740	3690.00	582.25	.62	.01	2.17	48.50	2.00
19.740	4470.00	583.58	1.32	.01	.00	48.50	2.00
19.790	2210.00	580.03	.00	-.05	.00	106.06	50.00
19.790	3290.00	581.65	1.62	.02	.00	109.96	50.00
19.790	3690.00	582.30	.65	.05	2.27	112.10	50.00
19.790	4470.00	583.75	1.45	.18	.00	160.00	50.00
19.900	2210.00	581.09	.00	1.06	.00	226.60	110.00
19.900	3290.00	582.93	1.84	1.28	.00	299.59	110.00
19.900	3690.00	583.60	.67	1.30	2.52	333.23	110.00
19.900	4470.00	584.95	1.34	1.20	.80	360.00	110.00
20.010	2210.00	581.43	.00	.34	.00	619.19	110.00
20.010	3290.00	583.31	1.87	.38	.00	781.91	110.00
20.010	3690.00	583.97	.66	.36	2.53	870.21	110.00
20.010	4470.00	585.26	1.30	.32	.00	957.26	110.00
20.060	2210.00	581.33	.00	-.10	.00	339.26	50.00
20.060	3290.00	583.30	1.97	-.01	.00	499.03	50.00
20.060	3690.00	583.96	.66	-.01	2.63	549.60	50.00
20.060	4470.00	585.26	1.30	-.00	.00	660.22	50.00
20.061	2210.00	581.58	.00	.25	.00	375.97	1.00
20.061	3290.00	583.33	1.75	.03	.00	502.39	1.00
20.061	3690.00	583.97	.64	.02	2.39	550.20	1.00
20.061	4470.00	585.26	1.29	.00	.00	668.24	1.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
20.079	2210.00	581.66	.00	.08	.00	386.07	18.00
20.079	3290.00	583.34	1.68	.01	.00	503.15	18.00
20.079	3690.00	583.98	.64	.01	2.33	551.36	18.00
20.079	4470.00	585.27	1.28	.00	.00	669.11	18.00
20.080	2210.00	581.62	.00	-.04	.00	380.97	1.00
20.080	3290.00	583.33	1.72	-.01	.00	503.04	1.00
20.080	3690.00	583.98	.65	-.01	2.36	551.60	1.00
20.080	4470.00	585.26	1.29	-.00	.00	669.25	1.00
20.130	2210.00	581.98	.00	.37	.00	485.46	50.00
20.130	3290.00	583.39	1.41	.06	.00	498.76	50.00
20.130	3690.00	584.00	.61	.02	2.02	504.53	50.00
20.130	4470.00	585.27	1.27	.00	.00	674.46	50.00
20.770	2210.00	582.35	.00	.37	.00	625.75	640.00
20.770	3290.00	583.76	1.40	.37	.00	654.55	640.00
20.770	3690.00	584.34	.59	.34	1.99	665.51	640.00
20.770	4470.00	585.56	1.21	.29	.00	688.20	640.00
21.910	2210.00	582.79	.00	.44	.00	250.00	1140.00
21.910	3290.00	584.18	1.38	.42	.00	250.00	1140.00
21.910	3690.00	584.73	.55	.38	1.93	250.00	1140.00
21.910	4470.00	585.86	1.14	.30	.00	250.00	1140.00
22.120	2210.00	583.01	.00	.21	.00	110.00	210.00
22.120	3290.00	584.32	1.32	.15	.00	110.00	210.00
22.120	3690.00	584.83	.51	.11	1.83	110.00	210.00
22.120	4470.00	585.88	1.04	.02	.00	110.00	210.00
22.170	2210.00	583.32	.00	.31	.00	75.00	50.00
22.170	3290.00	584.78	1.47	.46	.00	75.00	50.00
22.170	3690.00	585.34	.55	.50	2.02	75.47	50.00
22.170	4470.00	586.45	1.11	.57	.00	76.65	50.00
22.190	2210.00	583.34	.00	.02	.00	75.00	20.00
22.190	3290.00	585.05	1.71	.26	.00	75.00	20.00
22.190	3690.00	585.71	.66	.37	2.37	75.00	20.00
22.190	4470.00	587.08	1.37	.63	.00	75.00	20.00
22.270	2210.00	583.38	.00	.04	.00	101.00	80.00
22.270	3290.00	585.13	1.75	.09	.00	101.00	80.00
22.270	3690.00	585.81	.67	.10	2.43	101.00	80.00
22.270	4470.00	587.29	1.49	.22	.00	771.24	80.00
22.300	2210.00	583.39	.00	.01	.00	101.00	30.00
22.300	3290.00	585.15	1.76	.02	.00	101.00	30.00
22.300	3690.00	586.04	.88	.23	2.64	101.00	30.00
22.300	4470.00	587.75	1.71	.46	.00	915.64	30.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
22.350	2210.00	583.40	.00	.00	.00	230.00	50.00
22.350	3290.00	585.21	1.81	.05	.00	230.00	50.00
22.350	3690.00	586.11	.91	.08	2.72	230.00	50.00
22.350	4470.00	587.75	1.64	.01	.00	230.00	50.00
23.210	2210.00	584.20	.00	.81	.00	468.17	860.00
23.210	3290.00	585.89	1.68	.68	.00	779.14	860.00
23.210	3690.00	586.69	.81	.58	2.49	753.05	860.00
23.210	4470.00	588.17	1.48	.42	.00	1308.49	860.00
23.930	2210.00	584.81	.00	.61	.00	305.00	720.00
23.930	3290.00	586.33	1.52	.45	.00	305.00	720.00
23.930	3690.00	587.06	.73	.37	2.25	305.00	720.00
23.930	4470.00	588.33	1.27	.16	.00	305.00	720.00
24.160	2210.00	584.96	.00	.15	.00	150.00	230.00
24.160	3290.00	586.43	1.47	.10	.00	150.00	230.00
24.160	3690.00	587.12	.69	.06	2.16	150.00	230.00
24.160	4470.00	588.34	1.22	.01	.00	150.00	230.00
24.210	2210.00	585.23	.00	.27	.00	115.00	50.00
24.210	3290.00	586.79	1.56	.36	.00	115.00	50.00
24.210	3690.00	587.49	.70	.37	2.26	115.00	50.00
24.210	4470.00	588.73	1.24	.39	.00	115.00	50.00
24.260	2210.00	585.24	.00	.00	.00	115.00	55.00
24.260	3290.00	586.80	1.56	.01	.00	115.00	55.00
24.260	3690.00	587.64	.85	.15	2.41	115.00	55.00
24.260	4470.00	589.01	1.37	.29	.00	115.00	55.00
24.280	2210.00	585.24	.00	.00	.00	115.00	20.00
24.280	3290.00	586.80	1.56	.01	.00	115.00	20.00
24.280	3690.00	587.65	.85	.01	2.41	115.00	20.00
24.280	4470.00	589.02	1.37	.01	.00	115.00	20.00
24.340	2210.00	585.24	.00	.00	.00	115.00	55.00
24.340	3290.00	586.81	1.56	.01	.00	115.00	55.00
24.340	3690.00	587.81	1.00	.16	2.56	115.00	55.00
24.340	4470.00	589.31	1.50	.30	.00	115.00	55.00
24.390	2210.00	585.22	.00	-.02	.00	215.00	50.00
24.390	3290.00	586.81	1.59	.00	.00	215.00	50.00
24.390	3690.00	587.82	1.01	.02	2.60	215.00	50.00
24.390	4470.00	589.36	1.54	.05	.00	215.00	50.00
24.690	2210.00	585.52	.00	.30	.00	535.61	310.00
24.690	3290.00	587.10	1.58	.28	.00	567.93	310.00
24.690	3690.00	588.06	.96	.24	2.54	591.49	310.00
24.690	4470.00	589.57	1.51	.20	.00	691.11	310.00

SUMMARY OF ERRORS

CAUTION SECNO= 19.619 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

FLOOD INSURANCE ZONE DATA FOR BERLIN, SWAN CREEK

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
5.000	0.	.00	.00	.00
7.570	2570.	-.61	-.16	.31
9.730	4730.	-.80	-.20	.36
11.740	6740.	-.91	-.22	.41
13.550	8550.	-1.03	-.25	.46
14.400	9405.	-1.07	-.26	.46
14.460	9455.	-1.03	-.25	.44
14.461	9456.	-1.02	-.24	.43
14.499	9499.	-1.08	-.26	.46
14.500	9500.	-1.11	-.27	.48
14.550	9550.	-1.29	-.32	.59
15.840	10840.	-1.47	-.36	.65
17.260	12260.	-1.39	-.34	.59
18.650	13650.	-1.22	-.31	.54
19.540	14545.	-1.07	-.25	.37
19.600	14595.	-.74	-.13	.06
19.601	14596.	-.75	-.14	.07
19.619	14624.	-1.33	-.42	1.29
19.620	14625.	-1.34	-.43	1.29
19.670	14675.	-1.51	-.50	1.35
19.720	14725.	-2.15	-.62	1.33
19.722	14727.	-2.16	-.62	1.33
19.738	14743.	-2.17	-.62	1.32
19.740	14745.	-2.17	-.62	1.32
19.790	14795.	-2.27	-.65	1.45
19.900	14905.	-2.52	-.67	1.34
20.010	15015.	-2.53	-.66	1.30
20.060	15065.	-2.63	-.66	1.30
20.061	15066.	-2.39	-.64	1.29
20.079	15084.	-2.33	-.64	1.28
20.080	15085.	-2.36	-.65	1.29
20.130	15135.	-2.02	-.61	1.27
20.770	15775.	-1.99	-.59	1.21
21.910	16915.	-1.93	-.55	1.14
22.120	17125.	-1.83	-.51	1.04
22.170	17175.	-2.02	-.55	1.11
22.190	17195.	-2.37	-.66	1.37
22.270	17275.	-2.43	-.67	1.49
22.300	17305.	-2.64	-.88	1.71
22.350	17355.	-2.72	-.91	1.64
23.210	18215.	-2.49	-.81	1.48
23.930	18935.	-2.25	-.73	1.27
24.160	19165.	-2.16	-.69	1.22
24.210	19215.	-2.26	-.70	1.24

24.260	19270.	-2.41	-.85	1.37
24.280	19290.	-2.41	-.85	1.37
24.340	19345.	-2.56	-1.00	1.50
24.390	19395.	-2.60	-1.01	1.54
24.690	19705.	-2.54	-.96	1.51
WEIGHTED AVG FOR REACH		-1.27	-.35	.65

FHF FOR THE REACH = 015 WITH 50.5 PERCENT OF THE REACH WITHIN .5 FEET
ZONE FOR THE REACH = A 3

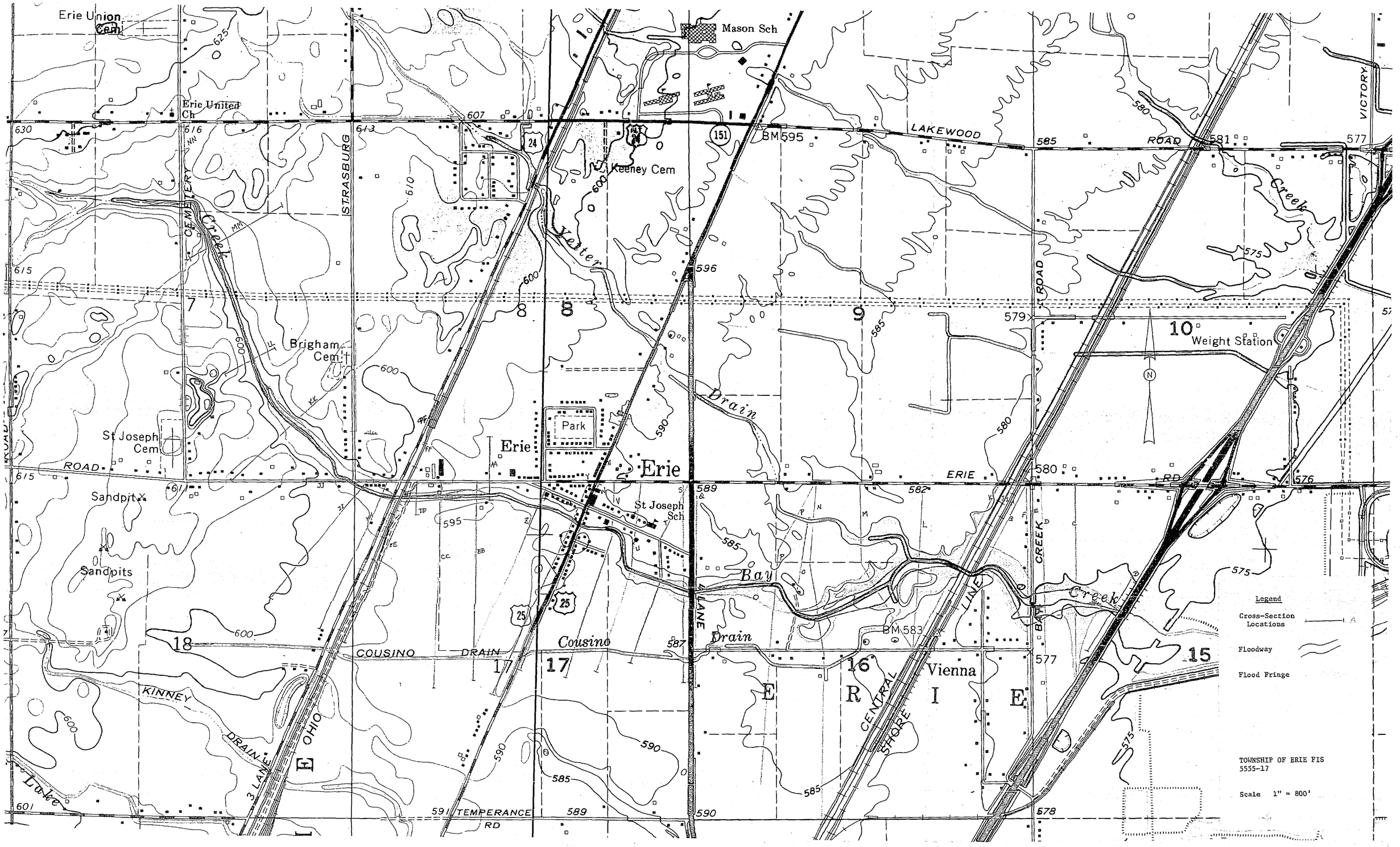
CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

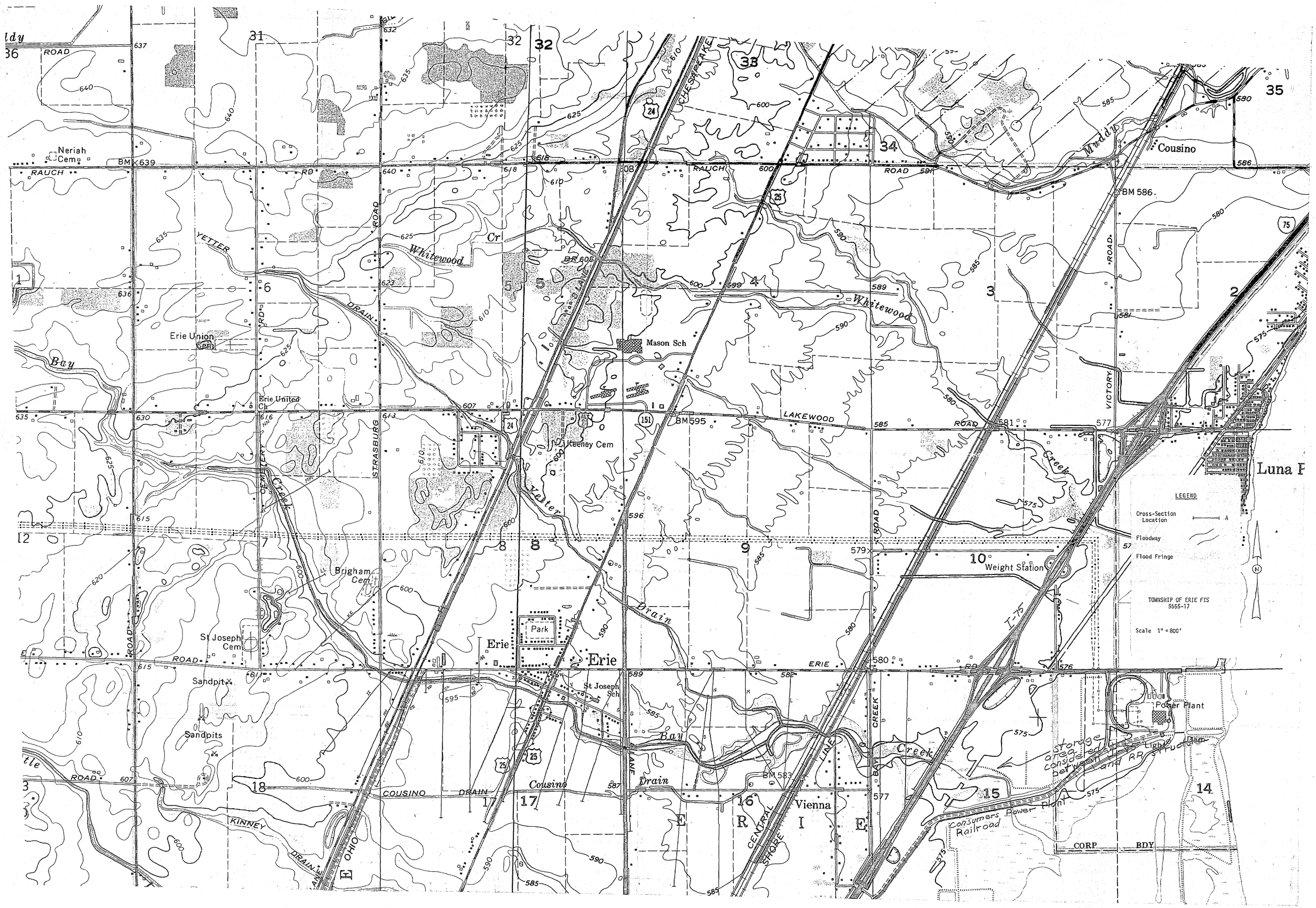
INC NO.	TOTAL LENGTH	WEIGHTED AVG DIFFERENCE BETWEEN BASE FLOOD AND 10	1	0.2
151	15100.	-.97	-.24	.44

FHF FOR REACH 1 = 010 WITH 05. PERCENT OF THE REACH WITHIN .5 FEET
ZONE FOR THE REACH = A 2

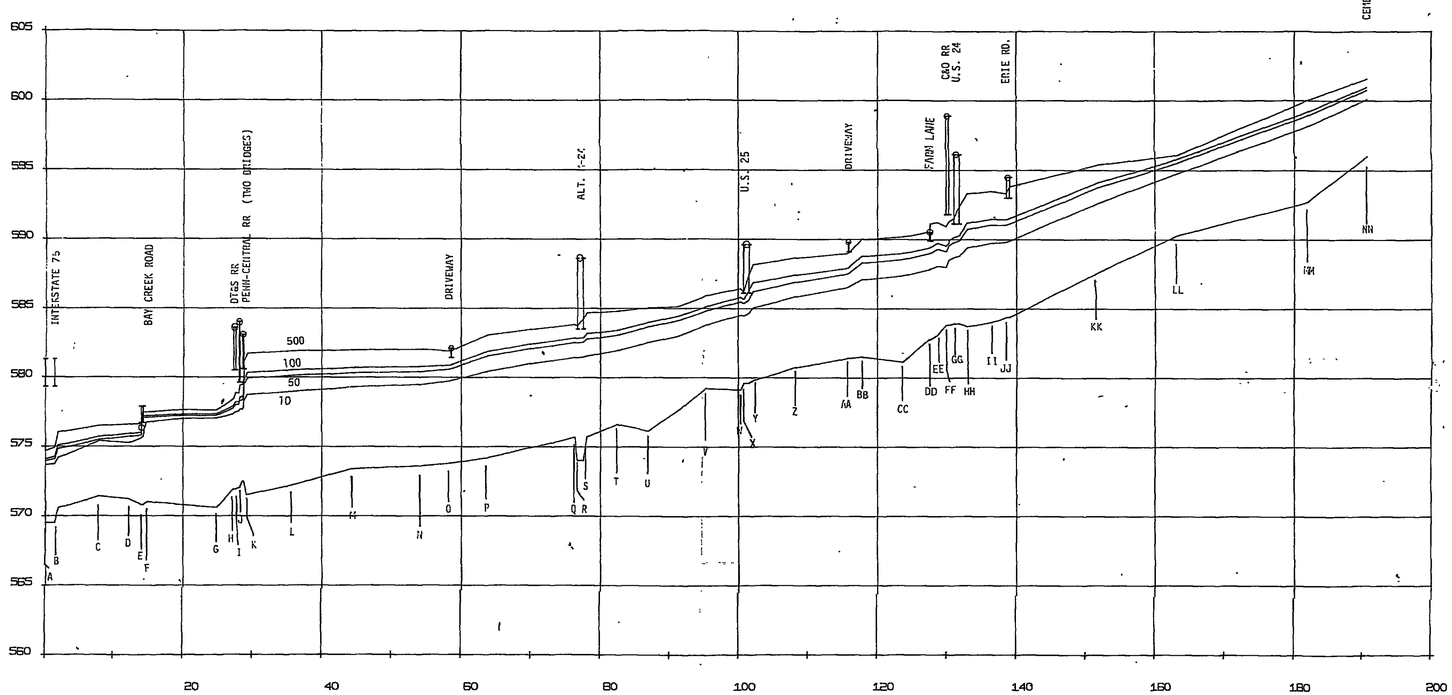
197	19700.	-2.25	-.71	1.34

FHF FOR REACH 2 = 025 WITH 100. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 5


Erie Union Cem
Erie United Ch
Mason Sch
Keeney Cem
BM 595
LAKEWOOD ROAD
VICTORY
STRASBURG
CEMETERY
Creek
Later
Drain
Brigham Cem
St Joseph Cem
Park
Erie
Weight Station
ERIE RD
Sandpit
Sandpits
St Joseph Sch
Bay
Creek
BM 583
Cousino
Drain
COUSINO DRAIN
KINNEY DRAIN
3 LANE
OHIO
Lake
TEMPERANCE RD
CENTRAL SHORE LINE
Vienna
E R I E
Legend
Cross-Section Locations
Floodway
Flood Fringe
TOWNSHIP OF ERIE FIS 5555-17
Scale 1" = 800'



LEGEND
Cross-Section Location
Floodway
Flood Fringe
TOWNSHIP OF ERIE FIS 5555-17
Scale 1" = 800'
Neriah Cem
RAUCH RD
YETTER DRAIN
Whitewood Cr
Erie Union Cem
Bay
Erie United Ch
Mason Sch
Keeney Cem
LAKEWOOD ROAD
Cousino
Muddy
VICTORY ROAD
Luna P
Weight Station
Brigham Cem
St Joseph Cem
Sandpit
Sandpits
Park
Erie
St Joseph Sch
ERIE RD
Power Plant
Light
Dam
storage area considered between Land RR structure
Consumers Power Plant Railroad
Vienna
COUSINO DRAIN
KINNEY DRAIN
OHIO
CENTRAL SHORE LINE
BAY CREEK
CHESAPEAKE
I-75
CORP BDY



NOTE: LAKE ERIE LAKE LEVELS WILL BE EXTENDED IN FINAL FLOOD INSURANCE REPORT.

O— WEIR FLOW BEGINS

Job No.
Contr. No.
Cont. Trk No.
Type of Job No.
Sheet No. or Sheet No. of Sheets
As Built Section
City No. in County
Twp. No. in County
Village No. in County
County No. in State
State
Construction Contract
Job Code No.

DRAWN:
DESIGN:
CHECKED:
FINAL:
DATE COMPLETED:
PRELIMINARY:

SCALE: VERT. 1" = 5'
HORIZ. 1" = 1000'

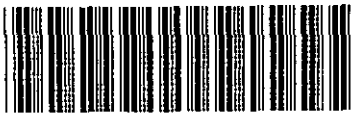
REVISIONS	MARK	BULLETIN	DATE	MARK	BULLETIN	DATE	MARK	BULLETIN	DATE

JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS
PONTIAC, MICHIGAN

TOWNSHIP OF ERIE, MI, FIS

BAY CREEK

JOB NO. 5555-17-1
DATE ISSUED
SHEET NO. 1 OF 1



1) COUNTY: Monroe

2) STUDY NAME: Erie Twp.

3) WATERCOURSE: Bay Creek

4) DOCUMENT TYPE: 10yr. Encroached

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$$$$$$$$  $$$$$$$   $$$$$$$$  $$$$$$$$   $$$$$ $  $      $$  $$$$$$$
$$        $$    $$     $$        $$     $$     $   $$     $$  $$     $$
$$        $$    $$     $$        $$     $$   $$$   $$$    $$  $$     $$
$$$$$     $$    $$     $$        $$     $$  $ $$   $$$$   $$  $$     $$
$$        $$    $$     $$        $$     $$ $$ $$   $$ $$  $$  $$     $$
$$        $$$$$$$      $$        $$     $$ $  $$   $$  $$$$  $$$$$$$
$$        $$   $$      $$        $$     $$$    $$   $$   $$$  $$
$$        $$    $$     $$        $$      $     $$   $$     $$  $$
$$$$$$$$  $$     $$  $$$$$$$$   $$$$     $ $$$$$   $$     $$  $$
ERIJONP  JANDA              03/23/77  17.05.23  7600    JO
```

Twp of Erie

Bay Creek

10, 50, 100 & 500 Yr encroached vans

S C O P E 2 L O A D M A P

LOADER VERSION 1.0 03/23/77 17.05.24 PAGE 1

PROGRAM WILL BE ENTERED AT HEC2 (373)

SCM LENGTH 146657 LCM LENGTH 0

BLOCK	ADDRESS	LENGTH
/ALPHA/	100	101
HEC2	201	11606
CARD	12007	1673
SUMPO	13702	1063
CHIMP	14765	1645
DC	16632	703
FLODIS	17535	444
BLFLO	20201	1003
ADDPTS	21204	334
BWEIR	21540	1356
YCRIT	23116	122
SLARA	23240	256
SCALE	23516	246
XSEC	23764	1264
PROF	25250	1142
EXP	26412	102
/FCL.C./	26514	23
/Q8.IO./	26537	137
/HEADING/	26676	16
OUTC=	26714	1017
Q8NTRY=	27733	1
COMIO=	27734	44
ENDFIL=	30000	45
FECMSK=	30045	41
FLTIN=	30106	154
FLTOUT=	30262	314
FMTAP=	30576	372
FORSYS=	31170	556
FORUTL=	31746	16
GETFIT=	31764	43
INCOM=	32027	257
INPC=	32306	173
KODER=	32501	467
KRAKER=	33170	454
OUTCOM=	33644	203
REWIND=	34047	35
GOTOER=	34104	14
ALOG	34120	77
ITOJ*	34217	52
SYSAID=	34271	1
SYS=1ST	34272	62
XTOY*	34354	55
//	34431	112226

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*****************************************
HEC2 VERSION UPDATED JAN 1976
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
MODIFICATIONS 52,53,54,55,56,57,58
*****************************************
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C
1      TOWNSHIP OF ERIE,  5555-17-01     PM: RICHARD ZANOTTI
T2      10-YEAR FLOOD
T3      BAY CREEK

J1  ICHECK    INQ      NINV     IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

     -0.        2.       -0.       -0. -0.000000     -0.00      -0.0       -0.   573.670    -0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1.000    -0.000    -1.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000

J3      1.000     10.000     11.000     12.000     14.000      8.000      4.000     -0.000     -0.000     -0.000
NC       .030       .030       .030       .300       .500     -0.000     -0.000     -0.000     -0.000     -0.000
QT      4.000    635.000    895.000    985.000   1300.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1      0.000     11.000      0.000     35.000     -0.000     -0.000     -0.000       .980     -0.000     -0.000
GR    581.300      0.000    572.100      0.000    569.700      5.000    570.200     10.000    569.900     14.000
GR    569.900     18.000    570.100     22.000    569.500     26.000    569.700     30.000    570.900     35.000
GR    581.300     35.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000
NC       .030       .030       .012     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1      1.000     11.000      0.000     35.000      1.000      1.000      1.000       .980     -0.000     -0.000
X2     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000       .980     -0.000
BT      4.000      0.000    581.300    579.300      0.000    584.300    579.300     35.000    584.300    579.300
BT     35.000    581.300    579.300     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000
GR    581.300      0.000    572.100      0.000    569.700      5.000    570.200     10.000    569.900     14.000
GR    569.900     18.000    570.100     22.000    569.500     26.000    569.700     30.000    570.900     35.000
GR    581.300     35.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1    141.000     -0.000     -0.000     -0.000    140.000    140.000    140.000     -0.000     -0.000     -0.000
X2     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000      1.000     -0.000     -0.000     -0.000

X1    142.000     -0.000     -0.000     -0.000      1.000      1.000      1.000     -0.000     -0.000     -0.000
NC       .050       .050       .030     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000
NH      5.000       .055    600.000       .050    651.000       .075    700.000       .050    800.000       .055
NH   1350.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1    192.000     24.000    600.000    651.000     50.000     50.000     50.000       .980     -0.000     -0.000
X3     -0.000     -0.000     -0.000    575.000     -0.000    651.000     -0.000     -0.000     -0.000     -0.000
GR    574.500      0.000    574.900    100.000    574.300    200.000    574.200    225.000    572.500    300.000
GR    573.100    400.000    572.500    500.000    570.800    595.000    574.700    600.000    570.700    603.000
GR    570.700    610.000    570.600    620.000    571.300    630.000    571.300    640.000    573.500    650.000
GR    575.300    651.000    575.300    700.000    576.000    800.000    576.100    900.000    575.800   1000.000
GR    575.400   1100.000    576.000   1200.000    575.700   1300.000    576.100   1350.000     -0.000     -0.000
NH      5.000       .055   1668.000       .050   1880.000       .045   1928.000       .080   1974.000       .055
NH   3102.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1    772.000     37.000   1880.000   1928.000    720.000    460.000    580.000     -0.000     -0.000     -0.000
X3     -0.000     -0.000     -0.000   1628.000     -0.000   1928.000     -0.000     -0.000     -0.000     -0.000
GR    578.800      0.000    579.400     13.000    576.600     21.000    577.900     30.000    577.400    150.000
GR    578.100    339.000    578.100    551.000    577.400    756.000    576.900    935.000    576.600   1143.000
GR    575.50    1199[illegible]0    576.600   12[illegible]6.00    57[illegible]0   144[illegible].00    575.4[illegible]   1553.00    574.30    1628.00
```

GR	574.100	1668.000	572.700	1728.000	572.800	1828.000	574.000	1870.000	575.30	1 00.
GR	574.000	1883.000	571.600	1888.000	571.500	1898.000	571.500	1908.000	571.400	1918.000
GR	573.400	1924.000	575.900	1928.000	573.300	1974.000	575.100	2088.000	574.400	2275.000
GR	574.300	2488.000	575.100	2652.000	575.000	2825.000	574.900	2971.000	572.800	2999.000
GR	575.900	3045.000	582.500	3102.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.055	1692.000	.060	1933.000	.030	1969.000	.060	2111.000	.055
NH	3922.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1232.000	59.000	1933.000	1969.000	440.000	440.000	460.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1690.000	-0.000	2100.000	-0.000	-0.000	-0.000	-0.000
GR	580.900	0.000	580.100	16.000	578.500	23.000	579.600	53.000	580.800	139.000
GR	579.300	198.000	580.000	261.000	578.300	339.000	578.300	503.000	579.000	669.000
GR	579.200	893.000	578.700	1170.000	578.000	1367.000	577.200	1510.000	575.700	1606.000
GR	574.100	1692.000	574.900	1933.000	573.600	1935.000	573.300	1938.000	572.700	1943.000
GR	571.700	1948.000	571.400	1953.000	571.200	1958.000	571.500	1963.000	572.500	1968.000
GR	574.600	1969.000	574.800	1986.000	573.700	1997.000	573.700	2056.000	574.300	2076.000
GR	574.400	2111.000	575.500	2216.000	577.500	2300.000	577.700	2409.000	577.600	2519.000
GR	577.600	2539.000	577.600	2591.000	577.700	2629.000	576.300	2702.000	577.200	2770.000
GR	577.100	2867.000	575.700	2999.000	577.100	3087.000	578.400	3151.000	578.700	3205.000
GR	578.600	3246.000	577.400	3283.000	577.500	3391.000	578.100	3456.000	577.800	3529.000
GR	578.300	3586.000	578.400	3646.000	577.200	3669.000	579.300	3747.000	575.100	3790.000
GR	576.600	3816.000	582.000	3864.000	584.600	3898.000	585.800	3922.000	-0.000	-0.000
NH	5.000	.055	1844.000	.080	1949.000	.030	1996.000	.075	2366.000	.055
NH	4052.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1402.000	18.000	1949.000	1996.000	170.000	170.000	170.000	-0.000	-.200	-0.000
X3	-0.000	-0.000	-0.000	1650.000	-0.000	2093.000	-0.000	-0.000	-0.000	-0.000
GR	578.300	1410.000	577.400	1459.000	576.800	1562.000	575.800	1701.000	574.700	1844.000
GR	574.700	1949.000	573.600	1956.000	572.900	1959.000	571.200	1969.000	571.000	1976.000
GR	572.200	1979.000	573.400	1982.000	575.100	1996.000	574.300	2100.000	576.600	2182.000
GR	577.200	2366.000	578.200	2396.000	581.100	4052.000	-0.000	-0.000	-0.000	-0.000
NC	.045	.045	.016	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1403.000	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1650.000	-0.000	2093.000	-0.000	-0.000	-0.000	-0.000
S8	.900	1.450	2.900	-0.000	18.230	.010	127.600	-0.000	570.800	570.800
X1	1427.000	31.000	1500.000	1520.000	24.000	24.000	24.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	577.900	576.700	-0.000	-0.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1307.000	-0.000	1800.000	-0.000	-0.000	-0.000	-0.000
BT	14.000	0.000	579.400	0.000	200.000	579.300	0.000	400.000	579.300	0.000
BT	600.000	579.600	0.000	800.000	578.700	0.000	1000.000	577.800	0.000	1200.000
BT	577.000	0.000	1300.000	577.100	0.000	1410.000	577.600	0.000	1500.000	579.400
BT	577.800	1520.000	579.500	577.900	1600.000	577.500	0.000	1640.000	577.000	0.000
BT	1800.000	576.700	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	579.400	0.000	579.300	200.000	579.300	400.000	579.600	600.000	578.700	800.000
GR	577.800	1000.000	577.000	1200.000	577.100	1300.000	575.600	1410.000	574.400	1500.000
GR	572.300	1500.000	571.700	1502.000	571.700	1505.000	571.300	1510.000	570.800	1515.000
GR	571.000	1517.000	571.000	1519.000	574.700	1519.000	574.700	1520.000	574.800	1521.000
GR	575.500	1600.000	575.800	1640.000	576.700	1800.000	577.100	1935.000	577.400	2000.000
GR	578.600	2184.000	578.600	2200.000	578.600	2400.000	578.700	2600.000	579.800	2800.000
GR	580.300	3000.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.055	1844.000	.080	1949.000	.030	1996.000	.075	2366.000	.055
NH	4052.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1428.000	18.000	1959.000	1979.000	1.000	1.000	1.000	-0.000	-.200	-0.000
X3	-0.000	-0.000	-0.000	1768.000	-0.000	2260.000	-0.000	-0.000	-0.000	-0.000
GR	578.300	1410.000	577.400	1459.000	576.800	1562.000	575.800	1701.000	574.700	1844.000
GR	574.700	1949.000	573.600	1956.000	572.900	1959.000	571.200	1969.000	571.000	1976.000
GR	572.200	1979.000	573.400	1982.000	575.100	1996.000	574.300	2100.000	576.600	2182.000
GR	577.200	2366.000	578.200	2396.000	581.100	4052.000	-0.000	-0.000	-0.000	-0.000
X1	1478.000	69.000	1949.000	1996.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1795.000	-0.000	2245.000	-0.000	-0.000	-0.000	-0.000
GR	582.100	0.000	581.500	14.000	579.400	26.000	580.300	43.000	580.300	88.000
GR	579.60	114.00	57	154.0	580	252.000	582.1	292.0	582.60	32.000

GR	579.700	363.000	580.300	473.000	580.300	583.000	582.800	679.0	581.000	680.000
GR	579.900	692.000	580.500	722.000	581.000	754.000	579.900	789.000	580.200	830.000
GR	580.300	898.000	580.900	993.000	579.800	1022.000	579.200	1045.000	578.700	1190.000
GR	578.800	1269.000	579.200	1330.000	578.900	1374.000	578.300	1410.000	577.400	1459.000
GR	576.800	1562.000	575.800	1701.000	574.700	1844.000	574.700	1949.000	573.600	1956.000
GR	572.900	1959.000	571.200	1969.000	571.000	1976.000	573.400	1982.000	575.100	1996.000
GR	574.300	2100.000	576.600	2182.000	577.200	2366.000	578.200	2396.000	578.200	2409.000
GR	578.500	2425.000	578.500	2461.000	578.100	2496.000	578.300	2520.000	578.500	2534.000
GR	579.000	2568.000	578.100	2619.000	578.000	2651.000	577.400	2751.000	578.300	2782.000
GR	577.700	2868.000	578.100	3019.000	577.700	3119.000	578.500	3226.000	578.800	3400.000
GR	579.300	3468.000	578.700	3518.000	578.800	3551.000	579.200	3609.000	579.100	3741.000
GR	579.500	3950.000	576.600	3978.000	580.600	4022.000	581.100	4052.000	-0.000	-0.000
X1	1978.000	-0.000	-0.000	-0.000	260.000	750.000	500.000	-0.000	-.200	-0.000
X3	-0.000	-0.000	-0.000	1823.000	-0.000	2073.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.055	1466.000	.100	1511.000	.030	1546.000	.045	1658.000	.070
NH	4132.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2478.000	54.000	1511.000	1546.000	425.000	490.000	500.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1511.000	-0.000	1543.000	-0.000	-0.000	-0.000	-0.000
GR	582.100	0.000	581.900	15.000	579.500	31.000	578.500	107.000	579.200	247.000
GR	579.200	275.000	578.400	410.000	578.500	580.000	578.400	754.000	578.900	839.000
GR	583.100	854.000	579.300	880.000	578.600	1020.000	575.300	1109.000	575.900	1220.000
GR	576.200	1385.000	576.600	1466.000	576.900	1511.000	573.600	1512.000	571.100	1516.000
GR	570.600	1521.000	571.600	1526.000	573.600	1533.000	578.500	1546.000	577.500	1589.000
GR	579.700	1658.000	580.300	1700.000	580.500	1792.000	580.300	1846.000	580.100	1901.000
GR	579.500	1971.000	579.000	2013.000	578.400	2100.000	577.800	2136.000	577.600	2162.000
GR	577.800	2188.000	578.400	2272.000	578.500	2306.000	579.900	2409.000	579.600	2439.000
GR	579.500	2498.000	579.000	2539.000	579.500	2640.000	579.500	2684.000	579.000	2797.000
GR	579.000	2882.000	579.800	2950.000	581.000	3066.000	580.400	3206.000	579.200	3404.000
GR	578.800	3590.000	578.300	3762.000	578.200	3979.000	579.200	4132.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2708.000	21.000	1533.000	1559.000	150.000	225.000	230.000	-0.000	.400	-0.000
X3	-0.000	-0.000	-0.000	1533.000	-0.000	1559.000	-0.000	-0.000	-0.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.400	1559.000	576.800	1560.000	575.500	1679.000	577.000	1737.000
GR	580.000	1836.000	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000
GR	583.700	2974.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.030	.030	.012	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2709.000	33.000	1500.000	1526.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1526.000	-0.000	-0.000	-0.000	-0.000
BT	23.000	0.000	583.600	0.000	200.000	583.700	0.000	400.000	584.000	0.000
BT	600.000	584.200	0.000	800.000	584.300	0.000	1000.000	584.600	0.000	1200.000
BT	584.800	0.000	1400.000	585.200	0.000	1500.000	585.300	580.500	1511.000	585.300
BT	580.500	1511.000	585.300	574.100	1514.000	585.300	574.100	1514.000	585.300	580.500
BT	1526.000	585.300	580.500	1600.000	585.400	0.000	1800.000	585.500	0.000	2000.000
BT	585.700	0.000	2200.000	585.800	0.000	2400.000	585.700	0.000	2600.000	585.800
BT	0.000	2800.000	585.900	0.000	2825.000	586.000	0.000	3000.000	586.100	0.000
GR	583.600	0.000	583.700	200.000	584.000	400.000	584.200	600.000	584.300	800.000
GR	584.600	1000.000	584.800	1200.000	585.200	1400.000	585.300	1500.000	574.100	1500.000
GR	574.100	1500.500	572.100	1500.500	572.100	1501.500	571.900	1505.000	572.000	1510.500
GR	574.100	1510.500	574.100	1511.000	574.100	1514.000	574.100	1514.500	572.800	1514.500
GR	572.800	1525.500	574.100	1525.500	574.100	1526.000	585.300	1526.000	585.400	1600.000
GR	585.500	1800.000	585.700	2000.000	585.800	2200.000	585.700	2400.000	585.800	2600.000
GR	585.900	2800.000	586.000	2825.000	586.100	3000.000	-0.000	-0.000	-0.000	-0.000
X1	2742.000	-0.000	-0.000	-0.000	32.500	32.500	32.500	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1526.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2743.000	21.000	1533.000	1559.000	1.000	1.000	1.000	-0.000	.400	-0.000
X3	-0.000	-0.000	-0.000	1533.000	-0.000	1559.000	-0.000	-0.000	-0.000	-0.000

GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.400	1559.000	576.800	1560.000	575.500	1679.000	577.000	1737.000
GR	580.000	1836.000	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000
GR	583.700	2974.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2793.000	20.000	1533.000	1553.000	50.000	50.000	50.000	-0.000	.500	-0.000
X3	-0.000	-0.000	-0.000	1533.000	-0.000	1553.000	-0.000	-0.000	-0.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000	580.000	1836.000
GR	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000	583.700	2974.000
NC	.040	.040	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2794.000	25.000	1500.000	1520.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1520.000	-0.000	-0.000	-0.000	-0.000
BT	19.000	0.000	584.000	0.000	200.000	584.000	0.000	400.000	584.100	0.000
BT	600.000	584.300	0.000	800.000	584.400	0.000	1000.000	584.600	0.000	1200.000
BT	584.700	0.000	1400.000	584.900	0.000	1500.000	585.100	579.500	1520.000	585.100
BT	579.600	1600.000	585.300	0.000	1800.000	585.700	0.000	2000.000	586.000	0.000
BT	2200.000	586.200	0.000	2400.000	586.300	0.000	2600.000	586.400	0.000	2800.000
BT	586.600	0.000	2875.000	586.800	0.000	3000.000	586.700	0.000	-0.000	-0.000
GR	584.000	0.000	584.000	200.000	584.100	400.000	584.300	600.000	584.400	800.000
GR	584.600	1000.000	584.700	1200.000	584.900	1400.000	585.100	1500.000	575.300	1500.000
GR	574.100	1504.000	573.600	1505.000	572.200	1510.000	572.300	1515.000	572.000	1520.000
GR	585.100	1520.000	585.300	1600.000	585.700	1800.000	586.000	2000.000	586.200	2200.000
GR	586.300	2400.000	586.400	2600.000	586.600	2800.000	586.800	2875.000	586.700	3000.000
X1	2809.000	-0.000	-0.000	-0.000	15.000	15.000	15.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1520.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2810.000	20.000	1533.000	1553.000	1.000	1.000	1.000	-0.000	.500	-0.000
X3	-0.000	-0.000	-0.000	1533.000	-0.000	1553.000	-0.000	-0.000	-0.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000	580.000	1836.000
GR	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000	583.700	2974.000
X1	2850.000	-0.000	-0.000	-0.000	40.000	40.000	40.000	-0.000	.500	-0.000
X3	-0.000	-0.000	-0.000	1533.000	-0.000	1553.000	-0.000	-0.000	-0.000	-0.000
NC	.040	.040	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2851.000	24.000	1500.000	1520.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1520.000	-0.000	-0.000	-0.000	-0.000
BT	19.000	0.000	583.100	0.000	200.000	583.300	0.000	400.000	583.400	0.000
BT	600.000	583.500	0.000	800.000	583.700	0.000	1000.000	583.900	0.000	1200.000
BT	584.100	0.000	1400.000	584.300	0.000	1500.000	584.500	580.600	1520.000	584.500
BT	580.600	1600.000	584.600	0.000	1800.000	584.900	0.000	2000.000	585.100	0.000
BT	2200.000	585.300	0.000	2400.000	585.400	0.000	2600.000	585.600	0.000	2800.000
BT	585.700	0.000	2915.000	585.800	0.000	3000.000	585.800	0.000	-0.000	-0.000
GR	583.100	0.000	583.300	200.000	583.400	400.000	583.500	600.000	583.700	800.000
GR	583.900	1000.000	584.100	1200.000	584.300	1400.000	584.500	1500.000	573.100	1500.000
GR	572.700	1505.000	572.500	1510.000	573.000	1515.000	574.300	1520.000	584.500	1520.000
GR	584.600	1600.000	584.900	1800.000	585.100	2000.000	585.300	2200.000	585.400	2400.000
GR	585.600	2600.000	585.700	2800.000	585.800	2915.000	585.800	3000.000	-0.000	-0.000
X1	2865.000	-0.000	-0.000	-0.000	14.000	14.000	14.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1520.000	-0.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2866.000	20.000	1533.000	1553.000	1.000	1.000	1.000	-0.000	1.000	-0.000
X3	-0.000	-0.000	-0.000	1533.000	-0.000	1553.000	-0.000	-0.000	-0.000	-0.000
GR	579.0	652.00	57[illegible]	[illegible]	[illegible]	1043.000	578.30	1175.00	577.200	1253.00

GR	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000	580.000	1836.000
GR	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000	583.700	2974.000
X1	2870.000	-0.000	-0.000	-0.000	4.000	4.000	4.000	-0.000	-.080	-0.000
X3	-0.000	-0.000	-0.000	1529.000	-0.000	1557.000	-0.000	-0.000	-0.000	-0.000
X1	2874.000	-0.000	-0.000	-0.000	4.000	4.000	4.000	-0.000	-.080	-0.000
X3	-0.000	-0.000	-0.000	1525.000	-0.000	1553.000	-0.000	-0.000	-0.000	-0.000
X1	2916.000	31.000	1527.000	1560.000	42.000	42.000	42.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1480.000	-0.000	1560.000	-0.000	-0.000	-0.000	-0.000
GR	582.000	0.000	581.800	15.000	577.700	28.000	580.000	35.000	579.400	177.000
GR	579.800	391.000	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000
GR	577.200	1253.000	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000
GR	572.400	1547.000	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000
GR	580.000	1836.000	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000
GR	582.000	2548.000	581.700	2657.000	581.800	2787.000	581.000	2948.000	583.600	2961.000
GR	583.700	2974.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.055	1224.000	.030	1258.000	.080	1311.000	.055	2631.000	-0.000
X1	3536.000	36.000	1224.000	1258.000	675.000	500.000	620.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1200.000	-0.000	1382.000	-0.000	-0.000	-0.000	-0.000
GR	583.000	0.000	583.400	14.000	581.700	26.000	583.300	66.000	583.100	116.000
GR	581.900	146.000	582.100	221.000	584.000	326.000	583.700	505.000	582.100	708.000
GR	583.300	808.000	583.600	952.000	582.400	1037.000	580.000	1102.000	578.000	1162.000
GR	577.700	1224.000	574.100	1234.000	572.200	1240.000	572.400	1244.000	574.100	1253.000
GR	577.200	1258.000	577.000	1311.000	577.700	1382.000	580.900	1464.000	581.900	1511.000
GR	581.700	1635.000	577.000	1732.000	577.900	1855.000	579.300	1983.000	582.000	2118.000
GR	581.600	2241.000	581.600	2406.000	582.500	2572.000	581.300	2611.000	584.800	2620.000
GR	585.000	2631.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	440.000	630.000	695.000	915.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	3796.000	-0.000	-0.000	-0.000	320.000	120.000	260.000	-0.000	.350	-0.000
X3	-0.000	-0.000	-0.000	1162.000	-0.000	1380.000	-0.000	-0.000	-0.000	-0.000
X1	4116.000	-0.000	-0.000	-0.000	420.000	220.000	320.000	-0.000	.450	-0.000
X3	-0.000	-0.000	-0.000	1162.000	-0.000	1380.000	-0.000	-0.000	-0.000	-0.000
NC	.055	.055	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	340.000	485.000	535.000	705.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	4416.000	39.000	1734.000	1770.000	200.000	400.000	300.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1680.000	-0.000	1990.000	-0.000	-0.000	-0.000	-0.000
GR	585.600	0.000	585.300	10.000	584.600	104.000	583.400	240.000	583.900	370.000
GR	582.700	485.000	583.400	605.000	583.000	706.000	581.500	835.000	580.100	912.000
GR	576.300	926.000	578.600	943.000	578.500	968.000	581.800	1050.000	581.300	1134.000
GR	580.700	1256.000	582.300	1315.000	582.000	1400.000	579.900	1511.000	579.900	1601.000
GR	577.300	1690.000	579.400	1734.000	573.400	1748.000	573.400	1759.000	574.000	1761.000
GR	579.100	1770.000	577.600	1840.000	577.400	2041.000	581.300	2174.000	579.300	2267.000
GR	575.400	2278.000	579.800	2315.000	583.000	2407.000	582.200	2517.000	582.100	2682.000
GR	582.300	2788.000	581.600	2826.000	584.100	2834.000	584.200	2849.000	-0.000	-0.000
X1	5416.000	55.000	2120.000	2156.000	900.000	1100.000	1000.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	2023.000	-0.000	2253.000	-0.000	-0.000	-0.000	-0.000
GR	586.300	0.000	585.900	13.000	583.400	25.000	585.200	30.000	584.700	177.000
GR	585.100	321.000	583.700	454.000	581.400	558.000	581.400	625.000	578.000	638.000
GR	581.400	648.000	581.000	667.000	583.100	708.000	584.200	820.000	583.800	950.000
GR	583.300	1086.000	584.300	1213.000	583.700	1312.000	583.700	1399.000	584.100	1508.000
GR	583.100	1674.000	582.300	1872.000	579.100	2045.000	580.500	2120.000	576.400	2130.000
GR	574.300	2137.000	573.600	2142.000	574.200	2146.000	580.500	2156.000	579.900	2323.000
GR	578.900	2472.000	581.600	2594.000	582.300	2646.000	580.600	2655.000	583.500	2663.000
GR	583.500	2682.000	583.900	2777.000	583.900	2827.000	583.900	2870.000	583.300	2936.000
GR	582.000	3004.000	583.000	3066.000	583.800	3156.000	582.400	3281.000	583.000	3486.000
GR	583.400	3736.000	583.600	3985.000	584.200	4212.000	584.400	4434.000	585.200	4661.000
GR	587.700	4878.000	588.600	5115.000	587.700	5310.000	587.100	5476.000	591.400	5539.000
NH	3.00	.065	1717.00	.030	1775.00	.055	2151.00	0.00	.000	0.00

X1	5846.000	18.000	1725.000	1739.000	350.000	460.000	430.000	-0.000	-.400	-0.000
X3	-0.000	-0.000	-0.000	1725.000	-0.000	1739.000	-0.000	-0.000	-0.000	-0.000
GR	587.000	741.000	587.100	851.000	586.400	1011.000	586.600	1217.000	586.200	1360.000
GR	585.200	1520.000	583.800	1638.000	583.100	1715.000	575.500	1725.000	574.400	1728.000
GR	574.200	1732.000	574.600	1735.000	577.150	1739.000	577.800	1740.000	582.600	1755.000
GR	580.700	1877.000	581.700	2043.000	584.200	2151.000	-0.000	-0.000	-0.000	-0.000
NC	.035	.035	.012	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	5847.000	26.000	1500.000	1514.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1514.000	-0.000	-0.000	-0.000	-0.000
BT	18.000	0.000	582.500	0.000	200.000	584.900	0.000	400.000	584.900	0.000
BT	600.000	584.500	0.000	800.000	584.400	0.000	1000.000	585.000	0.000	1100.000
BT	585.900	0.000	1200.000	585.300	0.000	1300.000	583.600	0.000	1400.000	581.800
BT	0.000	1500.000	582.400	581.700	1514.000	582.800	582.100	1600.000	581.400	0.000
BT	1700.000	581.400	0.000	1800.000	582.100	0.000	1900.000	583.000	0.000	2000.000
BT	583.700	0.000	2088.000	584.600	0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	582.500	0.000	584.900	200.000	584.900	400.000	584.500	600.000	584.400	800.000
GR	585.000	1000.000	585.900	1100.000	585.300	1200.000	583.600	1300.000	581.800	1400.000
GR	582.400	1500.000	576.500	1500.000	575.100	1503.000	574.100	1505.000	574.100	1508.000
GR	574.100	1512.000	573.800	1513.000	574.700	1513.100	575.400	1514.000	582.800	1514.000
GR	581.400	1600.000	581.400	1700.000	582.100	1800.000	583.000	1900.000	583.700	2000.000
GR	584.600	2088.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	5862.000	-0.000	-0.000	-0.000	15.000	15.000	15.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1500.000	-0.000	1514.000	-0.000	-0.000	-0.000	-0.000
NH	3.000	.055	1715.000	.030	1755.000	.055	2151.000	-0.000	-0.000	-0.000
X1	5863.000	18.000	1725.000	1739.000	1.000	1.000	1.000	-0.000	-.400	-0.000
X3	-0.000	-0.000	-0.000	1725.000	-0.000	1739.000	-0.000	-0.000	-0.000	-0.000
GR	587.000	741.000	587.100	851.000	586.400	1011.000	586.600	1217.000	586.200	1360.000
GR	585.200	1520.000	583.800	1638.000	583.100	1715.000	575.500	1725.000	574.400	1728.000
GR	574.200	1732.000	574.600	1735.000	577.150	1739.000	577.800	1740.000	582.600	1755.000
GR	580.700	1877.000	581.700	2043.000	584.200	2151.000	-0.000	-0.000	-0.000	-0.000
NH	3.000	.055	1715.000	.035	1755.000	.055	2151.000	-0.000	-0.000	-0.000
X1	6363.000	57.000	1715.000	1755.000	480.000	470.000	500.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1715.000	-0.000	1755.000	-0.000	-0.000	-0.000	-0.000
GR	587.000	0.000	586.700	15.000	584.600	29.000	586.500	36.000	585.600	239.000
GR	586.200	356.000	586.700	499.000	584.100	564.000	584.700	594.000	580.600	607.000
GR	582.900	616.000	584.600	679.000	587.000	741.000	587.100	851.000	586.400	1011.000
GR	586.600	1217.000	586.200	1360.000	585.200	1520.000	583.800	1638.000	583.100	1715.000
GR	575.500	1725.000	574.400	1728.000	574.200	1732.000	574.600	1735.000	577.800	1740.000
GR	582.600	1755.000	580.700	1877.000	581.700	2043.000	584.200	2151.000	583.200	2216.000
GR	584.400	2373.000	584.600	2545.000	584.700	2716.000	581.800	2726.000	584.300	2732.000
GR	584.000	2756.000	583.900	2785.000	583.900	2832.000	583.400	2936.000	579.200	2947.000
GR	582.800	2967.000	583.700	3050.000	584.100	3171.000	584.200	3391.000	584.000	3577.000
GR	584.700	3792.000	585.100	4004.000	585.200	4099.000	586.300	4308.000	587.800	4476.000
GR	589.100	4675.000	589.100	4837.000	589.500	5001.000	586.700	5190.000	589.600	5377.000
GR	588.200	5466.000	586.400	5678.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	3.000	.055	1690.000	.045	1726.000	.055	3564.000	-0.000	-0.000	-0.000
X1	6993.000	55.000	1690.000	1726.000	625.000	610.000	630.000	-0.000	-.750	-0.000
X3	-0.000	-0.000	-0.000	1690.000	-0.000	1726.000	-0.000	-0.000	-0.000	-0.000
GR	587.600	0.000	587.600	7.000	585.400	26.000	587.000	33.000	587.000	111.000
GR	586.000	213.000	586.300	284.000	585.600	364.000	585.900	450.000	585.700	556.000
GR	585.300	644.000	585.700	730.000	585.700	833.000	585.800	936.000	585.500	1042.000
GR	585.400	1138.000	588.200	1169.000	588.000	1180.000	587.700	1233.000	586.800	1281.000
GR	586.900	1345.000	586.400	1434.000	584.700	1519.000	582.800	1551.000	582.900	1623.000
GR	582.900	1690.000	581.500	1695.000	575.900	1701.000	575.700	1708.000	575.700	1715.000
GR	577.400	1721.000	583.400	1726.000	584.300	1792.000	585.700	1874.000	586.200	1971.000
GR	586.300	2124.000	586.200	2248.000	587.000	2391.000	587.300	2538.000	586.800	2603.000
GR	589.400	2620.000	588.900	2636.000	587.400	2695.000	581.000	2736.000	586.600	2759.000
GR	585.700	2873.000	587.100	2983.000	587.700	3113.000	589.400	3165.000	589.400	3196.000

X1	7623.000	-0.000	-0.000	-0.000	625.000	810.000	630.000	-0.000	.750	-0.000
X3	-0.000	-0.000	-0.000	1690.000	-0.000	1725.000	-0.000	-0.000	-0.000	-0.000
X1	7663.000	24.000	1700.500	1715.000	40.000	40.000	40.000	-0.000	-1.700	-0.000
X3	10.000	-0.000	-0.000	1235.000	-0.000	2620.000	-0.000	584.000	584.000	-0.000
GR	587.700	1233.000	586.800	1281.000	586.900	1345.000	586.400	1434.000	584.700	1519.000
GR	582.800	1551.000	582.900	1623.000	582.900	1690.000	581.500	1695.000	576.400	1700.500
GR	575.900	1701.000	575.700	1708.000	575.700	1715.000	577.400	1721.000	583.400	1726.000
GR	584.300	1792.000	585.700	1874.000	586.200	1971.000	586.300	2124.000	586.200	2248.000
GR	587.000	2391.000	587.300	2538.000	586.800	2603.000	589.400	2620.000	-0.000	-0.000
NC	.020	.020	.018	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	7664.000	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	584.000	584.000	-0.000
SB	-0.000	1.720	3.000	-0.000	13.100	-0.000	124.480	-0.000	574.000	574.000
X1	7754.000	27.000	1500.000	1514.500	90.000	90.000	90.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	583.500	588.600	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	589.400	589.400	-0.000
BT	20.000	0.000	589.900	0.000	200.000	589.800	0.000	400.000	589.600	0.000
BT	600.000	589.300	0.000	800.000	589.300	0.000	930.000	588.600	0.000	1000.000
BT	589.300	0.000	1200.000	589.400	0.000	1400.000	589.400	0.000	1500.000	589.400
BT	583.500	1514.500	589.400	583.500	1600.000	589.400	0.000	1800.000	589.500	0.000
BT	2000.000	589.500	0.000	2200.000	589.500	0.000	2400.000	589.300	0.000	2465.000
BT	588.800	0.000	2600.000	589.300	0.000	2800.000	589.500	0.000	3000.000	589.500
BT	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	589.900	0.000	589.800	200.000	589.600	400.000	589.300	600.000	589.300	800.000
GR	588.600	930.000	589.300	1000.000	589.400	1200.000	589.400	1400.000	583.500	1500.000
GR	576.100	1500.000	576.100	1501.000	574.800	1501.500	574.000	1507.000	575.700	1513.000
GR	576.100	1513.100	576.100	1514.500	583.500	1514.500	589.400	1600.000	589.500	1800.000
GR	589.500	2000.000	589.500	2200.000	589.300	2400.000	588.800	2465.000	589.300	2600.000
GR	589.500	2800.000	589.500	3000.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	1446.000	.045	1668.000	.033	1701.000	.050	1729.000	.055
NH	3188.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	7755.000	22.000	1679.000	1693.500	1.000	1.000	1.000	-0.000	-1.700	-0.000
X3	10.000	-0.000	-0.000	1446.000	-0.000	2559.000	-0.000	589.400	589.400	-0.000
GR	585.700	1446.000	581.900	1517.000	581.600	1626.000	582.600	1668.000	577.200	1679.000
GR	576.200	1681.000	575.700	1686.000	576.200	1691.000	577.500	1693.500	581.300	1701.000
GR	581.400	1729.000	582.300	1808.000	584.500	1901.000	583.900	2037.000	584.100	2196.000
GR	585.100	2308.000	583.900	2383.000	585.900	2450.000	585.100	2530.000	587.800	2559.000
GR	587.400	2580.000	586.300	3188.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	7805.000	47.000	1668.000	1701.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1668.000	-0.000	1701.000	-0.000	-0.000	-0.000	-0.000
GR	586.700	0.000	586.600	12.000	583.900	21.000	587.000	32.000	584.000	70.000
GR	584.300	105.000	585.000	224.000	585.800	334.000	584.900	456.000	584.200	599.000
GR	583.400	667.000	584.700	734.000	584.700	927.000	583.600	1041.000	586.200	1088.000
GR	585.900	1106.000	585.200	1133.000	584.400	1227.000	585.600	1345.000	586.100	1409.000
GR	585.700	1446.000	581.900	1517.000	581.600	1626.000	582.600	1668.000	576.200	1681.000
GR	575.700	1686.000	576.200	1691.000	581.300	1701.000	581.400	1729.000	582.300	1808.000
GR	584.500	1901.000	583.900	2037.000	584.100	2196.000	585.100	2308.000	583.900	2383.000
GR	585.900	2450.000	585.100	2530.000	587.800	2559.000	587.400	2580.000	587.700	2666.000
GR	586.400	2756.000	580.400	2772.000	585.200	2787.000	585.600	2876.000	585.800	3019.000
GR	585.900	3140.000	586.300	3188.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	1601.000	.055	1656.000	.040	1696.000	.045	1774.000	.055
NH	3062.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	8225.000	47.000	1656.000	1696.000	390.000	500.000	420.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	1601.000	-0.000	2450.000	-0.000	-0.000	-0.000	-0.000
GR	589.000	0.000	588.300	46.000	585.600	86.000	586.600	111.000	585.600	139.000
GR	586.900	285.000	587.000	398.000	586.000	491.000	587.200	592.000	586.200	708.000
GR	586.900	807.000	587.000	971.000	586.900	988.000	587.700	1031.000	587.500	1074.000
GR	588.000	1133.000	588.000	1174.000	588.000	1264.000	587.900	1336.000	587.700	1346.000
GR	587.500	[illegible]	587.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GR	584.200	1656.000	587.000	1673.000	588.600	1677.000	588.900	1683.000	582.400	1690.000
GR	583.900	1696.000	583.100	1774.000	584.700	1861.000	585.400	1990.000	585.800	2133.000
GR	585.500	2210.000	585.800	2353.000	586.600	2450.000	586.500	2546.000	586.100	2571.000
GR	586.300	2673.000	586.400	2777.000	586.200	2863.000	581.700	2874.000	586.300	2896.000
GR	586.400	2993.000	587.000	3062.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	1016.000	.075	1394.000	.040	1430.000	.045	1447.000	.055
NH	3090.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	8695.000	46.000	1394.000	1430.000	480.000	475.000	470.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1394.000	-0.000	1430.000	-0.000	-0.000	-0.000	-0.000
GR	588.900	0.000	588.900	13.000	587.100	25.000	589.200	33.000	588.000	103.000
GR	589.000	185.000	589.600	277.000	588.600	357.000	590.000	383.000	589.900	443.000
GR	589.600	481.000	589.600	528.000	590.100	582.000	589.600	660.000	589.600	673.000
GR	588.400	718.000	588.200	747.000	588.100	782.000	588.000	836.000	587.900	877.000
GR	587.400	1016.000	587.100	1105.000	587.200	1196.000	585.800	1276.000	584.500	1364.000
GR	585.000	1394.000	576.300	1408.000	576.100	1414.000	577.100	1418.000	584.000	1430.000
GR	580.800	1447.000	583.000	1539.000	585.100	1643.000	585.700	1751.000	585.700	1806.000
GR	586.700	1943.000	586.700	2065.000	586.700	2230.000	586.800	2447.000	586.300	2611.000
GR	586.200	2675.000	583.400	2686.000	587.300	2701.000	586.700	2756.000	587.900	2913.000
GR	587.500	3090.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	9105.000	-0.000	-0.000	-0.000	1.000	650.000	410.000	-0.000	1.500	-0.000
X3	10.000	-0.000	-0.000	1230.000	-0.000	1630.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	714.000	.065	730.000	.040	770.000	.045	828.000	.055
NH	3131.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	9515.000	45.000	730.000	770.000	650.000	1.000	410.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	715.000	-0.000	890.000	-0.000	-0.000	-0.000	-0.000
GR	590.800	0.000	590.400	22.000	590.800	60.000	590.700	102.000	590.500	132.000
GR	590.400	164.000	589.100	262.000	589.000	324.000	590.200	394.000	590.300	418.000
GR	590.200	440.000	590.200	495.000	588.500	541.000	587.300	605.000	586.900	699.000
GR	590.400	714.000	588.000	730.000	579.600	742.000	579.200	748.000	579.500	756.000
GR	585.400	770.000	584.500	790.000	584.900	828.000	585.500	924.000	587.700	1093.000
GR	586.600	1118.000	587.400	1159.000	586.300	1236.000	585.800	1363.000	585.200	1439.000
GR	587.500	1559.000	587.800	1722.000	587.400	1935.000	586.900	2078.000	587.800	2183.000
GR	586.900	2249.000	586.600	2384.000	588.400	2527.000	587.400	2560.000	588.500	2689.000
GR	583.300	2701.000	589.300	2712.000	588.300	2754.000	588.700	2925.000	589.700	3131.000
NH	5.000	.070	715.000	.045	731.000	.033	772.000	.100	1021.000	.070
NH	3122.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	325.000	465.000	515.000	680.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10035.000	69.000	731.000	772.000	430.000	500.000	520.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	715.000	-0.000	1038.000	-0.000	-0.000	-0.000	-0.000
GR	591.200	0.000	591.100	15.000	591.300	66.000	591.900	112.000	591.900	136.000
GR	591.700	145.000	591.900	231.000	591.900	244.000	590.000	412.000	589.500	442.000
GR	589.400	507.000	589.400	550.000	588.800	571.000	588.900	610.000	588.600	646.000
GR	588.600	672.000	589.400	715.000	588.700	731.000	585.700	739.000	580.900	750.000
GR	579.800	754.000	579.100	757.000	579.500	762.000	588.300	772.000	587.900	813.000
GR	588.300	884.000	589.600	950.000	589.500	1021.000	590.700	1038.000	590.500	1074.000
GR	589.600	1111.000	589.500	1132.000	588.700	1166.000	588.800	1233.000	589.100	1257.000
GR	589.100	1282.000	589.100	1311.000	589.000	1329.000	589.200	1354.000	589.400	1385.000
GR	590.300	1417.000	590.400	1448.000	590.100	1496.000	589.900	1534.000	589.900	1570.000
GR	589.900	1609.000	589.700	1644.000	589.200	1678.000	589.600	1711.000	590.100	1739.000
GR	589.300	1795.000	589.200	1895.000	590.300	1939.000	590.200	1967.000	589.200	1984.000
GR	588.900	2067.000	588.900	2112.000	588.900	2139.000	587.600	2171.000	587.600	2210.000
GR	587.800	2356.000	589.000	2516.000	588.800	2680.000	590.600	2830.000	590.100	2921.000
GR	586.900	2941.000	589.900	2966.000	589.400	3047.000	590.200	3122.000	-0.000	-0.000
X1	10070.000	15.000	750.000	764.500	35.000	35.000	35.000	-0.000	.500	-0.000
X3	10.000	-0.000	-0.000	537.000	-0.000	788.000	-0.000	587.000	587.000	-0.000
GR	589.400	715.000	588.700	731.000	585.700	739.000	580.900	750.000	579.800	754.000
GR	579.100	757.000	579.500	762.000	581.700	764.500	588.300	772.000	587.900	813.000
GR	588.300	884.000	589.600	950.000	589.500	1021.000	590.700	1038.000	590.200	3122.000
NC	.020	.020	.018	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
1	1071.00	21 0 0	15	0	1514 5 0	1.00	1.000	1. 00	00	0.000

X3	10.000	-0.000	-0.000	1287.000	-0.000	1538.000	-0.000	589.000	589.000	-0.000
GR	592.500	0.000	592.300	200.000	592.000	400.000	591.800	600.000	591.800	775.000
GR	591.700	800.000	591.000	1000.000	590.500	1186.000	590.300	1200.000	589.800	1400.000
GR	586.100	1500.000	579.800	1500.000	579.600	1503.000	579.600	1506.000	579.600	1509.000
GR	579.900	1512.000	580.200	1514.500	586.100	1514.500	589.600	1600.000	589.800	1800.000
GR	590.300	2000.000	590.600	2200.000	591.000	2400.000	591.200	2600.000	591.100	2800.000
GR	590.600	3000.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
SB	-0.000	1.850	3.000	-0.000	14.210	-0.000	92.380	-0.000	579.600	579.600
X1	10149.000	-0.000	-0.000	-0.000	77.500	77.500	77.500	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	586.100	589.600	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	1287.000	-0.000	1538.000	-0.000	589.000	589.000	-0.000
BT	22.000	0.000	592.500	0.000	200.000	592.300	0.000	400.000	592.000	0.000
BT	600.000	591.800	0.000	775.000	591.800	0.000	800.000	591.700	0.000	1000.000
BT	591.000	0.000	1186.000	590.500	0.000	1200.000	590.300	0.000	1400.000	589.800
BT	0.000	1500.000	589.600	0.000	1500.000	590.100	586.100	1514.500	590.100	586.100
BT	1514.500	589.600	0.000	1600.000	589.600	0.000	1800.000	589.800	0.000	2000.000
BT	590.300	0.000	2200.000	590.600	0.000	2400.000	591.000	0.000	2600.000	591.200
BT	0.000	2800.000	591.100	0.000	3000.000	590.600	0.000	-0.000	-0.000	-0.000
NH	5.000	.070	465.000	.100	665.000	.045	701.000	.050	715.000	.070
NH	3639.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10150.000	12.000	678.000	692.500	1.000	1.000	1.000	-0.000	-.200	-0.000
X3	10.000	-0.000	-0.000	465.000	-0.000	716.000	-0.000	589.500	589.500	-0.000
GR	590.600	465.000	589.200	525.000	590.500	542.000	588.500	554.000	588.900	596.000
GR	588.100	665.000	581.100	678.000	579.800	685.000	580.900	692.500	587.400	701.000
GR	587.100	716.000	589.500	3639.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10210.000	69.000	665.000	701.000	60.000	60.000	60.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	660.000	-0.000	705.000	-0.000	-0.000	-0.000	-0.000
GR	592.400	0.000	592.100	10.000	592.400	35.000	592.300	63.000	592.300	76.000
GR	592.500	110.000	592.500	113.000	592.400	153.000	592.400	158.000	591.500	193.000
GR	591.500	199.000	591.500	231.000	591.700	253.000	591.800	327.000	591.300	364.000
GR	591.000	398.000	591.400	420.000	590.600	465.000	589.200	525.000	590.500	542.000
GR	588.500	554.000	588.900	596.000	588.100	665.000	581.100	678.000	579.800	685.000
GR	580.900	692.000	587.400	701.000	587.100	716.000	587.000	745.000	587.100	767.000
GR	587.800	797.000	587.800	827.000	588.800	875.000	589.900	917.000	590.400	954.000
GR	590.200	984.000	590.600	1016.000	590.600	1031.000	590.100	1063.000	590.000	1076.000
GR	589.700	1115.000	588.200	1135.000	590.100	1211.000	590.300	1253.000	590.800	1267.000
GR	590.600	1293.000	591.700	1317.000	591.600	1346.000	590.500	1371.000	590.200	1407.000
GR	590.400	1429.000	590.200	1454.000	589.100	1476.000	589.600	1535.000	589.600	1668.000
GR	589.400	1768.000	589.400	1866.000	589.200	2027.000	588.900	2181.000	589.500	2391.000
GR	590.000	2628.000	590.000	2819.000	590.900	2942.000	587.100	2959.000	591.300	2970.000
GR	590.900	3078.000	590.600	3283.000	590.000	3481.000	589.500	3639.000	-0.000	-0.000
NH	5.000	.070	174.000	.075	283.000	.030	318.000	.100	333.000	.055
NH	2822.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10810.000	35.000	283.000	318.000	585.000	585.000	600.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	174.000	-0.000	333.000	-0.000	-0.000	-0.000	-0.000
GR	593.200	0.000	593.100	36.000	592.200	79.000	589.600	174.000	588.300	243.000
GR	587.600	283.000	583.400	291.000	581.600	296.000	580.700	298.000	580.700	304.000
GR	581.600	308.000	587.400	318.000	588.700	333.000	586.200	343.000	587.600	403.000
GR	589.200	498.000	589.000	564.000	587.500	609.000	588.000	712.000	588.100	797.000
GR	590.200	895.000	589.600	987.000	590.300	1086.000	590.500	1205.000	590.200	1259.000
GR	589.800	1408.000	589.700	1548.000	590.400	1669.000	589.600	1824.000	590.600	2033.000
GR	590.500	2203.000	591.200	2386.000	591.900	2597.000	591.800	2708.000	591.200	2822.000
NH	4.000	.055	170.000	.030	212.000	.055	389.000	.070	3118.000	-0.000
X1	11590.000	18.000	186.000	199.000	860.000	700.000	780.000	-0.000	-.100	-0.000
X3	10.000	-0.000	-0.000	0.000	-0.000	348.000	-0.000	590.000	590.000	-0.000
GR	593.000	0.000	592.800	13.000	588.900	30.000	589.000	81.000	588.400	170.000
GR	584.500	180.000	582.900	184.000	582.200	186.000	581.900	187.000	581.500	193.000
GR	582.200	199.000	584.200	202.000	588.500	212.000	589.000	245.000	591.700	284.000
GR	597.300	348.000	596.300	389.000	588.900	3118.000	-0.000	-0.000	-0.000	-0.000
NC	.030	.030	.020	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

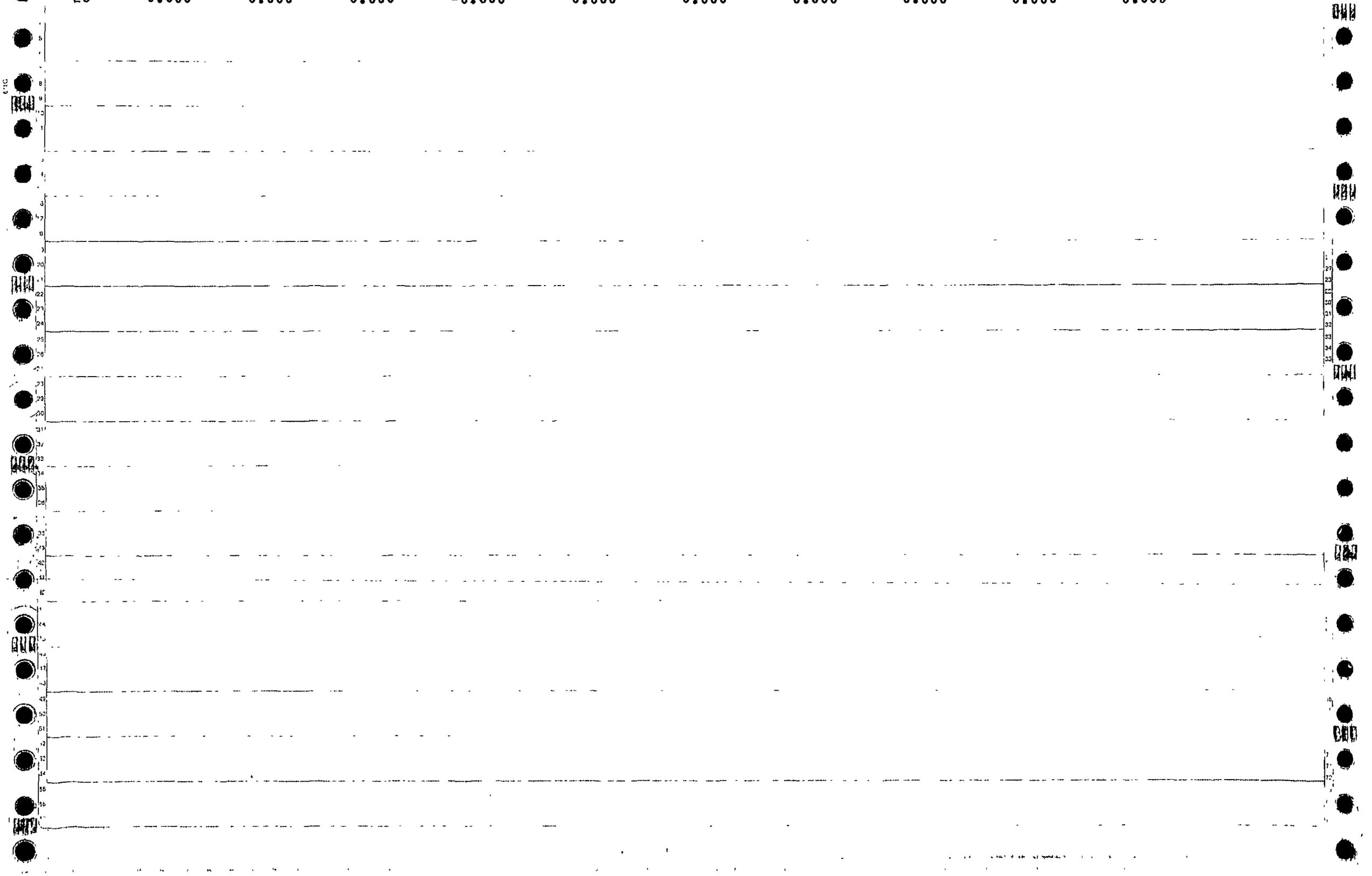
X1	11591.000	17.000	900.000	913.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	720.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	12.000	0.000	593.300	0.000	200.000	593.500	0.000	500.000	593.700	0.000
BT	600.000	593.900	0.000	716.000	593.100	0.000	800.000	590.700	0.000	900.000
BT	589.800	589.000	913.000	589.900	589.100	950.000	590.800	0.000	985.000	592.800
BT	0.000	1000.000	595.100	0.000	1030.000	597.000	0.000	-0.000	-0.000	-0.000
GR	593.300	0.000	593.500	200.000	593.700	500.000	593.900	600.000	593.100	716.000
GR	590.700	800.000	589.800	900.000	582.300	900.000	581.900	903.000	581.400	906.000
GR	581.500	909.000	582.200	913.000	589.900	913.000	590.800	950.000	592.800	985.000
GR	595.100	1000.000	597.000	1030.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	11608.000	-0.000	-0.000	-0.000	17.000	17.000	17.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	720.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.055	170.000	.030	212.000	.055	389.000	.070	3118.000	-0.000
X1	11609.000	18.000	186.000	199.000	1.000	1.000	1.000	-0.000	-.100	-0.000
X3	10.000	-0.000	-0.000	0.000	-0.000	348.000	-0.000	589.900	589.900	-0.000
GR	593.000	0.000	592.800	13.000	588.900	30.000	589.000	81.000	588.400	170.000
GR	584.500	180.000	582.900	184.000	582.200	186.000	581.900	187.000	581.500	193.000
GR	582.200	199.000	584.200	202.000	588.500	212.000	589.000	245.000	591.700	284.000
GR	597.300	348.000	596.300	389.000	588.900	3118.000	-0.000	-0.000	-0.000	-0.000
X1	11789.000	40.000	170.000	212.000	180.000	180.000	180.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	170.000	-0.000	212.000	-0.000	-0.000	-0.000	-0.000
GR	593.000	0.000	592.800	13.000	588.900	30.000	589.000	81.000	588.400	170.000
GR	584.500	180.000	582.900	184.000	581.900	187.000	581.500	193.000	582.200	199.000
GR	584.200	202.000	588.500	212.000	589.000	245.000	591.700	284.000	597.300	348.000
GR	596.300	389.000	594.800	415.000	593.200	469.000	592.200	597.000	591.100	746.000
GR	591.100	842.000	592.000	901.000	592.400	1010.000	591.900	1083.000	592.100	1241.000
GR	592.300	1371.000	592.800	1507.000	593.000	1615.000	592.000	1704.000	592.100	1860.000
GR	591.400	2051.000	592.500	2235.000	591.500	2442.000	591.200	2615.000	591.200	2717.000
GR	586.100	2733.000	590.900	2742.000	590.500	2859.000	589.400	2941.000	588.900	3118.000
NH	5.000	.070	192.000	.045	198.000	.030	230.000	.075	266.000	.055
NH	3236.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12359.000	39.000	198.000	230.000	570.000	570.000	570.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	192.000	-0.000	408.000	-0.000	-0.000	-0.000	-0.000
GR	594.500	0.000	594.800	17.000	595.000	50.000	593.800	104.000	592.600	157.000
GR	590.800	192.000	589.400	198.000	581.500	209.000	581.100	213.000	581.700	218.000
GR	590.200	230.000	590.400	266.000	589.600	307.000	590.200	374.000	591.500	438.000
GR	594.000	491.000	594.600	565.000	593.400	641.000	593.700	744.000	594.500	866.000
GR	594.500	996.000	593.600	1064.000	594.600	1169.000	594.900	1285.000	596.300	1411.000
GR	596.400	1513.000	597.400	1645.000	597.200	1793.000	597.200	1958.000	597.400	2156.000
GR	598.100	2351.000	598.800	2539.000	598.500	2732.000	594.100	2746.000	597.100	2759.000
GR	597.400	2880.000	597.500	3014.000	597.200	3142.000	596.800	3236.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.055	280.000	.055	2771.000	-0.000
X1	12759.000	16.000	253.000	270.000	400.000	400.000	400.000	-0.000	-.300	-0.000
X3	10.000	-0.000	-0.000	250.000	-0.000	280.000	-0.000	590.000	590.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	585.900	270.000	591.500	280.000	591.600	294.000	591.400	332.000
GR	591.500	424.000	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000
GR	600.500	2771.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.035	.035	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12760.000	19.000	235.000	252.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	232.000	-0.000	262.000	-0.000	590.000	590.000	-0.000
GR	597.800	0.000	596.000	35.000	596.500	135.000	595.900	160.000	591.600	225.000
GR	583.900	235.000	583.500	235.000	583.400	237.000	583.200	240.000	582.800	245.000
GR	583.300	249.000	583.600	250.000	584.100	252.000	584.500	252.000	591.300	270.000
GR	590.700	335.000	591.100	435.000	593.400	510.000	593.400	535.000	-0.000	-0.000
SB	-0.000	2.020	2.800	-0.000	15.780	-0.000	108.850	-0.000	582.800	582.800
X1	12774.000	-0.000	-0.000	-0.000	14.000	14.000	14.000	-0.000	-0.000	-0.000

X3	10.000	-0.000	-0.000	232.000	-0.000	262.000	-0.000	590.500	590.500	-0.00
BT	12.000	0.000	597.800	0.000	35.000	596.000	0.000	135.000	596.500	0.000
BT	160.000	595.900	0.000	225.000	591.600	0.000	235.000	590.900	589.900	252.000
BT	590.500	589.500	270.000	591.300	0.000	335.000	590.700	0.000	435.000	591.100
BT	0.000	510.000	593.400	0.000	535.000	593.400	0.000	-0.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.030	280.000	.055	2771.000	-0.000
X1	12775.000	16.000	253.000	270.000	1.000	1.000	1.000	-0.000	-.300	-0.000
X3	10.000	-0.000	-0.000	250.000	-0.000	280.000	-0.000	591.000	591.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	585.900	270.000	591.500	280.000	591.600	294.000	591.400	332.000
GR	591.500	424.000	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000
GR	600.500	2771.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	315.000	450.000	495.000	660.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12860.000	30.000	240.000	280.000	45.000	115.000	85.000	.950	-0.000	-0.000
X3	-0.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	-0.000	-0.000	-0.000
GR	595.100	0.000	594.900	14.000	593.600	54.000	594.500	108.000	594.500	127.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	594.400	1133.000
GR	593.200	1270.000	594.400	1416.000	596.200	1579.000	597.100	1781.000	597.700	1991.000
GR	598.100	2155.000	598.700	2327.000	599.400	2513.000	600.000	2634.000	600.300	2771.000
X1	12990.000	15.000	253.000	265.000	115.000	115.000	130.000	.950	.700	-0.000
X3	10.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	592.000	592.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	600.500	2771.000
NC	.030	.030	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12991.000	22.000	900.000	912.000	1.000	1.000	1.000	.950	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	.950	-0.000
BT	11.000	0.000	600.200	0.000	200.000	599.600	0.000	400.000	599.300	0.000
BT	600.000	599.300	0.000	627.000	599.200	0.000	800.000	598.900	0.000	900.000
BT	598.900	591.700	912.000	598.900	591.800	1000.000	599.000	0.000	1200.000	599.000
BT	0.000	1400.000	599.200	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	600.200	0.000	599.600	200.000	599.300	400.000	599.300	600.000	599.200	627.000
GR	598.900	800.000	598.900	900.000	587.800	900.000	587.700	900.800	583.900	900.800
GR	583.900	901.000	584.000	903.000	583.900	906.000	583.800	909.000	583.800	911.000
GR	583.800	911.200	587.900	911.200	587.900	912.000	598.900	912.000	599.000	1000.000
GR	599.000	1200.000	599.200	1400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13030.000	22.000	900.000	912.000	39.000	39.000	39.000	.950	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	.950	-0.000
BT	11.000	0.000	600.200	0.000	200.000	599.600	0.000	400.000	599.300	0.000
BT	600.000	599.300	0.000	627.000	599.200	0.000	800.000	598.900	0.000	900.000
BT	598.900	591.700	912.000	598.900	591.800	1000.000	599.000	0.000	1200.000	599.000
BT	0.000	1400.000	599.200	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	600.200	0.000	599.600	200.000	599.300	400.000	599.300	600.000	599.200	627.000
GR	598.900	800.000	598.900	900.000	587.800	900.000	587.700	900.800	583.900	900.800
GR	583.900	901.000	584.000	903.000	583.900	906.000	583.800	909.000	583.800	911.000
GR	583.800	911.200	587.900	911.200	587.900	912.000	598.900	912.000	599.000	1000.000
GR	599.000	1200.000	599.200	1400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.030	280.000	.055	2771.000	-0.000
X1	13031.000	15.000	253.000	265.000	1.000	1.000	1.000	.950	.700	-0.000
X3	16.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	592.000	592.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	600.500	2771.000
X1	13101.000	-0.000	-0.000	-0.000	60.000	60.000	70.000	.950	.100	-0.000
X3	10.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	592.000	592.000	-0.000
NC	.015	.015	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

X1	13102.000	24.000	1500.000	1512.000	1.000	1.000	1.000	.950	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	592.000	592.000	-0.000
GR	598.600	0.000	598.200	200.000	598.000	400.000	598.000	600.000	598.300	800.000
GR	598.300	1000.000	598.100	1200.000	598.100	1236.000	597.600	1400.000	584.500	1500.000
GR	584.100	1500.000	584.100	1503.000	584.000	1506.000	583.900	1509.000	583.900	1512.000
GR	584.500	1512.000	596.400	1600.000	596.100	1800.000	596.200	2000.000	596.400	2200.000
GR	596.700	2400.000	596.900	2600.000	596.900	2800.000	597.000	3000.000	-0.000	-0.000
SB	-0.000	1.570	3.000	-0.000	11.250	-0.000	81.030	-0.000	583.900	583.900
X1	13178.000	24.000	1500.000	1512.000	76.000	76.000	76.000	.950	-0.000	-0.000
X2	-0.000	-0.000	1.000	591.100	596.100	-0.000	-0.000	-0.000	.950	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	595.000	598.000	-0.000
BT	19.000	0.000	598.600	0.000	200.000	598.200	0.000	400.000	598.000	0.000
BT	600.000	598.000	0.000	800.000	598.300	0.000	1000.000	598.300	0.000	1200.000
BT	598.100	0.000	1236.000	598.100	0.000	1400.000	597.600	0.000	1500.000	597.000
BT	591.100	1512.000	597.000	591.100	1600.000	596.400	0.000	1800.000	596.100	0.000
BT	2000.000	596.200	0.000	2200.000	596.400	0.000	2400.000	596.700	0.000	2600.000
BT	596.900	0.000	2800.000	596.900	0.000	3000.000	597.000	0.000	-0.000	-0.000
GR	598.600	0.000	598.200	200.000	598.000	400.000	598.000	600.000	598.300	800.000
GR	598.300	1000.000	598.100	1200.000	598.100	1236.000	597.600	1400.000	584.500	1500.000
GR	584.100	1500.000	584.100	1503.000	584.000	1506.000	583.900	1509.000	583.900	1512.000
GR	584.500	1512.000	596.400	1600.000	596.100	1800.000	596.200	2000.000	596.400	2200.000
GR	596.700	2400.000	596.900	2600.000	596.900	2800.000	597.000	3000.000	-0.000	-0.000
NH	4.000	.070	160.000	-.045	240.000	.030	280.000	.055	2771.000	-0.000
X1	13179.000	15.000	253.000	265.000	1.000	1.000	1.000	.950	.800	-0.000
X3	10.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	594.000	594.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	600.500	2771.000
NH	5.000	.070	158.000	.100	222.000	.030	257.000	.100	692.000	.070
NH	2529.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13289.000	30.000	222.000	257.000	105.000	105.000	110.000	.950	-0.000	-0.000
X3	-0.000	-0.000	-0.000	158.000	-0.000	692.000	-0.000	-0.000	-0.000	-0.000
GR	600.500	0.000	599.500	19.000	598.800	116.000	597.400	158.000	591.800	195.000
GR	591.200	222.000	588.500	228.000	585.800	233.000	583.700	239.000	584.100	245.000
GR	585.800	248.000	592.300	257.000	592.400	295.000	593.200	379.000	595.700	483.000
GR	595.700	614.000	596.700	692.000	596.500	759.000	597.500	874.000	597.500	988.000
GR	597.500	1172.000	598.100	1329.000	598.600	1487.000	598.700	1679.000	599.100	1871.000
GR	599.800	2069.000	599.700	2211.000	599.700	2360.000	599.400	2460.000	598.800	2529.000
NH	5.000	.070	91.000	.045	119.000	.034	157.000	.045	207.000	.055
NH	2386.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13634.000	29.000	119.000	157.000	320.000	375.000	345.000	.980	-0.000	-0.000
X3	-0.000	-0.000	-0.000	90.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	595.000	0.000	593.600	24.000	593.200	41.000	592.800	91.000	591.300	119.000
GR	585.300	128.000	584.400	130.000	584.000	135.000	584.400	139.000	586.200	145.000
GR	592.700	157.000	593.000	207.000	596.000	292.000	597.300	393.000	595.900	549.000
GR	597.200	677.000	596.800	738.000	597.900	852.000	598.200	1024.000	598.300	1206.000
GR	598.500	1349.000	600.000	1479.000	600.400	1615.000	600.700	1754.000	600.400	1909.000
GR	600.300	2063.000	599.800	2163.000	599.600	2291.000	598.700	2386.000	-0.000	-0.000
NC	.050	.050	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13854.000	30.000	128.000	141.000	100.000	360.000	220.000	.900	.400	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	594.000	594.000	-0.000
GR	595.000	0.000	593.600	24.000	593.200	41.000	592.800	91.000	591.300	119.000
GR	585.300	128.000	584.400	130.000	584.000	135.000	584.400	139.000	585.000	141.000
GR	586.200	145.000	592.700	157.000	593.000	207.000	596.000	292.000	597.300	393.000
GR	595.900	549.000	597.200	677.000	596.800	738.000	597.900	852.000	598.200	1024.000
GR	598.300	1206.000	598.500	1349.000	600.000	1479.000	600.400	1615.000	600.700	1754.000
GR	600.400	1909.000	600.300	2063.000	599.800	2163.000	599.600	2291.000	598.700	2386.000
NC	.018	.018	.018	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13855.000	23.000	775.000	788.000	1.000	1.000	1.000	.900	-0.000	-0.000

GR	596.100	475.000	595.100	575.000	594.500	675.000	594.600	775.000	584.600	775.000
GR	584.400	778.000	584.400	781.000	584.700	784.000	585.500	787.000	586.100	788.000
GR	594.600	788.000	594.900	875.000	595.600	975.000	596.500	1075.000	597.700	1175.000
GR	598.200	1275.000	598.600	1375.000	599.400	1475.000	-0.000	-0.000	-0.000	-0.000
SB	-0.000	1.520	3.000	-0.000	11.260	-0.000	96.800	-0.000	584.400	584.400
X1	13900.000	23.000	775.000	788.000	45.000	45.000	45.000	.900	-0.000	-0.000
X2	-0.000	-0.000	1.000	593.000	594.500	-0.000	-0.000	-0.000	.900	-0.000
BT	19.000	0.000	598.400	0.000	75.000	598.700	0.000	175.000	599.600	0.000
BT	275.000	598.800	0.000	375.000	597.300	0.000	475.000	596.100	0.000	575.000
BT	595.100	0.000	675.000	594.500	0.000	775.000	594.600	0.000	775.000	594.900
BT	593.000	788.000	594.900	593.000	788.000	594.600	0.000	875.000	594.900	0.000
BT	975.000	595.600	0.000	1075.000	596.500	0.000	1175.000	597.700	0.000	1275.000
BT	598.200	0.000	1375.000	598.600	0.000	1475.000	599.400	0.000	-0.000	-0.000
GR	598.400	0.000	598.700	75.000	599.600	175.000	598.800	275.000	597.300	375.000
GR	596.100	475.000	595.100	575.000	594.500	675.000	594.600	775.000	584.600	775.000
GR	584.400	778.000	584.400	781.000	584.700	784.000	585.500	787.000	586.100	788.000
GR	594.600	788.000	594.900	875.000	595.600	975.000	596.500	1075.000	597.700	1175.000
GR	598.200	1275.000	598.600	1375.000	599.400	1475.000	-0.000	-0.000	-0.000	-0.000
NC	.050	.050	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13901.000	30.000	128.000	141.000	1.000	1.000	1.000	.900	.400	-0.000
X3	10.000	-0.000	-0.000	90.000	-0.000	-0.000	-0.000	594.500	594.500	-0.000
GR	595.000	0.000	593.600	24.000	593.200	41.000	592.800	91.000	591.300	119.000
GR	585.300	128.000	584.400	130.000	584.000	135.000	584.400	139.000	585.000	141.000
GR	586.200	145.000	592.700	157.000	593.000	207.000	596.000	292.000	597.300	393.000
GR	595.900	549.000	597.200	677.000	596.800	738.000	597.900	852.000	598.200	1024.000
GR	598.300	1206.000	598.500	1349.000	600.000	1479.000	600.400	1615.000	600.700	1754.000
GR	600.400	1909.000	600.300	2063.000	599.800	2163.000	599.600	2291.000	598.700	2386.000
NC	.055	.055	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	15171.000	45.000	1258.000	1298.000	1080.000	1300.000	1270.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	650.000	-0.000	1685.000	-0.000	-0.000	-0.000	-0.000
GR	604.900	0.000	604.300	20.000	604.000	65.000	604.500	127.000	606.200	166.000
GR	606.100	183.000	606.000	243.000	605.000	279.000	607.100	331.000	605.800	347.000
GR	606.400	492.000	606.000	618.000	608.000	651.000	606.100	683.000	604.900	781.000
GR	603.400	887.000	601.700	970.000	599.700	1045.000	595.600	1107.000	593.100	1168.000
GR	594.100	1258.000	587.900	1276.000	587.600	1278.000	588.000	1281.000	594.400	1298.000
GR	594.600	1337.000	596.000	1415.000	596.500	1498.000	597.500	1580.000	599.100	1683.000
GR	598.000	1747.000	596.800	1784.000	597.200	1876.000	599.400	1960.000	600.700	2058.000
GR	600.800	2163.000	600.500	2255.000	601.100	2322.000	601.400	2341.000	604.400	2435.000
GR	604.300	2503.000	604.000	2550.000	602.300	2556.000	604.200	2568.000	604.600	2587.000
QT	4.000	295.000	420.000	470.000	625.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	16321.000	24.000	474.000	511.000	1080.000	1230.000	1150.000	-0.000	-0.000	-0.000
GR	606.800	0.000	604.700	26.000	605.100	71.000	605.000	122.000	603.400	196.000
GR	602.100	241.000	597.100	305.000	595.800	366.000	597.200	474.000	594.700	484.000
GR	590.700	496.000	590.300	501.000	590.500	503.000	597.100	511.000	598.200	570.000
GR	599.500	649.000	601.900	730.000	603.600	794.000	604.900	889.000	605.200	931.000
GR	604.000	992.000	606.300	1027.000	606.800	1084.000	610.500	1128.000	-0.000	-0.000
X1	18201.000	39.000	1551.000	1595.000	1880.000	1880.000	1880.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	580.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	607.400	0.000	608.200	71.000	609.200	150.000	608.300	194.000	609.500	223.000
GR	609.000	257.000	609.100	349.000	609.300	446.000	609.900	523.000	612.900	580.000
GR	611.800	711.000	610.700	780.000	608.200	861.000	608.700	931.000	607.400	980.000
GR	608.300	1084.000	609.900	1177.000	608.700	1240.000	603.400	1317.000	600.400	1371.000
GR	600.200	1465.000	600.300	1551.000	596.800	1561.000	596.000	1568.000	594.700	1569.000
GR	593.200	1571.000	592.700	1574.000	593.200	1577.000	594.600	1582.000	602.100	1595.000
GR	602.900	1627.000	604.800	1697.000	606.300	1786.000	608.600	1880.000	609.600	1916.000
GR	610.900	1984.000	611.500	2062.000	613.700	2074.000	613.600	2085.000	-0.000	-0.000
X1	19081.000	45.000	1280.000	1322.000	1100.000	550.000	880.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	670.000	-0.000	1970.000	-0.000	-0.000	-0.000	-0.000
GR	615.300	0.000	615.300	11.000	612.600	28.000	614.200	42.000	612.500	123.000
GR	610.800	204.00	610.200	310.00	609.500	394.00	607.300	472.00	606.500	538.00

GR	611.300	605.000	611.300	668.000	609.200	738.000	608.700	829.000	608.400	898.000
GR	609.800	948.000	607.900	1012.000	607.300	1050.000	603.900	1112.000	604.600	1149.000
GR	606.300	1204.000	605.100	1226.000	600.700	1280.000	598.700	1307.000	596.300	1309.000
GR	596.000	1312.000	596.800	1317.000	602.300	1322.000	602.100	1382.000	602.500	1444.000
GR	603.400	1509.000	606.600	1558.000	609.700	1608.000	612.900	1656.000	611.800	1700.000
GR	614.100	1771.000	617.600	1851.000	617.300	1895.000	618.700	1968.000	617.700	2031.000
GR	617.700	2055.000	617.700	2081.000	617.100	2115.000	613.100	2135.000	612.400	2168.000
EJ	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000



00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Erie Twp

3) WATERCOURSE: Bay Creek

4) DOCUMENT TYPE: 10yr Natural

00BREAK00

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**********************************************
HEC2 VERSION UPDATED JAN 1976
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
MODIFICATIONS 52,53,54,55,56,57,58
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C
1       TOWNSHIP OF ERIE,  5555-17-01      PM: RICHARD ZANOTTI
T2       10-YEAR FLOOD
T3       BAY CREEK

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

        -0.        2.        -0.        -0. -0.000000      -0.00      -0.0       -0.    573.670    -0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

       1.000     -0.000     -1.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

J3       1.000     10.000     11.000     12.000     14.000      8.000      4.000     -0.000     -0.000     -0.000
NC        .030       .030       .030       .300       .500     -0.000     -0.000     -0.000     -0.000     -0.000
QT       4.000    635.000    895.000    985.000   1300.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1       0.000     11.000      0.000     35.000     -0.000     -0.000     -0.000       .980     -0.000     -0.000
GR     581.300      0.000    572.100      0.000    569.700      5.000    570.200     10.000    569.900     14.000
GR     569.900     18.000    570.100     22.000    569.500     26.000    569.700     30.000    570.900     35.000
GR     581.300     35.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000
NC        .030       .030       .012     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1       1.000     11.000      0.000     35.000      1.000      1.000      1.000       .980     -0.000     -0.000
X2      -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000       .980     -0.000
BT       4.000      0.000    581.300    579.300      0.000    584.300    579.300     35.000    584.300    579.300
BT      35.000    581.300    579.300     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000
GR     581.300      0.000    572.100      0.000    569.700      5.000    570.200     10.000    569.900     14.000
GR     569.900     18.000    570.100     22.000    569.500     26.000    569.700     30.000    570.900     35.000
GR     581.300     35.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1     141.000     -0.000     -0.000     -0.000    140.000    140.000    140.000     -0.000     -0.000     -0.000
X2      -0.000     -0.000     -0.000     -0.000     -0.000     -0.000      1.000     -0.000     -0.000     -0.000

X1     142.000     -0.000     -0.000     -0.000      1.000      1.000      1.000     -0.000     -0.000     -0.000
NC        .050       .050       .030     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000
NH       5.000      .055    600.000       .050    651.000       .075    700.000       .050    800.000       .055
NH    1350.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1     192.000     24.000    600.000    651.000     50.000     50.000     50.000       .980     -0.000     -0.000
X3      -0.000     -0.000     -0.000    558.000     -0.000    695.000     -0.000     -0.000     -0.000     -0.000
GR     574.500      0.000    574.900    100.000    574.300    200.000    574.200    225.000    572.500    300.000
GR     573.100    400.000    572.500    500.000    570.800    595.000    574.700    600.000    570.700    603.000
GR     570.700    610.000    570.600    620.000    571.300    630.000    571.300    640.000    573.500    650.000
GR     575.300    651.000    575.300    700.000    576.000    800.000    576.100    900.000    575.800   1000.000
GR     575.400   1100.000    576.000   1200.000    575.700   1300.000    576.100   1350.000     -0.000     -0.000
NH       5.000      .055   1668.000       .050   1880.000       .045   1928.000       .080   1974.000       .055
NH    3102.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000

X1     772.000     37.000   1880.000   1928.000    720.000    460.000    580.000     -0.000     -0.000     -0.000
X3      10.000     -0.000     -0.000   1540.000     -0.000   2100.000     -0.000     -0.000     -0.000     -0.000
GR     578.800      0.000    579.400     13.000    576.600     21.000    577.900     30.000    577.400    150.000
GR     578.100    339.000    578.100    551.000    577.400    756.000    576.900    935.000    576.600   1143.000
GR     575.500   1199.000    576.600   1296.000    576.000   1448.000    575.400   1553.000    574.300   1628.000
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GR	574.000	1883.000	571.600	1888.000	571.500	1898.000	571.500	1908.000	571.400	1918.000
GR	573.400	1924.000	575.900	1928.000	573.300	1974.000	575.100	2088.000	574.400	2275.000
GR	574.300	2488.000	575.100	2652.000	575.000	2825.000	574.900	2971.000	572.800	2999.000
GR	575.900	3045.000	582.500	3102.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.055	1692.000	.060	1933.000	.030	1969.000	.060	2111.000	.055
NH	3922.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	6.100	8.100	8.100	8.100	1898.000	2004.000	1500.000	2520.000	-0.000
X1	1232.000	59.000	1933.000	1969.000	440.000	440.000	460.000	-0.000	-0.000	-0.000
GR	580.900	0.000	580.100	16.000	578.500	23.000	579.600	53.000	580.800	139.000
GR	579.300	198.000	580.000	261.000	578.300	339.000	578.300	503.000	579.000	669.000
GR	579.200	893.000	578.700	1170.000	578.000	1367.000	577.200	1510.000	575.700	1606.000
GR	574.100	1692.000	574.900	1933.000	573.600	1935.000	573.300	1938.000	572.700	1943.000
GR	571.700	1948.000	571.400	1953.000	571.200	1958.000	571.500	1963.000	572.500	1968.000
GR	574.600	1969.000	574.800	1986.000	573.700	1997.000	573.700	2056.000	574.300	2076.000
GR	574.400	2111.000	575.500	2216.000	577.500	2300.000	577.700	2409.000	577.600	2519.000
GR	577.600	2539.000	577.600	2591.000	577.700	2629.000	576.300	2702.000	577.200	2770.000
GR	577.100	2867.000	575.700	2999.000	577.100	3087.000	578.400	3151.000	578.700	3205.000
GR	578.600	3246.000	577.400	3283.000	577.500	3391.000	578.100	3456.000	577.800	3529.000
GR	578.300	3586.000	578.400	3646.000	577.200	3669.000	579.300	3747.000	575.100	3790.000
GR	576.600	3816.000	582.000	3864.000	584.600	3898.000	585.800	3922.000	-0.000	-0.000
NH	5.000	.055	1844.000	.080	1949.000	.030	1996.000	.075	2366.000	.055
NH	4052.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	6.100	8.100	8.100	8.100	1959.000	1979.000	1460.000	2395.000	-0.000
X1	1402.000	18.000	1949.000	1996.000	170.000	170.000	170.000	-0.000	-.200	-0.000
GR	578.300	1410.000	577.400	1459.000	576.800	1562.000	575.800	1701.000	574.700	1844.000
GR	574.700	1949.000	573.600	1956.000	572.900	1959.000	571.200	1969.000	571.000	1976.000
GR	572.200	1979.000	573.400	1982.000	575.100	1996.000	574.300	2100.000	576.600	2182.000
GR	577.200	2366.000	578.200	2396.000	581.100	4052.000	-0.000	-0.000	-0.000	-0.000
NC	.045	.045	.016	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	6.100	8.100	8.100	8.100	1959.000	1979.000	1460.000	2395.000	-0.000
X1	1403.000	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
SB	.900	1.450	2.900	-0.000	18.230	.010	127.600	-0.000	570.800	570.800
X1	1427.000	31.000	1500.000	1520.000	24.000	24.000	24.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	577.900	576.700	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	1000.000	-0.000	1935.000	-0.000	576.700	576.700	-0.000
BT	15.000	0.000	579.400	0.000	200.000	579.300	0.000	400.000	579.300	0.000
BT	600.000	579.600	0.000	800.000	578.700	0.000	1000.000	577.800	0.000	1200.000
BT	577.000	0.000	1300.000	577.100	0.000	1410.000	577.600	0.000	1500.000	579.400
BT	577.800	1520.000	579.500	577.900	1600.000	577.500	0.000	1640.000	577.000	0.000
BT	1800.000	576.700	0.000	1935.000	577.100	0.000	-0.000	-0.000	-0.000	-0.000
GR	579.400	-0.000	579.300	200.000	579.300	400.000	579.600	600.000	578.700	800.000
GR	577.800	1000.000	577.000	1200.000	577.100	1300.000	575.600	1410.000	574.400	1500.000
GR	572.300	1500.000	571.700	1502.000	571.700	1505.000	571.300	1510.000	570.800	1515.000
GR	571.000	1517.000	571.000	1519.000	574.700	1519.000	574.700	1520.000	574.800	1521.000
GR	575.500	1600.000	575.800	1640.000	576.700	1800.000	577.100	1935.000	577.400	2000.000
GR	578.600	2184.000	578.600	2200.000	578.600	2400.000	578.700	2600.000	579.800	2800.000
GR	580.300	3000.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.055	1844.000	.080	1949.000	.030	1996.000	.075	2366.000	.055
NH	4052.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	1428.000	18.000	1959.000	1979.000	1.000	1.000	1.000	-0.000	-.200	-0.000
X3	10.000	-0.000	-0.000	1768.000	-0.000	2350.000	-0.000	576.200	576.200	-0.000
GR	578.300	1410.000	577.400	1459.000	576.800	1562.000	575.800	1701.000	574.700	1844.000
GR	574.700	1949.000	573.600	1956.000	572.900	1959.000	571.200	1969.000	571.000	1976.000
GR	572.200	1979.000	573.400	1982.000	575.100	1996.000	574.300	2100.000	576.600	2182.000
GR	577.200	2366.000	578.200	2396.000	581.100	4052.000	-0.000	-0.000	-0.000	-0.000
ET	-0.000	6.100	8.100	8.100	8.100	1913.000	2033.000	1718.000	2395.000	-0.000
X1	1478.000	69.000	1949.000	1996.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
GR	582.100	0.000	581.500	14.000	579.400	26.000	580.300	43.000	580.300	88.000
GR	579.600	114.000	579.900	154.000	580.000	252.000	582.100	292.000	582.600	324.000

GR	577.900	892.000	580.500	722.000	581.000	754.000	579.900	789.000	580.200	830.000
GR	580.300	898.000	580.900	993.000	579.800	1022.000	579.200	1045.000	578.700	1190.000
GR	578.800	1269.000	579.200	1330.000	578.900	1374.000	578.300	1410.000	577.400	1459.000
GR	576.800	1562.000	575.800	1701.000	574.700	1844.000	574.700	1949.000	573.600	1956.000
GR	572.900	1959.000	571.200	1969.000	571.000	1976.000	573.400	1982.000	575.100	1996.000
GR	574.300	2100.000	576.600	2182.000	577.200	2366.000	578.200	2396.000	578.200	2409.000
GR	578.500	2425.000	578.500	2461.000	578.100	2496.000	578.300	2520.000	578.500	2534.000
GR	579.000	2568.000	578.100	2619.000	578.000	2651.000	577.400	2751.000	578.300	2782.000
GR	577.700	2868.000	578.100	3019.000	577.700	3119.000	578.500	3226.000	578.800	3400.000
GR	579.300	3468.000	578.700	3518.000	578.800	3551.000	579.200	3609.000	579.100	3741.000
GR	579.500	3950.000	576.600	3978.000	580.600	4022.000	581.100	4052.000	-0.000	-0.000
X1	1978.000	-0.000	-0.000	-0.000	260.000	750.000	500.000	-0.000	-.200	-0.000
X3	-0.000	-0.000	-0.000	1823.000	-0.000	2073.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.055	1466.000	.100	1511.000	.030	1546.000	.045	1658.000	.070
NH	4132.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2478.000	54.000	1511.000	1546.000	425.000	490.000	500.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1476.000	-0.000	1598.000	-0.000	-0.000	-0.000	-0.000
GR	582.100	0.000	581.900	15.000	579.500	31.000	578.500	107.000	579.200	247.000
GR	579.200	275.000	578.400	410.000	578.500	580.000	578.400	754.000	578.900	839.000
GR	583.100	854.000	579.300	880.000	578.600	1020.000	575.300	1109.000	575.900	1220.000
GR	576.200	1385.000	576.600	1466.000	576.900	1511.000	573.600	1512.000	571.100	1516.000
GR	570.600	1521.000	571.600	1526.000	573.600	1533.000	578.500	1546.000	577.500	1589.000
GR	579.700	1658.000	580.300	1700.000	580.500	1792.000	580.300	1846.000	580.100	1901.000
GR	579.500	1971.000	579.000	2013.000	578.400	2100.000	577.800	2136.000	577.600	2162.000
GR	577.800	2188.000	578.400	2272.000	578.500	2306.000	579.900	2409.000	579.600	2439.000
GR	579.500	2498.000	579.000	2539.000	579.500	2640.000	579.500	2684.000	579.000	2797.000
GR	579.000	2882.000	579.800	2950.000	581.000	3066.000	580.400	3206.000	579.200	3404.000
GR	578.800	3590.000	578.300	3762.000	578.200	3979.000	579.200	4132.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2708.000	21.000	1533.000	1559.000	150.000	225.000	230.000	-0.000	.400	-0.000
X3	10.000	-0.000	-0.000	890.000	-0.000	1590.000	-0.000	582.000	582.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.400	1559.000	576.800	1560.000	575.500	1679.000	577.000	1737.000
GR	580.000	1836.000	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000
GR	583.700	2974.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.030	.030	.012	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2709.000	33.000	1500.000	1526.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	870.000	-0.000	1570.000	-0.000	-0.000	-0.000	-0.000
BT	23.000	0.000	583.600	0.000	200.000	583.700	0.000	400.000	584.000	0.000
BT	600.000	584.200	0.000	800.000	584.300	0.000	1000.000	584.600	0.000	1200.000
BT	584.800	0.000	1400.000	585.200	0.000	1500.000	585.300	580.500	1511.000	585.300
BT	580.500	1511.000	585.300	574.100	1514.000	585.300	574.100	1514.000	585.300	580.500
BT	1526.000	585.300	580.500	1600.000	585.400	0.000	1800.000	585.500	0.000	2000.000
BT	585.700	0.000	2200.000	585.800	0.000	2400.000	585.700	0.000	2600.000	585.800
BT	0.000	2800.000	585.900	0.000	2825.000	586.000	0.000	3000.000	586.100	0.000
GR	583.600	0.000	583.700	200.000	584.000	400.000	584.200	600.000	584.300	800.000
GR	584.600	1000.000	584.800	1200.000	585.200	1400.000	585.300	1500.000	574.100	1500.000
GR	574.100	1500.500	572.100	1500.500	572.100	1501.500	571.900	1505.000	572.000	1510.500
GR	574.100	1510.500	574.100	1511.000	574.100	1514.000	574.100	1514.500	572.800	1514.500
GR	572.800	1525.500	574.100	1525.500	574.100	1526.000	585.300	1526.000	585.400	1600.000
GR	585.500	1800.000	585.700	2000.000	585.800	2200.000	585.700	2400.000	585.800	2600.000
GR	585.900	2800.000	586.000	2825.000	586.100	3000.000	-0.000	-0.000	-0.000	-0.000
X1	2742.000	-0.000	-0.000	-0.000	32.500	32.500	32.500	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	870.000	-0.000	1570.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2743.000	21.000	1533.000	1559.000	1.000	1.000	1.000	-0.000	.400	-0.000
X3	10.000	-0.000	-0.000	890.000	-0.000	1590.000	-0.000	584.000	584.000	-0.000

GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.400	1559.000	576.800	1560.000	575.500	1679.000	577.000	1737.000
GR	580.000	1836.000	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000
GR	583.700	2974.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2793.000	20.000	1533.000	1553.000	50.000	50.000	50.000	-0.000	.500	-0.000
X3	10.000	-0.000	-0.000	890.000	-0.000	1590.000	-0.000	584.000	584.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000	580.000	1836.000
GR	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000	583.700	2974.000
NC	.040	.040	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2794.000	25.000	1500.000	1520.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	870.000	-0.000	1570.000	-0.000	-0.000	-0.000	-0.000
BT	19.000	0.000	584.000	0.000	200.000	584.000	0.000	400.000	584.100	0.000
BT	600.000	584.300	0.000	800.000	584.400	0.000	1000.000	584.600	0.000	1200.000
BT	584.700	0.000	1400.000	584.900	0.000	1500.000	585.100	579.500	1520.000	585.100
BT	579.600	1600.000	585.300	0.000	1800.000	585.700	0.000	2000.000	586.000	0.000
BT	2200.000	586.200	0.000	2400.000	586.300	0.000	2600.000	586.400	0.000	2800.000
BT	586.600	0.000	2875.000	586.800	0.000	3000.000	586.700	0.000	-0.000	-0.000
GR	584.000	0.000	584.000	200.000	584.100	400.000	584.300	600.000	584.400	800.000
GR	584.600	1000.000	584.700	1200.000	584.900	1400.000	585.100	1500.000	575.300	1500.000
GR	574.100	1504.000	573.600	1505.000	572.200	1510.000	572.300	1515.000	572.000	1520.000
GR	585.100	1520.000	585.300	1600.000	585.700	1800.000	586.000	2000.000	586.200	2200.000
GR	586.300	2400.000	586.400	2600.000	586.600	2800.000	586.800	2875.000	586.700	3000.000
X1	2809.000	-0.000	-0.000	-0.000	15.000	15.000	15.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	870.000	-0.000	1570.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2810.000	20.000	1533.000	1553.000	1.000	1.000	1.000	-0.000	.500	-0.000
X3	10.000	-0.000	-0.000	890.000	-0.000	1590.000	-0.000	584.000	584.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000
GR	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000	572.400	1547.000
GR	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000	580.000	1836.000
GR	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000	583.700	2974.000
X1	2850.000	-0.000	-0.000	-0.000	40.000	40.000	40.000	-0.000	.500	-0.000
X3	10.000	-0.000	-0.000	890.000	-0.000	1590.000	-0.000	584.000	584.000	-0.000
NC	.040	.040	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	2851.000	24.000	1500.000	1520.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	870.000	-0.000	1570.000	-0.000	-0.000	-0.000	-0.000
BT	19.000	0.000	583.100	0.000	200.000	583.300	0.000	400.000	583.400	0.000
BT	600.000	583.500	0.000	800.000	583.700	0.000	1000.000	583.900	0.000	1200.000
BT	584.100	0.000	1400.000	584.300	0.000	1500.000	584.500	580.600	1520.000	584.500
BT	580.600	1600.000	584.600	0.000	1800.000	584.900	0.000	2000.000	585.100	0.000
BT	2200.000	585.300	0.000	2400.000	585.400	0.000	2600.000	585.600	0.000	2800.000
BT	585.700	0.000	2915.000	585.800	0.000	3000.000	585.800	0.000	-0.000	-0.000
GR	583.100	0.000	583.300	200.000	583.400	400.000	583.500	600.000	583.700	800.000
GR	583.900	1000.000	584.100	1200.000	584.300	1400.000	584.500	1500.000	573.100	1500.000
GR	572.700	1505.000	572.500	1510.000	573.000	1515.000	574.300	1520.000	584.500	1520.000
GR	584.600	1600.000	584.900	1800.000	585.100	2000.000	585.300	2200.000	585.400	2400.000
GR	585.600	2600.000	585.700	2800.000	585.800	2915.000	585.800	3000.000	-0.000	-0.000
X1	2865.000	-0.000	-0.000	-0.000	14.000	14.000	14.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	870.000	-0.000	1570.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.060	1527.000	.030	1560.000	.075	1737.000	.055	2974.000	-0.000
X1	2866.000	20.000	1533.000	1553.000	1.000	1.000	1.000	-0.000	1.000	-0.000
X3	10.000	-0.000	-0.000	890.000	-0.000	1590.000	-0.000	584.000	584.000	-0.000
GR	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000	577.200	1253.000

GR	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000	580.000	1836.000
GR	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000	583.700	2974.000
X1	2870.000	-0.000	-0.000	-0.000	4.000	4.000	4.000	-0.000	-.080	-0.000
X3	-0.000	-0.000	-0.000	1529.000	-0.000	1557.000	-0.000	-0.000	-0.000	-0.000
X1	2874.000	-0.000	-0.000	-0.000	4.000	4.000	4.000	-0.000	-.080	-0.000
X3	-0.000	-0.000	-0.000	1525.000	-0.000	1561.000	-0.000	-0.000	-0.000	-0.000
X1	2916.000	31.000	1527.000	1560.000	42.000	42.000	42.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1480.000	-0.000	1600.000	-0.000	-0.000	-0.000	-0.000
GR	582.000	0.000	581.800	15.000	577.700	28.000	580.000	35.000	579.400	177.000
GR	579.800	391.000	579.000	652.000	579.600	889.000	579.200	1043.000	578.300	1175.000
GR	577.200	1253.000	575.900	1365.000	576.400	1527.000	571.800	1533.000	571.500	1537.000
GR	572.400	1547.000	573.900	1553.000	576.800	1560.000	575.500	1679.000	577.000	1737.000
GR	580.000	1836.000	580.600	1971.000	581.400	2115.000	582.400	2249.000	581.700	2395.000
GR	582.000	2548.000	581.700	2657.000	581.800	2787.000	581.000	2948.000	583.600	2961.000
GR	583.700	2974.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.055	1224.000	.030	1258.000	.080	1311.000	.055	2631.000	-0.000
X1	3536.000	36.000	1224.000	1258.000	675.000	500.000	620.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	325.000	-0.000	1510.000	-0.000	-0.000	-0.000	-0.000
GR	583.000	0.000	583.400	14.000	581.700	26.000	583.300	66.000	583.100	116.000
GR	581.900	146.000	582.100	221.000	584.000	326.000	583.700	505.000	582.100	708.000
GR	583.300	808.000	583.600	952.000	582.400	1037.000	580.000	1102.000	578.000	1162.000
GR	577.700	1224.000	574.100	1234.000	572.200	1240.000	572.400	1244.000	574.100	1253.000
GR	577.200	1258.000	577.000	1311.000	577.700	1382.000	580.900	1464.000	581.900	1511.000
GR	581.700	1635.000	577.000	1732.000	577.900	1855.000	579.300	1983.000	582.000	2118.000
GR	581.600	2241.000	581.600	2406.000	582.500	2572.000	581.300	2611.000	584.800	2620.000
GR	585.000	2631.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	440.000	630.000	695.000	915.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	3796.000	-0.000	-0.000	-0.000	320.000	120.000	260.000	-0.000	.350	-0.000
X3	-0.000	-0.000	-0.000	1100.000	-0.000	1450.000	-0.000	-0.000	-0.000	-0.000
X1	4116.000	-0.000	-0.000	-0.000	420.000	220.000	320.000	-0.000	.450	-0.000
X3	-0.000	-0.000	-0.000	1050.000	-0.000	1400.000	-0.000	-0.000	-0.000	-0.000
NC	.055	.055	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	340.000	485.000	535.000	705.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	4416.000	39.000	1734.000	1770.000	200.000	400.000	300.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1600.000	-0.000	1990.000	-0.000	-0.000	-0.000	-0.000
GR	585.600	0.000	585.300	10.000	584.600	104.000	583.400	240.000	583.900	370.000
GR	582.700	485.000	583.400	605.000	583.000	706.000	581.500	835.000	580.100	912.000
GR	576.300	926.000	578.600	943.000	578.500	968.000	581.800	1050.000	581.300	1134.000
GR	580.700	1256.000	582.300	1315.000	582.000	1400.000	579.900	1511.000	579.900	1601.000
GR	577.300	1690.000	579.400	1734.000	573.400	1748.000	573.400	1759.000	574.000	1761.000
GR	579.100	1770.000	577.600	1840.000	577.400	2041.000	581.300	2174.000	579.300	2267.000
GR	575.400	2278.000	579.800	2315.000	583.000	2407.000	582.200	2517.000	582.100	2682.000
GR	582.300	2788.000	581.600	2826.000	584.100	2834.000	584.200	2849.000	-0.000	-0.000
X1	5416.000	55.000	2120.000	2156.000	900.000	1100.000	1000.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	2023.000	-0.000	2253.000	-0.000	-0.000	-0.000	-0.000
GR	586.300	0.000	585.900	13.000	583.400	25.000	585.200	30.000	584.700	177.000
GR	585.100	321.000	583.700	454.000	581.400	558.000	581.400	625.000	578.000	638.000
GR	581.400	648.000	581.000	667.000	583.100	708.000	584.200	820.000	583.800	950.000
GR	583.300	1086.000	584.300	1213.000	583.700	1312.000	583.700	1399.000	584.100	1508.000
GR	583.100	1674.000	582.300	1872.000	579.100	2045.000	580.500	2120.000	576.400	2130.000
GR	574.300	2137.000	573.600	2142.000	574.200	2146.000	580.500	2156.000	579.900	2323.000
GR	578.900	2472.000	581.600	2594.000	582.300	2646.000	580.600	2655.000	583.500	2663.000
GR	583.500	2682.000	583.900	2777.000	583.900	2827.000	583.900	2870.000	583.300	2936.000
GR	582.000	3004.000	583.000	3066.000	583.800	3156.000	582.400	3281.000	583.000	3486.000
GR	583.400	3736.000	583.600	3985.000	584.200	4212.000	584.400	4434.000	585.200	4661.000
GR	587.700	4878.000	588.600	5115.000	587.700	5310.000	587.100	5476.000	591.400	5539.000
NH	3.000	.055	1715.000	.030	1755.000	.055	2151.000	-0.000	-0.000	-0.000

X1	5846.000	18.000	1725.000	1739.000	350.000	460.000	430.000	-0.000	-.400	-0.000
X3	10.000	-0.000	-0.000	1725.000	-0.000	1972.000	-0.000	582.500	582.500	-0.000
GR	587.000	741.000	587.100	851.000	586.400	1011.000	586.600	1217.000	586.200	1360.000
GR	585.200	1520.000	583.800	1638.000	583.100	1715.000	575.500	1725.000	574.400	1728.000
GR	574.200	1732.000	574.600	1735.000	577.150	1739.000	577.800	1740.000	582.600	1755.000
GR	580.700	1877.000	581.700	2043.000	584.200	2151.000	-0.000	-0.000	-0.000	-0.000
NC	.035	.035	.012	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	5847.000	26.000	1500.000	1514.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	250.000	-0.000	1747.000	-0.000	-0.000	-0.000	-0.000
BT	18.000	0.000	582.500	0.000	200.000	584.900	0.000	400.000	584.900	0.000
BT	600.000	584.500	0.000	800.000	584.400	0.000	1000.000	585.000	0.000	1100.000
BT	585.900	0.000	1200.000	585.300	0.000	1300.000	583.600	0.000	1400.000	581.800
BT	0.000	1500.000	582.400	581.700	1514.000	582.800	582.100	1600.000	581.400	0.000
BT	1700.000	581.400	0.000	1800.000	582.100	0.000	1900.000	583.000	0.000	2000.000
BT	583.700	0.000	2088.000	584.600	0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	582.500	0.000	584.900	200.000	584.900	400.000	584.500	600.000	584.400	800.000
GR	585.000	1000.000	585.900	1100.000	585.300	1200.000	583.600	1300.000	581.800	1400.000
GR	582.400	1500.000	576.500	1500.000	575.100	1503.000	574.100	1505.000	574.100	1508.000
GR	574.100	1512.000	573.800	1513.000	574.700	1513.100	575.400	1514.000	582.800	1514.000
GR	581.400	1600.000	581.400	1700.000	582.100	1800.000	583.000	1900.000	583.700	2000.000
GR	584.600	2088.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	5862.000	-0.000	-0.000	-0.000	15.000	15.000	15.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	250.000	-0.000	1747.000	-0.000	-0.000	-0.000	-0.000
NH	3.000	.055	1715.000	.030	1755.000	.055	2151.000	-0.000	-0.000	-0.000
X1	5863.000	18.000	1725.000	1739.000	1.000	1.000	1.000	-0.000	-.400	-0.000
X3	10.000	-0.000	-0.000	1725.000	-0.000	1972.000	-0.000	582.500	582.500	-0.000
GR	587.000	741.000	587.100	851.000	586.400	1011.000	586.600	1217.000	586.200	1360.000
GR	585.200	1520.000	583.800	1638.000	583.100	1715.000	575.500	1725.000	574.400	1728.000
GR	574.200	1732.000	574.600	1735.000	577.150	1739.000	577.800	1740.000	582.600	1755.000
GR	580.700	1877.000	581.700	2043.000	584.200	2151.000	-0.000	-0.000	-0.000	-0.000
NH	3.000	.055	1715.000	.035	1755.000	.055	2151.000	-0.000	-0.000	-0.000
X1	6363.000	57.000	1715.000	1755.000	480.000	470.000	500.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	1850.000	-0.000	-0.000	-0.000	-0.000
GR	587.000	0.000	586.700	15.000	584.600	29.000	586.500	36.000	585.600	239.000
GR	586.200	356.000	586.700	499.000	584.100	564.000	584.700	594.000	580.600	607.000
GR	582.900	616.000	584.600	679.000	587.000	741.000	587.100	851.000	586.400	1011.000
GR	586.600	1217.000	586.200	1360.000	585.200	1520.000	583.800	1638.000	583.100	1715.000
GR	575.500	1725.000	574.400	1728.000	574.200	1732.000	574.600	1735.000	577.800	1740.000
GR	582.600	1755.000	580.700	1877.000	581.700	2043.000	584.200	2151.000	583.200	2216.000
GR	584.400	2373.000	584.600	2545.000	584.700	2716.000	581.800	2726.000	584.300	2732.000
GR	584.000	2756.000	583.900	2785.000	583.900	2832.000	583.400	2936.000	579.200	2947.000
GR	582.800	2967.000	583.700	3050.000	584.100	3171.000	584.200	3391.000	584.000	3577.000
GR	584.700	3792.000	585.100	4004.000	585.200	4099.000	586.300	4308.000	587.800	4476.000
GR	589.100	4675.000	589.100	4837.000	589.500	5001.000	586.700	5190.000	589.600	5377.000
GR	588.200	5466.000	586.400	5678.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	3.000	.055	1690.000	.045	1726.000	.055	3564.000	-0.000	-0.000	-0.000
X1	6993.000	55.000	1690.000	1726.000	625.000	610.000	630.000	-0.000	-.750	-0.000
X3	10.000	-0.000	-0.000	1600.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	587.600	0.000	587.600	7.000	585.400	26.000	587.000	33.000	587.000	111.000
GR	586.000	213.000	586.300	284.000	585.600	364.000	585.900	450.000	585.700	556.000
GR	585.300	644.000	585.700	730.000	585.700	833.000	585.800	936.000	585.500	1042.000
GR	585.400	1138.000	588.200	1169.000	588.000	1180.000	587.700	1233.000	586.800	1281.000
GR	586.900	1345.000	586.400	1434.000	584.700	1519.000	582.800	1551.000	582.900	1623.000
GR	582.900	1690.000	581.500	1695.000	575.900	1701.000	575.700	1708.000	575.700	1715.000
GR	577.400	1721.000	583.400	1726.000	584.300	1792.000	585.700	1874.000	586.200	1971.000
GR	586.300	2124.000	586.200	2248.000	587.000	2391.000	587.300	2538.000	586.800	2603.000
GR	589.400	2620.000	588.900	2636.000	587.400	2695.000	581.000	2736.000	586.600	2759.000
GR	585.700	2873.000	587.100	2983.000	587.700	3113.000	589.400	3165.000	589.400	3196.000
GR	588.000	3255.000	586.600	3342.000	586.400	3405.000	586.500	3469.000	586.600	3564.000

X1	7623.000	-0.000	-0.000	-0.000	625.000	610.000	630.000	-0.000	.750	-0.000
X3	-0.000	-0.000	-0.000	1690.000	-0.000	1725.000	-0.000	-0.000	-0.000	-0.000
X1	7663.000	24.000	1700.500	1715.000	40.000	40.000	40.000	-0.000	-1.700	-0.000
X3	10.000	-0.000	-0.000	1235.000	-0.000	2620.000	-0.000	584.000	584.000	-0.000
GR	587.700	1233.000	586.800	1281.000	586.900	1345.000	586.400	1434.000	584.700	1519.000
GR	582.800	1551.000	582.900	1623.000	582.900	1690.000	581.500	1695.000	576.400	1700.500
GR	575.900	1701.000	575.700	1708.000	575.700	1715.000	577.400	1721.000	583.400	1726.000
GR	584.300	1792.000	585.700	1874.000	586.200	1971.000	586.300	2124.000	586.200	2248.000
GR	587.000	2391.000	587.300	2538.000	586.800	2603.000	589.400	2620.000	-0.000	-0.000
NC	.020	.020	.018	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	7664.000	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	584.000	584.000	-0.000
SB	-0.000	1.720	3.000	-0.000	13.100	-0.000	124.480	-0.000	574.000	574.000
X1	7754.000	27.000	1500.000	1514.500	90.000	90.000	90.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	583.500	588.600	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	589.400	589.400	-0.000
BT	20.000	0.000	589.900	0.000	200.000	589.800	0.000	400.000	589.600	0.000
BT	600.000	589.300	0.000	800.000	589.300	0.000	930.000	588.600	0.000	1000.000
BT	589.300	0.000	1200.000	589.400	0.000	1400.000	589.400	0.000	1500.000	589.400
BT	583.500	1514.500	589.400	583.500	1600.000	589.400	0.000	1800.000	589.500	0.000
BT	2000.000	589.500	0.000	2200.000	589.500	0.000	2400.000	589.300	0.000	2465.000
BT	588.800	0.000	2600.000	589.300	0.000	2800.000	589.500	0.000	3000.000	589.500
BT	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	589.900	0.000	589.800	200.000	589.600	400.000	589.300	600.000	589.300	800.000
GR	588.600	930.000	589.300	1000.000	589.400	1200.000	589.400	1400.000	583.500	1500.000
GR	576.100	1500.000	576.100	1501.000	574.800	1501.500	574.000	1507.000	575.700	1513.000
GR	576.100	1513.100	576.100	1514.500	583.500	1514.500	589.400	1600.000	589.500	1800.000
GR	589.500	2000.000	589.500	2200.000	589.300	2400.000	588.800	2465.000	589.300	2600.000
GR	589.500	2800.000	589.500	3000.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	1446.000	.045	1668.000	.033	1701.000	.050	1729.000	.055
NH	3188.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	7755.000	22.000	1679.000	1693.500	1.000	1.000	1.000	-0.000	1.700	-0.000
X3	10.000	-0.000	-0.000	1446.000	-0.000	2559.000	-0.000	589.400	589.400	-0.000
GR	585.700	1446.000	581.900	1517.000	581.600	1626.000	582.600	1668.000	577.200	1679.000
GR	576.200	1681.000	575.700	1686.000	576.200	1691.000	577.500	1693.500	581.300	1701.000
GR	581.400	1729.000	582.300	1808.000	584.500	1901.000	583.900	2037.000	584.100	2196.000
GR	585.100	2308.000	583.900	2383.000	585.900	2450.000	585.100	2530.000	587.800	2559.000
GR	587.400	2580.000	586.300	3188.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	7805.000	47.000	1668.000	1701.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1629.000	-0.000	1744.000	-0.000	-0.000	-0.000	-0.000
GR	586.700	0.000	586.600	12.000	583.900	21.000	587.000	32.000	584.000	70.000
GR	584.300	105.000	585.000	224.000	585.800	334.000	584.900	456.000	584.200	599.000
GR	583.400	667.000	584.700	734.000	584.700	927.000	583.600	1041.000	586.200	1088.000
GR	585.900	1106.000	585.200	1133.000	584.400	1227.000	585.600	1345.000	586.100	1409.000
GR	585.700	1446.000	581.900	1517.000	581.600	1626.000	582.600	1668.000	576.200	1681.000
GR	575.700	1686.000	576.200	1691.000	581.300	1701.000	581.400	1729.000	582.300	1808.000
GR	584.500	1901.000	583.900	2037.000	584.100	2196.000	585.100	2308.000	583.900	2383.000
GR	585.900	2450.000	585.100	2530.000	587.800	2559.000	587.400	2580.000	587.700	2666.000
GR	586.400	2756.000	580.400	2772.000	585.200	2787.000	585.600	2876.000	585.800	3019.000
GR	585.900	3140.000	586.300	3188.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	1601.000	.055	1656.000	.040	1696.000	.045	1774.000	.055
NH	3062.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	8225.000	47.000	1656.000	1696.000	390.000	500.000	420.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	1601.000	-0.000	2450.000	-0.000	-0.000	-0.000	-0.000
GR	589.000	0.000	588.300	46.000	585.600	86.000	586.600	111.000	585.600	139.000
GR	586.900	285.000	587.000	398.000	586.000	491.000	587.200	592.000	586.200	708.000
GR	586.900	807.000	587.000	971.000	586.900	988.000	587.700	1031.000	587.500	1074.000
GR	588.000	1133.000	588.000	1174.000	588.000	1264.000	587.900	1336.000	587.700	1346.000
GR	587.500	1414.000	587.500	1424.000	587.100	1488.000	586.300	1522.000	585.100	1601.000

GR	583.900	1696.000	583.100	1774.000	584.700	1861.000	585.400	1990.000	585.800	2133.000
GR	585.500	2210.000	585.800	2353.000	586.600	2450.000	586.500	2546.000	586.100	2571.000
GR	586.300	2673.000	586.400	2777.000	586.200	2863.000	581.700	2874.000	586.300	2896.000
GR	586.400	2993.000	587.000	3062.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	1016.000	.075	1394.000	.040	1430.000	.045	1447.000	.055
NH	3090.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	8695.000	46.000	1394.000	1430.000	480.000	475.000	470.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	1016.000	-0.000	2200.000	-0.000	-0.000	-0.000	-0.000
GR	588.900	0.000	588.900	13.000	587.100	25.000	589.200	33.000	588.000	103.000
GR	589.000	185.000	589.600	277.000	588.600	357.000	590.000	383.000	589.900	443.000
GR	589.600	481.000	589.600	528.000	590.100	582.000	589.600	660.000	589.600	673.000
GR	588.400	718.000	588.200	747.000	588.100	782.000	588.000	836.000	587.900	877.000
GR	587.400	1016.000	587.100	1105.000	587.200	1196.000	585.800	1276.000	584.500	1364.000
GR	585.000	1394.000	576.300	1408.000	576.100	1414.000	577.100	1418.000	584.000	1430.000
GR	580.800	1447.000	583.000	1539.000	585.100	1643.000	585.700	1751.000	585.700	1806.000
GR	586.700	1943.000	586.700	2065.000	586.700	2230.000	586.800	2447.000	586.300	2611.000
GR	586.200	2675.000	583.400	2686.000	587.300	2701.000	586.700	2756.000	587.900	2913.000
GR	587.500	3090.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	9105.000	-0.000	-0.000	-0.000	1.000	650.000	410.000	-0.000	1.500	-0.000
X3	10.000	-0.000	-0.000	1230.000	-0.000	1630.000	-0.000	-0.000	-0.000	-0.000
NH	5.000	.070	714.000	.065	730.000	.040	770.000	.045	828.000	.055
NH	3131.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	9515.000	45.000	730.000	770.000	650.000	1.000	410.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	715.000	-0.000	890.000	-0.000	-0.000	-0.000	-0.000
GR	590.800	0.000	590.400	22.000	590.800	60.000	590.700	102.000	590.500	132.000
GR	590.400	164.000	589.100	262.000	589.000	324.000	590.200	394.000	590.300	418.000
GR	590.200	440.000	590.200	495.000	588.500	541.000	587.300	605.000	586.900	699.000
GR	590.400	714.000	588.000	730.000	579.600	742.000	579.200	748.000	579.500	756.000
GR	585.400	770.000	584.500	790.000	584.900	828.000	585.500	924.000	587.700	1093.000
GR	586.600	1118.000	587.400	1159.000	586.300	1236.000	585.800	1363.000	585.200	1439.000
GR	587.500	1559.000	587.800	1722.000	587.400	1935.000	586.900	2078.000	587.800	2183.000
GR	586.900	2249.000	586.600	2384.000	588.400	2527.000	587.400	2560.000	588.500	2689.000
GR	583.300	2701.000	589.300	2712.000	588.300	2754.000	588.700	2925.000	589.700	3131.000
NH	5.000	.070	715.000	.045	731.000	.033	772.000	.100	1021.000	.070
NH	3122.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	325.000	465.000	515.000	680.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10035.000	69.000	731.000	772.000	430.000	500.000	520.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	715.000	-0.000	1038.000	-0.000	-0.000	-0.000	-0.000
GR	591.200	0.000	591.100	15.000	591.300	66.000	591.900	112.000	591.900	136.000
GR	591.700	145.000	591.900	231.000	591.900	244.000	590.000	412.000	589.500	442.000
GR	589.400	507.000	589.400	550.000	588.800	571.000	588.900	610.000	588.600	646.000
GR	588.600	672.000	589.400	715.000	588.700	731.000	585.700	739.000	580.900	750.000
GR	579.800	754.000	579.100	757.000	579.500	762.000	588.300	772.000	587.900	813.000
GR	588.300	884.000	589.600	950.000	589.500	1021.000	590.700	1038.000	590.500	1074.000
GR	589.600	1111.000	589.500	1132.000	588.700	1166.000	588.800	1233.000	589.100	1257.000
GR	589.100	1282.000	589.100	1311.000	589.000	1329.000	589.200	1354.000	589.400	1385.000
GR	590.300	1417.000	590.400	1448.000	590.100	1496.000	589.900	1534.000	589.900	1570.000
GR	589.900	1609.000	589.700	1644.000	589.200	1678.000	589.600	1711.000	590.100	1739.000
GR	589.300	1795.000	589.200	1895.000	590.300	1939.000	590.200	1967.000	589.200	1984.000
GR	588.900	2067.000	588.900	2112.000	588.900	2139.000	587.600	2171.000	587.600	2210.000
GR	587.800	2356.000	589.000	2516.000	588.800	2680.000	590.600	2830.000	590.100	2921.000
GR	586.900	2941.000	589.900	2966.000	589.400	3047.000	590.200	3122.000	-0.000	-0.000
X1	10070.000	15.000	750.000	764.500	35.000	35.000	35.000	-0.000	.500	-0.000
X3	10.000	-0.000	-0.000	537.000	-0.000	788.000	-0.000	587.000	587.000	-0.000
GR	589.400	715.000	588.700	731.000	585.700	739.000	580.900	750.000	579.800	754.000
GR	579.100	757.000	579.500	762.000	581.700	764.500	588.300	772.000	587.900	813.000
GR	588.300	884.000	589.600	950.000	589.500	1021.000	590.700	1038.000	590.200	3122.000
NC	.020	.020	.018	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10071.000	26.000	1500.000	1514.500	1.000	1.000	1.000	-0.000	-0.000	-0.000

GR	592.500	0.000	592.300	200.000	592.000	400.000	591.800	600.000	5.1.800	775.000
GR	591.700	800.000	591.000	1000.000	590.500	1186.000	590.300	1200.000	589.800	1400.000
GR	586.100	1500.000	579.800	1500.000	579.600	1503.000	579.600	1506.000	579.600	1509.000
GR	579.900	1512.000	580.200	1514.500	586.100	1514.500	589.600	1600.000	589.800	1800.000
GR	590.300	2000.000	590.600	2200.000	591.000	2400.000	591.200	2600.000	591.100	2800.000
GR	590.600	3000.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
SB	-0.000	1.850	3.000	-0.000	14.210	-0.000	92.380	-0.000	579.600	579.600
X1	10149.000	-0.000	-0.000	-0.000	77.500	77.500	77.500	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	586.100	589.600	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	1287.000	-0.000	1538.000	-0.000	589.000	589.000	-0.000
BT	22.000	0.000	592.500	0.000	200.000	592.300	0.000	400.000	592.000	0.000
BT	600.000	591.800	0.000	775.000	591.800	0.000	800.000	591.700	0.000	1000.000
BT	591.000	0.000	1186.000	590.500	0.000	1200.000	590.300	0.000	1400.000	589.800
BT	0.000	1500.000	589.600	0.000	1500.000	590.100	586.100	1514.500	590.100	586.100
BT	1514.500	589.600	0.000	1600.000	589.600	0.000	1800.000	589.800	0.000	2000.000
BT	590.300	0.000	2200.000	590.600	0.000	2400.000	591.000	0.000	2600.000	591.200
BT	0.000	2800.000	591.100	0.000	3000.000	590.600	0.000	-0.000	-0.000	-0.000
NH	5.000	.070	465.000	.100	665.000	.045	701.000	.050	715.000	.070
NH	3639.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10150.000	12.000	678.000	692.500	1.000	1.000	1.000	-0.000	-.200	-0.000
X3	10.000	-0.000	-0.000	465.000	-0.000	716.000	-0.000	589.500	589.500	-0.000
GR	590.600	465.000	589.200	525.000	590.500	542.000	588.500	554.000	588.900	596.000
GR	588.100	665.000	581.100	678.000	579.800	685.000	580.900	692.500	587.400	701.000
GR	587.100	716.000	589.500	3639.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10210.000	69.000	665.000	701.000	60.000	60.000	60.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	660.000	-0.000	705.000	-0.000	-0.000	-0.000	-0.000
GR	592.400	0.000	592.100	10.000	592.400	35.000	592.300	63.000	592.300	76.000
GR	592.500	110.000	592.500	113.000	592.400	153.000	592.400	158.000	591.500	193.000
GR	591.500	199.000	591.500	231.000	591.700	253.000	591.800	327.000	591.300	364.000
GR	591.000	398.000	591.400	420.000	590.600	465.000	589.200	525.000	590.500	542.000
GR	588.500	554.000	588.900	596.000	588.100	665.000	581.100	678.000	579.800	685.000
GR	580.900	692.000	587.400	701.000	587.100	716.000	587.000	745.000	587.100	767.000
GR	587.800	797.000	587.800	827.000	588.800	875.000	589.900	917.000	590.400	954.000
GR	590.200	984.000	590.600	1016.000	590.600	1031.000	590.100	1063.000	590.000	1076.000
GR	589.700	1115.000	588.200	1135.000	590.100	1211.000	590.300	1253.000	590.800	1267.000
GR	590.600	1293.000	591.700	1317.000	591.600	1346.000	590.500	1371.000	590.200	1407.000
GR	590.400	1429.000	590.200	1454.000	589.100	1476.000	589.600	1535.000	589.600	1668.000
GR	589.400	1768.000	589.400	1866.000	589.200	2027.000	588.900	2181.000	589.500	2391.000
GR	590.000	2628.000	590.000	2819.000	590.900	2942.000	587.100	2959.000	591.300	2970.000
GR	590.900	3078.000	590.600	3283.000	590.000	3481.000	589.500	3639.000	-0.000	-0.000
NH	5.000	.070	174.000	.075	283.000	.030	318.000	.100	333.000	.055
NH	2822.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	10810.000	35.000	283.000	318.000	585.000	585.000	600.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	174.000	-0.000	333.000	-0.000	-0.000	-0.000	-0.000
GR	593.200	0.000	593.100	36.000	592.200	79.000	589.600	174.000	588.300	243.000
GR	587.600	283.000	583.400	291.000	581.600	296.000	580.700	298.000	580.700	304.000
GR	581.600	308.000	587.400	318.000	588.700	333.000	586.200	343.000	587.600	403.000
GR	589.200	498.000	589.000	564.000	587.500	609.000	588.000	712.000	588.100	797.000
GR	590.200	895.000	589.600	987.000	590.300	1086.000	590.500	1205.000	590.200	1259.000
GR	589.800	1408.000	589.700	1548.000	590.400	1669.000	589.600	1824.000	590.600	2033.000
GR	590.500	2203.000	591.200	2386.000	591.900	2597.000	591.800	2708.000	591.200	2822.000
NH	4.000	.055	170.000	.030	212.000	.055	389.000	.070	3118.000	-0.000
X1	11590.000	18.000	186.000	199.000	860.000	700.000	780.000	-0.000	-.100	-0.000
X3	10.000	-0.000	-0.000	0.000	-0.000	348.000	-0.000	590.000	590.000	-0.000
GR	593.000	0.000	592.800	13.000	588.900	30.000	589.000	81.000	588.400	170.000
GR	584.500	180.000	582.900	184.000	582.200	186.000	581.900	187.000	581.500	193.000
GR	582.200	199.000	584.200	202.000	588.500	212.000	589.000	245.000	591.700	284.000
GR	597.300	348.000	596.300	389.000	588.900	3118.000	-0.000	-0.000	-0.000	-0.000
NC	.030	.030	.020	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

X3	-0.000	-0.000	-0.000	720.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
BT	12.000	0.000	593.300	0.000	200.000	593.500	0.000	500.000	593.700	0.000
BT	600.000	593.900	0.000	716.000	593.100	0.000	800.000	590.700	0.000	900.000
BT	589.800	589.000	913.000	589.900	589.100	950.000	590.800	0.000	985.000	592.800
BT	0.000	1000.000	595.100	0.000	1030.000	597.000	0.000	-0.000	-0.000	-0.000
GR	593.300	0.000	593.500	200.000	593.700	500.000	593.900	600.000	593.100	716.000
GR	590.700	800.000	589.800	900.000	582.300	900.000	581.900	903.000	581.400	906.000
GR	581.500	909.000	582.200	913.000	589.900	913.000	590.800	950.000	592.800	985.000
GR	595.100	1000.000	597.000	1030.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	11608.000	-0.000	-0.000	-0.000	17.000	17.000	17.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	720.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.055	170.000	.030	212.000	.055	389.000	.070	3118.000	-0.000
X1	11609.000	18.000	186.000	199.000	1.000	1.000	1.000	-0.000	-.100	-0.000
X3	10.000	-0.000	-0.000	0.000	-0.000	348.000	-0.000	589.900	589.900	-0.000
GR	593.000	0.000	592.800	13.000	588.900	30.000	589.000	81.000	588.400	170.000
GR	584.500	180.000	582.900	184.000	582.200	186.000	581.900	187.000	581.500	193.000
GR	582.200	199.000	584.200	202.000	588.500	212.000	589.000	245.000	591.700	284.000
GR	597.300	348.000	596.300	389.000	588.900	3118.000	-0.000	-0.000	-0.000	-0.000
X1	11789.000	40.000	170.000	212.000	180.000	180.000	180.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	170.000	-0.000	212.000	-0.000	-0.000	-0.000	-0.000
GR	593.000	0.000	592.800	13.000	588.900	30.000	589.000	81.000	588.400	170.000
GR	584.500	180.000	582.900	184.000	581.900	187.000	581.500	193.000	582.200	199.000
GR	584.200	202.000	588.500	212.000	589.000	245.000	591.700	284.000	597.300	348.000
GR	596.300	389.000	594.800	415.000	593.200	469.000	592.200	597.000	591.100	746.000
GR	591.100	842.000	592.000	901.000	592.400	1010.000	591.900	1083.000	592.100	1241.000
GR	592.300	1371.000	592.800	1507.000	593.000	1615.000	592.000	1704.000	592.100	1860.000
GR	591.400	2051.000	592.500	2235.000	591.500	2442.000	591.200	2615.000	591.200	2717.000
GR	586.100	2733.000	590.900	2742.000	590.500	2859.000	589.400	2941.000	588.900	3118.000
NH	5.000	.070	192.000	.045	198.000	.030	230.000	.075	266.000	.055
NH	3236.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12359.000	39.000	198.000	230.000	570.000	570.000	570.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	192.000	-0.000	408.000	-0.000	-0.000	-0.000	-0.000
GR	594.500	0.000	594.800	17.000	595.000	50.000	593.800	104.000	592.600	157.000
GR	590.800	192.000	589.400	198.000	581.500	209.000	581.100	213.000	581.700	218.000
GR	590.200	230.000	590.400	266.000	589.600	307.000	590.200	374.000	591.500	438.000
GR	594.000	491.000	594.600	565.000	593.400	641.000	593.700	744.000	594.500	866.000
GR	594.500	996.000	593.600	1064.000	594.600	1169.000	594.900	1285.000	596.300	1411.000
GR	596.400	1513.000	597.400	1645.000	597.200	1793.000	597.200	1958.000	597.400	2156.000
GR	598.100	2351.000	598.800	2539.000	598.500	2732.000	594.100	2746.000	597.100	2759.000
GR	597.400	2880.000	597.500	3014.000	597.200	3142.000	596.800	3236.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.055	280.000	.055	2771.000	-0.000
X1	12759.000	16.000	253.000	270.000	400.000	400.000	400.000	-0.000	-.300	-0.000
X3	10.000	-0.000	-0.000	250.000	-0.000	280.000	-0.000	590.000	590.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	585.900	270.000	591.500	280.000	591.600	294.000	591.400	332.000
GR	591.500	424.000	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000
GR	600.500	2771.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.035	.035	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12760.000	19.000	235.000	252.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	232.000	-0.000	262.000	-0.000	590.000	590.000	-0.000
GR	597.800	0.000	596.000	35.000	596.500	135.000	595.900	160.000	591.600	225.000
GR	583.900	235.000	583.500	235.000	583.400	237.000	583.200	240.000	582.800	245.000
GR	583.300	249.000	583.600	250.000	584.100	252.000	584.500	252.000	591.300	270.000
GR	590.700	335.000	591.100	435.000	593.400	510.000	593.400	535.000	-0.000	-0.000
SB	-0.000	2.020	2.800	-0.000	15.780	-0.000	108.850	-0.000	582.800	582.800
X1	12774.000	-0.000	-0.000	-0.000	14.000	14.000	14.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	589.900	590.500	-0.000	-0.000	-0.000	-0.000	-0.000

BT	12.000	0.000	597.800	0.000	35.000	596.000	0.000	135.000	596.500	0.000
BT	160.000	595.900	0.000	225.000	591.600	0.000	235.000	590.900	589.900	252.000
BT	590.500	589.500	270.000	591.300	0.000	335.000	590.700	0.000	435.000	591.100
BT	0.000	510.000	593.400	0.000	535.000	593.400	0.000	-0.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.030	280.000	.055	2771.000	-0.000
X1	12775.000	16.000	253.000	270.000	1.000	1.000	1.000	-0.000	-.300	-0.000
X3	10.000	-0.000	-0.000	250.000	-0.000	280.000	-0.000	591.000	591.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	585.900	270.000	591.500	280.000	591.600	294.000	591.400	332.000
GR	591.500	424.000	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000
GR	600.500	2771.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	4.000	315.000	450.000	495.000	660.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12860.000	30.000	240.000	280.000	45.000	115.000	85.000	.950	-0.000	-0.000
X3	-0.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	-0.000	-0.000	-0.000
GR	595.100	0.000	594.900	14.000	593.600	54.000	594.500	108.000	594.500	127.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	594.400	1133.000
GR	593.200	1270.000	594.400	1416.000	596.200	1579.000	597.100	1781.000	597.700	1991.000
GR	598.100	2155.000	598.700	2327.000	599.400	2513.000	600.000	2634.000	600.300	2771.000
X1	12990.000	15.000	253.000	265.000	115.000	115.000	130.000	.950	.700	-0.000
X3	10.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	592.000	592.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	600.500	2771.000
NC	.030	.030	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	12991.000	22.000	900.000	912.000	1.000	1.000	1.000	.950	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	.950	-0.000
BT	11.000	0.000	600.200	0.000	200.000	599.600	0.000	400.000	599.300	0.000
BT	600.000	599.300	0.000	627.000	599.200	0.000	800.000	598.900	0.000	900.000
BT	598.900	591.700	912.000	598.900	591.800	1000.000	599.000	0.000	1200.000	599.000
BT	0.000	1400.000	599.200	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	600.200	0.000	599.600	200.000	599.300	400.000	599.300	600.000	599.200	627.000
GR	598.900	800.000	598.900	900.000	587.800	900.000	587.700	900.800	583.900	900.800
GR	583.900	901.000	584.000	903.000	583.900	906.000	583.800	909.000	583.800	911.000
GR	583.800	911.200	587.900	911.200	587.900	912.000	598.900	912.000	599.000	1000.000
GR	599.000	1200.000	599.200	1400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13030.000	22.000	900.000	912.000	39.000	39.000	39.000	.950	-0.000	-0.000
X2	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	.950	-0.000
BT	11.000	0.000	600.200	0.000	200.000	599.600	0.000	400.000	599.300	0.000
BT	600.000	599.300	0.000	627.000	599.200	0.000	800.000	598.900	0.000	900.000
BT	598.900	591.700	912.000	598.900	591.800	1000.000	599.000	0.000	1200.000	599.000
BT	0.000	1400.000	599.200	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	600.200	0.000	599.600	200.000	599.300	400.000	599.300	600.000	599.200	627.000
GR	598.900	800.000	598.900	900.000	587.800	900.000	587.700	900.800	583.900	900.800
GR	583.900	901.000	584.000	903.000	583.900	906.000	583.800	909.000	583.800	911.000
GR	583.800	911.200	587.900	911.200	587.900	912.000	598.900	912.000	599.000	1000.000
GR	599.000	1200.000	599.200	1400.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.030	280.000	.055	2771.000	-0.000
X1	13031.000	15.000	253.000	265.000	1.000	1.000	1.000	.950	.700	-0.000
X3	16.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	592.000	592.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	600.500	2771.000
X1	13101.000	-0.000	-0.000	-0.000	60.000	60.000	70.000	.950	.100	-0.000
X3	10.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	592.000	592.000	-0.000
NC	.015	.015	.015	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	592.000	592.000	-0.000
GR	598.600	0.000	598.200	200.000	598.000	400.000	598.000	600.000	598.300	800.000
GR	598.300	1000.000	598.100	1200.000	598.100	1236.000	597.600	1400.000	584.500	1500.000
GR	584.100	1500.000	584.100	1503.000	584.000	1506.000	583.900	1509.000	583.900	1512.000
GR	584.500	1512.000	596.400	1600.000	596.100	1800.000	596.200	2000.000	596.400	2200.000
GR	596.700	2400.000	596.900	2600.000	596.900	2800.000	597.000	3000.000	-0.000	-0.000
SB	-0.000	1.570	3.000	-0.000	11.250	-0.000	81.030	-0.000	583.900	583.900
X1	13178.000	24.000	1500.000	1512.000	76.000	76.000	76.000	.950	-0.000	-0.000
X2	-0.000	-0.000	1.000	591.100	596.100	-0.000	-0.000	-0.000	.950	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	595.000	598.000	-0.000
BT	19.000	0.000	598.600	0.000	200.000	598.200	0.000	400.000	598.000	0.000
BT	600.000	598.000	0.000	800.000	598.300	0.000	1000.000	598.300	0.000	1200.000
BT	598.100	0.000	1236.000	598.100	0.000	1400.000	597.600	0.000	1500.000	597.000
BT	591.100	1512.000	597.000	591.100	1600.000	596.400	0.000	1800.000	596.100	0.000
BT	2000.000	596.200	0.000	2200.000	596.400	0.000	2400.000	596.700	0.000	2600.000
BT	596.900	0.000	2800.000	596.900	0.000	3000.000	597.000	0.000	-0.000	-0.000
GR	598.600	0.000	598.200	200.000	598.000	400.000	598.000	600.000	598.300	800.000
GR	598.300	1000.000	598.100	1200.000	598.100	1236.000	597.600	1400.000	584.500	1500.000
GR	584.100	1500.000	584.100	1503.000	584.000	1506.000	583.900	1509.000	583.900	1512.000
GR	584.500	1512.000	596.400	1600.000	596.100	1800.000	596.200	2000.000	596.400	2200.000
GR	596.700	2400.000	596.900	2600.000	596.900	2800.000	597.000	3000.000	-0.000	-0.000
NH	4.000	.070	160.000	.045	240.000	.030	280.000	.055	2771.000	-0.000
X1	13179.000	15.000	253.000	265.000	1.000	1.000	1.000	.950	.800	-0.000
X3	10.000	-0.000	-0.000	160.000	-0.000	900.000	-0.000	594.000	594.000	-0.000
GR	594.400	160.000	593.700	210.000	591.700	240.000	583.600	253.000	583.300	259.000
GR	583.100	265.000	591.500	280.000	591.600	294.000	591.400	332.000	591.500	424.000
GR	593.100	552.000	594.000	655.000	594.600	809.000	594.800	1004.000	600.500	2771.000
NH	5.000	.070	158.000	.100	222.000	.030	257.000	.100	692.000	.070
NH	2529.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13289.000	30.000	222.000	257.000	105.000	105.000	110.000	.950	-0.000	-0.000
X3	-0.000	-0.000	-0.000	158.000	-0.000	692.000	-0.000	-0.000	-0.000	-0.000
GR	600.500	0.000	599.500	19.000	598.800	116.000	597.400	158.000	591.800	195.000
GR	591.200	222.000	588.500	228.000	585.800	233.000	583.700	239.000	584.100	245.000
GR	585.800	248.000	592.300	257.000	592.400	295.000	593.200	379.000	595.700	483.000
GR	595.700	614.000	596.700	692.000	596.500	759.000	597.500	874.000	597.500	988.000
GR	597.500	1172.000	598.100	1329.000	598.600	1487.000	598.700	1679.000	599.100	1871.000
GR	599.800	2069.000	599.700	2211.000	599.700	2360.000	599.400	2460.000	598.800	2529.000
NH	5.000	.070	91.000	.045	119.000	.034	157.000	.045	207.000	.055
NH	2386.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13634.000	29.000	119.000	157.000	320.000	375.000	345.000	.980	-0.000	-0.000
X3	-0.000	-0.000	-0.000	90.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	595.000	0.000	593.600	24.000	593.200	41.000	592.800	91.000	591.300	119.000
GR	585.300	128.000	584.400	130.000	584.000	135.000	584.400	139.000	586.200	145.000
GR	592.700	157.000	593.000	207.000	596.000	292.000	597.300	393.000	595.900	549.000
GR	597.200	677.000	596.800	738.000	597.900	852.000	598.200	1024.000	598.300	1206.000
GR	598.500	1349.000	600.000	1479.000	600.400	1615.000	600.700	1754.000	600.400	1909.000
GR	600.300	2063.000	599.800	2163.000	599.600	2291.000	598.700	2386.000	-0.000	-0.000
NC	.050	.050	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13854.000	30.000	128.000	141.000	100.000	360.000	220.000	.900	.400	-0.000
X3	10.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	594.000	594.000	-0.000
GR	595.000	0.000	593.600	24.000	593.200	41.000	592.800	91.000	591.300	119.000
GR	585.300	128.000	584.400	130.000	584.000	135.000	584.400	139.000	585.000	141.000
GR	586.200	145.000	592.700	157.000	593.000	207.000	596.000	292.000	597.300	393.000
GR	595.900	549.000	597.200	677.000	596.800	738.000	597.900	852.000	598.200	1024.000
GR	598.300	1206.000	598.500	1349.000	600.000	1479.000	600.400	1615.000	600.700	1754.000
GR	600.400	1909.000	600.300	2063.000	599.800	2163.000	599.600	2291.000	598.700	2386.000
NC	.018	.018	.018	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13855.000	23.000	775.000	788.000	1.000	1.000	1.000	.900	-0.000	-0.000
GR	598.400	0.000	598.700	75.000	599.600	175.000	598.800	275.000	597.300	375.000

GR	584.400	778.000	584.400	781.000	584.700	784.000	585.500	787.000	586.100	788.000
GR	594.600	788.000	594.900	875.000	595.600	975.000	596.500	1075.000	597.700	1175.000
GR	598.200	1275.000	598.600	1375.000	599.400	1475.000	-0.000	-0.000	-0.000	-0.000
SB	-0.000	1.520	3.000	-0.000	11.260	-0.000	96.800	-0.000	584.400	584.400
X1	13900.000	23.000	775.000	788.000	45.000	45.000	45.000	.900	-0.000	-0.000
X2	-0.000	-0.000	1.000	593.000	594.500	-0.000	-0.000	-0.000	.900	-0.000
BT	19.000	0.000	598.400	0.000	75.000	598.700	0.000	175.000	599.600	0.000
BT	275.000	598.800	0.000	375.000	597.300	0.000	475.000	596.100	0.000	575.000
BT	595.100	0.000	675.000	594.500	0.000	775.000	594.600	0.000	775.000	594.900
BT	593.000	788.000	594.900	593.000	788.000	594.600	0.000	875.000	594.900	0.000
BT	975.000	595.600	0.000	1075.000	596.500	0.000	1175.000	597.700	0.000	1275.000
BT	598.200	0.000	1375.000	598.600	0.000	1475.000	599.400	0.000	-0.000	-0.000
GR	598.400	0.000	598.700	75.000	599.600	175.000	598.800	275.000	597.300	375.000
GR	596.100	475.000	595.100	575.000	594.500	675.000	594.600	775.000	594.600	775.000
GR	584.400	778.000	584.400	781.000	584.700	784.000	585.500	787.000	586.100	788.000
GR	594.600	788.000	594.900	875.000	595.600	975.000	596.500	1075.000	597.700	1175.000
GR	598.200	1275.000	598.600	1375.000	599.400	1475.000	-0.000	-0.000	-0.000	-0.000
NC	.050	.050	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	13901.000	30.000	128.000	141.000	1.000	1.000	1.000	.900	.400	-0.000
X3	10.000	-0.000	-0.000	90.000	-0.000	-0.000	-0.000	594.500	594.500	-0.000
GR	595.000	0.000	593.600	24.000	593.200	41.000	592.800	91.000	591.300	119.000
GR	585.300	128.000	584.400	130.000	584.000	135.000	584.400	139.000	585.000	141.000
GR	586.200	145.000	592.700	157.000	593.000	207.000	596.000	292.000	597.300	393.000
GR	595.900	549.000	597.200	677.000	596.800	738.000	597.900	852.000	598.200	1024.000
GR	598.300	1206.000	598.500	1349.000	600.000	1479.000	600.400	1615.000	600.700	1754.000
GR	600.400	1909.000	600.300	2063.000	599.800	2163.000	599.600	2291.000	598.700	2386.000
NC	.055	.055	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	15171.000	45.000	1258.000	1298.000	1080.000	1300.000	1270.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	650.000	-0.000	1685.000	-0.000	-0.000	-0.000	-0.000
GR	604.900	0.000	604.300	20.000	604.000	65.000	604.500	127.000	606.200	166.000
GR	606.100	183.000	606.000	243.000	605.000	279.000	607.100	331.000	605.800	347.000
GR	606.400	492.000	606.000	618.000	608.000	651.000	606.100	683.000	604.900	781.000
GR	603.400	887.000	601.700	970.000	599.700	1045.000	595.600	1107.000	593.100	1168.000
GR	594.100	1258.000	587.900	1276.000	587.600	1278.000	588.000	1281.000	594.400	1298.000
GR	594.600	1337.000	596.000	1415.000	596.500	1498.000	597.500	1580.000	599.100	1683.000
GR	598.000	1747.000	596.800	1784.000	597.200	1876.000	599.400	1960.000	600.700	2058.000
GR	600.800	2163.000	600.500	2255.000	601.100	2322.000	601.400	2341.000	604.400	2435.000
GR	604.300	2503.000	604.000	2550.000	602.300	2556.000	604.200	2568.000	604.600	2587.000
QT	4.000	295.000	420.000	470.000	625.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	16321.000	24.000	474.000	511.000	1080.000	1230.000	1150.000	-0.000	-0.000	-0.000
GR	606.800	0.000	604.700	26.000	605.100	71.000	605.000	122.000	603.400	196.000
GR	602.100	241.000	597.100	305.000	595.800	366.000	597.200	474.000	594.700	484.000
GR	590.700	496.000	590.300	501.000	590.500	503.000	597.100	511.000	598.200	570.000
GR	599.500	649.000	601.900	730.000	603.600	794.000	604.900	889.000	605.200	931.000
GR	604.000	992.000	606.300	1027.000	606.800	1084.000	610.500	1128.000	-0.000	-0.000
X1	18201.000	39.000	1551.000	1595.000	1880.000	1880.000	1880.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	580.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	607.400	0.000	608.200	71.000	609.200	150.000	608.300	194.000	609.500	223.000
GR	609.000	257.000	609.100	349.000	609.300	446.000	609.900	523.000	612.900	580.000
GR	611.800	711.000	610.700	780.000	608.200	861.000	608.700	931.000	607.400	980.000
GR	608.300	1084.000	609.900	1177.000	608.700	1240.000	603.400	1317.000	600.400	1371.000
GR	600.200	1465.000	600.300	1551.000	596.800	1561.000	596.000	1568.000	594.700	1569.000
GR	593.200	1571.000	592.700	1574.000	593.200	1577.000	594.600	1582.000	602.100	1595.000
GR	602.900	1627.000	604.800	1697.000	606.300	1786.000	608.600	1880.000	609.600	1916.000
GR	610.900	1984.000	611.500	2062.000	613.700	2074.000	613.600	2085.000	-0.000	-0.000
X1	19081.000	45.000	1280.000	1322.000	1100.000	550.000	880.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	670.000	-0.000	1970.000	-0.000	-0.000	-0.000	-0.000
GR	615.300	0.000	615.300	11.000	612.600	28.000	614.200	42.000	612.500	123.000
GR	610.800	204.000	610.200	310.000	609.500	394.000	607.300	472.000	609.500	538.000

GR	609.800	948.000	607.900	1012.000	607.300	1050.000	603.00	1112.000	604.600	1149.000
GR	606.300	1204.000	605.100	1226.000	600.700	1280.000	598.700	1307.000	596.300	1309.000
GR	596.000	1312.000	596.800	1317.000	602.300	1322.000	602.100	1382.000	602.500	1444.000
GR	603.400	1509.000	606.600	1558.000	609.700	1608.000	612.900	1656.000	611.800	1700.000
GR	614.100	1771.000	617.600	1851.000	617.300	1895.000	618.700	1968.000	617.700	2031.000
GR	617.700	2055.000	617.700	2081.000	617.100	2115.000	613.100	2135.000	612.400	2168.000
EJ	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Erie Twp.

3) WATERCOURSE: Bay Creek

4) DOCUMENT TYPE: 100 yr. Encroached

00BREAK00

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**********************************************
HEC2 VERSION UPDATED JAN 1976
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
MODIFICATIONS 52,53,54,55,56,57,58
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T1      TOWNSHIP OF ERIE, 5555-17-01      PM: RICHARD ZANOTTI
T2      100-YEAR FLOOD
T3      BAY CREEK

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ

     -10.        4.         -0.        -0. -0.000000      -0.00      -0.0        -0.    574.080     -0.000

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

      3.000      1.000     -1.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000     -0.000


CCHV=     .300 CEHV=     .500
     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

     0.00      4.58    574.08      0.00    574.08    574.88      .80       0.00      0.00      581.30
     985.        0.      985.        0.        0.      137.        0.        0.        0.      581.30
     0.00      0.00      7.20      0.00      .030      .030      .030     0.000    569.50       0.00
  .004129        -0.       -0.       -0.         0         0         1     0.00     34.30      34.30


NORMAL BRIDGE,NRD= 4 MIN ELTRD=  581.30 MAX ELLC=  579.30

              D/S FACE OF I-75 BRIDGE,  SKEWED BY 11 DEG., BS-75      SEC. A

          CONCRETE BOX CULVERT,  WITH HEADWALLS & WINGWALLS

          APPROX. SIZE = 35"X8.5", LENGTH = 140 FT.

      1.00      4.58    574.08      0.00      0.00    574.89      .80       .00       .00      581.30
     985.        0.      985.        0.        0.      137.        0.        0.        0.      581.30
      .00      0.00      7.19      0.00      .030      .012      .030      .006    569.50       0.00
  .000659         1.        1.        1.         0         0         1     0.00     34.30      34.30


8930,RDST NOT ON GR CARD    34.30
NORMAL BRIDGE,NRD= 4 MIN ELTRD=  581.30 MAX ELLC=  579.30

    141.00      4.75    574.25      0.00      0.00    574.99      .74       .09       .02      581.30
     985.        0.      985.        0.        0.      143.        0.        0.        0.      581.30
      .01      0.00      6.89      0.00      .030      .012      .030      .012    569.50       0.00
  .000578      140.      140.      140.         2         0         1     0.00     34.30      34.30
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142.00	4.76	574.26	0.00	0.00	574.99	.74	.00	.00	581.30
985.	0.	985.	0.	0.	143.	0.	0.	0.	581.30
.01	0.00	6.89	0.00	.030	.012	.030	.012	569.50	0.00
.000578	1.	1.	1.	0	0	1	0.00	34.30	34.30

1490 NH CARD USED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 563.5 638.0 TYPE= 1 TARGET= 76.000

50" U/S OF I-75 BRIDGE (U/S FACE),VS-1 SEC. B

192.00	4.40	575.00	0.00	0.00	575.21	.21	.05	.16	574.70
985.	310.	675.	0.	90.	181.	0.	1.	0.	100000.00
.01	3.45	3.73	0.00	.055	.051	.030	.016	570.60	563.50
.002832	50.	50.	50.	3	0	1	0.00	74.32	637.82

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 1628.0 1928.0 TYPE= 1 TARGET= 300.000

630" U/S OF I-75 BRIDGE (U/S FACE),VS-2 SEC. C

772.00	4.39	575.79	0.00	0.00	575.81	.03	.55	.05	575.30
985.	707.	278.	0.	632.	172.	0.	9.	3.	100000.00
.15	1.12	1.62	0.00	.050	.045	.030	.024	571.40	1628.00
.000402	720.	580.	460.	2	0	1	0.00	299.82	1927.82

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1690.0 2100.0 TYPE= 1 TARGET= 410.000

170" D/S OF BAY CREEK ROAD CULVERT,VS-3 SEC. D

1232.00	4.79	575.99	0.00	0.00	576.06	.07	.23	.02	574.90
985.	300.	427.	258.	363.	136.	256.	17.	7.	574.60
.22	.83	3.13	1.01	.060	.030	.060	.027	571.20	1690.00
.000654	440.	460.	440.	2	0	1	0.00	410.00	2100.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1650.0 2093.0 TYPE= 1 TARGET= 443.000

REPEATED SECTION FROM SECTION 1478

1402.00	5.30	576.10	0.00	0.00	576.23	.13	.14	.03	574.50
985.	273.	583.	129.	331.	156.	151.	20.	8.	574.90
.24	.82	3.74	.85	.067	.030	.075	.027	570.80	1650.00
.001022	170.	170.	170.	1	0	1	0.00	443.00	2093.00

3470 ENCROACHMENT STATIONS= 1650 93.0 TYPE= 1 TARGET= 443.0

D/S FACE OF BAY CREEK ROAD CULVERT,BS-9 SEC. E

CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

APPROX. SIZE = 18"X7.5", LENGTH = 24 FT.

1403.00	5.29	576.09	0.00	0.00	576.24	.15	.00	.01	574.50
985.	245.	610.	129.	331.	156.	152.	20.	8.	574.90
.24	.74	3.92	.85	.045	.016	.045	.027	570.80	1650.00
.000368	1.	1.	1.	0	0	1	0.00	443.00	2093.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.45	2.90	-0.00	18.23	.01	127.60	-0.00	570.80	570.80

6840,FLOW IS BY WEIR AND LOW FLOW
BRIDGE W.S.= 576.09 BRIDGE VELOCITY= 8.64

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
577.90	577.25	.00	155.	832.	128.	577.90	576.70	15.00

3470 ENCROACHMENT STATIONS= 1307.0 1800.0 TYPE= 1 TARGET= 493.000

1427.00	6.29	577.09	0.00	0.00	577.25	.16	1.01	0.00	574.40
985.	226.	497.	262.	269.	111.	348.	20.	9.	574.70
.24	.84	4.46	.75	.045	.016	.045	.027	570.80	1307.00
.000330	24.	24.	24.	2	0	5	0.00	493.00	1800.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1768.0 2260.0 TYPE= 1 TARGET= 492.000

REPEATED SECTION FROM SECTION 1478

1428.00	6.46	577.26	0.00	0.00	577.29	.03	.00	.04	572.70
985.	356.	274.	356.	513.	116.	568.	20.	9.	572.00
.24	.69	2.35	.63	.062	.030	.062	.027	570.80	1768.00
.000220	1.	1.	1.	2	0	1	0.00	492.00	2260.00

3470 ENCROACHMENT STATIONS= 1795.0 2245.0 TYPE= 1 TARGET= 450.000

50" U/S OF BAY CREEK ROAD BRIDGE,VS-4 SEC. F

1478.00	6.26	577.26	0.00	0.00	577.31	.04	.01	.01	574.70
985.	259.	470.	256.	387.	202.	453.	21.	9.	575.10
.25	.67	2.32	.56	.071	.030	.075	.026	571.00	1795.00
.000296	50.	50.	50.	0	0	1	0.00	450.00	2245.00

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

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 3470 ENCROACHMENT STATIONS=     1823.0     2073.0  TYPE=      1  TARGET=      250.000
  1978.00      6.61    577.41      0.00      0.00    577.47       .06       .15       .01    574.50
     985.       269.      561.      155.      364.      218.      216.       32.       13.     574.90
      .33       .74      2.58       .72      .075      .030      .075      .024    570.80   1823.00
 .000334       260.      500.      750.         0         0         1      0.00    250.00   2073.00


 1490 NH CARD USED

 3301 HV CHANGED MORE THAN HVINS


 3470 ENCROACHMENT STATIONS=     1511.0     1543.0  TYPE=      1  TARGET=       32.000

                  1050" U/S OF BAY CREEK ROAD BRIDGE,VS-5                    SEC. G

  2478.00      6.80    577.40      0.00      0.00    578.18       .77       .35       .36    576.90
     985.         0.      985.        0.        0.     139.        0.       37.       15. 100000.00
      .35        .01      7.06      0.00      .100      .030      .075      .022    570.60   1511.00
 .002508       425.      500.      490.         2         0         1      0.00     32.00   1543.00


 1490 NH CARD USED

 3470 ENCROACHMENT STATIONS=     1533.0     1559.0  TYPE=      1  TARGET=       26.000

              REPEATED SECTION FROM SECTION 2916

  2708.00      6.03    577.93      0.00      0.00    578.98      1.05       .66       .14    572.20
     985.         0.      985.        0.        0.     120.        0.       37.       15. 100000.40
      .35        .03      8.22      0.00      .030      .030      .075      .022    571.90   1533.00
 .003332       150.      230.      225.         2         0         1      0.00     26.00   1559.00
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 NORMAL BRIDGE,NRD=23 MIN ELTRD=  583.60 MAX ELLC=  580.50

 3470 ENCROACHMENT STATIONS=     1500.0     1526.0  TYPE=      1  TARGET=       26.000
                  D/S FACE OF D.T. & S.R.R. TRACKS CULVERT,BS-11             SEC. H

              TWIN CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

                  APPROX. SIZE = 23"X8", LENGTH = 32.5"

  2709.00      6.33    578.23      0.00      0.00    579.05       .82       .00       .07    585.30
     985.         0.      985.        0.        0.     136.        0.       37.       15. 100000.00
      .35       0.00      7.25      0.00      .030      .012      .030      .022    571.90   1500.00
 .000694          1.        1.        1.         2         0         1     -7.24     26.00   1526.00


 NORMAL BRIDGE,NRD=23 MIN ELTRD=  583.60 MAX ELLC=  580.50


 3470 ENCROACHMENT STATIONS=     1500.0     1526.0  TYPE=      1  TARGET=       26.000
  2742.00      6.36    578.26      0.00      0.00    579.07       .81       .02       .00    585.30
     985.         0.      985.        0.        0.     136.        0.       38.       15. 100000.00
      .35       0.00      7.22      0.00      .030      .012      .030      .022    571.90   1500.00
 .000685         33.       33.       33.         2         0         1     -7.28     26.00   1526.00
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1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1533.0 1559.0 TYPE= 1 TARGET= 26.000

REPEATED SECTION FROM SECTION 2916

2743.00	6.30	578.20	0.00	0.00	579.14	.94	.00	.06	572.20	
985.	0.	985.	0.	0.	127.	0.	38.	15.	100000.40	
.35	.03	7.76	0.00	.030	.030	.030	.022	571.90	1533.00	
.002783	1.	1.	1.	2	0	1	0.00	26.00	1559.00	

3470 ENCROACHMENT STATIONS= 1533.0 1553.0 TYPE= 1 TARGET= 20.000

REPEATED SECTION FROM SECTION 2916

2793.00	6.19	578.19	0.00	0.00	579.46	1.27	.16	.17	572.30	
985.	0.	985.	0.	0.	109.	0.	38.	15.	100000.50	
.36	.03	9.06	0.00	.030	.030	.030	.022	572.00	1533.00	
.003495	50.	50.	50.	2	0	1	0.00	20.00	1553.00	

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

NORMAL BRIDGE,NRD=19 MIN ELTRD= 584.00 MAX ELLC= 579.60

3470 ENCROACHMENT STATIONS= 1500.0 1520.0 TYPE= 1 TARGET= 20.000

D/S FACE OF EASTERLY PENN CENTRAL RR TRACK CULVERT,BS-12SEC. I

CONCRETE BOX CULVERT, WITH WINGWALLS & HEADWALLS

APPROX. SIZE = 20"X7.5", LENGTH = 15"

2794.00	6.12	578.12	0.00	0.00	579.53	1.41	.00	.07	585.10
985.	0.	985.	0.	0.	103.	0.	38.	15.	100000.00
.36	0.00	9.54	0.00	.040	.015	.040	.022	572.00	1500.00
.001741	1.	1.	1.	2	0	1	0.00	20.00	1520.00

NORMAL BRIDGE,NRD=19 MIN ELTRD= 584.00 MAX ELLC= 579.60

3470 ENCROACHMENT STATIONS= 1500.0 1520.0 TYPE= 1 TARGET= 20.000

2809.00	6.20	578.20	0.00	0.00	579.57	1.37	.03	.01	585.10
985.	0.	985.	0.	0.	105.	0.	38.	15.	100000.00
.36	0.00	9.39	0.00	.040	.015	.040	.022	572.00	1500.00
.001662	15.	15.	15.	2	0	1	0.00	20.00	1520.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1533.0 1553.0 TYPE= 1 TARGET= 20.000

REPEATED SECTION FROM SECTION 2916

```
2810.00      6.51    578.51      0.00      0.00    579.64      1.14       .00       .07    572.30
   985.         0.       985.       0.        0.      115.        0.       38.        15. 100000.50
   .36        .03      8.56      0.00      .030      .030      .040      .022    572.00   1533.00
.002895         1.       1.        1.         3         0         1      0.00     20.00   1553.00


3470 ENCROACHMENT STATIONS=    1533.0    1553.0  TYPE=      1  TARGET=       20.000
2850.00      6.03    578.53      0.00      0.00    579.88      1.35       .13       .11    572.80
   985.         0.       985.       0.        0.      106.        0.       38.        15. 100000.00
   .36        .03      9.32      0.00      .030      .030      .040      .021    572.50   1533.00
.003842        40.      40.       40.         2         0         1      0.00     20.00   1553.00


NORMAL BRIDGE,NRD=19 MIN ELTRD=  583.10 MAX ELLC=  580.60

3470 ENCROACHMENT STATIONS=    1500.0    1520.0  TYPE=      1  TARGET=       20.000

            D/S FACE OF WESTERLY PENN CENTRAL RR TRACK CULVERT,BS-13SEC. J

        CONCRETE BOX CULVERT, WITH WINGWALLS & HEADWALLS

        APPROX. SIZE = 20"X7.5", LENGTH = 14 FT.

2851.00      6.39    578.89      0.00      0.00    579.97      1.08       .00       .08    584.50
   985.         0.       985.       0.        0.      118.        0.       38.        15. 100000.00
   .36        0.00     8.33      0.00      .040      .015      .040      .021    572.50   1500.00
.001165         1.       1.        1.         3         0         1      0.00     20.00   1520.00


NORMAL BRIDGE,NRD=19 MIN ELTRD=  583.10 MAX ELLC=  580.60

3470 ENCROACHMENT STATIONS=    1500.0    1520.0  TYPE=      1  TARGET=       20.000
2865.00      6.42    578.92      0.00      0.00    579.99      1.06       .02       .00    584.50
   985.         0.       985.       0.        0.      119.        0.       38.        15. 100000.00
   .36        0.00     8.28      0.00      .040      .015      .040      .021    572.50   1500.00
.001146        14.      14.       14.         0         0         1      0.00     20.00   1520.00


1490 NH CARD USED
   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


3470 ENCROACHMENT STATIONS=    1533.0    1553.0  TYPE=      1  TARGET=       20.000

            REPEATED SECTION FROM SECTION 2916

2866.00      6.36    578.86      0.00      0.00    580.05      1.20       .00       .07    572.80
   985.         0.       985.       0.        0.      112.        0.       38.        15. 100001.00
   .36        .03      8.79      0.00      .030      .030      .040      .021    572.50   1533.00
.003158         1.       1.        1.         2         0         1      0.00     20.00   1553.00


3301 HV CHANGED MORE THAN HVINS
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 3470 ENCROACHMENT STATIONS=    1529.0    1557.0  TYPE=     1  TARGET=      28.000
   2870.00      7.28   579.70      0.00      0.00   580.26      .55       .01       .19    572.72
      985.       103.      812.       70.       22.      131.       16.       38.       15.     574.82
       .36      4.73      6.22      4.30      .030      .030      .030      .021    572.42   1529.00
  .001295        4.        4.        4.         3         0         1      0.00     28.00   1557.00


 3470 ENCROACHMENT STATIONS=    1525.0    1553.0  TYPE=     1  TARGET=      28.000
   2874.00      7.35   579.69      0.00      0.00   580.28      .59       .01       .02    572.64
      985.       135.      850.        0.       33.      132.        0.       38.       15.  100000.00
       .36      4.03      6.44      0.00      .032      .030      .030      .021    572.34   1525.00
  .001371        4.        4.        4.         2         0         1      0.00     28.00   1553.00


 3470 ENCROACHMENT STATIONS=    1480.0    1560.0  TYPE=     1  TARGET=      80.000

                50" U/S FROM WESTERLY PENN CENTRAL RR CULVERT,VS-6        SEC. K

   2916.00      8.80   580.30      0.00      0.00   580.44      .14       .03       .14    576.40
      985.       214.      771.        0.      187.      233.        0.       38.       15.  100000.00
       .36      1.14      3.31      0.00      .060      .030      .030      .021    571.50   1480.00
  .000336        42.       42.       42.         2         0         1      0.00     80.00   1560.00


 1490 NH CARD USED

 3470 ENCROACHMENT STATIONS=    1200.0    1382.0  TYPE=     1  TARGET=    -182.000

                150" D/S OF INTERSECTION OF YETTER DRAIN,VS-7          SEC. L

   3536.00      8.37   580.57      0.00      0.00   580.64      .07       .18       .02    577.70
      985.       58.       584.      342.       67.      215.      412.       46.       17.     577.20
       .45       .87      2.72       .83      .055      .030      .064      .020    572.20   1200.00
  .000259       675.      620.      500.         2         0         1      0.00    182.00   1382.00


 3470 ENCROACHMENT STATIONS=    1162.0    1380.0  TYPE=     1  TARGET=     218.000
   3796.00      8.11   580.66      0.00      0.00   580.69      .03       .04       .01    578.05
      695.       87.       395.      213.      152.      206.      375.       49.       18.     577.55
       .50       .57      1.92       .57      .055      .030      .064      .020    572.55   1162.00
  .000135       320.      260.      120.         2         0         1      0.00    218.00   1380.00


 3470 ENCROACHMENT STATIONS=    1162.0    1380.0  TYPE=     1  TARGET=     218.000
   4116.00      7.70   580.70      0.00      0.00   580.75      .05       .05       .01    578.50
      695.       77.       420.      199.      127.      192.      325.       53.       19.     578.00
       .55       .60      2.18       .61      .055      .030      .065      .020    573.00   1162.00
  .000190       420.      320.      220.         2         0         1      0.00    218.00   1380.00


 3470 ENCROACHMENT STATIONS=    1680.0    1990.0  TYPE=     1  TARGET=     310.000

                200" U/S OF INTERSECTION OF COUSINO DRAIN,VS-8          SEC. M

   4416.00      7.38   580.78      0.00      0.00   580.79      .01       .03       .01    579.40
      535.       53.       208.      274.      140.      195.      659.       60.       21.     579.10
       .69       .38      1.07       .42      .055      .030      .055      .020    573.40   1680.00
  .000054       200.      300.      400.         2         0         1      0.00    310.00   1990.00
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SECNO	DEPTH	C.SEL	CRIWS	WSELK	EG	H.	HL	OLOSS	BANK ELE.
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= 2023.0 2253.0 TYPE= 1 TARGET= 230.000

430" D/S OF DRIVE WAY CULVERT 5847 (D/S FACE),VS-9 SEC. N

5416.00	7.26	580.86	0.00	0.00	580.96	.10	.12	.04	580.50
535.	75.	440.	20.	114.	160.	52.	76.	28.	580.50
.81	.66	2.74	.39	.055	.030	.055	.022	573.60	2023.00
.000467	900.	1000.	1100.	2	0	1	0.00	230.00	2253.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1725.0 1739.0 TYPE= 1 TARGET= 14.000

REPEATED SECTION OF SECTION 6363

5846.00	7.14	580.94	0.00	0.00	581.49	.55	.31	.23	575.10
535.	0.	535.	0.	0.	90.	0.	78.	29.	99999.60
.83	.02	5.94	0.00	.030	.030	.055	.023	573.80	1725.00
.001272	350.	430.	460.	2	0	1	0.00	14.00	1739.00

NORMAL BRIDGE,NRD=18 MIN ELTRD= 581.40 MAX ELLC= 582.10

3470 ENCROACHMENT STATIONS= 1500.0 1514.0 TYPE= 1 TARGET= 14.000

D/S FACE OF DRIVE WAY CULVERT 1500 E. OF ALT. US24,BS-16SEC. 0

CONCRETE BOX CULVERT, WITH WINGWALLS

APPROX. SIZE = 13"X5", LENGTH = 15 FT.

5847.00	7.14	580.94	0.00	0.00	581.50	.56	.00	.01	582.40
535.	0.	535.	0.	0.	89.	0.	78.	29.	100000.00
.83	0.00	6.01	0.00	.035	.012	.035	.023	573.80	1500.00
.000448	1.	1.	1.	0	0	1	0.00	14.00	1514.00

NORMAL BRIDGE,NRD=18 MIN ELTRD= 581.40 MAX ELLC= 582.10

3470 ENCROACHMENT STATIONS= 1500.0 1514.0 TYPE= 1 TARGET= 14.000

5862.00	7.15	580.95	0.00	0.00	581.51	.56	.01	.00	582.40
535.	0.	535.	0.	0.	89.	0.	78.	29.	100000.00
.83	0.00	6.00	0.00	.035	.012	.035	.023	573.80	1500.00
.000446	15.	15.	15.	0	0	1	0.00	14.00	1514.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1725.0 1739.0 TYPE= 1 TARGET= 14.000

REPEATED SECTION FROM SECTION 6363

5863.00	7.17	580.97	0.00	0.00	581.51	.55	.00	.00	575.10
535.	0.	535.	0.	0.	90.	0.	78.	29.	99999.60
.83	.02	5.93	0.00	.030	.030	.035	.023	573.80	1725.00
.001263	1.	1.	1.	0	0	1	0.00	14.00	1739.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1715.0 1755.0 TYPE= 1 TARGET= 40.000

500" U/S OF DRIVE WAY CULVERT 5847 (U/S FACE),VS-10 SEC. P

6363.00	7.73	581.93	0.00	0.00	582.11	.18	.49	.11	583.10
535.	0.	535.	0.	0.	156.	0.	79.	29.	100000.00
.87	0.00	3.42	0.00	.030	.035	.035	.022	574.20	1716.54
.000777	480.	500.	470.	2	0	1	0.00	36.36	1752.90

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1690.0 1726.0 TYPE= 1 TARGET= 36.000

REPEATED SECTION FROM SECTION 7623

6993.00	7.51	582.46	0.00	0.00	582.58	.12	.46	.02	582.15
535.	0.	535.	0.	0.	191.	0.	82.	30.	99999.25
.93	.01	2.81	0.00	.055	.045	.035	.021	574.95	1690.00
.000677	625.	630.	610.	2	0	1	0.00	35.84	1725.84

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

3470 ENCROACHMENT STATIONS= 1690.0 1725.0 TYPE= 1 TARGET= 35.000

40" D/S OF ALT. US-24 CULVERT (D/S FACE),VS-11 SEC. Q

7623.00	7.21	582.91	0.00	0.00	583.05	.14	.46	.01	582.90
535.	0.	535.	0.	0.	180.	0.	84.	30.	100000.00
.99	.01	2.98	0.00	.055	.045	.035	.020	575.70	1690.00
.000791	625.	630.	610.	0	0	1	0.00	35.00	1725.00

3470 ENCROACHMENT STATIONS= 1235.0 2620.0 TYPE= 1 TARGET= 1385.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

REPEATED SECTION FROM SECTION 7623

7663.00	8.88	582.88	0.00	0.00	583.15	.27	.03	.07	574.70
535.	0.	535.	0.	0.	128.	0.	84.	30.	574.00
.99	0.00	4.19	0.00	.055	.045	.035	.020	574.00	1700.50
.000932	40.	40.	40.	2	0	1	0.00	14.50	1715.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

D/S FACE OF ALT. US-24 CULVERT RS-19 SEC. P

CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

APPROX. SIZE = 14.5"X9", LENGTH = 90 FT.

7664.00	8.88	582.88	0.00	0.00	583.15	.27	.00	.00	574.70
535.	0.	535.	0.	0.	128.	0.	84.	30.	574.00
.99	0.00	4.18	0.00	.020	.018	.020	.020	574.00	1700.50
.000256	1.	1.	1.	0	0	1	0.00	14.50	1715.00

SPECIAL BRIDGE

S8	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.72	3.00	-0.00	13.10	-0.00	124.48	-0.00	574.00	574.00

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 583.213 ELLC= 583.500 PCWSE= 582.880 ELTRD= 588.600

NORMAL BRIDGE,NRD=20 MIN ELTRD= 588.60 MAX ELLC= 583.50

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.40 ELREA= 589.40

7754.00	8.88	582.88	0.00	0.00	583.21	.33	.03	.03	583.50
535.	0.	535.	0.	0.	116.	0.	85.	30.	583.50
1.00	0.00	4.63	0.00	.020	.018	.020	.020	574.00	1500.00
.000511	90.	90.	90.	0	0	1	0.00	14.50	1514.50

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1446.0 2559.0 TYPE= 1 TARGET= 1113.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.40 ELREA= 589.40

REPEATED SECTION OF SECTION 7805

7755.00	8.93	582.93	0.00	0.00	583.23	.30	.00	.01	575.50
535.	0.	535.	0.	0.	122.	0.	85.	30.	575.80
1.00	0.00	4.38	0.00	.020	.033	.020	.020	574.00	1679.00
.000669	1.	1.	1.	2	0	1	0.00	14.50	1693.50

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

3470 ENCROACHMENT STATIONS= 1668.0 1701.0 TYPE= 1 TARGET= 33.000

50" U/S FROM ALT. US-24 CULVERT (U/S FACE),VS-12 SEC. S

7805.00	7.43	583.13	0.00	0.00	583.30	.16	.03	.04	582.60
535.	0.	535.	0.	0.	164.	0.	85.	30.	100000.00
1.00	.01	3.26	0.00	.045	.033	.020	.020	575.70	1668.00
.000603	50.	50.	50.	2	0	1	0.00	33.00	1701.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1601.0 2450.0 TYPE= 1 TARGET= 849.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 583.90

470" U/S FROM ALT. US-24 CULVERT (U/S FACE),VS-13 SEC. T

8225.00	6.87	583.47	0.00	0.00	583.68	.21	.36	.02	584.20
535.	0.	535.	0.	0.	145.	0.	86.	31.	583.90
1.03	0.00	3.68	0.00	.045	.040	.020	.020	576.60	1657.72
.001315	390.	420.	500.	2	0	1	0.00	36.55	1694.28

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1394.0 1430.0 TYPE= 1 TARGET= 36.000

940" U/S FROM ALT. US-24 CULVERT (U/S FACE),VS-14 SEC. U

8695.00	7.93	584.03	0.00	0.00	584.19	.16	.50	.01	585.00
535.	0.	535.	0.	0.	167.	0.	88.	31.	100000.00
1.07	0.00	3.21	0.00	.045	.040	.020	.020	576.10	1395.56
.000865	480.	470.	475.	2	0	1	0.00	34.44	1430.00

3470 ENCROACHMENT STATIONS= 1230.0 1630.0 TYPE= 1 TARGET= 400.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.50 ELREA= 585.50

9105.00	6.86	584.46	0.00	0.00	584.71	.26	.47	.05	586.50
535.	0.	535.	0.	0.	131.	0.	89.	31.	585.50
1.10	0.00	4.07	0.00	.045	.040	.020	.020	577.60	1397.29
.001626	1.	410.	650.	2	0	1	0.00	30.90	1428.18

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 715.0 890.0 TYPE= 1 TARGET= 175.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 588.00 ELREA= 585.40

555" D/S FROM US-25 BRIDGE,VS-15 SEC. V

9515.00	5.94	585.14	0.00	0.00	585.37	.23	.64	.01	588.00
535.	0.	535.	0.	0.	141.	0.	91.	32.	585.40
1.13	0.00	3.81	0.00	.045	.040	.020	.020	579.20	734.08
.001522	650.	410.	1.	2	0	1	0.00	35.31	769.39

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 715.0 1038.0 TYPE= 1 TARGET= 323.000

35" D/S FROM US-25 BRIDGE,VS-16 SEC. W

10035.00	6.72	585.82	0.00	0.00	586.09	.27	.70	.02	588.70
515.	0.	515.	0.	0.	124.	0.	92.	32.	588.30
1.17	0.00	4.16	0.00	.045	.033	.020	.020	579.10	738.69
.001181	430.	520.	500.	2	0	1	0.00	30.49	769.18

3470 ENCROACHMENT STATIONS= 537.0 788.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.00 ELREA= 587.00

REPEATED SECTION OF SECTION 10035

10070.00	6.07	585.67	0.00	0.00	586.36	.69	.06	.21	581.40
515.	0.	515.	0.	0.	77.	0.	92.	32.	582.20
1.17	0.00	6.67	0.00	.045	.033	.020	.020	579.60	750.00
.002853	35.	35.	35.	2	0	1	0.00	14.50	768.44

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

3470 ENCROACHMENT STATIONS= 1287.0 1538.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

D/S FACE OF US-25 BRIDGE,BS-22 SEC. X

CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

APPROX. SIZE = 14.5"X6", LENGTH = 77.5"

10071.00	6.30	585.90	0.00	0.00	586.41	.51	.00	.05	586.10
515.	0.	515.	0.	0.	89.	0.	92.	32.	586.10
1.17	0.00	5.76	0.00	.020	.018	.020	.020	579.60	1500.00
.000952	1.	1.	1.	2	0	1	0.00	14.50	1514.50

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.85	3.00	-0.00	14.21	-0.00	92.38	-0.00	579.60	579.60

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
586.79	586.41	0.00	0.	515.	92.	586.10	589.60	10.00

3470 ENCROACHMENT STATIONS= 1287.0 1538.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

10149.00	6.74	586.34	0.00	0.00	586.79	.45	.38	0.00	586.10
515.	0.	515.	0.	0.	96.	0.	92.	32.	586.10
1.17	0.00	5.37	0.00	.020	.018	.020	.020	579.60	1500.00
.000779	78.	78.	78.	2	0	1	0.00	14.50	1520.53

1490 HW CARD USED

3470 ENCROACHMENT STATIONS= 465.0 716.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.50 ELREA= 589.50

REPEATED SECTION OF SECTION 10210

10150.00	-6.71	586.31	0.00	0.00	586.83	.52	.00	.04	580.90
515.	0.	515.	0.	0.	89.	0.	92.	32.	580.70
1.17	0.00	5.81	0.00	.020	.045	.020	.020	579.60	678.00
.003401	1.	1.	1.	2	0	1	0.00	14.50	699.83

3470 ENCROACHMENT STATIONS= 660.0 705.0 TYPE= 1 TARGET= 45.000

60" U/S FROM US-25 BRIDGE (U/S FACE),VS-17 SEC. Y

10210.00	7.06	586.86	0.00	0.00	587.06	.19	.13	.10	588.10
515.	0.	515.	0.	0.	146.	0.	93.	32.	587.40
1.18	0.00	3.53	0.00	.020	.045	.020	.020	579.80	667.29
.001425	60.	60.	60.	2	0	1	0.00	32.97	700.26

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 174.0 333.0 TYPE= 1 TARGET= 159.000

660" U/S FROM US-25 BRIDGE (U/S FACE),VS-18 SEC. Z

10810.00	6.72	587.42	0.00	0.00	587.61	.19	.55	.00	587.60
515.	0.	515.	0.	0.	147.	0.	95.	33.	587.40
1.22	0.00	3.51	.00	.075	.030	.100	.019	580.70	283.36
.000638	585.	600.	585.	2	0	1	0.00	34.79	318.15

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= .0 348.0 TYPE= 1 TARGET= 347.999

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.00 ELREA= 590.00

REPEATED SECTION OF SECTION 11789

11590.00	6.55	587.95	0.00	0.00	588.57	.62	.75	.22	582.10
515.	0.	515.	0.	0.	81.	0.	97.	33.	582.10
1.26	0.00	6.34	0.00	.075	.030	.100	.019	581.40	186.00
.001587	860.	780.	700.	2	0	1	0.00	13.00	199.00

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	IOC	ICONT	CORAR	TOPWID	ENDST

NORMAL BRIDGE,NRD=12 MIN ELTRD= 589.80 MAX ELLC= 589.10

3470 ENCROACHMENT STATIONS= 720.0 1030.0 TYPE= 1 TARGET= -720.000

D/S FACE OF FARM LANE BRIDGE,BS-24 SEC. AA

CONCRETE BOX CULVERT, U/S WINGWALLS-FALLEN DOWN.

APPROX. SIZE = 13"X6.5", LENGTH = 17", PRJECT FROM FILL

11591.00	6.54	587.94	0.00	0.00	588.58	.64	.00	.01	589.80
515.	0.	515.	0.	0.	80.	0.	97.	33.	589.90
1.26	0.00	6.41	0.00	.030	.020	.030	.019	581.40	900.00
.001532	1.	1.	1.	0	0	1	0.00	13.00	913.00

NORMAL BRIDGE,NRD=12 MIN ELTRD= 589.80 MAX ELLC= 589.10

3470 ENCROACHMENT STATIONS= 720.0 1030.0 TYPE= 1 TARGET= -720.000

11608.00	6.57	587.97	0.00	0.00	588.61	.63	.03	.00	589.80
515.	0.	515.	0.	0.	81.	0.	97.	33.	589.90
1.26	0.00	6.39	0.00	.030	.020	.030	.019	581.40	900.00
.001515	17.	17.	17.	0	0	1	0.00	13.00	913.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= .0 348.0 TYPE= 1 TARGET= 347.999

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.90 ELREA= 589.90

REPEATED SECTION OF SECTION 11789

11609.00	6.60	588.00	0.00	0.00	588.61	.61	.00	.01	582.10
515.	0.	515.	0.	0.	82.	0.	97.	33.	582.10
1.26	0.00	6.28	0.00	.030	.030	.030	.019	581.40	186.00
.001542	1.	1.	1.	2	0	1	0.00	13.00	199.00

3470 ENCROACHMENT STATIONS= 170.0 212.0 TYPE= 1 TARGET= 42.000

180" U/S FROM FARM LANE BRIDGE 11591 (U/S FACE),VS-19 SEC. BB

11789.00	7.26	588.76	0.00	0.00	588.88	.12	.12	.15	588.40
515.	0.	515.	0.	0.	187.	0.	97.	33.	100000.00
1.28	.01	2.75	0.00	.055	.030	.030	.019	581.50	170.00
.000355	180.	180.	180.	2	0	1	0.00	42.00	212.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 192.0 408.0 TYPE= 1 TARGET= 216.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.40 ELREA= 590.20

400" D/S FROM FARM LANE BRIDGE 12760,VS-20 SEC. CC

12359.00	7.88	588.98	0.00	0.00	589.18	.20	.26	.04	589.40
515.	0.	515.	0.	0.	145.	0.	99.	34.	590.20
1.32	0.00	3.55	0.00	.055	.030	.030	.019	581.10	198.58
.000602	570.	570.	570.	2	0	1	0.00	29.70	228.28

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 250.0 280.0 T PE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.00 ELREA= 590.00

REPEATED SECTION FROM SECTION 12860

12759.00	6.58	589.38	0.00	0.00	589.77	.39	.50	.10	583.30
515.	0.	515.	0.	0.	102.	0.	101.	34.	585.60
1.34	0.00	5.04	0.00	.055	.055	.030	.019	582.80	253.00
.003927	400.	400.	400.	2	0	1	0.00	17.00	276.75

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

3470 ENCROACHMENT STATIONS= 232.0 262.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.00 ELREA= 590.00

D/S FACE OF FARM LANE BRIDGE, 200" D/S FROM C & 3 RR SEC. DD

BS-25

WOODEN BRIDGE, PROJECTED FROM FILL

SPAN 14 FT, WIDTH 17 FT

12760.00	6.61	589.41	0.00	0.00	589.78	.38	.00	.01	583.90
515.	0.	515.	0.	0.	105.	0.	101.	34.	584.50
1.34	0.00	4.92	0.00	.035	.030	.035	.019	582.80	235.00
.001340	1.	1.	1.	2	0	1	0.00	17.00	252.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	2.02	2.80	-0.00	15.78	-0.00	108.85	-0.00	582.80	582.80

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 589.781 ELLC= 589.900 PCWSE= 589.406 ELTRD= 590.500

NORMAL-BRIDGE,NRD=12 MIN ELTRD= 590.50 MAX ELLC= 589.90

3470 ENCROACHMENT STATIONS= 232.0 262.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.50 ELREA= 590.50

12774.00	6.63	589.43	0.00	0.00	589.80	.37	.02	.00	583.90
515.	0.	515.	0.	0.	105.	0.	101.	34.	584.50
1.34	0.00	4.90	0.00	.035	.030	.035	.019	582.80	235.00
.001326	14.	14.	14.	2	0	1	-5.75	17.00	252.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 250.0 280.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 591.00 ELREA= 591.00

REPEATED SECTION FROM SECTION 12860

12775.00	6.62	589.42	0.00	0.00	589.81	.39	.00	.01	583.30
515.	0.	515.	0.	0.	103.	0.	101.	34.	585.60
1.34	0.00	5.00	0.00	.035	.030	.035	.019	582.80	253.00
.001138	1.	1.	1.	0	0	1	0.00	17.00	276.84

3470 ENCROACHMENT STATIONS= 152.0 855.0 TYPE= 1 TARGET= 740.000

130" D/S FROM C & O RAILROAD TRACKS (D/S FACE), VS-21 SEC. EE

12860.00	6.65	589.75	0.00	0.00	589.94	.20	.07	.06	591.70
495.	0.	495.	0.	0.	139.	0.	101.	34.	591.50
1.35	0.00	3.55	0.00	.035	.030	.035	.019	583.10	230.98
.000683	45.	85.	115.	2	0	1	0.00	32.05	263.03

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 160.0 863.0 TYPE= 1 TARGET= 740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.00 ELREA= 592.00

REPEATED SECTION OF SECTION 12860

12990.00	5.73	589.53	0.00	0.00	590.49	.97	.17	.39	584.30
495.	0.	495.	0.	0.	63.	0.	101.	34.	583.80
1.36	0.00	7.89	0.00	.035	.030	.035	.020	583.80	248.35
.003189	115.	130.	115.	2	0	1	0.00	11.40	269.47

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

NORMAL BRIDGE,NRD=11 MIN ELTRD= 598.90 MAX ELLC= 591.80

D/S FACE OF C & O RAILROAD TRACKS CULVERT, BS-27 SEC. FF

CONCRETE BOX CULVERT, WITH HEADWALL AND WINGWALLS

APPROX. SIZE = 12"X7.5", LENGTH = 39 FT. SKEW = 18 DEG.

12991.00	5.63	589.43	0.00	0.00	590.59	1.16	.00	.10	598.90
495.	0.	495.	0.	0.	57.	0.	101.	34.	598.90
1.36	0.00	8.65	0.00	.030	.015	.030	.020	583.80	855.00
.002195	1.	1.	1.	2	0	1	0.00	11.40	866.40

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8930,RDST NOT ON GR CARD   1330.00

NORMAL BRIDGE,NRD=11 MIN ELTRD=  598.90 MAX ELLC=  591.80

 13030.00     5.82   589.62     0.00     0.00   590.70     1.08      .08      .02   598.90
     495.       0.     495.       0.       0.      59.       0.     101.      34.    598.90
     1.36     0.00     8.34     0.00     .030     .015     .030     .020   583.80   855.00
  .001983      39.      39.      39.        2        0        1     0.00    11.40   866.40


8930,RDST NOT ON GR CARD   1330.00
1490 NH CARD USED

3470 ENCROACHMENT STATIONS=     160.0     863.0  TYPE=     1  TARGET=     740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      592.00 ELREA=      592.00


          REPEATED SECTION FROM SECTION 12860

 13031.00     6.14   589.94     0.00     0.00   590.78      .83      .00      .07   584.30
     495.       0.     495.       0.       0.      68.       0.     101.      34.    583.80
     1.36     0.00     7.33     0.00     .030     .030     .030     .020   583.80   248.35
  .002549       1.       1.       1.        2        0        1     0.00    11.40   270.18


3470 ENCROACHMENT STATIONS=     160.0     900.0  TYPE=     1  TARGET=     740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      592.00 ELREA=      592.00

 13101.00     6.25   590.15     0.00     0.00   590.96      .81      .17      .01   584.40
     495.       0.     495.       0.       0.      69.       0.     101.      34.    583.90
     1.36     0.00     7.20     0.00     .030     .030     .030     .020   583.90   248.35
  .002420      60.      70.      60.        2        0        1     0.00    11.40   270.36


OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      592.00 ELREA=      592.00

              D/S FACE OF US-24 BRIDGE, SKEWED BY 18 DEG.,BS-28       SEC. GG

          CONCRETE BOX CULVERT, WITH WINGWALLS AND HEADWALLS

          APPROX. SIZE = 12"X7", LENGTH = 76 FT.

 13102.00     6.32   590.22     0.00     0.00   590.97      .76      .00      .01   584.50
     495.       0.     495.       0.       0.      71.       0.     101.      34.    584.50
     1.36     0.00     6.98     0.00     .015     .015     .015     .020   583.90  1425.00
  .000807       1.       1.       1.        2        0        1     0.00    11.40  1476.56


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    -0.00      1.57      3.00     -0.00     11.25     -0.00     81.03     -0.00    583.90    583.90


6070,LOW FLOW BY NORMAL BRIDGE

FGPRS=     0  0  FGL C=  .59  974  ELLC=   591.100   CMSF=  .59  216  ELTRD=  [illegible]
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELE.
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

NORMAL BRIDGE,NRD=19 MIN ELTRD= 596.10 MAX ELLC= 591.10

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 595.00 ELREA= 598.00

13178.00	6.40	590.30	0.00	0.00	591.04	.74	.06	.01	584.50
495.	0.	495.	0.	0.	72.	0.	101.	34.	584.50
1.36	0.00	6.89	0.00	.015	.015	.015	.020	583.90	1425.00
.000775	76.	76.	76.	2	0	1	0.00	11.40	1477.17

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 160.0 863.0 TYPE= 1 TARGET= 740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

REPEATED SECTION OF SECTION 12860

13179.00	6.39	590.29	0.00	0.00	591.06	.77	.00	.02	584.40
495.	0.	495.	0.	0.	70.	0.	101.	34.	583.90
1.36	0.00	7.03	0.00	.015	.030	.015	.020	583.90	248.35
.002252	1.	1.	1.	1	0	1	0.00	11.40	270.60

1490 NH CARD USED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 150.1 657.4 TYPE= 1 TARGET= 534.000

110" U/S FROM US-24 BRIDGE (U/S FACE), SKEW = 18 DEG. SEC. HH

VS-22

13289.00	7.47	591.17	0.00	0.00	591.36	.19	.13	.17	591.20
495.	0.	495.	0.	0.	142.	0.	102.	34.	592.30
1.37	0.00	3.50	0.00	.015	.033	.015	.019	583.70	210.95
.000697	105.	110.	105.	2	0	1	0.00	31.72	242.67

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 88.2 2338.3 TYPE= 1 TARGET= -90.000

220" D/S FROM ERIE ROAD CULVERT, SKEW = 11 DEG.,VS-23 SEC. II

13634.00	7.44	591.44	0.00	0.00	591.58	.14	.21	.02	591.30
495.	0.	495.	0.	0.	165.	0.	103.	34.	592.70
1.40	.13	2.99	0.00	.045	.034	.015	.019	584.00	114.03
.000525	320.	345.	375.	2	0	1	0.00	37.56	151.58

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

REPEATED SECTION OF SECTION 13634

13854.00	7.02	591.42	0.00	0.00	592.05	.63	.22	.25	585.70
495.	0.	495.	0.	0.	78.	0.	104.	34.	585.40
1.41	0.00	6.37	0.00	.050	.034	.050	.020	584.40	115.20
.002774	100.	220.	360.	2	0	1	0.00	11.70	126.90

D/S FACE OF ERIE ROAD CULVERT, SKEWED BY 26 DEG.,BS-30 SEC. JJ

CONCRETE BOX CULVERT, WITH HEADWALLS AND WINGWALLS

APROX. SIZE = 13"X8.5", LENGTH = 45 FT

13855.00	7.04	591.44	0.00	0.00	592.06	.62	.00	.00	594.60
495.	0.	495.	0.	0.	78.	0.	104.	34.	594.60
1.41	0.00	6.31	0.00	.018	.018	.018	.020	584.40	697.50
.001218	1.	1.	1.	1	0	1	0.00	11.70	709.20

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.52	3.00	-0.00	11.26	-0.00	96.80	-0.00	584.40	584.40

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 592.054 ELLC= 593.000 PCWSE= 591.436 ELTRD= 594.500

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

NORMAL BRIDGE,NRD=19 MIN ELTRD= 594.50 MAX ELLC= 593.00

13900.00	7.11	591.51	0.00	0.00	592.11	.60	.05	.00	594.60
495.	0.	495.	0.	0.	79.	0.	104.	34.	594.60
1.42	0.00	6.24	0.00	.018	.018	.018	.020	584.40	697.50
.001181	45.	45.	45.	2	0	1	0.00	11.70	709.20

8930,RDST NOT ON GR CARD 709.20
8930,RDST NOT ON GR CARD 787.50
8930,RDST NOT ON GR CARD 1327.50

3470 ENCROACHMENT STATIONS= 81.0 2147.4 TYPE= 1 TARGET= -90.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.50 ELREA= 594.50

REPEATED SECTION FROM SECTION 13634

13901.00	7.11	591.51	0.00	0.00	592.12	.61	.00	.00	585.70
495.	0.	495.	0.	0.	79.	0.	104.	34.	585.40
1.42	0.00	6.28	0.00	.050	.034	.050	.020	584.40	115.20
.002671	1.	1.	1.	0	0	1	0.00	11.70	126.90

3470 ENCROACHMENT STATIONS= 650.0 1685.0 TYPE= 1 TARGET= 1035.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.10 ELREA= 594.40

1270" U/S OF ERIE ROAD CULVERT,VS-24 SEC. KK

15171.00	6.50	594.10	0.00	0.00	594.30	.20	2.06	.12	594.10
495.	0.	495.	0.	0.	137.	0.	107.	35.	594.40
1.51	0.00	3.62	0.00	.055	.030	.055	.020	587.60	1258.01
.001087	1080.	1270.	1300.	2	0	1	0.00	39.18	1297.19

2420" U/S OF ERIE ROAD CULVERT, VS-25 SEC. LL

16321.00	5.50	595.80	0.00	0.00	596.19	.39	1.79	.09	597.20
470.	0.	470.	0.	0.	94.	0.	110.	36.	597.10
1.58	0.00	5.00	0.00	.055	.030	.055	.021	590.30	479.60
.002484	1080.	1150.	1230.	2	0	1	0.00	29.82	509.42

3470 ENCROACHMENT STATIONS= 580.0 2085.0 TYPE= 1 TARGET= -580.000

930" D/S OF MINX ROAD CULVERT,VS-26 SEC. MM

18201.00	6.50	599.20	0.00	0.00	599.42	.22	3.19	.05	600.30
470.	0.	470.	0.	0.	125.	0.	115.	37.	602.10
1.71	0.00	3.77	0.00	.055	.030	.055	.022	592.70	1554.14
.001230	1880.	1880.	1880.	2	0	1	0.00	35.84	1589.98

3470 ENCROACHMENT STATIONS= 670.0 1970.0 TYPE= 1 TARGET= 1300.000

50" D/S FROM MINX ROAD CULVERT,VS-27 SEC. NN

19081.00	4.99	600.99	0.00	0.00	601.44	.45	1.90	.11	600.70
470.	0.	470.	0.	1.	87.	0.	117.	38.	602.30
1.76	.51	5.39	0.00	.055	.030	.055	.022	596.00	1276.46
.004744	1100.	880.	550.	2	0	1	0.00	44.34	1320.81

1) COUNTY: Monroe

2) STUDY NAME: Erie Twp

3) WATERCOURSE: Bay Creek

4) DOCUMENT TYPE: 100 yr Natural

15.01

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$$$$$$$$  $$$$$$$   $$$$$$$$  $$$$$$$$   $$$$$ $     $$      $$$$$$
$$        $$    $$     $$        $$      $$    $     $$$     $$    $$
$$        $$    $$     $$        $$      $$   $$$     $$     $$    $$
$$$$$     $$    $$     $$        $$      $$  $ $$     $$     $$    $$
$$        $$    $$     $$        $$      $$ $$ $$     $$     $$    $$
$$        $$$$$$$      $$        $$      $$ $  $$     $$      $$$$$$$
$$        $$   $$      $$        $$      $$$   $$     $$            $$
$$        $$    $$     $$     $$ $$       $    $$     $$     $$    $$
$$$$$$$$  $$     $$  $$$$$$$$   $$$       $ $$$$$   $$$$$$$$   $$$$$$
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Twp of Erie

Bay Creek

100 Yr. Natural Run

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$$$$$$$$  $$$$$$$   $$$$$$$$  $$$$$$$$   $$$$$ $     $$      $$$$$$
$$        $$    $$     $$        $$      $$    $     $$$     $$    $$
$$        $$    $$     $$        $$      $$   $$$     $$     $$    $$
$$$$$     $$    $$     $$        $$      $$  $ $$     $$     $$    $$
$$        $$    $$     $$        $$      $$ $$ $$     $$     $$    $$
$$        $$$$$$$      $$        $$      $$ $  $$     $$      $$$$$$$
$$        $$   $$      $$        $$      $$$   $$     $$            $$
$$        $$    $$     $$      $$ $$     $     $$     $$     $$    $$
$$$$$$$$  $$     $$  $$$$$$$$   $$$      $ $$$$$   $$$$$$$$   $$$$$$
ERIJ019 JANDA          02/02/77  17.07.55  7600   J0
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S C O P E 2 L O A D M A P LOADER VERSION 1.0 02/02/77 17.07.56 PAGE 1

PROGRAM WILL BE ENTERED AT HEC2 (373) SCM LENGTH 146655 LCM LENGTH 0

BLOCK	ADDRESS	LENGTH
/ALPHA/	100	101
HEC2	201	11606
CARD	12007	1673
SUMPQ	13702	1063
CHIMP	14765	1645
DC	16632	703
FLODIS	17535	444
BLFLO	20201	1003
ADDPTS	21204	334
BWEIR	21540	1356
YCRIT	23116	122
SLARA	23240	256
SCALE	23516	246
XSEC	23764	1264
PROF	25250	1142
/FCL.C./	26412	23
/Q8.IO./	26435	137
/HEADING/	26574	16
OUTC=	26612	1017
Q8NTRY=	27631	1
COMIO=	27632	44
ENDFIL=	27676	45
FECMSK=	27743	41
FLTIN=	30004	154
FLTOUT=	30160	314
FMTAP=	30474	372
FORSYS=	31066	556
FORUTL=	31644	16
GETFIT=	31662	43
INCOM=	31725	257
INPC=	32204	173
KODER=	32377	467
KRAKER=	33066	454
OUTCOM=	33542	203
REWIND=	33745	35
GOTOER=	34002	14
ALOG	34016	77
EXP	34115	100
ITOJ*	34215	52
SYSAIO=	34267	1
SYS=1ST	34270	62
XTOY*	34352	55
//	34427	112226

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*****************************************
HEC2 VERSION UPDATED JAN 1976
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
MODIFICATIONS 52,53,54,55,56,57,58
*****************************************


T1      TOWNSHIP OF ERIE, 5555-17-01      PM: RICHARD ZANOTTI
T2      100-YEAR FLOOD
T3      BAY CREEK

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q       * WSEL     FQ

    -10.       4.       -0.       -0.  -0.000000    -0.00     -0.0      -0.    574.080   -0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     3.000     1.000    -1.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000

CCHV=    .300 CEHV=    .500
   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
```

TW @ I-75

```
     0.00      4.58    574.08      0.00    574.08    574.88       .80      0.00      0.00    581.30
     985.        0.      985.        0.        0.      137.        0.        0.        0.    581.30
     0.00      0.00      7.20      0.00      .030      .030      .030     0.000    569.50      0.00
  .004129       -0.       -0.       -0.         0         0         1      0.00     34.30     34.30

NORMAL BRIDGE,NRD= 4 MIN ELTRD=  581.30 MAX ELLC=  579.30

          D/S FACE OF I-75 BRIDGE,  SKEWED BY 11 DEG., BS-75      SEC. A

        CONCRETE BOX CULVERT,  WITH HEADWALLS & WINGWALLS

        APPROX. SIZE = 35"X8.5", LENGTH = 140 FT.

     1.00      4.58    574.08      0.00      0.00    574.89       .80       .00       .00    581.30
     985.        0.      985.        0.        0.      137.        0.        0.        0.    581.30
      .00      0.00      7.19      0.00      .030      .012      .030      .006    569.50      0.00
  .000659        1.        1.        1.         0         0         1      0.00     34.30     34.30

8930,RDST NOT ON GR CARD      34.30

NORMAL BRIDGE,NRD= 4 MIN ELTRD=  581.30 MAX ELLC=  579.30
```

574.25 < 579.3 ⇒ unsubmerged outlet

```
   141.00      4.75    574.25      0.00      0.00    574.99       .74       .09       .02    581.30
     985.        0.      985.        0.        0.      143.        0.        0.        0.    581.30
      .01      0.00      6.89      0.00      .030      .012      .030      .012    569.50      0.00
  .000578      140.      140.      140.         2         0         1      0.00     34.30     34.30
```

* st. W.S. from TR 20 program (storage capacity btwn Consumers Power Plant Railroad Spur Bridge and I-75 considered)

see p. 2 of J&A procedural sheet

note: 100-yr fp Lk Erie @ 576.1 IGLD (576.1 + 1.5 = 577.6 USGS) to be superposed

142.00	4.76	574.26	0.00	0.00	574.99	.74	.00	.00	581.30
985.	0.	985.	0.	0.	143.	0.	0.	0.	581.30
.01	0.00	6.89	0.00	.030	.012	.030	.012	569.50	0.00
.000578	1.	1.	1.	0	0	1	0.00	34.30	34.30

1490 NH CARD USED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 546.8 681.1 TYPE= 1 TARGET= 137.000

50" U/S OF I-75 BRIDGE (U/S FACE),VS-1 SEC. B

192.00	4.49	575.09	0.00	0.00	575.22	.13	.05	.18	574.70
985.	429.	556.	0.	155.	185.	0.	1.	0.	575.30
.01	2.76	3.00	0.00	.055	.051	.030	.016	570.60	546.84
.001775	50.	50.	50.	3	0	1	0.00	91.03	637.87

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 1540.0 2100.0 TYPE= 1 TARGET= 560.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 575.30 ELREA= 575.90

630" U/S OF I-75 BRIDGE (U/S FACE),VS-2 SEC. C

772.00	4.32	575.72	0.00	0.00	575.74	.02	.49	.03	575.30
985.	713.	272.	0.	684.	169.	0.	10.	4.	575.90
.16	1.04	1.61	0.00	.051	.045	.030	.024	571.40	1540.00
.000405	720.	580.	460.	2	0	1	0.00	387.71	1927.71

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1500.0 2520.0 TYPE= 1 TARGET= 1020.000

170" D/S OF BAY CREEK ROAD CULVERT,VS-3 SEC. D

1232.00	4.72	575.92	0.00	0.00	575.97	.05	.21	.02	574.90
985.	306.	380.	299.	430.	134.	368.	19.	9.	574.60
.24	.71	2.85	.81	.059	.030	.059	.026	571.20	1592.25
.000552	440.	460.	440.	2	0	1	0.00	641.18	2233.43

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1460.0 2395.0 TYPE= 1 TARGET= 935.000

REPEATED SECTION FROM SECTION 1478

1402.00	5.20	576.00	0.00	0.00	576.14	.13	.13	.04	574.50
985.	243.	570.	172.	303.	152.	220.	22.	11.	574.90
.26	.80	3.16	.78	.068	.030	.075	.027	570.80	1645.92
.001065	170.	170.	170.	0	0	1	0.00	521.68	2167.61

3470 ENCROACHMENT STATIONS= 1460.0 2395.0 TYPE= 1 TARGET= 935.000

D/S FACE OF BAY CREEK ROAD CULVERT,BS-9 SEC. E

CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

APPROX. SIZE = 18"X7.5", LENGTH = 24 FT.

low chord c 577.9

576.00 < 577.9 ⇒ unsubmerged outlet

1403.00	5.20	576.00	0.00	0.00	576.14	.15	.00	.01	574.50	
985.	220.	594.	172.	304.	152.	220.	22.	11.	574.90	
.26	.72	3.92	.78	.045	.016	.045	.027	570.80	1645.81	
.000383	1.	1.	1.	0	0	1	0.00	521.83	2167.63	

SPECIAL BRIDGE

SB	XK	XKOR	CCFS	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	.90	1.45	2.90	-0.00	18.23	.01	127.60	-0.00	570.80	570.80

6840-FLOW IS BY WEIR AND LOW FLOW

BRIDGE W.S.= 576.00 BRIDGE VELOCITY= 8.72

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
577.90	577.18	.00	163.	826.	128.	577.90	576.70	15.00

Reasonable Continuity

3470 ENCROACHMENT STATIONS= 1000.0 1935.0 TYPE= 1 TARGET= 935.000

1427.00	6.19	576.99	0.00	0.00	577.18	.19	1.03	0.00	574.40
985.	218.	516.	251.	251.	110.	336.	23.	12.	574.70
.26	.87	4.71	.75	.045	.016	.045	.027	570.80	1307.64
.000376	24.	24.	24.	2	0	5	0.00	592.18	1899.82

* Continuity problem

* should have 500+ cfs in channel @ sta 14+28 (error on high side — see "n" values)

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1768.0 2350.0 TYPE= 1 TARGET= 582.000

REPEATED SECTION FROM SECTION 1478

1428.00	6.39	577.19	0.00	0.00	577.23	.03	.00	.05	572.70
985.	352.	277.	356.	501.	115.	585.	23.	12.	572.00
.26	.70	2.41	.61	.062	.030	.063	.027	570.80	1768.00
.000234	1.	1.	1.	2	70	1	0.00	582.00	2350.00

Consider 577.2 reasonable

3470 ENCROACHMENT STATIONS= 1718.8 2395. TYPE= 1 TARGET= 677.000

50" U/S OF BAY CREEK ROAD BRIDGE,VS-4 SEC. F

1478.00	6.20	577.20	0.00	0.00	577.24	.03	.01	.00	574.70
985.	324.	431.	230.	519.	199.	463.	24.	13.	575.10
.28	.63	2.16	.50	.066	.030	.075	.026	571.00	1718.00
.000261	50.	50.	50.	0	0	1	0.00	648.33	2366.33

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

3470 ENCROACHMENT STATIONS= 1823.0 2073.0 TYPE= 1 TARGET= 250.000

1978.00	6.53	577.33	0.00	0.00	577.40	.07	.14	.02	574.50
985.	267.	565.	153.	356.	214.	210.	35.	18.	574.90
.35	.75	2.63	.73	.075	.030	.075	.024	570.80	1823.00
.000355	260.	500.	750.	0	0	1	0.00	250.00	2073.00

1490 NH CARD USED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1476.0 1598.0 TYPE= 1 TARGET= 122.000

1050" U/S OF BAY CREEK ROAD BRIDGE, VS-5 SEC. G

2478.00	6.75	577.35	0.00	0.00	578.12	.77	.37	.35	576.90
985.	10.	975.	0.	20.	138.	0.	40.	20.	578.50
.37	.51	7.08	0.00	.100	.030	.075	.022	570.60	1476.00
.002545	425.	500.	490.	2	0	1	0.00	66.95	1542.95

1490 NH CARD USED

⇒ 100-yr FP LK Erie 577.6 USGS intersects btwn 24+78 and 27+08

3470 ENCROACHMENT STATIONS= 890.0 1590.0 TYPE= 1 TARGET= 700.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 582.00 ELREA= 582.00

REPEATED SECTION FROM SECTION 2916

2708.00	6.02	577.92	0.00	0.00	578.97	1.05	.71	.14	572.20
985.	0.	985.	0.	0.	120.	0.	41.	20.	576.80
.37	0.00	8.23	0.00	.100	.030	.075	.022	571.90	1533.00
.003881	150.	230.	225.	2	0	1	0.00	26.00	1559.00

NORMAL BRIDGE, NRD=23 MIN ELTRD= 583.60 MAX ELLC= 580.50

3470 ENCROACHMENT STATIONS= 870.0 1570.0 TYPE= 1 TARGET= 700.000

D/S FACE OF D.T. & S.R.R. TRACKS CULVERT, BS-11 SEC. H

TWIN CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

APPROX. SIZE = 23"X8", LENGTH = 32.5'

580.5 > 578.23 ⇒ unsubmerged outlet ELLC @ 580.5

2709.00	6.33	578.23	0.00	0.00	579.04	.82	.00	.07	585.30
985.	0.	985.	0.	0.	136.	0.	41.	20.	585.30
.37	0.00	7.26	0.00	.030	.012	.030	.022	571.90	1500.00
.000695	1.	1.	1.	2	0	1	-7.24	26.00	1526.00

NORMAL BRIDGE, NRD=23 MIN ELTRD= 583.60 MAX ELLC= 580.50

3470 ENCROACHMENT STATIONS= 870.0 1570.0 TYPE= 1 TARGET= 700.000

	985.	0.	985.	0.	0.	136.	0.	41.	20.	585.30
	.38	0.00	7.23	0.00	.030	.012	.030	.022	571.90	1500.00
	.000687	33.	33.	33.	2	0	1	-7.28	26.00	1526.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 890.0 1590.0 TYPE= 1 TARGET= 700.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 584.00 ELREA= 584.00

REPEATED SECTION FROM SECTION 2916

	2743.00	6.30	578.20	0.00	0.00	579.13	.94	.00	.06	572.20
	985.	0.	985.	0.	0.	127.	0.	41.	20.	576.80
	.38	0.00	7.77	0.00	.030	.030	.030	.022	571.90	1533.00
	.003254	1.	1.	1.	2	0	1	0.00	26.00	1559.00

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	

3470 ENCROACHMENT STATIONS= 890.0 1590.0 TYPE= 1 TARGET= 700.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 584.00 ELREA= 584.00

REPEATED SECTION FROM SECTION 2916

	2793.00	6.22	578.22	0.00	0.00	579.48	1.26	.18	.16	572.30
	985.	0.	985.	0.	0.	109.	0.	41.	20.	574.40
	.38	0.00	9.01	0.00	.030	.030	.030	.022	572.00	1533.00
	.004052	50.	50.	50.	2	0	1	0.00	20.00	1553.00

NORMAL BRIDGE, NRD=19 MIN EL TRD= 584.00 MAX ELLC= 579.60

3470 ENCROACHMENT STATIONS= 870.0 1570.0 TYPE= 1 TARGET= 700.000

D/S FACE OF EASTERLY PENN CENTRAL RR TRACK CULVERT, BS-12SEC. I

CONCRETE BOX CULVERT, WITH WINGWALLS & HEADWALLS

APPROX. SIZE = 20"X7.5", LENGTH = 15"

578.15 < 579.6 ⇒ Unsubmerged outlet

	2794.00	6.15	578.15	0.00	0.00	579.55	1.40	.00	.07	585.10
	985.	0.	985.	0.	0.	104.	0.	41.	20.	585.10
	.38	0.00	9.48	0.00	.040	.015	.040	.022	572.00	1500.00
	.001711	1.	1.	1.	2	0	1	0.00	20.00	1520.00

NORMAL BRIDGE, NRD=19 MIN ELTRD= 584.00 MAX ELLC= 579.60

3470 ENCROACHMENT STATIONS= 870.0 1570.0 TYPE= 1 TARGET= 700.000

985.	0.	985.	0.	0.	105.	0.	41.	20.	585.10
.38	0.00	9.40	0.00	.040	.015	.040	.022	572.00	1500.00
.001665	15.	15.	15.	1	0	1	0.00	20.00	1520.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 890.0 1590.0 TYPE= 1 TARGET= 700.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

REPEATED SECTION FROM SECTION 2916

2810.00	6.52	578.52	0.00	0.00	579.65	1.13	.00	.07	572.30
985.	0.	985.	0.	0.	115.	0.	41.	20.	574.40
.38	0.00	8.53	0.00	.040	.030	.040	.022	572.00	1533.00
.003403	1.	1.	1.	3	0	1	0.00	20.00	1553.00

3470 ENCROACHMENT STATIONS= 890.0 1590.0 TYPE= 1 TARGET= 700.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

2850.00	6.08	578.58	0.00	0.00	579.91	1.33	.15	.10	572.80
985.	0.	985.	0.	0.	107.	0.	41.	20.	574.90
.38	0.00	9.24	0.00	.040	.030	.040	.021	572.50	1533.00
.004388	40.	40.	40.	2	0	1	0.00	20.00	1553.00

NORMAL BRIDGE,NRD=19 MIN ELTRD= 583.10 MAX ELLC= 580.60

3470 ENCROACHMENT STATIONS= 870.0 1570.0 TYPE= 1 TARGET= 700.000

D/S FACE OF WESTERLY PENN CENTRAL RR TRACK CULVERT,BS-13SEC. J

CONCRETE BOX CULVERT, WITH WINGWALLS & HEADWALLS

APPROX. SIZE = 20"X7.5", LENGTH = 14 FT.

578.92 < ELLC < 580.60 ⇒ unsubmerged outlet

2851.00	6.42	578.92	0.00	0.00	579.99	1.07	.00	.08	584.50
985.	0.	985.	0.	0.	119.	0.	41.	20.	584.50
.38	0.00	8.29	0.00	.040	.015	.040	.021	572.50	1500.00
.001148	1.	1.	1.	3	0	1	0.00	20.00	1520.00

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

NORMAL BRIDGE,NRD=19 MIN ELTRD= 583.10 MAX ELLC= 580.60

3470 ENCROACHMENT STATIONS= 870.0 1570.0 TYPE= 1 TARGET= 700.000

2865.00	6.45	578.95	0.00	0.00	580.01	1.05	.02	.00	584.50
985.	0.	985.	0.	0.	120.	0.	41.	20.	584.50
.38	0.00	8.23	0.00	.040	.015	.040	.021	572.50	1500.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 890.0 1590.0 TYPE= 1 TARGET= 700.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 584.00 ELREA= 584.00

REPEATED SECTION FROM SECTION 2916

2866.00	6.39	578.89	0.00	0.00	580.07	1.18	.00	.07	572.80
985.	0.	985.	0.	0.	113.	0.	41.	20.	574.90
.38	0.00	8.73	0.00	.040	.030	.040	.021	572.50	1533.00
.003666	1.	1.	1.	2	0	1	0.00	20.00	1553.00

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 1529.0 1557.0 TYPE= 1 TARGET= 28.000

2870.00	7.31	579.73	0.00	0.00	580.27	.55	.01	.19	572.72
985.	103.	812.	70.	22.	131.	16.	41.	20.	574.82
.38	4.72	6.20	4.29	.030	.030	.030	.021	572.42	1529.00
.001280	4.	4.	4.	3	0	1	0.00	28.00	1557.00

3470 ENCROACHMENT STATIONS= 1525.0 1561.0 TYPE= 1 TARGET= 36.000

2874.00	7.55	579.89	0.00	0.00	580.31	.42	.00	.04	572.64
985.	124.	766.	95.	35.	136.	28.	41.	20.	574.74
.38	3.55	5.63	3.37	.032	.030	.031	.021	572.34	1525.00
.001007	4.	4.	4.	2	0	1	0.00	36.00	1561.00

3470 ENCROACHMENT STATIONS= 1480.0 1600.0 TYPE= 1 TARGET= 120.000

50" U/S FROM WESTERLY PENN CENTRAL RR CULVERT, VS-6 SEC. K

2916.00	8.84	580.34	0.00	0.00	580.43	.09	.02	.10	576.40
985.	189.	680.	116.	189.	234.	150.	41.	20.	576.80
.39	1.00	2.90	.77	.060	.030	.075	.021	571.50	1480.00
.000258	42.	42.	42.	2	0	1	0.00	120.00	1600.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 325.0 1510.0 TYPE= 1 TARGET= 1185.000

150" D/S OF INTERSECTION OF YETTER DRAIN, VS-7 SEC. L

3536.00	8.33	580.53	0.00	0.00	580.58	.04	.13	.02	577.70
985.	164.	489.	332.	262.	214.	511.	52.	23.	577.20
.50	.62	2.29	.65	.055	.030	.063	.020	572.20	1087.52
.000185	675.	620.	500.	2	0	1	0.00	367.12	1454.64

⇒ confluence with Yetter Drain

3470 ENCROACHMENT STATIONS= 1100.0 1450.0 TYPE= 1 TARGET= 350.000

3796.00	8.04	580.59	0.00	0.00	580.62	.03	.03	.00	578.05
695.	104.	366.	225.	223.	203.	454.	56.	25.	577.55
.55	.47	1.80	.50	.055	.030	.063	.020	572.55	1100.00
.000121	320.	260.	120.	0	0	1	0.00	346.99	1446.99

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
3470 ENCROACHMENT STATIONS=		1050.0	1400.0	TYPE=	1	TARGET=		350.000	
4116.00	7.63	580.63	0.00	0.00	580.67	.04	.04	.01	578.50
695.	88.	401.	206.	174.	190.	354.	62.	27.	578.00
.61	.51	2.11	.58	.055	.030	.064	.020	573.00	1106.95
.000181	420.	320.	220.	0	0	1	0.00	293.05	1400.00

⇒ confluence with Cousino Drain

3470 ENCROACHMENT STATIONS=		1600.0	1990.0	TYPE=	1	TARGET=		390.000	
200" U/S OF INTERSECTION OF COUSINO DRAIN,VS-8							SEC. M		
4416.00	7.30	580.70	0.00	0.00	580.71	.01	.03	.01	579.40
535.	93.	193.	249.	291.	192.	641.	69.	30.	579.10
.76	.32	1.01	.39	.055	.030	.055	.020	573.40	1600.00
.000049	200.	300.	400.	2	0	1	0.00	390.00	1990.00

3470 ENCROACHMENT STATIONS=		2023.0	2253.0	TYPE=	1	TARGET=		230.000	
430" D/S OF DRIVE WAY CULVERT 5847 (D/S FACE),VS-9							SEC. N		
5416.00	7.17	580.77	0.00	0.00	580.88	.11	.12	.05	580.50
535.	70.	450.	15.	105.	157.	43.	85.	37.	580.50
.87	.66	2.87	.36	.055	.030	.055	.022	573.60	2023.00
.000526	900.	1000.	1100.	2	0	1	0.00	230.00	2253.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS=		1725.0	1972.0	TYPE=	1	TARGET=		247.000	
OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=			582.50	ELREA=		582.50			
REPEATED SECTION OF SECTION 6363									
5846.00	7.08	580.88	0.00	0.00	581.44	.56	.34	.22	575.10
535.	0.	535.	0.	0.	89.	0.	87.	38.	576.75
.89	0.00	5.99	0.00	.055	.030	.055	.023	573.80	1725.00
.001311	350.	430.	460.	0	0	1	0.00	14.00	1739.00

NORMAL BRIDGE,NRD=18 MIN ELTRD= 581.40 MAX ELLC= 582.10

3470 ENCROACHMENT STATIONS=		250.0	1747.0	TYPE=	1	TARGET=		1497.000	
OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=			582.40	ELREA=		582.80			
D/S FACE OF DRIVE WAY CULVERT 1500 E. OF ALT. US24,BS-16SEC. O									

CONCRETE BOX CULVERT, WITH WINGWALLS

APPROX. SIZE = 13"X5", LENGTH = 15 FT. ⇒ unsubmerged outlet
580.87 < ELLC ≤ 582.1

5847.00	7.07	580.87	0.00	0.00	581.44	.57	.00	.01	582.40
535.	0.	535.	0.	0.	88.	0.	87.	38.	582.80
.89	0.00	6.07	0.00	.035	.012	.035	.023	573.80	1500.00
.000461	1.	1.	1.	1	0	1	0.00	14.00	1514.00

NORMAL BRIDGE,NRD=18 MIN ELTRD= 581.40 MAX ELLC= 582.10

3470 ENCROACHMENT STATIONS= 250.0 1747.0 TYPE= 1 TARGET= 1497.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 582.40 ELREA= 582.80

5862.00	7.08	580.88	0.00	0.00	581.45	.57	.01	.00	582.40
535.	0.	535.	0.	0.	88.	0.	87.	38.	582.80
.89	0.00	6.07	0.00	.035	.012	.035	.023	573.80	1500.00
.000459	15.	15.	15.	1	0	1	0.00	14.00	1514.00

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 1725.0 1972.0 TYPE= 1 TARGET= 247.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 582.50 ELREA= 582.50

REPEATED SECTION FROM SECTION 6363

5863.00	7.10	580.90	0.00	0.00	581.46	.56	.00	.00	575.10
535.	0.	535.	0.	0.	89.	0.	87.	38.	576.75
.89	0.00	5.99	0.00	.035	.030	.035	.023	573.80	1725.00
.001307	1.	1.	1.	1	0	1	0.00	14.00	1739.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= .0 1850.0 TYPE= 1 TARGET= 1849.999

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 583.10 ELREA= 582.60

500" U/S OF DRIVE WAY CULVERT 5847 (U/S FACE),VS-10 SEC. P

6363.00	7.68	581.88	0.00	0.00	582.07	.19	.50	.11	583.10
535.	0.	535.	0.	0.	155.	0.	89.	38.	582.60
.93	0.00	3.45	0.00	.035	.035	.035	.022	574.20	1716.60
.000796	480.	500.	470.	2	0	1	0.00	36.17	1752.77

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1600.0 3564.0 TYPE= 1 TARGET= -1600.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 582.15 ELREA= 582.65

REPEATED SECTION FROM SECTION 7623

6993.00	7.48	582.43	0.00	0.00	582.55	.12	.46	.02	582.15
535.	8.	527.	0.	26.	189.	0.	91.	40.	582.65
1.00	.30	2.78	0.00	.055	.045	.035	.021	574.95	1600.00
.000668	625.	630.	610.	2	0	1	0.00	125.82	1725.82

3470 ENCROACHMENT STATIONS= 1690.0 1725.0 TYPE= 1 TARGET= 35.000

40"-D/S OF ALT. US-24 CULVERT (D/S FACE),VS-11 SEC. Q

7623.00	7.18	582.88	0.00	0.00	583.02	.14	.46	.01	582.90
535.	0.	535.	0.	0.	179.	0.	94.	41.	100000.00
1.05	0.00	2.99	0.00	.055	.045	.035	.020	575.70	1690.05
.000802	625.	630.	610.	0	0	1	0.00	34.94	1725.00

3470 ENCROACHMENT STATIONS= 1235.0 2620.0 TYPE= 1 TARGET= 1385.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

REPEATED SECTION FROM SECTION 7623

7663.00	8.85	582.85	0.00	0.00	583.12	.27	.03	.07	574.70
535.	0.	535.	0.	0.	127.	0.	94.	41.	574.00
1.06	0.00	4.20	0.00	.055	.045	.035	.020	574.00	1700.50
.000944	40.	40.	40.	2	0	1	0.00	14.50	1715.00

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.00 ELREA= 584.00

D/S FACE OF ALT. US-24 CULVERT,BS-19 SEC. R

CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

582.85 < ELLC < 583.5 ⇒ unsubmerged outlet

APPROX. SIZE = 14.5"X9", LENGTH = 90 FT.

7664.00	8.85	582.85	0.00	0.00	583.12	.27	.00	.00	574.70
535.	0.	535.	0.	0.	127.	0.	94.	41.	574.00
1.06	0.00	4.20	0.00	.020	.018	.020	.020	574.00	1700.50
.000259	1.	1.	1.	0	0	1	0.00	14.50	1715.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.72	3.00	-0.00	13.10	-0.00	124.48	-0.00	574.00	574.00

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 583.183 ELLC= 583.500 PCWSE= 582.847 ELTRD= 588.600

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

NORMAL BRIDGE,NRD=20 MIN ELTRD= 588.60 MAX ELLC= 583.50

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.40 ELREA= 589.40

7754.00	8.85	582.85	0.00	0.00	583.18	.34	.03	.03	583.50
535.	0.	535.	0.	0.	115.	0.	94.	41.	583.50
1.06	0.00	4.65	0.00	.020	.018	.020	.020	574.00	1500.00
.000517	90.	90.	90.	0	0	1	0.00	14.50	1514.50

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1446.0 2559.0 TYPE= 1 TARGET= 1113.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.40 ELREA= 589.40

REPEATED SECTION OF SECTION 7805

7755.00	8.89	582.89	0.00	0.00	583.20	.30	.00	.01	575.50
535.	0.	535.	0.	0.	122.	0.	94.	41.	575.80
1.06	0.00	4.40	0.00	.020	.033	.020	.020	574.00	1679.00
.000677	1.	1.	1.	2	0	1	0.00	14.50	1693.50

3470 ENCROACHMENT STATIONS= 1629.0 1744.0 TYPE= 1 TARGET= 115.000

50" U/S FROM ALT. US-24 CULVERT (U/S FACE),VS-12 SEC. S

7805.00	7.49	583.19	0.00	0.00	583.28	.09	.03	.06	582.60
535.	28.	441.	66.	41.	166.	77.	95.	41.	581.30
1.07	.68	2.66	.85	.045	.033	.052	.020	575.70	1629.00
.000395	50.	50.	50.	2	0	1	0.00	115.00	1744.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1601.0 2450.0 TYPE= 1 TARGET= 849.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 584.20 ELREA= 583.90

470" U/S FROM ALT. US-24 CULVERT (U/S FACE),VS-13 SEC. T

8225.00	6.81	583.41	0.00	0.00	583.63	.22	.28	.06	584.20
535.	0.	535.	0.	0.	144.	0.	97.	42.	583.90
1.10	0.00	3.72	0.00	.045	.040	.052	.020	576.60	1657.84
.001358	390.	420.	500.	1	0	1	0.00	36.24	1694.08

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 1016.0 2200.0 TYPE= 1 TARGET= 1184.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 585.00 ELREA= 584.00

940" U/S FROM ALT. US-24 CULVERT (U/S FACE),VS-14 SEC. U

8695.00	7.89	583.99	0.00	0.00	584.15	.16	.51	.02	585.00
535.	0.	535.	0.	0.	165.	0.	99.	42.	584.00

.000886	480.	470.	475.	2	0	1	0.00	34.36	1429.98

3470 ENCROACHMENT STATIONS= 1230.0 1630.0 TYPE= 1 TARGET= 400.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 586.50 ELREA= 585.50

9105.00	6.83	584.43	0.00	0.00	584.69	.26	.48	.05	586.50
535.	0.	535.	0.	0.	131.	0.	100.	42.	585.50
1.17	0.00	4.10	0.00	.045	.040	.052	.020	577.60	1397.34
.001657	1.	410.	650.	2	0	1	0.00	30.80	1428.13

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 715.0 890.0 TYPE= 1 TARGET= 175.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 588.00 ELREA= 585.40

555" D/S FROM US-25 BRIDGE,VS-15 SEC. V

9515.00	5.93	585.13	0.00	0.00	585.35	.23	.65	.01	588.00
535.	0.	535.	0.	0.	140.	0.	101.	43.	585.40
1.20	0.00	3.82	0.00	.045	.040	.052	.020	579.20	734.11
.001541	650.	410.	1.	2	0	1	0.00	35.24	769.35

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 715.0 1038.0 TYPE= 1 TARGET= 323.000

35" D/S FROM US-25 BRIDGE,VS-16 SEC. W

10035.00	6.71	585.81	0.00	0.00	586.08	.27	.70	.02	588.70
515.	0.	515.	0.	0.	124.	0.	103.	43.	588.30
1.23	0.00	4.17	0.00	.045	.033	.052	.020	579.10	738.72
.001189	430.	520.	500.	2	0	1	0.00	30.45	769.17

3470 ENCROACHMENT STATIONS= 537.0 788.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 587.00 ELREA= 587.00

REPEATED SECTION OF SECTION 10035

10070.00	6.06	585.66	0.00	0.00	586.35	.69	.06	.21	581.40
515.	0.	515.	0.	0.	77.	0.	103.	43.	582.20
1.23	0.00	6.69	0.00	.045	.033	.052	.020	579.60	750.00
.002872	35.	35.	35.	2	0	1	0.00	14.50	768.43

3470 ENCROACHMENT STATIONS= 1287.0 1538.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

D/S FACE OF US-25 BRIDGE,BS-22 SEC. X

CONCRETE BOX CULVERT, WITH HEADWALLS & WINGWALLS

585.89 < ELLC < 586.1) unsubmerged outlet (586.1-585.89) = .21

APPROX. SIZE = 14.5"X6", LENGTH = 77.5"

10071.00	6.29	585.89	0.00	0.00	586.41	.52	.00	.05	586.10
515.	0.	515.	0.	0.	89.	0.	103.	43.	586.10
1.23	0.00	5.76	0.00	.020	.018	.020	.020	579.60	1500.00
.000956	1.	1.	1.	2	0	1	0.00	14.50	1514.50

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.85	3.00	-0.00	14.21	-0.00	92.38	-0.00	579.60	579.60

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	ELLC	ELTRD	CLASS
586.78	586.41	0.00	0.	515.	92.	586.10	589.60	10.00

3470 ENCROACHMENT STATIONS= 1287.0 1538.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.00 ELREA= 589.00

10149.00	6.73	586.33	0.00	0.00	586.78	.45	.38	0.00	586.10
515.	0.	515.	0.	0.	96.	0.	103.	43.	586.10
1.24	0.00	5.38	0.00	.020	.018	.020	.020	579.60	1500.00
.000782	78.	78.	78.	2	0	1	0.00	14.50	1520.27

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 465.0 716.0 TYPE= 1 TARGET= 251.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.50 ELREA= 589.50

REPEATED SECTION OF SECTION 10210

10150.00	6.70	586.30	0.00	0.00	586.82	.53	.00	.04	580.90
515.	0.	515.	0.	0.	88.	0.	103.	43.	580.70
1.24	0.00	5.82	0.00	.020	.045	.020	.020	579.60	678.00
.003420	1.	1.	1.	2	0	1	0.00	14.50	699.82

3470 ENCROACHMENT STATIONS= 660.0 705.0 TYPE= 1 TARGET= 45.000

60" U/S FROM US-25 BRIDGE (U/S FACE),VS-17 " SEC. Y

US-25 bridge

check on pressure flow

$Q = CA\sqrt{2gH}$

$K = 1.85$; $C = K/\sqrt{K} = .735$

$Q = .735(92)(8.025)H^{1/2}$

$Q = 542.81H^{1/2}$

TW = 585.89

left HW = 586.86 @ 102+10

$H = (586.86 - 585.89) = .97$

$Q = 542.81(.984)$

consider reasonable

$Q = 534.6$ cfs

10210.00	7.06	586.86	0.00	0.00	587.05	.19	.13	.10	588.10
515.	0.	515.	0.	0.	146.	0.	103.	43.	587.40
1.24	0.00	3.53	0.00	.020	.045	.020	.020	579.80	667.31
.001432	60.	60.	60.	2	0	1	0.00	32.94	700.25

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 174.0 333.0 TYPE= 1 TARGET= 159.000

660" U/S FROM US-25 BRIDGE (U/S FACE),VS-18 SEC. Z

10810.00	6.71	587.41	0.00	0.00	587.60	.19	.55	.00	587.60
515.	0.	515.	0.	0.	147.	0.	105.	43.	587.40
1.29	0.00	3.51	.00	.075	.030	.100	.019	580.70	283.37
.000640	585.	600.	585.	2	0	1	0.00	34.71	318.08

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= .0 348.0 TYPE= 1 TARGET= 347.999

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.00 ELREA= 590.00

REPEATED SECTION OF SECTION 11789

11590.00	6.54	587.94	0.00	0.00	588.57	.62	.75	.22	582.10
515.	0.	515.	0.	0.	81.	0.	107.	44.	582.10
1.32	0.00	6.34	0.00	.075	.030	.100	.019	581.40	186.00
.001590	860.	780.	700.	2	0	1	0.00	13.00	199.00

NORMAL BRIDGE,NRD=12 MIN ELTRD= 589.80 MAX ELLC= 589.10

3470 ENCROACHMENT STATIONS= 720.0 1030.0 TYPE= 1 TARGET= -720.000

D/S FACE OF FARM LANE BRIDGE,BS-24 SEC. AA

CONCRETE BOX CULVERT, U/S WINGWALLS-FALLEN DOWN.

APPROX. SIZE = 13"X6.5", LENGTH = 17", PRJECT FROM FILL

587.94 < ELLC < 589.1 ⇒ unsubmerged outlet

11591.00	6.54	587.94	0.00	0.00	588.58	.64	.00	.01	589.80
515.	0.	515.	0.	0.	80.	0.	107.	44.	589.90
1.32	0.00	6.42	0.00	.030	.020	.030	.019	581.40	900.00
.001534	1.	1.	1.	0	0	1	0.00	13.00	913.00

NORMAL BRIDGE,NRD=12 MIN ELTRD= 589.80 MAX ELLC= 589.10

3470 ENCROACHMENT STATIONS= 720.0 1030.0 TYPE= 1 TARGET= -720.000

11608.00	6.57	587.97	0.00	0.00	588.60	.63	.03	.00	589.80
515.	0.	515.	0.	0.	81.	0.	107.	44.	589.90
1.33	0.00	6.39	0.00	.030	.020	.030	.019	581.40	900.00
.001517	17.	17.	17.	0	0	1	0.00	13.00	913.00

1490 NH CARD USED

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= .0 348.0 TYPE= 1 TARGET= 347.999

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.90 ELREA= 589.90

REPEATED SECTION OF SECTION 11789

11609.00	6.60	588.00	0.00	0.00	588.61	.61	.00	.01	582.10
515.	0.	515.	0.	0.	82.	0.	107.	44.	582.10
1.33	0.00	6.29	0.00	.030	.030	.030	.019	581.40	186.00
.001545	1.	1.	1.	2	0	1	0.00	13.00	199.00

3470 ENCROACHMENT STATIONS= 170.0 212.0 TYPE= 1 TARGET= 42.000

180" U/S FROM FARM LANE BRIDGE 11591 (U/S FACE),VS-19 SEC. BB

11789.00	7.26	588.76	0.00	0.00	588.88	.12	.12	.15	588.40
515.	0.	515.	0.	0.	187.	0.	108.	44.	100000.00
1.34	.01	2.75	0.00	.055	.030	.030	.019	581.50	170.00
.000356	180.	180.	180.	2	0	1	0.00	42.00	212.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 192.0 408.0 TYPE= 1 TARGET= 216.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 589.40 ELREA= 590.20

400" D/S FROM FARM LANE BRIDGE 12760,VS-20 SEC. CC

12359.00	7.88	588.98	0.00	0.00	589.17	.20	.26	.04	589.40
515.	0.	515.	0.	0.	145.	0.	110.	44.	590.20
1.39	0.00	3.55	0.00	.055	.030	.030	.019	581.10	198.59
.000602	570.	570.	570.	2	0	1	0.00	29.69	228.28

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 250.0 280.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.00 ELREA= 590.00

REPEATED SECTION FROM SECTION 12860

12759.00	6.58	589.38	0.00	0.00	589.77	.39	.50	.10	583.30
515.	0.	515.	0.	0.	102.	0.	111.	45.	585.60
1.41	0.00	5.04	0.00	.055	.055	.030	.019	582.80	253.00
.003931	400.	400.	400.	2	0	1	0.00	17.00	276.74

3470 ENCROACHMENT STATIONS= 232.0 262.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 590.00 ELREA= 590.00

D/S FACE OF FARM LANE BRIDGE, 200" D/S FROM C & 3 RR SEC. DD

BS-25

WOODEN BRIDGE, PROJECTED FROM FILL

SPAN 14 FT, WIDTH 17 FT 589.4 < 5ELLC < 589.9 ⇒ unsubmerged outlet

12760.00	6.60	589.40	0.00	0.00	589.78	.38	.00	.01	583.90
515.	0.	515.	0.	0.	105.	0.	111.	45.	584.50
1.41	0.00	4.92	0.00	.035	.030	.035	.019	582.80	235.00
.001341	1.	1.	1.	2	0	1	0.00	17.00	252.00

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	2.02	2.80	-0.00	15.78	-0.00	108.85	-0.00	582.80	582.80

6070, LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 589.780 ELLC= 589.900 PCWSE= 589.404 ELTRD= 590.500

NORMAL BRIDGE, NRD=12 MIN ELTRD= 590.50 MAX ELLC= 589.90

3470 ENCROACHMENT STATIONS= 232.0 262.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 590.50 ELREA= 590.50

12774.00	6.63	589.43	0.00	0.00	589.80	.37	.02	.00	583.90
515.	0.	515.	0.	0.	105.	0.	111.	45.	584.50
1.41	0.00	4.90	0.00	.035	.030	.035	.019	582.80	235.00
.001327	14.	14.	14.	2	0	1	-5.74	17.00	252.00

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 250.0 280.0 TYPE= 1 TARGET= 30.000

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 591.00 ELREA= 591.00

REPEATED SECTION FROM SECTION 12860

12775.00	6.62	589.42	0.00	0.00	589.81	.39	.00	.01	583.30
515.	0.	515.	0.	0.	103.	0.	111.	45.	585.60
1.41	0.00	5.00	0.00	.035	.030	.035	.019	582.80	253.00
.001139	1.	1.	1.	0	0	1	0.00	17.00	276.83

3470 ENCROACHMENT STATIONS= 152.0 855.0 TYPE= 1 TARGET= 740.000

12860.00	6.64	589.74	0.00	0.00	589.94	.20	.07	.06	591.70
495.	0.	495.	0.	0.	139.	0.	111.	45.	591.50
1.42	0.00	3.55	0.00	.035	.030	.035	.020	583.10	230.98
.000683	45.	85.	115.	2	0	1	0.00	32.04	263.02

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 160.0 863.0 TYPE= 1 TARGET= 740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.00 ELREA= 592.00

REPEATED SECTION OF SECTION 12860

12990.00	5.73	589.53	0.00	0.00	590.49	.97	.17	.39	584.30
495.	0.	495.	0.	0.	63.	0.	112.	45.	583.80
1.42	0.00	7.89	0.00	.035	.030	.035	.020	583.80	248.35
.003192	115.	130.	115.	2	0	1	0.00	11.40	269.47

NORMAL BRIDGE,NRD=11 MIN ELTRD= 598.90 MAX ELLC= 591.80

D/S FACE OF C & O RAILROAD TRACKS CULVERT, BS-27 SEC. FF

CONCRETE BOX CULVERT, WITH HEADWALL AND WINGWALLS

APPROX. SIZE = 12"X7.5", LENGTH = 39 FT. SKEW = 18 DEG.

589.43 < ELLC < 591.8 ⇒ unsubmerged outlet

12991.00	5.63	589.43	0.00	0.00	590.59	1.16	.00	.10	598.90
495.	0.	495.	0.	0.	57.	0.	112.	45.	598.90
1.42	0.00	8.66	0.00	.030	.015	.030	.020	583.80	855.00
.002197	1.	1.	1.	2	0	1	0.00	11.40	866.40

8930,RDST NOT ON GR CARD 1330.00

NORMAL BRIDGE,NRD=11 MIN ELTRD= 598.90 MAX ELLC= 591.80

13030.00	5.82	589.62	0.00	0.00	590.70	1.08	.08	.03	598.90
495.	0.	495.	0.	0.	59.	0.	112.	45.	598.90
1.42	0.00	8.34	0.00	.030	.015	.030	.020	583.80	855.00
.001984	39.	39.	39.	2	0	1	0.00	11.40	866.40

8930,RDST NOT ON GR CARD 1330.00

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 160.0 863.0 TYPE= 1 TARGET= 740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.00 ELREA= 592.00

REPEATED SECTION FROM SECTION 12860

13031.00	6.14	589.94	0.00	0.00	590.78	.83	.00	.07	584.30
495.	0.	495.	0.	0.	68.	0.	112.	45.	583.80
1.42	0.00	7.33	0.00	.030	.030	.030	.020	583.80	248.35

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

3470 ENCROACHMENT STATIONS= 160.0 900.0 TYPE= 1 TARGET= 740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.00 ELREA= 592.00

13101.00	6.25	590.15	0.00	0.00	590.96	.81	.17	.01	584.40
495.	0.	495.	0.	0.	69.	0.	112.	45.	583.90
1.43	0.00	7.20	0.00	.030	.030	.030	.020	583.90	248.35
.002421	60.	70.	60.	2	0	1	0.00	11.40	270.36

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 592.00 ELREA= 592.00

D/S FACE OF US-24 BRIDGE, SKEWED BY 18 DEG.,BS-28 SEC. GG

CONCRETE BOX CULVERT, WITH WINGWALLS AND HEADWALLS

APPROX. SIZE = 12"X7", LENGTH = 76 FT.

690.22 < ELLC < 591.0 ⇒ unsubmerged outlet

13102.00	6.32	590.22	0.00	0.00	590.97	.76	.00	.01	584.50
495.	0.	495.	0.	0.	71.	0.	112.	45.	584.50
1.43	0.00	6.99	0.00	.015	.015	.015	.020	583.90	1425.00
.000807	1.	1.	1.	2	0	1	0.00	11.40	1476.55

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.57	3.00	-0.00	11.25	-0.00	81.03	-0.00	583.90	583.90

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 590.973 ELLC= 591.100 PCWSE= 590.216 ELTRD= 596.100

NORMAL BRIDGE,NRD=19 MIN ELTRD= 596.10 MAX ELLC= 591.10

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 595.00 ELREA= 598.00

13178.00	6.40	590.30	0.00	0.00	591.04	.74	.06	.01	584.50
495.	0.	495.	0.	0.	72.	0.	112.	45.	584.50
1.43	0.00	6.89	0.00	.015	.015	.015	.020	583.90	1425.00
.000775	76.	76.	76.	2	0	1	0.00	11.40	1477.17

1490 NH CARD USED

3470 ENCROACHMENT STATIONS= 160.0 863.0 TYPE= 1 TARGET= 740.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

Structures on line with each other

REPEATED SECTION OF SECTION 12860

UP 13179.00	6.39	590.29	0.00	0.00	591.06	.77	.00	.02	584.40
495.	0.	495.	0.	0.	70.	0.	112.	45.	583.90
1.43	0.00	7.04	0.00	.015	.030	.015	.020	583.90	248.35
.002253	1.	1.	1.	1	0	1	0.00	11.40	270.60

1490 NH CARD USED

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 150.1 657.4 TYPE= 1 TARGET= 534.000

110" U/S FROM US-24 BRIDGE (U/S FACE), SKEW = 18 DEG. SEC. HH

VS-22

13289.00	7.47	591.17	0.00	0.00	591.36	.19	.13	.17	591.20
495.	0.	495.	0.	0.	142.	0.	112.	45.	592.30
1.44	0.00	3.50	0.00	.015	.033	.015	.019	583.70	210.95
.000697	105.	110.	105.	2	0	1	0.00	31.72	242.67

1490 NH CARD USED

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

3470 ENCROACHMENT STATIONS= 88.2 2338.3 TYPE= 1 TARGET= -90.000

220" D/S FROM ERIE ROAD CULVERT, SKEW = 11 DEG.,VS-23 SEC. II

13634.00	7.44	591.44	0.00	0.00	591.58	.14	.21	.02	591.30
495.	0.	495.	0.	0.	165.	0.	113.	45.	592.70
1.47	.13	2.99	0.00	.045	.034	.015	.019	584.00	114.03
.000525	320.	345.	375.	2	0	1	0.00	37.55	151.58

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.00 ELREA= 594.00

REPEATED SECTION OF SECTION 13634

13854.00	7.02	591.42	0.00	0.00	592.05	.63	.22	.25	585.70
495.	0.	495.	0.	0.	78.	0.	114.	45.	585.40
1.48	0.00	6.37	0.00	.050	.034	.050	.020	584.40	115.20
.002775	100.	220.	360.	2	0	1	0.00	11.70	126.90

D/S FACE OF ERIE ROAD CULVERT, SKEWED BY 26 DEG.,BS-30 SEC. JJ

CONCRETE BOX CULVERT, WITH HEADWALLS AND WINGWALLS

APROX. SIZE = 13"X8.5", LENGTH = 45 FT

495.	0.	495.	0.	0.	78.	0.	114.	45.	594.60	
1.48	0.00	6.31	0.00	.018	.018	.018	.020	584.40	697.50	
.001218	1.	1.	1.	1	0	1	0.00	11.70	709.20	

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	-0.00	1.52	3.00	-0.00	11.26	-0.00	96.80	-0.00	584.40	584.40

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 0.000 EGLWC= 592.054 ELLC= 593.000 PCWSE= 591.436 ELTRD= 594.500

NORMAL BRIDGE,NRD=19 MIN ELTRD= 594.50 MAX ELLC= 593.00

13900.00	7.11	591.51	0.00	0.00	592.11	.60	.05	.00	594.60
495.	0.	495.	0.	0.	79.	0.	114.	45.	594.60
1.48	0.00	6.24	0.00	.018	.018	.018	.020	584.40	697.50
.001181	45.	45.	45.	2	0	1	0.00	11.70	709.20

8930,RDST NOT ON GR CARD 709.20
8930,RDST NOT ON GR CARD 787.50
8930,RDST NOT ON GR CARD 1327.50

3470 ENCROACHMENT STATIONS= 81.0 2147.4 TYPE= 1 TARGET= -90.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.50 ELREA= 594.50

REPEATED SECTION FROM SECTION 13634

13901.00	7.11	591.51	0.00	0.00	592.12	.61	.00	.00	585.70
495.	0.	495.	0.	0.	79.	0.	114.	45.	585.40
1.48	0.00	6.28	0.00	.050	.034	.050	.020	584.40	115.20
.002671	1.	1.	1.	0	0	1	0.00	11.70	126.90

3470 ENCROACHMENT STATIONS= 650.0 1685.0 TYPE= 1 TARGET= 1035.000

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 594.10 ELREA= 594.40

1270' U/S OF ERIE ROAD CULVERT,VS-24 SEC. KK

15171.00	6.50	594.10	0.00	0.00	594.30	.20	2.06	.12	594.10
495.	0.	495.	0.	0.	137.	0.	117.	46.	594.40
1.58	0.00	3.62	0.00	.055	.030	.055	.020	587.60	1258.01
.001087	1080.	1270.	1300.	2	0	1	0.00	39.18	1297.19

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

2420' U/S OF ERIE ROAD CULVERT, VS-25 SEC. LL

16321.00	5.50	595.80	0.00	0.00	596.19	.39	1.79	.09	597.20

1.64	0.00	5.00	0.00	.055	.030	.055	.021	590.30	479.60
.002484	1080.	1150.	1230.	2	0	1	0.00	29.82	509.42

3470 ENCROACHMENT STATIONS= 580.0 2085.0 TYPE= 1 TARGET= -580.000

930" D/S OF MINX ROAD CULVERT,VS-26 SEC. MM

18201.00	6.50	599.20	0.00	0.00	599.42	.22	3.19	.05	600.30
470.	0.	470.	0.	0.	125.	0.	125.	48.	602.10
1.78	0.00	3.77	0.00	.055	.030	.055	.022	592.70	1554.14
.001230	1880.	1880.	1880.	2	0	1	0.00	35.84	1589.98

3470 ENCROACHMENT STATIONS= 670.0 1970.0 TYPE= 1 TARGET= 1300.000

50" D/S FROM MINX ROAD CULVERT,VS-27 SEC. NN

19081.00	4.99	600.99	0.00	0.00	601.44	.45	1.90	.11	600.70
470.	0.	470.	0.	1.	87.	0.	127.	49.	602.30
1.83	.51	5.39	0.00	.055	.030	.055	.022	596.00	1276.46
.004744	1100.	880.	550.	2	0	1	0.00	44.34	1320.81

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Erie Twp

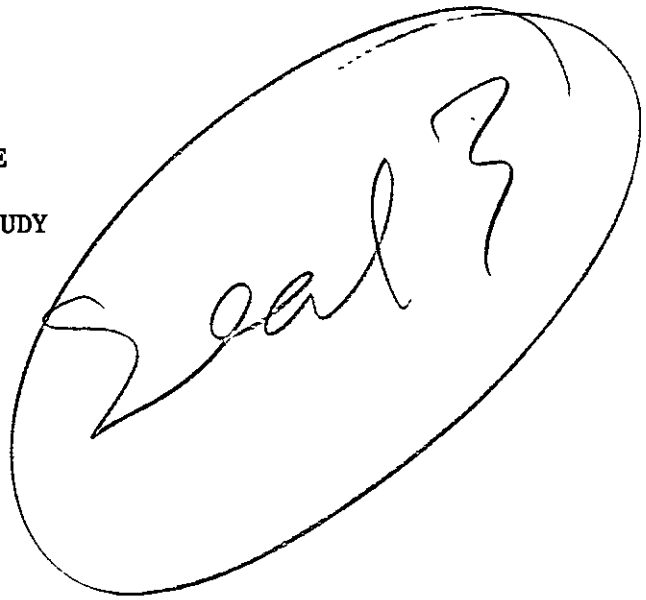
3) WATERCOURSE: Bay Creek

4) DOCUMENT TYPE: Report

00BREAK00

TOWNSHIP OF ERIE

FLOOD INSURANCE STUDY



HYDRAULIC ANALYSIS OF BAY CREEK

February 7, 1977

J&A File No. 5555-17
R. Zanotti, Project Manager

HYDRAULIC ANALYSIS

Introduction

Bay Creek drains portions of Whiteford, Bedford, and Erie Townships before ultimately discharging into North Maumee Bay and Lake Erie. It has a drainage area of approximately 12.5 square miles. The study reach runs from the Interstate 75 highway bridge, through the City of Erie, and ends at Minx Road in the northwest corner of Erie Township. The flows were determined by analysis of drainage and retention patterns in adjacent areas along Bay Creek. The flows have been approved by the Michigan Department of Natural Resources (December 23, 1976).

Method of Analysis

The flood profiles were calculated by the COE HEC-2 computer program. All bridges have been modeled in conformity with the requirements of the HEC-2 normal and special bridge routines.

Variables and Coefficients

The roughness factors (Manning's "n") were determined by comparing the descriptions in Ven Te Chow's Open-Channel Hydraulics (Reference 1) with photographs and field descriptions taken in Erie Township by survey crews in September 1976 and are indicative of summer conditions. In order to reflect generally gradual changes in cross-section geometry, the expansion and contraction coefficients used in this study were .3 and .5, respectively.

Starting Point

The profile computations for Bay Creek began downstream of Interstate 75 highway bridge. The starting elevation was determined by assuming the mean flood level of Lake Erie at the downstream face of Consumers Power Plant Railroad Spur Bridge. This elevation, along with the storage capacity of the area between the Railroad Spur Bridge and I-75, was inputted into the SCS TR-20 program in order to determine a headwater elevation for the Railroad Spur Bridge. The headwater elevation was then used as a tailwater elevation at the I-75 bridge. Due to the storage area, the TR-20 program provided the best method with which to determine the tailwater at I-75. The Lake Erie mean flood level used was 573.35 (USG&CS).

Yes*

100-yr st. W.S. = 574.08 (574.08 - 573.35) = 0.73 ft higher

Stationing was recorded as river feet from the downstream face of the I-75 bridge. In the Final Flood Insurance Report, the 10-, 50-, 100- and 500-year Lake Erie elevations will be extended horizontally upstream until the corresponding Bay Creek profiles are intersected.

Discussion

The drainage basin for Bay Creek is principally farm fields with the only development occurring around the town of Erie. The cross sections were photogrammetrically surveyed from rectified models of 1"=1000' scale with supplementary bank-to-bank elevations field surveyed. Overbank flooding occurred principally near the mouth and at the confluence of the Yetter and Cousino Drains.

* TR 20 output checked by Hydrological Studies Unit JA 3/16/77

References

1. Chow, Ven Te, Open-Channel Hydraulics, McGraw-Hill Engineering Series, 1959.

Township of Erie
Bay Creek
5555-17-1
MSC 1-28-77

Cross Section	SECNO	Location
A	1	d/s face of I-75 Bridge
B	192	50' u/s from u/s face of I-75 Bridge
C	772	±630' u/s from u/s face of I-75 Bridge
D	1232	170' d/s from d/s face of Bay Creek Road culvert
E	1403	d/s face of Bay Creek Road culvert
F	1478	50' u/s from u/s face of Bay Creek Road culvert
G	2478	±1050/ u/s from u/s face of Bay Creek Road culvert
H	2709	d/s face of D.T.& S. Railroad culvert
I	2794	d/s face of E. Penn-Central Railroad culvert
J	2851	d/s face of W. Penn-Central Railroad culvert
K	2916	50' u/s from u/s from of W. Penn-Central Railroad culvert
L	3536	150' d/s of Intersection of Yetter Drain
M	4416	200' u/s of Intersection of Cousino Drain
N	5416	430' d/s from d/s face of driveway culvert O
O	5847	d/s face of driveway culvert, ±1500' east of Alt. US-24
P	6363	500' u/s from u/s face of driveway culvert O
Q	7623	40' d/s from d/s face of Alt. US-24 culvert
R	7664	d/s face of Alt. US-24 culvert
S	7805	50' u/s from u/s face of Alt. US-24 culvert
T	8225	470' u/s from u/s face of Alt. US-24 culvert

Cross Section	SECNO	Location
U	8695	940' u/s from u/s face of Alt. US-24 culvert
V	9515	±550' d/s from d/s face of US-25 Bridge
W	10035	35' d/s from d/s face of US-25 Bridge
X	10071	d/s face of US-25 Bridge
Y	10210	60' u/s from u/s face of US-25 Bridge
Z	10810	±660' u/s from u/s face of US-25 Bridge
AA	11591	d/s face of Farm Lane Bridge
BB	11789	180' u/s from u/s face of Bridge AA
CC	12359	400' d/s from d/s face of Farm Lane Bridge DD
DD	12760	d/s face of Farm Lane Bridge, ±200' d/s from d/s face of C&O Railroad Bridge
EE	12860	±130' d/s from d/s face of C&O Railroad Bridge
FF	12991	d/s face of C&O Railroad Bridge
GG	13102	d/s face of US-24 Bridge
HH	13289	110' u/s from u/s face of US-24 Bridge
II	13634	220' d/s from d/s face of Erie Road culvert
JJ	13855	d/s face of Erie Road culvert
KK	15171	±1270' u/s from u/s face of Erie Road culvert
LL	16321	±2400' u/s from u/s face of Erie Road culvert
MM	18201	±930' d/s of ~~Minx~~ Cemetery Road culvert
NN	19081	50' d/s from ~~Minx~~ Cemetery Road culvert

Johnson & Anderson, Inc.
Consulting Engineers
P.O Box 1166 2300 Dixie Highway Pontiac, Michigan 48056

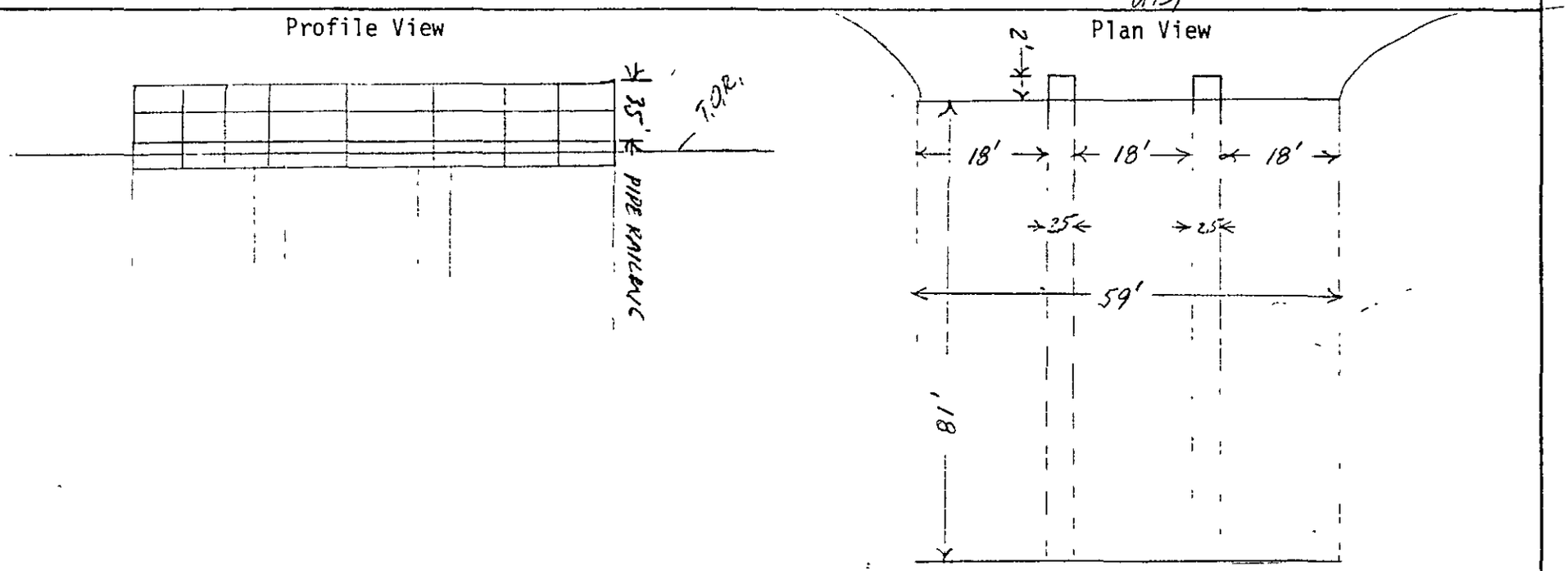
HYDRAULIC STRUCTURAL DATA

Code No. 17-BS#1

Job Name: ERIE TWP FIS		By: L. T. SLADE
Date: JUNE 11 1976	Feature: CONC. BOX CULVERT	Water Course: BAY CREEK
Remarks: PADET IS D.T.&S.R.R SPUR FOR WHITING POWER PLANT		
		PHOTO: DSF 13/14 D 15/16 F 17/18 D USF

Width of Piers: 2.5'	Pier Shape:	No. of Piers: 2	Area: —
Water Elevation: 579.5	Length: 59'	Width of Deck: 81'	Skew: —

FIELD SKETCH



Johnson & Anderson, Inc.
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P. O. Box 1166 2300 Dixie Highway Pontiac, Michigan 48056

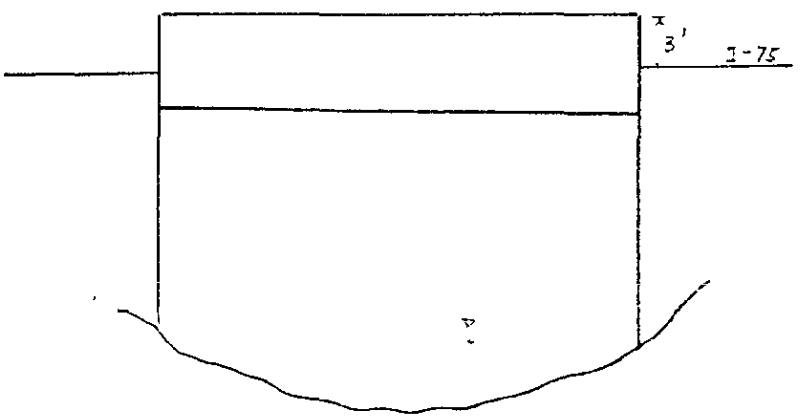
HYDRAULIC STRUCTURAL DATA

Code No. 17 - 25 " 175

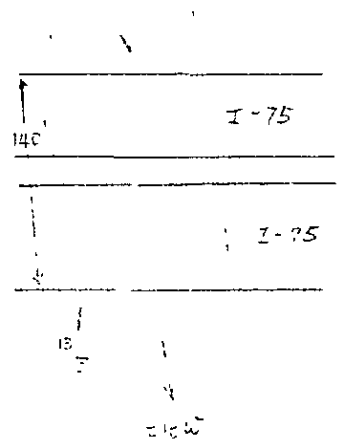
Job Name: Erie TWP FIS			By: R. Zanotti, M.S. Cheng
Date: Nov. 17 1976	Feature: Concrete box Culvert		Water Course: Bay Creek
Remarks: Bridge is on I-75			
Good Condition			
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: 572.1	Length: 35.0	Width of Deck: 140.0	Skew:

FIELD SKETCH

Profile View



Plan View



JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS

BY MSC DATE 11-17-76 JOB DESCRIPTION FIS - Erie TWP SHEET 1 OF
SUBJECT I-25 Bridge JOB NO. 5555-17

STATION	ROAD ELEVATION	LDW	CHORD ELEVATION	GROUND ELEVATION
0	581.3 584.3		579.3	572.1
5				569.7
10				570.2
14				569.9
18				569.9
22				570.1
26				569.5
30				569.7
35	584.3 581.3		579.3	570.9

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Consulting Engineers
P O Box 1166 2300 Dixie Highway Pontiac, Michigan 48056

HYDRAULIC STRUCTURAL DATA

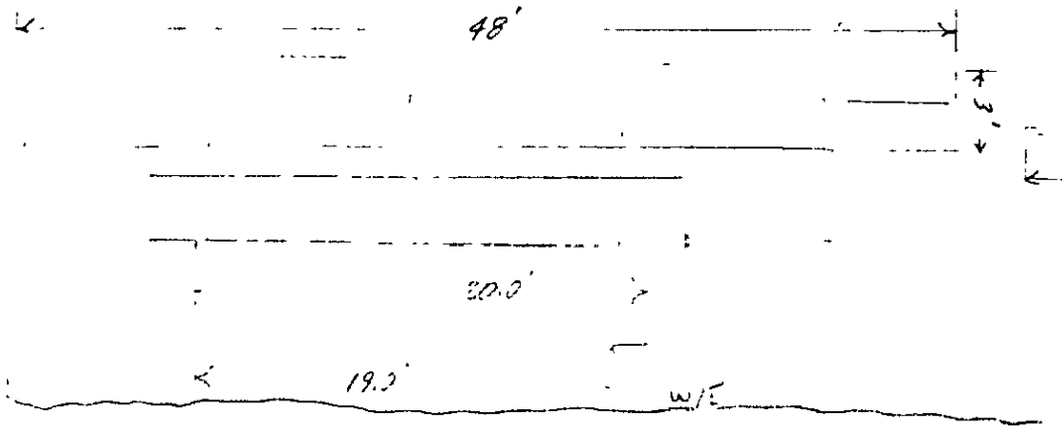
Code No. 17-BS II 9

Job Name: ERIE TWP FIS on Bay Creek Rd		By: LARRY T. SLADE
Date: JUNE 9, 1976	Feature: CONC. BOX CULVERT	Water Course: BAY CREEK
Remarks: [illegible] Looking		
[illegible] 1500'		
[illegible]		

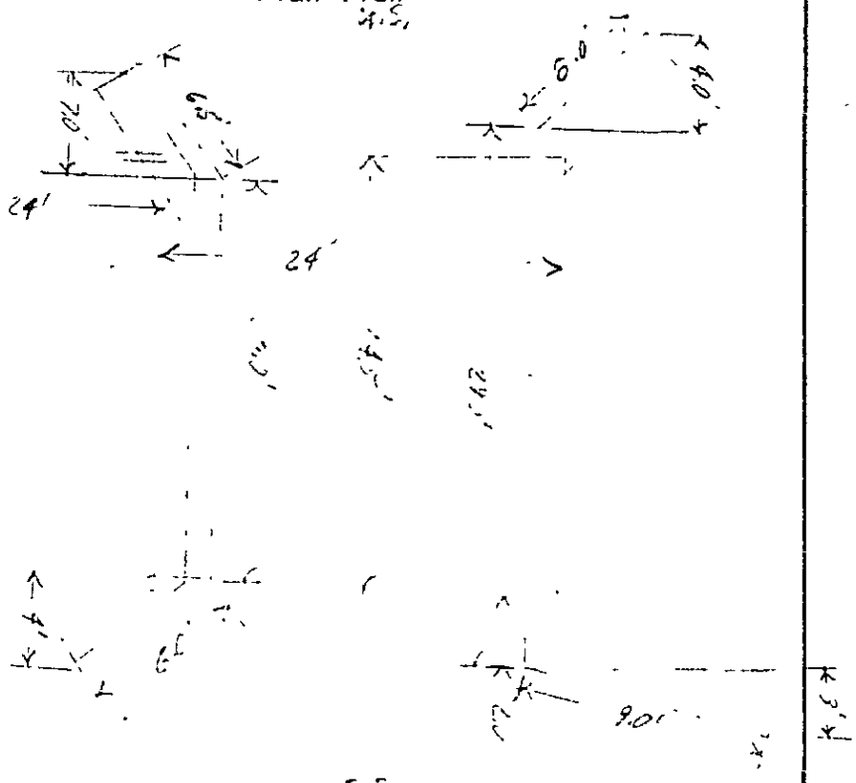
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: 5743	Length: 20.0	Width of Deck: 24.5	Skew: —

FIELD SKETCH

Profile View

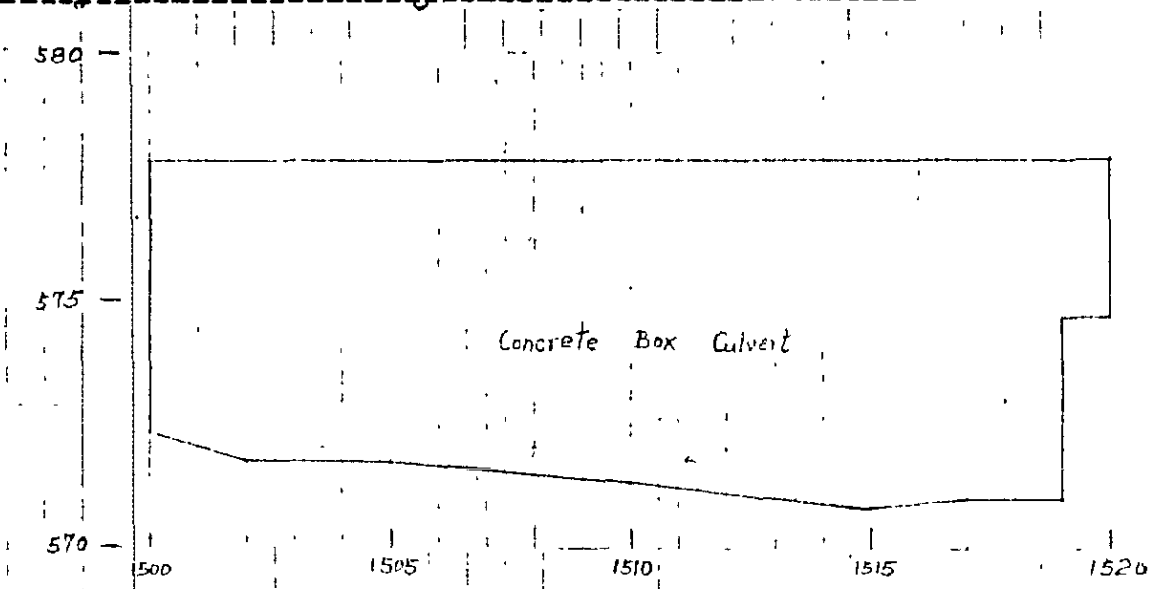


Plan View



JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS

BY MSC DATE 12-8-76 JOB DESCRIPTION EIS - Erie TWP SHEET ____ OF ____
SUBJECT I 2 Creek Road Bridge JOB NO. 5555-17-01



Area : $A = 127.6 \text{ ft}^2$

Wetted Perimeter : $P = 52.5 \text{ ft.}$

Hydraulic Radius : $R = A/P = 2.43 \text{ ft.}$

Length : $L = 24 \text{ ft.}$

Manning Coefficient : $n = 0.016$ (concrete box culvert with sandy bottom)

Entrance Loss Coeff. : $K_e = 0.4$

$$K_f = \frac{29 n^2 L}{R^{4/3}} = 0.05$$

$$XKOR = 1 + K_e + K_f = 1 + 0.4 + 0.05 = 1.45$$

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P.O Box 1166 2300 Dixie Highway Pontiac, Michigan 48056

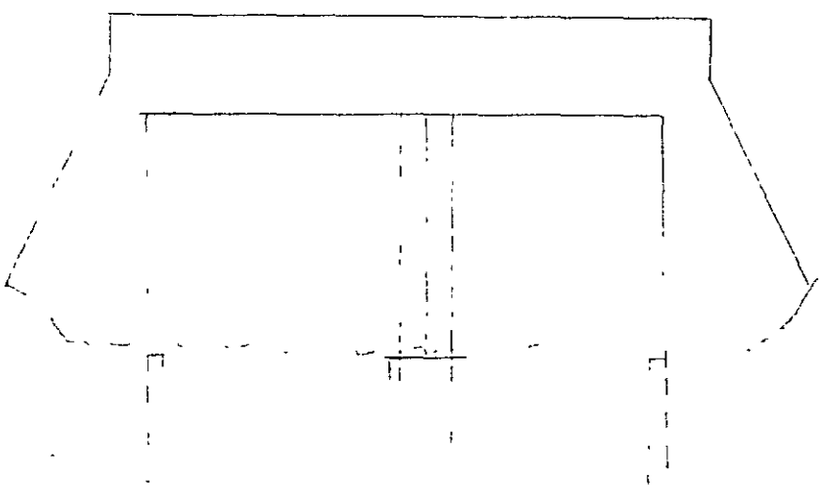
HYDRAULIC STRUCTURAL DATA

Code No. 12-85-4

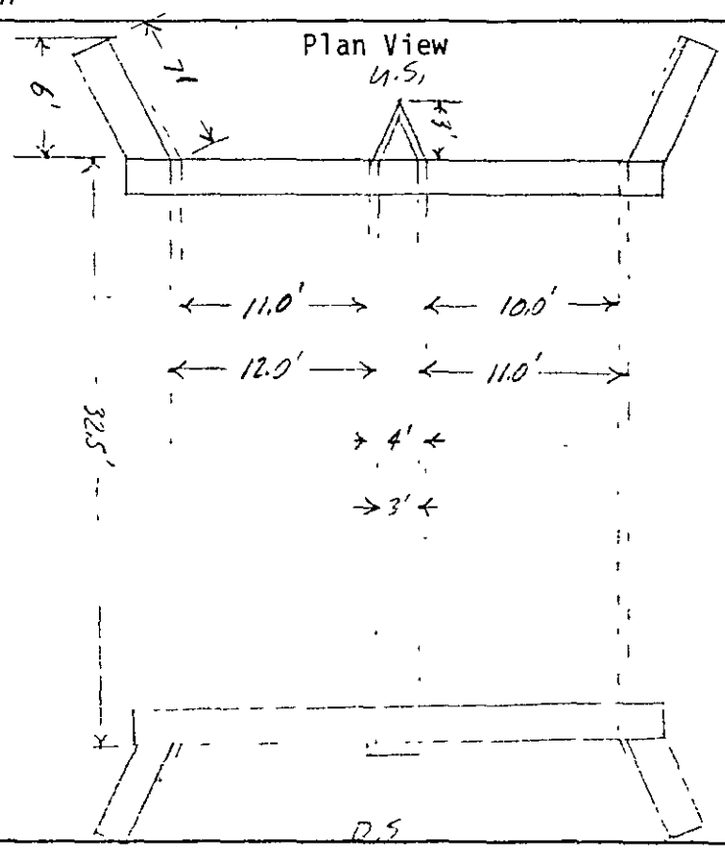
Job Name: EDIE TWIN PIPE			By: LARRY T SLADE
Date: JUNE 9, 1976	Feature: TWIN CONC BOX CULVERT		Water Course: BAY CREEK
Remarks: [illegible]			
-N D.T.&S.R.R. TRACKS			
Width of Piers: 3'	Pier Shape: "V" 4:5,	No. of Piers: 1	Area: —
Water Elevation: 574.0	Length: 23' TOTAL	Width of Deck: 32.5	Skew: —

FIELD SKETCH

Profile View



Plan View



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HYDRAULIC STRUCTURAL DATA

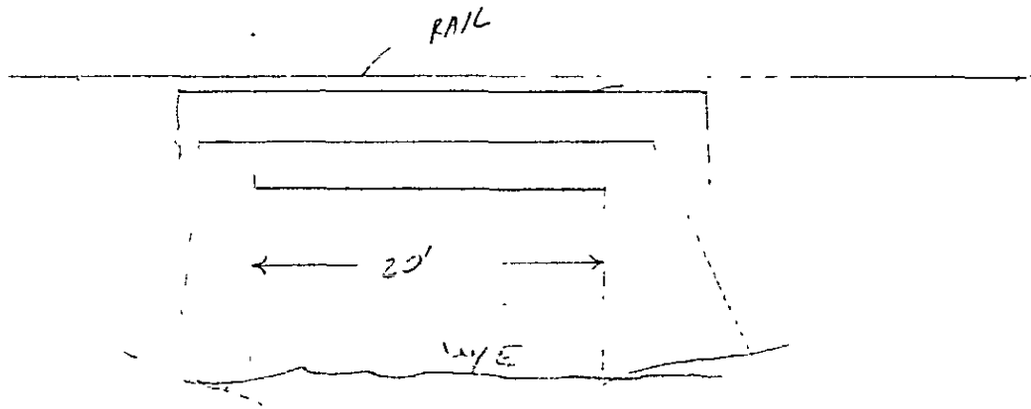
Code No. 17-BS-12

Job Name: ERIE TWP FTS		By: LARRY T. SLADE
Date: JUNE 9, 1976	Feature: EASTERLY PENN CENTRAL RR TRACK	Water Course: BAY CREEK
Remarks: STRUCTURE IS IN EXISTING COND		
		PHOTO 22 DSF / 23 D / 24 R / 25 L / 26 U / 27 USF

Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: 574.2	Length: 20'	Width of Deck: 15'	Skew: —

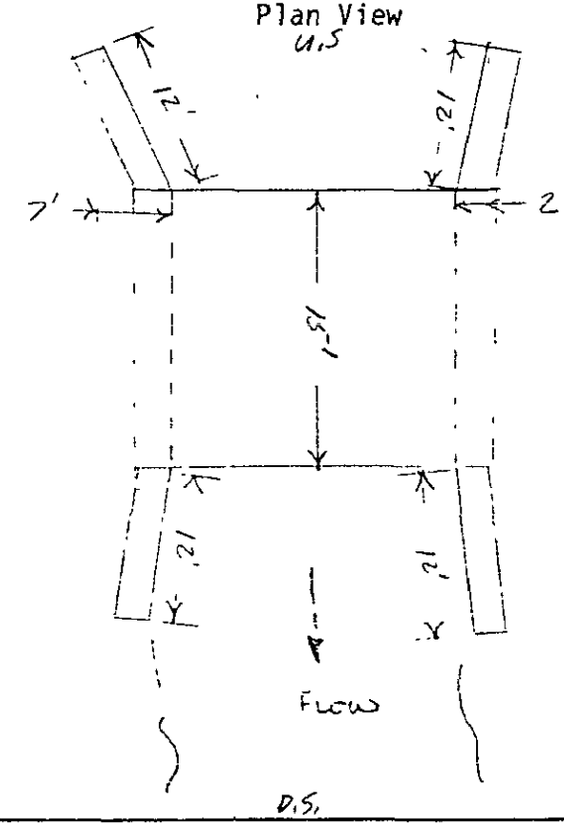
FIELD SKETCH

Profile View



U.S. FACE

Plan View



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HYDRAULIC STRUCTURAL DATA

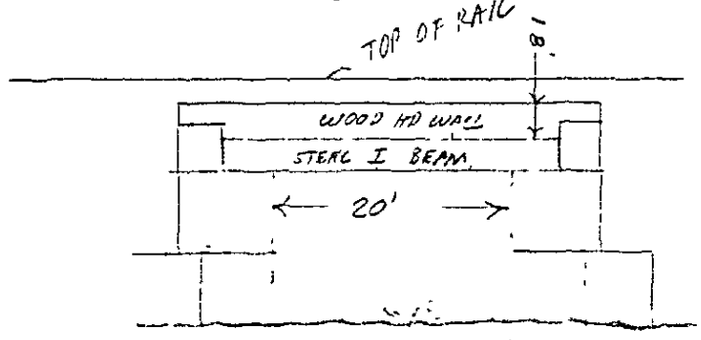
Code No. 12-BS #13

Job Name: ERIE TWP FIS		By: L.T. SLADE
Date: JUNE 9, 1976	Feature: WESTERLY PENN CENTRAL RR TRACK	Water Course: BAY CREEK
Remarks: BRIDGE IS MADE FROM R.R. TIMBERS & I-BEAM - GOOD COND.		
		PHOTO 28 D / 29 DSF / 30 R / 31 L / 32 U / 33 UCF

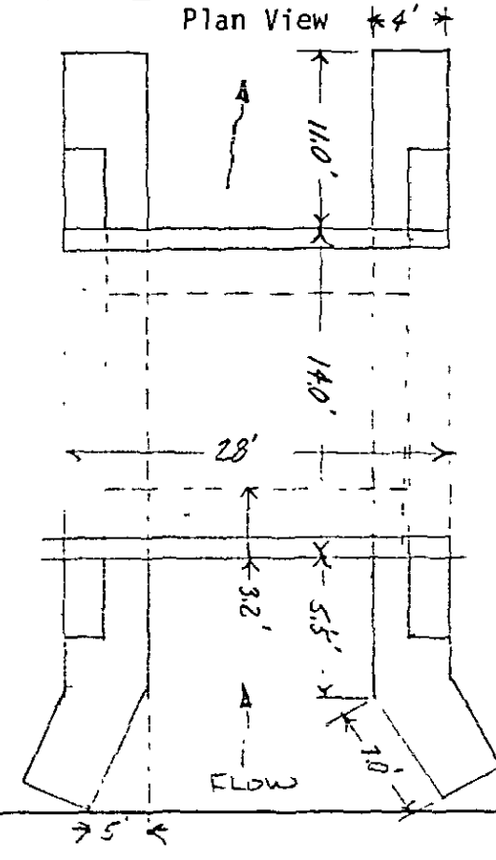
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: 574.3	Length: 20'	Width of Deck: 140	Skew: —

FIELD SKETCH

Profile View



Plan View



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Consulting Engineers
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HYDRAULIC STRUCTURAL DATA

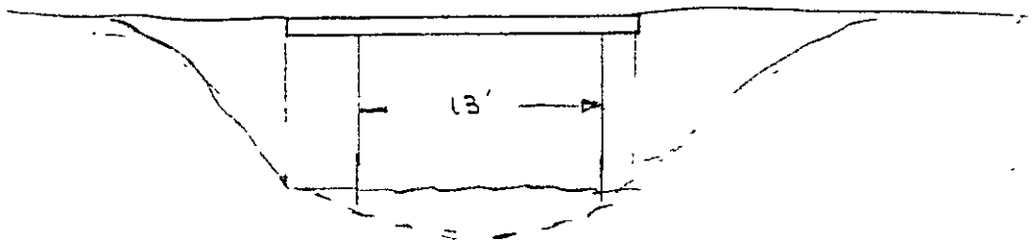
Code No. 17-BS#16

Job Name: ERIE TWP FT		By: L.T. SLADE
Date: JUNE 9 1976	Feature: ON DRIVE WAY 1500'± EAST OF ALT. U.S. 24	Water Course: BAY CREEK
Remarks: BRIDGE IS MADE OF CONC. BLOCK & POURED CONC.		
		Roll 2
		PHOTO: 34 / 35 / 36 / 37 / ~~38~~ / 5 / 6 — 11 / USF / D / DSF / K / L

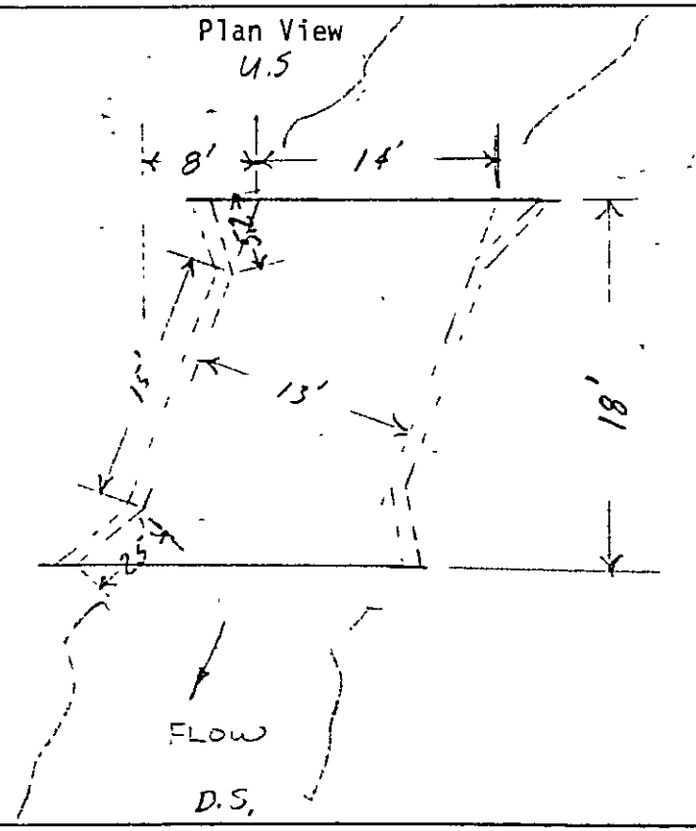
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area:
Water Elevation: 575.0	Length: 13'	Width of Deck: 15'	Skew:

FIELD SKETCH

Profile View



Plan View



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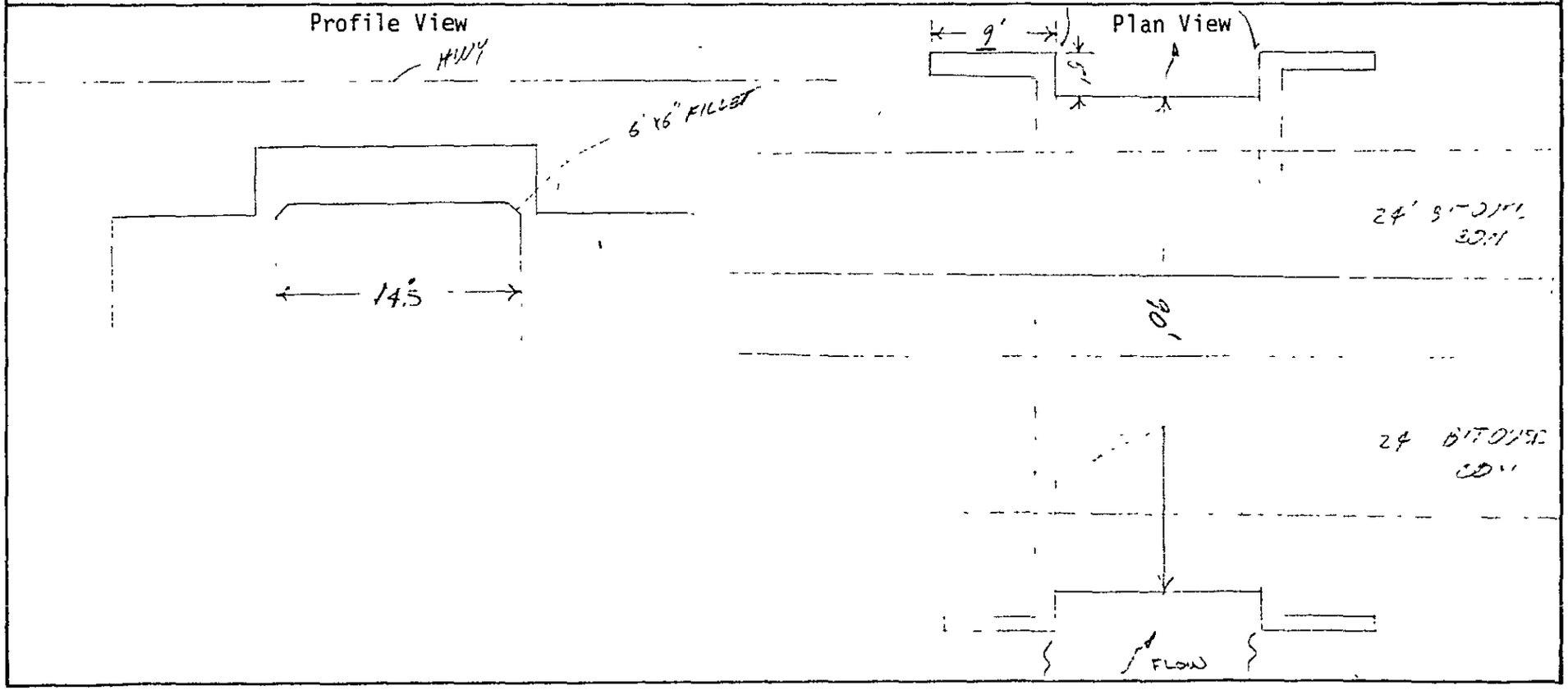
HYDRAULIC STRUCTURAL DATA

Code No. 17-B5-19

Job Name: ERIE TWP FIS		By: L. T SLADE
Date: JUNE 17 1976	Feature: CONC. BOX CULVERT	Water Course: BAY CREEK
Remarks: BRIDGE IS 800'± N OF VIENNA RD ON ALT M-24		

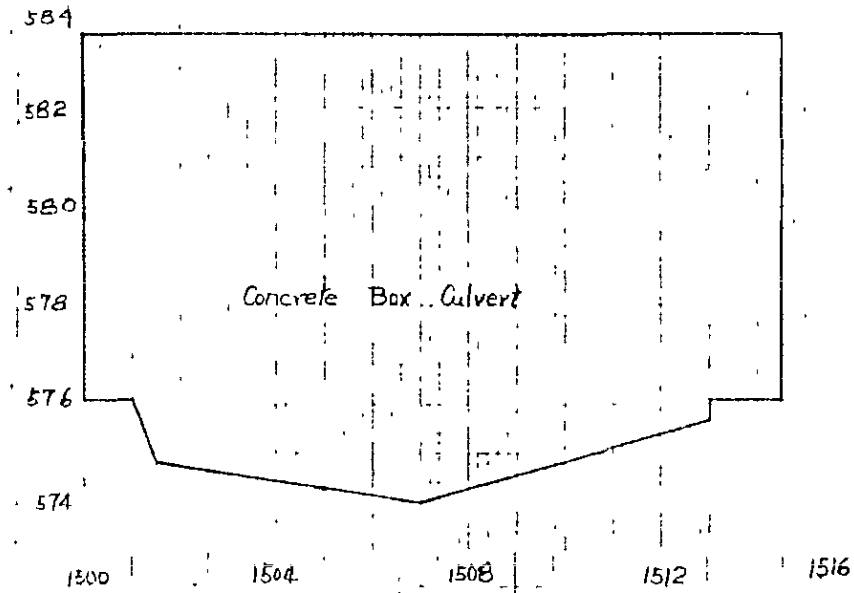
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: 576.9	Length: 14.5'	Width of Deck: 90	Skew: —

FIELD SKETCH



JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS

BY MSC DATE 12/15/76 JOB DESCRIPTION FIS - Erie TWP SHEET ____ OF ____
SUBJECT Alt US-24 Bridge - Bay Creek JOB NO. 5555-17-01



Area : $A = 124.48$ ft²

Wetted Perimeter : $P = 45.39$ ft.

Hydraulic Radius : $R = A/P = 2.74$ ft.

Max Depth : $D = 9.5$ ft.

Length : $L = 90$ ft.

Bottom Width : $BWC = 124.48/9.5 = 13.10$

Manning Coefficient : $n = 0.018$ (With Sand Bottom)

Entrance Loss : $K_e = 0.50$

$$K_f = \frac{29 n^2 L}{R^{4/3}} = 0.22$$

$$XK\Phi R = 1 + K_e + K_f = 1. + 0.5 + 0.22 = 1.72$$

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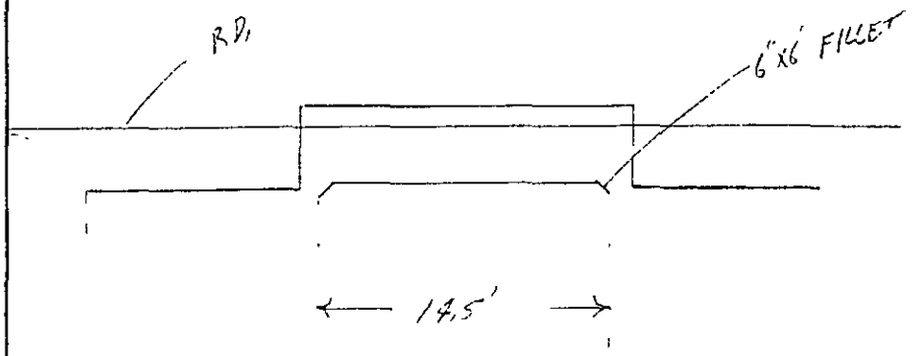
HYDRAULIC STRUCTURAL DATA

Code No. 17-B.S.22

Job Name: ERIE TWP FTS			By: L.T SLADE
Date: JUNE 10 1976	Feature: CONC BOX CULVERT		Water Course: BAY CREEK
Remarks: ON U.S '25 JUST 300 S OF MANHATTAN ST			
			PHOTO: 12 / 14 USF / 15 R2 / 16 L / 17 D / 18 DSF
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: — / / /
Water Elevation: 580.2	Length: 14.5	Width of Deck: 77.5	Skew: —

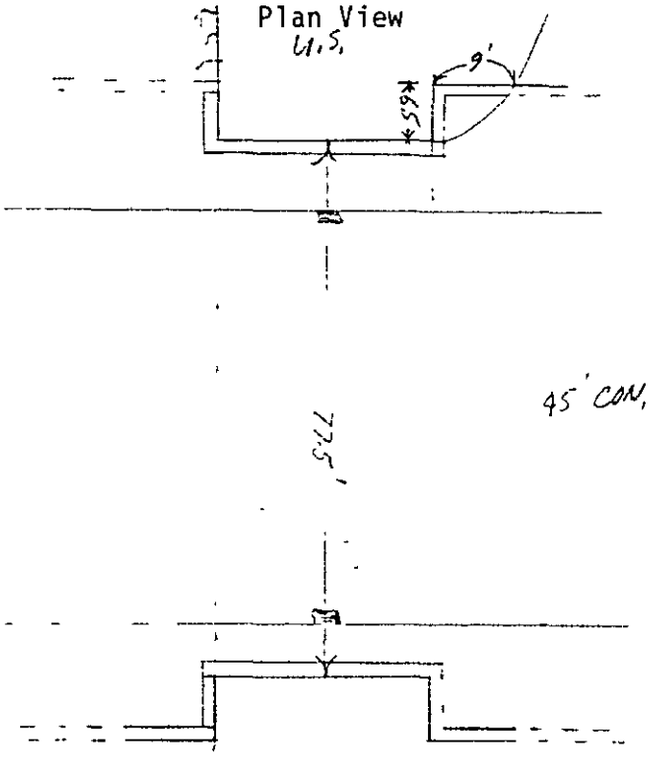
FIELD SKETCH

Profile View

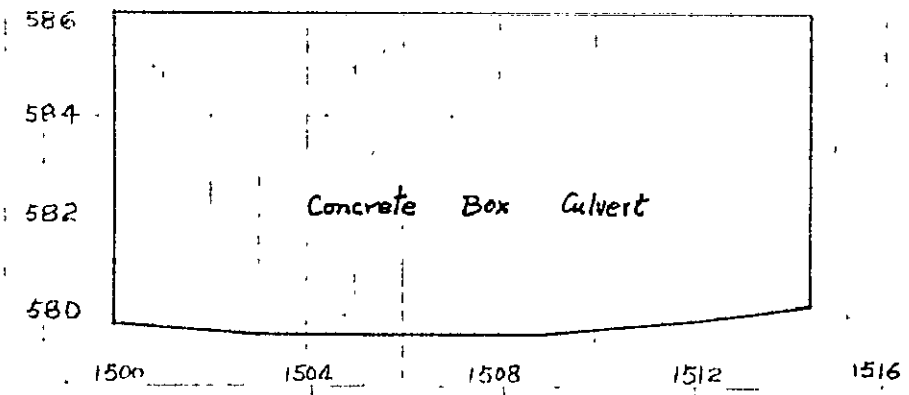


U.S. FACE

Plan View



D.S.



Area : $A = 92.38$ ft²

Wetted Perimeter : $P = 41.25$ ft.

Hydraulic Radius : $R = A/P = 2.24$ ft.

Max. Depth : $D = 6.5$ ft

Length : $L = 77$ ft.

Bottom Width : $BWC = 92.38/6.5 = 14.21$ ft.

Manning Coefficient : $n = 0.018$ (with sand bottom)

Entrance Loss : $K_e = 0.6$

$$K_f = \frac{29n^2L}{R^{4/3}} = 0.25$$

$$XK\Phi R = 1 + K_e + K_f = 1 + 0.6 + 0.25 = 1.85$$

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HYDRAULIC STRUCTURAL DATA

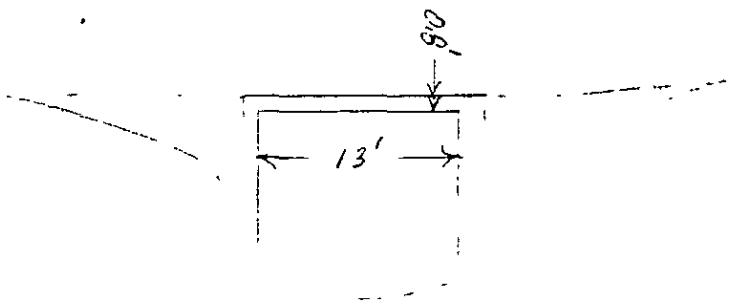
Code No. 17-B.S. #24

Job Name: ERIE TWP FIS.		By: L.T. SLADE
Date: JUNE 10 1976	Feature: POURED CONC. & BLOCK	Water Course: BAY CREEK
Remarks: Up-REAM WING WALLS - HAVE FALLEN DOWN & BROKEN UP - EROISION		
1400' DS. FROM C.O.R.P. TRACKS - BRIDGE FOR DE-WAY		Rd13
		PHOTO: 1 D / 2 DSF / 3 R / 4 W / 5 U / 6 USF

Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: 582.0	Length: 13'	Width of Deck: 17'	Skew: —

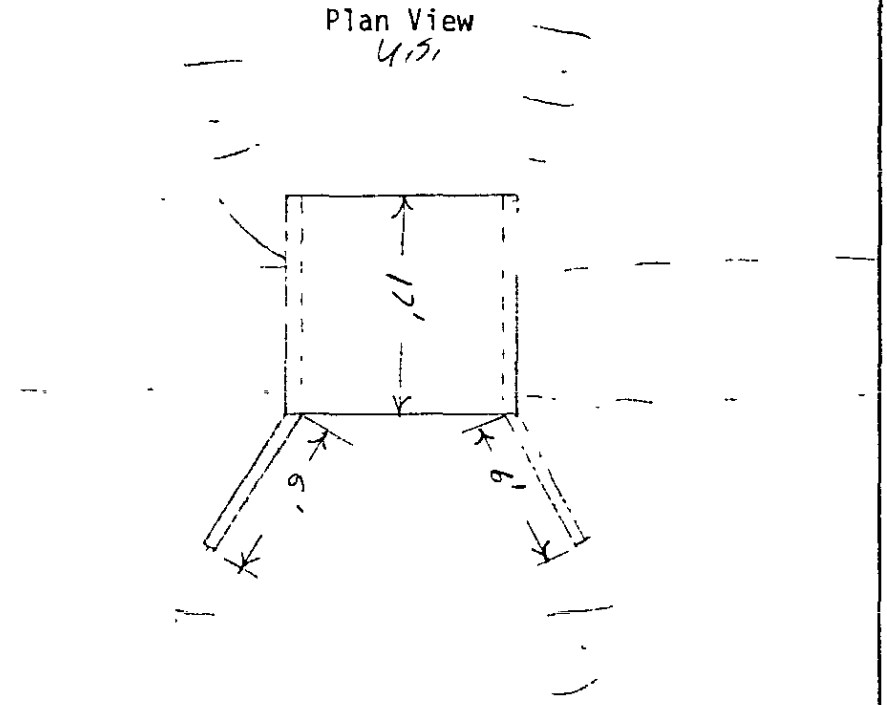
FIELD SKETCH

Profile View



U.S. FACE

Plan View
U.S.



D.S.

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Consulting Engineers
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HYDRAULIC STRUCTURAL DATA

Code No. 12-B.S. #25

Job Name: ERIE TWP FIS		By: I.T. SLADE
Date: JUNE 10, 1976	Feature: WOODEN FARM BRIDGE 100'± D.S. FARM C&O RR	Water Course: BAY CREEK

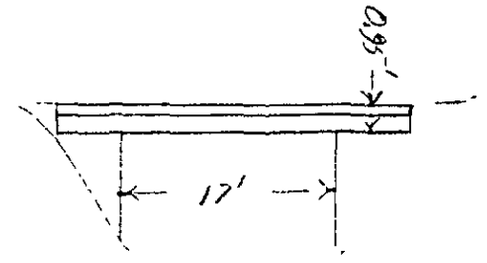
Remarks: FARM LANE BRIDGE — DNSTREAM HAS A RESTRICTION
OF R.R. TIES, LUNCH JUNK & WOOD

PHOTO 19 D / 20 U / 21 E / 22 L / 23 USF

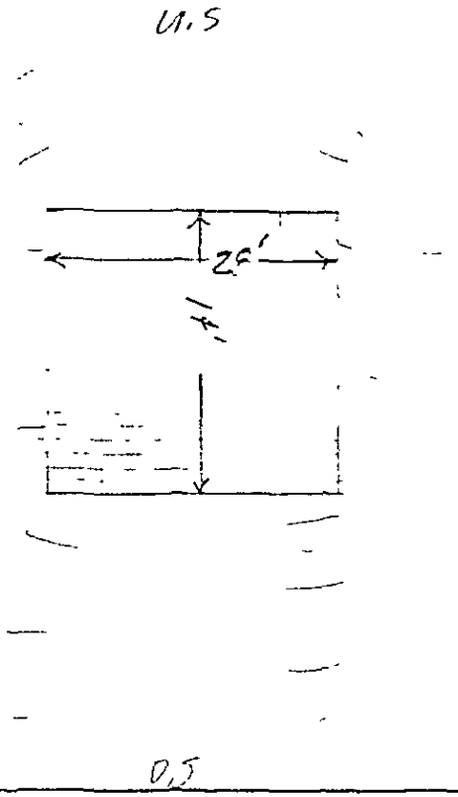
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area: —
Water Elevation: EB 3.5	Length: 17'	Width of Deck: 14'	Skew: —

FIELD SKETCH

Profile View

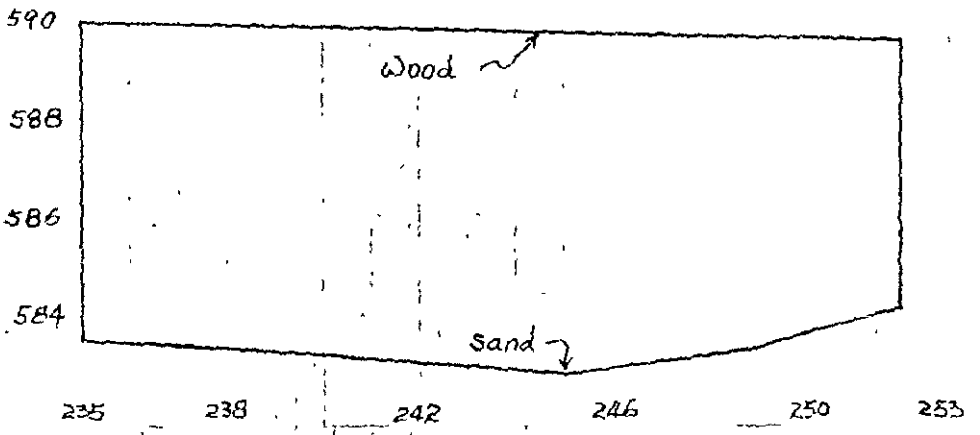


Plan View



JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS

BY MSC DATE 12/20/76 JOB DESCRIPTION FIS - Erie TWP SHEET ____ OF ____
SUBJECT Wooden Farm Bridge : 100' d/s from C & O R.R. (BS # 252) JOB NO. 5555-17-01



Area : $A = 108.85$ ft²

Wetted Perimeter : $P = 45.88$ ft.

Hydraulic Radius : $R = A/P = 2.37$ ft.

Max. Depth : $D = 6.9$ ft.

Length : $L = 14.0$ ft.

Bottom Width : $BWC = 108.85 / 6.9 = 15.78$ ft.

Manning Coefficient : $n = 0.03$ (Sand & Wooden Bridge)

Entrance Loss Coefficient : $K_e = 0.90$ (Projected From Fill)

$$K_f = \frac{29 n^2 L}{R^{4/3}} = 0.12$$

$$XK\Phi R = 1 + K_e + K_f = 1 + 0.90 + 0.12 = 2.02$$

Johnson & Anderson, Inc.
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P. O. Box 1166 2300 Dixie Highway Pontiac, Michigan 48056

HYDRAU[illegible] STRUCTURAL DATA

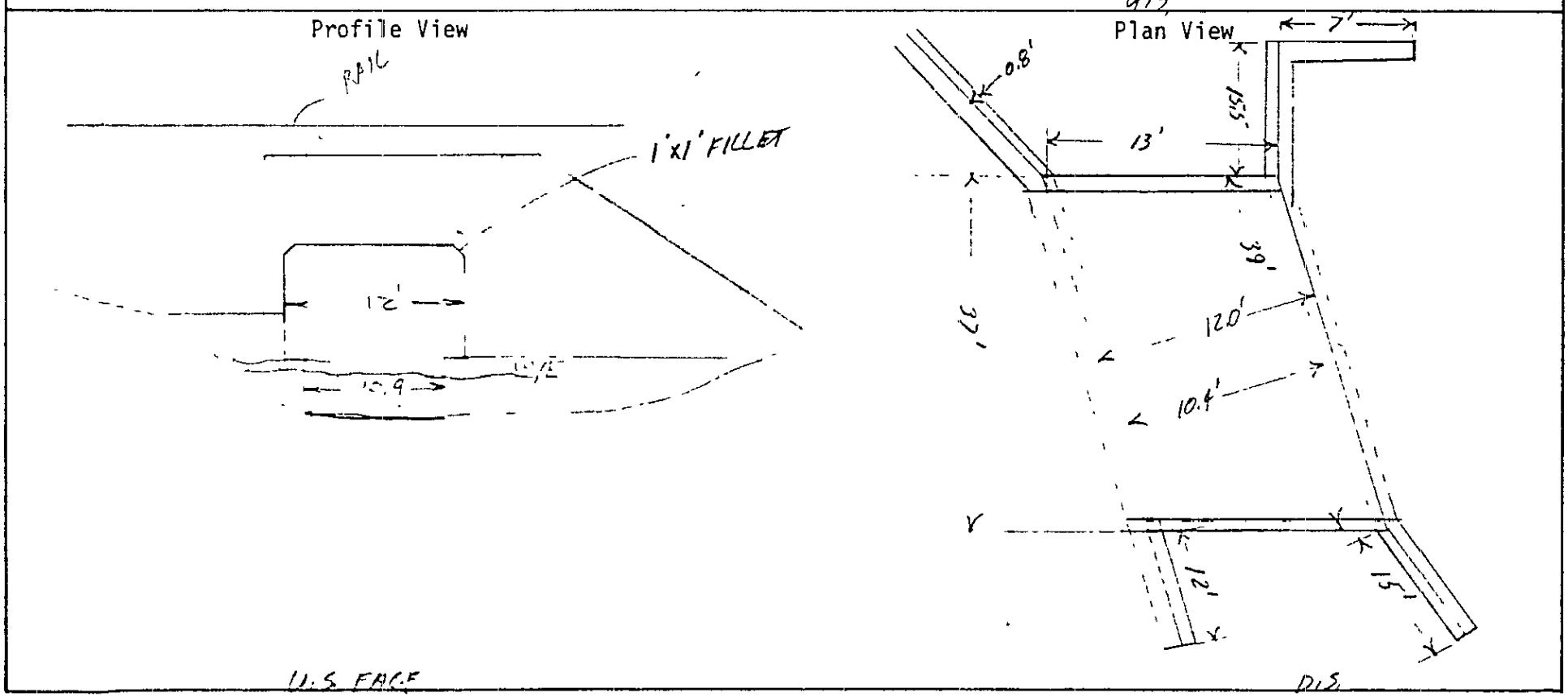
Code No. 17-B.S #27

Job Name: ERIE TWP TIS		By: L.T. SLADE
Date: JUNE 10, 1976	Feature: CONC BOX CULVERT	Water Course: BAY CREEK
Remarks: ON C.O.R.R. TRACKS		

24	25	26	27	28	29
Photo DSE	D	R	L	U	USE

Width of Piers: —	Pier Shape: —	No. of Piers: —	Area:
Water Elevation: 594.0	Length: 12' & 10.4'	Width of Deck: 39	Skew:

FIELD SKETCH



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HYDRAULIC STRUCTURAL DATA

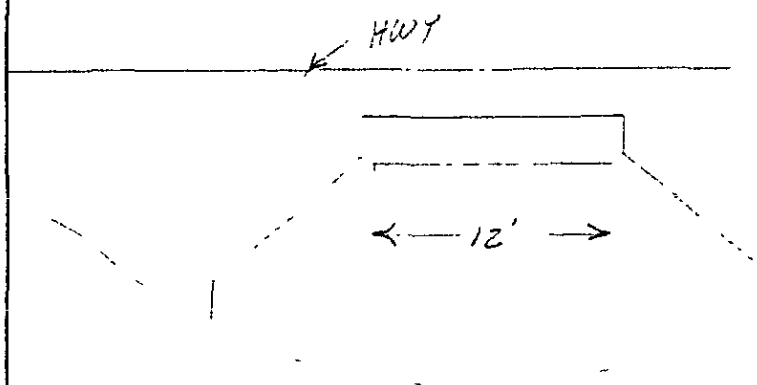
Code No. 17-B.S #28

Job Name: ERIE TWP FIS		By: L. T. SLAVE
Date: JUNE 11, 1976	Feature: CONC. BOX CULVERT	Water Course: BAY CREEK
Remarks: UPSTREAM — THERE IS HEAVY BRUSH ALONG BANKS ON U.S. 24 HIGHWAY		
		Photo: 30 DSF / 31 D / 32 B / 33 I / 34 U / 35 USF

Width of Piers: —	Pier Shape: —	No. of Piers: —	Area:
Water Elevation: 584.3	Length: 12'	Width of Deck: 76'	Skew:

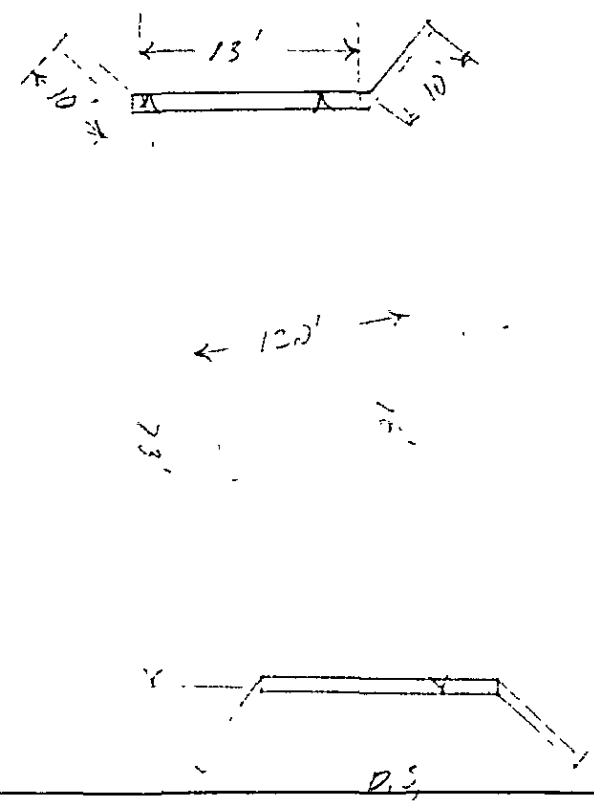
FIELD SKETCH

Profile View



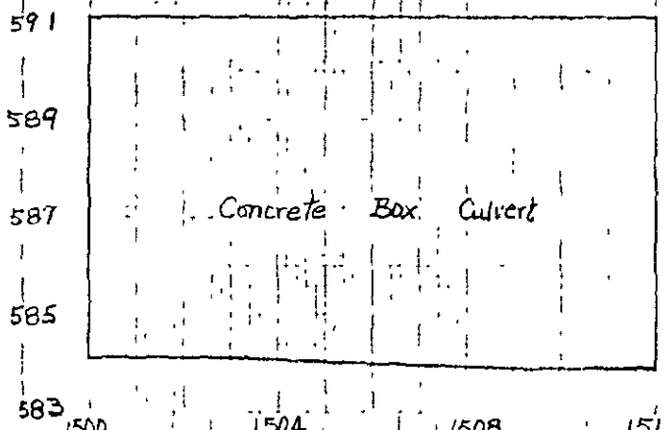
U.S. FACE

Plan View



JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS

BY MSC DATE 12/21/76 JOB DESCRIPTION EIS - Erie TWP SHEET 1 OF
SUBJECT U.S. 24 Highway Bridge (BS # 28) JOB NO. 5555-17-01



Area ~ $A = 81.03$ ft² (skewed by 18°)

Wetted Perimeter ~ $P = 37.00$ ft. (skewed by 18°)

Hydraulic Radius ~ $R = A/P = 2.19$ ft

Max. Diameter ~ $D = 7.2$ ft

Length ~ $L = 76.0$ ft.

Bottom Width ~ $BWC = 81.03/7.2 = 11.25$ ft.

Manning Coefficient ~ $n = 0.015$ (with sand bottom)

Entrance Loss Coeff. ~ $k_e = 0.4$

$$K_f = \frac{29 n^2 L}{R^{4/3}} = 0.17$$

$$XKOR = 1 + K_e + K_f = 1 + 0.4 + 0.17 = 1.57$$

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HYDRAULIC STRUCTURAL DATA

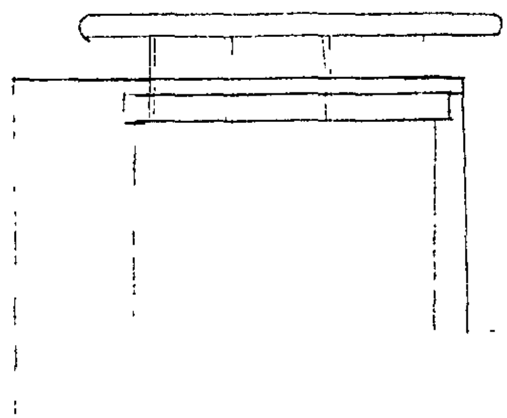
Code No. 12-BS-30

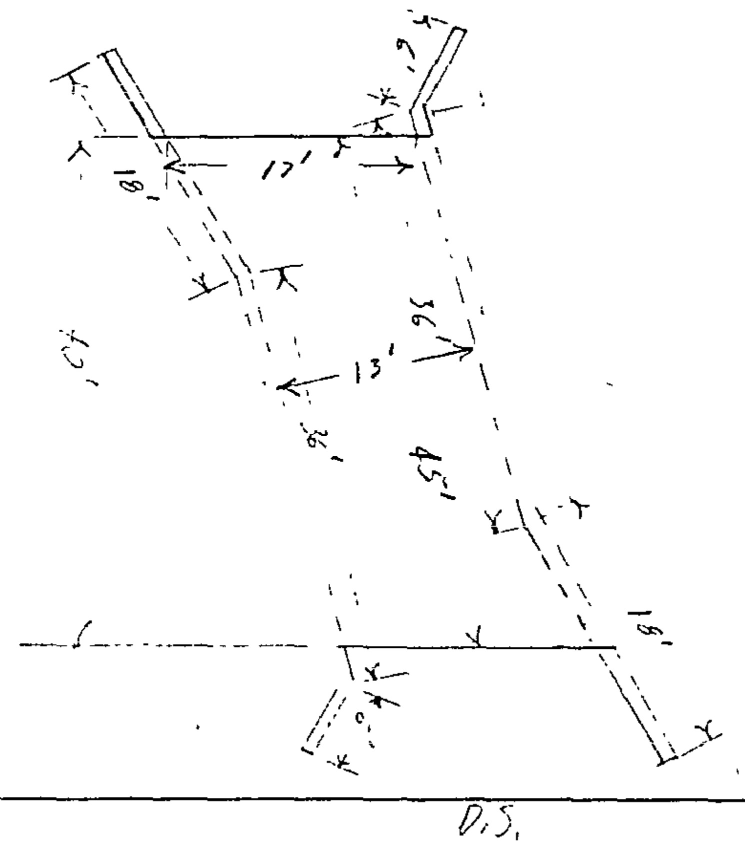
Job Name: ERIE TWP FIS			By: L.T. SLAMF
Date: JUNE 11, 1976	Feature: CONC. BOX CULVERT		Water Course: BAY CREEK
Remarks:			
Width of Piers: —	Pier Shape: —	No. of Piers: —	Area:
Water Elevation: 585.0	Length: 13'	Width of Deck:	Skew:

FIELD SKETCH

Profile View

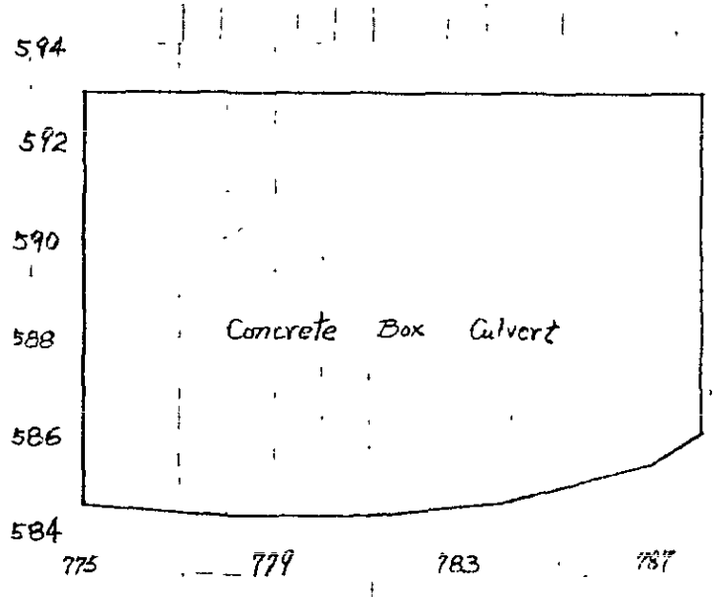
Plan View





JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS

BY MSC DATE 12/22/76 JOB DESCRIPTION EIS - Erie TWP SHEET 1 OF
SUBJECT Erie Road Culvert (BS #30) JOB NO. 5555-17-9



Area : $A = 107.55 \times 0.90 = 96.80$ ft² (skew 25°)

Wetted Perimeter : $P = 38.71$ ft. (after skew)

Hydraulic Radius : $R = A/P = 96.8/38.71 = 2.50$ ft.

Max. Depth : $D = 8.6$ ft.

Length : $L = 45$ ft.

Bottom Width : $BWC = 96.80/8.6 = 11.26$ ft

Manning Coefficient : $n = 0.018$ (with sand bottom)

Entrance Loss : $K_e = 0.4$

$$K_f = \frac{29n^2L}{R^{4/3}} = 0.12$$

$$XK\Phi R = 1 + K_e + K_f = 1.52$$

00BREAK00

1) COUNTY: Monroe

2) STUDY NAME: Erie Twp.

3) WATERCOURSE: Bay Creek

4) DOCUMENT TYPE: Summary

00BREAK00

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

BAY CREEK

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
0.00	0.00	0.00	0.00	569.50	635.00	573.67	.42	0.00	0.00	635.00	4.17	34.30
0.00	0.00	0.00	0.00	569.50	895.00	573.94	.71	0.00	0.00	895.00	4.44	34.30
0.00	0.00	0.00	0.00	569.50	985.00	574.08	.80	0.00	0.00	985.00	4.58	34.30
0.00	0.00	0.00	0.00	569.50	1300.00	574.68	1.06	0.00	0.00	1300.00	5.18	34.30
1.00	1.00	581.30	579.30	569.50	635.00	573.67	.41	.00	.00	635.00	4.17	34.30
1.00	1.00	581.30	579.30	569.50	895.00	573.94	.71	.00	.00	895.00	4.44	34.30
1.00	1.00	581.30	579.30	569.50	985.00	574.08	.80	.00	.00	985.00	4.58	34.30
1.00	1.00	581.30	579.30	569.50	1300.00	574.68	1.06	.00	.00	1300.00	5.18	34.30
141.00	140.00	581.30	579.30	569.50	635.00	573.74	.40	.05	.00	635.00	4.24	34.30
141.00	140.00	581.30	579.30	569.50	895.00	574.09	.66	.08	.02	895.00	4.59	34.30
141.00	140.00	581.30	579.30	569.50	985.00	574.25	.74	.09	.02	985.00	4.75	34.30
141.00	140.00	581.30	579.30	569.50	1300.00	574.91	.96	.10	.03	1300.00	5.41	34.30
142.00	-1.00	0.00	0.00	569.50	635.00	573.75	.40	.00	.00	635.00	4.25	34.30
142.00	1.00	0.00	0.00	569.50	895.00	574.09	.66	.00	.00	895.00	4.59	34.30
142.00	1.00	0.00	0.00	569.50	985.00	574.26	.74	.00	.00	985.00	4.76	34.30
142.00	1.00	0.00	0.00	569.50	1300.00	574.91	.96	.00	.00	1300.00	5.41	34.30
192.00	50.00	0.00	0.00	570.60	635.00	574.11	.15	.04	.07	434.43	3.51	72.67
192.00	50.00	0.00	0.00	570.60	895.00	574.75	.20	.05	.14	613.69	4.15	74.18
192.00	50.00	0.00	0.00	570.60	985.00	575.00	.21	.05	.16	675.45	4.40	74.32
192.00	50.00	0.00	0.00	570.60	1300.00	575.91	.23	.06	.22	891.83	5.31	74.48
772.00	580.00	0.00	0.00	571.40	635.00	574.94	.02	.67	.04	213.43	3.54	297.07
772.00	580.00	0.00	0.00	571.40	895.00	575.56	.03	.59	.05	262.62	4.16	299.45
772.00	580.00	0.00	0.00	571.40	985.00	575.79	.03	.55	.05	278.41	4.39	299.82
772.00	580.00	0.00	0.00	571.40	1300.00	576.61	.03	.43	.06	332.47	5.21	300.00
1232.00	460.00	0.00	0.00	571.20	635.00	575.22	.12	.32	.05	376.53	4.02	410.00
1232.00	460.00	0.00	0.00	571.20	895.00	575.78	.08	.25	.03	416.21	4.58	410.00
1232.00	460.00	0.00	0.00	571.20	985.00	575.99	.07	.23	.02	426.95	4.79	410.00
1232.00	460.00	0.00	0.00	571.20	1300.00	576.75	.05	.16	.01	462.05	5.55	410.00
1402.00	170.00	0.00	0.00	570.80	635.00	575.39	.19	.21	.04	486.49	4.59	364.62
1402.00	170.00	0.00	0.00	570.80	895.00	575.91	.15	.15	.03	565.42	5.11	434.56
1402.00	170.00	0.00	0.00	570.80	985.00	576.10	.13	.14	.03	583.30	5.30	443.00
1402.00	170.00	0.00	0.00	570.80	1300.00	576.82	.09	.09	.02	623.15	6.02	443.00
1403.00	1.00	0.00	0.00	570.80	635.00	575.39	.19	.00	.00	489.75	4.59	364.78
1403.00	1.00	0.00	0.00	570.80	895.00	575.90	.16	.00	.01	585.27	5.10	434.69
1403.00	1.00	0.00	0.00	570.80	985.00	576.09	.15	.00	.01	610.49	5.29	443.00
1403.00	1.00	0.00	0.00	570.80	1300.00	576.81	.11	.00	.01	677.05	6.01	443.00
1427.00	24.00	576.70	577.90	570.80	635.00	575.39	.85	.66	0.00	592.94	4.59	161.55
1427.00	24.00	576.70	577.90	570.80	895.00	576.97	.16	1.06	0.00	475.39	6.17	490.34
1427.00	24.00	576.70	577.90	570.80	985.00	577.09	.16	1.01	0.00	497.28	6.29	493.00
1427.00	24.00	576.70	577.90	570.80	1300.00	577.41	.17	.66	0.00	578.52	6.61	493.00

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
1428.00	1.00	0.00	0.00	570.80	635.00	576.45	.03	.00	.25	225.25	5.65	428.47
1428.00	1.00	0.00	0.00	570.80	895.00	577.14	.03	.00	.04	256.63	6.34	492.00
1428.00	1.00	0.00	0.00	570.80	985.00	577.26	.03	.00	.04	273.64	6.46	492.00
1428.00	1.00	0.00	0.00	570.80	1300.00	577.59	.04	.00	.04	333.40	6.79	492.00
1478.00	50.00	0.00	0.00	571.00	635.00	576.46	.04	.01	.01	361.79	5.46	382.09
1478.00	50.00	0.00	0.00	571.00	895.00	577.15	.04	.01	.01	437.06	6.15	450.00
1478.00	50.00	0.00	0.00	571.00	985.00	577.26	.04	.01	.01	469.83	6.26	450.00
1478.00	50.00	0.00	0.00	571.00	1300.00	577.59	.06	.02	.01	584.86	6.59	450.00
1978.00	500.00	0.00	0.00	570.80	635.00	576.62	.05	.16	.00	399.20	5.82	250.00
1978.00	500.00	0.00	0.00	570.80	895.00	577.28	.06	.14	.01	516.62	6.48	250.00
1978.00	500.00	0.00	0.00	570.80	985.00	577.41	.06	.15	.01	560.94	6.61	250.00
1978.00	500.00	0.00	0.00	570.80	1300.00	577.77	.08	.19	.01	715.07	6.97	250.00
2478.00	500.00	0.00	0.00	570.60	635.00	576.71	.45	.29	.20	635.00	6.11	30.19
2478.00	500.00	0.00	0.00	570.60	895.00	577.29	.67	.32	.31	895.00	6.69	31.80
2478.00	500.00	0.00	0.00	570.60	985.00	577.40	.77	.35	.36	985.00	6.80	32.00
2478.00	500.00	0.00	0.00	570.60	1300.00	577.68	1.19	.46	.55	1300.00	7.08	32.00
2708.00	230.00	0.00	0.00	571.90	635.00	577.08	.65	.47	.10	635.00	5.18	26.00
2708.00	230.00	0.00	0.00	571.90	895.00	577.76	.93	.60	.13	895.00	5.86	26.00
2708.00	230.00	0.00	0.00	571.90	985.00	577.93	1.05	.66	.14	985.00	6.03	26.00
2708.00	230.00	0.00	0.00	571.90	1300.00	578.43	1.48	.90	.15	1300.00	6.53	26.00
2709.00	1.00	583.60	580.50	571.90	635.00	577.30	.49	.00	.05	635.00	5.40	26.00
2709.00	1.00	583.60	580.50	571.90	895.00	578.03	.73	.00	.06	895.00	6.13	26.00
2709.00	1.00	583.60	580.50	571.90	985.00	578.23	.82	.00	.07	985.00	6.33	26.00
2709.00	1.00	583.60	580.50	571.90	1300.00	578.86	1.15	.00	.10	1300.00	6.96	26.00
2742.00	32.50	583.60	580.50	571.90	635.00	577.32	.49	.02	.00	635.00	5.42	26.00
2742.00	32.50	583.60	580.50	571.90	895.00	578.06	.72	.02	.00	895.00	6.16	26.00
2742.00	32.50	583.60	580.50	571.90	985.00	578.26	.81	.02	.00	985.00	6.36	26.00
2742.00	32.50	583.60	580.50	571.90	1300.00	578.93	1.12	.03	.01	1300.00	7.03	26.00
2743.00	1.00	0.00	0.00	571.90	635.00	577.26	.60	.00	.05	635.00	5.36	26.00
2743.00	1.00	0.00	0.00	571.90	895.00	578.00	.84	.00	.06	895.00	6.10	26.00
2743.00	1.00	0.00	0.00	571.90	985.00	578.20	.94	.00	.06	985.00	6.30	26.00
2743.00	1.00	0.00	0.00	571.90	1300.00	578.86	1.26	.00	.07	1300.00	6.96	26.00
2793.00	50.00	0.00	0.00	572.00	635.00	577.30	.75	.12	.08	635.00	5.30	20.00
2793.00	50.00	0.00	0.00	572.00	895.00	578.00	1.13	.15	.14	895.00	6.00	20.00
2793.00	50.00	0.00	0.00	572.00	985.00	578.19	1.27	.16	.17	985.00	6.19	20.00
2793.00	50.00	0.00	0.00	572.00	1300.00	578.78	1.81	.19	.27	1300.00	6.78	20.00
2794.00	1.00	584.00	579.60	572.00	635.00	577.26	.85	.00	.05	635.00	5.26	20.00
2794.00	1.00	584.00	579.60	572.00	895.00	577.94	1.25	.00	.06	895.00	5.94	20.00
2794.00	1.00	584.00	579.60	572.00	985.00	578.12	1.41	.00	.07	985.00	6.12	20.00
2794.00	1.00	584.00	579.60	572.00	1300.00	578.68	2.00	.00	.10	1300.00	6.68	20.00

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
2809.00	15.00	584.00	579.60	572.00	635.00	577.29	.83	.02	.00	635.00	5.29	20.00
2809.00	15.00	584.00	579.60	572.00	895.00	577.99	1.23	.02	.01	895.00	5.99	20.00
2809.00	15.00	584.00	579.60	572.00	985.00	578.20	1.37	.03	.01	985.00	6.20	20.00
2809.00	15.00	584.00	579.60	572.00	1300.00	578.90	1.86	.03	.04	1300.00	6.90	20.00
2810.00	1.00	0.00	0.00	572.00	635.00	577.47	.70	.00	.04	635.00	5.47	20.00
2810.00	1.00	0.00	0.00	572.00	895.00	578.27	1.02	.00	.06	895.00	6.27	20.00
2810.00	1.00	0.00	0.00	572.00	985.00	578.51	1.14	.00	.07	985.00	6.51	20.00
2810.00	1.00	0.00	0.00	572.00	1300.00	579.37	1.50	.00	.11	1300.00	7.37	20.00
2850.00	40.00	0.00	0.00	572.50	635.00	577.49	.87	.11	.08	635.00	4.99	20.00
2850.00	40.00	0.00	0.00	572.50	895.00	578.29	1.22	.13	.10	895.00	5.79	20.00
2850.00	40.00	0.00	0.00	572.50	985.00	578.53	1.35	.13	.11	985.00	6.03	20.00
2850.00	40.00	0.00	0.00	572.50	1300.00	579.39	1.74	.14	.12	1300.00	6.89	20.00
2851.00	1.00	583.10	580.60	572.50	635.00	577.72	.69	.00	.05	635.00	5.22	20.00
2851.00	1.00	583.10	580.60	572.50	895.00	578.61	.98	.00	.07	895.00	6.11	20.00
2851.00	1.00	583.10	580.60	572.50	985.00	578.89	1.08	.00	.08	985.00	6.39	20.00
2851.00	1.00	583.10	580.60	572.50	1300.00	579.85	1.39	.00	.10	1300.00	7.35	20.00
2865.00	14.00	583.10	580.60	572.50	635.00	577.75	.69	.01	.00	635.00	5.25	20.00
2865.00	14.00	583.10	580.60	572.50	895.00	578.64	.97	.02	.00	895.00	6.14	20.00
2865.00	14.00	583.10	580.60	572.50	985.00	578.92	1.06	.02	.00	985.00	6.42	20.00
2865.00	14.00	583.10	580.60	572.50	1300.00	579.89	1.38	.02	.00	1300.00	7.39	20.00
2866.00	1.00	0.00	0.00	572.50	635.00	577.69	.79	.00	.05	635.00	5.19	20.00
2866.00	1.00	0.00	0.00	572.50	895.00	578.58	1.09	.00	.06	895.00	6.08	20.00
2866.00	1.00	0.00	0.00	572.50	985.00	578.86	1.20	.00	.07	985.00	6.36	20.00
2866.00	1.00	0.00	0.00	572.50	1300.00	579.81	1.52	.00	.07	1300.00	7.31	20.00
2870.00	4.00	0.00	0.00	572.42	635.00	578.19	.41	.01	.11	540.38	5.77	28.00
2870.00	4.00	0.00	0.00	572.42	895.00	579.34	.52	.01	.17	742.75	6.92	28.00
2870.00	4.00	0.00	0.00	572.42	985.00	579.70	.55	.01	.19	812.21	7.28	28.00
2870.00	4.00	0.00	0.00	572.42	1300.00	580.95	.66	.01	.26	1053.21	8.53	28.00
2874.00	4.00	0.00	0.00	572.34	635.00	578.19	.44	.01	.01	564.78	5.85	28.00
2874.00	4.00	0.00	0.00	572.34	895.00	579.33	.55	.01	.02	777.23	6.99	28.00
2874.00	4.00	0.00	0.00	572.34	985.00	579.69	.59	.01	.02	850.19	7.35	28.00
2874.00	4.00	0.00	0.00	572.34	1300.00	580.93	.70	.01	.02	1102.52	8.59	28.00
2916.00	42.00	0.00	0.00	571.50	635.00	578.63	.13	.03	.09	542.11	7.13	80.00
2916.00	42.00	0.00	0.00	571.50	895.00	579.90	.13	.03	.13	713.55	8.40	80.00
2916.00	42.00	0.00	0.00	571.50	985.00	580.30	.14	.03	.14	771.47	8.80	80.00
2916.00	42.00	0.00	0.00	571.50	1300.00	581.67	.15	.02	.17	970.27	10.17	80.00
3536.00	620.00	0.00	0.00	572.20	635.00	578.91	.11	.26	.01	476.22	6.71	182.00
3536.00	620.00	0.00	0.00	572.20	895.00	580.16	.08	.19	.02	556.20	7.96	182.00
3536.00	620.00	0.00	0.00	572.20	985.00	580.57	.07	.18	.02	584.42	8.37	182.00
3536.00	620.00	0.00	0.00	572.20	1300.00	581.93	.06	.14	.03	684.32	9.73	182.00

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
3796.00	260.00	0.00	0.00	572.55	440.00	579.05	.06	.08	.01	334.90	6.50	218.00
3796.00	260.00	0.00	0.00	572.55	630.00	580.26	.04	.05	.01	379.67	7.71	218.00
3796.00	260.00	0.00	0.00	572.55	695.00	580.66	.03	.04	.01	394.95	8.11	218.00
3796.00	260.00	0.00	0.00	572.55	915.00	582.00	.03	.03	.01	447.37	9.45	218.00
4116.00	320.00	0.00	0.00	573.00	440.00	579.13	.09	.10	.02	365.40	6.13	218.00
4116.00	320.00	0.00	0.00	573.00	630.00	580.31	.05	.06	.01	406.29	7.31	218.00
4116.00	320.00	0.00	0.00	573.00	695.00	580.70	.05	.05	.01	419.52	7.70	218.00
4116.00	320.00	0.00	0.00	573.00	915.00	582.03	.03	.03	.00	465.37	9.03	218.00
4416.00	300.00	0.00	0.00	573.40	340.00	579.30	.02	.07	.02	184.01	5.90	307.67
4416.00	300.00	0.00	0.00	573.40	485.00	580.41	.01	.04	.01	201.07	7.01	310.00
4416.00	300.00	0.00	0.00	573.40	535.00	580.78	.01	.03	.01	208.03	7.38	310.00
4416.00	300.00	0.00	0.00	573.40	705.00	582.08	.01	.02	.01	233.82	8.68	310.00
5416.00	1000.00	0.00	0.00	573.60	340.00	579.49	.14	.25	.06	337.97	5.89	73.86
5416.00	1000.00	0.00	0.00	573.60	485.00	580.50	.12	.15	.06	434.51	6.90	229.17
5416.00	1000.00	0.00	0.00	573.60	535.00	580.86	.10	.12	.04	439.74	7.26	230.00
5416.00	1000.00	0.00	0.00	573.60	705.00	582.13	.05	.07	.02	438.57	8.53	230.00
5846.00	430.00	0.00	0.00	573.80	340.00	579.76	.33	.37	.10	340.00	5.96	14.00
5846.00	430.00	0.00	0.00	573.80	485.00	580.67	.49	.35	.18	485.00	6.87	14.00
5846.00	430.00	0.00	0.00	573.80	535.00	580.94	.55	.31	.23	535.00	7.14	14.00
5846.00	430.00	0.00	0.00	573.80	705.00	581.98	.71	.18	.33	705.00	8.18	14.00
5847.00	1.00	581.40	582.10	573.80	340.00	579.76	.34	.00	.00	340.00	5.96	14.00
5847.00	1.00	581.40	582.10	573.80	485.00	580.66	.50	.00	.01	485.00	6.86	14.00
5847.00	1.00	581.40	582.10	573.80	535.00	580.94	.56	.00	.01	535.00	7.14	14.00
5847.00	1.00	581.40	582.10	573.80	705.00	581.96	.74	.00	.02	705.00	8.16	14.00
5862.00	15.00	581.40	582.10	573.80	340.00	579.77	.34	.00	.00	340.00	5.97	14.00
5862.00	15.00	581.40	582.10	573.80	485.00	580.67	.50	.01	.00	485.00	6.87	14.00
5862.00	15.00	581.40	582.10	573.80	535.00	580.95	.56	.01	.00	535.00	7.15	14.00
5862.00	15.00	581.40	582.10	573.80	705.00	581.97	.74	.01	.00	705.00	8.17	14.00
5863.00	1.00	0.00	0.00	573.80	340.00	579.78	.33	.00	.00	340.00	5.98	14.00
5863.00	1.00	0.00	0.00	573.80	485.00	580.69	.49	.00	.00	485.00	6.89	14.00
5863.00	1.00	0.00	0.00	573.80	535.00	580.97	.55	.00	.00	535.00	7.17	14.00
5863.00	1.00	0.00	0.00	573.80	705.00	582.03	.70	.00	.01	705.00	8.23	14.00
6363.00	500.00	0.00	0.00	574.20	340.00	580.46	.15	.45	.05	340.00	6.26	29.83
6363.00	500.00	0.00	0.00	574.20	485.00	581.58	.18	.48	.09	485.00	7.38	34.80
6363.00	500.00	0.00	0.00	574.20	535.00	581.93	.18	.49	.11	535.00	7.73	36.36
6363.00	500.00	0.00	0.00	574.20	705.00	583.15	.19	.46	.15	705.00	8.95	40.00
6993.00	630.00	0.00	0.00	574.95	340.00	580.99	.09	.45	.02	340.00	6.04	30.48
6993.00	630.00	0.00	0.00	574.95	485.00	582.11	.12	.46	.02	485.00	7.16	35.42
6993.00	630.00	0.00	0.00	574.95	535.00	582.46	.12	.46	.02	535.00	7.51	35.84
6993.00	630.00	0.00	0.00	574.95	705.00	583.63	.14	.42	.01	705.00	8.68	36.00

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
7623.00	630.00	0.00	0.00	575.70	340.00	581.43	.10	.44	.01	340.00	5.73	29.29
7623.00	630.00	0.00	0.00	575.70	485.00	582.56	.13	.46	.01	485.00	6.86	33.81
7623.00	630.00	0.00	0.00	575.70	535.00	582.91	.14	.46	.01	535.00	7.21	35.00
7623.00	630.00	0.00	0.00	575.70	705.00	584.07	.16	.45	.01	705.00	8.37	35.00
7663.00	40.00	0.00	0.00	574.00	340.00	581.43	.16	.03	.03	340.00	7.43	14.50
7663.00	40.00	0.00	0.00	574.00	485.00	582.54	.24	.03	.06	485.00	8.54	14.50
7663.00	40.00	0.00	0.00	574.00	535.00	582.88	.27	.03	.07	535.00	8.88	14.50
7663.00	40.00	0.00	0.00	574.00	705.00	584.26	.01	.01	.04	213.55	10.26	469.42
7664.00	1.00	0.00	0.00	574.00	340.00	581.43	.16	.00	.00	340.00	7.43	14.50
7664.00	1.00	0.00	0.00	574.00	485.00	582.54	.24	.00	.00	485.00	8.54	14.50
7664.00	1.00	0.00	0.00	574.00	535.00	582.88	.27	.00	.00	535.00	8.88	14.50
7664.00	1.00	0.00	0.00	574.00	705.00	584.26	.01	.00	.00	207.19	10.26	469.53
7754.00	90.00	588.60	583.50	574.00	340.00	581.43	.20	.02	.02	340.00	7.43	14.50
7754.00	90.00	588.60	583.50	574.00	485.00	582.54	.30	.03	.03	485.00	8.54	14.50
7754.00	90.00	588.60	583.50	574.00	535.00	582.88	.33	.03	.03	535.00	8.88	14.50
7754.00	90.00	588.60	583.50	574.00	705.00	584.74	.38	.84	0.00	705.00	10.74	14.50
7755.00	1.00	0.00	0.00	574.00	340.00	581.46	.18	.00	.01	340.00	7.46	14.50
7755.00	1.00	0.00	0.00	574.00	485.00	582.58	.27	.00	.01	485.00	8.58	14.50
7755.00	1.00	0.00	0.00	574.00	535.00	582.93	.30	.00	.01	535.00	8.93	14.50
7755.00	1.00	0.00	0.00	574.00	705.00	584.78	.35	.00	.01	705.00	10.78	14.50
7805.00	50.00	0.00	0.00	575.70	340.00	581.54	.14	.03	.01	340.00	5.84	30.84
7805.00	50.00	0.00	0.00	575.70	485.00	582.75	.16	.03	.03	485.00	7.05	33.00
7805.00	50.00	0.00	0.00	575.70	535.00	583.13	.16	.03	.04	535.00	7.43	33.00
7805.00	50.00	0.00	0.00	575.70	705.00	585.07	.15	.02	.06	705.00	9.37	33.00
8225.00	420.00	0.00	0.00	576.60	340.00	581.95	.19	.44	.02	340.00	5.35	28.11
8225.00	420.00	0.00	0.00	576.60	485.00	583.11	.21	.38	.02	485.00	6.51	34.25
8225.00	420.00	0.00	0.00	576.60	535.00	583.47	.21	.36	.02	535.00	6.87	36.55
8225.00	420.00	0.00	0.00	576.60	705.00	585.34	.05	.15	.03	473.79	8.74	378.59
8695.00	470.00	0.00	0.00	576.10	340.00	582.56	.13	.53	.02	340.00	6.46	29.58
8695.00	470.00	0.00	0.00	576.10	485.00	583.69	.15	.51	.02	485.00	7.59	33.34
8695.00	470.00	0.00	0.00	576.10	535.00	584.03	.16	.50	.01	535.00	7.93	34.44
8695.00	470.00	0.00	0.00	576.10	705.00	585.50	.16	.21	.05	705.00	9.40	36.00
9105.00	410.00	0.00	0.00	577.60	340.00	583.01	.22	.49	.05	340.00	5.41	26.02
9105.00	410.00	0.00	0.00	577.60	485.00	584.12	.25	.48	.05	485.00	6.52	29.75
9105.00	410.00	0.00	0.00	577.60	535.00	584.46	.26	.47	.05	535.00	6.86	30.90
9105.00	410.00	0.00	0.00	577.60	705.00	585.88	.05	.24	.03	414.82	8.28	212.58
9515.00	410.00	0.00	0.00	579.20	340.00	583.78	.20	.74	.01	340.00	4.58	30.08
9515.00	410.00	0.00	0.00	579.20	485.00	584.82	.22	.66	.01	485.00	5.62	34.07
9515.00	410.00	0.00	0.00	579.20	535.00	585.14	.23	.64	.01	535.00	5.94	35.31
9515.00	410.00	0.00	0.00	579.20	705.00	586.02	.14	.18	.04	574.15	6.82	157.17

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
10035.00	520.00	0.00	0.00	579.10	325.00	584.53	.21	.76	.01	325.00	5.43	26.02
10035.00	520.00	0.00	0.00	579.10	465.00	585.51	.26	.71	.02	465.00	6.41	29.39
10035.00	520.00	0.00	0.00	579.10	515.00	585.82	.27	.70	.02	515.00	6.72	30.49
10035.00	520.00	0.00	0.00	579.10	680.00	586.50	.34	.58	.10	680.00	7.40	33.09
10070.00	35.00	0.00	0.00	579.60	325.00	584.46	.46	.06	.12	325.00	4.86	14.50
10070.00	35.00	0.00	0.00	579.60	465.00	585.38	.63	.06	.19	465.00	5.78	14.50
10070.00	35.00	0.00	0.00	579.60	515.00	585.67	.69	.06	.21	515.00	6.07	14.50
10070.00	35.00	0.00	0.00	579.60	680.00	586.25	.98	.07	.32	680.00	6.65	14.50
10071.00	1.00	0.00	0.00	579.60	325.00	584.64	.32	.00	.04	325.00	5.04	14.50
10071.00	1.00	0.00	0.00	579.60	465.00	585.60	.46	.00	.05	465.00	6.00	14.50
10071.00	1.00	0.00	0.00	579.60	515.00	585.90	.51	.00	.05	515.00	6.30	14.50
10071.00	1.00	0.00	0.00	579.60	680.00	586.58	.73	.00	.08	680.00	6.98	14.50
10149.00	77.50	589.60	586.10	579.60	325.00	584.71	.32	.05	.00	325.00	5.11	14.50
10149.00	77.50	589.60	586.10	579.60	465.00	585.68	.45	.07	.00	465.00	6.08	14.50
10149.00	77.50	589.60	586.10	579.60	515.00	586.34	.45	.38	0.00	515.00	6.74	14.50
10149.00	77.50	589.60	586.10	579.60	680.00	587.59	.55	.83	0.00	680.00	7.99	14.50
10150.00	1.00	0.00	0.00	579.60	325.00	584.67	.39	.00	.04	325.00	5.07	14.50
10150.00	1.00	0.00	0.00	579.60	465.00	585.64	.54	.00	.04	465.00	6.04	14.50
10150.00	1.00	0.00	0.00	579.60	515.00	586.31	.52	.00	.04	515.00	6.71	14.50
10150.00	1.00	0.00	0.00	579.60	680.00	587.55	.63	.00	.04	680.00	7.95	14.50
10210.00	60.00	0.00	0.00	579.80	325.00	585.08	.19	.16	.06	325.00	5.28	27.20
10210.00	60.00	0.00	0.00	579.80	465.00	586.22	.21	.15	.10	465.00	6.42	30.88
10210.00	60.00	0.00	0.00	579.80	515.00	586.86	.19	.13	.10	515.00	7.06	32.97
10210.00	60.00	0.00	0.00	579.80	680.00	588.23	.19	.11	.13	676.75	8.43	45.00
10810.00	600.00	0.00	0.00	580.70	325.00	585.82	.18	.72	.00	325.00	5.12	28.90
10810.00	600.00	0.00	0.00	580.70	465.00	586.89	.20	.65	.00	465.00	6.19	32.74
10810.00	600.00	0.00	0.00	580.70	515.00	587.42	.19	.55	.00	515.00	6.72	34.79
10810.00	600.00	0.00	0.00	580.70	680.00	588.66	.19	.43	.00	667.26	7.96	108.80
11590.00	780.00	0.00	0.00	581.40	325.00	586.53	.42	.83	.12	325.00	5.13	13.00
11590.00	780.00	0.00	0.00	581.40	465.00	587.52	.59	.82	.19	465.00	6.12	13.00
11590.00	780.00	0.00	0.00	581.40	515.00	587.95	.62	.75	.22	515.00	6.55	13.00
11590.00	780.00	0.00	0.00	581.40	680.00	589.00	.80	.65	.30	680.00	7.60	13.00
11591.00	1.00	589.80	589.10	581.40	325.00	586.53	.43	.00	.01	325.00	5.13	13.00
11591.00	1.00	589.80	589.10	581.40	465.00	587.51	.60	.00	.01	465.00	6.11	13.00
11591.00	1.00	589.80	589.10	581.40	515.00	587.94	.64	.00	.01	515.00	6.54	13.00
11591.00	1.00	589.80	589.10	581.40	680.00	589.00	.81	.00	.01	680.00	7.60	13.00
11608.00	17.00	589.80	589.10	581.40	325.00	586.55	.42	.02	.00	325.00	5.15	13.00
11608.00	17.00	589.80	589.10	581.40	465.00	587.55	.60	.03	.00	465.00	6.15	13.00
11608.00	17.00	589.80	589.10	581.40	515.00	587.97	.63	.03	.00	515.00	6.57	13.00
11608.00	17.00	589.80	589.10	581.40	680.00	589.04	.81	.03	.00	680.00	7.64	13.00

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
11609.00	1.00	0.00	0.00	581.40	325.00	586.57	.41	.00	.00	325.00	5.17	13.00
11609.00	1.00	0.00	0.00	581.40	465.00	587.57	.58	.00	.01	465.00	6.17	13.00
11609.00	1.00	0.00	0.00	581.40	515.00	588.00	.61	.00	.01	515.00	6.60	13.00
11609.00	1.00	0.00	0.00	581.40	680.00	589.07	.78	.00	.01	680.00	7.67	13.00
11789.00	180.00	0.00	0.00	581.50	325.00	587.09	.11	.13	.09	325.00	5.59	35.39
11789.00	180.00	0.00	0.00	581.50	465.00	588.29	.12	.13	.14	465.00	6.79	41.24
11789.00	180.00	0.00	0.00	581.50	515.00	588.76	.12	.12	.15	515.00	7.26	42.00
11789.00	180.00	0.00	0.00	581.50	680.00	590.03	.12	.10	.20	680.00	8.53	42.00
12359.00	570.00	0.00	0.00	581.10	325.00	587.37	.16	.30	.03	325.00	6.27	25.18
12359.00	570.00	0.00	0.00	581.10	465.00	588.53	.19	.28	.04	465.00	7.43	28.45
12359.00	570.00	0.00	0.00	581.10	515.00	588.98	.20	.26	.04	515.00	7.88	29.70
12359.00	570.00	0.00	0.00	581.10	680.00	590.21	.21	.22	.04	670.82	9.11	135.80
12759.00	400.00	0.00	0.00	582.80	325.00	587.83	.29	.52	.06	325.00	5.03	17.00
12759.00	400.00	0.00	0.00	582.80	465.00	588.96	.37	.52	.09	465.00	6.16	17.00
12759.00	400.00	0.00	0.00	582.80	515.00	589.38	.39	.50	.10	515.00	6.58	17.00
12759.00	400.00	0.00	0.00	582.80	680.00	590.54	.30	.38	.05	561.13	7.74	28.83
12760.00	1.00	0.00	0.00	582.80	325.00	587.85	.27	.00	.01	325.00	5.05	17.00
12760.00	1.00	0.00	0.00	582.80	465.00	588.99	.35	.00	.01	465.00	6.19	17.00
12760.00	1.00	0.00	0.00	582.80	515.00	589.41	.38	.00	.01	515.00	6.61	17.00
12760.00	1.00	0.00	0.00	582.80	680.00	590.63	.24	.00	.02	530.28	7.83	30.00
12774.00	14.00	590.50	589.90	582.80	325.00	587.87	.26	.02	.00	325.00	5.07	17.00
12774.00	14.00	590.50	589.90	582.80	465.00	589.01	.35	.02	.00	465.00	6.21	17.00
12774.00	14.00	590.50	589.90	582.80	515.00	589.43	.37	.02	.00	515.00	6.63	17.00
12774.00	14.00	590.50	589.90	582.80	680.00	591.14	.20	.47	0.00	522.51	8.34	30.00
12775.00	1.00	0.00	0.00	582.80	325.00	587.87	.28	.00	.01	325.00	5.07	17.00
12775.00	1.00	0.00	0.00	582.80	465.00	589.00	.36	.00	.01	465.00	6.20	17.00
12775.00	1.00	0.00	0.00	582.80	515.00	589.42	.39	.00	.01	515.00	6.62	17.00
12775.00	1.00	0.00	0.00	582.80	680.00	591.11	.25	.00	.02	553.43	8.31	29.84
12860.00	85.00	0.00	0.00	583.10	315.00	588.07	.19	.09	.03	315.00	4.97	26.65
12860.00	85.00	0.00	0.00	583.10	450.00	589.30	.20	.08	.05	450.00	6.20	30.61
12860.00	85.00	0.00	0.00	583.10	495.00	589.75	.20	.07	.06	495.00	6.65	32.05
12860.00	85.00	0.00	0.00	583.10	660.00	591.24	.19	.04	.02	660.00	8.14	36.85
12990.00	130.00	0.00	0.00	583.80	315.00	588.00	.75	.21	.28	315.00	4.20	11.40
12990.00	130.00	0.00	0.00	583.80	450.00	589.11	.93	.18	.37	450.00	5.31	11.40
12990.00	130.00	0.00	0.00	583.80	495.00	589.53	.97	.17	.39	495.00	5.73	11.40
12990.00	130.00	0.00	0.00	583.80	660.00	590.91	1.10	.13	.45	660.00	7.11	11.40
12991.00	1.00	598.90	591.80	583.80	315.00	587.89	.98	.00	.12	315.00	4.09	10.64
12991.00	1.00	598.90	591.80	583.80	450.00	589.01	1.15	.00	.11	450.00	5.21	11.40
12991.00	1.00	598.90	591.80	583.80	495.00	589.43	1.16	.00	.10	495.00	5.63	11.40
12991.00	1.00	598.90	591.80	583.80	660.00	590.83	1.26	.00	.08	660.00	7.03	11.40

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
13030.00	39.00	598.90	591.80	583.80	315.00	588.14	.85	.09	.04	315.00	4.34	11.40
13030.00	39.00	598.90	591.80	583.80	450.00	589.22	1.04	.08	.03	450.00	5.42	11.40
13030.00	39.00	598.90	591.80	583.80	495.00	589.62	1.08	.08	.02	495.00	5.82	11.40
13030.00	39.00	598.90	591.80	583.80	660.00	590.98	1.21	.08	.02	660.00	7.18	11.40
13031.00	1.00	0.00	0.00	583.80	315.00	588.47	.60	.00	.08	315.00	4.67	11.40
13031.00	1.00	0.00	0.00	583.80	450.00	589.56	.79	.00	.08	450.00	5.76	11.40
13031.00	1.00	0.00	0.00	583.80	495.00	589.94	.83	.00	.07	495.00	6.14	11.40
13031.00	1.00	0.00	0.00	583.80	660.00	591.26	.99	.00	.06	660.00	7.46	11.40
13101.00	70.00	0.00	0.00	583.90	315.00	588.67	.57	.17	.01	315.00	4.77	11.40
13101.00	70.00	0.00	0.00	583.90	450.00	589.77	.76	.18	.01	450.00	5.87	11.40
13101.00	70.00	0.00	0.00	583.90	495.00	590.15	.81	.17	.01	495.00	6.25	11.40
13101.00	70.00	0.00	0.00	583.90	660.00	591.47	.97	.17	.01	660.00	7.57	11.40
13102.00	1.00	0.00	0.00	583.90	315.00	588.73	.53	.00	.01	315.00	4.83	11.40
13102.00	1.00	0.00	0.00	583.90	450.00	589.84	.71	.00	.01	450.00	5.94	11.40
13102.00	1.00	0.00	0.00	583.90	495.00	590.22	.76	.00	.01	495.00	6.32	11.40
13102.00	1.00	0.00	0.00	583.90	660.00	591.53	.92	.00	.01	660.00	7.63	11.40
13178.00	76.00	596.10	591.10	583.90	315.00	588.81	.51	.05	.00	315.00	4.91	11.40
13178.00	76.00	596.10	591.10	583.90	450.00	589.92	.69	.06	.01	450.00	6.02	11.40
13178.00	76.00	596.10	591.10	583.90	495.00	590.30	.74	.06	.01	495.00	6.40	11.40
13178.00	76.00	596.10	591.10	583.90	660.00	592.42	.73	.70	0.00	660.00	8.52	11.40
13179.00	1.00	0.00	0.00	583.90	315.00	588.79	.54	.00	.01	315.00	4.89	11.40
13179.00	1.00	0.00	0.00	583.90	450.00	589.91	.72	.00	.02	450.00	6.01	11.40
13179.00	1.00	0.00	0.00	583.90	495.00	590.29	.77	.00	.02	495.00	6.39	11.40
13179.00	1.00	0.00	0.00	583.90	660.00	592.40	.76	.00	.01	660.00	8.50	11.40
13289.00	110.00	0.00	0.00	583.70	315.00	589.40	.19	.14	.11	315.00	5.70	25.64
13289.00	110.00	0.00	0.00	583.70	450.00	590.73	.19	.13	.16	450.00	7.03	30.22
13289.00	110.00	0.00	0.00	583.70	495.00	591.17	.19	.13	.17	495.00	7.47	31.72
13289.00	110.00	0.00	0.00	583.70	660.00	593.30	.13	.08	.19	621.31	9.60	188.45
13634.00	345.00	0.00	0.00	584.00	315.00	589.73	.13	.26	.02	315.00	5.73	29.57
13634.00	345.00	0.00	0.00	584.00	450.00	591.02	.14	.22	.02	450.00	7.02	33.79
13634.00	345.00	0.00	0.00	584.00	495.00	591.44	.14	.21	.02	494.98	7.44	37.56
13634.00	345.00	0.00	0.00	584.00	660.00	593.45	.10	.11	.01	620.84	9.45	127.19
13854.00	220.00	0.00	0.00	584.40	315.00	589.83	.44	.25	.16	315.00	5.43	11.70
13854.00	220.00	0.00	0.00	584.40	450.00	591.03	.59	.23	.22	450.00	6.63	11.70
13854.00	220.00	0.00	0.00	584.40	495.00	591.42	.63	.22	.25	495.00	7.02	11.70
13854.00	220.00	0.00	0.00	584.40	660.00	593.30	.68	.14	.29	660.00	8.90	11.70
13855.00	1.00	0.00	0.00	584.40	315.00	589.84	.43	.00	.00	315.00	5.44	11.70
13855.00	1.00	0.00	0.00	584.40	450.00	591.04	.58	.00	.00	450.00	6.64	11.70
13855.00	1.00	0.00	0.00	584.40	495.00	591.44	.62	.00	.00	495.00	7.04	11.70
13855.00	1.00	0.00	0.00	584.40	660.00	593.31	.67	.00	.00	660.00	8.91	11.70

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
13900.00	45.00	594.50	593.00	584.40	315.00	589.90	.42	.04	.00	315.00	5.50	11.70
13900.00	45.00	594.50	593.00	584.40	450.00	591.11	.56	.05	.00	450.00	6.71	11.70
13900.00	45.00	594.50	593.00	584.40	495.00	591.51	.60	.05	.00	495.00	7.11	11.70
13900.00	45.00	594.50	593.00	584.40	660.00	593.81	.60	.43	0.00	660.00	9.41	11.70
13901.00	1.00	0.00	0.00	584.40	315.00	589.90	.43	.00	.00	315.00	5.50	11.70
13901.00	1.00	0.00	0.00	584.40	450.00	591.11	.57	.00	.00	450.00	6.71	11.70
13901.00	1.00	0.00	0.00	584.40	495.00	591.51	.61	.00	.00	495.00	7.11	11.70
13901.00	1.00	0.00	0.00	584.40	660.00	593.81	.60	.00	.00	660.00	9.41	11.70
15171.00	1270.00	0.00	0.00	587.60	315.00	592.61	.22	2.44	.06	315.00	5.01	30.92
15171.00	1270.00	0.00	0.00	587.60	450.00	593.74	.21	2.16	.11	450.00	6.14	37.20
15171.00	1270.00	0.00	0.00	587.60	495.00	594.10	.20	2.06	.12	495.00	6.50	39.18
15171.00	1270.00	0.00	0.00	587.60	660.00	595.40	.08	.90	.16	480.28	7.80	269.16
16321.00	1150.00	0.00	0.00	590.30	295.00	594.78	.31	2.21	.05	295.00	4.48	24.49
16321.00	1150.00	0.00	0.00	590.30	420.00	595.54	.37	1.88	.08	420.00	5.24	28.47
16321.00	1150.00	0.00	0.00	590.30	470.00	595.80	.39	1.79	.09	470.00	5.50	29.82
16321.00	1150.00	0.00	0.00	590.30	625.00	596.07	.58	.92	.25	623.15	5.77	64.31
18201.00	1880.00	0.00	0.00	592.70	295.00	598.12	.17	3.17	.04	295.00	5.42	30.88
18201.00	1880.00	0.00	0.00	592.70	420.00	598.92	.21	3.18	.05	420.00	6.22	34.56
18201.00	1880.00	0.00	0.00	592.70	470.00	599.20	.22	3.19	.05	470.00	6.50	35.84
18201.00	1880.00	0.00	0.00	592.70	625.00	600.03	.25	3.54	.10	625.00	7.33	39.70
19081.00	880.00	0.00	0.00	596.00	295.00	600.11	.46	2.14	.14	295.00	4.11	32.06
19081.00	880.00	0.00	0.00	596.00	420.00	600.78	.44	1.97	.12	420.00	4.78	41.57
19081.00	880.00	0.00	0.00	596.00	470.00	600.99	.45	1.90	.11	469.74	4.99	44.34
19081.00	880.00	0.00	0.00	596.00	625.00	601.60	.47	1.68	.11	620.24	5.60	52.43

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
0.000	635.000	573.670	0.000	0.000	0.000	34.300	0.000	-0.000
0.000	895.000	573.940	.270	0.000	0.000	34.300	0.000	-0.000
0.000	985.000	574.080	.140	0.000	0.000	34.300	0.000	-0.000
0.000	1300.000	574.680	.600	0.000	0.000	34.300	0.000	-0.000
1.000	635.000	573.672	0.000	.002	0.000	34.300	0.000	1.000
1.000	895.000	573.943	.272	.003	0.000	34.300	0.000	1.000
1.000	985.000	574.084	.140	.004	0.000	34.300	0.000	1.000
1.000	1300.000	574.684	.601	.004	0.000	34.300	0.000	1.000
141.000	635.000	573.745	0.000	.073	0.000	34.300	0.000	140.000
141.000	895.000	574.091	.346	.148	0.000	34.300	0.000	140.000
141.000	985.000	574.255	.164	.171	0.000	34.300	0.000	140.000
141.000	1300.000	574.907	.652	.222	0.000	34.300	0.000	140.000
142.000	635.000	573.745	0.000	.000	0.000	34.300	0.000	1.000
142.000	895.000	574.092	.347	.001	0.000	34.300	0.000	1.000
142.000	985.000	574.256	.164	.001	0.000	34.300	0.000	1.000
142.000	1300.000	574.908	.652	.001	0.000	34.300	0.000	1.000
192.000	635.000	574.109	0.000	.363	0.000	72.670	0.000	50.000
192.000	895.000	574.746	.638	.654	0.000	74.177	-1.508	50.000
192.000	985.000	575.000	.254	.745	0.000	74.316	-1.646	50.000
192.000	1300.000	575.913	.913	1.006	0.000	74.479	-1.809	50.000
772.000	635.000	574.939	0.000	.830	0.000	297.068	0.000	580.000
772.000	895.000	575.562	.623	.816	0.000	299.454	-2.386	580.000
772.000	985.000	575.789	.227	.788	0.000	299.817	-2.749	580.000
772.0	130 .00	576.60	.819	.95	.000	299.0 0	-2.931	580.000

1232.000	635.000	575.218	0.000	.279	0.000	409.999	0.000	460.000
1232.000	895.000	575.784	.566	.222	0.000	409.999	-.000	460.000
1232.000	985.000	575.991	.206	.202	0.000	409.999	-.000	460.000
1232.000	1300.000	576.752	.762	.144	0.000	409.999	-.000	460.000
1402.000	635.000	575.389	0.000	.171	0.000	364.617	0.000	170.000
1402.000	895.000	575.906	.517	.122	0.000	434.560	-69.943	170.000
1402.000	985.000	576.098	.192	.107	0.000	442.999	-78.382	170.000
1402.000	1300.000	576.823	.725	.070	0.000	442.999	-78.382	170.000
1403.000	635.000	575.388	0.000	-.001	0.000	364.778	0.000	1.000
1403.000	895.000	575.899	.511	-.007	0.000	434.691	-69.913	1.000
1403.000	985.000	576.090	.191	-.008	0.000	442.999	-78.221	1.000
1403.000	1300.000	576.813	.723	-.010	0.000	442.999	-78.221	1.000
1427.000	635.000	575.388	0.000	.000	0.000	161.548	0.000	24.000
1427.000	895.000	576.965	1.577	1.066	0.000	490.340	-328.792	24.000
1427.000	985.000	577.087	.122	.998	0.000	492.999	-331.451	24.000
1427.000	1300.000	577.409	.322	.597	0.000	492.999	-331.451	24.000
1428.000	635.000	576.455	0.000	1.066	0.000	428.467	0.000	1.000
1428.000	895.000	577.140	.685	.174	0.000	491.999	-63.532	1.000
1428.000	985.000	577.259	.119	.172	0.000	491.999	-63.532	1.000
1428.000	1300.000	577.588	.329	.179	0.000	491.999	-63.532	1.000
1478.000	635.000	576.462	0.000	.008	0.000	382.088	0.000	50.000
1478.000	895.000	577.145	.683	.005	0.000	449.999	-67.911	50.000
1478.000	985.000	577.265	.120	.006	0.000	449.999	-67.911	50.000
1478.000	1300.000	577.595	.330	.006	0.000	449.999	-67.911	50.000
1978.000	635.000	576.616	0.000	.154	0.000	249.999	0.000	500.000
1978.000	895.000	577.281	.664	.135	0.000	249.999	-.000	500.000
1978.000	985.000	577.409	.128	.144	0.000	249.999	-.000	500.000
1978.000	1300.000	577.772	.363	.177	0.000	249.999	-.000	500.000
2478.000	635.000	576.710	0.000	.094	0.000	30.194	0.000	500.000
2478.000	895.000	577.294	.583	.013	0.000	31.800	-1.606	500.000
2478.000	985.000	577.403	.109	-.006	0.000	31.999	-1.805	500.000
2478.000	1300.000	577.681	.278	-.091	0.000	31.999	-1.805	500.000
2708.000	635.000	577.082	0.000	.372	0.000	25.999	0.000	230.000
2708.000	895.000	577.763	.681	.469	0.000	25.999	-.000	230.000
2708.000	985.000	577.927	.165	.524	0.000	25.999	-.000	230.000
2708.000	1300.000	578.431	.503	.749	0.000	25.999	-.000	230.000
2709.000	635.000	577.296	0.000	.214	0.000	25.999	0.000	1.000
2709.000	895.000	578.032	.736	.269	0.000	25.999	-.000	1.000
2709.000	985.000	578.231	.199	.303	0.000	25.999	-.000	1.000
2709.000	1300.000	578.865	.634	.434	0.000	25.999	-.000	1.000
2742.000	635.000	577.317	0.000	.021	0.000	25.999	0.000	32.500
2742.000	895.000	578.061	.743	.029	0.000	25.999	-.000	32.500
2742.000	985.000	578.262	.201	.031	0.000	25.999	-.000	32.500
2742.000	1300.000	578.929	.667	.064	0.000	25.999	-.000	32.500
2743.000	635.000	577.264	0.000	-.054	0.000	25.999	0.000	1.000
2743.000	895.000	578.002	.738	-.059	0.000	25.999	-.000	1.000
2743.000	985.000	578.200	.199	-.062	0.000	25.999	-.000	1.000
2743.000	1300.000	578.860	.659	-.069	0.000	25.999	-.000	1.000
2793.000	635.000	577.305	0.000	.041	0.000	19.999	0.000	50.000
2793.000	895.000	578.003	.698	.001	0.000	19.999	-.000	50.000
2793.000	985.000	578.186	.183	-.014	0.000	19.999	-.000	50.000
2793.000	1300.000	578.775	.589	-.085	0.000	19.999	-.000	50.000

2794.000	635.000	577.261	0.000	-.044	0.000	19.999	0.000	1.000
2794.000	895.000	577.943	.682	-.060	0.000	19.999	-.000	1.000
2794.000	985.000	578.119	.176	-.067	0.000	19.999	-.000	1.000
2794.000	1300.000	578.680	.561	-.095	0.000	19.999	-.000	1.000
2809.000	635.000	577.294	0.000	.033	0.000	19.999	0.000	15.000
2809.000	895.000	577.993	.699	.050	0.000	19.999	-.000	15.000
2809.000	985.000	578.203	.210	.084	0.000	19.999	-.000	15.000
2809.000	1300.000	578.897	.694	.217	0.000	19.999	-.000	15.000
2810.000	635.000	577.466	0.000	.172	0.000	19.999	0.000	1.000
2810.000	895.000	578.266	.800	.273	0.000	19.999	-.000	1.000
2810.000	985.000	578.506	.240	.303	0.000	19.999	-.000	1.000
2810.000	1300.000	579.367	.860	.470	0.000	19.999	-.000	1.000
2850.000	635.000	577.492	0.000	.026	0.000	19.999	0.000	40.000
2850.000	895.000	578.293	.801	.027	0.000	19.999	-.000	40.000
2850.000	985.000	578.533	.240	.027	0.000	19.999	-.000	40.000
2850.000	1300.000	579.391	.858	.025	0.000	19.999	-.000	40.000
2851.000	635.000	577.724	0.000	.232	0.000	19.999	0.000	1.000
2851.000	895.000	578.611	.887	.319	0.000	19.999	-.000	1.000
2851.000	985.000	578.888	.277	.356	0.000	19.999	-.000	1.000
2851.000	1300.000	579.847	.959	.456	0.000	19.999	-.000	1.000
2865.000	635.000	577.746	0.000	.021	0.000	19.999	0.000	14.000
2865.000	895.000	578.642	.896	.030	0.000	19.999	-.000	14.000
2865.000	985.000	578.921	.279	.033	0.000	19.999	-.000	14.000
2865.000	1300.000	579.886	.965	.038	0.000	19.999	-.000	14.000
2866.000	635.000	577.693	0.000	-.052	0.000	19.999	0.000	1.000
2866.000	895.000	578.580	.886	-.062	0.000	19.999	-.000	1.000
2866.000	985.000	578.856	.276	-.065	0.000	19.999	-.000	1.000
2866.000	1300.000	579.814	.958	-.072	0.000	19.999	-.000	1.000
2870.000	635.000	578.194	0.000	.500	0.000	27.999	0.000	4.000
2870.000	895.000	579.338	1.144	.758	0.000	27.999	-.000	4.000
2870.000	985.000	579.705	.367	.849	0.000	27.999	-.000	4.000
2870.000	1300.000	580.949	1.244	1.135	0.000	27.999	-.000	4.000
2874.000	635.000	578.186	0.000	-.008	0.000	27.999	0.000	4.000
2874.000	895.000	579.326	1.140	-.012	0.000	27.999	-.000	4.000
2874.000	985.000	579.691	.365	-.014	0.000	27.999	-.000	4.000
2874.000	1300.000	580.932	1.241	-.017	0.000	27.999	-.000	4.000
2916.000	635.000	578.625	0.000	.439	0.000	79.999	0.000	42.000
2916.000	895.000	579.895	1.270	.569	0.000	79.999	-.000	42.000
2916.000	985.000	580.305	.410	.614	0.000	79.999	-.000	42.000
2916.000	1300.000	581.673	1.368	.741	0.000	79.999	-.000	42.000
3536.000	635.000	578.907	0.000	.281	0.000	181.999	0.000	620.000
3536.000	895.000	580.161	1.255	.266	0.000	181.999	-.000	620.000
3536.000	985.000	580.567	.406	.263	0.000	181.999	-.000	620.000
3536.000	1300.000	581.926	1.358	.253	0.000	181.999	-.000	620.000
3796.000	440.000	579.052	0.000	.145	0.000	217.999	0.000	260.000
3796.000	630.000	580.261	1.210	.100	0.000	217.999	-.000	260.000
3796.000	695.000	580.659	.398	.092	0.000	217.999	-.000	260.000
3796.000	915.000	582.001	1.342	.075	0.000	217.999	-.000	260.000
4116.000	440.000	579.133	0.000	.081	0.000	217.999	0.000	320.000
4116.000	630.000	580.310	1.177	.048	0.000	217.999	-.000	320.000
4116.000	695.000	580.701	.392	.042	0.000	217.999	-.000	320.000
4116.000	915.000	582.029	1.328	.028	0.000	217.999	-.000	320.000
4116.000	3.0 .0	57[illegible].300	0.00	1[illegible]	000.	3.7.[illegible]73	0	3.0.0

4416.000	485.000	580.406	1.106	.096	0.000	309.999	-2.326	300.000
4416.000	535.000	580.784	.378	.083	0.000	309.999	-2.326	300.000
4416.000	705.000	582.084	1.300	.055	0.000	309.999	-2.326	300.000
5416.000	340.000	579.489	0.000	.189	0.000	73.858	0.000	1000.000
5416.000	485.000	580.497	1.008	.092	0.000	229.167	-155.309	1000.000
5416.000	535.000	580.861	.364	.077	0.000	229.999	-156.141	1000.000
5416.000	705.000	582.133	1.271	.048	0.000	229.999	-156.141	1000.000
5846.000	340.000	579.763	0.000	.274	0.000	13.999	0.000	430.000
5846.000	485.000	580.667	.903	.169	0.000	13.999	-.000	430.000
5846.000	535.000	580.944	.277	.082	0.000	13.999	-.000	430.000
5846.000	705.000	581.979	1.035	-.154	0.000	13.999	-.000	430.000
5847.000	340.000	579.759	0.000	-.004	0.000	13.999	0.000	1.000
5847.000	485.000	580.661	.902	-.005	0.000	13.999	-.000	1.000
5847.000	535.000	580.938	.277	-.006	0.000	13.999	-.000	1.000
5847.000	705.000	581.962	1.024	-.017	0.000	13.999	-.000	1.000
5862.000	340.000	579.766	0.000	.006	0.000	13.999	0.000	15.000
5862.000	485.000	580.670	.904	.009	0.000	13.999	-.000	15.000
5862.000	535.000	580.948	.278	.010	0.000	13.999	-.000	15.000
5862.000	705.000	581.975	1.027	.012	0.000	13.999	-.000	15.000
5863.000	340.000	579.779	0.000	.013	0.000	13.999	0.000	1.000
5863.000	485.000	580.687	.908	.017	0.000	13.999	-.000	1.000
5863.000	535.000	580.966	.279	.018	0.000	13.999	-.000	1.000
5863.000	705.000	582.034	1.069	.060	0.000	13.999	-.000	1.000
6363.000	340.000	580.457	0.000	.678	0.000	29.829	0.000	500.000
6363.000	485.000	581.576	1.119	.889	0.000	34.800	-4.971	500.000
6363.000	535.000	581.927	.351	.961	0.000	36.359	-6.530	500.000
6363.000	705.000	583.154	1.227	1.120	0.000	39.999	-10.170	500.000
6993.000	340.000	580.992	0.000	.535	0.000	30.483	0.000	630.000
6993.000	485.000	582.113	1.121	.537	0.000	35.419	-4.936	630.000
6993.000	535.000	582.460	.347	.533	0.000	35.841	-5.358	630.000
6993.000	705.000	583.629	1.169	.474	0.000	35.999	-5.516	630.000
7623.000	340.000	581.426	0.000	.434	0.000	29.290	0.000	630.000
7623.000	485.000	582.562	1.136	.450	0.000	33.808	-4.517	630.000
7623.000	535.000	582.912	.350	.453	0.000	34.999	-5.709	630.000
7623.000	705.000	584.066	1.153	.437	0.000	34.999	-5.709	630.000
7663.000	340.000	581.428	0.000	.002	0.000	14.500	0.000	40.000
7663.000	485.000	582.539	1.111	-.023	0.000	14.500	0.000	40.000
7663.000	535.000	582.880	.340	-.033	0.000	14.500	0.000	40.000
7663.000	705.000	584.264	1.384	-.198	0.000	469.425	-454.925	40.000
7664.000	340.000	581.429	0.000	.000	0.000	14.500	0.000	1.000
7664.000	485.000	582.540	1.111	.000	0.000	14.500	0.000	1.000
7664.000	535.000	582.880	.340	.001	0.000	14.500	0.000	1.000
7664.000	705.000	584.265	1.385	.001	0.000	469.528	-455.028	1.000
7754.000	340.000	581.428	0.000	-.000	0.000	14.500	0.000	90.000
7754.000	485.000	582.541	1.112	.001	0.000	14.500	0.000	90.000
7754.000	535.000	582.881	.341	.001	0.000	14.500	0.000	90.000
7754.000	705.000	584.742	1.861	.477	0.000	14.500	0.000	90.000
7755.000	340.000	581.460	0.000	.032	0.000	14.500	0.000	1.000
7755.000	485.000	582.583	1.123	.043	0.000	14.500	0.000	1.000
7755.000	535.000	582.927	.344	.046	0.000	14.500	0.000	1.000
7755.000	705.000	584.784	1.857	.043	0.000	14.500	0.000	1.000
7805.000	340.000	581.536	0.000	.076	0.000	30.839	0.000	50.000
7805.000	485.000	582.755	1.219	.172	0.000	33.999	-3.160	50.000

7805.000	535.000	583.132	.377	.205	0.000	32.999	-2.160	50.000
7805.000	705.000	585.066	1.934	.282	0.000	32.999	-2.160	50.000
8225.000	340.000	581.948	0.000	.412	0.000	28.109	0.000	420.000
8225.000	485.000	583.108	1.159	.353	0.000	34.252	-6.143	420.000
8225.000	535.000	583.470	.362	.338	0.000	36.554	-8.445	420.000
8225.000	705.000	585.343	1.874	.277	0.000	378.585	-350.476	420.000
8695.000	340.000	582.564	0.000	.615	0.000	29.580	0.000	470.000
8695.000	485.000	583.685	1.121	.577	0.000	33.335	-3.755	470.000
8695.000	535.000	584.030	.345	.561	0.000	34.439	-4.859	470.000
8695.000	705.000	585.503	1.473	.160	0.000	35.999	-6.419	470.000
9105.000	340.000	583.006	0.000	.442	0.000	26.017	0.000	410.000
9105.000	485.000	584.115	1.110	.430	0.000	29.754	-3.737	410.000
9105.000	535.000	584.456	.341	.426	0.000	30.896	-4.879	410.000
9105.000	705.000	585.884	1.428	.381	0.000	212.584	-186.566	410.000
9515.000	340.000	583.776	0.000	.771	0.000	30.082	0.000	410.000
9515.000	485.000	584.818	1.042	.703	0.000	34.071	-3.989	410.000
9515.000	535.000	585.143	.325	.687	0.000	35.310	-5.228	410.000
9515.000	705.000	586.018	.875	.133	0.000	157.167	-127.085	410.000
10035.000	325.000	584.525	0.000	.749	0.000	26.018	0.000	520.000
10035.000	465.000	585.510	.984	.692	0.000	29.393	-3.375	520.000
10035.000	515.000	585.817	.308	.674	0.000	30.491	-4.473	520.000
10035.000	680.000	586.501	.684	.484	0.000	33.093	-7.075	520.000
10070.000	325.000	584.462	0.000	-.064	0.000	14.500	0.000	35.000
10070.000	465.000	585.383	.922	-.126	0.000	14.500	0.000	35.000
10070.000	515.000	585.667	.283	-.150	0.000	14.500	0.000	35.000
10070.000	680.000	586.253	.586	-.248	0.000	14.500	0.000	35.000
10071.000	325.000	584.641	0.000	.179	0.000	14.500	0.000	1.000
10071.000	465.000	585.601	.960	.217	0.000	14.500	0.000	1.000
10071.000	515.000	585.899	.298	.232	0.000	14.500	0.000	1.000
10071.000	680.000	586.582	.683	.329	0.000	14.500	0.000	1.000
10149.000	325.000	584.705	0.000	.065	0.000	14.500	0.000	77.500
10149.000	465.000	585.685	.979	.084	0.000	14.500	0.000	77.500
10149.000	515.000	586.344	.660	.446	0.000	14.500	0.000	77.500
10149.000	680.000	587.586	1.242	1.004	0.000	14.500	0.000	77.500
10150.000	325.000	584.669	0.000	-.036	0.000	14.500	0.000	1.000
10150.000	465.000	585.642	-.973	-.043	0.000	14.500	0.000	1.000
10150.000	515.000	586.307	.665	-.037	0.000	14.500	0.000	1.000
10150.000	680.000	587.547	1.241	-.038	0.000	14.500	0.000	1.000
10210.000	325.000	585.084	0.000	.415	0.000	27.199	0.000	60.000
10210.000	465.000	586.217	1.133	.575	0.000	30.878	-3.679	60.000
10210.000	515.000	586.864	.647	.558	0.000	32.973	-5.774	60.000
10210.000	680.000	588.232	1.368	.685	0.000	44.999	-17.800	60.000
10810.000	325.000	585.824	0.000	.739	0.000	28.899	0.000	600.000
10810.000	465.000	586.885	1.062	.668	0.000	32.737	-3.838	600.000
10810.000	515.000	587.416	.531	.552	0.000	34.792	-5.894	600.000
10810.000	680.000	588.663	1.246	.430	0.000	108.799	-79.900	600.000
11590.000	325.000	586.532	0.000	.708	0.000	13.000	0.000	780.000
11590.000	465.000	587.518	.986	.633	0.000	13.000	0.000	780.000
11590.000	515.000	587.945	.427	.529	0.000	13.000	0.000	780.000
11590.000	680.000	589.003	1.058	.341	0.000	13.000	0.000	780.000
11591.000	325.000	586.527	0.000	-.005	0.000	13.000	0.000	1.000
11591.000	465.000	587.512	.985	-.006	0.000	13.000	0.000	1.000
11591.00	515.00	587.939	.27	-.6	0.00	13	0.0	1.000

11591.000	680.000	588.997	1.058	-.006	0.000	13.000	0.000	1.000
11608.000	325.000	586.553	0.000	.026	0.000	13.000	0.000	17.000
11608.000	465.000	587.545	.992	.033	0.000	13.000	0.000	17.000
11608.000	515.000	587.972	.427	.033	0.000	13.000	0.000	17.000
11608.000	680.000	589.036	1.063	.039	0.000	13.000	0.000	17.000
11609.000	325.000	586.573	0.000	.020	0.000	13.000	0.000	1.000
11609.000	465.000	587.573	1.000	.028	0.000	13.000	0.000	1.000
11609.000	515.000	588.000	.427	.027	0.000	13.000	0.000	1.000
11609.000	680.000	589.070	1.070	.034	0.000	13.000	0.000	1.000
11789.000	325.000	587.095	0.000	.522	0.000	35.388	0.000	180.000
11789.000	465.000	588.291	1.197	.719	0.000	41.242	-5.854	180.000
11789.000	515.000	588.761	.470	.761	0.000	41.999	-6.611	180.000
11789.000	680.000	590.028	1.267	.958	0.000	41.999	-6.611	180.000
12359.000	325.000	587.372	0.000	.277	0.000	25.184	0.000	570.000
12359.000	465.000	588.535	1.163	.244	0.000	28.445	-3.261	570.000
12359.000	515.000	588.981	.446	.220	0.000	29.695	-4.511	570.000
12359.000	680.000	590.209	1.228	.181	0.000	135.804	-110.619	570.000
12759.000	325.000	587.826	0.000	.454	0.000	17.000	0.000	400.000
12759.000	465.000	588.962	1.135	.427	0.000	17.000	0.000	400.000
12759.000	515.000	589.379	.417	.398	0.000	17.000	0.000	400.000
12759.000	680.000	590.543	1.165	.335	0.000	28.827	-11.827	400.000
12760.000	325.000	587.852	0.000	.026	0.000	17.000	0.000	1.000
12760.000	465.000	588.989	1.137	.028	0.000	17.000	0.000	1.000
12760.000	515.000	589.406	.417	.027	0.000	17.000	0.000	1.000
12760.000	680.000	590.626	1.220	.082	0.000	29.999	-12.999	1.000
12774.000	325.000	587.873	0.000	.021	0.000	17.000	0.000	14.000
12774.000	465.000	589.012	1.138	.022	0.000	17.000	0.000	14.000
12774.000	515.000	589.428	.417	.022	0.000	17.000	0.000	14.000
12774.000	680.000	591.135	1.707	-.509	0.000	29.999	-12.999	14.000
12775.000	325.000	587.867	0.000	-.006	0.000	17.000	0.000	1.000
12775.000	465.000	589.005	1.138	-.007	0.000	17.000	0.000	1.000
12775.000	515.000	589.422	.417	-.007	0.000	17.000	0.000	1.000
12775.000	680.000	591.112	1.690	-.023	0.000	29.841	-12.841	1.000
12860.000	315.000	588.072	0.000	.205	0.000	26.653	0.000	85.000
12860.000	450.000	589.298	1.227	.293	0.000	30.606	-3.952	85.000
12860.000	495.000	589.746	.448	.325	0.000	32.048	-5.395	85.000
12860.000	660.000	591.237	1.491	.125	0.000	36.847	-10.194	85.000
12990.000	315.000	587.999	0.000	-.072	0.000	11.400	0.000	130.000
12990.000	450.000	589.111	1.112	-.187	0.000	11.400	0.000	130.000
12990.000	495.000	589.527	.415	-.219	0.000	11.400	0.000	130.000
12990.000	660.000	590.915	1.388	-.322	0.000	11.400	0.000	130.000
12991.000	315.000	587.886	0.000	-.113	0.000	10.640	0.000	1.000
12991.000	450.000	589.008	1.122	-.103	0.000	11.400	-.760	1.000
12991.000	495.000	589.431	.423	-.095	0.000	11.400	-.760	1.000
12991.000	660.000	590.834	1.403	-.081	0.000	11.400	-.760	1.000
13030.000	315.000	588.142	0.000	.256	0.000	11.400	0.000	39.000
13030.000	450.000	589.224	1.082	.216	0.000	11.400	0.000	39.000
13030.000	495.000	589.621	.397	.190	0.000	11.400	0.000	39.000
13030.000	660.000	590.984	1.363	.150	0.000	11.400	0.000	39.000
13031.000	315.000	588.470	0.000	.328	0.000	11.400	0.000	1.000
13031.000	450.000	589.562	1.092	.338	0.000	11.400	0.000	1.000
13031.000	495.000	589.942	.380	.321	0.000	11.400	0.000	1.000
13031.000	660.00	591.263	1.322	.279	0.00	11.40	0.000	1.000

13101.000	315.000	588.674	0.000	.204	0.000	11.400	0.000	70.000
13101.000	450.000	589.774	1.100	.212	0.000	11.400	0.000	70.000
13101.000	495.000	590.152	.378	.210	0.000	11.400	0.000	70.000
13101.000	660.000	591.468	1.316	.205	0.000	11.400	0.000	70.000
13102.000	315.000	588.731	0.000	.058	0.000	11.400	0.000	1.000
13102.000	450.000	589.838	1.107	.064	0.000	11.400	0.000	1.000
13102.000	495.000	590.216	.378	.064	0.000	11.400	0.000	1.000
13102.000	660.000	591.531	1.315	.063	0.000	11.400	0.000	1.000
13178.000	315.000	588.806	0.000	.075	0.000	11.400	0.000	76.000
13178.000	450.000	589.924	1.118	.086	0.000	11.400	0.000	76.000
13178.000	495.000	590.303	.379	.087	0.000	11.400	0.000	76.000
13178.000	660.000	592.415	2.112	.884	0.000	11.400	0.000	76.000
13179.000	315.000	588.793	0.000	-.013	0.000	11.400	0.000	1.000
13179.000	450.000	589.910	1.117	-.015	0.000	11.400	0.000	1.000
13179.000	495.000	590.289	.379	-.015	0.000	11.400	0.000	1.000
13179.000	660.000	592.403	2.114	-.012	0.000	11.400	0.000	1.000
13289.000	315.000	589.397	0.000	.604	0.000	25.641	0.000	110.000
13289.000	450.000	590.729	1.332	.819	0.000	30.217	-4.576	110.000
13289.000	495.000	591.168	.439	.879	0.000	31.722	-6.080	110.000
13289.000	660.000	593.303	2.135	.900	0.000	188.450	-162.809	110.000
13634.000	315.000	589.733	0.000	.337	0.000	29.570	0.000	345.000
13634.000	450.000	591.020	1.287	.291	0.000	33.791	-4.220	345.000
13634.000	495.000	591.442	.421	.274	0.000	37.558	-7.988	345.000
13634.000	660.000	593.451	2.009	.148	0.000	127.188	-97.617	345.000
13854.000	315.000	589.826	0.000	.092	0.000	11.700	0.000	220.000
13854.000	450.000	591.028	1.203	.008	0.000	11.700	0.000	220.000
13854.000	495.000	591.421	.392	-.021	0.000	11.700	0.000	220.000
13854.000	660.000	593.299	1.879	-.152	0.000	11.700	0.000	220.000
13855.000	315.000	589.840	0.000	.014	0.000	11.700	0.000	1.000
13855.000	450.000	591.044	1.204	.016	0.000	11.700	0.000	1.000
13855.000	495.000	591.436	.393	.016	0.000	11.700	0.000	1.000
13855.000	660.000	593.312	1.876	.013	0.000	11.700	0.000	1.000
13900.000	315.000	589.899	0.000	.059	0.000	11.700	0.000	45.000
13900.000	450.000	591.114	1.216	.070	0.000	11.700	0.000	45.000
13900.000	495.000	591.509	.395	.073	0.000	11.700	0.000	45.000
13900.000	660.000	593.811	2.302	.499	0.000	11.700	0.000	45.000
13901.000	315.000	589.896	0.000	-.003	0.000	11.700	0.000	1.000
13901.000	450.000	591.112	1.215	-.003	0.000	11.700	0.000	1.000
13901.000	495.000	591.507	.395	-.003	0.000	11.700	0.000	1.000
13901.000	660.000	593.810	2.303	-.002	0.000	11.700	0.000	1.000
15171.000	315.000	592.611	0.000	2.714	0.000	30.922	0.000	1270.000
15171.000	450.000	593.741	1.130	2.629	0.000	37.201	-6.279	1270.000
15171.000	495.000	594.097	.356	2.590	0.000	39.182	-8.260	1270.000
15171.000	660.000	595.398	1.301	1.588	0.000	269.159	-238.237	1270.000
16321.000	295.000	594.776	0.000	2.165	0.000	24.485	0.000	1150.000
16321.000	420.000	595.541	.765	1.801	0.000	28.471	-3.985	1150.000
16321.000	470.000	595.796	.255	1.699	0.000	29.818	-5.332	1150.000
16321.000	625.000	596.066	.270	.669	0.000	64.312	-39.826	1150.000
18201.000	295.000	598.120	0.000	3.344	0.000	30.875	0.000	1880.000
18201.000	420.000	598.923	.803	3.382	0.000	34.562	-3.686	1880.000
18201.000	470.000	599.202	.278	3.405	0.000	35.839	-4.964	1880.000
18201.000	625.000	600.034	.832	3.968	0.000	39.696	-8.821	1880.000

19081.000	25.000	600.111	0.000	1.991	0.00	32.062	0.0	880.000
19081.000	420.000	600.778	.666	1.854	0.000	41.573	-9.511	880.000
19081.000	470.000	600.988	.211	1.787	0.000	44.344	-12.282	880.000
19081.000	625.000	601.604	.615	1.569	0.000	52.426	-20.364	880.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	1300.000	33.135	0.000
2	0.000	1300.000	37.859	4.724
3	0.000	1300.000	38.278	5.143
4	0.000	1300.000	56.397	23.262