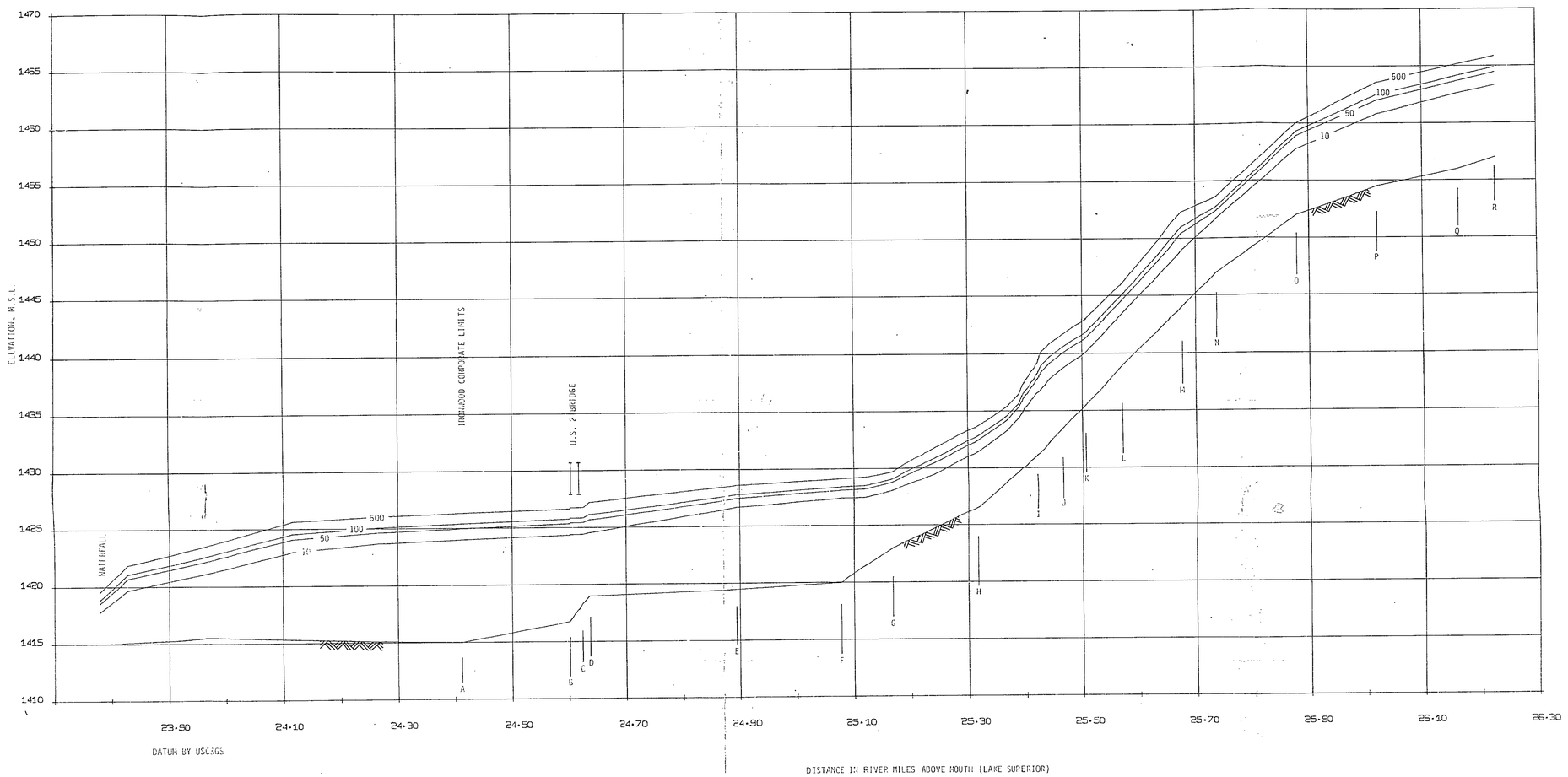


RECEIVED
APR 27 1977
WATER MANAGEMENT

MULTIPLE PROFILES FOR 10, 50, 100 & 500 YEAR FLOODS

DRAWN:
DESIGN:
CHECKED:
FINAL: 4-25-77
DATE COMPLETED:
PRELIMINARY:

SCALE: VERT. 1" = 5'
HORIZ. 1" = 0.10 MI

REVISIONS	MARK	BULLETIN	DATE	MARK	BULLETIN	DATE	MARK	BULLETIN	DATE

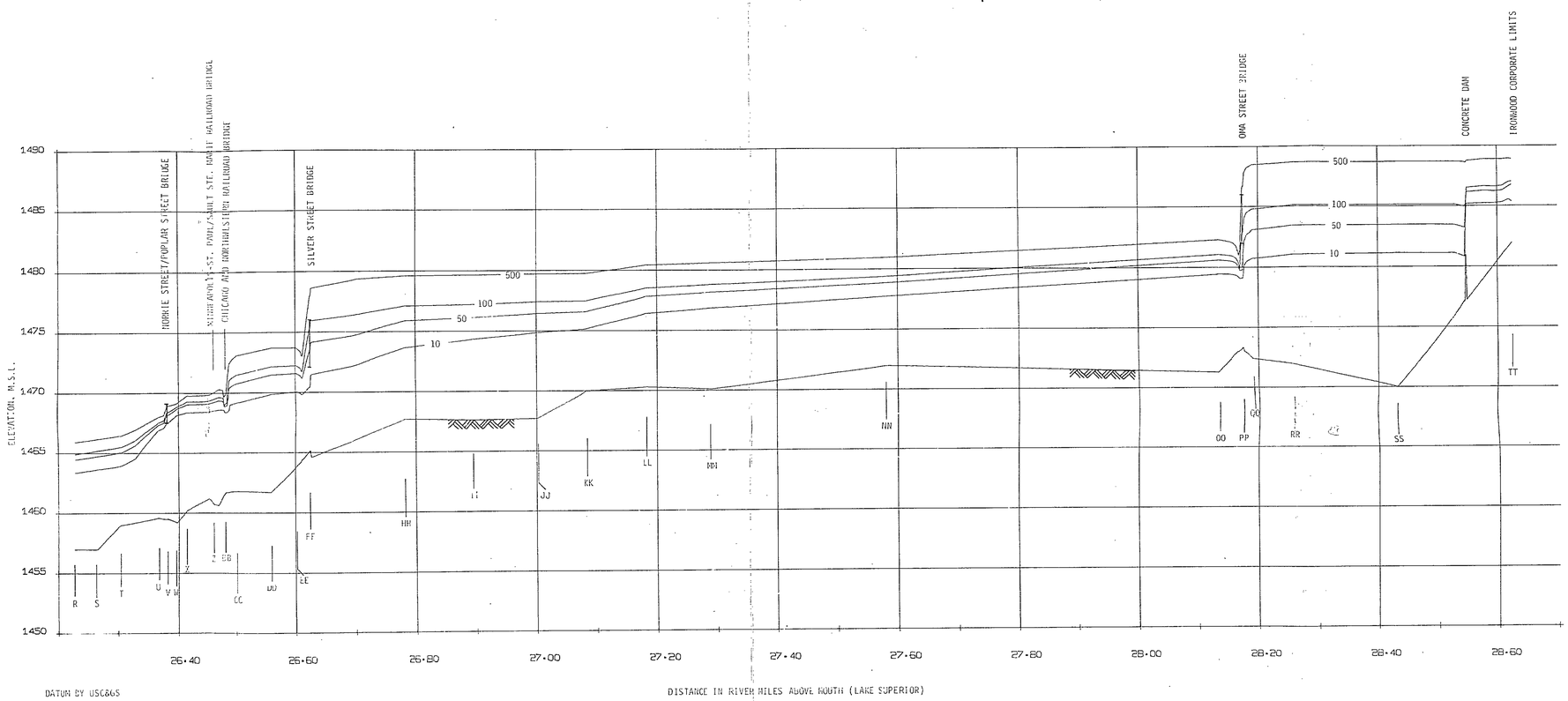
JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS
PONTIAC, MICHIGAN

CITY OF IRONWOOD, MI, FIS

MONTREAL RIVER

JOB NO. 555 5-31-1
DATE ISSUED
SHEET NO. 1 OF 2

Job No. | Contr. No. | Con. Tel No. | Type of Job No. | Sheet No. *Sheet No. of Sheets | As Built | Section | City No. in County | Town No. in County | Village No. in County | County No. in County | State | Construction Contract | Job Code No.



MULTIPLE PROFILES FOR 10, 50, 100 & 500 YEAR FLOODS

DRAWN:
DESIGN:
CHECKED:
FINAL: 4-25-77
DATE COMPLETED:
PRELIMINARY:

SCALE: VERT. 1" = 5'
HORIZ. 1" = 0.10 MI

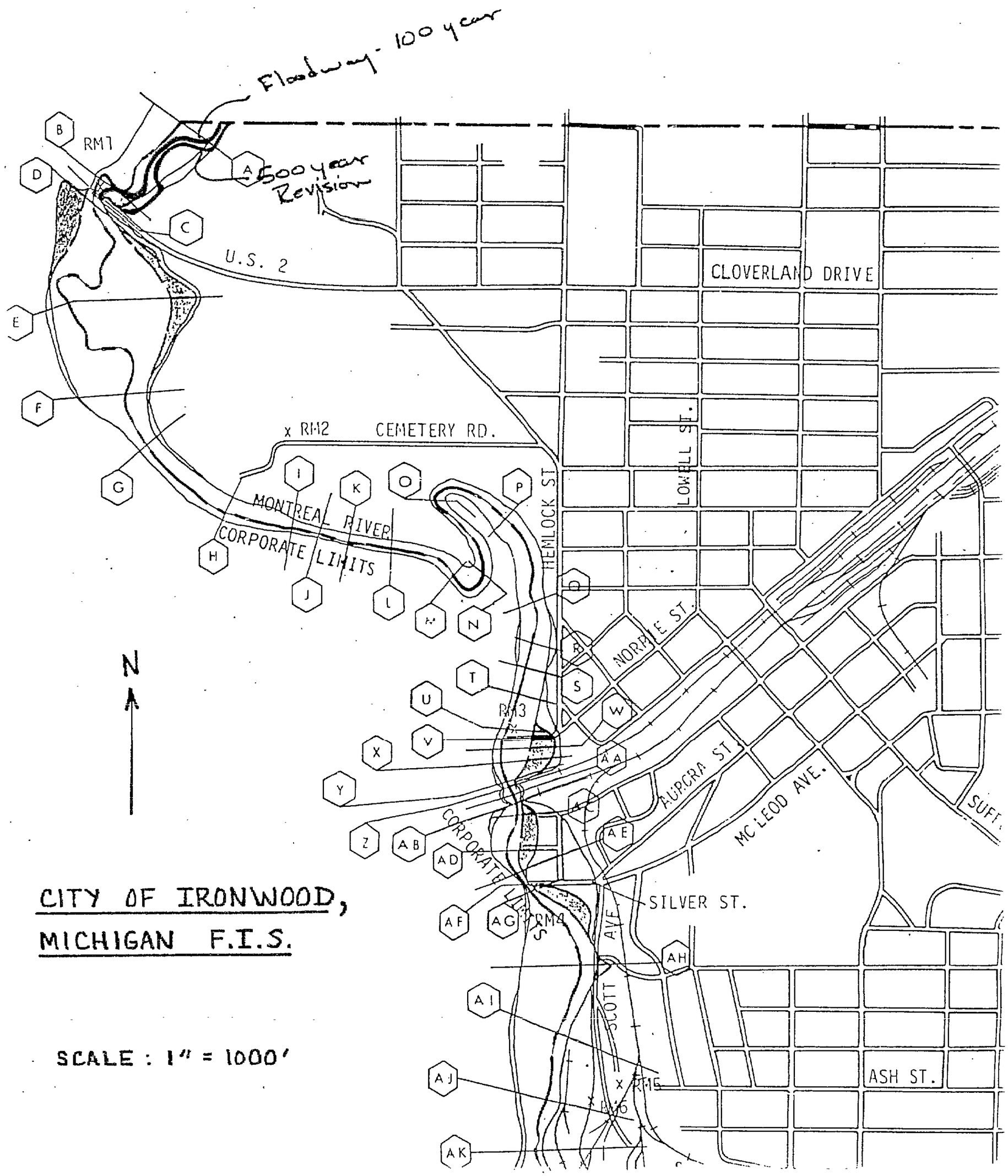
REVISIONS	MARK	BULLETIN	DATE	MARK	BULLETIN	DATE	MARK	BULLETIN	DATE

JOHNSON & ANDERSON, INC.
CONSULTING ENGINEERS
PONTIAC, MICHIGAN

CITY OF IRONWOOD, MI, FIS

MONTREAL RIVER

JOB NO. 5555-31-1
DATE ISSUED
SHEET NO. 2 OF 2



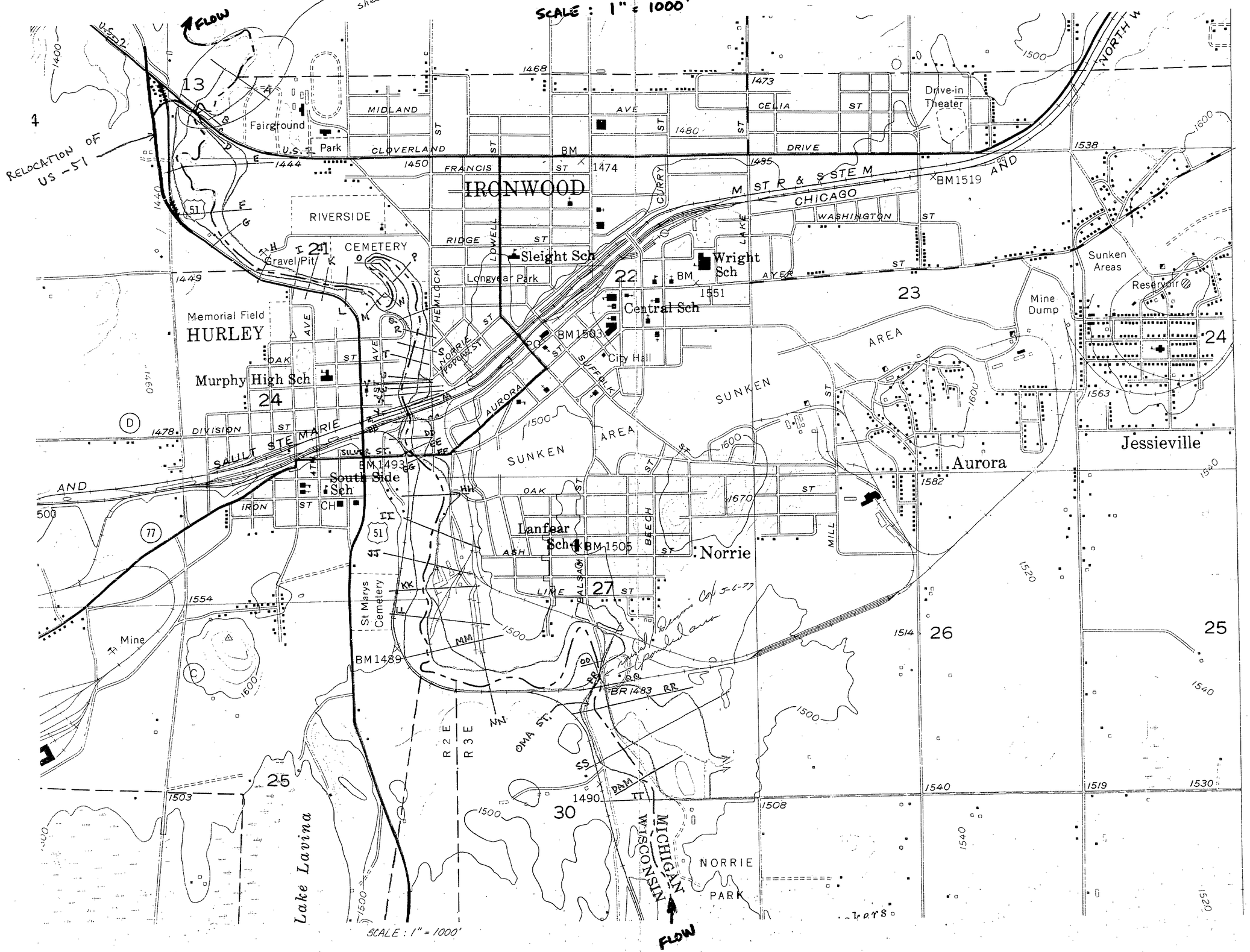
CITY OF IRONWOOD,
MICHIGAN F.I.S.

SCALE : 1" = 1000'

CITY OF IRONWOOD F.I.S.
Job # 5555-31
Montreal River
SCALE : 1" = 1000'

|| 100-YEAR FLOODWAY
|| 100-YEAR FLOODED OUTLINE

4/25/77



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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      MONTREAL RIVER - GOGEBIC COUNTY, MICHIGAN - PROJECT MANAGER, DENNIS COX
T2      FLOW FOR FLOOD OF MAY 2, 1954 = 1040 CFS
T3      MONTREAL RIVER - CITY OF IRONWOOD, MICHIGAN - JOB NO. 5555-31

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

    -10.       6.       -0.       -0. -1.000000     -0.00     -0.0      -0.     -0.000    -0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     5.000    -0.000    -1.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000


3720 ASSUMED CRITICAL DEPTH


CCHV=     .300 CEHV=     .500
2096 WSEL NOT GIVEN,AVG OF MAX,MIN 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


        FIELD SECTION AT TOP OF WATERFALLS

    23.78      2.05   1417.05   1417.05     -0.00   1417.83       .78      0.00      0.00   1424.20
    1080.       0.      949.      131.        0.      127.       54.        0.        0.   1415.30
     0.00      0.00      7.50      2.43      .064      .034      .064     0.000   1415.00     71.45
  .013084      -0.       -0.       -0.         0        20         1      0.00    130.08    201.54


3301 HV CHANGED MORE THAN HVINS

    23.83      3.64   1418.74      0.00      0.00   1418.94       .20       .94       .17   1422.40
    1080.       0.      850.      230.        0.      215.      149.        2.        1.   1415.60
      .02      0.00      3.95      1.54      .064      .034      .064      .034   1415.10     83.22
  .001727      235.      250.      260.         4         0         1      0.00    163.61    246.82


    23.88      3.98   1419.18      0.00      0.00   1419.41       .23       .45       .01   1420.60
    1080.       0.      874.      206.        0.      208.      130.        4.        2.   1416.10
      .04      0.00      4.20      1.58      .064      .034      .064      .034   1415.20     96.90
  .001862      240.      250.      265.         3         0         1      0.00    147.10    244.00


    23.92      4.33   1419.63      0.00      0.00   1419.88       .25       .46       .01   1418.80
    1080.       0.      900.      180.        0.      207.      114.        6.        3.   1416.50
      .06      .44      4.36      1.58      .064      .034      .064      .034   1415.30    110.15
  .001824      235.      250.      260.         0         0         1      0.00    130.85    241.00
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00BREAK00

1) COUNTY: Gogebic

2) STUDY NAME: Ironwood

3) WATERCOURSE: Montreal River

4) DOCUMENT TYPE: Flood of 1960

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      MONTREAL RIVER - GOGEBIC COUNTY, MICHIGAN - PROJECT MANAGER, DENNIS COX
T2      FLOW FOR FLOOD OF APRIL 24, 1960 = 3400 CFS
T3      MONTREAL RIVER - CITY OF IRONWOOD, MICHIGAN - JOB NO. 5555-31
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J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	7.	-0.	-0.	-1.000000	-0.00	-0.0	-0.	-0.000	-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

3720 ASSUMED CRITICAL DEPTH

CCHV= .300 CEHV= .500
2096 WSEL NOT GIVEN,AVG OF MAX,MIN 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

FIELD SECTION AT TOP OF WATERFALLS

23.78	3.85	1418.85	1418.85	-0.00	1420.18	1.33	0.00	0.00	1424.20
3400.	0.	2621.	779.	0.	253.	221.	0.	0.	1415.30
0.00	0.00	10.37	3.52	.064	.034	.064	0.000	1415.00	67.83
.010737	-0.	-0.	-0.	0	16	1	0.00	196.71	264.54

3301 HV CHANGED MORE THAN HVINS

23.83	5.98	1421.08	0.00	0.00	1421.49	.42	1.04	.27	1422.40
3400.	0.	2281.	1119.	0.	376.	438.	4.	1.	1415.60
.01	0.00	6.07	2.55	.064	.034	.064	.033	1415.10	77.91
.002160	235.	250.	260.	2	0	1	0.00	220.52	298.44
23.88	6.41	1421.61	0.00	0.00	1422.09	.49	.57	.04	1420.60
3400.	0.	2370.	1030.	1.	366.	383.	8.	2.	1416.10
.03	.59	6.48	2.69	.064	.034	.064	.033	1415.20	91.77
.002283	240.	250.	265.	3	0	1	0.00	191.34	283.11
23.92	6.84	1422.14	0.00	0.00	1422.73	.59	.58	.05	1418.80
3400.	7.	2465.	928.	6.	352.	334.	13.	3.	1416.50
.04	1.26	7.01	2.78	.064	.034	.064	.033	1415.30	107.56
.002322	235.	250.	260.	1	0	1	0.00	162.58	270.15

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

MONTREAL RIVER - CITY OF

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
23.78	0.00	0.00	0.00	1415.00	1850.00	1417.77	1.01	0.00	0.00	1539.20	2.77	156.78
23.78	0.00	0.00	0.00	1415.00	2890.00	1418.53	1.24	0.00	0.00	2277.90	3.53	184.81
23.78	0.00	0.00	0.00	1415.00	3380.00	1418.84	1.33	0.00	0.00	2608.23	3.84	196.26
23.78	0.00	0.00	0.00	1415.00	4600.00	1419.55	1.47	0.00	0.00	3384.81	4.55	222.93
23.78	0.00	0.00	0.00	1415.00	1080.00	1417.05	.78	0.00	0.00	948.86	2.05	130.08
23.78	0.00	0.00	0.00	1415.00	3400.00	1418.85	1.33	0.00	0.00	2621.47	3.85	196.71
23.83	250.00	0.00	0.00	1415.10	1850.00	1419.69	.28	.98	.22	1356.20	4.59	189.00
23.83	250.00	0.00	0.00	1415.10	2890.00	1420.67	.38	1.03	.26	1987.18	5.57	212.28
23.83	250.00	0.00	0.00	1415.10	3380.00	1421.06	.42	1.04	.27	2269.97	5.96	220.26
23.83	250.00	0.00	0.00	1415.10	4600.00	1421.88	.51	1.07	.29	2953.41	6.78	233.95
23.83	250.00	0.00	0.00	1415.10	1080.00	1418.74	.20	.94	.17	849.78	3.64	163.61
23.83	250.00	0.00	0.00	1415.10	3400.00	1421.08	.42	1.04	.27	2281.38	5.98	220.52
23.88	250.00	0.00	0.00	1415.20	1850.00	1420.18	.32	.51	.02	1393.37	4.98	165.71
23.88	250.00	0.00	0.00	1415.20	2890.00	1421.20	.43	.55	.03	2054.68	6.00	183.71
23.88	250.00	0.00	0.00	1415.20	3380.00	1421.59	.49	.56	.04	2357.76	6.39	191.06
23.88	250.00	0.00	0.00	1415.20	4600.00	1422.43	.61	.61	.05	3090.60	7.23	202.48
23.88	250.00	0.00	0.00	1415.20	1080.00	1419.18	.23	.45	.01	873.66	3.98	147.10
23.88	250.00	0.00	0.00	1415.20	3400.00	1421.61	.49	.57	.04	2370.01	6.41	191.34
23.92	250.00	0.00	0.00	1415.30	1850.00	1420.67	.37	.52	.02	1445.49	5.37	144.16
23.92	250.00	0.00	0.00	1415.30	2890.00	1421.72	.52	.56	.04	2137.44	6.42	157.46
23.92	250.00	0.00	0.00	1415.30	3380.00	1422.12	.58	.58	.05	2452.04	6.82	162.39
23.92	250.00	0.00	0.00	1415.30	4600.00	1423.00	.75	.63	.07	3213.68	7.70	174.09
23.92	250.00	0.00	0.00	1415.30	1080.00	1419.63	.25	.46	.01	899.83	4.33	130.85
23.92	250.00	0.00	0.00	1415.30	3400.00	1422.14	.59	.58	.05	2464.76	6.84	162.58
23.97	250.00	0.00	0.00	1415.50	1850.00	1421.15	.48	.54	.06	1511.38	5.65	118.96
23.97	250.00	0.00	0.00	1415.50	2890.00	1422.24	.68	.60	.08	2231.21	6.74	131.63
23.97	250.00	0.00	0.00	1415.50	3380.00	1422.66	.77	.63	.10	2558.05	7.16	137.71
23.97	250.00	0.00	0.00	1415.50	4600.00	1423.58	.99	.70	.12	3344.25	8.08	147.40
23.97	250.00	0.00	0.00	1415.50	1080.00	1420.07	.33	.48	.04	948.29	4.57	109.91
23.97	250.00	0.00	0.00	1415.50	3400.00	1422.68	.78	.64	.10	2571.23	7.18	137.89
24.12	780.00	0.00	0.00	1415.30	1850.00	1422.96	.16	1.38	.10	1686.35	7.66	397.07
24.12	780.00	0.00	0.00	1415.30	2890.00	1424.08	.14	1.13	.16	2330.30	8.78	469.80
24.12	780.00	0.00	0.00	1415.30	3380.00	1424.55	.13	1.06	.19	2618.53	9.25	492.80
24.12	780.00	0.00	0.00	1415.30	4600.00	1425.61	.13	.92	.26	3301.35	10.31	545.70
24.12	780.00	0.00	0.00	1415.30	1080.00	1421.44	.18	1.19	.04	1077.97	6.14	115.52
24.12	780.00	0.00	0.00	1415.30	3400.00	1424.57	.13	1.05	.19	2630.07	9.27	493.73
24.27	780.00	0.00	0.00	1415.10	1850.00	1423.68	.07	.60	.03	1521.89	8.58	459.30
24.27	780.00	0.00	0.00	1415.10	2890.00	1424.65	.08	.49	.02	2187.52	9.55	507.55
24.27	780.00	0.00	0.00	1415.10	3380.00	1425.07	.09	.45	.01	2482.91	9.97	528.23
24.27	780.00	0.00	0.00	1415.10	4600.00	1426.04	.09	.38	.01	3178.46	10.94	577.00
24.27	780.00	0.00	0.00	1415.10	1080.00	1422.29	.09	.71	.03	1032.91	7.19	299.95
24.27	780.00	0.00	0.00	1415.10	3400.00	1425.08	.09	.45	.01	2494.72	9.98	529.07

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
24.41	780.00	0.00	0.00	1415.00	1820.00	1424.00	.05	.29	.01	1441.59	9.00	480.02
24.41	780.00	0.00	0.00	1415.00	2830.00	1424.96	.06	.29	.01	2077.38	9.96	528.29
24.41	780.00	0.00	0.00	1415.00	3310.00	1425.38	.06	.28	.01	2362.24	10.38	549.14
24.41	780.00	0.00	0.00	1415.00	4510.00	1426.33	.08	.27	.01	3040.66	11.33	596.81
24.41	780.00	0.00	0.00	1415.00	1080.00	1422.77	.05	.43	.01	973.44	7.77	414.77
24.41	780.00	0.00	0.00	1415.00	3400.00	1425.40	.07	.29	.01	2423.56	10.40	550.07
24.60	1000.00	0.00	0.00	1416.80	1820.00	1424.36	.15	.41	.05	1820.00	7.56	110.50
24.60	1000.00	0.00	0.00	1416.80	2830.00	1425.34	.26	.48	.10	2829.27	8.54	111.86
24.60	1000.00	0.00	0.00	1416.80	3310.00	1425.75	.31	.49	.12	3308.43	8.95	112.43
24.60	1000.00	0.00	0.00	1416.80	4510.00	1426.66	.45	.52	.19	4504.65	9.86	113.71
24.60	1000.00	0.00	0.00	1416.80	1080.00	1423.21	.09	.46	.02	1080.00	6.41	109.32
24.60	1000.00	0.00	0.00	1416.80	3400.00	1425.78	.33	.51	.13	3398.34	8.98	112.46
24.60	8.00	1430.70	1427.90	1416.90	1820.00	1424.40	.12	.00	.01	1820.00	7.50	109.20
24.60	8.00	1430.70	1427.90	1416.90	2830.00	1425.40	.21	.00	.01	2830.00	8.50	109.20
24.60	8.00	1430.70	1427.90	1416.90	3310.00	1425.82	.26	.01	.02	3310.00	8.92	109.20
24.60	8.00	1430.70	1427.90	1416.90	4510.00	1426.76	.38	.01	.02	4510.00	9.86	109.20
24.60	8.00	1430.70	1427.90	1416.90	1080.00	1423.24	.07	.00	.01	1080.00	6.34	109.20
24.60	8.00	1430.70	1427.90	1416.90	3400.00	1425.86	.27	.01	.02	3400.00	8.96	109.20
24.61	45.00	0.00	0.00	1417.50	1820.00	1424.40	.15	.02	.01	1820.00	6.90	109.20
24.61	45.00	0.00	0.00	1417.50	2830.00	1425.41	.26	.02	.02	2830.00	7.91	109.20
24.61	45.00	0.00	0.00	1417.50	3310.00	1425.82	.31	.03	.02	3310.00	8.32	109.20
24.61	45.00	0.00	0.00	1417.50	4510.00	1426.76	.44	.03	.03	4510.00	9.26	109.20
24.61	45.00	0.00	0.00	1417.50	1080.00	1423.24	.09	.01	.01	1080.00	5.74	108.95
24.61	45.00	0.00	0.00	1417.50	3400.00	1425.86	.32	.03	.02	3400.00	8.36	109.20
24.61	1.00	0.00	0.00	1417.50	1820.00	1424.41	.15	.00	.00	1820.00	6.91	109.20
24.61	1.00	0.00	0.00	1417.50	2830.00	1425.41	.26	.00	.00	2830.00	7.91	109.20
24.61	1.00	0.00	0.00	1417.50	3310.00	1425.83	.31	.00	.00	3310.00	8.33	109.20
24.61	1.00	0.00	0.00	1417.50	4510.00	1426.76	.44	.00	.00	4510.00	9.26	109.20
24.61	1.00	0.00	0.00	1417.50	1080.00	1423.24	.09	.00	.00	1080.00	5.74	108.96
24.61	1.00	0.00	0.00	1417.50	3400.00	1425.86	.32	.00	.00	3400.00	8.36	109.20
24.62	23.00	0.00	0.00	1417.80	1820.00	1424.41	.17	.01	.01	1820.00	6.61	109.20
24.62	23.00	0.00	0.00	1417.80	2830.00	1425.41	.28	.02	.01	2830.00	7.61	109.20
24.62	23.00	0.00	0.00	1417.80	3310.00	1425.83	.34	.02	.01	3310.00	8.03	109.20
24.62	23.00	0.00	0.00	1417.80	4510.00	1426.77	.48	.03	.02	4510.00	8.97	109.20
24.62	23.00	0.00	0.00	1417.80	1080.00	1423.24	.10	.01	.01	1080.00	5.44	107.37
24.62	23.00	0.00	0.00	1417.80	3400.00	1425.87	.35	.02	.01	3400.00	8.07	109.20
24.62	1.00	1430.70	1427.90	1417.80	1820.00	1424.41	.17	.00	.00	1820.00	6.61	109.20
24.62	1.00	1430.70	1427.90	1417.80	2830.00	1425.41	.28	.00	.00	2830.00	7.61	109.20
24.62	1.00	1430.70	1427.90	1417.80	3310.00	1425.83	.34	.00	.00	3310.00	8.03	109.20
24.62	1.00	1430.70	1427.90	1417.80	4510.00	1426.77	.48	.00	.00	4510.00	8.97	109.20
24.62	1.00	1430.70	1427.90	1417.80	1080.00	1423.24	.10	.00	.00	1080.00	5.44	107.37
24.62	1.00	1430.70	1427.90	1417.80	3400.00	1425.87	.35	.00	.00	3400.00	8.07	109.20

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
24.63	45.00	0.00	0.00	1418.40	1820.00	1424.42	.21	.03	.02	1820.00	6.02	109.20
24.63	45.00	0.00	0.00	1418.40	2830.00	1425.42	.35	.04	.03	2830.00	7.02	109.20
24.63	45.00	0.00	0.00	1418.40	3310.00	1425.84	.41	.04	.04	3310.00	7.44	109.20
24.63	45.00	0.00	0.00	1418.40	4510.00	1426.78	.57	.05	.04	4510.00	8.38	109.20
24.63	45.00	0.00	0.00	1418.40	1080.00	1423.25	.14	.02	.02	1080.00	4.85	101.71
24.63	45.00	0.00	0.00	1418.40	3400.00	1425.88	.43	.04	.04	3400.00	7.48	109.20
24.63	1.00	0.00	0.00	1418.40	1820.00	1424.42	.21	.00	.00	1820.00	6.02	109.20
24.63	1.00	0.00	0.00	1418.40	2830.00	1425.42	.35	.00	.00	2830.00	7.02	109.20
24.63	1.00	0.00	0.00	1418.40	3310.00	1425.84	.41	.00	.00	3310.00	7.44	109.20
24.63	1.00	0.00	0.00	1418.40	4510.00	1426.78	.57	.00	.00	4510.00	8.38	109.20
24.63	1.00	0.00	0.00	1418.40	1080.00	1423.25	.14	.00	.00	1080.00	4.85	101.72
24.63	1.00	0.00	0.00	1418.40	3400.00	1425.88	.43	.00	.00	3400.00	7.48	109.20
24.64	56.00	0.00	0.00	1419.00	1820.00	1424.56	.16	.07	.02	1820.00	5.56	159.97
24.64	56.00	0.00	0.00	1419.00	2830.00	1425.66	.22	.08	.04	2815.22	6.66	221.00
24.64	56.00	0.00	0.00	1419.00	3310.00	1426.14	.24	.08	.05	3262.27	7.14	221.00
24.64	56.00	0.00	0.00	1419.00	4510.00	1427.23	.28	.08	.08	4343.27	8.23	221.00
24.64	56.00	0.00	0.00	1419.00	1080.00	1423.33	.13	.07	.00	1080.00	4.33	148.82
24.64	56.00	0.00	0.00	1419.00	3400.00	1426.19	.25	.08	.05	3347.23	7.19	221.00
24.89	1360.00	0.00	0.00	1419.50	1820.00	1426.67	.09	2.03	.02	1602.80	7.17	832.53
24.89	1360.00	0.00	0.00	1419.50	2830.00	1427.45	.06	1.58	.05	2042.49	7.95	991.18
24.89	1360.00	0.00	0.00	1419.50	3310.00	1427.78	.06	1.41	.05	2240.70	8.28	1008.48
24.89	1360.00	0.00	0.00	1419.50	4510.00	1428.61	.05	1.08	.07	2728.21	9.11	1051.59
24.89	1360.00	0.00	0.00	1419.50	1080.00	1425.81	.11	2.45	.01	1080.00	6.31	203.12
24.89	1360.00	0.00	0.00	1419.50	3400.00	1427.84	.06	1.40	.06	2280.35	8.34	1011.30
25.08	970.00	0.00	0.00	1420.00	1820.00	1427.42	.06	.70	.01	1060.74	7.42	539.31
25.08	970.00	0.00	0.00	1420.00	2830.00	1428.13	.08	.69	.01	1423.53	8.13	567.98
25.08	970.00	0.00	0.00	1420.00	3310.00	1428.43	.08	.66	.01	1570.48	8.43	575.63
25.08	970.00	0.00	0.00	1420.00	4510.00	1429.15	.10	.56	.02	1896.82	9.15	593.85
25.08	970.00	0.00	0.00	1420.00	1080.00	1426.56	.05	.68	.02	781.27	6.56	501.79
25.08	970.00	0.00	0.00	1420.00	3400.00	1428.48	.09	.65	.01	1597.68	8.48	576.96
25.12	220.00	0.00	0.00	1421.50	1820.00	1427.47	.30	.17	.12	1570.44	5.97	466.49
25.12	220.00	0.00	0.00	1421.50	2830.00	1428.22	.31	.20	.11	2004.36	6.72	508.51
25.12	220.00	0.00	0.00	1421.50	3310.00	1428.53	.30	.21	.11	2169.66	7.03	522.19
25.12	220.00	0.00	0.00	1421.50	4510.00	1429.27	.28	.21	.09	2506.05	7.77	555.32
25.12	220.00	0.00	0.00	1421.50	1080.00	1426.63	.22	.15	.09	1049.63	5.13	194.48
25.12	220.00	0.00	0.00	1421.50	3400.00	1428.58	.30	.21	.11	2199.41	7.08	524.62
25.17	250.00	0.00	0.00	1423.00	1820.00	1428.09	.36	.65	.03	1740.60	5.09	147.81
25.17	250.00	0.00	0.00	1423.00	2830.00	1428.83	.55	.73	.12	2627.93	5.83	169.88
25.17	250.00	0.00	0.00	1423.00	3310.00	1429.11	.64	.75	.17	3036.97	6.11	178.33
25.17	250.00	0.00	0.00	1423.00	4510.00	1429.73	.85	.75	.28	4026.67	6.73	197.03
25.17	250.00	0.00	0.00	1423.00	1080.00	1427.18	.24	.56	.01	1063.81	4.18	120.52
25.17	250.00	0.00	0.00	1423.00	3400.00	1429.16	.66	.75	.18	3112.89	6.16	179.82

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
25.24	400.00	0.00	0.00	1424.80	1820.00	1429.55	.45	1.50	.05	1762.22	4.75	137.50
25.24	400.00	0.00	0.00	1424.80	2830.00	1430.55	.58	1.73	.01	2637.21	5.75	167.35
25.24	400.00	0.00	0.00	1424.80	3310.00	1430.95	.63	1.82	.00	3032.56	6.15	179.35
25.24	400.00	0.00	0.00	1424.80	4510.00	1431.89	.70	1.96	.04	3949.40	7.09	208.60
25.24	400.00	0.00	0.00	1424.80	1080.00	1428.56	.33	1.42	.05	1073.79	3.76	107.56
25.24	400.00	0.00	0.00	1424.80	3400.00	1431.02	.64	1.83	.01	3105.06	6.22	181.57
25.32	400.00	0.00	0.00	1426.60	1820.00	1431.50	.58	2.02	.07	1749.07	4.90	134.62
25.32	400.00	0.00	0.00	1426.60	2830.00	1432.49	.73	2.02	.07	2521.00	5.89	169.17
25.32	400.00	0.00	0.00	1426.60	3310.00	1432.88	.78	2.01	.07	2846.49	6.28	177.19
25.32	400.00	0.00	0.00	1426.60	4510.00	1433.76	.87	1.96	.08	3601.44	7.16	195.09
25.32	400.00	0.00	0.00	1426.60	1080.00	1430.53	.40	2.01	.03	1075.88	3.93	90.20
25.32	400.00	0.00	0.00	1426.60	3400.00	1432.95	.78	2.01	.07	2905.85	6.35	178.62
25.37	275.00	0.00	0.00	1428.90	1820.00	1433.36	.78	1.95	.10	1785.92	4.46	112.74
25.37	275.00	0.00	0.00	1428.90	2830.00	1434.29	1.02	1.95	.15	2637.67	5.39	158.85
25.37	275.00	0.00	0.00	1428.90	3310.00	1434.66	1.09	1.93	.16	2984.63	5.76	166.45
25.37	275.00	0.00	0.00	1428.90	4510.00	1435.45	1.22	1.87	.18	3787.52	6.55	182.74
25.37	275.00	0.00	0.00	1428.90	1080.00	1432.36	.55	1.91	.08	1080.00	3.46	71.26
25.37	275.00	0.00	0.00	1428.90	3400.00	1434.72	1.10	1.92	.16	3047.72	5.82	167.77
25.39	105.00	0.00	0.00	1429.70	1820.00	1434.40	1.02	1.16	.12	1820.00	4.70	74.65
25.39	105.00	0.00	0.00	1429.70	2830.00	1435.31	1.42	1.21	.20	2830.00	5.61	82.14
25.39	105.00	0.00	0.00	1429.70	3310.00	1435.62	1.64	1.24	.28	3309.73	5.92	90.96
25.39	105.00	0.00	0.00	1429.70	4510.00	1436.47	1.96	1.19	0.00	4459.29	6.77	133.28
25.39	105.00	0.00	0.00	1429.70	1080.00	1433.45	.73	1.18	.09	1080.00	3.75	66.85
25.39	105.00	0.00	0.00	1429.70	3400.00	1435.67	1.66	1.24	.29	3399.38	5.97	92.57
25.40	32.00	0.00	0.00	1430.00	1820.00	1434.85	1.03	.46	.01	1820.00	4.85	74.70
25.40	32.00	0.00	0.00	1430.00	2830.00	1435.93	1.30	.47	.04	2830.00	5.93	83.87
25.40	32.00	0.00	0.00	1430.00	3310.00	1436.43	1.38	.47	.08	3310.00	6.43	87.92
25.40	32.00	0.00	0.00	1430.00	4510.00	1437.25	1.73	.46	.07	4485.58	7.25	126.21
25.40	32.00	0.00	0.00	1430.00	1080.00	1433.89	.75	.45	.01	1080.00	3.89	63.98
25.40	32.00	0.00	0.00	1430.00	3400.00	1436.54	1.38	.47	.09	3400.00	6.54	90.14
25.40	18.00	0.00	0.00	1430.10	1820.00	1435.20	.95	.25	.02	1820.00	5.10	75.83
25.40	18.00	0.00	0.00	1430.10	2830.00	1436.26	1.24	.24	.02	2830.00	6.16	84.60
25.40	18.00	0.00	0.00	1430.10	3310.00	1436.70	1.35	.23	.01	3310.00	6.60	88.26
25.40	18.00	0.00	0.00	1430.10	4510.00	1437.51	1.71	.24	.00	4501.48	7.41	117.47
25.40	18.00	0.00	0.00	1430.10	1080.00	1434.18	.70	.23	.01	1080.00	4.08	61.45
25.40	18.00	0.00	0.00	1430.10	3400.00	1436.80	1.36	.23	.01	3400.00	6.70	89.10
25.41	51.00	0.00	0.00	1430.60	1820.00	1435.84	.94	.62	.01	1820.00	5.24	68.85
25.41	51.00	0.00	0.00	1430.60	2830.00	1436.93	1.22	.65	.01	2830.00	6.33	83.87
25.41	51.00	0.00	0.00	1430.60	3310.00	1437.36	1.35	.65	.00	3310.00	6.76	87.71
25.41	51.00	0.00	0.00	1430.60	4510.00	1438.33	1.59	.67	.04	4510.00	7.73	96.42
25.41	51.00	0.00	0.00	1430.60	1080.00	1434.77	.63	.50	.02	1080.00	4.17	52.64
25.41	51.00	0.00	0.00	1430.60	3400.00	1437.44	1.36	.65	.00	3400.00	6.84	88.49

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
25.42	35.00	0.00	0.00	1430.90	1820.00	1436.27	.88	.36	.02	1820.00	5.37	63.78
25.42	35.00	0.00	0.00	1430.90	2830.00	1437.38	1.20	.42	.01	2830.00	6.48	79.94
25.42	35.00	0.00	0.00	1430.90	3310.00	1437.81	1.33	.44	.00	3310.00	6.91	85.59
25.42	35.00	0.00	0.00	1430.90	4510.00	1438.78	1.60	.44	.00	4510.00	7.88	95.50
25.42	35.00	0.00	0.00	1430.90	1080.00	1435.08	.59	.26	.01	1080.00	4.18	47.95
25.42	35.00	0.00	0.00	1430.90	3400.00	1437.89	1.35	.44	.00	3400.00	6.99	86.64
25.42	17.00	0.00	0.00	1431.00	1820.00	1436.48	.63	.15	.01	1820.00	5.48	61.69
25.42	17.00	0.00	0.00	1431.00	2830.00	1437.61	1.17	.19	.01	2830.00	6.61	77.00
25.42	17.00	0.00	0.00	1431.00	3310.00	1438.11	1.26	.20	.02	3310.00	7.11	84.51
25.42	17.00	0.00	0.00	1431.00	4510.00	1439.06	1.54	.21	.02	4510.00	8.06	95.15
25.42	17.00	0.00	0.00	1431.00	1080.00	1435.24	.55	.11	.01	1080.00	4.24	48.68
25.42	17.00	0.00	0.00	1431.00	3400.00	1438.17	1.29	.20	.02	3400.00	7.17	85.36
25.42	17.00	0.00	0.00	1431.20	1820.00	1436.61	.85	.14	.01	1820.00	5.41	57.26
25.42	17.00	0.00	0.00	1431.20	2830.00	1437.78	1.20	.18	.01	2830.00	6.58	73.15
25.42	17.00	0.00	0.00	1431.20	3310.00	1438.27	1.31	.19	.03	3310.00	7.07	79.74
25.42	17.00	0.00	0.00	1431.20	4510.00	1439.24	1.61	.21	.04	4510.00	8.04	92.73
25.42	17.00	0.00	0.00	1431.20	1080.00	1435.34	.55	.10	.00	1080.00	4.14	47.77
25.42	17.00	0.00	0.00	1431.20	3400.00	1438.34	1.34	.19	.03	3400.00	7.14	80.69
25.43	14.00	0.00	0.00	1431.30	1820.00	1436.74	.84	.11	.00	1820.00	5.44	61.92
25.43	14.00	0.00	0.00	1431.30	2830.00	1438.13	1.03	.14	.05	2830.00	6.83	80.48
25.43	14.00	0.00	0.00	1431.30	3310.00	1438.71	1.09	.14	.07	3310.00	7.41	88.00
25.43	14.00	0.00	0.00	1431.30	4510.00	1439.85	1.25	.15	.11	4510.00	8.55	99.48
25.43	14.00	0.00	0.00	1431.30	1080.00	1435.41	.58	.09	.02	1080.00	4.11	49.08
25.43	14.00	0.00	0.00	1431.30	3400.00	1438.80	1.10	.14	.07	3400.00	7.50	89.19
25.43	14.00	0.00	0.00	1431.40	1820.00	1436.86	.84	.12	.00	1820.00	5.46	64.90
25.43	14.00	0.00	0.00	1431.40	2830.00	1438.33	.97	.12	.02	2830.00	6.93	84.26
25.43	14.00	0.00	0.00	1431.40	3310.00	1438.93	1.01	.12	.02	3310.00	7.53	90.71
25.43	14.00	0.00	0.00	1431.40	4510.00	1440.09	1.16	.12	.03	4510.00	8.69	101.46
25.43	14.00	0.00	0.00	1431.40	1080.00	1435.49	.62	.10	.02	1080.00	4.09	48.95
25.43	14.00	0.00	0.00	1431.40	3400.00	1439.02	1.02	.12	.02	3400.00	7.62	91.59
25.43	28.00	0.00	0.00	1431.70	1820.00	1437.17	.80	.25	.01	1820.00	5.47	71.96
25.43	28.00	0.00	0.00	1431.70	2830.00	1438.67	.89	.23	.02	2830.00	6.97	87.63
25.43	28.00	0.00	0.00	1431.70	3310.00	1439.25	.94	.22	.02	3310.00	7.55	92.81
25.43	28.00	0.00	0.00	1431.70	4510.00	1440.39	1.09	.22	.02	4510.00	8.69	102.79
25.43	28.00	0.00	0.00	1431.70	1080.00	1435.69	.70	.24	.04	1080.00	3.99	53.01
25.43	28.00	0.00	0.00	1431.70	3400.00	1439.34	.95	.22	.02	3400.00	7.64	93.66
25.44	56.00	0.00	0.00	1432.30	1820.00	1437.80	.66	.46	.04	1820.00	5.50	78.29
25.44	56.00	0.00	0.00	1432.30	2830.00	1439.20	.79	.40	.03	2830.00	6.90	90.08
25.44	56.00	0.00	0.00	1432.30	3310.00	1439.75	.85	.39	.03	3310.00	7.45	94.52
25.44	56.00	0.00	0.00	1432.30	4510.00	1440.89	1.01	.39	.03	4510.00	8.59	103.65
25.44	56.00	0.00	0.00	1432.30	1080.00	1436.39	.58	.56	.04	1080.00	4.09	68.75
25.44	56.00	0.00	0.00	1432.30	3400.00	1439.84	.86	.39	.03	3400.00	7.54	95.27

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
25.47	113.00	0.00	0.00	1433.40	1820.00	1438.67	.53	.69	.04	1820.00	5.27	79.41
25.47	113.00	0.00	0.00	1433.40	2830.00	1439.99	.69	.67	.03	2830.00	6.59	89.48
25.47	113.00	0.00	0.00	1433.40	3310.00	1440.53	.76	.66	.03	3310.00	7.13	93.60
25.47	113.00	0.00	0.00	1433.40	4510.00	1441.66	.93	.67	.02	4510.00	8.26	102.17
25.47	113.00	0.00	0.00	1433.40	1080.00	1437.43	.38	.77	.06	1080.00	4.03	70.07
25.47	113.00	0.00	0.00	1433.40	3400.00	1440.62	.77	.66	.03	3400.00	7.22	94.30
25.51	225.00	0.00	0.00	1435.50	1820.00	1440.09	.88	1.60	.17	1820.00	4.59	70.61
25.51	225.00	0.00	0.00	1435.50	2830.00	1441.36	1.09	1.57	.20	2830.00	5.86	78.90
25.51	225.00	0.00	0.00	1435.50	3310.00	1441.88	1.18	1.56	.21	3310.00	6.38	82.21
25.51	225.00	0.00	0.00	1435.50	4510.00	1443.01	1.39	1.57	.23	4510.00	7.51	89.60
25.51	225.00	0.00	0.00	1435.50	1080.00	1438.91	.67	1.62	.15	1080.00	3.41	62.98
25.51	225.00	0.00	0.00	1435.50	3400.00	1441.97	1.20	1.56	.21	3400.00	6.47	82.82
25.55	200.00	0.00	0.00	1437.50	1820.00	1442.13	.86	2.01	.01	1820.00	4.63	70.86
25.55	200.00	0.00	0.00	1437.50	2830.00	1443.29	1.13	1.95	.02	2830.00	5.79	78.44
25.55	200.00	0.00	0.00	1437.50	3310.00	1443.78	1.23	1.93	.02	3310.00	6.28	81.63
25.55	200.00	0.00	0.00	1437.50	4510.00	1444.86	1.47	1.90	.04	4510.00	7.36	88.64
25.55	200.00	0.00	0.00	1437.50	1080.00	1441.08	.60	2.07	.02	1080.00	3.58	64.05
25.55	200.00	0.00	0.00	1437.50	3400.00	1443.87	1.25	1.93	.03	3400.00	6.37	82.20
25.57	140.00	0.00	0.00	1439.00	1820.00	1443.47	.97	1.40	.06	1820.00	4.47	60.29
25.57	140.00	0.00	0.00	1439.00	2830.00	1444.63	1.35	1.45	.11	2830.00	5.63	64.58
25.57	140.00	0.00	0.00	1439.00	3310.00	1445.10	1.52	1.47	.15	3310.00	6.10	66.33
25.57	140.00	0.00	0.00	1439.00	4510.00	1446.14	1.93	1.51	.23	4510.00	7.14	70.14
25.57	140.00	0.00	0.00	1439.00	1080.00	1442.37	.65	1.32	.03	1080.00	3.37	56.25
25.57	140.00	0.00	0.00	1439.00	3400.00	1445.19	1.56	1.47	.15	3400.00	6.19	66.64
25.64	350.00	0.00	0.00	1442.20	1820.00	1446.95	.91	3.40	.02	1820.00	4.75	62.65
25.64	350.00	0.00	0.00	1442.20	2830.00	1446.26	1.19	3.41	.05	2821.79	6.06	77.70
25.64	350.00	0.00	0.00	1442.20	3310.00	1448.81	1.30	3.41	.07	3283.76	6.61	85.15
25.64	350.00	0.00	0.00	1442.20	4510.00	1450.06	1.48	3.34	.13	4381.87	7.86	102.81
25.64	350.00	0.00	0.00	1442.20	1080.00	1445.74	.66	3.38	.00	1080.00	3.54	57.27
25.64	350.00	0.00	0.00	1442.20	3400.00	1448.90	1.31	3.40	.07	3368.67	6.70	86.63
25.66	100.00	0.00	0.00	1443.10	1820.00	1447.91	.87	.91	.01	1811.41	4.81	79.18
25.66	100.00	0.00	0.00	1443.10	2830.00	1449.28	1.02	.81	.05	2715.29	6.18	109.18
25.66	100.00	0.00	0.00	1443.10	3310.00	1449.94	1.00	.75	.09	3074.64	6.84	118.54
25.66	100.00	0.00	0.00	1443.10	4510.00	1451.35	.98	.63	.15	3911.44	8.25	138.22
25.66	100.00	0.00	0.00	1443.10	1080.00	1446.75	.63	.96	.01	1080.00	3.65	59.22
25.66	100.00	0.00	0.00	1443.10	3400.00	1450.04	1.00	.74	.09	3142.83	6.94	119.94
25.67	50.00	0.00	0.00	1443.50	1820.00	1448.44	.78	.42	.03	1770.39	4.94	101.15
25.67	50.00	0.00	0.00	1443.50	2830.00	1449.93	.77	.32	.08	2522.83	6.43	125.95
25.67	50.00	0.00	0.00	1443.50	3310.00	1450.51	.78	.29	.06	2850.59	7.01	134.07
25.67	50.00	0.00	0.00	1443.50	4510.00	1451.82	.80	.24	.05	3614.64	8.32	152.36
25.67	50.00	0.00	0.00	1443.50	1080.00	1447.23	.61	.46	.01	1079.60	3.73	66.29
25.67	50.00	0.00	0.00	1443.50	3400.00	1450.61	.79	.29	.06	2911.38	7.11	135.45

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
25.68	50.00	0.00	0.00	1444.00	1820.00	1448.98	.64	.36	.04	1663.40	4.98	145.66
25.68	50.00	0.00	0.00	1444.00	2830.00	1450.47	.55	.25	.07	2236.97	6.47	154.53
25.68	50.00	0.00	0.00	1444.00	3310.00	1451.05	.55	.23	.07	2502.23	7.05	157.79
25.68	50.00	0.00	0.00	1444.00	4510.00	1452.32	.56	.19	.07	3151.86	8.32	164.94
25.68	50.00	0.00	0.00	1444.00	1080.00	1447.69	.60	.45	.00	1069.05	3.69	88.65
25.68	50.00	0.00	0.00	1444.00	3400.00	1451.14	.55	.22	.07	2552.37	7.14	158.35
25.74	320.00	0.00	0.00	1447.00	1820.00	1451.74	.58	2.68	.02	1820.00	4.74	134.97
25.74	320.00	0.00	0.00	1447.00	2830.00	1452.40	.80	2.06	.12	2830.00	5.40	148.54
25.74	320.00	0.00	0.00	1447.00	3310.00	1452.75	.85	1.85	.15	3310.00	5.75	150.49
25.74	320.00	0.00	0.00	1447.00	4510.00	1453.65	.93	1.51	.18	4510.00	6.65	155.53
25.74	320.00	0.00	0.00	1447.00	1080.00	1450.94	.43	3.02	.05	1080.00	3.94	99.84
25.74	320.00	0.00	0.00	1447.00	3400.00	1452.81	.86	1.83	.16	3400.00	5.81	150.86
25.88	750.00	0.00	0.00	1452.00	1820.00	1457.75	.52	5.93	.02	1820.00	5.75	87.13
25.88	750.00	0.00	0.00	1452.00	2830.00	1458.90	.70	6.37	.03	2830.00	6.90	96.92
25.88	750.00	0.00	0.00	1452.00	3310.00	1459.27	.82	6.47	.01	3310.00	7.27	99.98
25.88	750.00	0.00	0.00	1452.00	4510.00	1460.01	1.11	6.46	.09	4510.00	8.01	106.37
25.88	750.00	0.00	0.00	1452.00	1080.00	1456.57	.38	5.57	.01	1080.00	4.57	77.01
25.88	750.00	0.00	0.00	1452.00	3400.00	1459.33	.44	6.49	.01	3400.00	7.33	100.51
26.02	750.00	0.00	0.00	1454.50	1820.00	1460.82	.27	2.74	.07	1670.77	6.32	178.58
26.02	750.00	0.00	0.00	1454.50	2830.00	1462.00	.32	2.60	.12	2392.96	7.50	207.77
26.02	750.00	0.00	0.00	1454.50	3310.00	1462.50	.33	2.60	.15	2710.00	8.00	220.04
26.02	750.00	0.00	0.00	1454.50	4510.00	1463.59	.37	2.62	.22	3456.66	9.09	246.94
26.02	750.00	0.00	0.00	1454.50	1080.00	1459.57	.22	2.80	.05	1061.38	5.07	120.63
26.02	750.00	0.00	0.00	1454.50	3400.00	1462.59	.33	2.60	.15	2767.97	8.09	222.24
26.16	750.00	0.00	0.00	1456.00	1820.00	1462.62	.23	1.75	.01	1665.72	6.62	182.87
26.16	750.00	0.00	0.00	1456.00	2830.00	1463.71	.30	1.68	.01	2407.05	7.71	208.80
26.16	750.00	0.00	0.00	1456.00	3310.00	1464.15	.32	1.64	.00	2735.65	8.15	219.54
26.16	750.00	0.00	0.00	1456.00	4510.00	1465.16	.37	1.57	.00	3508.85	9.16	243.58
26.16	750.00	0.00	0.00	1456.00	1080.00	1461.38	.19	1.77	.01	1061.11	5.38	129.95
26.16	750.00	0.00	0.00	1456.00	3400.00	1464.24	.33	1.64	.00	2795.90	8.24	221.47
26.23	350.00	0.00	0.00	1457.00	1820.00	1463.34	.16	.62	.02	1820.00	6.34	171.79
26.23	350.00	0.00	0.00	1457.00	2830.00	1464.45	.20	.62	.03	2827.29	7.45	217.72
26.23	350.00	0.00	0.00	1457.00	3310.00	1464.90	.22	.62	.03	3293.13	7.90	248.25
26.23	350.00	0.00	0.00	1457.00	4510.00	1465.89	.26	.58	.04	4377.44	8.89	357.05
26.23	350.00	0.00	0.00	1457.00	1080.00	1462.12	.12	.65	.02	1080.00	5.12	143.73
26.23	350.00	0.00	0.00	1457.00	3400.00	1464.98	.23	.62	.03	3378.84	7.98	253.73
26.27	200.00	0.00	0.00	1457.00	1820.00	1463.62	.17	.29	.00	1778.01	6.62	169.11
26.27	200.00	0.00	0.00	1457.00	2830.00	1464.74	.22	.30	.01	2699.13	7.74	195.52
26.27	200.00	0.00	0.00	1457.00	3310.00	1465.18	.25	.29	.01	3114.27	8.18	216.15
26.27	200.00	0.00	0.00	1457.00	4510.00	1466.15	.29	.28	.02	4099.60	9.15	261.00
26.27	200.00	0.00	0.00	1457.00	1080.00	1462.44	.13	.32	.00	1074.09	5.44	148.28
26.27	200.00	0.00	0.00	1457.00	3400.00	1465.26	.25	.29	.01	3190.72	8.26	219.85

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	C.SEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
26.30	180.00	0.00	0.00	1458.90	1820.00	1463.89	.35	.36	.09	1652.10	4.99	163.53
26.30	180.00	0.00	0.00	1458.90	2830.00	1465.01	.35	.35	.08	2306.05	6.11	220.48
26.30	180.00	0.00	0.00	1458.90	3310.00	1465.45	.36	.34	.07	2575.18	6.55	240.20
26.30	180.00	0.00	0.00	1458.90	4510.00	1466.42	.39	.32	.05	3190.25	7.52	306.83
26.30	180.00	0.00	0.00	1458.90	1080.00	1462.76	.30	.41	.09	1059.55	3.86	113.89
26.30	180.00	0.00	0.00	1458.90	3400.00	1465.53	.38	.34	.07	2623.95	6.63	243.72
26.31	20.00	0.00	0.00	1459.00	1820.00	1463.92	.43	.07	.04	1671.73	4.92	163.69
26.31	20.00	0.00	0.00	1459.00	2830.00	1465.02	.47	.06	.05	2358.92	6.02	216.36
26.31	20.00	0.00	0.00	1459.00	3310.00	1465.46	.49	.06	.05	2650.24	6.46	241.67
26.31	20.00	0.00	0.00	1459.00	4510.00	1466.43	.48	.05	.04	3253.06	7.43	307.59
26.31	20.00	0.00	0.00	1459.00	1080.00	1462.81	.36	.08	.03	1064.23	3.81	110.21
26.31	20.00	0.00	0.00	1459.00	3400.00	1465.54	.49	.06	.05	2703.10	6.54	246.67
26.33	129.00	0.00	0.00	1459.20	1820.00	1464.52	.31	.44	.03	1600.23	5.32	182.48
26.33	129.00	0.00	0.00	1459.20	2830.00	1465.59	.35	.42	.04	2237.77	6.39	237.22
26.33	129.00	0.00	0.00	1459.20	3310.00	1466.01	.37	.40	.03	2513.17	6.81	263.63
26.33	129.00	0.00	0.00	1459.20	4510.00	1466.91	.36	.34	.03	3050.90	7.71	328.48
26.33	129.00	0.00	0.00	1459.20	1080.00	1463.42	.26	.43	.03	1039.56	4.22	129.62
26.33	129.00	0.00	0.00	1459.20	3400.00	1466.08	.37	.39	.03	2562.53	6.88	268.34
26.33	1.00	0.00	0.00	1459.20	1615.00	1464.52	1.36	.01	.54	1615.00	5.32	37.00
26.33	1.00	0.00	0.00	1459.20	1785.00	1465.59	1.11	.00	.38	1785.00	6.39	38.63
26.33	1.00	0.00	0.00	1459.20	1830.00	1466.01	1.00	.00	.32	1830.00	6.81	39.27
26.33	1.00	0.00	0.00	1459.20	1890.00	1466.91	.80	.00	.21	1890.00	7.71	40.63
26.33	1.00	0.00	0.00	1459.20	1080.00	1463.42	1.05	.01	.40	1080.00	4.22	35.33
26.33	1.00	0.00	0.00	1459.20	1840.00	1466.08	.99	.00	.31	1840.00	6.88	39.37
26.37	200.00	0.00	0.00	1459.60	1615.00	1466.86	.67	1.42	.21	1615.00	7.26	39.96
26.37	200.00	0.00	0.00	1459.60	1785.00	1467.30	.71	1.20	.12	1785.00	7.70	40.63
26.37	200.00	0.00	0.00	1459.60	1830.00	1467.49	.71	1.10	.09	1830.00	7.89	40.91
26.37	200.00	0.00	0.00	1459.60	1890.00	1467.95	.66	.86	.04	1889.90	8.35	44.29
26.37	200.00	0.00	0.00	1459.60	1080.00	1465.48	.49	1.33	.17	1080.00	5.88	37.85
26.37	200.00	0.00	0.00	1459.60	1840.00	1467.53	.71	1.08	.08	1840.00	7.93	40.93
26.38	44.00	0.00	0.00	1459.50	1615.00	1467.05	.69	.20	.01	1615.00	7.55	34.60
26.38	44.00	0.00	0.00	1459.50	1785.00	1467.48	.75	.20	.02	1785.00	7.98	34.60
26.38	44.00	0.00	0.00	1459.50	1830.00	1467.66	.75	.20	.02	1830.00	8.16	34.60
26.38	44.00	0.00	0.00	1459.50	1890.00	1468.10	.72	.17	.03	1890.00	8.60	34.60
26.38	44.00	0.00	0.00	1459.50	1080.00	1465.67	.48	.18	.00	1080.00	6.17	34.60
26.38	44.00	0.00	0.00	1459.50	1840.00	1467.70	.75	.19	.02	1840.00	8.20	34.60
26.38	1.00	0.00	0.00	1459.50	1615.00	1467.06	.69	.00	.00	1615.00	7.56	34.60
26.38	1.00	0.00	0.00	1459.50	1785.00	1467.49	.75	.00	.00	1785.00	7.99	34.60
26.38	1.00	0.00	0.00	1459.50	1830.00	1467.67	.75	.00	.00	1830.00	8.17	34.60
26.38	1.00	0.00	0.00	1459.50	1890.00	1468.10	.72	.00	.00	1890.00	8.60	34.60
26.38	1.00	0.00	0.00	1459.50	1080.00	1465.68	.48	.00	.00	1080.00	6.18	34.60
26.38	1.00	0.00	0.00	1459.50	1840.00	1467.70	.75	.00	.00	1840.00	8.20	34.60

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
26.38	30.00	1469.10	1467.50	1459.50	1615.00	1467.47	.62	.34	0.00	1615.00	7.97	34.60
26.38	30.00	1469.10	1467.50	1459.50	1785.00	1468.11	.64	.51	0.00	1785.00	8.61	34.60
26.38	30.00	1469.10	1467.50	1459.50	1830.00	1468.36	.63	.57	0.00	1830.00	8.86	34.60
26.38	30.00	1469.10	1467.50	1459.50	1890.00	1468.90	.59	.67	0.00	1890.00	9.40	34.60
26.38	30.00	1469.10	1467.50	1459.50	1080.00	1465.78	.46	.08	.01	1080.00	6.28	34.60
26.38	30.00	1469.10	1467.50	1459.50	1840.00	1468.41	.63	.58	0.00	1840.00	8.91	34.60
26.38	1.00	0.00	0.00	1459.50	1615.00	1467.47	.62	.00	.00	1615.00	7.97	34.60
26.38	1.00	0.00	0.00	1459.50	1735.00	1468.11	.64	.00	.00	1785.00	8.61	34.60
26.38	1.00	0.00	0.00	1459.50	1830.00	1468.36	.63	.00	.00	1830.00	8.86	34.60
26.38	1.00	0.00	0.00	1459.50	1890.00	1468.90	.59	.00	.00	1890.00	9.40	34.60
26.38	1.00	0.00	0.00	1459.50	1080.00	1465.78	.46	.00	.00	1080.00	6.28	34.60
26.38	1.00	0.00	0.00	1459.50	1840.00	1468.41	.63	.00	.00	1840.00	8.91	34.60
26.40	84.00	0.00	0.00	1459.20	1820.00	1468.13	.22	.14	.12	1657.95	8.93	297.87
26.40	84.00	0.00	0.00	1459.20	2830.00	1468.66	.35	.13	.09	2362.45	9.46	298.92
26.40	84.00	0.00	0.00	1459.20	3310.00	1468.83	.42	.19	.06	2682.00	9.63	299.28
26.40	84.00	0.00	0.00	1459.20	4510.00	1469.13	.52	.24	.02	3485.84	9.93	299.85
26.40	84.00	0.00	0.00	1459.20	1080.00	1466.28	.20	.15	.08	1080.00	7.08	59.97
26.40	84.00	0.00	0.00	1459.20	3400.00	1468.87	.43	.20	.06	2736.79	9.67	299.36
26.41	90.00	0.00	0.00	1460.20	1820.00	1468.36	.09	.06	.04	1462.57	8.16	289.20
26.41	90.00	0.00	0.00	1460.20	2830.00	1469.02	.14	.09	.06	2098.77	8.82	297.24
26.41	90.00	0.00	0.00	1460.20	3310.00	1469.26	.17	.11	.07	2392.03	9.06	302.56
26.41	90.00	0.00	0.00	1460.20	4510.00	1469.78	.24	.15	.12	3092.23	9.58	314.18
26.41	90.00	0.00	0.00	1460.20	1080.00	1466.47	.11	.08	.02	1073.47	6.27	172.89
26.41	90.00	0.00	0.00	1460.20	3400.00	1469.31	.17	.11	.08	2444.21	9.11	303.67
26.45	200.00	0.00	0.00	1461.20	1820.00	1468.43	.21	.13	.06	1701.30	7.23	126.64
26.45	200.00	0.00	0.00	1461.20	2830.00	1469.11	.38	.20	.12	2575.48	7.91	133.00
26.45	200.00	0.00	0.00	1461.20	3310.00	1469.35	.47	.23	.15	2982.50	8.15	133.00
26.45	200.00	0.00	0.00	1461.20	4510.00	1469.86	.71	.32	.24	3981.02	8.66	133.00
26.45	200.00	0.00	0.00	1461.20	1080.00	1466.63	.17	.19	.03	1070.43	5.43	102.52
26.45	200.00	0.00	0.00	1461.20	3400.00	1469.40	.48	.24	.15	3057.45	8.20	133.00
26.46	40.00	0.00	0.00	1460.70	1820.00	1468.51	.17	.03	.01	1809.51	7.81	97.06
26.46	40.00	0.00	0.00	1460.70	2830.00	1469.22	.32	.05	.02	2795.47	8.52	99.90
26.46	40.00	0.00	0.00	1460.70	3310.00	1469.43	.41	.06	.02	3261.27	8.78	100.91
26.46	40.00	0.00	0.00	1460.70	4510.00	1470.01	.66	.09	.01	4418.80	9.31	103.05
26.46	40.00	0.00	0.00	1460.70	1080.00	1466.74	.11	.03	.02	1080.00	6.04	76.99
26.46	40.00	0.00	0.00	1460.70	3400.00	1469.53	.43	.06	.02	3348.21	8.83	101.12
26.47	50.00	0.00	0.00	1460.60	1820.00	1468.59	.13	.03	.01	1820.00	7.99	90.00
26.47	50.00	0.00	0.00	1460.60	2830.00	1469.37	.25	.05	.02	2830.00	8.77	90.00
26.47	50.00	0.00	0.00	1460.60	3310.00	1469.66	.32	.06	.03	3310.00	9.06	90.00
26.47	50.00	0.00	0.00	1460.60	4510.00	1470.30	.51	.08	.05	4510.00	9.70	90.00
26.47	50.00	0.00	0.00	1460.60	1080.00	1466.80	.08	.02	.01	1080.00	6.20	90.00
26.47	50.00	0.00	0.00	1460.60	3400.00	1469.71	.33	.06	.03	3400.00	9.11	90.00

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
26.47	21.00	0.00	0.00	1461.00	1820.00	1468.59	.16	.01	.02	1820.00	7.59	80.00
26.47	21.00	0.00	0.00	1461.00	2830.00	1469.35	.32	.02	.04	2830.00	8.35	80.00
26.47	21.00	0.00	0.00	1461.00	3310.00	1469.64	.41	.03	.05	3310.00	8.64	80.00
26.47	21.00	0.00	0.00	1461.00	4510.00	1470.26	.56	.04	.07	4510.00	9.26	80.00
26.47	21.00	0.00	0.00	1461.00	1080.00	1466.80	.10	.01	.01	1080.00	5.80	80.00
26.47	21.00	0.00	0.00	1461.00	3400.00	1469.69	.43	.03	.05	3400.00	8.69	80.00
26.48	12.00	0.00	0.00	1461.20	1820.00	1468.58	.19	.01	.01	1820.00	7.38	75.00
26.48	12.00	0.00	0.00	1461.20	2830.00	1469.34	.37	.02	.03	2830.00	8.14	75.00
26.48	12.00	0.00	0.00	1461.20	3310.00	1469.63	.48	.02	.03	3310.00	8.43	75.00
26.48	12.00	0.00	0.00	1461.20	4510.00	1470.24	.76	.03	.05	4510.00	9.04	75.00
26.48	12.00	0.00	0.00	1461.20	1080.00	1466.80	.12	.01	.01	1080.00	5.60	75.00
26.48	12.00	0.00	0.00	1461.20	3400.00	1469.68	.49	.02	.03	3400.00	8.48	75.00
26.48	5.00	0.00	0.00	1461.30	1820.00	1468.58	.21	.00	.01	1820.00	7.28	72.00
26.48	5.00	0.00	0.00	1461.30	2830.00	1469.33	.41	.01	.02	2830.00	8.03	72.00
26.48	5.00	0.00	0.00	1461.30	3310.00	1469.61	.52	.01	.02	3310.00	8.31	72.00
26.48	5.00	0.00	0.00	1461.30	4510.00	1470.22	.83	.01	.04	4510.00	8.92	72.00
26.48	5.00	0.00	0.00	1461.30	1080.00	1466.80	.13	.00	.01	1080.00	5.50	72.00
26.48	5.00	0.00	0.00	1461.30	3400.00	1469.67	.54	.01	.02	3400.00	8.37	72.00
26.48	5.00	0.00	0.00	1461.40	1820.00	1468.32	.73	.01	.26	1820.00	6.92	50.00
26.48	5.00	0.00	0.00	1461.40	2830.00	1468.83	1.45	.02	.52	2830.00	7.43	70.00
26.48	5.00	0.00	0.00	1461.40	3310.00	1468.96	1.86	.02	.67	3310.00	7.56	70.00
26.48	5.00	0.00	0.00	1461.40	4510.00	1469.65	2.58	.03	0.00	4510.00	8.25	70.00
26.48	5.00	0.00	0.00	1461.40	1080.00	1466.58	.57	.01	.22	1080.00	5.18	50.00
26.48	5.00	0.00	0.00	1461.40	3400.00	1468.99	1.94	.02	.70	3400.00	7.59	70.00
26.48	17.00	0.00	0.00	1461.70	1820.00	1468.37	.81	.09	.04	1820.00	6.67	50.00
26.48	17.00	0.00	0.00	1461.70	2830.00	1468.95	1.57	.18	.06	2830.00	7.25	50.00
26.48	17.00	0.00	0.00	1461.70	3310.00	1469.20	1.92	.27	.03	3310.00	7.50	70.00
26.48	17.00	0.00	0.00	1461.70	4510.00	1469.99	2.55	.30	.01	4510.00	8.29	70.00
26.48	17.00	0.00	0.00	1461.70	1080.00	1466.65	.66	.11	.04	1080.00	4.95	50.00
26.48	17.00	0.00	0.00	1461.70	3400.00	1469.24	1.99	.27	.02	3400.00	7.54	70.00
26.48	18.00	0.00	0.00	1461.72	1820.00	1468.52	.77	.09	.01	1820.00	6.80	50.00
26.48	18.00	0.00	0.00	1461.72	2830.00	1469.66	1.16	.16	.12	2830.00	7.94	70.00
26.48	18.00	0.00	0.00	1461.72	3310.00	1470.31	1.22	.19	.21	3310.00	8.59	70.00
26.48	18.00	0.00	0.00	1461.72	4510.00	1471.57	1.48	.20	.32	4510.00	9.85	70.00
26.48	18.00	0.00	0.00	1461.72	1080.00	1466.86	.58	.12	.02	1080.00	5.14	50.00
26.48	18.00	0.00	0.00	1461.72	3400.00	1470.41	1.23	.20	.23	3400.00	8.69	70.00
26.49	10.00	0.00	0.00	1461.73	1820.00	1468.98	.44	.03	.10	1808.33	7.25	72.64
26.49	10.00	0.00	0.00	1461.73	2830.00	1470.37	.64	.04	.16	2771.82	8.64	80.00
26.49	10.00	0.00	0.00	1461.73	3310.00	1471.00	.71	.04	.15	3217.62	9.27	80.00
26.49	10.00	0.00	0.00	1461.73	4510.00	1472.37	.90	.04	.17	4316.82	10.64	80.00
26.49	10.00	0.00	0.00	1461.73	1080.00	1467.23	.33	.04	.08	1080.00	5.50	56.58
26.49	10.00	0.00	0.00	1461.73	3400.00	1471.11	.73	.04	.15	3300.75	9.38	80.00

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
26.49	10.00	0.00	0.00	1461.74	1820.00	1469.02	.43	.02	.00	1800.60	7.28	82.71
26.49	10.00	0.00	0.00	1461.74	2830.00	1470.46	.59	.03	.01	2722.35	8.72	90.00
26.49	10.00	0.00	0.00	1461.74	3310.00	1471.11	.65	.03	.02	3142.11	9.37	90.00
26.49	10.00	0.00	0.00	1461.74	4510.00	1472.54	.79	.03	.03	4171.61	10.80	90.00
26.49	10.00	0.00	0.00	1461.74	1080.00	1467.26	.33	.03	.00	1080.00	5.52	56.71
26.49	10.00	0.00	0.00	1461.74	3400.00	1471.23	.66	.03	.02	3220.24	9.49	90.00
26.49	20.00	0.00	0.00	1461.76	1820.00	1469.07	.42	.05	.00	1796.30	7.31	102.78
26.49	20.00	0.00	0.00	1461.76	2830.00	1470.59	.53	.05	.02	2646.00	8.83	110.00
26.49	20.00	0.00	0.00	1461.76	3310.00	1471.28	.56	.05	.03	3020.13	9.52	110.00
26.49	20.00	0.00	0.00	1461.76	4510.00	1472.78	.63	.04	.05	3929.65	11.02	110.00
26.49	20.00	0.00	0.00	1461.76	1080.00	1467.32	.32	.05	.00	1080.00	5.56	56.86
26.49	20.00	0.00	0.00	1461.76	3400.00	1471.40	.56	.05	.03	3089.53	9.64	110.00
26.50	42.00	0.00	0.00	1461.80	1820.00	1469.18	.41	.09	.00	1794.81	7.38	111.90
26.50	42.00	0.00	0.00	1461.80	2830.00	1470.76	.47	.09	.02	2572.27	8.96	152.00
26.50	42.00	0.00	0.00	1461.80	3310.00	1471.49	.46	.08	.03	2872.84	9.69	152.00
26.50	42.00	0.00	0.00	1461.80	4510.00	1473.07	.47	.07	.05	3593.01	11.27	152.00
26.50	42.00	0.00	0.00	1461.80	1080.00	1467.43	.31	.10	.00	1080.00	5.63	57.18
26.50	42.00	0.00	0.00	1461.80	3400.00	1471.61	.46	.08	.03	2928.20	9.81	152.00
26.56	320.00	0.00	0.00	1461.70	1820.00	1469.88	.19	.40	.07	1647.51	8.18	177.29
26.56	320.00	0.00	0.00	1461.70	2830.00	1471.47	.21	.38	.08	2250.98	9.77	200.00
26.56	320.00	0.00	0.00	1461.70	3310.00	1472.16	.21	.35	.07	2494.67	10.46	200.00
26.56	320.00	0.00	0.00	1461.70	4510.00	1473.69	.23	.31	.07	3067.33	11.99	200.00
26.56	320.00	0.00	0.00	1461.70	1080.00	1468.08	.16	.45	.05	1079.34	6.38	82.33
26.56	320.00	0.00	0.00	1461.70	3400.00	1472.28	.22	.35	.07	2539.58	10.58	200.00
26.60	220.00	0.00	0.00	1463.80	1820.00	1470.06	.33	.25	.07	1820.00	6.26	80.00
26.60	220.00	0.00	0.00	1463.80	2830.00	1471.59	.47	.25	.13	2830.00	7.79	80.00
26.60	220.00	0.00	0.00	1463.80	3310.00	1472.25	.53	.24	.16	3310.00	8.45	80.00
26.60	220.00	0.00	0.00	1463.80	4510.00	1473.70	.67	.23	.22	4510.00	9.90	80.00
26.60	220.00	0.00	0.00	1463.80	1080.00	1468.33	.27	.30	.06	1080.00	4.53	73.88
26.60	220.00	0.00	0.00	1463.80	3400.00	1472.36	.54	.24	.16	3400.00	8.56	80.00
26.61	30.00	0.00	0.00	1464.10	1820.00	1469.97	.65	.07	.16	1820.00	5.87	58.11
26.61	30.00	0.00	0.00	1464.10	2830.00	1471.44	.92	.08	.23	2830.00	7.34	58.85
26.61	30.00	0.00	0.00	1464.10	3310.00	1472.07	1.04	.08	.26	3310.00	7.97	59.17
26.61	30.00	0.00	0.00	1464.10	4510.00	1473.46	1.33	.08	.33	4510.00	9.36	60.89
26.61	30.00	0.00	0.00	1464.10	1080.00	1468.29	.53	.10	.13	1080.00	4.19	57.26
26.61	30.00	0.00	0.00	1464.10	3400.00	1472.18	1.07	.08	.26	3400.00	8.08	59.23
26.61	10.00	0.00	0.00	1464.20	1820.00	1469.92	.84	.04	.09	1820.00	5.72	52.64
26.61	10.00	0.00	0.00	1464.20	2830.00	1471.36	1.19	.05	.13	2830.00	7.16	53.10
26.61	10.00	0.00	0.00	1464.20	3310.00	1471.96	1.34	.05	.15	3310.00	7.76	53.29
26.61	10.00	0.00	0.00	1464.20	4510.00	1473.31	1.72	.05	.20	4510.00	9.11	53.72
26.61	10.00	0.00	0.00	1464.20	1080.00	1468.27	.69	.06	.08	1080.00	4.07	52.11
26.61	10.00	0.00	0.00	1464.20	3400.00	1472.07	1.37	.05	.15	3400.00	7.87	53.32

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
26.61	10.00	0.00	0.00	1464.30	1820.00	1469.85	1.11	.06	.14	1820.00	5.55	47.27
26.61	10.00	0.00	0.00	1464.30	2830.00	1471.22	1.58	.06	.20	2830.00	6.92	47.53
26.61	10.00	0.00	0.00	1464.30	3310.00	1471.60	1.79	.07	.23	3310.00	7.50	47.64
26.61	10.00	0.00	0.00	1464.30	4510.00	1473.08	2.32	.07	.30	4510.00	8.78	47.89
26.61	10.00	0.00	0.00	1464.30	1080.00	1468.23	.94	.08	.12	1080.00	3.93	46.96
26.61	10.00	0.00	0.00	1464.30	3400.00	1471.91	1.83	.07	.23	3400.00	7.61	47.66
26.61	4.00	0.00	0.00	1464.40	1820.00	1469.81	1.24	.03	.06	1820.00	5.41	46.00
26.61	4.00	0.00	0.00	1464.40	2830.00	1471.17	1.76	.03	.09	2830.00	6.77	46.00
26.61	4.00	0.00	0.00	1464.40	3310.00	1471.74	1.99	.03	.10	3310.00	7.34	46.00
26.61	4.00	0.00	0.00	1464.40	4510.00	1472.99	2.58	.04	.13	4510.00	8.59	46.00
26.61	4.00	0.00	0.00	1464.40	1080.00	1468.21	1.08	.05	.07	1080.00	3.81	46.00
26.61	4.00	0.00	0.00	1464.40	3400.00	1471.84	2.04	.04	.10	3400.00	7.44	46.00
26.61	1.00	0.00	0.00	1464.40	1820.00	1469.83	1.24	.01	.00	1820.00	5.43	46.00
26.61	1.00	0.00	0.00	1464.40	2830.00	1471.18	1.75	.01	.00	2830.00	6.78	46.00
26.61	1.00	0.00	0.00	1464.40	3310.00	1471.75	1.99	.01	.00	3310.00	7.36	46.00
26.61	1.00	0.00	0.00	1464.40	4510.00	1473.01	2.58	.01	.00	4510.00	8.61	46.00
26.61	1.00	0.00	0.00	1464.40	1080.00	1468.30	1.02	.01	.02	1080.00	3.90	46.00
26.61	1.00	0.00	0.00	1464.40	3400.00	1471.86	2.03	.01	.00	3400.00	7.46	46.00
26.63	70.00	1476.00	1472.10	1465.10	1820.00	1470.43	1.29	.63	.03	1820.00	5.33	46.00
26.63	70.00	1476.00	1472.10	1465.10	2830.00	1473.46	1.06	1.60	0.00	2830.00	8.36	46.00
26.63	70.00	1476.00	1472.10	1465.10	3310.00	1475.35	.94	2.54	0.00	3310.00	10.25	46.00
26.63	70.00	1476.00	1472.10	1465.10	4510.00	1477.98	1.06	3.45	0.00	4510.00	12.88	46.00
26.63	70.00	1476.00	1472.10	1465.10	1080.00	1469.19	.88	.72	.04	1080.00	4.09	46.00
26.63	70.00	1476.00	1472.10	1465.10	3400.00	1475.61	.94	2.66	0.00	3400.00	10.51	46.00
26.63	1.00	0.00	0.00	1465.10	1820.00	1470.44	1.29	.01	.00	1820.00	5.34	46.00
26.63	1.00	0.00	0.00	1465.10	2830.00	1473.46	1.08	.00	.00	2830.00	8.36	46.00
26.63	1.00	0.00	0.00	1465.10	3310.00	1475.35	.94	.00	.00	3310.00	10.25	46.00
26.63	1.00	0.00	0.00	1465.10	4510.00	1477.99	1.05	.00	.00	4510.00	12.89	46.00
26.63	1.00	0.00	0.00	1465.10	1080.00	1469.21	.88	.01	.00	1080.00	4.11	46.00
26.63	1.00	0.00	0.00	1465.10	3400.00	1475.61	.93	.00	.00	3400.00	10.51	46.00
26.63	14.00	0.00	0.00	1464.60	1790.00	1471.47	.54	.05	.23	1790.00	6.87	53.56
26.63	14.00	0.00	0.00	1464.60	2790.00	1474.15	.57	.03	.15	2790.00	9.55	59.86
26.63	14.00	0.00	0.00	1464.60	3260.00	1475.92	.51	.02	.13	3260.00	11.32	60.00
26.63	14.00	0.00	0.00	1464.60	4450.00	1478.62	.58	.02	.14	4450.00	14.02	60.00
26.63	14.00	0.00	0.00	1464.60	1080.00	1469.94	.35	.04	.16	1080.00	5.34	48.35
26.63	14.00	0.00	0.00	1464.60	3400.00	1476.16	.53	.02	.12	3400.00	11.56	60.00
26.70	400.00	0.00	0.00	1466.10	1790.00	1472.28	.69	.89	.07	1790.00	6.18	50.15
26.70	400.00	0.00	0.00	1466.10	2790.00	1474.76	.69	.66	.06	2734.44	8.66	130.88
26.70	400.00	0.00	0.00	1466.10	3260.00	1476.44	.44	.42	.02	2859.03	10.34	230.31
26.70	400.00	0.00	0.00	1466.10	4450.00	1479.37	.17	.22	.12	2736.35	13.27	369.56
26.70	400.00	0.00	0.00	1466.10	1080.00	1470.67	.50	.81	.07	1080.00	4.57	46.72
26.70	400.00	0.00	0.00	1466.10	3400.00	1476.72	.42	.41	.04	2909.53	10.62	256.74

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
26.78	400.00	0.00	0.00	1467.70	1790.00	1473.65	.20	.73	.15	1499.33	5.95	340.51
26.78	400.00	0.00	0.00	1467.70	2790.00	1475.88	.05	.30	.19	1499.86	8.18	592.34
26.78	400.00	0.00	0.00	1467.70	3260.00	1477.12	.03	.15	.12	1554.98	9.42	599.06
26.78	400.00	0.00	0.00	1467.70	4450.00	1479.62	.02	.06	.04	1866.41	11.92	604.09
26.78	400.00	0.00	0.00	1467.70	1080.00	1471.95	.31	1.04	.06	1078.81	4.25	99.67
26.78	400.00	0.00	0.00	1467.70	3400.00	1477.35	.03	.14	.11	1595.06	9.65	599.53
26.89	600.00	0.00	0.00	1467.60	1790.00	1474.34	.25	.71	.02	1775.25	6.74	217.60
26.89	600.00	0.00	0.00	1467.60	2790.00	1476.12	.18	.30	.06	2293.54	8.52	433.93
26.89	600.00	0.00	0.00	1467.60	3260.00	1477.23	.12	.15	.04	2284.24	9.63	476.77
26.89	600.00	0.00	0.00	1467.60	4450.00	1479.67	.06	.06	.02	2329.46	12.07	748.98
26.89	600.00	0.00	0.00	1467.60	1080.00	1473.00	.17	.87	.04	1080.00	5.40	84.50
26.89	600.00	0.00	0.00	1467.60	3400.00	1477.45	.11	.14	.04	2312.72	9.86	485.45
27.00	570.00	0.00	0.00	1467.70	1790.00	1474.88	.15	.42	.03	1748.43	7.18	204.57
27.00	570.00	0.00	0.00	1467.70	2790.00	1476.45	.16	.30	.01	2491.41	8.75	317.54
27.00	570.00	0.00	0.00	1467.70	3260.00	1477.42	.13	.20	.01	2694.37	9.72	350.00
27.00	570.00	0.00	0.00	1467.70	4450.00	1479.74	.09	.09	.02	3125.24	12.04	350.00
27.00	570.00	0.00	0.00	1467.70	1080.00	1473.49	.11	.40	.02	1080.00	5.79	105.49
27.00	570.00	0.00	0.00	1467.70	3400.00	1477.63	.13	.18	.01	2762.18	9.93	350.00
27.08	420.00	0.00	0.00	1470.00	1790.00	1475.14	.56	.46	.21	1777.60	5.14	96.36
27.08	420.00	0.00	0.00	1470.00	2790.00	1476.59	.64	.39	.24	2688.99	6.59	123.81
27.08	420.00	0.00	0.00	1470.00	3260.00	1477.48	.59	.29	.23	3064.12	7.48	140.57
27.08	420.00	0.00	0.00	1470.00	4450.00	1479.76	.41	.17	.16	3812.98	9.76	211.15
27.08	420.00	0.00	0.00	1470.00	1080.00	1473.80	.48	.50	.19	1080.00	3.80	71.97
27.08	420.00	0.00	0.00	1470.00	3400.00	1477.68	.58	.28	.23	3176.40	7.68	144.33
27.18	520.00	0.00	0.00	1470.30	1790.00	1476.41	.16	.75	.12	1484.11	6.11	292.28
27.18	520.00	0.00	0.00	1470.30	2790.00	1477.81	.14	.56	.15	1981.63	7.51	369.12
27.18	520.00	0.00	0.00	1470.30	3260.00	1478.52	.12	.43	.14	2135.75	8.22	377.87
27.18	520.00	0.00	0.00	1470.30	4450.00	1480.43	.09	.26	.10	2492.40	10.13	402.15
27.18	520.00	0.00	0.00	1470.30	1080.00	1475.15	.15	.93	.10	1011.50	4.85	195.77
27.18	520.00	0.00	0.00	1470.30	3400.00	1478.71	.12	.41	.14	2186.86	8.41	380.20
27.29	580.00	0.00	0.00	1470.10	1790.00	1476.87	.06	.34	.03	1206.72	6.77	408.42
27.29	580.00	0.00	0.00	1470.10	2790.00	1478.18	.06	.27	.02	1614.51	8.08	444.22
27.29	580.00	0.00	0.00	1470.10	3260.00	1478.82	.06	.22	.02	1801.06	8.72	445.84
27.29	580.00	0.00	0.00	1470.10	4450.00	1480.61	.05	.13	.01	2245.56	10.51	450.36
27.29	580.00	0.00	0.00	1470.10	1080.00	1475.67	.07	.41	.02	881.36	5.57	329.44
27.29	580.00	0.00	0.00	1470.10	3400.00	1478.99	.06	.21	.02	1858.23	8.89	446.28
27.58	1540.00	0.00	0.00	1472.00	1790.00	1477.74	.19	.94	.07	1266.98	5.74	310.31
27.58	1540.00	0.00	0.00	1472.00	2790.00	1478.87	.19	.76	.07	1647.31	6.87	349.88
27.58	1540.00	0.00	0.00	1472.00	3260.00	1479.41	.18	.65	.06	1781.29	7.41	362.14
27.58	1540.00	0.00	0.00	1472.00	4450.00	1480.98	.14	.41	.04	2029.56	8.98	421.94
27.58	1540.00	0.00	0.00	1472.00	1080.00	1476.71	.17	1.09	.05	883.27	4.71	206.31
27.58	1540.00	0.00	0.00	1472.00	3400.00	1479.56	.18	.63	.06	1821.34	7.56	365.53

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
28.13	2920.00	0.00	0.00	1471.30	1790.00	1479.48	.13	1.66	.02	1790.00	8.18	128.00
28.13	2920.00	0.00	0.00	1471.30	2790.00	1480.62	.21	1.76	.01	2790.00	9.32	128.00
28.13	2920.00	0.00	0.00	1471.30	3260.00	1481.10	.25	1.73	.03	3260.00	9.80	128.00
28.13	2920.00	0.00	0.00	1471.30	4450.00	1482.33	.32	1.44	.09	4450.00	11.03	128.00
28.13	2920.00	0.00	0.00	1471.30	1080.00	1478.34	.08	1.51	.03	1080.00	7.04	122.21
28.13	2920.00	0.00	0.00	1471.30	3400.00	1481.24	.26	1.72	.04	3400.00	9.94	128.00
28.16	110.00	0.00	0.00	1472.40	1790.00	1479.45	.33	.06	.10	1790.00	7.05	74.00
28.16	110.00	0.00	0.00	1472.40	2790.00	1480.53	.55	.08	.17	2790.00	8.13	74.00
28.16	110.00	0.00	0.00	1472.40	3260.00	1480.98	.66	.08	.20	3260.00	8.58	74.00
28.16	110.00	0.00	0.00	1472.40	4450.00	1482.13	.89	.09	.28	4450.00	9.73	74.00
28.16	110.00	0.00	0.00	1472.40	1080.00	1478.33	.19	.05	.05	1080.00	5.93	74.00
28.16	110.00	0.00	0.00	1472.40	3400.00	1481.11	.69	.09	.22	3400.00	8.71	74.00
28.16	20.00	0.00	0.00	1472.70	1790.00	1479.43	.41	.02	.04	1790.00	6.73	64.00
28.16	20.00	0.00	0.00	1472.70	2790.00	1480.48	.70	.03	.07	2790.00	7.78	64.00
28.16	20.00	0.00	0.00	1472.70	3260.00	1480.92	.84	.03	.09	3260.00	8.22	64.00
28.16	20.00	0.00	0.00	1472.70	4450.00	1482.04	1.16	.04	.13	4450.00	9.34	64.00
28.16	20.00	0.00	0.00	1472.70	1080.00	1478.33	.23	.02	.02	1080.00	5.63	64.00
28.16	20.00	0.00	0.00	1472.70	3400.00	1481.04	.38	.03	.10	3400.00	8.34	64.00
28.16	25.00	0.00	0.00	1472.90	1790.00	1479.36	.61	.03	.10	1790.00	6.46	51.00
28.16	25.00	0.00	0.00	1472.90	2790.00	1480.35	1.07	.05	.18	2790.00	7.45	51.00
28.16	25.00	0.00	0.00	1472.90	3260.00	1480.74	1.30	.05	.23	3260.00	7.84	51.00
28.16	25.00	0.00	0.00	1472.90	4450.00	1481.76	1.84	.07	.34	4450.00	8.86	51.00
28.16	25.00	0.00	0.00	1472.90	1080.00	1478.30	.34	.02	.05	1080.00	5.40	51.00
28.16	25.00	0.00	0.00	1472.90	3400.00	1480.86	1.36	.06	.24	3400.00	7.96	51.00
28.17	10.00	0.00	0.00	1473.00	1790.00	1479.32	.73	.02	.06	1790.00	6.32	46.00
28.17	10.00	0.00	0.00	1473.00	2790.00	1480.26	1.30	.03	.12	2790.00	7.26	46.00
28.17	10.00	0.00	0.00	1473.00	3260.00	1480.63	1.59	.03	.15	3260.00	7.63	46.00
28.17	10.00	0.00	0.00	1473.00	4450.00	1481.57	2.31	.04	.23	4450.00	8.57	46.00
28.17	10.00	0.00	0.00	1473.00	1080.00	1478.28	.40	.01	.03	1080.00	5.28	46.00
28.17	10.00	0.00	0.00	1473.00	3400.00	1480.73	1.68	.03	.16	3400.00	7.73	46.00
28.17	10.00	0.00	0.00	1473.00	1790.00	1479.25	.91	.02	.09	1790.00	6.25	41.00
28.17	10.00	0.00	0.00	1473.00	2790.00	1480.11	1.67	.04	.18	2790.00	7.11	41.00
28.17	10.00	0.00	0.00	1473.00	3260.00	1480.43	2.07	.04	.24	3260.00	7.43	41.00
28.17	10.00	0.00	0.00	1473.00	4450.00	1481.23	3.09	.05	.39	4450.00	8.23	41.00
28.17	10.00	0.00	0.00	1473.00	1080.00	1478.25	.49	.02	.04	1080.00	5.25	41.00
28.17	10.00	0.00	0.00	1473.00	3400.00	1480.52	2.19	.04	.25	3400.00	7.52	41.00
28.17	5.00	0.00	0.00	1473.00	1790.00	1479.19	1.05	.01	.07	1790.00	6.19	38.00
28.17	5.00	0.00	0.00	1473.00	2790.00	1479.98	1.98	.02	.16	2790.00	6.98	38.00
28.17	5.00	0.00	0.00	1473.00	3260.00	1480.25	2.49	.03	.21	3260.00	7.25	38.00
28.17	5.00	0.00	0.00	1473.00	4450.00	1480.99	3.77	.04	0.00	4450.00	7.99	38.00
28.17	5.00	0.00	0.00	1473.00	1080.00	1478.23	.55	.01	.03	1080.00	5.23	38.00
28.17	5.00	0.00	0.00	1473.00	3400.00	1480.32	2.65	.03	.23	3400.00	7.32	38.00

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
28.17	5.00	0.00	0.00	1473.10	1790.00	1479.15	1.17	.02	.06	1790.00	6.05	36.00
28.17	5.00	0.00	0.00	1473.10	2790.00	1479.87	2.25	.03	.14	2790.00	6.77	36.00
28.17	5.00	0.00	0.00	1473.10	3260.00	1480.09	2.37	.03	.19	3260.00	6.99	36.00
28.17	5.00	0.00	0.00	1473.10	4450.00	1481.23	3.90	.04	0.00	4450.00	8.13	36.00
28.17	5.00	0.00	0.00	1473.10	1080.00	1478.21	.61	.01	.03	1080.00	5.11	36.00
28.17	5.00	0.00	0.00	1473.10	3400.00	1480.14	3.07	.04	.21	3400.00	7.04	36.00
28.17	4.00	0.00	0.00	1473.10	1790.00	1479.09	1.32	.01	.07	1790.00	5.99	34.40
28.17	4.00	0.00	0.00	1473.10	2790.00	1479.72	2.59	.03	.17	2790.00	6.62	34.40
28.17	4.00	0.00	0.00	1473.10	3260.00	1479.93	3.32	.03	0.00	3260.00	6.83	34.40
28.17	4.00	0.00	0.00	1473.10	4450.00	1481.46	4.05	.03	0.00	4450.00	8.36	34.40
28.17	4.00	0.00	0.00	1473.10	1080.00	1478.18	.58	.01	.04	1080.00	5.08	34.40
28.17	4.00	0.00	0.00	1473.10	3400.00	1480.15	3.38	.03	0.00	3400.00	7.05	34.40
28.17	1.00	0.00	0.00	1473.10	1790.00	1479.10	1.32	.00	.00	1790.00	6.00	34.40
28.17	1.00	0.00	0.00	1473.10	2790.00	1479.74	2.59	.01	.00	2790.00	6.64	34.40
28.17	1.00	0.00	0.00	1473.10	3260.00	1481.35	2.23	.01	.33	3260.00	8.25	34.40
28.17	1.00	0.00	0.00	1473.10	4450.00	1483.12	2.78	.01	.38	4450.00	10.02	34.40
28.17	1.00	0.00	0.00	1473.10	1080.00	1478.19	.58	.00	.00	1080.00	5.09	34.40
28.17	1.00	0.00	0.00	1473.10	3400.00	1480.16	3.37	.01	.00	3400.00	7.06	34.40
28.17	20.00	1486.00	1482.00	1473.30	1790.00	1479.12	1.41	.07	.04	1790.00	5.82	34.40
28.17	20.00	1486.00	1482.00	1473.30	2790.00	1479.79	2.72	.12	.06	2790.00	6.49	34.40
28.17	20.00	1486.00	1482.00	1473.30	3260.00	1482.94	1.62	.97	0.00	3260.00	9.64	34.40
28.17	20.00	1486.00	1482.00	1473.30	4450.00	1486.68	1.53	2.32	0.00	4450.00	13.38	34.40
28.17	20.00	1486.00	1482.00	1473.30	1080.00	1478.20	.74	.04	.03	1080.00	4.90	34.40
28.17	20.00	1486.00	1482.00	1473.30	3400.00	1480.34	3.39	.14	0.00	3400.00	7.04	34.40
28.18	1.00	0.00	0.00	1473.30	1790.00	1479.13	1.40	.00	.00	1790.00	5.83	34.40
28.18	1.00	0.00	0.00	1473.30	2790.00	1480.51	2.17	.01	.17	2790.00	7.21	34.40
28.18	1.00	0.00	0.00	1473.30	3260.00	1482.94	1.61	.00	.00	3260.00	9.64	34.40
28.18	1.00	0.00	0.00	1473.30	4450.00	1486.69	1.53	.00	.00	4450.00	13.39	34.40
28.18	1.00	0.00	0.00	1473.30	1080.00	1478.20	.74	.00	.00	1080.00	4.90	34.40
28.18	1.00	0.00	0.00	1473.30	3400.00	1481.71	2.34	.01	.31	3400.00	8.41	34.40
28.18	4.00	0.00	0.00	1473.10	1790.00	1479.75	.93	.01	.14	1790.00	6.65	37.03
28.18	4.00	0.00	0.00	1473.10	2790.00	1481.59	1.35	.02	.24	2790.00	8.49	37.08
28.18	4.00	0.00	0.00	1473.10	3260.00	1483.50	1.19	.01	.13	3250.25	10.40	42.40
28.18	4.00	0.00	0.00	1473.10	4450.00	1487.23	1.12	.01	.12	4354.98	14.13	42.40
28.18	4.00	0.00	0.00	1473.10	1080.00	1478.48	.53	.01	.06	1080.00	5.38	37.00
28.18	4.00	0.00	0.00	1473.10	3400.00	1482.80	1.51	.01	.25	3397.88	9.70	42.40
28.18	10.00	0.00	0.00	1473.00	1790.00	1480.14	.65	.02	.08	1790.00	7.14	43.55
28.18	10.00	0.00	0.00	1473.00	2790.00	1482.19	.90	.02	.13	2790.00	9.19	43.82
28.18	10.00	0.00	0.00	1473.00	3260.00	1484.03	.79	.01	.12	3219.12	11.03	62.40
28.18	10.00	0.00	0.00	1473.00	4450.00	1487.80	.68	.01	.13	4171.08	14.80	62.40
28.18	10.00	0.00	0.00	1473.00	1080.00	1478.66	.40	.01	.04	1080.00	5.66	43.36
28.18	10.00	0.00	0.00	1473.00	3400.00	1483.51	.98	.02	.16	3378.16	10.51	62.40

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
28.18	20.00	0.00	0.00	1472.90	1790.00	1480.47	.41	.02	.07	1790.00	7.57	56.50
28.18	20.00	0.00	0.00	1472.90	2790.00	1482.69	.54	.02	.11	2790.00	9.79	57.39
28.18	20.00	0.00	0.00	1472.90	3260.00	1484.48	.46	.02	.10	3193.62	11.58	102.40
28.18	20.00	0.00	0.00	1472.90	4450.00	1486.23	.36	.01	.10	3997.13	15.33	102.40
28.18	20.00	0.00	0.00	1472.90	1080.00	1478.85	.27	.02	.04	1080.00	5.95	55.85
28.18	20.00	0.00	0.00	1472.90	3400.00	1484.08	.56	.02	.13	3357.94	11.18	102.40
28.19	55.00	0.00	0.00	1472.40	1790.00	1480.75	.22	.03	.06	1790.00	8.35	78.52
28.19	55.00	0.00	0.00	1472.40	2790.00	1483.07	.27	.03	.08	2790.00	10.67	89.09
28.19	55.00	0.00	0.00	1472.40	3260.00	1484.79	.24	.02	.07	3254.62	12.39	207.42
28.19	55.00	0.00	0.00	1472.40	4450.00	1488.51	.16	.01	.06	3982.97	16.11	212.00
28.19	55.00	0.00	0.00	1472.40	1080.00	1479.04	.15	.03	.04	1080.00	6.64	70.70
28.19	55.00	0.00	0.00	1472.40	3400.00	1484.47	.28	.03	.08	3399.74	12.07	106.29
28.26	340.00	0.00	0.00	1472.00	1790.00	1481.07	.04	.08	.05	1546.22	9.07	354.85
28.26	340.00	0.00	0.00	1472.00	2790.00	1483.43	.03	.05	.07	2306.59	11.43	460.47
28.26	340.00	0.00	0.00	1472.00	3260.00	1485.10	.02	.03	.07	2638.48	13.10	485.33
28.26	340.00	0.00	0.00	1472.00	4450.00	1488.70	.02	.01	.04	3465.28	16.70	514.50
28.26	340.00	0.00	0.00	1472.00	1080.00	1479.29	.05	.11	.03	1009.74	7.29	286.01
28.26	340.00	0.00	0.00	1472.00	3400.00	1484.84	.03	.04	.08	2761.30	12.84	483.16
28.43	940.00	0.00	0.00	1470.00	1740.00	1481.17	.03	.09	.00	1319.06	11.17	400.46
28.43	940.00	0.00	0.00	1470.00	2720.00	1483.48	.03	.05	.00	1684.89	13.48	620.12
28.43	940.00	0.00	0.00	1470.00	3170.00	1485.14	.02	.03	.00	1717.73	15.14	633.75
28.43	940.00	0.00	0.00	1470.00	4320.00	1488.72	.01	.01	.00	1898.06	18.72	676.64
28.43	940.00	0.00	0.00	1470.00	1080.00	1479.42	.03	.11	.01	933.05	9.42	292.65
28.43	940.00	0.00	0.00	1470.00	3400.00	1484.88	.03	.04	.00	1878.29	14.88	628.52
28.48	260.00	0.00	0.00	1473.00	1740.00	1481.15	.12	.03	.04	1668.72	8.15	258.17
28.48	260.00	0.00	0.00	1473.00	2720.00	1483.47	.09	.02	.03	2141.63	10.47	516.70
28.48	260.00	0.00	0.00	1473.00	3170.00	1485.13	.05	.01	.02	2082.55	12.13	735.99
28.48	260.00	0.00	0.00	1473.00	4320.00	1488.72	.02	.00	.00	2023.00	15.72	775.29
28.48	260.00	0.00	0.00	1473.00	1080.00	1479.41	.10	.03	.04	1080.00	6.41	90.82
28.48	260.00	0.00	0.00	1473.00	3400.00	1484.87	.07	.01	.02	2299.64	11.87	696.74
28.53	250.00	0.00	0.00	1476.00	1740.00	1481.16	.34	.12	.11	1737.36	5.16	99.08
28.53	250.00	0.00	0.00	1476.00	2720.00	1483.44	.28	.07	.10	2571.39	7.44	330.86
28.53	250.00	0.00	0.00	1476.00	3170.00	1485.12	.14	.03	.05	2513.39	9.12	465.65
28.53	250.00	0.00	0.00	1476.00	4320.00	1488.72	.05	.01	.01	2438.80	12.72	687.11
28.53	250.00	0.00	0.00	1476.00	1080.00	1479.43	.39	.17	.14	1080.00	3.43	85.10
28.53	250.00	0.00	0.00	1476.00	3400.00	1484.85	.19	.04	.06	2779.35	8.85	456.67
28.55	89.00	0.00	0.00	1477.20	1740.00	1480.86	1.37	.21	.52	1740.00	3.66	61.38
28.55	89.00	0.00	0.00	1477.20	2720.00	1483.20	.97	.10	.34	2720.00	6.00	74.78
28.55	89.00	0.00	0.00	1477.20	3170.00	1484.94	.58	.04	.22	3015.34	7.74	284.92
28.55	89.00	0.00	0.00	1477.20	4320.00	1488.68	.15	.01	.05	2864.29	11.48	457.30
28.55	89.00	0.00	0.00	1477.20	1080.00	1479.83	1.15	.38	0.00	1080.00	2.63	55.38
28.55	89.00	0.00	0.00	1477.20	3400.00	1484.61	.80	.06	.31	3312.32	7.41	252.01

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	C&SEL	HV	HL	OLOSS	QCH	DEPTH	TOPWID
28.55	1.00	0.00	0.00	1481.00	1740.00	1483.77	1.23	.00	0.00	1739.53	2.77	95.06
28.55	1.00	0.00	0.00	1481.00	2720.00	1484.84	1.23	.00	0.00	2566.86	3.84	274.40
28.55	1.00	0.00	0.00	1481.00	3170.00	1485.20	1.24	.00	0.00	2888.99	4.20	304.96
28.55	1.00	0.00	0.00	1481.00	4320.00	1488.62	.28	.00	.06	2939.99	7.62	447.59
28.55	1.00	0.00	0.00	1481.00	1080.00	1483.03	.94	.00	0.00	1080.00	2.03	74.12
28.55	1.00	0.00	0.00	1481.00	3400.00	1485.38	1.23	.00	0.00	3040.20	4.38	314.16
28.55	3.00	0.00	0.00	1481.00	1740.00	1484.50	.67	.01	.17	1689.60	3.50	241.50
28.55	3.00	0.00	0.00	1481.00	2720.00	1485.54	.59	.00	.16	2390.10	4.54	319.67
28.55	3.00	0.00	0.00	1481.00	3170.00	1485.21	1.24	.01	.00	2887.42	4.21	305.23
28.55	3.00	0.00	0.00	1481.00	4320.00	1488.62	.28	.00	.00	2939.86	7.62	447.69
28.55	3.00	0.00	0.00	1481.00	1080.00	1483.45	.63	.01	.10	1080.00	2.45	76.42
28.55	3.00	0.00	0.00	1481.00	3400.00	1485.39	1.22	.00	.00	3038.64	4.39	314.41
28.55	1.00	0.00	0.00	1477.20	1740.00	1485.18	.15	.00	.16	1621.15	7.98	304.48
28.55	1.00	0.00	0.00	1477.20	2720.00	1486.18	.21	.00	.15	2290.39	8.98	315.00
28.55	1.00	0.00	0.00	1477.20	3170.00	1486.52	.23	.00	.30	2582.75	9.32	315.00
28.55	1.00	0.00	0.00	1477.20	4320.00	1488.78	.15	.00	.04	2930.62	11.58	315.00
28.55	1.00	0.00	0.00	1477.20	1080.00	1484.13	.10	.00	.16	1075.85	6.93	205.73
28.55	1.00	0.00	0.00	1477.20	3400.00	1486.67	.25	.00	.29	2730.46	9.47	315.00
28.58	156.00	0.00	0.00	1479.00	1740.00	1485.23	.19	.07	.02	1574.57	6.23	393.05
28.58	156.00	0.00	0.00	1479.00	2720.00	1486.27	.19	.07	.01	2056.51	7.27	520.20
28.58	156.00	0.00	0.00	1479.00	3170.00	1486.64	.19	.07	.01	2252.94	7.64	541.09
28.58	156.00	0.00	0.00	1479.00	4320.00	1488.90	.08	.03	.02	2255.42	9.90	582.35
28.58	156.00	0.00	0.00	1479.00	1080.00	1484.16	.16	.06	.03	1072.47	5.16	180.18
28.58	156.00	0.00	0.00	1479.00	3400.00	1486.81	.19	.07	.02	2347.61	7.81	550.32
28.60	100.00	0.00	0.00	1480.20	1740.00	1485.23	.36	.08	.08	1647.22	5.03	187.72
28.60	100.00	0.00	0.00	1480.20	2720.00	1486.22	.43	.07	.12	2345.10	6.02	354.59
28.60	100.00	0.00	0.00	1480.20	3170.00	1486.60	.42	.07	.12	2587.21	6.40	499.07
28.60	100.00	0.00	0.00	1480.20	4320.00	1488.90	.13	.02	.03	2447.55	8.70	593.80
28.60	100.00	0.00	0.00	1480.20	1080.00	1484.18	.29	.08	.06	1073.51	3.98	128.68
28.60	100.00	0.00	0.00	1480.20	3400.00	1486.77	.42	.07	.12	2698.33	6.57	509.56
28.61	75.00	0.00	0.00	1481.10	1740.00	1485.31	.43	.12	.03	1528.25	4.21	169.75
28.61	75.00	0.00	0.00	1481.10	2720.00	1486.31	.49	.12	.03	2189.33	5.21	259.67
28.61	75.00	0.00	0.00	1481.10	3170.00	1486.67	.51	.11	.05	2467.23	5.57	319.18
28.61	75.00	0.00	0.00	1481.10	4320.00	1488.90	.17	.03	.02	2455.67	7.80	620.14
28.61	75.00	0.00	0.00	1481.10	1080.00	1484.23	.47	.14	.09	1061.59	3.13	164.67
28.61	75.00	0.00	0.00	1481.10	3400.00	1486.83	.52	.11	.05	2599.18	5.73	347.59
28.62	50.00	0.00	0.00	1481.70	1740.00	1485.55	.32	.10	.03	1301.33	3.85	228.07
28.62	50.00	0.00	0.00	1481.70	2720.00	1486.62	.31	.08	.05	1791.14	4.92	270.95
28.62	50.00	0.00	0.00	1481.70	3170.00	1486.99	.33	.08	.06	2013.74	5.29	334.75
28.62	50.00	0.00	0.00	1481.70	4320.00	1488.95	.15	.02	.01	2180.51	7.25	648.78
28.62	50.00	0.00	0.00	1481.70	1080.00	1484.35	.58	.18	.06	1020.67	2.65	222.43
28.62	50.00	0.00	0.00	1481.70	3400.00	1487.15	.34	.08	.06	2126.03	5.45	362.05

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
28.63	25.00	0.00	0.00	1482.00	1740.00	1485.36	1.32	.09	0.00	1740.00	3.36	72.51
28.63	25.00	0.00	0.00	1482.00	2720.00	1486.75	.99	.06	0.00	2481.72	4.75	270.71
28.63	25.00	0.00	0.00	1482.00	3170.00	1487.02	1.02	.06	0.00	2766.83	5.02	317.20
28.63	25.00	0.00	0.00	1482.00	4320.00	1488.90	.30	.02	.07	2633.10	6.90	658.40
28.63	25.00	0.00	0.00	1482.00	1080.00	1484.53	1.04	.15	0.00	1080.00	2.53	64.48
28.63	25.00	0.00	0.00	1482.00	3400.00	1487.16	1.03	.06	0.00	2900.66	5.16	340.07

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.E. DIFF	LENGTH
23.780	1850.000	1417.772	0.000	0.000	0.000	156.775	0.000	-0.000
23.780	2890.000	1418.527	.755	0.000	0.000	184.809	-28.033	-0.000
23.780	3380.000	1418.835	.308	0.000	0.000	196.256	-39.481	-0.000
23.780	4600.000	1419.554	.718	0.000	0.000	222.931	-66.156	-0.000
23.780	1080.000	1417.053	-2.501	0.000	0.000	130.081	26.694	-0.000
23.780	3400.000	1418.847	1.795	0.000	0.000	196.712	-39.937	-0.000
23.827	1850.000	1419.694	0.000	1.922	0.000	188.998	0.000	250.000
23.827	2890.000	1420.675	.981	2.148	0.000	212.292	-23.294	250.000
23.827	3380.000	1421.061	.387	2.226	0.000	220.261	-31.263	250.000
23.827	4600.000	1421.875	.814	2.322	0.000	233.952	-44.954	250.000
23.827	1080.000	1418.741	-3.135	1.688	0.000	163.606	25.392	250.000
23.827	3400.000	1421.076	2.336	2.229	0.000	220.523	-31.525	250.000
23.875	1850.000	1420.182	0.000	.488	0.000	165.705	0.000	250.000
23.875	2890.000	1421.195	1.014	.521	0.000	183.713	-18.008	250.000
23.875	3380.000	1421.591	.396	.530	0.000	191.057	-25.352	250.000
23.875	4600.000	1422.431	.840	.556	0.000	202.482	-36.777	250.000
23.875	1080.000	1419.179	-3.252	.439	0.000	147.099	18.606	250.000
23.875	3400.000	1421.606	2.427	.530	0.000	191.342	-25.636	250.000
23.922	1850.000	1420.674	0.000	.492	0.000	144.165	0.000	250.000
23.922	2890.000	1421.716	1.041	.520	0.000	157.457	-13.293	250.000
23.922	3380.000	1422.124	.409	.533	0.000	162.393	-18.228	250.000
23.922	4600.000	1422.998	.873	.566	0.000	174.089	-29.924	250.000
23.922	1080.000	1419.632	-3.366	.452	0.000	130.847	13.317	250.000
23.922	3400.000	1422.140	2.508	.534	0.000	162.584	-18.420	250.000
23.969	1850.000	1421.155	0.000	.480	0.000	118.962	0.000	250.000
23.969	2890.000	1422.236	1.082	.521	0.000	131.631	-12.670	250.000
23.969	3380.000	1422.662	.426	.538	0.000	137.714	-18.753	250.000
23.969	4600.000	1423.578	.916	.581	0.000	147.401	-28.439	250.000
23.969	1080.000	1420.072	-3.507	.440	0.000	109.910	9.052	250.000
23.969	3400.000	1422.679	2.607	.539	0.000	137.889	-18.928	250.000
24.117	1850.000	1422.963	0.000	1.809	0.000	397.067	0.000	780.000
24.117	2890.000	1424.082	1.119	1.846	0.000	469.797	-72.730	780.000
24.117	3380.000	1424.551	.469	1.889	0.000	492.804	-95.737	780.000
24.117	4600.000	1425.610	1.059	2.031	0.000	545.702	-148.635	780.000
24.117	1080.000	1421.444	-4.166	1.372	0.000	115.516	281.551	780.000
24.117	3400.000	1424.570	3.126	1.891	0.000	493.726	-96.658	780.000
24.265	1850.000	1423.680	0.000	.717	0.000	459.295	0.000	780.000
24.265	2890.000	1424.646	.966	.563	0.000	507.545	-48.250	780.000
24.265	3380.000	1425.068	.422	.517	0.000	528.229	-68.934	780.000
24.265	4600.000	1426.040	.972	.430	0.000	576.997	-117.702	780.000
24.265	1080.000	1422.285	-3.754	.841	0.000	299.951	159.344	780.000
24.265	3400.000	1425.084	2.799	.515	0.000	529.065	-69.770	780.000
24.413	1820.000	1423.997	0.000	.317	0.000	480.024	0.000	780.000
24.413	2830.000	1424.961	.964	.315	0.000	528.287	-48.263	780.000
24.413	3310.000	1425.378	.417	.310	0.000	549.139	-69.115	780.000
24.413	4510.000	1426.331	.954	.292	0.000	596.814	-116.791	780.000

24.413	1080.000	1422.767	-3.565	.481	0.000	414.767	65.257	780.000
24.413	3400.000	1425.396	2.630	.312	0.000	550.067	-70.043	780.000
24.602	1820.000	1424.359	0.000	.361	0.000	110.497	0.000	1000.000
24.602	2830.000	1425.337	.979	.376	0.000	111.860	-1.363	1000.000
24.602	3310.000	1425.747	.409	.369	0.000	112.428	-1.931	1000.000
24.602	4510.000	1426.662	.915	.330	0.000	113.707	-3.210	1000.000
24.602	1080.000	1423.206	-3.456	.439	0.000	109.318	1.179	1000.000
24.602	3400.000	1425.780	2.574	.383	0.000	112.462	-1.965	1000.000
24.603	1820.000	1424.402	0.000	.044	0.000	109.200	0.000	8.000
24.603	2830.000	1425.403	1.001	.066	0.000	109.200	0.000	8.000
24.603	3310.000	1425.822	.419	.075	0.000	109.200	0.000	8.000
24.603	4510.000	1426.758	.936	.096	0.000	109.200	0.000	8.000
24.603	1080.000	1423.236	-3.521	.031	0.000	109.200	0.000	8.000
24.603	3400.000	1425.859	2.623	.080	0.000	109.200	0.000	8.000
24.612	1820.000	1424.405	0.000	.002	0.000	109.200	0.000	45.000
24.612	2830.000	1425.406	1.001	.003	0.000	109.200	0.000	45.000
24.612	3310.000	1425.825	.419	.003	0.000	109.200	0.000	45.000
24.612	4510.000	1426.760	.936	.003	0.000	109.200	0.000	45.000
24.612	1080.000	1423.239	-3.522	.002	0.000	108.954	.246	45.000
24.612	3400.000	1425.862	2.624	.003	0.000	109.200	0.000	45.000
24.613	1820.000	1424.405	0.000	.001	0.000	109.200	0.000	1.000
24.613	2830.000	1425.406	1.001	.001	0.000	109.200	0.000	1.000
24.613	3310.000	1425.825	.419	.001	0.000	109.200	0.000	1.000
24.613	4510.000	1426.761	.936	.001	0.000	109.200	0.000	1.000
24.613	1080.000	1423.239	-3.522	.000	0.000	108.955	.245	1.000
24.613	3400.000	1425.863	2.624	.001	0.000	109.200	0.000	1.000
24.617	1820.000	1424.410	0.000	.005	0.000	109.200	0.000	23.000
24.617	2830.000	1425.413	1.003	.007	0.000	109.200	0.000	23.000
24.617	3310.000	1425.833	.420	.008	0.000	109.200	0.000	23.000
24.617	4510.000	1426.770	.937	.009	0.000	109.200	0.000	23.000
24.617	1080.000	1423.243	-3.527	.004	0.000	107.368	1.832	23.000
24.617	3400.000	1425.871	2.628	.008	0.000	109.200	0.000	23.000
24.618	1820.000	1424.411	0.000	.001	0.000	109.200	0.000	1.000
24.618	2830.000	1425.414	1.003	.001	0.000	109.200	0.000	1.000
24.618	3310.000	1425.834	.420	.001	0.000	109.200	0.000	1.000
24.618	4510.000	1426.772	.938	.001	0.000	109.200	0.000	1.000
24.618	1080.000	1423.244	-3.528	.000	0.000	107.373	1.827	1.000
24.618	3400.000	1425.872	2.628	.001	0.000	109.200	0.000	1.000
24.625	1820.000	1424.415	0.000	.004	0.000	109.200	0.000	45.000
24.625	2830.000	1425.419	1.003	.004	0.000	109.200	0.000	45.000
24.625	3310.000	1425.839	.420	.004	0.000	109.200	0.000	45.000
24.625	4510.000	1426.776	.938	.004	0.000	109.200	0.000	45.000
24.625	1080.000	1423.248	-3.528	.005	0.000	101.713	7.487	45.000
24.625	3400.000	1425.877	2.628	.005	0.000	109.200	0.000	45.000
24.626	1820.000	1424.416	0.000	.001	0.000	109.200	0.000	1.000
24.626	2830.000	1425.420	1.004	.001	0.000	109.200	0.000	1.000
24.626	3310.000	1425.840	.420	.001	0.000	109.200	0.000	1.000
24.626	4510.000	1426.778	.938	.002	0.000	109.200	0.000	1.000
24.626	1080.000	1423.249	-3.529	.001	0.000	101.718	7.482	1.000
24.626	3400.000	1425.878	2.629	.002	0.000	109.200	0.000	1.000
24.636	1820.000	1424.556	0.000	.140	0.000	159.967	0.000	56.000
24.636	2830.000	1425.663	1.106	.243	0.000	220.999	-61.032	56.000
24.636	3310.000	1426.140	.477	.299	0.000	220.999	-61.032	56.000
24.636	4510.000	1427.229	1.089	.451	0.000	220.999	-61.032	56.000
24.636	1080.000	1423.330	-3.899	.081	0.000	148.818	11.149	56.000
24.636	3400.000	1426.193	2.862	.314	0.000	220.999	-61.032	56.000

24.894	1820.000	1426.674	0.000	2.118	0.000	832.527	0.000	1360.000
24.894	2830.000	1427.449	.774	1.786	0.000	991.185	-158.657	1360.000
24.894	3310.000	1427.784	.336	1.645	0.000	1008.475	-175.948	1360.000
24.894	4510.000	1428.614	.830	1.365	0.000	1051.594	-219.066	1360.000
24.894	1080.000	1425.813	-2.801	2.483	0.000	203.122	629.405	1360.000
24.894	3400.000	1427.841	2.027	1.648	0.000	1011.302	-178.775	1360.000
25.077	1820.000	1427.417	0.000	.742	0.000	539.305	0.000	970.000
25.077	2830.000	1428.128	.712	.680	0.000	567.975	-28.670	970.000
25.077	3310.000	1428.423	.300	.644	0.000	575.631	-36.325	970.000
25.077	4510.000	1429.155	.727	.541	0.000	593.848	-54.543	970.000
25.077	1080.000	1426.564	-2.591	.751	0.000	501.793	37.513	970.000
25.077	3400.000	1428.481	1.917	.640	0.000	576.962	-37.657	970.000
25.119	1820.000	1427.469	0.000	.053	0.000	466.493	0.000	220.000
25.119	2830.000	1428.218	.748	.089	0.000	508.512	-42.018	220.000
25.119	3310.000	1428.528	.311	.100	0.000	522.193	-55.699	220.000
25.119	4510.000	1429.272	.744	.117	0.000	555.318	-88.825	220.000
25.119	1080.000	1426.630	-2.641	.066	0.000	194.479	272.014	220.000
25.119	3400.000	1428.584	1.953	.102	0.000	524.624	-58.131	220.000
25.166	1820.000	1428.093	0.000	.624	0.000	147.808	0.000	250.000
25.166	2830.000	1428.828	.735	.610	0.000	169.875	-22.067	250.000
25.166	3310.000	1429.110	.282	.582	0.000	178.335	-30.526	250.000
25.166	4510.000	1429.734	.624	.462	0.000	197.030	-49.221	250.000
25.166	1080.000	1427.185	-2.549	.554	0.000	120.524	27.284	250.000
25.166	3400.000	1429.159	1.975	.576	0.000	179.821	-32.013	250.000
25.242	1820.000	1429.552	0.000	1.458	0.000	137.497	0.000	400.000
25.242	2830.000	1430.547	.996	1.719	0.000	167.351	-29.854	400.000
25.242	3310.000	1430.946	.399	1.837	0.000	179.346	-41.849	400.000
25.242	4510.000	1431.885	.939	2.152	0.000	208.599	-71.101	400.000
25.242	1080.000	1428.555	-3.330	1.371	0.000	107.563	29.934	400.000
25.242	3400.000	1431.021	2.466	1.861	0.000	181.567	-44.070	400.000
25.318	1820.000	1431.502	0.000	1.950	0.000	134.623	0.000	400.000
25.318	2830.000	1432.490	.988	1.943	0.000	169.174	-34.551	400.000
25.318	3310.000	1432.883	.392	1.936	0.000	177.188	-42.565	400.000
25.318	4510.000	1433.760	.877	1.874	0.000	195.093	-60.470	400.000
25.318	1080.000	1430.529	-3.231	1.973	0.000	90.198	44.425	400.000
25.318	3400.000	1432.953	2.424	1.932	0.000	178.622	-43.999	400.000
25.370	1820.000	1433.355	0.000	1.853	0.000	112.743	0.000	275.000
25.370	2830.000	1434.293	.938	1.802	0.000	158.847	-46.104	275.000
25.370	3310.000	1434.655	.362	1.772	0.000	166.454	-53.711	275.000
25.370	4510.000	1435.453	.798	1.693	0.000	182.739	-69.995	275.000
25.370	1080.000	1432.363	-3.090	1.834	0.000	71.264	41.479	275.000
25.370	3400.000	1434.720	2.357	1.767	0.000	167.775	-55.032	275.000
25.390	1820.000	1434.402	0.000	1.047	0.000	74.648	0.000	105.000
25.390	2830.000	1435.308	.906	1.016	0.000	82.136	-7.488	105.000
25.390	3310.000	1435.619	.310	.964	0.000	90.962	-16.315	105.000
25.390	4510.000	1436.474	.856	1.022	0.000	133.279	-58.631	105.000
25.390	1080.000	1433.452	-3.022	1.090	0.000	66.854	7.794	105.000
25.390	3400.000	1435.671	2.219	.952	0.000	92.573	-17.925	105.000
25.396	1820.000	1434.854	0.000	.452	0.000	74.699	0.000	32.000
25.396	2830.000	1435.931	1.078	.623	0.000	83.872	-9.173	32.000
25.396	3310.000	1436.432	.501	.813	0.000	87.923	-13.224	32.000
25.396	4510.000	1437.246	.814	.771	0.000	126.213	-51.514	32.000
25.396	1080.000	1433.889	-3.357	.437	0.000	63.976	10.723	32.000
25.396	3400.000	1436.536	2.647	.865	0.000	90.144	-15.444	32.000
25.399	1820.000	1435.198	0.000	.345	0.000	75.830	0.000	18.000
25.399	2830.000	1436.257	1.058	.325	0.000	84.602	-8.772	18.000
25.399	3310.000	1436.700	.443	.268	0.000	88.256	-12.427	18.000

25.399	4510.000	1437.506	.807	.261	0.000	117.474	-41.644	18.000
25.399	1080.000	1434.183	-3.323	.294	0.000	61.450	14.380	18.000
25.399	3400.000	1436.799	2.616	.263	0.000	89.104	-13.275	18.000
25.409	1820.000	1435.840	0.000	.641	0.000	68.849	0.000	51.000
25.409	2830.000	1436.932	1.093	.676	0.000	83.868	-15.018	51.000
25.409	3310.000	1437.358	.426	.659	0.000	87.709	-18.860	51.000
25.409	4510.000	1438.335	.976	.828	0.000	98.422	-27.572	51.000
25.409	1080.000	1434.771	-3.564	.587	0.000	52.641	16.208	51.000
25.409	3400.000	1437.444	2.674	.645	0.000	88.491	-19.642	51.000
25.416	1820.000	1436.268	0.000	.426	0.000	63.782	0.000	35.000
25.416	2830.000	1437.381	1.113	.448	0.000	79.944	-16.162	35.000
25.416	3310.000	1437.813	.433	.455	0.000	85.586	-21.804	35.000
25.416	4510.000	1438.777	.963	.442	0.000	95.498	-31.717	35.000
25.416	1080.000	1435.081	-3.695	.311	0.000	47.947	15.835	35.000
25.416	3400.000	1437.893	2.811	.448	0.000	86.641	-22.859	35.000
25.419	1820.000	1436.452	0.000	.214	0.000	61.688	0.000	17.000
25.419	2830.000	1437.609	1.128	.229	0.000	77.005	-15.317	17.000
25.419	3310.000	1438.107	.498	.294	0.000	84.511	-22.824	17.000
25.419	4510.000	1439.064	.957	.288	0.000	95.152	-33.464	17.000
25.419	1080.000	1435.237	-3.827	.156	0.000	48.682	13.006	17.000
25.419	3400.000	1438.175	2.937	.282	0.000	85.361	-23.674	17.000
25.422	1820.000	1436.610	0.000	.128	0.000	57.255	0.000	17.000
25.422	2830.000	1437.776	1.166	.166	0.000	73.150	-15.895	17.000
25.422	3310.000	1438.270	.494	.163	0.000	79.743	-22.487	17.000
25.422	4510.000	1439.236	.965	.171	0.000	92.726	-35.471	17.000
25.422	1080.000	1435.341	-3.895	.103	0.000	47.771	9.485	17.000
25.422	3400.000	1438.340	2.999	.165	0.000	80.688	-23.432	17.000
25.425	1820.000	1436.737	0.000	.127	0.000	61.923	0.000	14.000
25.425	2830.000	1438.131	1.394	.355	0.000	80.479	-18.556	14.000
25.425	3310.000	1438.709	.578	.439	0.000	87.998	-26.074	14.000
25.425	4510.000	1439.848	1.139	.612	0.000	99.479	-37.556	14.000
25.425	1080.000	1435.413	-4.434	.073	0.000	49.075	12.848	14.000
25.425	3400.000	1438.801	3.388	.461	0.000	89.187	-27.264	14.000
25.427	1820.000	1436.856	0.000	.119	0.000	64.895	0.000	14.000
25.427	2830.000	1438.332	1.476	.201	0.000	84.260	-19.364	14.000
25.427	3310.000	1438.930	.598	.221	0.000	90.713	-25.818	14.000
25.427	4510.000	1440.085	1.155	.237	0.000	101.457	-36.562	14.000
25.427	1080.000	1435.491	-4.594	.078	0.000	48.953	15.942	14.000
25.427	3400.000	1439.025	3.533	.224	0.000	91.593	-26.698	14.000
25.433	1820.000	1437.166	0.000	.311	0.000	71.961	0.000	28.000
25.433	2830.000	1438.669	1.503	.337	0.000	87.628	-15.667	28.000
25.433	3310.000	1439.245	.577	.316	0.000	92.814	-20.853	28.000
25.433	4510.000	1440.393	1.148	.308	0.000	102.791	-30.830	28.000
25.433	1080.000	1435.686	-4.707	.195	0.000	53.012	18.949	28.000
25.433	3400.000	1439.340	3.654	.315	0.000	93.663	-21.702	28.000
25.443	1820.000	1437.805	0.000	.639	0.000	78.289	0.000	56.000
25.443	2830.000	1439.203	1.398	.534	0.000	90.076	-11.786	56.000
25.443	3310.000	1439.752	.549	.506	0.000	94.520	-16.230	56.000
25.443	4510.000	1440.887	1.136	.494	0.000	103.651	-25.362	56.000
25.443	1080.000	1436.395	-4.493	.709	0.000	68.749	9.540	56.000
25.443	3400.000	1439.845	3.450	.505	0.000	95.275	-16.985	56.000
25.465	1820.000	1438.665	0.000	.861	0.000	79.407	0.000	113.000
25.465	2830.000	1439.995	1.329	.792	0.000	89.484	-10.076	113.000
25.465	3310.000	1440.530	.535	.778	0.000	93.601	-14.193	113.000
25.465	4510.000	1441.664	1.135	.777	0.000	102.170	-22.763	113.000
25.465	1080.000	1437.434	-4.231	1.039	0.000	70.068	9.340	113.000
25.465	3400.000	1440.623	3.189	.778	0.000	94.301	-14.894	113.000

25.507	1820.000	1440.091	0.000	1.425	0.000	70.612	0.000	225.000
25.507	2830.000	1441.363	1.272	1.368	0.000	78.900	-8.287	225.000
25.507	3310.000	1441.878	.515	1.349	0.000	82.213	-11.601	225.000
25.507	4510.000	1443.007	1.129	1.342	0.000	89.599	-18.987	225.000
25.507	1080.000	1438.909	-4.098	1.476	0.000	62.975	7.637	225.000
25.507	3400.000	1441.974	3.031	1.348	0.000	82.815	-12.203	225.000
25.545	1820.000	1442.127	0.000	2.036	0.000	70.860	0.000	200.000
25.545	2830.000	1443.292	1.165	1.929	0.000	78.436	-7.575	200.000
25.545	3310.000	1443.784	.492	1.906	0.000	81.633	-10.773	200.000
25.545	4510.000	1444.863	1.079	1.856	0.000	88.642	-17.781	200.000
25.545	1080.000	1441.078	-3.785	2.169	0.000	64.053	6.807	200.000
25.545	3400.000	1443.871	2.793	1.901	0.000	82.200	-11.340	200.000
25.572	1820.000	1443.467	0.000	1.340	0.000	60.294	0.000	140.000
25.572	2830.000	1444.630	1.163	1.338	0.000	64.580	-4.286	140.000
25.572	3310.000	1445.104	.474	1.320	0.000	66.328	-6.034	140.000
25.572	4510.000	1446.139	1.035	1.276	0.000	70.142	-9.848	140.000
25.572	1080.000	1442.372	-3.767	1.294	0.000	56.247	4.047	140.000
25.572	3400.000	1445.189	2.816	1.317	0.000	66.639	-6.345	140.000
25.638	1820.000	1446.949	0.000	3.452	0.000	62.651	0.000	350.000
25.638	2830.000	1448.256	1.307	3.626	0.000	77.697	-15.046	350.000
25.638	3310.000	1448.806	.550	3.702	0.000	85.149	-22.497	350.000
25.638	4510.000	1450.059	1.253	3.920	0.000	102.811	-40.159	350.000
25.638	1080.000	1445.744	-4.315	3.372	0.000	57.274	5.377	350.000
25.638	3400.000	1448.902	3.159	3.714	0.000	86.631	-23.980	350.000
25.657	1820.000	1447.906	0.000	.956	0.000	79.177	0.000	100.000
25.657	2830.000	1449.280	1.374	1.024	0.000	109.181	-30.004	100.000
25.657	3310.000	1449.945	.665	1.136	0.000	118.544	-39.367	100.000
25.657	4510.000	1451.345	1.400	1.286	0.000	138.224	-59.047	100.000
25.657	1080.000	1446.749	-4.596	1.005	0.000	59.215	19.961	100.000
25.657	3400.000	1450.044	3.295	1.142	0.000	119.938	-40.761	100.000
25.667	1820.000	1448.440	0.000	.534	0.000	101.146	0.000	50.000
25.667	2830.000	1449.929	1.489	.649	0.000	125.954	-24.808	50.000
25.667	3310.000	1450.514	.585	.569	0.000	134.069	-32.923	50.000
25.667	4510.000	1451.822	1.308	.477	0.000	152.356	-51.210	50.000
25.667	1080.000	1447.232	-4.590	.483	0.000	66.293	34.653	50.000
25.667	3400.000	1450.613	3.381	.569	0.000	135.450	-34.304	50.000
25.676	1820.000	1448.984	0.000	.544	0.000	145.663	0.000	50.000
25.676	2830.000	1450.465	1.482	.536	0.000	154.528	-8.864	50.000
25.676	3310.000	1451.045	.580	.531	0.000	157.791	-12.128	50.000
25.676	4510.000	1452.318	1.272	.496	0.000	164.937	-19.274	50.000
25.676	1080.000	1447.694	-4.623	.463	0.000	88.647	57.016	50.000
25.676	3400.000	1451.144	3.450	.531	0.000	158.347	-12.684	50.000
25.736	1820.000	1451.743	0.000	2.759	0.000	134.972	0.000	320.000
25.736	2830.000	1452.404	.662	1.939	0.000	148.535	-13.564	320.000
25.736	3310.000	1452.747	.343	1.702	0.000	150.492	-15.521	320.000
25.736	4510.000	1453.646	.900	1.329	0.000	155.530	-20.559	320.000
25.736	1080.000	1450.938	-2.709	3.243	0.000	99.842	35.130	320.000
25.736	3400.000	1452.813	1.875	1.669	0.000	150.862	-15.890	320.000
25.878	1820.000	1457.750	0.000	6.008	0.000	87.127	0.000	750.000
25.878	2830.000	1458.899	1.149	6.495	0.000	96.915	-9.788	750.000
25.878	3310.000	1459.270	.370	6.523	0.000	99.985	-12.858	750.000
25.878	4510.000	1460.013	.744	6.367	0.000	106.375	-19.247	750.000
25.878	1080.000	1456.567	-3.446	5.629	0.000	77.006	10.121	750.000
25.878	3400.000	1459.333	2.766	6.520	0.000	100.507	-13.379	750.000
26.021	1820.000	1460.817	0.000	3.067	0.000	178.583	0.000	750.000
26.021	2830.000	1462.001	1.184	3.102	0.000	207.774	-29.191	750.000

26.021	3310.000	1462.500	.499	3.231	0.000	220.036	-41.453	750.000
26.021	4510.000	1463.593	1.093	3.580	0.000	246.941	-68.358	750.000
26.021	1080.000	1459.573	-4.020	3.006	0.000	120.631	57.952	750.000
26.021	3400.000	1462.590	3.017	3.257	0.000	222.245	-43.662	750.000
26.163	1820.000	1462.620	0.000	1.803	0.000	182.867	0.000	750.000
26.163	2830.000	1463.705	1.085	1.704	0.000	208.798	-25.932	750.000
26.163	3310.000	1464.154	.449	1.654	0.000	219.538	-36.671	750.000
26.163	4510.000	1465.156	1.002	1.563	0.000	243.579	-60.713	750.000
26.163	1080.000	1461.383	-3.773	1.810	0.000	129.953	52.914	750.000
26.163	3400.000	1464.235	2.652	1.645	0.000	221.466	-38.600	750.000
26.229	1820.000	1463.339	0.000	.719	0.000	171.790	0.000	350.000
26.229	2830.000	1464.452	1.113	.747	0.000	217.719	-45.929	350.000
26.229	3310.000	1464.901	.448	.746	0.000	248.245	-76.455	350.000
26.229	4510.000	1465.888	.987	.732	0.000	357.054	-185.264	350.000
26.229	1080.000	1462.119	-3.769	.735	0.000	143.728	28.062	350.000
26.229	3400.000	1464.981	2.862	.746	0.000	253.731	-81.941	350.000
26.267	1820.000	1463.625	0.000	.286	0.000	159.111	0.000	200.000
26.267	2830.000	1464.738	1.113	.286	0.000	195.515	-26.405	200.000
26.267	3310.000	1465.183	.445	.282	0.000	216.153	-47.042	200.000
26.267	4510.000	1466.151	.968	.263	0.000	261.000	-91.889	200.000
26.267	1080.000	1462.441	-3.709	.323	0.000	148.280	20.831	200.000
26.267	3400.000	1465.263	2.821	.282	0.000	219.849	-50.739	200.000
26.301	1820.000	1463.890	0.000	.265	0.000	163.531	0.000	180.000
26.301	2830.000	1465.006	1.116	.269	0.000	220.483	-56.952	180.000
26.301	3310.000	1465.455	.449	.272	0.000	240.202	-76.671	180.000
26.301	4510.000	1466.422	.967	.271	0.000	306.835	-143.304	180.000
26.301	1080.000	1462.764	-3.658	.323	0.000	113.886	49.645	180.000
26.301	3400.000	1465.535	2.771	.272	0.000	243.716	-80.184	180.000
26.305	1820.000	1463.920	0.000	.030	0.000	163.687	0.000	20.000
26.305	2830.000	1465.021	1.101	.014	0.000	216.361	-52.674	20.000
26.305	3310.000	1465.463	.443	.008	0.000	241.675	-77.988	20.000
26.305	4510.000	1466.427	.964	.005	0.000	307.590	-143.903	20.000
26.305	1080.000	1462.812	-3.615	.048	0.000	110.207	53.479	20.000
26.305	3400.000	1465.542	2.730	.007	0.000	246.670	-82.983	20.000
26.328	1820.000	1464.516	0.000	.596	0.000	182.484	0.000	129.000
26.328	2830.000	1465.591	1.076	.571	0.000	237.219	-54.735	129.000
26.328	3310.000	1466.008	.417	.545	0.000	263.630	-81.146	129.000
26.328	4510.000	1466.905	.897	.478	0.000	328.475	-145.991	129.000
26.328	1080.000	1463.418	-3.487	.607	0.000	129.622	52.862	129.000
26.328	3400.000	1466.082	2.664	.540	0.000	268.337	-85.853	129.000
26.329	1615.000	1464.520	0.000	.004	0.000	37.004	0.000	1.000
26.329	1785.000	1465.590	1.070	-.001	0.000	38.630	-1.625	1.000
26.329	1830.000	1466.010	.420	.002	0.000	39.267	-2.263	1.000
26.329	1890.000	1466.910	.900	.005	0.000	40.634	-3.630	1.000
26.329	1080.000	1463.420	-3.490	.002	0.000	35.334	1.671	1.000
26.329	1840.000	1466.080	2.660	-.002	0.000	39.374	-2.369	1.000
26.367	1615.000	1466.865	0.000	2.345	0.000	39.957	0.000	200.000
26.367	1785.000	1467.300	.435	1.710	0.000	40.625	-.668	200.000
26.367	1830.000	1467.488	.188	1.478	0.000	40.910	-.953	200.000
26.367	1890.000	1467.953	.465	1.043	0.000	44.287	-4.330	200.000
26.367	1080.000	1465.481	-2.472	2.061	0.000	37.852	2.105	200.000
26.367	1840.000	1467.527	2.046	1.447	0.000	40.931	-.973	200.000
26.375	1615.000	1467.052	0.000	.187	0.000	34.599	0.000	44.000
26.375	1785.000	1467.482	.430	.181	0.000	34.599	-.000	44.000
26.375	1830.000	1467.661	.180	.173	0.000	34.599	-.000	44.000
26.375	1890.000	1468.097	.436	.144	0.000	34.599	-.000	44.000
26.375	1080.000	1465.671	-2.426	.190	0.000	34.599	.000	44.000

26.375	1840.000	1467.698	2.027	.171	0.000	34.599	-.000	44.000
26.376	1615.000	1467.057	0.000	.005	0.000	34.600	0.000	1.000
26.376	1785.000	1467.487	.430	.005	0.000	34.600	0.000	1.000
26.376	1830.000	1467.666	.179	.005	0.000	34.600	0.000	1.000
26.376	1890.000	1468.101	.435	.004	0.000	34.600	0.000	1.000
26.376	1080.000	1465.675	-2.426	.004	0.000	34.600	0.000	1.000
26.376	1840.000	1467.703	2.028	.005	0.000	34.600	0.000	1.000
26.381	1615.000	1467.469	0.000	.413	0.000	34.600	0.000	30.000
26.381	1785.000	1468.105	.636	.618	0.000	34.600	0.000	30.000
26.381	1830.000	1468.356	.251	.690	0.000	34.600	0.000	30.000
26.381	1890.000	1468.896	.540	.795	0.000	34.600	0.000	30.000
26.381	1080.000	1465.778	-3.118	.103	0.000	34.600	0.000	30.000
26.381	1840.000	1468.408	2.630	.705	0.000	34.600	0.000	30.000
26.382	1615.000	1467.473	0.000	.004	0.000	34.599	0.000	1.000
26.382	1785.000	1468.108	.635	.003	0.000	34.599	-.000	1.000
26.382	1830.000	1468.359	.251	.003	0.000	34.599	-.000	1.000
26.382	1890.000	1468.899	.540	.003	0.000	34.599	-.000	1.000
26.382	1080.000	1465.782	-3.117	.003	0.000	34.599	.000	1.000
26.382	1840.000	1468.411	2.630	.003	0.000	34.599	-.000	1.000
26.397	1820.000	1468.131	0.000	.658	0.000	297.870	0.000	84.000
26.397	2830.000	1468.662	.531	.553	0.000	295.921	-1.052	84.000
26.397	3310.000	1468.832	.170	.473	0.000	299.278	-1.408	84.000
26.397	4510.000	1469.123	.296	.229	0.000	299.354	-1.985	84.000
26.397	1080.000	1466.279	-2.848	.498	0.000	59.966	237.904	84.000
26.397	3400.000	1468.872	2.593	.461	0.000	299.357	-1.488	84.000
26.414	1820.000	1466.361	0.000	.230	0.000	289.200	0.000	90.000
26.414	2830.000	1469.025	.664	.363	0.000	297.243	-8.043	90.000
26.414	3310.000	1469.263	.238	.431	0.000	302.564	-13.364	90.000
26.414	4510.000	1469.780	.517	.653	0.000	314.177	-24.976	90.000
26.414	1080.000	1466.467	-3.313	.188	0.000	172.885	116.315	90.000
26.414	3400.000	1469.313	2.845	.440	0.000	303.674	-14.473	90.000
26.452	1820.000	1466.432	0.000	.072	0.000	126.640	0.000	200.000
26.452	2830.000	1469.108	.676	.083	0.000	132.999	-6.359	200.000
26.452	3310.000	1469.349	.241	.086	0.000	132.999	-6.359	200.000
26.452	4510.000	1469.862	.512	.081	0.000	132.999	-6.359	200.000
26.452	1080.000	1466.626	-3.236	.153	0.000	102.520	24.120	200.000
26.452	3400.000	1469.398	2.773	.086	0.000	132.999	-6.359	200.000
26.460	1820.000	1466.514	0.000	.082	0.000	97.057	0.000	40.000
26.460	2830.000	1469.224	.710	.116	0.000	99.896	-2.839	40.000
26.460	3310.000	1469.478	.255	.129	0.000	100.914	-3.857	40.000
26.460	4510.000	1470.012	.533	.150	0.000	103.048	-5.991	40.000
26.460	1080.000	1466.741	-3.271	.115	0.000	76.993	20.064	40.000
26.460	3400.000	1469.529	2.788	.130	0.000	101.116	-4.059	40.000
26.469	1820.000	1468.591	0.000	.077	0.000	89.999	0.000	50.000
26.469	2830.000	1469.366	.776	.143	0.000	89.999	-.000	50.000
26.469	3310.000	1469.658	.291	.179	0.000	89.999	-.000	50.000
26.469	4510.000	1470.296	.638	.284	0.000	89.999	-.000	50.000
26.469	1080.000	1466.798	-3.498	.057	0.000	89.999	.000	50.000
26.469	3400.000	1469.715	2.917	.186	0.000	89.999	-.000	50.000
26.473	1820.000	1468.585	0.000	-.006	0.000	79.999	0.000	21.000
26.473	2830.000	1469.352	.767	-.014	0.000	79.999	-.000	21.000
26.473	3310.000	1469.639	.286	-.019	0.000	79.999	-.000	21.000
26.473	4510.000	1470.261	.622	-.034	0.000	79.999	-.000	21.000
26.473	1080.000	1466.797	-3.464	-.000	0.000	79.999	.000	21.000
26.473	3400.000	1469.695	2.897	-.020	0.000	79.999	-.000	21.000
26.475	1820.000	1468.581	0.000	-.004	0.000	74.999	0.000	12.000

26.475	2830.000	1469.343	.752	-.010	0.000	74.999	-.000	12.000
26.475	3310.000	1469.626	.283	-.013	0.000	74.999	-.000	12.000
26.475	4510.000	1470.238	.612	-.024	0.000	74.999	-.000	12.000
26.475	1080.000	1466.797	-3.440	-.000	0.000	74.999	.000	12.000
26.475	3400.000	1469.681	2.884	-.014	0.000	74.999	-.000	12.000
26.476	1820.000	1468.577	0.000	-.004	0.000	71.999	0.000	5.000
26.476	2830.000	1469.334	.757	-.009	0.000	71.999	-.000	5.000
26.476	3310.000	1469.613	.279	-.013	0.000	71.999	-.000	5.000
26.476	4510.000	1470.216	.602	-.022	0.000	71.999	-.000	5.000
26.476	1080.000	1466.796	-3.420	-.002	0.000	71.999	.000	5.000
26.476	3400.000	1469.668	2.873	-.013	0.000	71.999	-.000	5.000
26.477	1820.000	1468.323	0.000	-.254	0.000	50.000	0.000	5.000
26.477	2830.000	1468.830	.507	-.504	0.000	70.000	-20.000	5.000
26.477	3310.000	1468.964	.134	-.649	0.000	70.000	-20.000	5.000
26.477	4510.000	1469.646	.681	-.570	0.000	70.000	-20.000	5.000
26.477	1080.000	1466.585	-3.061	-.211	0.000	50.000	0.000	5.000
26.477	3400.000	1468.992	2.407	-.677	0.000	70.000	-20.000	5.000
26.481	1820.000	1468.372	0.000	.049	0.000	50.000	0.000	17.000
26.481	2830.000	1468.952	.580	.122	0.000	50.000	0.000	17.000
26.481	3310.000	1469.201	.249	.237	0.000	70.000	-20.000	17.000
26.481	4510.000	1469.987	.786	.342	0.000	70.000	-20.000	17.000
26.481	1080.000	1466.650	-3.337	.065	0.000	50.000	0.000	17.000
26.481	3400.000	1469.241	2.591	.249	0.000	70.000	-20.000	17.000
26.484	1820.000	1468.517	0.000	.145	0.000	50.000	0.000	18.000
26.484	2830.000	1469.656	1.139	.704	0.000	70.000	-20.000	18.000
26.484	3310.000	1470.305	.650	1.104	0.000	70.000	-20.000	18.000
26.484	4510.000	1471.572	1.267	1.585	0.000	70.000	-20.000	18.000
26.484	1080.000	1466.863	-4.709	.213	0.000	50.000	0.000	18.000
26.484	3400.000	1470.414	2.550	1.173	0.000	70.000	-20.000	18.000
26.486	1820.000	1468.981	0.000	.464	0.000	72.644	0.000	10.000
26.486	2830.000	1470.372	1.391	.717	0.000	79.999	-7.355	10.000
26.486	3310.000	1471.004	.632	.699	0.000	79.999	-7.355	10.000
26.486	4510.000	1472.368	1.364	.796	0.000	79.999	-7.355	10.000
26.486	1080.000	1467.231	-5.137	.368	0.000	56.582	16.063	10.000
26.486	3400.000	1471.115	3.884	.701	0.000	79.999	-7.355	10.000
26.488	1820.000	1469.017	0.000	.037	0.000	82.713	0.000	10.000
26.488	2830.000	1470.458	1.441	.086	0.000	89.999	-7.286	10.000
26.488	3310.000	1471.114	.655	.110	0.000	89.999	-7.286	10.000
26.488	4510.000	1472.538	1.424	.170	0.000	89.999	-7.286	10.000
26.488	1080.000	1467.262	-5.277	.031	0.000	56.706	26.007	10.000
26.488	3400.000	1471.229	3.967	.114	0.000	89.999	-7.286	10.000
26.492	1820.000	1469.073	0.000	.056	0.000	102.781	0.000	20.000
26.492	2830.000	1470.590	1.517	.132	0.000	109.999	-7.218	20.000
26.492	3310.000	1471.279	.688	.165	0.000	109.999	-7.218	20.000
26.492	4510.000	1472.781	1.502	.242	0.000	109.999	-7.218	20.000
26.492	1080.000	1467.318	-5.463	.056	0.000	56.858	45.923	20.000
26.492	3400.000	1471.400	4.082	.171	0.000	109.999	-7.218	20.000
26.500	1820.000	1469.182	0.000	.108	0.000	111.903	0.000	42.000
26.500	2830.000	1470.759	1.577	.168	0.000	151.999	-40.096	42.000
26.500	3310.000	1471.486	.727	.207	0.000	151.999	-40.096	42.000
26.500	4510.000	1473.070	1.584	.289	0.000	151.999	-40.096	42.000
26.500	1080.000	1467.432	-5.638	.114	0.000	57.177	54.726	42.000
26.500	3400.000	1471.614	4.182	.214	0.000	151.999	-40.096	42.000
26.560	1820.000	1469.876	0.000	.695	0.000	177.289	0.000	320.000
26.560	2830.000	1471.472	1.595	.713	0.000	199.999	-22.710	320.000
26.560	3310.000	1472.159	.687	.673	0.000	199.999	-22.710	320.000
26.560	4510.000	1473.694	1.535	.624	0.000	199.999	-22.710	320.000

26.560	1080.000	1468.082	-5.611	.650	0.000	82.327	94.962	320.000
26.560	3400.000	1472.282	4.199	.668	0.000	199.999	-22.710	320.000
26.602	1820.000	1470.058	0.000	.182	0.000	79.999	0.000	220.000
26.602	2830.000	1471.592	1.534	.120	0.000	79.999	-.000	220.000
26.602	3310.000	1472.246	.654	.087	0.000	79.999	-.000	220.000
26.602	4510.000	1473.703	1.457	.009	0.000	79.999	-.000	220.000
26.602	1080.000	1465.325	-5.374	.246	0.000	73.882	6.117	220.000
26.602	3400.000	1472.362	4.034	.081	0.000	79.999	-.000	220.000
26.608	1820.000	1469.973	0.000	-.085	0.000	58.108	0.000	30.000
26.608	2830.000	1471.440	1.467	-.151	0.000	58.853	-.745	30.000
26.608	3310.000	1472.065	.625	-.180	0.000	59.171	-1.063	30.000
26.608	4510.000	1473.456	1.391	-.247	0.000	60.892	-2.783	30.000
26.608	1080.000	1468.293	-5.163	-.035	0.000	57.255	.853	30.000
26.608	3400.000	1472.177	3.884	-.186	0.000	59.228	-1.119	30.000
26.610	1820.000	1469.924	0.000	-.049	0.000	52.640	0.000	10.000
26.610	2830.000	1471.355	1.431	-.065	0.000	53.096	-.455	10.000
26.610	3310.000	1471.963	.608	-.102	0.000	53.289	-.649	10.000
26.610	4510.000	1473.310	1.347	-.146	0.000	53.718	-1.077	10.000
26.610	1080.000	1468.271	-5.039	-.022	0.000	52.115	.526	10.000
26.610	3400.000	1472.072	3.800	-.105	0.000	53.324	-.683	10.000
26.611	1820.000	1469.847	0.000	-.077	0.000	47.271	0.000	10.000
26.611	2830.000	1471.222	1.375	-.133	0.000	47.532	-.262	10.000
26.611	3310.000	1471.805	.582	-.159	0.000	47.643	-.372	10.000
26.611	4510.000	1473.085	1.260	-.226	0.000	47.887	-.616	10.000
26.611	1080.000	1468.235	-4.850	-.037	0.000	46.964	.307	10.000
26.611	3400.000	1471.908	3.673	-.164	0.000	47.663	-.392	10.000
26.612	1820.000	1469.815	0.000	-.033	0.000	46.000	0.000	4.000
26.612	2830.000	1471.168	1.353	-.055	0.000	46.000	0.000	4.000
26.612	3310.000	1471.739	.571	-.065	0.000	46.000	0.000	4.000
26.612	4510.000	1472.989	1.250	-.096	0.000	46.000	0.000	4.000
26.612	1080.000	1468.210	-4.778	-.025	0.000	46.000	0.000	4.000
26.612	3400.000	1471.840	3.630	-.068	0.000	46.000	0.000	4.000
26.613	1820.000	1469.829	0.000	.014	0.000	45.999	0.000	1.000
26.613	2830.000	1471.184	1.355	.016	0.000	45.999	-.000	1.000
26.613	3310.000	1471.756	.572	.017	0.000	45.999	-.000	1.000
26.613	4510.000	1473.007	1.251	.018	0.000	45.999	-.000	1.000
26.613	1080.000	1468.295	-4.712	.085	0.000	45.999	.000	1.000
26.613	3400.000	1471.857	3.561	.017	0.000	45.999	-.000	1.000
26.626	1820.000	1470.427	0.000	.598	0.000	45.999	0.000	70.000
26.626	2830.000	1473.457	3.030	2.274	0.000	45.999	-.000	70.000
26.626	3310.000	1475.348	1.891	3.593	0.000	45.999	-.000	70.000
26.626	4510.000	1477.983	2.635	4.976	0.000	45.999	-.000	70.000
26.626	1080.000	1469.195	-8.789	.899	0.000	45.999	.000	70.000
26.626	3400.000	1475.609	6.414	3.752	0.000	45.999	-.000	70.000
26.627	1820.000	1470.442	0.000	.015	0.000	45.999	0.000	1.000
26.627	2830.000	1473.464	3.022	.006	0.000	45.999	-.000	1.000
26.627	3310.000	1475.352	1.889	.004	0.000	45.999	-.000	1.000
26.627	4510.000	1477.987	2.635	.004	0.000	45.999	-.000	1.000
26.627	1080.000	1469.210	-8.777	.016	0.000	45.999	.000	1.000
26.627	3400.000	1475.613	6.403	.004	0.000	45.999	-.000	1.000
26.628	1790.000	1471.466	0.000	1.024	0.000	53.560	0.000	14.000
26.628	2790.000	1474.155	2.689	.691	0.000	59.861	-6.301	14.000
26.628	3260.000	1475.922	1.767	.570	0.000	59.999	-6.439	14.000
26.628	4450.000	1478.622	2.701	.635	0.000	59.999	-6.439	14.000
26.628	1080.000	1469.936	-8.686	.726	0.000	48.351	5.209	14.000
26.628	3400.000	1476.156	6.220	.543	0.000	59.999	-6.439	14.000

26.704	1790.000	1472.232	0.000	.816	0.000	50.153	0.000	400.000
26.704	2790.000	1474.755	2.473	.601	0.000	130.876	-80.723	400.000
26.704	3260.000	1476.445	1.639	.523	0.000	230.310	-180.157	400.000
26.704	4450.000	1479.374	2.929	.751	0.000	369.563	-319.410	400.000
26.704	1080.000	1470.659	-3.705	.733	0.000	46.720	3.433	400.000
26.704	3400.000	1476.718	6.050	.562	0.000	256.736	-206.583	400.000
26.780	1790.000	1473.650	0.000	1.365	0.000	340.514	0.000	400.000
26.780	2790.000	1475.884	2.234	1.128	0.000	592.339	-251.826	400.000
26.780	3260.000	1477.118	1.234	.674	0.000	599.056	-258.542	400.000
26.780	4450.000	1479.622	2.503	.248	0.000	604.091	-263.577	400.000
26.780	1080.000	1471.947	-7.674	1.279	0.000	99.665	240.848	400.000
26.780	3400.000	1477.354	5.406	.635	0.000	599.530	-259.016	400.000
26.894	1790.000	1474.337	0.000	.687	0.000	217.503	0.000	600.000
26.894	2790.000	1476.118	1.781	.234	0.000	433.932	-216.329	600.000
26.894	3260.000	1477.232	1.114	.114	0.000	476.773	-259.170	600.000
26.894	4450.000	1479.668	2.436	.046	0.000	748.982	-531.378	600.000
26.894	1080.000	1473.000	-6.668	1.052	0.000	84.498	133.105	600.000
26.894	3400.000	1477.457	4.458	.104	0.000	465.446	-267.843	600.000
27.002	1790.000	1474.884	0.000	.547	0.000	204.569	0.000	570.000
27.002	2790.000	1476.445	1.562	.328	0.000	317.536	-112.966	570.000
27.002	3260.000	1477.419	.974	.187	0.000	349.999	-145.430	570.000
27.002	4450.000	1479.742	2.323	.074	0.000	349.999	-145.430	570.000
27.002	1080.000	1473.491	-5.251	.492	0.000	105.492	99.077	570.000
27.002	3400.000	1477.632	4.140	.174	0.000	349.999	-145.430	570.000
27.081	1790.000	1475.135	0.000	.251	0.000	96.361	0.000	420.000
27.081	2790.000	1476.594	1.459	.149	0.000	123.815	-27.454	420.000
27.081	3260.000	1477.484	.890	.065	0.000	140.565	-44.204	420.000
27.081	4450.000	1479.759	2.274	.017	0.000	211.149	-114.788	420.000
27.081	1080.000	1473.802	-5.957	.311	0.000	71.971	24.390	420.000
27.081	3400.000	1477.685	3.883	.053	0.000	144.332	-47.970	420.000
27.180	1790.000	1476.408	0.000	1.273	0.000	292.278	0.000	520.000
27.180	2790.000	1477.807	1.399	1.213	0.000	369.116	-76.838	520.000
27.180	3260.000	1478.522	.715	1.038	0.000	377.874	-85.596	520.000
27.180	4450.000	1480.433	1.910	.674	0.000	402.152	-109.874	520.000
27.180	1080.000	1475.154	-5.279	1.352	0.000	195.773	96.505	520.000
27.180	3400.000	1478.706	3.552	1.021	0.000	380.205	-87.927	520.000
27.289	1790.000	1476.872	0.000	.464	0.000	408.420	0.000	580.000
27.289	2790.000	1478.176	1.304	.369	0.000	444.216	-35.796	580.000
27.289	3260.000	1478.821	.645	.299	0.000	445.843	-37.423	580.000
27.289	4450.000	1480.615	1.794	.182	0.000	450.362	-41.942	580.000
27.289	1080.000	1475.671	-4.943	.518	0.000	329.439	78.981	580.000
27.289	3400.000	1478.993	3.321	.287	0.000	446.276	-37.856	580.000
27.581	1790.000	1477.744	0.000	.872	0.000	310.306	0.000	1540.000
27.581	2790.000	1478.871	1.126	.694	0.000	349.882	-39.576	1540.000
27.581	3260.000	1479.406	.535	.585	0.000	362.136	-51.830	1540.000
27.581	4450.000	1480.978	1.572	.363	0.000	421.942	-111.636	1540.000
27.581	1080.000	1476.713	-4.265	1.042	0.000	206.312	103.994	1540.000
27.581	3400.000	1479.557	2.844	.564	0.000	365.533	-55.227	1540.000
28.134	1790.000	1479.483	0.000	1.739	0.000	127.999	0.000	2920.000
28.134	2790.000	1480.623	1.139	1.752	0.000	127.999	-.000	2920.000
28.134	3260.000	1481.099	.476	1.693	0.000	127.999	-.000	2920.000
28.134	4450.000	1482.326	1.227	1.349	0.000	127.999	-.000	2920.000
28.134	1080.000	1478.337	-3.990	1.624	0.000	122.207	5.792	2920.000
28.134	3400.000	1481.236	2.899	1.679	0.000	127.999	-.000	2920.000
28.155	1790.000	1479.446	0.000	-.037	0.000	73.999	0.000	110.000
28.155	2790.000	1480.530	1.084	-.092	0.000	73.999	-.000	110.000
28.155	3260.000	1480.978	.448	-.121	0.000	73.999	-.000	110.000

28.155	4450.000	1482.133	1.155	-.193	0.000	73.999	-.000	110.000
28.155	1080.000	1478.332	-3.862	-.005	0.000	73.999	.000	110.000
28.155	3400.000	1481.106	2.774	-.130	0.000	73.999	-.000	110.000
28.159	1790.000	1479.426	0.000	-.020	0.000	63.999	0.000	20.000
28.159	2790.000	1480.484	1.057	-.047	0.000	63.999	-.000	20.000
28.159	3260.000	1480.917	.434	-.061	0.000	63.999	-.000	20.000
28.159	4450.000	1482.036	1.118	-.098	0.000	63.999	-.000	20.000
28.159	1080.000	1478.327	-3.738	-.005	0.000	63.999	.000	20.000
28.159	3400.000	1481.041	2.714	-.065	0.000	63.999	-.000	20.000
28.164	1790.000	1479.362	0.000	-.064	0.000	50.999	0.000	25.000
28.164	2790.000	1480.349	.987	-.135	0.000	50.999	-.000	25.000
28.164	3260.000	1480.744	.395	-.173	0.000	50.999	-.000	25.000
28.164	4450.000	1481.761	1.017	-.274	0.000	50.999	-.000	25.000
28.164	1080.000	1478.301	-3.460	-.026	0.000	50.999	.000	25.000
28.164	3400.000	1480.855	2.555	-.135	0.000	50.999	-.000	25.000
28.165	1790.000	1479.320	0.000	-.042	0.000	45.999	0.000	10.000
28.165	2790.000	1480.259	.938	-.090	0.000	45.999	-.000	10.000
28.165	3260.000	1480.625	.367	-.118	0.000	45.999	-.000	10.000
28.165	4450.000	1481.566	.940	-.195	0.000	45.999	-.000	10.000
28.165	1080.000	1478.283	-3.243	-.018	0.000	45.999	.000	10.000
28.165	3400.000	1480.728	2.445	-.127	0.000	45.999	-.000	10.000
28.167	1790.000	1479.253	0.000	-.058	0.000	40.999	0.000	10.000
28.167	2790.000	1480.112	.859	-.147	0.000	40.999	-.000	10.000
28.167	3260.000	1480.430	.319	-.195	0.000	40.999	-.000	10.000
28.167	4450.000	1481.228	.798	-.338	0.000	40.999	-.000	10.000
28.167	1080.000	1478.253	-2.975	-.030	0.000	40.999	.000	10.000
28.167	3400.000	1480.517	2.263	-.211	0.000	40.999	-.000	10.000
28.168	1790.000	1479.194	0.000	-.058	0.000	37.999	0.000	5.000
28.168	2790.000	1479.979	.785	-.133	0.000	37.999	-.000	5.000
28.168	3260.000	1480.247	.269	-.183	0.000	37.999	-.000	5.000
28.168	4450.000	1480.987	.740	-.241	0.000	37.999	-.000	5.000
28.168	1080.000	1478.228	-2.759	-.026	0.000	37.999	.000	5.000
28.168	3400.000	1480.316	2.088	-.201	0.000	37.999	-.000	5.000
28.169	1790.000	1479.150	0.000	-.045	0.000	35.999	0.000	5.000
28.169	2790.000	1479.870	.720	-.109	0.000	35.999	-.000	5.000
28.169	3260.000	1480.090	.220	-.158	0.000	35.999	-.000	5.000
28.169	4450.000	1481.228	1.139	.241	0.000	35.999	-.000	5.000
28.169	1080.000	1478.209	-3.019	-.018	0.000	35.999	.000	5.000
28.169	3400.000	1480.140	1.931	-.176	0.000	35.999	-.000	5.000
28.170	1790.000	1479.091	0.000	-.059	0.000	34.399	0.000	4.000
28.170	2790.000	1479.723	.632	-.147	0.000	34.399	-.000	4.000
28.170	3260.000	1479.931	.208	-.158	0.000	34.399	-.000	4.000
28.170	4450.000	1481.458	1.527	.230	0.000	34.399	-.000	4.000
28.170	1080.000	1478.183	-3.275	-.026	0.000	34.399	.000	4.000
28.170	3400.000	1480.151	1.968	.011	0.000	34.399	-.000	4.000
28.171	1790.000	1479.097	0.000	.006	0.000	34.399	0.000	1.000
28.171	2790.000	1479.736	.640	.013	0.000	34.399	-.000	1.000
28.171	3260.000	1481.348	1.612	1.417	0.000	34.399	-.000	1.000
28.171	4450.000	1483.122	1.774	1.664	0.000	34.399	-.000	1.000
28.171	1080.000	1478.186	-4.936	.003	0.000	34.399	.000	1.000
28.171	3400.000	1480.165	1.979	.014	0.000	34.399	-.000	1.000
28.174	1790.000	1479.120	0.000	.023	0.000	34.399	0.000	20.000
28.174	2790.000	1479.787	.667	.051	0.000	34.399	-.000	20.000
28.174	3260.000	1482.938	3.151	1.590	0.000	34.399	-.000	20.000
28.174	4450.000	1486.685	3.747	3.562	0.000	34.399	-.000	20.000
28.174	1080.000	1478.199	-8.485	.013	0.000	34.399	.000	20.000
28.174	3400.000	1480.342	2.143	.178	0.000	34.399	-.000	20.000

28.175	1790.000	1479.126	0.000	.006	0.000	34.399	0.000	1.000
28.175	2790.000	1480.511	1.385	.724	0.000	34.399	-.000	1.000
28.175	3260.000	1482.942	2.431	.004	0.000	34.399	-.000	1.000
28.175	4450.000	1486.688	3.745	.003	0.000	34.399	-.000	1.000
28.175	1080.000	1478.203	-8.435	.003	0.000	34.399	.000	1.000
28.175	3400.000	1481.713	3.511	1.371	0.000	34.399	-.000	1.000
28.176	1790.000	1479.754	0.000	.678	0.000	37.032	0.000	4.000
28.176	2790.000	1481.587	1.833	1.076	0.000	37.076	-.044	4.000
28.176	3260.000	1483.499	1.912	.556	0.000	42.399	-5.367	4.000
28.176	4450.000	1487.229	3.730	.541	0.000	42.399	-5.367	4.000
28.176	1080.000	1478.479	-8.750	.276	0.000	37.002	.030	4.000
28.176	3400.000	1482.801	4.322	1.087	0.000	42.399	-5.367	4.000
28.177	1790.000	1480.138	0.000	.384	0.000	43.550	0.000	10.000
28.177	2790.000	1482.190	2.052	.603	0.000	43.819	-.269	10.000
28.177	3260.000	1484.032	1.842	.533	0.000	62.399	-18.849	10.000
28.177	4450.000	1487.804	3.772	.576	0.000	62.399	-18.849	10.000
28.177	1080.000	1478.665	-9.139	.186	0.000	43.356	.194	10.000
28.177	3400.000	1483.513	4.848	.712	0.000	62.399	-18.849	10.000
28.181	1790.000	1480.474	0.000	.336	0.000	56.501	0.000	20.000
28.181	2790.000	1482.689	2.215	.499	0.000	57.395	-.894	20.000
28.181	3260.000	1484.477	1.788	.445	0.000	102.399	-45.898	20.000
28.181	4450.000	1488.234	3.757	.430	0.000	102.399	-45.898	20.000
28.181	1080.000	1478.852	-9.383	.187	0.000	55.846	.655	20.000
28.181	3400.000	1484.076	5.224	.563	0.000	102.399	-45.898	20.000
28.191	1790.000	1480.752	0.000	.278	0.000	78.517	0.000	55.000
28.191	2790.000	1483.065	2.313	.376	0.000	89.091	-10.574	55.000
28.191	3260.000	1484.794	1.728	.316	0.000	207.423	-128.906	55.000
28.191	4450.000	1488.505	3.712	.271	0.000	211.999	-133.482	55.000
28.191	1080.000	1479.042	-9.463	.190	0.000	70.697	7.820	55.000
28.191	3400.000	1484.468	5.427	.392	0.000	106.289	-27.772	55.000
28.255	1790.000	1481.074	0.000	.321	0.000	354.848	0.000	340.000
28.255	2790.000	1483.429	2.355	.363	0.000	460.465	-105.617	340.000
28.255	3260.000	1485.105	1.676	.311	0.000	485.332	-130.484	340.000
28.255	4450.000	1488.705	3.600	.200	0.000	514.502	-159.654	340.000
28.255	1080.000	1479.286	-9.419	.244	0.000	286.012	68.836	340.000
28.255	3400.000	1484.837	5.551	.369	0.000	483.160	-128.311	340.000
28.433	1740.000	1481.165	0.000	.092	0.000	400.461	0.000	940.000
28.433	2720.000	1483.480	2.315	.052	0.000	620.120	-219.659	940.000
28.433	3170.000	1485.138	1.657	.033	0.000	633.752	-233.291	940.000
28.433	4320.000	1488.724	3.586	.019	0.000	676.642	-276.181	940.000
28.433	1080.000	1479.417	-9.307	.131	0.000	292.646	107.615	940.000
28.433	3400.000	1484.876	5.459	.039	0.000	628.516	-228.055	940.000
28.483	1740.000	1481.149	0.000	-.017	0.000	258.169	0.000	260.000
28.483	2720.000	1483.469	2.320	-.012	0.000	516.703	-258.534	260.000
28.483	3170.000	1485.134	1.665	-.004	0.000	735.993	-477.824	260.000
28.483	4320.000	1488.725	3.591	.001	0.000	775.289	-517.121	260.000
28.483	1080.000	1479.410	-9.315	-.007	0.000	90.822	167.347	260.000
28.483	3400.000	1484.870	5.460	-.006	0.000	696.743	-438.574	260.000
28.530	1740.000	1481.163	0.000	.015	0.000	99.085	0.000	250.000
28.530	2720.000	1483.438	2.274	-.031	0.000	330.860	-231.775	250.000
28.530	3170.000	1485.120	1.682	-.014	0.000	465.653	-366.568	250.000
28.530	4320.000	1488.721	3.601	-.004	0.000	687.106	-588.021	250.000
28.530	1080.000	1479.434	-9.287	.024	0.000	85.095	13.990	250.000
28.530	3400.000	1484.850	5.416	-.020	0.000	456.674	-357.589	250.000
28.546	1740.000	1480.859	0.000	-.305	0.000	61.376	0.000	89.000
28.546	2720.000	1483.195	2.336	-.243	0.000	74.783	-13.406	89.000

28.546	3170.000	1484.944	1.749	-.175	0.000	284.915	-223.539	89.000
28.546	4320.000	1488.682	3.738	-.039	0.000	457.303	-395.927	89.000
28.546	1080.000	1479.834	-8.848	.400	0.000	55.384	5.992	89.000
28.546	3400.000	1484.605	4.771	-.245	0.000	252.014	-190.638	89.000
28.547	1740.000	1483.774	0.000	2.915	0.000	95.055	0.000	1.000
28.547	2720.000	1484.435	1.152	1.641	0.000	274.398	-179.343	1.000
28.547	3170.000	1485.199	.363	.255	0.000	304.964	-209.909	1.000
28.547	4320.000	1488.617	3.418	-.065	0.000	447.594	-352.538	1.000
28.547	1080.000	1483.027	-5.591	3.193	0.000	74.122	20.934	1.000
28.547	3400.000	1485.383	2.357	.778	0.000	314.160	-219.105	1.000
28.548	1740.000	1484.503	0.000	.729	0.000	241.501	0.000	3.000
28.548	2720.000	1485.544	1.041	.708	0.000	319.575	-78.174	3.000
28.548	3170.000	1485.212	-.333	.012	0.000	305.227	-63.726	3.000
28.548	4320.000	1488.618	3.406	.001	0.000	447.695	-206.194	3.000
28.548	1080.000	1483.446	-5.172	.420	0.000	76.417	165.084	3.000
28.548	3400.000	1485.395	1.948	.011	0.000	314.410	-72.908	3.000
28.549	1740.000	1485.182	0.000	.679	0.000	304.483	0.000	1.000
28.549	2720.000	1486.177	.995	.633	0.000	314.999	-10.516	1.000
28.549	3170.000	1486.516	.338	1.304	0.000	314.999	-10.516	1.000
28.549	4320.000	1488.777	2.261	.159	0.000	314.999	-10.516	1.000
28.549	1080.000	1484.128	-4.648	.682	0.000	205.731	98.752	1.000
28.549	3400.000	1486.666	2.537	1.271	0.000	314.999	-10.516	1.000
28.577	1740.000	1485.227	0.000	.045	0.000	393.054	0.000	156.000
28.577	2720.000	1486.270	1.043	.093	0.000	520.200	-127.146	156.000
28.577	3170.000	1486.644	.374	.129	0.000	541.092	-148.038	156.000
28.577	4320.000	1488.903	2.259	.126	0.000	582.354	-189.300	156.000
28.577	1080.000	1484.157	-4.746	.028	0.000	180.177	212.877	156.000
28.577	3400.000	1486.814	2.657	.148	0.000	550.319	-157.265	156.000
28.596	1740.000	1485.225	0.000	-.002	0.000	187.717	0.000	100.000
28.596	2720.000	1486.225	1.000	-.045	0.000	354.586	-166.870	100.000
28.596	3170.000	1486.598	.373	-.046	0.000	499.066	-311.349	100.000
28.596	4320.000	1488.897	2.299	-.006	0.000	593.798	-406.081	100.000
28.596	1080.000	1484.176	-4.721	.019	0.000	128.683	59.034	100.000
28.596	3400.000	1486.767	2.591	-.047	0.000	509.565	-321.848	100.000
28.610	1740.000	1485.314	0.000	.088	0.000	169.752	0.000	75.000
28.610	2720.000	1486.312	.998	.087	0.000	259.670	-89.919	75.000
28.610	3170.000	1486.667	.355	.070	0.000	319.182	-149.430	75.000
28.610	4320.000	1488.904	2.237	.007	0.000	620.143	-450.392	75.000
28.610	1080.000	1484.229	-4.675	.053	0.000	164.668	5.084	75.000
28.610	3400.000	1486.828	2.599	.061	0.000	347.589	-177.838	75.000
28.620	1740.000	1485.548	0.000	.235	0.000	228.070	0.000	50.000
28.620	2720.000	1486.622	1.073	.309	0.000	270.946	-42.877	50.000
28.620	3170.000	1486.994	.373	.327	0.000	334.755	-106.685	50.000
28.620	4320.000	1488.954	1.959	.050	0.000	648.777	-420.707	50.000
28.620	1080.000	1484.353	-4.601	.123	0.000	222.434	5.636	50.000
28.620	3400.000	1487.154	2.802	.326	0.000	362.054	-133.984	50.000
28.625	1740.000	1485.356	0.000	-.193	0.000	72.509	0.000	25.000
28.625	2720.000	1486.751	1.395	.129	0.000	270.711	-198.202	25.000
28.625	3170.000	1487.022	.272	.028	0.000	317.195	-244.686	25.000
28.625	4320.000	1488.897	1.874	-.057	0.000	658.396	-585.886	25.000
28.625	1080.000	1484.527	-4.369	.175	0.000	64.485	8.024	25.000
28.625	3400.000	1487.156	2.629	.002	0.000	340.068	-267.558	25.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.000	789.999	143.467	0.000

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WATER MANAGEMENT

MONTREAL RIVER

City of Ironwood, Michigan

Hydraulic Analysis

SECNO Chart

Bibliography

Bridge Data

Project Manager - Dennis Cox

HYDRAULIC ANALYSIS

A. Introduction

The Montreal River, in the city of Ironwood, Gogebic County, Michigan, is the subject of this report. The study begins at the northern corporate limits of Ironwood and continues upstream for approximately 4.2 river miles to the southern corporate limits of Ironwood. The Montreal River forms the Michigan/Wisconsin state boundary in the study area and the city of Hurley, Wisconsin, lies to the west directly across the river from Ironwood, Michigan. In 1972, the Soil Conservation Service in Madison, Wisconsin, completed a Flood Insurance Study for the Montreal River in Hurley, Wisconsin.

For the S. C. S. study in Hurley, Wisconsin, a discharge-frequency relationship for the Montreal River was derived from a log-Pearson type III analysis of records of U. S. Geological Survey gaging station on the Montreal River at Ironwood, Michigan. The gage had been operated on an intermittent basis since 1918. The S. C. S. analysis was based on the 12 discontinuous years of recorded flow. The gage was located on the downstream side of the Silver Street bridge in Ironwood.

A new discharge-frequency relationship for the Montreal River was derived for the Ironwood, Michigan study. Annual peak flow data available at the Ironwood gage was correlated to the corresponding data for the Bad River near Odanah, Wisconsin. The discharge-frequency relationship was then estimated from the Bad River by the Two Station Comparison method. The 10-, 50-, 100-, and 500-year flood frequency flows used in this study have been approved by the Michigan Department of Natural Resources. According to the analysis above, the major floods on the Montreal River occur during the spring months.

The data in this report were coordinated with the Soil Conservation Service, Madison, Wisconsin, the Wisconsin Department of Natural Resources, and the Michigan Department of Natural Resources.

B. Basic Data

Basic field data obtained by the S. C. S. in the Hurley, Wisconsin study were used for the Ironwood, Michigan study. The S. C. S. cross sections begin about 0.6 mile downstream of the northern corporate limits of Ironwood and end at the southern corporate limits of Ironwood. Actual field data were taken on the Hurley, Wisconsin, side of the river only; the remaining portions of the cross sections on the Ironwood, Michigan, side of the river were constructed from available 2-foot contour maps (1963) for the city of Ironwood. The S. C. S. furnished information concerning channel distances between sections and maps showing locations of some of the sections. The remaining sections were located using the S. C. S. channel reach lengths and the 2-foot contour maps. Information on bridge widths and the dam features was obtained during a reconnaissance trip to Ironwood in October, 1976. The crest elevation for the dam near the upstream end of the study was furnished by the S. C. S. The railroad bridge which is shown crossing the Montreal River just upstream from the Oma Street bridge no longer exists.

C. Method of Analysis

The flood profiles were calculated by the HEC-2 computer program developed by the U. S. Army Corps of Engineers. The U.S. 2 highway bridge has been modeled for the requirements of the normal bridge routine; the Norrie Street/Poplar Street Bridge, Silver Street Bridge, and the Oma Street Bridge have all been modeled for the requirements of the special bridge routine. Since the low chords of the two railroad bridges are much higher than the flood profiles, these two bridges were considered to be constricted valley sections.

The backwater curves began at the top of a waterfall about 0.6 mile north (downstream) of the northern corporate limits of Ironwood. This location was chosen to obtain a good starting water-surface elevation (at critical depth) for each profile. Channel Manning's "n" values were determined by calculating a backwater profile for a known "bank-full" flow which matched the corresponding high-water mark at the Silver Street bridge. The overbank Manning's "n" values were then determined by calculating a backwater profile for a large known flow which also matched the corresponding high-water mark at the Silver Street bridge. The flow chosen for the determination of Manning's channel "n" values was 1080 cfs, which occurred during the flood

of May 2, 1954. For the determination of Manning's overbank "n" values, the maximum flood of record, which occurred on April 24, 1960, was chosen. The discharge for this flood was 3400 cfs.

Manning's "n" values were furnished by the S. C. S. from their Hurley, Wisconsin Flood Insurance Study. However, in the course of this study it was determined that due to the differences in modeling techniques, the S. C. S. values for Manning's "n" would not duplicate the known high-water marks in the new stream model. It was later determined that a 25 percent reduction in both the channel and overbank Manning's "n" of the S.C.S. from the waterfall to Silver Street was necessary to match the high water marks at Silver Street. In order to match the high water mark for the flood of April 1950 near the dam, it was necessary to reduce the channel and overbank Manning's "n" of the S. C. S. by 40% from Silver Street to the upstream limits of the study. Based on a field reconnaissance of the river, these new Manning's "n" values appear to be reasonable. No major development has occurred in the flood plain of the Montreal River since the floods of 1954 and 1960.

D. Variables and Coefficients

The Manning's "n" values as determined by the method above were used in this study. The Manning's "n" for the channel ranges from 0.027 to 0.045. For the overbank areas, the Manning's "n" ranges from 0.030 to 0.064. The expansion and contraction coefficients chosen for this study were 0.5 and 0.3, respectively.

Weir flow discharge coefficients (COFQ) were chosen from charts published by the Bureau of Public Roads based on headwater depth of constrictions. The calculations for "XKOR" values used in the "special bridge" routines are shown on special forms in the back of this booklet.

E. Starting Point

The profile computation for the Montreal River began at the top of a waterfall about 3300 feet north (downstream) of the northern corporate limits of Ironwood. Since each profile would pass through the critical depth as it passed over the waterfall, the starting elevation chosen for each profile was assumed to be the elevation at which critical depth occurs. This critical depth was determined by the HEC-2 computer model.

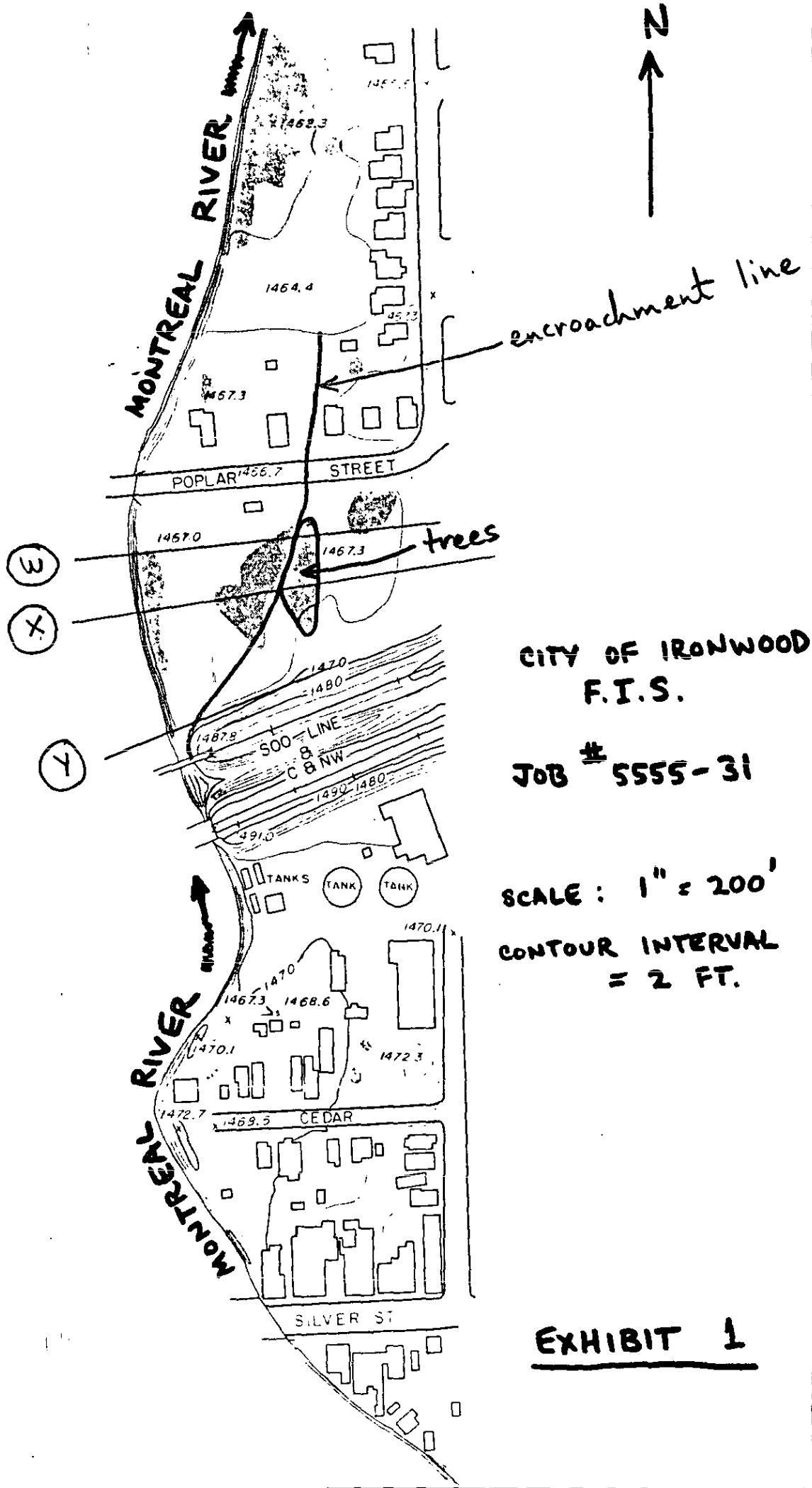
F. Encroachments

In most cases, the encroachments for the 100-year natural floodway are based on a 1:1 convergence into bridges and a 1:4 expansion from the downstream sides of bridges or other natural constrictions. Notable exceptions occur in the following areas: 1) between Poplar Street/Norrie Street and the Minneapolis - St. Paul/ Sault Ste. Marie railroad bridge, 2) between the Chicago and Northwestern railroad bridge and the Silver Street bridge, and 3) between the southern Ironwood City limits and the first eastern tributary just downstream from Section SS. These encroachments will be discussed in detail later. Other encroachments occur just upstream from Silver Street, and also at Sections E, LL and MM. Since the flow for the April, 1960 flood of record and the 100-year frequency flows are nearly the same, and also because of the availability of high water mark information for the April 1960 flood, the stream was modeled using the April 1960 flood flow.

In the area upstream from the Silver Steet bridge, the encroachment is due to a line of houses along the east bank of the river. At the Silver Street bridge, weir flow was confined to the roadway directly above the channel due to building rows along Silver Street. In the S. C. S. cross sections, buildings were not included in the total lengths of the sections; cross sections were shortened by the total widths of the buildings.

At sections E, LL, and MM, encroachments were added to eliminate shallow flooding areas. The net effect of these encroachments was a rise in water surface elevation of less than 0.1 foot. For the areas previously mentioned as exceptions to the 1:1 convergence and 1:4 expansion rates, exhibits showing the 100-year natural floodway boundaries are presented on the following pages.

Exhibit 1 shows the floodway on the Ironwood side of the river for the area between Poplar Street/Norrie Street and the Minneapolis-St. Paul/ Sault Ste. Marie railroad bridge. A low levee exists along the east bank of the Montreal River in this reach but when the levee is overtopped, the overbank area becomes a large pond until weir flow can begin over the roadway east of the bridge. For purposes of this study, the floodway extent at the roadway was assumed to include the width of roadway that experienced a flow depth greater than 0.5 foot as determined by the energy grade line at the downstream face of



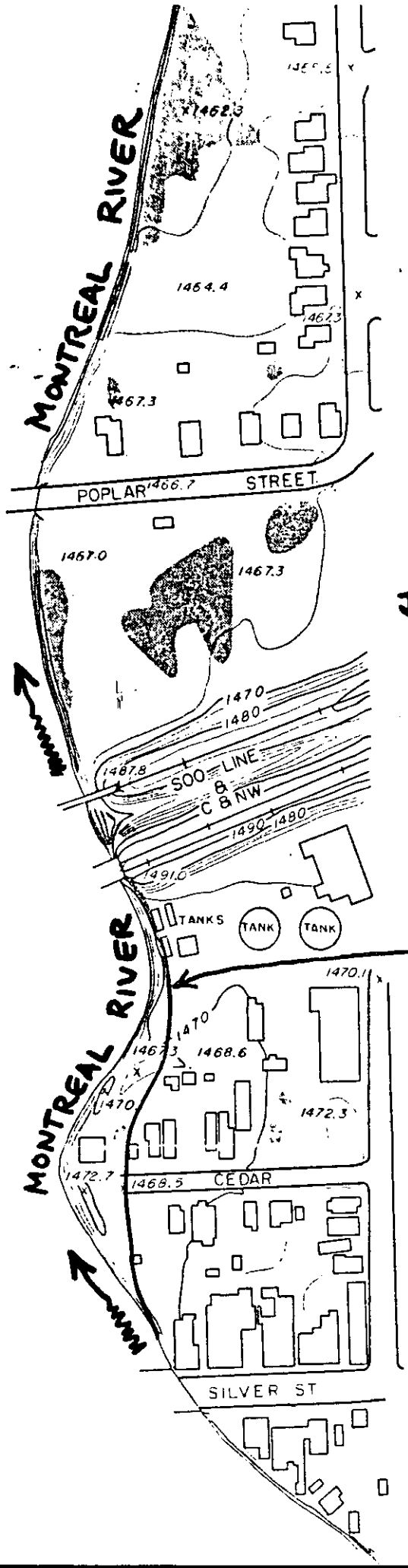
CITY OF IRONWOOD
F.I.S.

JOB # 5555-31

SCALE : 1" = 200'

CONTOUR INTERVAL
= 2 FT.

EXHIBIT 1



N

CITY OF IRONWOOD
F.I.S.

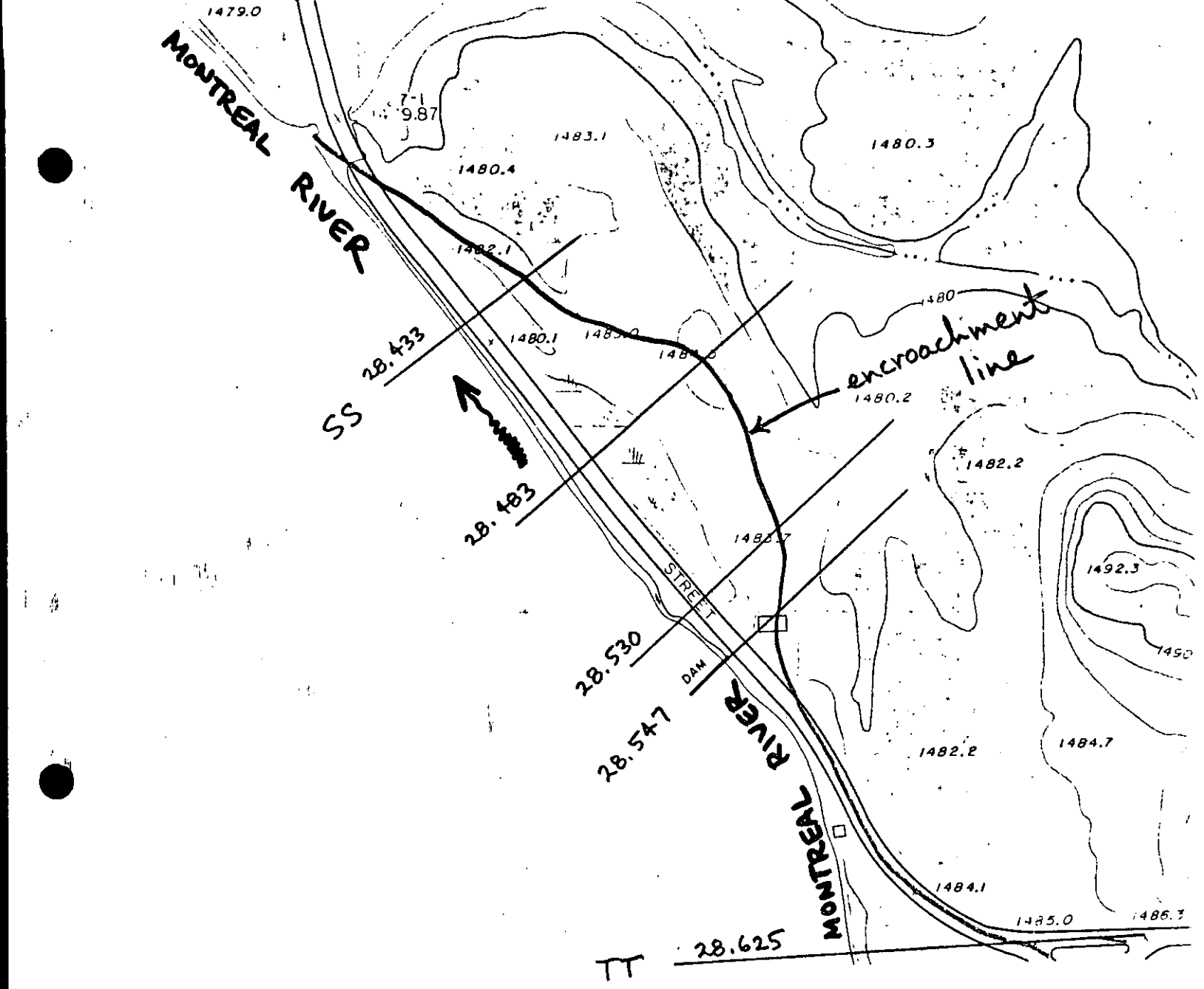
JOB # 5555-31

SCALE : 1" = 200'

CONTOUR INTERVAL
= 2 FT.

encroachment line

EXHIBIT 2



3	2	1
0	11	12
5	14	13
2	23	24
7	26	25
4	35	36

400 600

CONTOUR INTERVAL 2'

CITY OF IRONWOOD
F.I.S.

JOB # 5555-31

SCALE: 1" = 200'

CONTOUR INTERVAL = 2 FT.

N

EXHIBIT 3

the bridge. A straight line was drawn from the eastern extremity of the floodway at the roadway downstream to the eastern edge of the floodway at Section 26.328. Upstream of the roadway, at Sections W and X, the floodway was encroached at a tree line as shown on the 2-foot contour map exhibit and on aerial photographs of the area. For a detailed explanation of the hydraulic model in the area of Poplar Street/Norrie Street, see the "Special Problems" section of this report.

Exhibit 2 shows the floodway on the Ironwood side of the river between the Chicago and Northwestern railroad bridge and the Silver Street bridge. This outline is based on the sweep and extent of moving floodwaters as determined from photographs taken during the April 1960 flood.

Exhibit 3 shows the floodway on the Ironwood side of the river at the upstream end of the study. The floodway is drawn along the drainage divide between the Montreal River and its tributary to the east because the flooded outline of the April 1960 flood extends past the drainage divide.

G. High-Water Data

High-water data can be obtained from the gage records for the 12 years of record at the Ironwood gage. In addition, several high-water marks were obtained for the flood of record which occurred on April 24, 1960. In this study the high-water marks were used to determine the Manning's "n" values, since both the flows and the elevations were available.

Since the rating curve for flows at the Ironwood gage is accurate for flows up to 1100 cfs, the flood of May 2, 1954, was selected to determine Manning's "n" for the channel. The flow for this flood was 1080 cfs. Since there was no other available flow data for areas downstream of the gage, the flow of 1080 cfs was assumed to be constant from the Silver Street bridge to the waterfall. With a reduction of 25 percent in the S. C. S. values of Manning's "n", the backwater profile computed for this flow gives a water-surface elevation of Elev. 1468.21 just downstream from the bridge and Elev. 1468.30 at the downstream face of the bridge. This compares well to the recorded gage height elevation of Elev. 1468.28.

In order to determine the overbank Manning's "n", the flood of record was used. The flood occurred on April 24, 1960, and its discharge was 3400 cfs. The

high-water mark of Elev. 1475.55 was measured on the upstream side of the Silver Street bridge. Once again, the discharge was assumed to be constant from Silver Street downstream to the waterfall. With a combination of 25 percent reduction in Manning's "n" for both the channel and the overbanks, the computer backwater profile gives a surface of Elev. 1475.61 at the upstream face of the Silver Street bridge.

For the area upstream of the Silver Street bridge, a high water mark just east of the dam (near the southern corporate limits of Ironwood) was used to determine Manning's "n". This high water mark was also taken during the flood of April 1960, and the elevation of the high water mark was Elev. 1484.69. The flow for this flood was also assumed to be 3400 cfs. With a 40% reduction in the S. C. S. values of Manning's "n" for the channel and overbanks, the backwater profile computed for the flow of 3400 cfs gives a water-surface elevation of Elev. 1484.61 at the downstream end of the dam. This compares favorably with the high water mark of Elev. 1484.69.

Two other high water marks for the flood of April 1960 were obtained; one on Norrie Street/Poplar Street and another on Cedar Street. The high water mark at Norrie St./Poplar Street was used to establish a flow distribution between the channel flow and weir flow around the Norrie Street/Poplar Street bridge, as detailed in the "Special Problems" section of this report. The highwater mark at Cedar Street was discarded for use in this study. According to photographs taken during the flood of April 1960, sandbags were placed on Cedar Street between the river and the high water mark. Since the high water mark may not be representative of the river flooding, and also due to the only "fair" reliability of the mark, it was not used in this study.

H. Special Problems - The Norrie Street/Poplar Street Area

In the area between Sections 26.329 and the Norrie Street/Poplar Street bridge, nearly vertical walls of stone blocks exist along both sides of the Montreal River. The wall on the east (Ironwood) side of the river ends abruptly at Section 26.329 and makes a nearly 90° turn, continuing along the back of a property line parallel to Poplar Street for a short distance. At this section there is a sharp transition from a narrow channel (upstream) to a wide channel (downstream). Based on a field reconnaissance of the area, the wall on the east bank has an elevation slightly above the low chord of the bridge on the downstream side. A field section taken along the centerline of Norrie Street/Poplar Street indicates that weir flow begins at Elev. 1467.2, which is 0.3 foot lower than the

low chord of the bridge. During the flood of April 1960, a high water mark was taken approximately 200 feet east of the bridge on the downstream side of the road in the area of the weir flow. The elevation of the high water mark was Elev. 1467.69, which is 0.19 foot higher than the low chord of the bridge. Photos of the area taken during the flood of 1960 indicate that the channel flow was confined by the nearly vertical channel walls, and the weir flow around the bridge spread out as a sheet flow over the relatively high flat residential area on the north side of Poplar Street. The water then reentered the stream near the end of the wall at Section 26.329.

Because of the sheet flow problem associated with the weir flow over Poplar Street, and the ponding effect of the right overbank upstream of the bridge, analysis by the HEC-2 backwater program was not possible. In order to obtain the discharge distribution between the channel flow and the overbank weir flow for the flood of April 1960, the following assumptions and analysis were made:

1) We calculated a HEC-2 backwater profile for the April 1960 flow of 3400 cfs from the waterfall upstream to a point 1 foot downstream from the end of the wall, allowing the top width to expand to its natural width 1 foot away from the wall.

2) We assumed that the water surface elevation just inside the wall and just outside the wall were equal; we also assumed that the high water mark elevation taken 200 feet east of the bridge was representative of the elevation at the downstream face of the bridge.

3) We calculated backwater profiles for various assumed flows through the channel from Section 26.329 to the downstream face of the bridge (with an encroachment placed on the east bank at the top of the wall to preclude any overbank flow on the east side of the river).

4) We plotted a rating curve for the section at the downstream face of the Norrie Street/Poplar Street bridge to determine the flow necessary to match the high water mark. The rating curve indicated that a flow of 1840 cfs would correspond to the high water mark of Elev. 1484.69.

5) We calculated a backwater profile for a flow of 1840 cfs from just inside the wall (Sec. 26.329) through the channel to the upstream face of the Norrie Street/Poplar Street bridge. The profile matched the high water mark at the downstream face of the bridge to within 0.01 foot.

6) Since the total flow for the April 1960 flood was 3400 cfs, the weir flow over Poplar Street east of the bridge must be 3400-1840 or 1560 cfs. In order to check this, we calculated a weir rating curve for Norrie Street/Poplar Street, as shown on the following page.

7) Using the energy grade line obtained at the upstream face of the bridge for the channel flow of 1840 cfs (Elev. 1469.04), we determined the weir flow that would be expected over Poplar Street at the same energy grade line. From the weir rating curve, Elev. 1469.04 indicates a weir flow of approximately 1590 cfs, which compares favorably with the 1560 cfs calculated in Step 6.

In order to obtain the flow distribution for the other profiles, the following assumptions and analysis were made:

1) We calculated HEC-2 backwater profiles for the "bank-full" May 1954 flow, and the 10-, 50-, 100-, and 500-year flow from the waterfall upstream to the point 1 foot downstream from the end of the wall (Section 26.328). The top width in each case was allowed to expand to its natural width at the section 1 foot away from the wall.

2) We assumed that the water surface elevation just inside the wall and just outside the wall were equal; we therefore used the water surface elevations obtained at Section 26.328 as starting water surface elevations at Section 26.329 for the following trials.

3) Anticipating that the flow of May 1954 would not generate any weir flow over Poplar Street, we computed a backwater profile for this flow (1080 cfs) through the channel from Section 26.329 to the upstream face of the Norrie Street/Poplar Street bridge. The energy grade line obtained for this profile at the upstream face was Elev. 1466.24; since weir flow over Poplar Street begins at Elev. 1467.2, all of the flow is contained by the channel.

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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       MONTREAL RIVER-GOGEBIC COUNTY, MICHIGAN-PROJECT MANAGER, DENNIS COX
T2       10-YEAR FLOW=1850 CFS
T3       MONTREAL RIVER-CITY OF IRONWOOD, MICHIGAN-JOB NO. 5555-31

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

     -1.       2.       -0.       -0. -1.000000     -0.00      -0.0      -0.     -0.000    -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     1.000    10.000    11.000    12.000    14.000     8.000     4.000    -0.000    -0.000    -0.000
NC      .064      .064      .034      .300      .500    -0.000    -0.000    -0.000    -0.000    -0.000
QT     6.000  1850.000  2890.000  3380.000  4600.000  1080.000  3400.000    -0.000    -0.000    -0.000

X1    23.780     9.000    57.000   140.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000
GR  1435.000     0.000  1424.200    57.000  1415.300    75.000  1415.200    78.000  1415.000   100.000
GR  1415.200   120.000  1415.300   140.000  1420.000   305.000  1435.000   550.000    -0.000    -0.000
NC      .064      .064      .034    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000    -0.000

X1    23.827    90.000    75.000   149.500   235.000   260.000   250.000    -0.000    -0.000    -0.000
GR  1436.400     0.000  1436.000     2.500  1435.500     5.100  1435.100     7.700  1434.700    10.300
GR  1434.200    12.900  1433.800    15.500  1433.400    18.100  1433.000    20.600  1432.500    23.200
GR  1432.100    25.800  1431.700    28.400  1431.300    31.000  1430.800    33.600  1430.400    36.200
GR  1430.000    38.700  1429.600    41.300  1429.100    43.900  1428.700    46.500  1428.300    49.100
GR  1427.800    51.700  1427.400    54.300  1427.000    56.800  1426.600    59.400  1426.100    62.000
GR  1425.700    64.600  1425.000    67.200  1424.300    69.800  1423.800    72.400  1422.400    75.000
GR  1421.300    77.400  1420.200    79.900  1419.100    82.400  1418.000    84.900  1416.900    87.400
GR  1415.900    89.800  1415.300    92.300  1415.300    94.800  1415.200    97.300  1415.200    99.800
GR  1415.200   102.300  1415.100   104.700  1415.100   107.200  1415.100   109.700  1415.100   112.200
GR  1415.100   114.700  1415.100   117.200  1415.100   119.600  1415.200   122.100  1415.200   124.600
GR  1415.300   127.100  1415.300   129.600  1415.400   132.100  1415.400   134.500  1415.500   137.000
GR  1415.500   139.500  1415.500   142.000  1415.600   144.500  1415.600   147.000  1415.600   149.500
GR  1416.000   161.500  1416.400   173.600  1416.800   185.700  1417.200   197.700  1417.600   209.800
GR  1418.000   221.900  1418.400   234.000  1418.700   246.000  1419.300   258.100  1419.700   270.200
GR  1420.300   282.300  1420.800   294.300  1421.600   306.400  1422.500   318.500  1423.300   330.600
GR  1424.200   342.600  1425.100   354.700  1425.900   366.800  1426.800   378.900  1427.600   390.900
GR  1428.500   403.000  1429.400   415.100  1430.200   427.200  1431.000   439.200  1431.900   451.300
GR  1432.800   463.400  1433.600   475.500  1434.500   487.500  1435.300   499.600  1436.200   511.700

X1    23.875    90.000    93.000   159.000   240.000   265.000   250.000    -0.000    -0.000    -0.000
GR  1437.900     0.000  1437.400     3.200  1436.900     6.400  1436.400     9.600  1435.900    12.800
GR  1435.400    16.000  1435.000    19.200  1434.500    22.400  1434.000    25.600  1433.500    28.800
GR  1433.000    32.000  1432.600    35.200  1432.100    38.400  1431.600    41.600  1431.100    44.800
GR  1430.600    48.100  1430.200    51.300  1429.700    54.500  1429.200    57.700  1428.700    60.900
GR  1428.200    64.100  1427.800    67.300  1427.300    70.500  1426.800    73.700  1426.300    76.900
GR  1425.800    80.100  1424.900    83.300  1423.800    86.500  1423.300    89.700  1420.600    93.000
GR  1419.800    95.200  1419.000    97.400  1418.200    99.600  1417.400   101.800  1416.600   104.000
GR  1415.900   106.100  1415.500   108.300  1415.500   110.500  1415.400   112.700  1415.400   114.900
GR  1415.400   117.100  1415.300   119.300  1415.300   121.500  1415.300   123.700  1415.300   125.900
GR  1415.200   128.100  1415.200   130.300  1415.300   132.500  1415.400   134.700  1415.400   136.900
GR  1415.500   139.100  1415.600   141.300  1415.600   143.500  1415.700   145.700  1415.800   147.900
GR  1415.800   150.100  1415.900   152.300  1416.000   154.500  1416.000   156.700  1416.100   159.000
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RECEIVED
APR 27 1977
WATER MANAGEMENT

CITY OF IRONWOOD F.I.S.

MONTREAL RIVER

HEC-2 OUTPUT FOR 10-, 50-, 100-, AND 500-YR. FLOODS; ALSO FOR THE FLOODS OF MAY 1954 AND APRIL 1960.

APRIL 1977

[illegible] NO. [illegible]55-31

GR	1416.500	169.400	1416.900	179.900	1417.200	190.400	1417.600	200.900	1418.000	211.400
GR	1418.400	221.800	1418.800	232.300	1419.100	242.800	1419.800	253.300	1420.400	263.800
GR	1421.100	274.300	1421.700	284.700	1422.600	295.200	1423.500	305.700	1424.300	316.200
GR	1425.200	326.700	1426.100	337.200	1427.000	347.600	1427.800	358.100	1428.700	368.600
GR	1429.600	379.100	1430.500	389.600	1431.300	400.100	1432.200	410.500	1433.100	421.000
GR	1434.000	431.500	1434.800	442.000	1435.700	452.500	1436.600	463.000	1437.500	473.500
X1	23.922	90.000	111.000	164.500	235.000	260.000	250.000	-0.000	-0.000	-0.000
GR	1439.300	0.000	1438.800	3.800	1438.200	7.300	1437.700	11.400	1437.100	15.300
GR	1436.600	19.100	1436.100	22.900	1435.500	26.700	1435.000	30.600	1434.500	34.400
GR	1433.900	38.200	1433.400	42.100	1432.900	45.900	1432.300	49.700	1431.800	53.500
GR	1431.200	57.400	1430.700	61.200	1430.200	65.000	1429.700	68.800	1429.100	72.700
GR	1428.600	76.500	1428.100	80.300	1427.500	84.200	1427.000	88.000	1426.400	91.800
GR	1425.900	95.600	1424.700	99.500	1423.300	103.300	1422.600	107.100	1418.800	111.000
GR	1418.300	112.900	1417.800	114.800	1417.300	116.700	1416.800	118.600	1416.200	120.500
GR	1415.900	122.500	1415.700	124.400	1415.600	126.300	1415.600	128.200	1415.500	130.100
GR	1415.500	132.000	1415.500	134.000	1415.400	135.900	1415.400	137.800	1415.400	139.700
GR	1415.300	141.600	1415.300	143.500	1415.400	145.400	1415.500	147.400	1415.600	149.300
GR	1415.700	151.200	1415.800	153.100	1415.800	155.000	1416.000	156.900	1416.100	158.900
GR	1416.100	160.800	1416.200	162.700	1416.300	164.600	1416.400	166.500	1416.500	168.500
GR	1416.900	177.300	1417.300	186.200	1417.600	195.100	1418.000	204.000	1418.400	212.900
GR	1418.800	221.800	1419.200	230.700	1419.500	239.600	1420.300	248.500	1421.000	257.400
GR	1421.800	266.300	1422.600	275.100	1423.500	284.000	1424.400	292.900	1425.300	301.800
GR	1426.200	310.700	1427.100	319.600	1428.000	328.500	1428.800	337.400	1429.700	346.300
GR	1430.600	355.200	1431.600	364.100	1432.400	373.000	1433.300	381.800	1434.200	390.700
GR	1435.100	399.600	1436.000	408.500	1436.900	417.400	1437.800	426.300	1438.700	435.200
NC	.049	.064	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	23.969	10.000	129.000	178.000	240.000	265.000	250.000	-0.000	-0.000	-0.000
GR	1440.800	0.000	1426.000	112.000	1422.500	121.000	1421.800	127.000	1417.100	129.000
GR	1416.000	137.000	1415.500	157.000	1417.000	178.000	1420.000	237.000	1440.000	397.000
NC	.053	.060	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.117	15.000	715.000	900.000	770.000	800.000	780.000	-0.000	.300	-0.000
GR	1440.000	0.000	1429.200	140.000	1426.500	517.000	1426.600	585.000	1420.700	599.000
GR	1422.800	715.000	1421.500	800.000	1415.500	810.000	1415.000	830.000	1415.500	850.000
GR	1420.000	860.000	1421.500	900.000	1422.500	1000.000	1433.000	1500.000	1440.000	1600.000
X1	24.265	-0.000	-0.000	-0.000	770.000	800.000	780.000	-0.000	-.200	-0.000
NC	.056	.056	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	6.000	1820.000	2830.000	3310.000	4510.000	1080.000	3400.000	-0.000	-0.000	-0.000
X1	24.413	15.000	715.000	900.000	760.000	800.000	780.000	-0.000	-0.000	-0.000
GR	1440.000	0.000	1429.200	140.000	1426.500	517.000	1426.600	585.000	1420.700	599.000
GR	1422.800	715.000	1421.500	800.000	1415.500	810.000	1415.000	830.000	1415.500	850.000
GR	1420.000	860.000	1421.500	900.000	1422.500	1000.000	1433.000	1500.000	1440.000	1600.000
NC	.049	.049	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.602	14.000	495.000	710.000	1000.000	1000.000	1000.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	490.000	-0.000	605.000	-0.000	-0.000	-0.000	-0.000
GR	1440.000	0.000	1438.000	46.000	1428.900	395.000	1427.600	490.000	1424.000	495.000
GR	1417.000	501.000	1416.800	520.000	1417.000	540.000	1420.000	545.000	1422.000	700.000
GR	1424.000	710.000	1428.000	1095.000	1430.000	1470.000	1440.000	1680.000	-0.000	-0.000
NC	.030	.030	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.603	18.000	580.600	689.800	8.000	8.000	8.000	-0.000	-0.000	-0.000
BT	4.000	580.600	1430.700	1427.900	580.600	1430.700	1427.900	689.800	1430.900	1427.900
BT	689.800	1430.900	1427.900	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	1440.000	0.000	1440.000	86.600	1428.800	87.500	1430.400	407.000	1430.700	580.600
GR	1422.400	580.600	1418.700	598.800	1416.900	616.800	1416.900	619.000	1416.900	651.500
GR	1416.900	653.700	1418.700	671.800	1422.700	689.800	1430.900	689.800	1431.200	870.300
GR	1435.000	1346.600	1436.000	1580.400	1440.000	1680.000	-0.000	-0.000	-0.000	-0.000
X1	24.612	18.000	580.600	689.800	45.000	45.000	45.000	-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
GR	1440.000	0.000	1440.000	86.600	1428.800	87.500	1430.400	407.000	1430.700	580.600

GR	1423.000	580.600	1419.300	598.800	1417.500	616.800	1417.500	619.000	1417.500	651.500
GR	1417.500	653.700	1419.300	671.800	1423.300	689.800	1430.900	689.800	1431.200	870.300
GR	1435.000	1346.600	1436.000	1580.400	1440.000	1680.000	-0.000	-0.000	-0.000	-0.000
NC	.030	.030	.034	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.613	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X1	24.617	18.000	580.600	689.800	23.000	23.000	23.000	-0.000	-0.000	-0.000
GR	1440.000	0.000	1440.000	86.600	1428.800	87.500	1430.400	407.000	1430.700	580.600
GR	1423.300	580.600	1419.600	598.800	1417.800	616.800	1417.800	619.000	1417.800	651.500
GR	1417.800	653.700	1419.600	671.800	1423.600	689.800	1430.900	689.800	1431.200	870.300
GR	1435.000	1346.600	1436.000	1580.400	1440.000	1680.000	-0.000	-0.000	-0.000	-0.000
NC	.030	.030	.030	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.618	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
BT	4.000	580.600	1430.700	1427.900	580.600	1430.700	1427.900	689.800	1430.900	1427.900
BT	689.800	1430.900	1427.900	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.625	18.000	580.600	689.800	45.000	45.000	45.000	-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
GR	1440.000	0.000	1440.000	86.600	1428.800	87.500	1430.400	407.000	1430.700	580.600
GR	1423.900	580.600	1420.200	598.800	1418.400	616.800	1418.400	619.000	1418.400	651.500
GR	1418.400	653.700	1420.200	671.800	1424.200	689.800	1430.900	689.800	1431.200	870.300
GR	1435.000	1346.600	1436.000	1580.400	1440.000	1680.000	-0.000	-0.000	-0.000	-0.000
NC	.056	.060	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.626	-0.000	-0.000	-0.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
NC	.056	.060	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.636	16.000	532.000	1057.000	56.000	56.000	56.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	475.000	-0.000	696.000	-0.000	-0.000	-0.000	-0.000
GR	1441.600	0.000	1439.700	67.000	1425.600	217.000	1425.900	407.000	1425.000	532.000
GR	1419.500	582.000	1419.000	607.000	1421.200	637.000	1423.800	907.000	1424.000	1027.000
GR	1425.000	1057.000	1426.000	1107.000	1428.000	1407.000	1430.000	1437.000	1430.000	1737.000
GR	1440.000	1877.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.060	.060	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	24.894	16.000	152.000	607.000	1020.000	750.000	1360.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	150.000	-0.000	1250.000	-0.000	-0.000	-0.000	-0.000
GR	1440.000	0.000	1439.000	1.000	1437.000	27.000	1424.600	87.000	1429.500	152.000
GR	1425.000	387.000	1420.000	402.000	1419.500	417.000	1420.000	437.000	1422.000	439.000
GR	1424.000	452.000	1425.000	507.000	1427.000	607.000	1426.000	907.000	1426.000	1427.000
GR	1440.000	1677.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.056	.056	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.077	16.000	425.000	495.000	830.000	830.000	970.000	-0.000	-0.000	-0.000
GR	1433.100	0.000	1432.100	30.000	1431.200	45.000	1428.000	85.000	1424.800	170.000
GR	1425.500	245.000	1426.000	330.000	1425.000	425.000	1420.500	440.000	1420.000	460.000
GR	1420.500	480.000	1424.000	495.000	1426.000	615.000	1428.000	650.000	1432.000	700.000
GR	1440.000	740.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.060	.060	.041	=0.000	=0.000	=0.000	=0.000	=0.000	=0.000	=0.000
X1	25.119	-0.000	-0.000	-0.000	250.000	170.000	220.000	-0.000	1.500	-0.000
NC	.053	.060	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.166	12.000	70.000	225.000	250.000	250.000	250.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	70.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	1434.000	0.000	1430.000	55.000	1431.300	70.000	1430.000	120.000	1426.000	140.000
GR	1423.200	145.000	1423.000	160.000	1423.300	180.000	1424.000	190.000	1426.000	225.000
GR	1430.000	325.000	1440.000	360.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.053	.060	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.242	-0.000	-0.000	-0.000	400.000	400.000	400.000	-0.000	1.800	-0.000
X3	-0.000	-0.000	-0.000	70.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.060	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

X1	25.318	9.000	55.000	125.000	450.000	380.000	400.000	-0.000	-0.000	-0.000
GR	1437.000	0.000	1431.000	55.000	1426.700	62.000	1426.600	105.000	1428.000	107.000
GR	1430.000	125.000	1432.000	205.000	1436.000	250.000	1440.000	380.000	-0.000	-0.000
NC	.060	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.370	9.000	55.000	125.000	310.000	270.000	275.000	-0.000	-0.000	-0.000
GR	1439.300	0.000	1433.300	55.000	1429.000	62.000	1428.900	105.000	1430.300	107.000
GR	1432.300	125.000	1434.300	205.000	1438.300	250.000	1442.300	380.000	-0.000	-0.000
X1	25.390	90.000	44.300	129.500	105.000	105.000	105.000	-0.000	-0.000	-0.000
GR	1441.400	0.000	1441.200	1.500	1441.100	3.000	1440.900	4.500	1440.700	6.100
GR	1440.500	7.600	1440.300	9.100	1440.100	10.600	1440.000	12.200	1439.800	13.700
GR	1439.600	15.200	1439.400	16.600	1439.200	18.300	1439.000	19.800	1438.900	21.300
GR	1438.700	22.900	1438.500	24.400	1438.300	25.900	1438.100	27.400	1437.900	29.000
GR	1437.800	30.500	1437.600	32.000	1437.400	33.600	1437.200	35.100	1437.000	36.600
GR	1436.800	38.100	1436.700	39.700	1436.500	41.200	1436.300	42.700	1436.100	44.300
GR	1435.000	47.100	1433.900	49.900	1432.800	52.800	1432.700	55.600	1432.500	58.500
GR	1432.400	61.300	1432.200	64.200	1432.100	67.000	1431.900	69.800	1431.800	72.700
GR	1431.600	75.500	1430.200	78.400	1429.800	81.200	1429.800	84.100	1429.800	86.900
GR	1429.700	89.700	1429.700	92.600	1429.700	95.400	1429.700	98.300	1429.700	101.100
GR	1429.700	103.900	1430.300	106.800	1430.700	109.600	1432.000	112.500	1433.000	115.300
GR	1433.500	118.200	1434.000	121.000	1434.500	123.800	1435.000	126.700	1435.500	129.500
GR	1435.600	135.700	1435.800	141.800	1435.900	147.900	1436.000	154.000	1436.200	160.100
GR	1436.300	166.200	1436.400	172.400	1436.600	178.500	1436.700	184.600	1437.000	190.700
GR	1437.500	196.800	1438.000	203.000	1438.400	209.100	1439.000	215.200	1439.400	221.300
GR	1439.600	227.400	1439.800	233.600	1440.000	239.700	1440.300	245.800	1440.500	251.900
GR	1440.700	258.000	1440.900	264.100	1441.100	270.300	1441.300	276.400	1441.600	282.500
GR	1441.800	288.600	1442.100	294.700	1442.500	300.900	1442.900	307.000	1443.300	313.100
NC	.060	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.396	90.000	41.000	131.000	32.000	32.000	32.000	-0.000	-0.000	-0.000
GR	1442.100	0.000	1441.900	1.400	1441.700	2.800	1441.600	4.200	1441.400	5.600
GR	1441.200	7.000	1441.000	8.400	1440.900	9.800	1440.700	11.300	1440.500	12.700
GR	1440.300	14.100	1440.200	15.500	1440.000	16.900	1439.800	18.300	1439.600	19.700
GR	1439.500	21.200	1439.300	22.600	1439.100	24.000	1438.900	25.400	1438.800	26.800
GR	1438.600	28.200	1438.400	29.600	1438.200	31.100	1438.100	32.500	1437.900	33.900
GR	1437.700	35.300	1437.500	36.700	1437.400	38.100	1437.200	39.500	1437.000	41.000
GR	1436.000	44.000	1435.000	47.000	1434.100	49.900	1433.900	52.900	1433.700	55.900
GR	1433.500	58.900	1433.300	61.900	1433.100	64.900	1432.900	67.900	1432.700	70.900
GR	1432.500	73.900	1430.600	76.900	1430.000	79.900	1430.000	82.900	1430.000	85.900
GR	1430.000	88.900	1430.000	91.900	1430.000	94.900	1430.000	97.900	1430.000	100.900
GR	1430.000	103.900	1430.500	106.900	1430.800	109.900	1432.400	112.900	1433.700	115.900
GR	1434.200	118.900	1434.800	121.900	1435.400	124.900	1435.900	127.900	1436.500	131.000
GR	1436.600	136.300	1436.700	141.700	1436.800	147.100	1436.900	152.500	1437.100	157.900
GR	1437.200	163.300	1437.300	168.600	1437.400	174.000	1437.500	179.400	1437.800	184.800
GR	1438.100	190.200	1438.500	195.600	1438.900	200.900	1439.300	206.300	1439.700	211.700
GR	1439.900	217.100	1440.100	222.500	1440.300	227.800	1440.500	233.200	1440.700	238.600
GR	1440.900	244.000	1441.100	249.400	1441.300	254.800	1441.500	260.200	1441.700	265.500
GR	1441.900	270.900	1442.300	276.300	1442.700	281.700	1443.200	287.100	1443.600	292.500
X1	25.399	90.000	39.200	131.700	18.000	18.000	18.000	-0.000	-0.000	-0.000
GR	1442.500	0.000	1442.300	1.300	1442.100	2.700	1441.900	4.000	1441.800	5.400
GR	1441.600	6.700	1441.400	8.100	1441.300	9.400	1441.100	10.800	1440.900	12.100
GR	1440.700	13.500	1440.600	14.800	1440.400	16.200	1440.200	17.500	1440.100	18.900
GR	1439.900	20.200	1439.700	21.600	1439.500	22.900	1439.400	24.300	1439.200	25.600
GR	1439.000	27.000	1438.900	28.300	1438.700	29.700	1438.500	31.000	1438.300	32.400
GR	1438.200	33.700	1438.000	35.100	1437.800	36.500	1437.700	37.800	1437.500	39.200
GR	1436.600	42.200	1435.600	45.300	1434.700	48.400	1434.500	51.500	1434.300	54.600
GR	1434.000	57.700	1433.800	60.800	1433.600	63.800	1433.400	66.900	1433.100	70.000
GR	1432.900	73.100	1430.800	76.200	1430.200	79.300	1430.200	82.400	1430.200	85.400
GR	1430.200	88.500	1430.200	91.600	1430.200	94.700	1430.200	97.800	1430.200	100.900
GR	1430.100	103.900	1430.600	107.000	1430.800	110.100	1432.600	113.200	1434.000	116.300
GR	1434.600	119.400	1435.200	122.500	1435.800	125.500	1436.400	128.600	1437.000	131.700
GR	1437.100	136.700	1437.200	141.700	1437.300	146.700	1437.400	151.700	1437.500	156.600
GR	1437.600	161.600	1437.700	166.600	1437.800	171.600	1437.900	176.600	1438.200	181.600
GR	1438.500	186.500	1438.800	191.500	1439.200	196.500	1439.500	201.500	1439.900	206.500

GR	1440.100	211.500	1440.300	216.500	1440.500	221.400	1440.700	226.400	1440.900	231.400
GR	1441.100	236.400	1441.300	241.400	1441.500	246.400	1441.600	251.300	1441.800	256.300
GR	1442.000	261.300	1442.400	266.300	1442.800	271.300	1443.300	276.300	1443.800	281.300
X1	25.409	90.000	34.000	134.000	51.000	51.000	51.000	-0.000	-0.000	-0.000
GR	1443.500	0.000	1443.300	1.100	1443.200	2.300	1443.000	3.500	1442.900	4.600
GR	1442.700	5.800	1442.500	7.000	1442.400	8.200	1442.200	9.300	1442.000	10.500
GR	1441.900	11.700	1441.700	12.800	1441.600	14.000	1441.400	15.200	1441.200	16.400
GR	1441.100	17.500	1440.900	18.700	1440.800	19.900	1440.600	21.100	1440.500	22.200
GR	1440.300	23.400	1440.100	24.600	1440.000	25.700	1439.800	26.900	1439.700	28.100
GR	1439.500	29.300	1439.300	30.400	1439.200	31.600	1439.000	32.800	1438.900	34.000
GR	1438.100	37.300	1437.300	40.600	1436.600	44.000	1436.300	47.300	1436.000	50.600
GR	1435.700	54.000	1435.400	57.300	1435.100	60.600	1434.800	63.900	1434.500	67.300
GR	1434.200	70.600	1431.400	73.900	1430.600	77.300	1430.600	80.600	1430.600	83.900
GR	1430.600	87.300	1430.600	90.600	1430.600	93.900	1430.600	97.300	1430.600	100.600
GR	1430.600	103.900	1430.800	107.300	1431.000	110.600	1433.200	113.900	1435.000	117.300
GR	1435.700	120.600	1436.400	123.900	1437.200	127.300	1437.900	130.600	1438.600	134.000
GR	1438.700	137.800	1438.700	141.600	1438.800	145.400	1438.800	149.300	1438.900	153.100
GR	1439.000	156.900	1439.000	160.700	1439.100	164.600	1439.100	168.400	1439.300	172.200
GR	1439.400	176.000	1439.600	179.800	1439.900	183.700	1440.100	187.500	1440.400	191.300
GR	1440.500	195.100	1440.700	199.000	1440.900	202.800	1441.100	206.600	1441.200	210.400
GR	1441.400	214.300	1441.600	218.100	1441.800	221.900	1441.900	225.700	1442.100	229.600
GR	1442.300	233.400	1442.700	237.200	1443.200	241.000	1443.700	244.900	1444.300	248.700
X1	25.416	90.000	30.500	135.500	35.000	35.000	35.000	-0.000	-0.000	-0.000
GR	1444.200	0.000	1444.000	1.000	1443.900	2.100	1443.700	3.100	1443.600	4.200
GR	1443.400	5.200	1443.300	6.300	1443.100	7.300	1443.000	8.400	1442.800	9.400
GR	1442.700	10.500	1442.500	11.500	1442.400	12.600	1442.200	13.600	1442.000	14.700
GR	1441.900	15.700	1441.700	16.800	1441.600	17.800	1441.400	18.900	1441.300	19.900
GR	1441.100	21.000	1441.000	22.000	1440.800	23.100	1440.700	24.100	1440.600	25.200
GR	1440.400	26.200	1440.200	27.300	1440.100	28.300	1439.900	29.400	1439.800	30.500
GR	1439.100	34.000	1438.500	37.500	1437.900	40.900	1437.500	44.400	1437.200	47.900
GR	1436.800	51.400	1436.500	54.900	1436.100	58.400	1435.800	61.900	1435.400	65.400
GR	1435.100	68.900	1431.800	72.400	1430.900	75.900	1430.900	79.400	1430.900	82.900
GR	1430.900	86.400	1430.900	89.900	1430.900	93.400	1430.900	96.900	1430.900	100.400
GR	1430.900	103.900	1431.000	107.400	1431.100	110.900	1433.600	114.400	1435.700	117.900
GR	1436.400	121.400	1437.200	124.900	1438.100	128.400	1438.900	131.900	1439.600	135.500
GR	1439.700	138.500	1439.700	141.500	1439.800	144.600	1439.800	147.600	1439.800	150.700
GR	1439.900	153.700	1439.900	156.800	1439.900	159.800	1439.900	162.900	1440.000	165.900
GR	1440.100	168.900	1440.200	172.000	1440.300	175.000	1440.500	178.100	1440.700	181.100
GR	1440.900	184.200	1441.000	187.200	1441.200	190.300	1441.400	193.300	1441.500	196.300
GR	1441.700	199.400	1441.800	202.400	1442.000	205.500	1442.100	208.500	1442.300	211.600
GR	1442.500	214.600	1442.900	217.700	1443.400	220.700	1444.000	223.800	1444.600	226.800
X1	25.419	90.000	28.700	136.200	17.000	17.000	17.000	-0.000	-0.000	-0.000
GR	1444.600	0.000	1444.400	.900	1444.300	1.900	1444.100	2.900	1444.000	3.900
GR	1443.800	4.900	1443.700	5.900	1443.500	6.900	1443.400	7.900	1443.200	8.900
GR	1443.100	9.900	1442.900	10.900	1442.800	11.800	1442.600	12.800	1442.400	13.800
GR	1442.300	14.800	1442.100	15.800	1442.000	16.800	1441.800	17.800	1441.700	18.800
GR	1441.500	19.800	1441.400	20.800	1441.300	21.800	1441.100	22.800	1441.000	23.700
GR	1440.800	24.700	1440.700	25.700	1440.500	26.700	1440.400	27.700	1440.300	28.700
GR	1439.600	32.300	1439.100	35.900	1438.500	39.500	1438.100	43.000	1437.800	46.600
GR	1437.400	50.200	1437.000	53.800	1436.600	57.400	1436.300	60.900	1435.900	64.500
GR	1435.500	68.100	1432.000	71.700	1431.000	75.300	1431.000	78.900	1431.000	82.400
GR	1431.000	86.000	1431.000	89.600	1431.000	93.200	1431.000	96.800	1431.000	100.400
GR	1431.000	103.900	1431.100	107.500	1431.100	111.100	1433.800	114.700	1436.000	118.300
GR	1436.800	121.900	1437.600	125.400	1438.500	129.000	1439.400	132.600	1440.100	136.200
GR	1440.200	138.900	1440.200	141.500	1440.300	144.200	1440.300	146.800	1440.300	149.500
GR	1440.300	152.100	1440.300	154.800	1440.300	157.400	1440.300	160.100	1440.400	162.700
GR	1440.400	165.400	1440.500	168.100	1440.600	170.700	1440.700	173.400	1440.900	176.000
GR	1441.000	178.700	1441.200	181.300	1441.300	184.000	1441.500	186.600	1441.600	189.300
GR	1441.800	192.000	1441.900	194.600	1442.100	197.300	1442.200	199.900	1442.400	202.600
GR	1442.600	205.200	1443.000	207.900	1443.500	210.500	1444.100	213.200	1444.800	215.900
X1	25.422	11.000	27.000	137.000	17.000	17.000	17.000	-0.000	-0.000	-0.000
GR	1445.000	0.000	1440.800	27.000	1439.200	38.000	1436.000	68.000	1431.200	72.000

GR	1431.200	112.000	1436.000	117.000	1440.800	137.000	1440.900	167.000	1442.800	197.000
GR	1445.000	205.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.425	90.000	31.200	140.900	14.000	14.000	14.000	-0.000	-0.000	-0.000
GR	1445.100	0.000	1444.900	1.000	1444.800	2.100	1444.600	3.200	1444.500	4.300
GR	1444.300	5.300	1444.100	6.400	1443.900	7.500	1443.800	8.600	1443.600	9.600
GR	1443.400	10.700	1443.200	11.800	1443.100	12.900	1443.000	14.000	1442.800	15.000
GR	1442.700	16.100	1442.500	17.200	1442.400	18.300	1442.200	19.300	1442.100	20.400
GR	1442.000	21.500	1441.900	22.600	1441.800	23.700	1441.600	24.700	1441.500	25.800
GR	1441.300	26.900	1441.200	28.000	1441.000	29.000	1440.900	30.100	1440.800	31.200
GR	1440.200	34.900	1439.600	38.500	1438.900	42.200	1438.500	45.800	1438.100	49.500
GR	1437.700	53.100	1437.300	56.800	1436.900	60.400	1436.500	64.100	1436.200	67.700
GR	1435.800	71.400	1432.300	75.100	1431.300	78.700	1431.300	82.400	1431.300	86.000
GR	1431.300	89.700	1431.300	93.300	1431.300	97.000	1431.400	100.600	1431.400	104.300
GR	1431.400	108.000	1431.500	111.600	1431.500	115.300	1434.300	118.900	1436.400	122.600
GR	1437.300	126.200	1438.200	129.900	1439.100	133.500	1440.000	137.200	1440.800	140.900
GR	1440.900	143.100	1440.900	145.300	1440.900	147.600	1440.900	149.800	1440.900	152.100
GR	1440.900	154.300	1440.900	156.600	1440.900	158.800	1441.000	161.100	1441.000	163.300
GR	1441.000	165.600	1441.000	167.800	1441.100	170.100	1441.200	172.300	1441.300	174.600
GR	1441.400	176.800	1441.600	179.100	1441.700	181.300	1441.900	183.600	1442.000	185.800
GR	1442.200	188.100	1442.300	190.300	1442.500	192.600	1442.600	194.800	1442.700	197.100
GR	1442.900	199.300	1443.300	201.600	1443.900	203.800	1444.500	206.100	1445.200	208.400
X1	25.427	90.000	35.500	144.800	14.000	14.000	14.000	-0.000	-0.000	-0.000
GR	1445.200	0.000	1445.000	1.200	1444.900	2.400	1444.700	3.600	1444.600	4.800
GR	1444.400	6.100	1444.200	7.300	1444.000	8.500	1443.800	9.700	1443.600	11.000
GR	1443.400	12.200	1443.200	13.400	1443.000	14.600	1442.900	15.900	1442.800	17.100
GR	1442.700	18.300	1442.500	19.500	1442.400	20.800	1442.200	22.000	1442.100	23.200
GR	1442.000	24.400	1441.900	25.700	1441.800	26.900	1441.600	28.100	1441.500	29.300
GR	1441.300	30.600	1441.200	31.800	1441.100	33.000	1441.000	34.200	1440.900	35.500
GR	1440.200	39.100	1439.500	42.700	1438.800	46.400	1438.300	50.000	1437.900	53.700
GR	1437.400	57.300	1437.000	61.000	1436.700	64.600	1436.300	68.300	1436.000	71.900
GR	1435.600	75.500	1432.400	79.200	1431.400	82.800	1431.400	86.500	1431.400	90.100
GR	1431.400	93.800	1431.400	97.400	1431.500	101.100	1431.600	104.700	1431.700	108.300
GR	1431.700	112.000	1431.800	115.600	1431.900	119.300	1434.600	122.900	1436.600	126.600
GR	1437.400	130.200	1438.300	133.900	1439.200	137.500	1440.100	141.200	1440.900	144.800
GR	1441.000	147.000	1441.000	149.300	1441.000	151.500	1441.000	153.700	1441.100	156.000
GR	1441.100	158.200	1441.100	160.400	1441.100	162.700	1441.200	164.900	1441.200	167.100
GR	1441.200	169.400	1441.200	171.600	1441.300	173.800	1441.500	176.100	1441.600	178.300
GR	1441.700	180.500	1441.900	182.800	1442.000	185.000	1442.200	187.200	1442.300	189.500
GR	1442.500	191.700	1442.600	193.900	1442.800	196.200	1442.900	198.400	1443.000	200.600
GR	1443.200	202.900	1443.600	205.100	1444.200	207.300	1444.700	209.600	1445.400	211.800
X1	25.433	90.000	44.000	152.700	28.000	28.000	28.000	-0.000	-0.000	-0.000
GR	1445.500	0.000	1445.300	1.500	1445.200	3.000	1445.000	4.500	1444.800	6.000
GR	1444.600	7.500	1444.400	9.100	1444.100	10.600	1443.900	12.100	1443.600	13.600
GR	1443.400	15.100	1443.200	16.600	1442.900	18.200	1442.800	19.700	1442.700	21.200
GR	1442.600	22.700	1442.400	24.200	1442.300	25.700	1442.200	27.300	1442.100	28.800
GR	1442.000	30.300	1441.900	31.800	1441.800	33.300	1441.600	34.800	1441.500	36.400
GR	1441.400	37.900	1441.300	39.400	1441.200	40.900	1441.100	42.400	1441.000	44.000
GR	1440.200	47.600	1439.400	51.200	1438.600	54.800	1438.000	58.400	1437.400	62.100
GR	1436.800	65.700	1436.500	69.300	1436.200	72.900	1435.900	76.600	1435.600	80.200
GR	1435.300	83.800	1432.600	87.400	1431.700	91.100	1431.700	94.700	1431.700	98.300
GR	1431.700	101.900	1431.700	105.600	1431.900	109.200	1432.000	112.800	1432.200	116.400
GR	1432.400	120.100	1432.500	123.700	1432.700	127.300	1435.100	130.900	1437.000	134.600
GR	1437.700	138.200	1438.600	141.800	1439.400	145.400	1440.300	149.100	1441.100	152.700
GR	1441.200	154.900	1441.200	157.100	1441.300	159.300	1441.300	161.500	1441.400	163.700
GR	1441.400	165.900	1441.500	168.100	1441.500	170.300	1441.600	172.500	1441.600	174.700
GR	1441.700	176.900	1441.700	179.100	1441.800	181.300	1442.000	183.500	1442.100	185.700
GR	1442.300	187.900	1442.400	190.100	1442.500	192.300	1442.700	194.500	1442.900	196.700
GR	1443.100	198.900	1443.200	201.100	1443.400	203.300	1443.500	205.500	1443.600	207.700
GR	1443.800	209.900	1444.200	212.100	1444.700	214.300	1445.200	216.500	1445.800	218.700
X1	25.443	90.000	61.000	168.500	56.000	56.000	56.000	-0.000	-0.000	-0.000
GR	1446.100	0.000	1445.900	2.100	1445.700	4.200	1445.500	6.300	1445.300	8.400
GR	1445.100	10.500	1444.700	12.600	1444.400	14.700	1444.100	16.800	1443.700	18.900

GR	1443.400	21.000	1443.100	23.100	1442.700	25.200	1442.600	27.300	1442.500	29.400
GR	1442.400	31.500	1442.300	33.600	1442.200	35.700	1442.200	37.800	1442.100	39.900
GR	1442.000	42.000	1441.900	44.100	1441.800	46.200	1441.700	48.300	1441.600	50.400
GR	1441.500	52.500	1441.500	54.600	1441.400	56.700	1441.300	58.800	1441.200	61.000
GR	1440.200	64.500	1439.200	68.100	1438.200	71.700	1437.300	75.300	1436.400	78.900
GR	1435.700	82.500	1435.500	86.000	1435.300	89.600	1435.100	93.200	1434.900	96.800
GR	1434.700	100.400	1432.900	103.900	1432.300	107.500	1432.300	111.100	1432.300	114.700
GR	1432.300	118.300	1432.300	121.900	1432.600	125.400	1432.900	129.000	1433.300	132.600
GR	1433.600	136.200	1433.900	139.800	1434.300	143.400	1436.100	146.900	1437.600	150.500
GR	1438.300	154.100	1439.100	157.700	1439.900	161.300	1440.700	164.900	1441.500	168.500
GR	1441.600	170.600	1441.700	172.700	1441.800	174.900	1441.900	177.000	1442.000	179.100
GR	1442.100	181.300	1442.200	183.400	1442.300	185.500	1442.400	187.700	1442.500	189.800
GR	1442.600	191.900	1442.700	194.100	1442.800	196.200	1443.000	198.300	1443.100	200.500
GR	1443.300	202.600	1443.500	204.700	1443.600	206.800	1443.800	209.000	1444.000	211.100
GR	1444.200	213.200	1444.300	215.400	1444.500	217.500	1444.700	219.600	1444.800	221.800
GR	1445.000	223.900	1445.300	226.000	1445.700	228.200	1446.100	230.300	1446.600	232.500
X1	25.465	8.000	95.000	200.000	113.000	113.000	113.000	-0.000	-0.000	-0.000
GR	1447.200	0.000	1446.200	15.000	1442.200	40.000	1441.700	95.000	1433.400	115.000
GR	1433.500	155.000	1442.200	200.000	1443.200	260.000	-0.000	-0.000	-0.000	-0.000
NC	.064	.064	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.507	10.000	75.000	195.000	225.000	225.000	225.000	-0.000	-0.000	-0.000
GR	1455.000	0.000	1454.200	12.000	1447.500	75.000	1436.100	120.000	1435.500	145.000
GR	1436.200	165.000	1448.000	195.000	1448.100	355.000	1450.000	375.000	1455.000	465.000
NC	.064	.064	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.545	-0.000	-0.000	-0.000	200.000	200.000	200.000	-0.000	2.000	-0.000
NC	.060	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.572	13.000	105.000	180.000	140.000	140.000	140.000	-0.000	-0.000	-0.000
GR	1465.100	0.000	1459.300	45.000	1448.000	65.000	1447.000	105.000	1439.000	121.000
GR	1439.100	165.000	1448.000	180.000	1454.000	195.000	1456.000	225.000	1458.000	385.000
GR	1460.000	485.000	1462.000	720.000	1465.000	780.000	-0.000	-0.000	-0.000	-0.000
X1	25.638	90.000	171.700	243.600	350.000	350.000	350.000	-0.000	-0.000	-0.000
GR	1466.300	0.000	1466.000	5.900	1465.700	11.800	1465.500	17.700	1465.200	23.600
GR	1464.900	29.600	1464.700	35.500	1464.400	41.400	1464.100	47.300	1463.900	53.300
GR	1463.600	59.200	1463.400	65.100	1463.100	71.000	1462.500	77.000	1461.700	82.900
GR	1460.800	88.800	1460.000	94.700	1459.100	100.600	1458.300	106.600	1458.200	112.500
GR	1458.100	118.400	1457.900	124.300	1457.800	130.300	1457.700	136.200	1457.600	142.100
GR	1457.400	148.000	1457.300	154.000	1457.000	159.900	1454.500	165.800	1452.000	171.700
GR	1450.600	174.100	1449.100	176.500	1447.600	178.900	1446.100	181.300	1444.700	183.700
GR	1443.200	186.100	1442.600	188.500	1442.500	190.900	1442.500	193.300	1442.400	195.700
GR	1442.400	198.100	1442.400	200.500	1442.300	202.900	1442.300	205.200	1442.200	207.600
GR	1442.200	210.000	1442.200	212.400	1442.200	214.800	1442.300	217.200	1442.400	219.600
GR	1442.400	222.000	1442.500	224.400	1442.600	226.800	1442.700	229.200	1443.300	231.600
GR	1444.000	234.000	1444.800	236.400	1445.600	238.800	1446.500	241.200	1447.300	243.600
GR	1450.400	282.000	1453.400	320.400	1455.900	358.900	1456.600	397.300	1457.300	435.800
GR	1458.000	474.200	1458.700	512.700	1459.400	551.100	1459.800	589.500	1460.100	628.000
GR	1460.400	666.400	1460.700	704.900	1460.800	743.300	1460.600	781.800	1460.500	820.200
GR	1460.600	858.700	1460.700	897.100	1460.900	935.500	1461.300	974.000	1461.800	1012.400
GR	1462.200	1050.900	1462.300	1089.300	1462.300	1127.800	1462.400	1166.200	1462.500	1204.600
GR	1462.500	1243.100	1462.600	1281.500	1463.800	1320.000	1465.000	1358.400	1466.200	1396.900
X1	25.657	90.000	190.800	261.800	100.000	100.000	100.000	-0.000	-0.000	-0.000
GR	1466.600	0.000	1466.400	6.500	1466.200	13.100	1466.000	19.700	1465.800	26.300
GR	1465.600	32.900	1465.400	39.400	1465.200	46.000	1465.000	52.600	1464.700	59.200
GR	1464.500	65.800	1464.300	72.400	1464.100	78.900	1463.800	85.500	1463.300	92.100
GR	1462.800	98.700	1462.300	105.300	1461.800	111.900	1461.300	118.400	1461.200	125.000
GR	1461.000	131.600	1460.900	138.200	1460.800	144.800	1460.600	151.300	1460.500	157.900
GR	1460.300	164.500	1460.200	171.100	1459.800	177.700	1456.700	184.300	1453.500	190.800
GR	1452.000	193.200	1450.400	195.600	1448.900	197.900	1447.300	200.300	1445.800	202.700
GR	1444.300	205.000	1443.600	207.400	1443.500	209.700	1443.500	212.100	1443.400	214.500
GR	1443.400	216.800	1443.300	219.200	1443.300	221.600	1443.200	223.900	1443.200	226.300
GR	1443.100	228.700	1443.100	231.000	1443.100	233.400	1443.200	235.700	1443.300	238.100

GR	1443.400	240.500	1443.500	242.300	1443.600	245.200	1443.700	247.600	1444.100	249.900
GR	1444.500	252.300	1445.200	254.700	1445.800	257.000	1446.500	259.400	1447.100	261.800
GR	1449.200	305.500	1452.700	349.200	1455.800	392.900	1456.600	436.600	1457.500	480.400
GR	1458.300	524.100	1459.200	567.800	1460.000	611.500	1460.500	655.200	1460.700	699.000
GR	1461.000	742.700	1461.300	786.400	1461.200	830.100	1461.000	873.900	1460.700	917.600
GR	1460.800	961.300	1460.800	1005.000	1461.000	1048.700	1461.500	1092.500	1462.100	1136.200
GR	1462.600	1179.900	1462.600	1223.600	1462.600	1267.400	1462.700	1311.100	1462.700	1354.800
GR	1462.700	1398.500	1462.800	1442.200	1464.100	1486.000	1465.300	1529.700	1466.600	1573.400
X1	25.667	90.000	200.400	270.900	50.000	50.000	50.000	-0.000	-0.000	-0.000
GR	1466.800	0.000	1466.600	6.900	1466.400	13.800	1466.200	20.700	1466.100	27.600
GR	1465.900	34.500	1465.700	41.400	1465.500	48.300	1465.400	55.200	1465.200	62.200
GR	1465.000	69.100	1464.800	76.000	1464.600	82.900	1464.400	89.800	1464.100	96.700
GR	1463.700	103.600	1463.400	110.500	1463.100	117.500	1462.800	124.400	1462.600	131.300
GR	1462.500	138.200	1462.400	145.100	1462.200	152.000	1462.100	158.900	1461.900	165.800
GR	1461.800	172.700	1461.600	179.700	1461.300	186.600	1457.700	193.500	1454.200	200.400
GR	1452.700	202.700	1451.100	205.100	1449.500	207.400	1447.900	209.800	1446.400	212.100
GR	1444.800	214.500	1444.100	216.800	1444.000	219.200	1444.000	221.500	1443.900	223.900
GR	1443.900	226.200	1443.800	228.600	1443.700	230.900	1443.700	233.300	1443.600	235.600
GR	1443.600	238.000	1443.500	240.300	1443.600	242.700	1443.700	245.000	1443.800	247.400
GR	1443.900	249.700	1444.000	252.100	1444.100	254.400	1444.200	256.800	1444.500	259.100
GR	1444.800	261.500	1445.400	263.800	1445.900	266.200	1446.500	268.500	1447.000	270.900
GR	1448.700	317.200	1452.400	363.600	1455.700	409.900	1456.600	456.300	1457.600	502.700
GR	1458.500	549.000	1459.400	595.400	1460.300	641.700	1460.800	688.100	1461.000	734.500
GR	1461.300	780.800	1461.500	827.200	1461.500	873.500	1461.100	919.900	1460.800	966.300
GR	1460.900	1012.600	1460.900	1059.000	1461.000	1105.300	1461.700	1151.700	1462.300	1198.100
GR	1462.800	1244.400	1462.800	1290.800	1462.800	1337.200	1462.800	1383.500	1462.800	1429.900
GR	1462.800	1476.200	1462.900	1522.600	1464.200	1569.000	1465.500	1615.300	1466.800	1661.700
NC	.064	.064	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.676	16.000	210.000	280.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
GR	1467.000	0.000	1463.000	195.000	1455.000	210.000	1444.700	225.000	1444.000	250.000
GR	1445.000	270.000	1447.000	280.000	1449.000	365.000	1455.000	390.000	1461.000	690.000
GR	1462.000	890.000	1461.000	1010.000	1461.000	1150.000	1463.000	1300.000	1463.000	1600.000
GR	1467.000	1750.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.064	.064	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.736	16.000	210.000	390.000	360.000	80.000	320.000	-0.000	-0.000	-0.000
GR	1470.000	0.000	1466.000	195.000	1458.000	210.000	1447.700	225.000	1447.000	250.000
GR	1448.000	270.000	1450.000	280.000	1452.000	365.000	1458.000	390.000	1464.000	690.000
GR	1465.000	890.000	1464.000	1010.000	1464.000	1150.000	1466.000	1300.000	1466.000	1600.000
GR	1470.000	1750.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.064	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	25.878	16.000	80.000	200.000	750.000	700.000	750.000	-0.000	-0.000	-0.000
GR	1468.000	0.000	1462.000	0.000	1461.500	80.000	1460.000	90.000	1455.000	120.000
GR	1453.500	140.000	1452.000	160.000	1453.500	180.000	1461.500	200.000	1464.000	210.000
GR	1466.000	250.000	1466.100	320.000	1466.200	390.000	1466.300	560.000	1466.400	660.000
GR	1468.000	670.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.060	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.021	13.000	188.000	280.000	470.000	1000.000	750.000	-0.000	-0.000	-0.000
GR	1468.500	0.000	1464.900	10.000	1464.900	55.000	1458.500	134.000	1460.600	188.000
GR	1455.000	193.000	1454.500	220.000	1455.000	240.000	1456.500	242.000	1458.500	255.000
GR	1460.500	280.000	1467.000	360.000	1468.500	390.000	-0.000	-0.000	-0.000	-0.000
NC	.060	.060	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.163	13.000	188.000	280.000	750.000	770.000	750.000	-0.000	-0.000	-0.000
GR	1470.000	0.000	1466.400	10.000	1466.400	55.000	1460.300	134.000	1462.100	188.000
GR	1456.500	193.000	1456.000	220.000	1456.500	240.000	1458.000	242.000	1460.000	255.000
GR	1462.000	280.000	1469.300	360.000	1470.000	390.000	-0.000	-0.000	-0.000	-0.000
NC	.045	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.229	13.000	605.000	800.000	310.000	400.000	350.000	-0.000	-0.000	-0.000
GR	1472.000	0.000	1469.100	385.000	1465.000	605.000	1457.500	665.000	1457.000	690.000
GR	1457.500	710.000	1460.000	715.000	1462.000	770.000	1464.000	800.000	1466.000	920.000

GR	1468.500	960.000	1470.000	1030.000	1472.000	1070.000	-0.000	-0.000	-0.000	-0.000
NC	.034	.045	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.267	19.000	124.000	310.000	200.000	200.000	200.000	-0.000	-0.000	-0.000
GR	1470.000	0.000	1468.000	0.000	1468.000	40.000	1466.900	70.000	1467.000	100.000
GR	1468.800	124.000	1467.600	151.000	1461.400	180.000	1457.800	199.000	1457.000	205.000
GR	1457.000	210.000	1457.800	214.000	1460.300	250.000	1460.100	285.000	1461.400	310.000
GR	1461.400	310.000	1464.500	350.000	1466.900	450.000	1470.000	550.000	-0.000	-0.000
NC	.034	.045	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.301	90.000	340.900	436.000	180.000	180.000	180.000	-0.000	-0.000	-0.000
GR	1473.600	0.000	1473.100	11.700	1472.900	23.500	1472.700	35.200	1472.500	47.000
GR	1472.300	58.700	1472.000	70.500	1471.800	82.200	1471.600	94.000	1471.400	105.700
GR	1471.100	117.500	1470.900	129.300	1470.700	141.000	1470.400	152.800	1470.200	164.500
GR	1470.000	176.300	1469.700	188.000	1469.500	199.800	1469.300	211.500	1469.100	223.300
GR	1468.900	235.100	1468.600	246.800	1468.400	258.600	1468.200	270.300	1468.000	282.100
GR	1467.700	293.800	1467.100	305.600	1466.600	317.300	1466.100	329.100	1465.500	340.900
GR	1464.900	344.000	1464.300	347.200	1463.700	350.400	1463.100	353.500	1462.400	356.700
GR	1461.700	359.900	1461.000	363.000	1460.300	366.200	1459.600	369.400	1459.500	372.500
GR	1459.300	375.700	1459.100	378.900	1458.900	382.100	1458.900	385.200	1458.900	388.400
GR	1458.900	391.600	1459.000	394.700	1459.100	397.900	1459.300	401.100	1459.400	404.200
GR	1459.500	407.400	1459.500	410.600	1459.600	413.800	1459.700	416.900	1459.700	420.100
GR	1459.800	423.300	1459.900	426.400	1460.000	429.600	1460.800	432.800	1461.900	436.000
GR	1462.200	449.700	1462.600	463.300	1463.000	477.000	1463.300	490.700	1463.700	504.400
GR	1464.000	518.100	1464.300	531.800	1464.600	545.500	1464.900	559.200	1465.200	572.900
GR	1465.600	586.600	1465.900	600.300	1466.100	614.000	1466.400	627.700	1466.600	641.400
GR	1466.900	655.100	1467.200	668.800	1467.400	682.500	1467.700	696.200	1468.000	709.900
GR	1468.400	723.600	1468.800	737.300	1469.300	751.000	1469.700	764.700	1470.100	778.400
GR	1470.600	792.100	1471.000	805.800	1471.500	819.500	1472.200	833.200	1473.600	847.000
NC	.034	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.305	11.000	365.000	450.000	20.000	20.000	20.000	-0.000	-0.000	-0.000
GR	1474.000	0.000	1468.000	310.000	1465.200	365.000	1459.500	390.000	1459.000	410.000
GR	1460.000	445.000	1462.000	450.000	1466.000	625.000	1468.000	735.000	1472.000	860.000
GR	1474.000	880.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.034	.049	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.328	-0.000	-0.000	-0.000	129.000	129.000	129.000	-0.000	.200	-0.000
NC	.030	.030	.045	.300	.500	-0.000	-0.000	-0.000	-0.000	-0.000
QT	6.000	1615.000	1785.000	1830.000	1890.000	1030.000	1840.000	-0.000	-0.000	-0.000
X1	26.329	12.000	232.000	273.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	273.000	-0.000	-0.000	-0.000	-0.000
X5	6.000	1464.520	1465.590	1466.010	1466.910	1463.420	1466.030	-0.000	-0.000	-0.000
GR	1475.600	0.000	1473.100	120.000	1469.300	192.000	1467.400	232.000	1459.500	234.000
GR	1459.200	263.000	1467.100	273.000	1467.600	490.000	1469.600	570.000	1471.600	620.000
GR	1473.600	645.000	1475.600	725.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.041	.041	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.367	12.000	232.000	273.000	200.000	200.000	200.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	273.000	-0.000	-0.000	-0.000	-0.000
GR	1476.000	0.000	1473.500	120.000	1469.700	192.000	1467.800	232.000	1459.900	234.000
GR	1459.600	263.000	1467.500	273.000	1468.000	490.000	1470.000	570.000	1472.000	620.000
GR	1474.000	645.000	1476.000	725.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.041	.041	.045	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.375	15.000	129.900	164.500	44.000	44.000	44.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	164.500	-0.000	-0.000	-0.000	-0.000
GR	1473.000	0.000	1472.000	26.000	1469.500	129.900	1462.000	129.900	1460.000	138.600
GR	1459.500	147.200	1459.500	155.900	1460.500	164.500	1469.100	164.500	1468.100	221.000
GR	1467.200	272.800	1468.000	381.000	1468.000	519.600	1470.000	584.600	1477.000	692.800
NC	.035	.035	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.376	9.000	129.900	164.500	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
GR	1473.000	0.000	1472.000	26.000	1469.500	129.900	1462.000	129.900	1460.000	138.600

GR	1459.500	147.200	1459.500	155.900	1460.500	164.500	1469.100	164.500	-0.000	-0.000
SB	-0.000	1.680	3.090	-0.000	34.600	-0.000	257.200	-0.000	1459.500	1459.500
X1	26.381	-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	1467.500	1469.100	-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	-0.000	-0.000	-0.000
BT	5.000	0.000	1473.000	-0.000	26.000	1472.000	-0.000	129.900	1469.500	1467.500
BT	147.200	1469.200	1467.500	164.500	1469.100	1467.500	-0.000	-0.000	-0.000	-0.000
NC	.045	.045	.041	.300	.500	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.382	-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	-0.000	-0.000	164.500	-0.000	-0.000	-0.000	-0.000
NC	.049	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	6.000	1820.000	2830.000	3310.000	4510.000	1080.000	3400.000	-0.000	-0.000	-0.000
X1	26.397	11.000	245.000	315.000	84.000	84.000	84.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	545.000	-0.000	-0.000	-0.000	-0.000
GR	1478.000	0.000	1477.000	55.000	1473.000	160.000	1469.200	245.000	1459.200	265.000
GR	1459.800	295.000	1468.000	315.000	1467.000	400.000	1468.000	710.000	1472.000	820.000
GR	1478.000	920.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.049	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.414	10.000	265.000	355.000	90.000	90.000	90.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	555.000	-0.000	-0.000	-0.000	-0.000
GR	1480.000	0.000	1479.000	30.000	1477.000	80.000	1468.700	265.000	1460.200	285.000
GR	1460.300	325.000	1466.000	355.000	1468.000	730.000	1470.000	820.000	1480.000	980.000
NC	.049	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.452	8.000	335.000	410.000	210.000	190.000	200.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	307.000	-0.000	440.000	-0.000	-0.000	-0.000	-0.000
GR	1480.000	0.000	1472.100	205.000	1467.700	335.000	1461.200	350.000	1461.300	395.000
GR	1466.000	410.000	1470.000	845.000	1480.000	1005.000	-0.000	-0.000	-0.000	-0.000
NC	.053	.053	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.460	10.000	48.000	127.000	40.000	40.000	40.000	-0.000	-0.000	-0.000
GR	1480.000	0.000	1477.000	12.000	1470.500	24.000	1467.000	36.000	1468.000	48.000
GR	1462.000	56.000	1460.700	64.000	1460.700	119.000	1467.000	127.000	1481.000	135.000
NC	.049	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.469	13.000	266.000	387.000	50.000	50.000	50.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	270.000	-0.000	360.000	-0.000	-0.000	-0.000	-0.000
GR	1480.800	0.000	1475.400	86.000	1471.600	171.000	1467.300	254.000	1466.100	266.000
GR	1460.600	284.000	1460.700	337.000	1470.000	387.000	1472.000	462.000	1474.000	642.000
GR	1476.000	692.000	1478.000	862.000	1480.000	962.000	-0.000	-0.000	-0.000	-0.000
X1	26.473	-0.000	-0.000	-0.000	21.000	21.000	21.000	-0.000	.400	-0.000
X3	-0.000	-0.000	-0.000	275.000	-0.000	355.000	-0.000	-0.000	-0.000	-0.000
X1	26.475	-0.000	-0.000	-0.000	12.000	12.000	12.000	-0.000	.200	-0.000
X3	-0.000	-0.000	-0.000	278.000	-0.000	353.000	-0.000	-0.000	-0.000	-0.000
X1	26.476	-0.000	-0.000	-0.000	5.000	5.000	5.000	-0.000	.100	-0.000
X3	-0.000	-0.000	-0.000	279.000	-0.000	351.000	-0.000	-0.000	-0.000	-0.000
NC	.053	.053	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.477	7.000	0.000	70.000	5.000	5.000	5.000	-0.000	-0.000	-0.000
GR	1479.700	0.000	1468.700	0.000	1468.700	20.000	1464.700	20.000	1461.400	45.000
GR	1464.600	70.000	1479.700	70.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.481	7.000	0.000	70.000	17.000	17.000	17.000	-0.000	-0.000	-0.000
GR	1480.000	0.000	1469.000	0.000	1469.000	20.000	1465.000	20.000	1461.700	45.000
GR	1464.900	70.000	1480.000	70.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.484	-0.000	-0.000	-0.000	18.000	18.000	18.000	-0.000	.020	-0.000
NC	.056	.049	.041	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

X1	26.486	11.000	375.000	440.000	10.000	10.000	10.000	-0.000	-.070	-0.000
X3	-0.000	-0.000	-0.000	365.000	-0.000	445.000	-0.000	-0.000	-0.000	-0.000
GR	1485.000	0.000	1474.500	125.000	1471.600	225.000	1468.000	375.000	1461.800	390.000
GR	1462.000	420.000	1470.000	440.000	1474.000	715.000	1480.000	815.000	1480.500	930.000
GR	1485.000	930.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.488	-0.000	-0.000	-0.000	10.000	10.000	10.000	-0.000	.010	-0.000
X3	-0.000	-0.000	-0.000	355.000	-0.000	445.000	-0.000	-0.000	-0.000	-0.000
X1	26.492	-0.000	-0.000	-0.000	20.000	20.000	20.000	-0.000	.020	-0.000
X3	-0.000	-0.000	-0.000	335.000	-0.000	445.000	-0.000	-0.000	-0.000	-0.000
X1	26.500	11.000	375.000	440.000	42.000	42.000	42.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	233.000	-0.000	445.000	-0.000	-0.000	-0.000	-0.000
GR	1485.000	0.000	1474.500	125.000	1471.600	225.000	1468.000	375.000	1461.800	390.000
GR	1462.000	420.000	1470.000	440.000	1474.000	715.000	1480.000	815.000	1480.500	930.000
GR	1485.000	930.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.053	.049	.041	.300	.500	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.560	11.000	139.000	204.000	350.000	350.000	320.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	80.000	-0.000	230.000	-0.000	-0.000	-0.000	-0.000
GR	1485.000	0.000	1474.500	29.000	1467.600	139.000	1461.700	144.000	1461.700	184.000
GR	1468.000	204.000	1470.000	439.000	1474.000	459.000	1476.000	524.000	1480.000	549.000
GR	1485.000	979.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.049	.034	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.602	11.000	35.000	115.000	210.000	250.000	220.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	35.000	-0.000	115.000	-0.000	-0.000	-0.000	-0.000
GR	1485.000	0.000	1471.000	1.000	1469.300	35.000	1463.800	55.000	1463.800	95.000
GR	1469.000	115.000	1472.000	175.000	1475.000	280.000	1476.000	430.000	1478.000	540.000
GR	1485.000	730.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.049	.038	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.608	90.000	173.300	234.200	30.000	30.000	30.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	173.300	-0.000	234.200	-0.000	-0.000	-0.000	-0.000
GR	1483.400	0.000	1477.000	5.900	1476.700	11.900	1476.400	17.900	1476.100	23.900
GR	1475.800	29.800	1475.500	35.800	1475.200	41.800	1475.100	47.600	1474.900	53.700
GR	1474.700	59.700	1474.500	65.700	1474.300	71.700	1474.200	77.600	1474.000	83.600
GR	1473.800	89.600	1473.600	95.600	1473.400	101.600	1473.400	107.500	1473.300	113.500
GR	1473.300	119.500	1473.200	125.500	1473.100	131.400	1473.100	137.400	1473.000	143.400
GR	1473.000	149.400	1472.900	155.300	1472.800	161.300	1472.800	167.300	1472.700	173.300
GR	1473.200	174.400	1466.900	176.500	1466.400	178.600	1466.000	180.700	1465.500	182.800
GR	1465.100	184.900	1464.600	187.000	1464.300	189.100	1464.200	191.200	1464.100	193.300
GR	1464.100	195.400	1464.200	197.500	1464.300	199.600	1464.300	201.700	1464.400	203.700
GR	1464.400	205.800	1464.500	207.900	1464.500	210.000	1464.600	212.100	1464.700	214.200
GR	1464.700	216.300	1464.800	218.400	1465.000	220.500	1465.400	222.600	1465.700	224.700
GR	1466.100	226.800	1466.500	228.900	1466.800	231.000	1467.200	233.100	1473.500	234.200
GR	1472.900	260.100	1473.300	285.900	1473.700	311.800	1474.000	337.700	1474.400	363.500
GR	1474.700	389.400	1475.000	415.200	1475.400	441.100	1475.500	466.900	1475.700	492.800
GR	1475.800	518.700	1476.000	544.500	1476.100	570.400	1476.300	596.200	1476.400	622.100
GR	1476.700	647.900	1477.000	673.800	1477.300	699.700	1477.600	725.500	1478.000	751.400
GR	1478.600	777.200	1479.300	803.100	1480.300	828.900	1481.400	854.800	1482.400	880.700
GR	1483.500	906.500	1484.600	932.400	1485.600	958.200	1486.700	984.100	1487.800	1010.000
X1	26.610	90.000	217.700	272.600	10.000	10.000	10.000	-0.000	-0.000	-0.000
GR	1483.000	0.000	1478.900	7.500	1478.500	15.000	1478.200	22.500	1477.800	30.000
GR	1477.400	37.500	1477.000	45.000	1476.800	52.500	1476.500	60.000	1476.300	67.500
GR	1476.100	75.000	1475.900	82.600	1475.600	90.100	1475.400	97.600	1475.200	105.100
GR	1475.000	112.600	1474.800	120.100	1474.500	127.600	1474.500	135.100	1474.400	142.600
GR	1474.400	150.100	1474.300	157.700	1474.200	165.200	1474.200	172.700	1474.100	180.200
GR	1474.100	187.700	1474.000	195.200	1474.000	202.700	1473.900	210.200	1473.800	217.700
GR	1474.800	218.400	1466.600	220.300	1466.200	222.200	1465.900	224.200	1465.500	226.100
GR	1465.100	228.000	1464.800	229.900	1464.500	231.800	1464.400	233.700	1464.200	235.600
GR	1464.300	237.500	1464.300	239.400	1464.400	241.300	1464.500	243.200	1464.600	245.100
GR	1464.600	247.100	1464.700	249.000	1464.800	250.900	1464.900	252.800	1464.900	254.700
GR	1465.000	256.600	1465.100	258.500	1465.300	260.400	1465.500	262.300	1465.800	264.200

GR	1466.100	266.100	1466.300	268.100	1466.600	270.000	1466.800	271.900	1474.900	272.600
GR	1473.900	300.100	1474.000	327.700	1474.200	356.300	1474.500	382.900	1474.700	410.500
GR	1475.000	438.000	1475.300	465.600	1475.500	493.200	1475.700	520.800	1475.800	548.400
GR	1476.000	575.900	1476.100	603.500	1476.300	631.100	1476.400	658.700	1476.600	686.300
GR	1476.800	713.800	1477.100	741.400	1477.400	769.000	1477.700	796.600	1478.100	824.200
GR	1478.700	851.700	1479.500	879.300	1480.500	906.900	1481.700	934.500	1482.800	962.100
GR	1484.000	989.600	1485.200	1017.200	1486.300	1044.800	1487.500	1072.400	1488.700	1100.000
X1	26.611	90.000	262.200	310.900	10.000	10.000	10.000	-0.000	-0.000	-0.000
GR	1482.500	0.000	1480.900	9.000	1480.400	18.000	1479.900	27.100	1479.500	36.100
GR	1479.000	45.200	1478.500	54.200	1478.300	63.200	1478.000	72.300	1477.700	81.300
GR	1477.500	90.400	1477.200	99.400	1476.900	108.500	1476.700	117.500	1476.400	126.500
GR	1476.200	135.600	1475.900	144.600	1475.700	153.700	1475.600	162.700	1475.500	171.800
GR	1475.500	180.800	1475.400	189.800	1475.400	198.900	1475.300	207.900	1475.200	217.000
GR	1475.200	226.000	1475.100	235.100	1475.100	244.100	1475.000	253.100	1475.000	262.200
GR	1476.300	262.400	1466.300	264.100	1466.000	265.900	1465.700	267.600	1465.500	269.300
GR	1465.200	271.000	1465.000	272.800	1464.700	274.500	1464.500	276.200	1464.300	277.900
GR	1464.400	279.700	1464.500	281.400	1464.600	283.100	1464.700	284.800	1464.800	286.500
GR	1464.900	288.300	1465.000	290.000	1465.000	291.700	1465.100	293.400	1465.200	295.200
GR	1465.300	296.900	1465.400	298.600	1465.600	300.300	1465.700	302.100	1465.900	303.800
GR	1466.000	305.500	1466.200	307.200	1466.300	309.000	1466.500	310.700	1476.400	310.900
GR	1474.900	340.200	1474.800	369.500	1474.700	398.800	1474.900	428.100	1475.100	457.400
GR	1475.300	486.700	1475.500	516.000	1475.700	545.300	1475.800	574.600	1476.000	603.900
GR	1476.100	633.200	1476.300	662.500	1476.500	691.800	1476.600	721.100	1476.800	750.400
GR	1477.000	779.700	1477.200	809.000	1477.500	838.300	1477.700	867.600	1478.100	896.900
GR	1478.900	926.200	1479.600	955.500	1480.700	984.800	1482.000	1014.100	1483.200	1043.400
GR	1484.500	1072.700	1485.800	1102.000	1487.000	1131.300	1488.300	1160.600	1489.600	1190.000
X1	26.612	16.000	282.000	328.000	4.000	4.000	4.000	-0.000	-0.000	-0.000
GR	1482.300	0.000	1479.200	60.000	1476.200	165.000	1475.500	282.000	1477.000	282.000
GR	1466.400	282.000	1464.400	297.000	1465.400	313.000	1466.400	328.000	1477.100	328.000
GR	1475.500	328.000	1475.000	414.000	1477.000	800.000	1478.000	920.000	1480.000	1000.000
GR	1490.000	1230.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.040	.040	.038	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.613	-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	282.000	-0.000	328.000	-0.000	-0.000	-0.000	-0.000
SB	-0.000	2.570	3.000	-0.000	46.000	-0.000	308.600	-0.000	1465.100	1464.400
X1	26.626	16.000	282.000	328.000	70.000	70.000	70.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	1472.100	1476.000	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	282.000	-0.000	328.000	-0.000	-0.000	-0.000	-0.000
BT	4.000	282.000	1476.000	1472.100	282.000	1476.000	1472.100	328.000	1476.100	1472.100
BT	328.000	1476.100	1472.100	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	1482.300	0.000	1479.200	60.000	1476.200	165.000	1475.500	282.000	1476.000	282.000
GR	1467.100	282.000	1465.100	297.000	1466.100	313.000	1467.100	328.000	1476.100	328.000
GR	1475.500	328.000	1475.000	414.000	1477.000	800.000	1478.000	920.000	1480.000	1000.000
GR	1490.000	1230.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.048	.042	.033	.300	.500	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.627	16.000	282.000	328.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	282.000	-0.000	328.000	-0.000	-0.000	-0.000	-0.000
GR	1482.300	0.000	1479.200	60.000	1476.200	165.000	1475.500	282.000	1476.000	282.000
GR	1467.100	282.000	1465.100	297.000	1466.100	313.000	1467.100	328.000	1476.100	328.000
GR	1475.500	328.000	1475.000	414.000	1477.000	800.000	1478.000	920.000	1480.000	1000.000
GR	1490.000	1230.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	6.000	1790.000	2790.000	3260.000	4450.000	1080.000	3400.000	-0.000	-0.000	-0.000
X1	26.628	10.000	39.000	100.000	14.000	14.000	14.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	40.000	-0.000	100.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1475.800	0.000	1475.000	39.000	1464.600	53.000	1464.600	90.000
GR	1471.000	95.000	1472.000	100.000	1476.000	330.000	1485.000	520.000	1490.000	521.000
NC	.045	.039	.033	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.704	-0.000	-0.000	-0.000	400.000	400.000	400.000	-0.000	1.500	-0.000
NC	.048	.048	.036	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

X1	26.780	19.000	469.000	624.000	320.000	420.000	400.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	625.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1475.600	29.000	1474.400	109.000	1472.000	194.000	1475.300	229.000
GR	1473.600	304.000	1471.700	389.000	1473.200	469.000	1467.700	489.000	1467.800	529.000
GR	1470.000	539.000	1472.000	549.000	1474.000	569.000	1476.000	624.000	1473.000	679.000
GR	1473.000	769.000	1478.000	794.000	1480.000	809.000	1490.000	889.000	-0.000	-0.000
NC	.045	.042	.033	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	26.894	15.000	399.000	494.000	580.000	600.000	600.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1478.700	33.000	1474.600	119.000	1475.600	213.000	1473.900	304.000
GR	1474.200	399.000	1467.600	429.000	1467.700	469.000	1470.000	474.000	1474.000	494.000
GR	1476.000	519.000	1478.000	554.000	1480.000	824.000	1484.000	959.000	1490.000	1019.000
X1	27.002	17.000	318.000	433.000	560.000	600.000	570.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	155.000	-0.000	505.000	-0.000	-0.000	-0.000	-0.000
GR	1492.300	0.000	1487.900	63.000	1482.700	78.000	1476.700	143.000	1474.800	228.000
GR	1473.500	318.000	1473.500	318.000	1467.700	368.000	1467.800	408.000	1472.000	418.000
GR	1476.000	433.000	1476.000	433.000	1480.000	788.000	1482.000	868.000	1484.000	908.000
GR	1486.000	918.000	1490.000	988.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.048	.048	.033	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	27.081	22.000	180.000	305.000	490.000	400.000	420.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	395.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1488.700	27.000	1479.700	87.000	1474.000	180.000	1472.500	200.000
GR	1470.000	205.000	1470.000	245.000	1472.000	250.000	1474.000	255.000	1478.000	265.000
GR	1479.000	275.000	1480.000	305.000	1480.000	395.000	1478.000	405.000	1478.300	470.000
GR	1479.000	471.000	1480.000	590.000	1482.000	630.000	1484.000	631.000	1484.000	720.000
GR	1486.000	800.000	1490.000	860.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	27.180	15.000	444.000	549.000	410.000	550.000	520.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	549.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1486.800	66.000	1477.900	179.000	1473.600	219.000	1477.400	444.000
GR	1470.300	479.000	1470.400	519.000	1476.000	549.000	1478.000	684.000	1480.000	1149.000
GR	1482.000	1164.000	1484.000	1224.000	1486.000	1239.000	1488.000	1279.000	1490.000	1369.000
X1	27.289	16.000	339.000	474.000	650.000	520.000	580.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	474.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1476.500	34.000	1473.900	140.000	1474.700	269.000	1477.700	339.000
GR	1470.100	399.000	1470.200	429.000	1478.000	474.000	1479.000	899.000	1480.000	1229.000
GR	1482.000	1304.000	1484.000	1324.000	1486.000	1374.000	1488.000	1394.000	1488.000	1519.000
GR	1490.000	1569.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	27.581	14.000	133.000	195.000	1600.000	1100.000	1540.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1483.800	0.000	1477.800	15.000	1475.800	65.000	1474.400	116.000
GR	1474.400	133.000	1472.000	135.000	1472.100	175.000	1476.000	195.000	1478.000	345.000
GR	1480.000	385.000	1482.000	475.000	1484.000	745.000	1490.000	1025.000	-0.000	-0.000
NC	.045	.045	.027	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.134	13.000	271.000	429.000	2650.000	2950.000	2920.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	271.000	-0.000	399.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1483.700	1.000	1476.800	17.000	1477.700	105.000	1478.100	271.000
GR	1472.300	274.000	1471.300	309.000	1478.000	369.000	1478.200	389.000	1479.500	429.000
GR	1478.000	469.000	1478.000	854.000	1490.000	879.000	-0.000	-0.000	-0.000	-0.000
X1	28.155	90.000	230.300	316.400	130.000	90.000	110.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	236.000	-0.000	310.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1481.300	7.900	1480.000	15.800	1480.000	23.800	1480.000	31.700
GR	1480.100	39.700	1480.100	47.600	1480.200	55.600	1480.200	63.500	1480.200	71.400
GR	1480.300	79.400	1480.300	87.300	1480.300	95.300	1480.300	103.200	1480.400	111.200
GR	1480.400	119.100	1480.400	127.100	1480.400	135.000	1480.400	142.900	1480.400	150.900
GR	1480.400	158.800	1480.400	166.800	1480.400	174.700	1480.400	182.700	1480.400	190.600
GR	1480.500	198.600	1480.500	206.500	1480.500	214.400	1480.500	222.400	1480.500	230.300
GR	1473.100	232.500	1473.000	235.400	1472.900	238.400	1472.800	241.300	1472.700	244.200
GR	1472.600	247.100	1472.400	250.000	1472.600	252.900	1472.800	255.900	1473.000	258.800
GR	1473.300	261.700	1473.500	264.600	1473.800	267.500	1474.100	270.400	1474.300	273.400

GR	1474.600	276.300	1474.900	279.200	1475.100	282.100	1475.300	285.000	1475.300	287.900
GR	1475.400	290.900	1475.400	293.800	1475.500	296.700	1475.600	299.600	1475.700	302.500
GR	1475.800	305.400	1475.900	308.400	1476.000	311.300	1476.100	314.200	1481.400	316.400
GR	1480.700	335.500	1479.900	354.600	1479.400	373.700	1479.100	392.800	1478.700	411.900
GR	1478.400	431.000	1478.000	450.100	1477.800	469.200	1477.700	488.300	1477.600	507.400
GR	1477.400	526.500	1477.400	545.700	1477.500	564.800	1477.600	583.900	1477.600	603.000
GR	1477.700	622.100	1477.800	641.200	1477.800	660.300	1477.900	679.400	1478.100	698.500
GR	1478.800	717.600	1479.500	736.700	1480.200	755.800	1480.900	774.900	1481.500	794.000
GR	1482.200	813.100	1482.900	832.200	1483.600	851.300	1486.300	870.400	1490.000	889.500
X1	28.159	90.000	222.900	295.900	20.000	20.000	20.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	227.000	-0.000	291.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1481.600	7.500	1480.500	15.300	1480.600	23.000	1480.600	30.700
GR	1480.600	38.400	1480.700	46.100	1480.700	53.800	1480.700	61.500	1480.700	69.100
GR	1480.800	76.800	1480.800	84.500	1480.800	92.200	1480.800	99.900	1480.800	107.600
GR	1480.800	115.300	1480.800	123.000	1480.900	130.700	1480.900	138.300	1480.900	146.000
GR	1480.900	153.700	1480.900	161.400	1480.900	169.100	1480.900	176.800	1480.900	184.500
GR	1480.900	192.200	1480.900	199.900	1480.900	207.500	1480.900	215.200	1480.900	222.900
GR	1473.300	224.600	1473.200	227.100	1473.100	229.500	1473.000	232.000	1472.900	234.500
GR	1472.800	237.000	1472.700	239.500	1472.700	242.000	1472.900	244.500	1473.000	247.000
GR	1473.200	249.500	1473.400	251.900	1473.600	254.400	1473.800	256.900	1474.000	259.400
GR	1474.300	261.900	1474.500	264.400	1474.700	266.900	1474.800	269.400	1474.900	271.900
GR	1474.900	274.300	1474.900	276.800	1475.000	279.300	1475.100	281.800	1475.200	284.300
GR	1475.200	286.800	1475.300	289.300	1475.400	291.800	1475.500	294.200	1481.700	295.900
GR	1481.000	315.700	1480.200	335.600	1479.700	355.400	1479.300	375.300	1478.900	395.200
GR	1478.400	415.000	1478.000	434.900	1477.800	454.700	1477.600	474.600	1477.500	494.400
GR	1477.300	514.300	1477.300	534.100	1477.400	554.000	1477.500	573.800	1477.600	593.700
GR	1477.600	613.500	1477.700	633.400	1477.800	653.200	1477.900	673.100	1478.200	692.900
GR	1479.000	712.800	1479.800	732.600	1480.600	752.500	1481.400	772.400	1482.200	792.200
GR	1483.000	812.100	1483.800	831.900	1484.600	851.800	1486.900	871.600	1490.000	891.500
X1	28.164	90.000	213.700	270.400	35.000	15.000	25.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	217.000	-0.000	268.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1481.900	7.300	1481.300	14.700	1481.300	22.100	1481.300	29.400
GR	1481.300	36.800	1481.300	44.200	1481.300	51.500	1481.400	58.900	1481.400	66.300
GR	1481.400	73.700	1481.400	81.000	1481.400	88.400	1481.400	95.800	1481.400	103.100
GR	1481.400	110.500	1481.400	117.900	1481.400	125.300	1481.400	132.600	1481.500	140.000
GR	1481.500	147.400	1481.500	154.700	1481.500	162.100	1481.500	169.500	1481.500	176.900
GR	1481.500	184.200	1481.500	191.600	1481.500	199.000	1481.500	206.300	1481.500	213.700
GR	1473.500	214.700	1473.400	216.600	1473.300	218.600	1473.200	220.500	1473.100	222.500
GR	1473.000	224.400	1472.900	226.400	1472.900	228.300	1473.000	230.300	1473.000	232.300
GR	1473.200	234.200	1473.300	236.200	1473.400	238.100	1473.600	240.100	1473.700	242.000
GR	1473.800	244.000	1474.000	245.900	1474.100	247.900	1474.200	249.900	1474.200	251.800
GR	1474.300	253.800	1474.300	255.700	1474.400	257.700	1474.400	259.600	1474.500	261.600
GR	1474.600	263.500	1474.600	265.500	1474.700	267.500	1474.700	269.400	1482.200	270.400
GR	1481.400	291.100	1480.600	311.900	1480.000	332.700	1479.500	353.500	1479.000	374.300
GR	1478.500	395.100	1478.000	415.800	1477.800	436.600	1477.600	457.400	1477.400	478.200
GR	1477.200	499.000	1477.200	519.800	1477.300	540.500	1477.400	561.300	1477.500	582.100
GR	1477.600	602.900	1477.700	623.700	1477.800	644.500	1477.900	665.300	1478.200	686.000
GR	1479.200	706.800	1480.100	727.600	1481.100	748.400	1482.000	769.200	1483.000	790.000
GR	1484.000	810.700	1484.900	831.500	1485.900	852.300	1487.700	873.100	1490.000	893.900
X1	28.165	90.000	210.000	260.100	10.000	10.000	10.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	212.000	-0.000	258.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.000	7.200	1481.600	14.400	1481.600	21.700	1481.600	28.900
GR	1481.600	36.200	1481.600	43.400	1481.600	50.700	1481.600	57.900	1481.600	65.100
GR	1481.700	72.400	1481.700	79.600	1481.700	86.900	1481.700	94.100	1481.700	101.400
GR	1481.700	108.600	1481.700	115.800	1481.700	123.100	1481.700	130.300	1481.700	137.600
GR	1481.700	144.800	1481.700	152.100	1481.700	159.300	1481.700	166.600	1481.700	173.800
GR	1481.700	181.000	1481.700	188.300	1481.700	195.500	1481.700	202.800	1481.700	210.000
GR	1473.600	210.700	1473.500	212.400	1473.400	214.200	1473.300	215.900	1473.200	217.600
GR	1473.100	219.400	1473.000	221.100	1473.000	222.900	1473.000	224.600	1473.000	226.400
GR	1473.100	228.100	1473.200	229.800	1473.400	231.600	1473.500	233.300	1473.600	235.100
GR	1473.700	236.800	1473.800	238.500	1473.900	240.300	1474.000	242.000	1474.000	243.800
GR	1474.000	245.500	1474.100	247.300	1474.100	249.000	1474.200	250.700	1474.200	252.500
GR	1474.300	254.200	1474.300	256.000	1474.400	257.700	1474.500	259.400	1482.300	260.100

GR	1481.500	281.300	1480.700	302.400	1480.200	323.600	1479.500	344.700	1479.100	365.900
GR	1478.600	387.100	1478.100	408.200	1477.800	429.400	1477.600	450.500	1477.400	471.700
GR	1477.100	492.800	1477.100	514.000	1477.300	535.200	1477.400	556.300	1477.500	577.500
GR	1477.600	598.600	1477.700	619.800	1477.800	640.900	1477.900	662.100	1478.200	683.300
GR	1479.200	704.400	1480.300	725.600	1481.300	746.700	1482.300	767.900	1483.300	789.000
GR	1484.300	810.200	1485.400	831.400	1486.400	852.500	1488.000	873.700	1490.000	894.800
X1	28.167	90.000	206.300	249.900	10.000	10.000	10.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	208.000	-0.000	249.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.100	7.100	1481.800	14.200	1481.900	21.300	1481.900	28.400
GR	1481.900	35.500	1481.900	42.600	1481.900	49.800	1481.900	56.900	1481.900	64.000
GR	1481.900	71.100	1481.900	78.200	1481.900	85.300	1481.900	92.500	1481.900	99.600
GR	1481.900	106.700	1481.900	113.800	1481.900	120.900	1481.900	128.000	1481.900	135.200
GR	1481.900	142.300	1481.900	149.400	1481.900	156.500	1481.900	163.600	1481.900	170.700
GR	1481.900	177.900	1481.900	185.000	1481.900	192.100	1481.900	199.200	1481.900	206.300
GR	1473.600	206.700	1473.500	208.200	1473.500	209.800	1473.400	211.300	1473.300	212.800
GR	1473.200	214.300	1473.100	215.900	1473.100	217.400	1473.100	218.900	1473.000	220.500
GR	1473.100	222.000	1473.200	223.500	1473.300	225.000	1473.400	226.600	1473.400	228.100
GR	1473.500	229.600	1473.600	231.100	1473.700	232.700	1473.700	234.200	1473.800	235.700
GR	1473.800	237.300	1473.800	238.800	1473.900	240.300	1473.900	241.800	1474.000	243.400
GR	1474.000	244.900	1474.100	246.400	1474.100	247.900	1474.200	249.500	1482.500	249.900
GR	1481.700	271.400	1480.900	292.900	1480.300	314.500	1479.700	336.000	1479.200	357.500
GR	1478.600	379.000	1478.100	400.600	1477.800	422.100	1477.500	443.600	1477.300	465.200
GR	1477.100	486.700	1477.100	508.200	1477.200	529.800	1477.300	551.300	1477.400	572.800
GR	1477.500	594.400	1477.700	615.900	1477.800	637.400	1477.900	659.000	1478.200	680.500
GR	1479.300	702.000	1480.400	723.600	1481.500	745.100	1482.600	766.600	1483.700	788.100
GR	1484.700	809.700	1485.800	831.200	1486.900	852.700	1488.300	874.300	1490.000	895.800
X1	28.168	90.000	204.500	244.800	5.000	5.000	5.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	205.000	-0.000	243.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.100	7.000	1482.000	14.100	1482.000	21.100	1482.000	28.200
GR	1482.000	35.200	1482.000	42.300	1482.000	49.300	1482.000	56.400	1482.000	63.400
GR	1482.000	70.500	1482.000	77.500	1482.000	84.600	1482.000	91.600	1482.000	98.700
GR	1482.000	105.800	1482.000	112.800	1482.000	119.900	1482.000	126.900	1482.000	134.000
GR	1482.000	141.000	1482.000	148.100	1482.000	155.100	1482.000	162.200	1482.000	169.200
GR	1482.000	176.300	1482.000	183.300	1482.000	190.400	1482.000	197.400	1482.000	204.500
GR	1473.700	204.800	1473.600	206.200	1473.500	207.600	1473.400	209.000	1473.300	210.400
GR	1473.300	211.900	1473.200	213.300	1473.100	214.700	1473.100	216.100	1473.000	217.600
GR	1473.100	219.000	1473.200	220.400	1473.200	221.800	1473.300	223.200	1473.400	224.700
GR	1473.400	226.100	1473.500	227.500	1473.600	228.900	1473.600	230.400	1473.600	231.800
GR	1473.700	233.200	1473.700	234.600	1473.800	236.000	1473.800	237.500	1473.800	238.900
GR	1473.900	240.300	1473.900	241.700	1474.000	243.200	1474.000	244.600	1482.600	244.800
GR	1481.800	266.500	1481.000	288.300	1480.400	310.000	1479.800	331.700	1479.200	353.400
GR	1478.600	375.100	1478.100	396.800	1477.800	418.600	1477.500	440.300	1477.300	462.000
GR	1477.100	483.700	1477.100	505.400	1477.200	527.100	1477.300	548.800	1477.400	570.600
GR	1477.500	592.300	1477.600	614.000	1477.800	635.700	1477.900	657.400	1478.300	679.100
GR	1479.400	700.800	1480.500	722.600	1481.600	744.300	1482.700	766.000	1483.800	787.700
GR	1484.900	809.400	1486.000	831.100	1487.100	852.800	1488.500	874.600	1490.000	896.300
X1	28.169	90.000	202.600	239.600	5.000	5.000	5.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	203.000	-0.000	239.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.200	6.900	1482.100	13.900	1482.100	20.900	1482.100	27.900
GR	1482.100	34.900	1482.100	41.900	1482.100	48.900	1482.100	55.900	1482.100	62.800
GR	1482.200	69.800	1482.200	76.800	1482.200	83.800	1482.200	90.800	1482.200	97.800
GR	1482.200	104.800	1482.200	111.800	1482.200	118.800	1482.200	125.700	1482.200	132.700
GR	1482.200	139.700	1482.200	146.700	1482.200	153.700	1482.200	160.700	1482.200	167.700
GR	1482.200	174.700	1482.200	181.700	1482.200	188.600	1482.200	195.600	1482.200	202.600
GR	1473.700	202.700	1473.600	204.000	1473.600	205.400	1473.500	206.700	1473.400	208.000
GR	1473.300	209.300	1473.200	210.600	1473.200	211.900	1473.100	213.200	1473.100	214.500
GR	1473.100	215.900	1473.100	217.200	1473.200	218.500	1473.200	219.800	1473.300	221.100
GR	1473.300	222.400	1473.400	223.700	1473.400	225.100	1473.500	226.400	1473.500	227.700
GR	1473.600	229.000	1473.600	230.300	1473.600	231.600	1473.700	232.900	1473.700	234.200
GR	1473.700	235.600	1473.800	236.900	1473.800	238.200	1473.900	239.500	1482.700	239.600
GR	1481.900	261.500	1481.000	283.400	1480.400	305.300	1479.800	327.200	1479.200	349.100
GR	1478.700	371.000	1478.100	392.900	1477.800	414.900	1477.500	436.800	1477.300	458.700
GR	1477.000	480.600	1477.100	502.500	1477.200	524.400	1477.300	546.300	1477.400	568.200

GR	1477.500	590.100	1477.600	612.000	1477.700	633.900	1477.900	655.800	1478.300	677.700
GR	1479.400	699.600	1480.500	721.500	1481.700	743.400	1482.800	765.300	1484.000	787.200
GR	1485.100	809.100	1486.300	831.000	1487.400	853.000	1488.700	874.900	1490.000	896.800
X1	28.170	12.000	201.200	235.600	5.000	5.000	4.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	201.200	-0.000	235.600	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.300	1.000	1482.300	201.200	1473.800	201.200	1473.100	212.100
GR	1473.800	235.600	1482.800	235.600	1481.100	281.000	1478.000	394.200	1477.000	484.900
GR	1478.000	670.700	1490.000	897.200	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.028	.028	.024	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.171	14.000	201.200	235.600	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	201.200	-0.000	235.600	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.300	1.000	1482.300	201.200	1486.000	201.200	1473.800	201.200
GR	1473.100	212.100	1473.800	235.600	1486.000	235.600	1482.800	235.600	1481.100	281.000
GR	1478.000	394.200	1477.000	484.900	1478.000	670.700	1490.000	897.200	-0.000	-0.000
SB	-0.000	1.680	3.000	-0.000	34.400	-0.000	294.100	-0.000	1473.300	1473.100
X1	28.174	14.000	201.200	235.600	20.000	20.000	20.000	-0.000	-0.000	-0.000
X2	-0.000	-0.000	1.000	1482.000	1486.000	-0.000	-0.000	-0.000	-0.000	-0.000
X3	10.000	-0.000	-0.000	201.200	-0.000	235.600	-0.000	-0.000	-0.000	-0.000
BT	4.000	201.200	1482.300	0.000	201.200	1486.000	1482.000	235.600	1486.000	1482.000
BT	235.600	1482.800	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.300	1.000	1482.300	201.200	1486.000	201.200	1474.000	201.200
GR	1473.300	212.100	1474.000	235.600	1486.000	235.600	1482.800	235.600	1481.100	281.000
GR	1478.000	394.200	1477.000	484.900	1478.000	670.700	1490.000	897.200	-0.000	-0.000
NC	.042	.045	.027	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.175	-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	201.200	-0.000	235.600	-0.000	-0.000	-0.000	-0.000
X1	28.176	90.000	242.500	279.600	1.000	5.000	4.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	237.200	-0.000	279.500	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.400	8.300	1482.400	16.700	1482.400	25.000	1482.400	33.400
GR	1482.400	41.800	1482.400	50.100	1482.400	58.500	1482.400	66.900	1482.400	75.200
GR	1482.400	83.600	1482.400	92.000	1482.400	100.300	1482.400	108.700	1482.400	117.000
GR	1482.400	125.400	1482.400	133.800	1482.400	142.100	1482.400	150.500	1482.400	158.900
GR	1482.400	167.200	1482.400	175.600	1482.400	184.000	1482.400	192.300	1482.400	200.700
GR	1482.400	209.000	1482.400	217.400	1482.400	225.800	1482.400	234.100	1482.400	242.500
GR	1474.200	242.600	1474.000	244.000	1473.800	245.300	1473.700	246.600	1473.500	247.900
GR	1473.400	249.200	1473.300	250.500	1473.200	251.800	1473.100	253.200	1473.100	254.500
GR	1473.100	255.800	1473.100	257.100	1473.100	258.400	1473.200	259.700	1473.200	261.100
GR	1473.200	262.400	1473.300	263.700	1473.300	265.000	1473.400	266.300	1473.400	267.600
GR	1473.500	269.000	1473.600	270.300	1473.600	271.600	1473.700	272.900	1473.800	274.200
GR	1473.900	275.500	1474.000	276.800	1474.100	278.200	1474.200	279.500	1482.800	279.600
GR	1482.100	301.900	1481.300	324.200	1480.700	346.400	1480.100	368.700	1479.500	391.000
GR	1479.000	413.200	1478.400	435.500	1478.100	457.800	1477.900	480.000	1477.600	502.300
GR	1477.400	524.600	1477.400	546.800	1477.600	569.100	1477.700	591.400	1477.800	613.600
GR	1477.900	635.900	1478.000	658.200	1478.100	680.500	1478.300	702.700	1478.700	725.000
GR	1479.800	747.300	1480.900	769.500	1482.000	791.800	1483.200	814.100	1484.300	836.300
GR	1485.400	858.600	1486.500	880.900	1487.700	903.100	1488.800	925.400	1490.000	947.700
X1	28.177	90.000	345.400	389.300	9.000	15.000	10.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	326.900	-0.000	339.300	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1482.600	11.900	1482.600	23.800	1482.600	35.700	1482.600	47.600
GR	1482.600	59.500	1482.600	71.400	1482.600	83.300	1482.600	95.200	1482.600	107.200
GR	1482.600	119.100	1482.600	131.000	1482.600	142.900	1482.600	154.800	1482.600	166.700
GR	1482.600	178.600	1482.600	190.500	1482.600	202.500	1482.600	214.400	1482.600	226.300
GR	1482.600	238.200	1482.600	250.100	1482.600	262.000	1482.600	273.900	1482.600	285.800
GR	1482.600	297.800	1482.600	309.700	1482.600	321.600	1482.600	333.500	1482.600	345.400
GR	1475.200	345.900	1474.800	347.400	1474.500	349.000	1474.200	350.500	1473.800	352.000
GR	1473.500	353.600	1473.300	355.100	1473.200	356.600	1473.100	358.200	1473.000	359.700
GR	1473.100	361.200	1473.100	362.800	1473.100	364.300	1473.100	365.800	1473.100	367.400
GR	1473.200	368.900	1473.200	370.400	1473.300	372.000	1473.300	373.500	1473.400	375.000
GR	1473.500	376.600	1473.700	378.100	1473.900	379.600	1474.100	381.200	1474.400	382.700
GR	1474.600	384.200	1474.800	385.800	1475.000	387.300	1475.200	388.800	1483.000	389.300

GR	1482.400	412.100	1481.700	434.900	1481.200	457.700	1480.700	480.500	1480.200	503.300
GR	1479.700	526.100	1479.200	548.900	1478.900	571.700	1478.800	594.500	1478.600	617.400
GR	1478.400	640.200	1478.400	663.000	1478.500	685.800	1478.700	708.600	1478.800	731.400
GR	1478.900	754.200	1479.000	777.000	1479.200	799.800	1479.300	822.600	1479.600	845.400
GR	1480.700	868.200	1481.700	891.000	1482.700	913.800	1483.700	936.600	1484.700	959.400
GR	1485.700	982.200	1486.700	1005.000	1487.800	1027.800	1488.900	1050.600	1490.000	1073.400
X1	28.181	90.000	552.100	609.700	15.000	30.000	20.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	507.300	-0.000	609.700	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1483.200	19.000	1483.200	38.000	1483.200	57.100	1483.200	76.100
GR	1483.200	95.200	1483.200	114.200	1483.100	133.200	1483.100	152.300	1483.100	171.300
GR	1483.100	190.400	1483.100	209.400	1483.100	228.400	1483.100	247.500	1483.100	266.500
GR	1483.100	285.600	1483.100	304.600	1483.100	323.600	1483.100	342.700	1483.100	361.700
GR	1483.100	380.800	1483.100	399.800	1483.100	418.800	1483.100	437.900	1483.100	456.900
GR	1483.100	476.000	1483.100	495.000	1483.100	514.000	1483.100	533.100	1483.100	552.100
GR	1477.200	553.300	1476.500	555.300	1475.800	557.300	1475.100	559.200	1474.400	561.200
GR	1473.600	563.200	1473.300	565.200	1473.200	567.100	1473.100	569.100	1473.000	571.100
GR	1473.000	573.000	1473.000	575.000	1472.900	577.000	1472.900	578.900	1472.900	580.900
GR	1473.000	582.900	1473.100	584.800	1473.200	586.800	1473.200	588.800	1473.300	590.700
GR	1473.600	592.700	1474.000	594.700	1474.500	596.700	1475.000	598.600	1475.400	600.600
GR	1475.900	602.600	1476.400	604.500	1476.800	606.500	1477.300	608.500	1483.300	609.700
GR	1483.000	633.600	1482.600	657.400	1482.200	681.300	1481.900	705.200	1481.500	729.100
GR	1481.200	753.000	1480.800	776.800	1480.600	800.700	1480.500	824.600	1480.400	848.500
GR	1480.300	872.400	1480.400	896.200	1480.500	920.100	1480.700	944.000	1480.800	967.900
GR	1480.900	991.700	1481.100	1015.600	1481.200	1039.500	1481.300	1063.400	1481.600	1087.300
GR	1482.400	1111.100	1483.200	1135.000	1483.900	1158.900	1484.700	1182.800	1485.500	1206.700
GR	1486.300	1230.500	1487.200	1254.400	1488.100	1278.300	1489.000	1302.200	1490.000	1326.100
NC	.042	.045	.027	.300	.500	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.191	12.000	1120.000	1215.000	35.000	70.000	55.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	1033.000	-0.000	1245.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1484.700	1.000	1484.600	600.000	1484.600	1120.000	1473.600	1140.000
GR	1472.400	1165.000	1473.300	1185.000	1484.200	1215.000	1484.900	1245.000	1485.400	1440.000
GR	1488.000	1920.000	1490.000	2020.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
NC	.045	.048	.027	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.255	19.000	236.000	524.000	350.000	350.000	340.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	525.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1484.200	47.000	1482.000	97.000	1481.600	126.000	1479.800	131.000
GR	1478.000	178.000	1477.600	236.000	1472.000	241.000	1472.100	282.000	1478.000	299.000
GR	1478.000	424.000	1480.000	434.000	1482.000	524.000	1482.000	574.000	1480.000	754.000
GR	1480.000	984.000	1482.000	1014.000	1482.000	1054.000	1490.000	1399.000	-0.000	-0.000
NC	.048	.045	.027	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
QT	6.000	1740.000	2720.000	3170.000	4320.000	1080.000	3400.000	-0.000	-0.000	-0.000
X1	28.433	14.000	485.000	580.000	1000.000	900.000	940.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	690.000	-0.000	-0.000	-0.000	-0.000
GR	1490.000	0.000	1485.700	45.000	1484.700	65.000	1482.200	75.000	1481.200	225.000
GR	1478.200	325.000	1476.400	415.000	1477.900	485.000	1470.000	490.000	1470.000	530.000
GR	1480.000	580.000	1482.000	660.000	1482.000	930.000	1480.000	990.000	-0.000	-0.000
X1	28.483	17.000	485.000	580.000	260.000	260.000	260.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	820.000	-0.000	-0.000	-0.000	-0.000
GR	1493.000	0.000	1488.700	45.000	1487.700	65.000	1485.200	75.000	1484.200	225.000
GR	1481.200	325.000	1479.400	415.000	1480.900	485.000	1473.000	490.000	1473.000	530.000
GR	1480.000	580.000	1482.000	590.000	1482.000	700.000	1484.000	790.000	1484.500	825.000
GR	1484.000	860.000	1482.000	900.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.530	18.000	485.000	580.000	250.000	250.000	250.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	760.000	-0.000	-0.000	-0.000	-0.000
GR	1496.000	0.000	1491.700	45.000	1490.700	65.000	1488.200	75.000	1487.200	225.000
GR	1484.200	325.000	1482.400	415.000	1483.900	485.000	1476.000	490.000	1476.000	530.000
GR	1480.000	580.000	1482.000	590.000	1483.500	600.000	1483.500	620.000	1482.000	635.000
GR	1482.000	665.000	1483.700	750.000	1482.000	880.000	-0.000	-0.000	-0.000	-0.000
X1	28.546	14.000	485.000	565.000	89.000	89.000	89.000	-0.000	-0.000	-0.000

X3	-0.000	-0.000	-0.000	-0.000	-0.000	640.000	-0.000	-0.000	-0.000	-0.000
GR	1497.200	0.000	1492.900	45.000	1491.900	65.000	1489.400	75.000	1488.400	225.000
GR	1485.400	325.000	1483.600	415.000	1485.100	485.000	1477.200	490.000	1477.200	530.000
GR	1482.000	555.000	1484.000	565.000	1484.000	650.000	1482.000	730.000	-0.000	-0.000
NC	.048	.045	.016	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.547	14.000	485.000	565.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	640.000	-0.000	-0.000	-0.000	-0.000
GR	1497.200	0.000	1492.900	45.000	1491.900	65.000	1489.400	75.000	1488.400	225.000
GR	1485.400	325.000	1483.600	415.000	1485.100	485.000	1481.000	487.000	1481.000	549.000
GR	1482.000	555.000	1484.000	565.000	1484.000	650.000	1482.000	730.000	-0.000	-0.000
X1	28.548	-0.000	-0.000	-0.000	3.000	3.000	3.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	640.000	-0.000	-0.000	-0.000	-0.000
NC	.048	.045	.027	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.549	14.000	485.000	565.000	1.000	1.000	1.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	325.000	-0.000	640.000	-0.000	-0.000	-0.000	-0.000
GR	1497.200	0.000	1492.900	45.000	1491.900	65.000	1489.400	75.000	1488.400	225.000
GR	1485.400	325.000	1483.600	415.000	1485.100	485.000	1477.200	490.000	1477.200	530.000
GR	1482.000	555.000	1484.000	565.000	1484.000	650.000	1482.000	730.000	-0.000	-0.000
NC	.045	.045	.027	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.577	12.000	520.000	610.000	156.000	156.000	156.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	630.000	-0.000	-0.000	-0.000	-0.000
GR	1492.000	0.000	1486.800	80.000	1484.700	200.000	1483.700	270.000	1485.100	405.000
GR	1485.400	520.000	1479.000	550.000	1479.000	590.000	1483.000	610.000	1484.000	615.000
GR	1484.000	660.000	1482.000	700.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.596	12.000	520.000	610.000	60.000	120.000	100.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	650.000	-0.000	-0.000	-0.000	-0.000
GR	1493.200	0.000	1488.000	80.000	1485.900	200.000	1484.900	270.000	1486.300	405.000
GR	1486.600	520.000	1480.200	550.000	1480.200	590.000	1483.000	610.000	1484.000	615.000
GR	1484.000	680.000	1483.000	820.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
X1	28.610	14.000	520.000	610.000	45.000	90.000	75.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	700.000	-0.000	-0.000	-0.000	-0.000
GR	1494.100	0.000	1488.900	80.000	1486.800	200.000	1485.800	270.000	1487.200	405.000
GR	1487.500	520.000	1481.100	550.000	1481.100	590.000	1483.000	610.000	1484.000	620.000
GR	1484.100	695.000	1484.000	720.000	1483.500	820.000	1484.000	930.000	-0.000	-0.000
X1	28.620	14.000	520.000	610.000	30.000	60.000	50.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	760.000	-0.000	-0.000	-0.000	-0.000
GR	1494.700	0.000	1489.500	80.000	1487.400	200.000	1486.400	270.000	1487.800	405.000
GR	1488.100	520.000	1481.700	550.000	1481.700	590.000	1483.000	610.000	1484.000	620.000
GR	1484.100	765.000	1484.000	790.000	1483.800	870.000	1484.000	960.000	-0.000	-0.000
X1	28.625	16.000	520.000	610.000	15.000	30.000	25.000	-0.000	-0.000	-0.000
X3	-0.000	-0.000	-0.000	-0.000	-0.000	790.000	-0.000	-0.000	-0.000	-0.000
GR	1495.000	0.000	1489.800	80.000	1487.700	200.000	1486.700	270.000	1488.100	405.000
GR	1488.400	520.000	1482.000	550.000	1482.000	590.000	1486.000	610.000	1486.000	930.000
GR	1484.000	1140.000	1484.000	1240.000	1486.000	1410.000	1488.000	1470.000	1490.000	1680.000
GR	1490.000	1950.000	-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

OUTPUT LISTING FOR SECTION 359

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
403.	403.	27.	27.	7.33

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
615.00	587142.0	4731.40	1.337	0.000	0.000	1.337
614.00	534109.8	4456.40	1.337	0.000	0.000	1.337
613.00	482886.3	4181.40	1.337	0.000	0.000	1.337
612.00	433538.4	3906.40	1.337	0.000	0.000	1.337
611.00	386139.4	3631.40	1.337	0.000	0.000	1.337
610.00	340769.0	3356.40	1.337	0.000	0.000	1.337
609.00	297514.5	3081.40	1.337	0.000	0.000	1.337
608.00	256472.7	2806.40	1.337	0.000	0.000	1.337
607.00	217751.5	2531.40	1.337	0.000	0.000	1.337
606.00	181472.5	2256.40	1.337	0.000	0.000	1.337
605.00	147775.1	1981.40	1.337	0.000	0.000	1.337
604.00	116821.2	1706.40	1.337	0.000	0.000	1.337
603.00	88804.1	1431.40	1.337	0.000	0.000	1.337
602.00	63962.2	1156.40	1.337	0.000	0.382	0.954
601.00	42604.8	881.40	1.337	0.000	0.422	0.915
600.00	25171.4	606.40	1.337	0.382	0.898	0.056
599.00	12941.1	350.05	0.954	0.039	0.915	0.000
598.00	5084.0	151.92	0.915	0.859	0.056	0.000
597.00	2010.1	43.26	0.056	0.056	0.000	0.000
596.00	612.7	18.84	0.000	0.000	0.000	0.000
595.00	50.8	3.48	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.39	1.03	595.23	14.78	1.13	595.61	36.96	1.35	596.34
51.75	1.49	596.64	73.93	1.70	597.00	147.86	1.20	597.72
295.72	1.15	598.52	443.59	0.99	599.37	591.45	0.79	600.49
739.31	0.70	601.59	887.18	0.59	603.19	1108.97	0.54	605.15

KIDS CREEK, MICHIGAN-HIGH LAKE LEVEL-ENLARGED BRIDGE OPNGS

INFORMATION LISTING FOR BRIDGE SECTION 360

OPENING COEF. 0.650 ORIFICE COEF. 0.600 ROADWAY COEF. 0.850

OPENING

ELEVATION	END AREA	Q CONTROL
597.00	80.00	907.55
596.00	60.00	589.47
595.00	40.00	320.86
594.00	20.00	113.44
593.00	0.00	0.00

ROADWAY

ELEVATION	FLOW OVER ROAD (CFS)
615.00	27216.81
614.00	24823.27
613.00	22504.33
612.00	20262.47
611.00	18100.43
610.00	16021.27
609.00	14028.46
608.00	12125.89
607.00	10318.08
606.00	8610.28
605.00	7008.73
604.00	5521.01
603.00	4156.61
602.00	2927.89
601.00	1851.91
600.00	954.54
599.00	197.55

THE HEAD-LOSS IS REFLECTED BETWEEN THE EXIT AND APPROACH SECTION. A RATING CURVE IS NOT DEVELOPED SEPARATELY FOR THE BRIDGE. NORMAL PROFILES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONTROL THE FLOW.

OUTPUT LISTING FOR SECTION 363

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
56.	56.	39.	39.	7.31

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
615.00	231310.2	1845.35	0.178	0.000	0.000	0.178
614.00	209827.7	1730.35	0.178	0.000	0.000	0.178
613.00	189010.6	1615.35	0.178	0.000	0.000	0.178
612.00	168895.7	1500.35	0.178	0.000	0.000	0.178
611.00	149523.6	1385.35	0.178	0.000	0.000	0.178
610.00	130939.7	1270.35	0.178	0.000	0.000	0.178
609.00	113194.6	1155.35	0.178	0.000	0.000	0.178
608.00	96345.7	1040.35	0.178	0.000	0.000	0.178
607.00	80458.2	925.35	0.178	0.000	0.000	0.178
606.00	65607.7	810.35	0.178	0.000	0.000	0.178
605.00	51882.6	695.35	0.178	0.000	0.000	0.178
604.00	39389.1	580.35	0.178	0.000	0.000	0.178
603.00	28258.4	465.35	0.178	0.000	0.034	0.143
602.00	18660.3	350.35	0.178	0.000	0.134	0.044
601.00	10832.1	235.35	0.178	0.034	0.134	0.009
600.00	5280.4	120.35	0.143	0.099	0.044	0.000
599.00	2680.4	51.47	0.044	0.034	0.009	0.000
598.00	1321.4	27.24	0.009	0.009	0.000	0.000
597.00	502.9	13.82	0.000	0.000	0.000	0.000
596.00	97.5	4.39	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.37	7.37	594.83*	14.75	2.25	596.22	36.89	2.80	596.92
51.64	3.13	597.19	73.78	3.50	597.53	147.56	4.30	598.28
295.13	4.57	599.18	442.70	5.55	599.40	590.26	3.15	600.58
737.83	2.33	601.69	885.40	1.76	603.30	1106.75	1.52	605.28

* INDICATES CRITICAL FLOW.

OUTPUT LISTING FOR SECTION 369

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
39.	39.	30.	30.	7.30

ELEVATION	TOTAL KO	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
615.00	231310.2	1845.35	0.117	0.000	0.000	0.117
614.00	209827.7	1730.35	0.117	0.000	0.000	0.117
613.00	189010.6	1615.35	0.117	0.000	0.000	0.117
612.00	168895.7	1500.35	0.117	0.000	0.000	0.117
611.00	149523.6	1385.35	0.117	0.000	0.000	0.117
610.00	130939.7	1270.35	0.117	0.000	0.000	0.117
609.00	113194.6	1155.35	0.117	0.000	0.000	0.117
608.00	96345.7	1040.35	0.117	0.000	0.000	0.117
607.00	80458.2	925.35	0.117	0.000	0.000	0.117
606.00	65607.7	810.35	0.117	0.000	0.000	0.117
605.00	51882.6	695.35	0.117	0.000	0.000	0.117
604.00	39389.1	580.35	0.117	0.000	0.000	0.117
603.00	28258.4	465.35	0.117	0.000	0.022	0.094
602.00	18660.3	350.35	0.117	0.000	0.087	0.029
601.00	10932.1	235.35	0.117	0.022	0.088	0.006
600.00	5280.4	120.35	0.094	0.065	0.029	0.000
599.00	2680.4	51.47	0.029	0.022	0.006	0.000
598.00	1321.4	27.24	0.006	0.006	0.000	0.000
597.00	502.9	13.82	0.000	0.000	0.000	0.000
596.00	97.5	4.39	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.37	7.37	594.83*	14.74	1.82	596.38	36.85	2.39	597.11
51.59	2.68	597.39	73.70	3.06	597.75	147.41	3.57	598.57
294.83	3.30	599.54	442.25	3.76	599.95	589.67	2.83	600.75
737.09	2.26	601.77	884.51	1.74	603.34	1105.63	1.51	605.29

* INDICATES CRITICAL FLOW.

INFORMATION LISTING FOR BRIDGE SECTION 370

OPENING COEF. 0.750 ORIFICE COEF. 0.600 ROADWAY COEF. 0.850

OPENING	ELEVATION	END AREA	Q CONTROL
	600.00	80.00	907.55
	599.00	60.00	589.47
	598.00	40.00	320.86
	597.00	20.00	113.44
	596.00	0.00	0.00

ROADWAY	ELEVATION	FLOW OVER ROAD (CFS)
	615.00	65470.36
	614.00	58815.71
	613.00	52403.16
	612.00	46242.29
	611.00	40343.78
	610.00	34719.86
	609.00	29384.68
	608.00	24354.79
	607.00	19650.00
	606.00	15294.55
	605.00	11319.08
	604.00	7764.16
	603.00	3710.63
	602.00	1221.21
	601.00	126.81

THE HEAD-LOSS IS REFLECTED BETWEEN THE EXIT AND APPROACH SECTION. A RATING CURVE IS NOT DEVELOPED SEPARATELY FOR TH BRIDGE. NORMAL PROFILES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONTROL THE FLOW.

OUTPUT LISTING FOR SECTION 371

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
30.	30.	168.	168.	7.28

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
615.00	230627.8	1838.37	0.283	0.000	0.000	0.283
614.00	207334.8	1713.37	0.283	0.000	0.000	0.283
613.00	184878.0	1588.37	0.283	0.000	0.000	0.283
612.00	163303.2	1463.37	0.283	0.000	0.000	0.283
611.00	142661.7	1338.37	0.283	0.000	0.000	0.283
610.00	123010.8	1213.37	0.283	0.000	0.000	0.283
609.00	104415.8	1088.37	0.283	0.000	0.000	0.283
608.00	86951.2	963.37	0.283	0.000	0.000	0.283
607.00	70704.1	838.37	0.283	0.000	0.000	0.283
606.00	55777.9	713.37	0.283	0.000	0.000	0.283
605.00	42298.7	588.37	0.283	0.000	0.039	0.244
604.00	30427.3	463.37	0.283	0.000	0.099	0.184
603.00	20383.0	338.37	0.283	0.039	0.228	0.016
602.00	12629.9	215.62	0.244	0.060	0.175	0.009
601.00	7572.8	121.17	0.184	0.168	0.014	0.001
600.00	4779.4	68.65	0.016	0.007	0.009	0.000
599.00	2788.5	47.32	0.009	0.007	0.001	0.000
598.00	1291.0	28.72	0.001	0.001	0.000	0.000
597.00	374.1	12.68	0.000	0.000	0.000	0.000
596.00	38.9	2.23	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.35	0.95	596.52	14.71	1.68	596.61	36.78	2.04	597.32
51.49	2.27	597.61	73.56	2.56	598.00	147.12	3.36	598.80
294.24	4.77	599.66	441.36	4.47	600.57	588.48	5.12	600.87
735.60	3.63	601.85	882.72	2.27	603.39	1103.41	1.74	605.34

OUTPUT LISTING FOR SECTION 375

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
168.	168.	158.	158.	7.27

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
615.00	530657.5	3996.95	0.871	0.000	0.000	0.871
614.00	479149.3	3746.95	0.871	0.000	0.000	0.871
613.00	429517.6	3496.95	0.871	0.000	0.000	0.871
612.00	381841.1	3246.95	0.871	0.000	0.000	0.871
611.00	336206.5	2996.95	0.871	0.000	0.000	0.871
610.00	292708.9	2746.95	0.871	0.000	0.000	0.871
609.00	251453.3	2496.95	0.871	0.000	0.000	0.871
608.00	212557.6	2246.95	0.871	0.000	0.009	0.861
607.00	176154.7	1996.95	0.871	0.000	0.019	0.851
606.00	142397.2	1746.95	0.871	0.009	0.019	0.841
605.00	112183.4	1498.29	0.861	0.009	0.091	0.760
604.00	85005.4	1252.29	0.851	0.009	0.112	0.729
603.00	61056.7	1008.95	0.841	0.081	0.060	0.699
602.00	42430.6	779.83	0.760	0.031	0.102	0.627
601.00	26149.9	563.92	0.729	0.029	0.603	0.096
600.00	13474.0	355.95	0.699	0.072	0.627	0.000
599.00	5061.9	161.62	0.627	0.531	0.096	0.000
598.00	1629.5	35.66	0.096	0.096	0.000	0.000
597.00	689.9	18.14	0.000	0.000	0.000	0.000
596.00	174.6	6.75	0.000	0.000	0.000	0.000
595.00	3.7	0.41	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.34	0.55	596.57	14.69	0.94	596.76	36.74	1.33	597.52
51.44	1.54	597.85	73.48	1.11	598.23	146.97	0.82	599.08
293.94	0.78	600.08	440.91	0.80	600.92	587.89	0.92	601.33
734.86	0.91	602.09	881.83	0.78	603.49	1102.29	0.68	605.39

OUTPUT LISTING FOR SECTION 379

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
158.	158.	31.	31.	7.26

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
617.00	418317.0	3710.46	0.675	0.000	0.000	0.675
616.00	369797.8	3429.46	0.675	0.000	0.000	0.675
615.00	323542.0	3148.46	0.675	0.000	0.000	0.675
614.00	279652.4	2867.46	0.675	0.000	0.000	0.675
613.00	238244.6	2586.46	0.675	0.000	0.000	0.675
612.00	199448.7	2305.46	0.675	0.000	0.000	0.675
611.00	163413.7	2024.46	0.675	0.000	0.000	0.675
610.00	130313.4	1743.46	0.675	0.000	0.000	0.675
609.00	100355.4	1462.46	0.675	0.000	0.055	0.620
608.00	73795.5	1181.46	0.675	0.000	0.365	0.309
607.00	50964.5	900.46	0.675	0.055	0.401	0.218
606.00	33585.4	627.11	0.620	0.310	0.162	0.147
605.00	25228.2	401.54	0.309	0.091	0.130	0.088
604.00	18018.7	283.57	0.218	0.070	0.082	0.065
603.00	12733.0	199.75	0.147	0.059	0.046	0.042
602.00	9128.9	141.91	0.088	0.022	0.043	0.022
601.00	5927.5	97.91	0.065	0.023	0.037	0.004
600.00	3521.4	62.92	0.042	0.019	0.022	0.000
599.00	1807.1	36.72	0.022	0.017	0.004	0.000
598.00	671.6	17.92	0.004	0.004	0.000	0.000
597.00	93.5	4.96	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.34	1.28	597.05	14.68	1.73	597.26	36.70	2.07	597.97
51.38	2.25	598.25	73.41	2.48	598.61	146.82	3.01	599.45
293.64	3.65	600.49	440.47	3.91	601.32	587.29	4.41	601.79
734.12	4.25	602.52	880.94	3.33	603.76	1101.18	2.08	605.55

INFORMATION LISTING FOR BRIDGE SECTION 380

OPENING COEF. 0.750 ORIFICE COEF. 0.600 ROADWAY COEF. 0.850

OPENING	ELEVATION	END AREA	Q CONTROL
	602.40	96.00	1333.82
	601.40	80.00	1014.67
	600.40	64.00	726.04
	599.40	48.00	471.57
	598.40	32.00	256.69
	597.40	16.00	90.75
	596.40	0.00	0.00

ROADWAY	ELEVATION	FLOW OVER ROAD (CFS)
	617.00	45238.32
	616.00	40270.03
	615.00	35498.24
	614.00	30931.41
	613.00	26579.19
	612.00	22452.72
	611.00	18565.12
	610.00	14932.09
	609.00	11572.89
	608.00	8511.98
	607.00	5781.91
	606.00	2962.54
	605.00	861.43
	604.00	63.49

THE HEAD-LOSS IS REFLECTED BETWEEN THE EXIT AND APPROACH SECTION. A RATING CURVE IS NOT DEVELOPED SEPARATELY FOR THE BRIDGE. NORMAL PROFILES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONTROL THE FLOW.

OUTPUT LISTING FOR SECTION 381

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
28.	28.	178.	178.	7.24

AREA FLOODED BY DEPTH INCREMENTS (ACRES).

ELEVATION	TOTAL KD	END AREA	TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
617.00	221133.1	2041.26	0.376	0.000	0.000	0.376
616.00	196832.4	1891.26	0.376	0.000	0.000	0.376
615.00	173525.8	1741.26	0.376	0.000	0.000	0.376
614.00	151269.3	1591.26	0.376	0.000	0.000	0.376
613.00	130125.4	1441.26	0.376	0.000	0.000	0.376
612.00	110164.5	1291.26	0.376	0.000	0.000	0.376
611.00	91467.2	1141.26	0.376	0.000	0.000	0.376
610.00	74126.7	991.26	0.376	0.000	0.000	0.376
609.00	58253.1	841.26	0.376	0.000	0.000	0.376
608.00	43980.4	691.26	0.376	0.000	0.049	0.326
607.00	31477.7	541.26	0.376	0.000	0.212	0.163
606.00	20972.6	391.26	0.376	0.049	0.296	0.029
605.00	13282.7	245.89	0.326	0.162	0.134	0.029
604.00	8858.7	137.08	0.163	0.134	0.000	0.029
603.00	7301.7	102.20	0.029	0.000	0.000	0.029
602.00	5273.6	81.20	0.029	0.000	0.022	0.007
601.00	3496.1	60.20	0.029	0.000	0.029	0.000
600.00	2025.2	39.20	0.029	0.022	0.007	0.000
599.00	993.7	21.55	0.007	0.007	0.000	0.000
598.00	408.5	11.36	0.000	0.000	0.000	0.000
597.00	87.5	3.91	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
7.32	1.37	597.18	14.65	1.97	597.46	36.63	2.73	598.19
51.28	3.13	598.48	73.26	3.62	598.86	146.52	4.27	599.71
293.05	5.31	600.75	439.57	6.16	601.52	586.10	7.23	601.98
732.63	5.91	603.61	879.15	6.56	603.90	1098.94	3.21	605.66

OUTPUT LISTING FOR SECTION 383

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
178.	178.	1582.	1582.	5.74

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
617.00	634641.0	5264.86	6.727	0.000	0.000	6.727
616.00	569420.5	4919.86	6.727	0.000	0.000	6.727
615.00	506833.2	4574.86	6.727	0.000	0.000	6.727
614.00	446980.8	4229.86	6.727	0.000	0.000	6.727
613.00	389974.5	3884.86	6.727	0.000	0.000	6.727
612.00	335937.1	3539.86	6.727	0.000	0.000	6.727
611.00	285005.9	3194.86	6.727	0.000	0.000	6.727
610.00	237335.6	2849.86	6.727	0.000	0.000	6.727
609.00	193103.3	2504.86	6.727	0.000	0.139	6.587
608.00	152514.7	2159.86	6.727	0.000	0.608	6.119
607.00	115815.2	1814.86	6.727	0.139	1.275	5.312
606.00	84136.7	1471.94	6.587	0.468	1.557	4.561
605.00	58887.6	1142.00	6.119	0.806	1.615	3.696
604.00	40115.3	847.08	5.312	0.750	1.698	2.862
603.00	25279.6	590.99	4.561	0.864	1.811	1.885
602.00	14434.1	374.60	3.696	0.834	2.833	0.028
601.00	7013.8	200.26	2.862	0.977	1.885	0.000
600.00	2819.5	68.20	1.885	1.856	0.028	0.000
599.00	1415.1	28.07	0.028	0.028	0.000	0.000
598.00	652.8	16.51	0.000	0.000	0.000	0.000
597.00	155.0	6.37	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
6.16	0.66	597.28	12.32	0.95	597.63	30.81	1.41	598.45
43.14	1.67	598.79	61.63	1.61	599.24	123.27	1.32	600.18
246.54	0.96	601.30	369.81	0.88	602.19	493.08	0.87	602.86
616.35	0.68	604.19	739.62	0.72	604.59	924.53	0.65	605.83

OUTPUT LISTING FOR SECTION 386

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
1582.	1582.	728.	728.	5.67

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
617.00	963092.1	11206.59	20.946	0.000	0.000	20.946
616.00	853020.1	10406.59	20.946	0.000	0.000	20.946
615.00	748173.2	9606.59	20.946	0.000	0.000	20.946
614.00	648727.5	8806.59	20.946	0.000	0.000	20.946
613.00	554877.7	8006.59	20.946	0.000	0.000	20.946
612.00	466842.4	7206.59	20.946	0.000	0.000	20.946
611.00	384868.6	6406.59	20.946	0.000	0.000	20.946
610.00	309241.0	5606.59	20.946	0.000	0.000	20.946
609.00	240293.0	4806.59	20.946	0.000	0.000	20.946
608.00	178425.1	4006.59	20.946	0.000	1.178	19.768
607.00	124135.1	3206.59	20.946	0.000	5.544	15.402
606.00	78071.9	2406.59	20.946	1.178	9.882	9.886
605.00	43024.8	1624.36	19.768	4.365	8.862	6.540
604.00	20142.0	907.49	15.402	5.516	9.857	0.028
603.00	8267.3	423.43	9.886	3.346	6.540	0.000
602.00	1840.8	97.23	6.540	6.511	0.028	0.000
601.00	710.4	17.72	0.028	0.028	0.000	0.000
600.00	285.5	9.22	0.000	0.000	0.000	0.000
599.00	47.7	2.67	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
5.10	1.05	599.47	12.21	1.25	600.05	30.53	1.46	601.03
42.74	0.99	601.31	61.06	0.79	601.73	122.13	0.69	602.23
244.27	0.61	602.90	366.41	0.58	603.41	4[illegible]8.54	0.56	603.90
610.68	0.44	604.66	732.82	0.44	605.03	916.02	0.37	606.04

OUTPUT LISTING FOR SECTION 389

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
728.	728.	41.	41.	5.62

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	646234.7	6929.22	4.044	0.000	0.000	4.044
621.00	580513.2	6479.22	4.044	0.000	0.000	4.044
620.00	517481.3	6029.22	4.044	0.000	0.000	4.044
619.00	457234.7	5579.22	4.044	0.000	0.000	4.044
618.00	399878.0	5129.22	4.044	0.000	0.000	4.044
617.00	345527.0	4679.22	4.044	0.000	0.000	4.044
616.00	294310.6	4229.22	4.044	0.000	0.000	4.044
615.00	246374.1	3779.22	4.044	0.000	0.000	4.044
614.00	201884.1	3329.22	4.044	0.000	0.000	4.044
613.00	161034.6	2879.22	4.044	0.000	0.000	4.044
612.00	124057.6	2429.22	4.044	0.000	0.464	3.579
611.00	91240.9	1979.22	4.044	0.000	0.887	3.156
610.00	62960.9	1529.22	4.044	0.464	0.813	2.766
609.00	41276.9	1104.22	3.579	0.422	1.674	1.482
608.00	24450.4	726.94	3.156	0.390	2.607	0.158
607.00	12460.9	393.59	2.766	1.284	1.397	0.084
606.00	6401.4	149.26	1.482	1.323	0.158	0.000
605.00	4064.1	74.20	0.158	0.073	0.084	0.000
604.00	2308.8	46.12	0.084	0.084	0.000	0.000
603.00	1065.0	26.25	0.000	0.000	0.000	0.000
602.00	392.2	12.78	0.000	0.000	0.000	0.000
601.00	31.4	2.46	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
6.06	1.17	601.25	12.13	1.32	601.64	30.33	1.61	602.44
42.46	1.80	602.79	60.66	1.99	603.20	121.32	2.56	604.03
242.64	2.97	605.09	363.97	2.59	605.87	485.29	2.13	606.31
606.61	1.78	606.77	727.94	1.72	607.08	909.92	1.54	607.58

INFORMATION LISTING FOR BRIDGE SECTIO 390

OPENING COEF. 0.750 ORIFICE COEF. 0.600 ROADWAY COEF. 0.850

OPENING	ELEVATION	END AREA	Q CONTROL
	604.60	70.00	794.10
	603.60	52.50	515.78
	602.60	35.00	280.76
	601.60	17.50	99.26
	600.60	0.00	0.00

ROADWAY	ELEVATION	FLOW OVER ROAD (CFS)
	622.00	85906.42
	621.00	78076.21
	620.00	70499.50
	619.00	63185.10
	618.00	56142.78
	617.00	49383.46
	616.00	42919.55
	615.00	36765.21
	614.00	30936.90
	613.00	25453.97
	612.00	20339.74
	611.00	15623.00
	610.00	11340.58
	609.00	6823.80
	608.00	3480.49
	607.00	1212.45
	606.00	31.44

THE HEAD-LOSS IS REFLECTED BETWEEN THE EXIT AND APPROACH SECTION. A RATING CURVE IS NOT DEVELOPED SEPARATELY FOR THE BRIDGE. NORMAL PROFILES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONTROL THE FLOW.

OUTPUT LISTING FOR SECTION 391

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
40.	40.	1348.	1348.	5.60

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	646234.7	6929.22	7.130	0.000	0.000	7.130
621.00	580513.2	6479.22	7.130	0.000	0.000	7.130
620.00	517481.3	6029.22	7.130	0.000	0.000	7.130
619.00	457234.7	5579.22	7.130	0.000	0.000	7.130
618.00	399878.0	5129.22	7.130	0.000	0.000	7.130
617.00	345527.0	4679.22	7.130	0.000	0.000	7.130
616.00	294310.6	4229.22	7.130	0.000	0.000	7.130
615.00	246374.1	3779.22	7.130	0.000	0.000	7.130
614.00	201884.1	3329.22	7.130	0.000	0.000	7.130
613.00	161034.6	2879.22	7.130	0.000	0.000	7.130
612.00	124057.6	2429.22	7.130	0.000	0.819	6.310
611.00	91240.9	1979.22	7.130	0.000	1.564	5.565
610.00	62960.9	1529.22	7.130	0.819	1.434	4.876
609.00	41276.9	1104.22	6.310	0.744	2.952	2.612
608.00	24450.4	726.94	5.565	0.689	4.597	0.279
607.00	12460.9	393.59	4.876	2.263	2.463	0.149
606.00	6401.4	149.26	2.612	2.333	0.279	0.000
605.00	4064.1	74.20	0.279	0.129	0.149	0.000
604.00	2308.8	46.12	0.149	0.149	0.000	0.000
603.00	1065.0	26.25	0.000	0.000	0.000	0.000
602.00	382.2	12.78	0.000	0.000	0.000	0.000
601.00	31.4	2.46	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
6.04	0.94	601.37	12.09	.15	601.77	30.24	1.46	602.57
42.34	1.65	602.94	60.49	.82	603.34	120.99	2.31	604.21
241.99	1.92	605.69	362.99	.11	606.09	483.98	1.70	606.54
604.98	1.54	606.98	725.93	.50	607.26	907.47	1.47	607.67

OUTPUT LISTING FOR SECTION 397

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
1348.	1348.	377.	377.	5.54

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	808962.5	8686.27	10.612	0.000	0.000	10.612
621.00	727467.8	8136.27	10.612	0.000	0.000	10.612
620.00	649279.0	7586.27	10.612	0.000	0.000	10.612
619.00	574503.2	7036.27	10.612	0.000	0.000	10.612
618.00	503258.8	6486.27	10.612	0.000	0.000	10.612
617.00	435675.2	5936.27	10.612	0.000	0.000	10.612
616.00	371896.0	5386.27	10.612	0.000	0.000	10.612
615.00	312081.8	4836.27	10.612	0.000	0.000	10.612
614.00	256415.4	4286.27	10.612	0.000	0.000	10.612
613.00	205106.8	3736.27	10.612	0.000	0.000	10.612
612.00	158402.8	3186.27	10.612	0.000	0.000	10.612
611.00	116600.9	2636.27	10.612	0.000	0.470	10.141
610.00	80072.6	2086.27	10.612	0.000	0.820	9.792
609.00	49307.3	1536.27	10.612	0.470	8.769	1.372
608.00	25934.5	998.98	10.141	0.349	9.739	0.052
607.00	9336.5	478.50	9.792	8.419	1.372	0.000
606.00	2329.7	61.37	1.372	1.320	0.052	0.000
605.00	1030.2	25.33	0.052	0.052	0.000	0.000
604.00	350.8	11.87	0.000	0.000	0.000	0.000
603.00	39.0	2.56	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
6.00	1.00	603.36	12.00	1.14	603.84	30.00	1.48	604.61
42.00	1.59	605.02	60.00	1.52	605.38	120.01	1.04	606.12
240.03	0.57	606.85	360.05	0.61	607.20	480.06	0.63	607.52
600.08	0.64	607.86	720.10	0.67	608.12	900.12	0.71	608.47

OUTPUT LISTING FOR SECTION 399

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
377.	377.	15.	15.	5.50

AREA FLOODED BY DEPTH INCREMENTS (ACRES).

ELEVATION	TOTAL KD	END AREA	TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	641064.8	8692.93	2.756	0.000	0.000	2.756
621.00	570788.1	8090.93	2.756	0.000	0.000	2.756
620.00	503663.3	7488.93	2.756	0.000	0.000	2.756
619.00	439799.5	6886.93	2.756	0.000	0.000	2.756
618.00	379316.6	6284.93	2.756	0.000	0.000	2.756
617.00	322348.6	5682.93	2.756	0.000	0.000	2.756
616.00	269045.6	5080.93	2.756	0.000	0.000	2.756
615.00	219579.0	4478.93	2.756	0.000	0.000	2.756
614.00	174147.1	3876.93	2.756	0.000	0.000	2.756
613.00	132984.9	3274.93	2.756	0.000	0.012	2.744
612.00	96378.6	2672.93	2.756	0.000	0.053	2.703
611.00	64691.7	2070.93	2.756	0.012	0.775	1.968
610.00	38473.9	1469.32	2.744	0.040	2.514	0.189
609.00	18480.9	874.32	2.703	0.734	1.968	0.000
608.00	6167.4	329.09	1.968	1.779	0.189	0.000
607.00	2264.8	62.79	0.189	0.189	0.000	0.000
606.00	1187.3	28.94	0.000	0.000	0.000	0.000
605.00	577.7	17.66	0.000	0.000	0.000	0.000
604.00	151.4	7.31	0.000	0.000	0.000	0.000
603.00	12.3	1.02	0.000	0.000	0.000	0.000

CFS	VELOCITY	E EV.	CFS	V CITY	ELEV.	CFS	VELOCITY	ELEV.
5.96	0.83	60 .97	11.93	1.05	604.38	29.84	1.45	605.24
41.77	1.64	60 .68	59.68	1.79	606.12	119.36	1.69	607.02
238.72	0.95	60 .69	358.08	0.94	608.08	477.44	0.93	608.32
596.80	0.90	60 .59	716.16	0.91	608.83	895.20	0.93	609.13

KIDS CREEK, MICHIGAN-HIGH AKE LEVEL-EN ARGED BRIDGE OPNGS

INFORMATION LISTING FO BRIDGE SECTION 400

OPENING COEF. 0.800 ORIFIC COEF. 0.600 JADWAY COEF. 0.850

OPENING	ELEVATION	END AREA	Q CONTROL
	607.00	70.00	887.84
	606.00	56.00	635.28
	605.00	42.00	412.63
	604.00	28.00	224.60
	603.00	14.00	79.41
	602.00	0.00	0.00

ROADWAY	ELEVATION	FL	OVER ROAD (CFS)
	622.00		69034.34
	621.00		60854.13
	620.00		53025.28
	619.00		45564.33
	618.00		38490.39
	617.00		31825.93
	616.00		25597.87
	615.00		19839.24
	614.00		14591.97
	613.00		9911.84
	612.00		5878.34
	611.00		2618.99
	610.00		133.33

THE HEAD-LOSS IS REFL CTED BETWEEN THE XIT AND APPROACH SECTION. A ATING CURVE IS N T DEVELOPED SEPARATELY FOR THE BRIDGE. NORMAL PRO LES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONT L THE FLOW.

OUTPUT LISTING FOR SECTION 40

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
15.	15.	398.	398.	5.48

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	641064.8	8692.93	2.898	0.000	0.000	2.898
621.00	570788.1	8090.93	2.898	0.000	0.000	2.898
620.00	503663.3	7488.93	2.898	0.000	0.000	2.898
619.00	439799.5	6886.93	2.898	0.000	0.000	2.898
618.00	379316.6	6284.93	2.898	0.000	0.000	2.898
617.00	322348.6	5682.93	2.898	0.000	0.000	2.898
616.00	269045.6	5080.93	2.898	0.000	0.000	2.898
615.00	219579.0	4478.93	2.898	0.000	0.000	2.898
614.00	174147.1	3876.93	2.898	0.000	0.000	2.898
613.00	132984.9	3274.93	2.898	0.000	0.012	2.885
612.00	96378.6	2672.93	2.898	0.000	0.055	2.842
611.00	64691.7	2070.93	2.898	0.012	0.815	2.070
610.00	38473.9	1469.32	2.885	0.042	2.643	0.198
609.00	18480.9	874.32	2.842	0.772	2.070	0.000
608.00	6167.4	329.09	2.070	1.871	0.198	0.000
607.00	2264.8	62.79	0.198	0.198	0.000	0.000
606.00	1187.3	28.94	0.000	0.000	0.000	0.000
605.00	577.7	17.66	0.000	0.000	0.000	0.000
604.00	151.4	7.31	0.000	0.000	0.000	0.000
603.00	12.3	1.02	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
5.95	0.78	604.02	11.90	1.01	604.42	29.75	1.41	605.29
41.66	1.59	605.74	59.51	1.66	606.19	119.03	1.07	607.18
238.06	0.54	608.19	357.09	0.35	609.21	476.12	0.37	609.66
595.16	0.40	610.02	714.19	0.47	610.07	892.74	0.57	610.16

OUTPUT LISTING FOR SECTION 409

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
398.	398.	31.	31.	5.30

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	473808.5	8194.17	3.099	0.000	0.000	3.099
621.00	418892.1	7594.17	3.099	0.000	0.000	3.099
620.00	366605.8	6994.17	3.099	0.000	0.000	3.099
619.00	317045.1	6394.17	3.099	0.000	0.000	3.099
618.00	270316.3	5794.17	3.099	0.000	0.000	3.099
617.00	226538.5	5194.17	3.099	0.000	0.000	3.099
616.00	185847.3	4594.17	3.099	0.000	0.000	3.099
615.00	148399.4	3994.17	3.099	0.000	0.000	3.099
614.00	114379.9	3394.17	3.099	0.000	0.087	3.011
613.00	84013.4	2794.17	3.099	0.000	0.404	2.694
612.00	57583.8	2194.17	3.099	0.087	0.572	2.439
611.00	35874.1	1595.01	3.011	0.316	1.355	1.339
610.00	20229.2	1052.34	2.694	0.255	2.393	0.045
609.00	8680.9	547.92	2.439	1.099	1.339	0.000
608.00	2776.6	133.32	1.339	1.293	0.045	0.000
607.00	1290.7	32.39	0.045	0.045	0.000	0.000
606.00	549.5	17.48	0.000	0.000	0.000	0.000
605.00	98.0	5.76	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
5.80	0.95	605.02	11.60	1.22	605.31	29.01	1.50	606.11
40.62	1.61	606.50	58.02	1.79	607.00	116.05	0.91	607.92
232.11	0.56	608.66	348.17	0.44	609.46	464.22	0.46	609.90
580.28	0.48	610.24	696.34	0.55	610.35	870.42	0.64	610.52

INFORMATION LISTING FOR BRIDGE SECTION 410

OPENING COEF. 0.800 ORIFICE COEF. 0.600 ROADWAY COEF. 0.850

OPENING	ELEVATION	END AREA	Q CONTROL
	608.20	72.00	866.34
	607.20	56.00	594.25
	606.20	40.00	358.74
	605.20	24.00	166.72
	604.20	8.00	32.08

ROADWAY	ELEVATION	FLOW OVER ROAD (CFS)
	622.00	69870.90
	621.00	61656.39
	620.00	53791.71
	619.00	46293.16
	618.00	39179.58
	617.00	32473.06
	616.00	26200.01
	615.00	20392.73
	614.00	15092.12
	613.00	10352.22
	612.00	6249.44
	611.00	2420.40
	610.00	252.88

THE HEAD-LOSS IS REFLECTED BETWEEN THE EXIT AND APPROACH SECTION. A RATING CURVE IS NOT DEVELOPED SEPARATELY FOR THE BRIDGE. NORMAL PROFILES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONTROL THE FLOW.

OUTPUT LISTING FOR SECTION 411

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
31.	31.	752.	752.	5.28

ELEVATION	TOTAL KO	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	576230.0	8194.17	5.484	0.000	0.000	5.484
621.00	508765.0	7594.17	5.484	0.000	0.000	5.484
620.00	444564.5	6994.17	5.484	0.000	0.000	5.484
619.00	383748.8	6394.17	5.484	0.000	0.000	5.484
618.00	326451.0	5794.17	5.484	0.000	0.000	5.484
617.00	272821.4	5194.17	5.484	0.000	0.000	5.484
616.00	223030.7	4594.17	5.484	0.000	0.000	5.484
615.00	177277.0	3994.17	5.484	0.000	0.000	5.484
614.00	135794.5	3394.17	5.484	0.000	0.155	5.328
613.00	98868.8	2794.17	5.484	0.000	0.716	4.768
612.00	66862.3	2194.17	5.484	0.155	1.012	4.316
611.00	40868.5	1595.01	5.328	0.560	2.398	2.370
610.00	22793.2	1052.34	4.768	0.451	4.235	0.080
609.00	9510.9	547.92	4.316	1.946	2.370	0.000
608.00	2882.5	133.32	2.370	2.289	0.080	0.000
607.00	1295.3	32.39	0.080	0.080	0.000	0.000
606.00	549.5	17.48	0.000	0.000	0.000	0.000
605.00	98.0	5.76	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
5.78	0.80	605.11	11.57	1.07	605.42	28.93	1.38	606.22
40.50	1.51	606.61	57.86	1.30	607.11	115.72	0.88	607.97
231.44	0.38	609.10	347.17	0.38	609.69	462.89	0.42	610.05
578.62	0.47	610.30	694.34	0.54	610.42	867.93	0.62	610.60

OUTPUT LISTING FOR SECTION 419

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
752.	752.	55.	55.	4.36

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	428886.1	7930.04	6.619	0.000	0.000	6.619
621.00	370588.8	7240.04	6.619	0.000	0.000	6.619
620.00	315682.0	6550.04	6.619	0.000	0.000	6.619
619.00	264305.5	5860.04	6.619	0.000	0.000	6.619
618.00	216619.3	5170.04	6.619	0.000	0.002	6.616
617.00	172809.2	4480.04	6.619	0.000	0.025	6.593
616.00	133096.4	3790.04	6.619	0.002	0.047	6.569
615.00	97760.2	3100.05	6.619	0.023	0.919	5.673
614.00	67213.5	2411.48	6.59	0.023	2.181	4.388
613.00	41837.9	1725.29	6.56	0.895	3.487	2.186
612.00	23463.0	1093.09	5.67	1.285	4.239	0.148
611.00	11537.0	552.85	4.38	2.201	2.156	0.030
610.00	5381.0	192.96	2.18	2.038	0.148	0.000
609.00	2698.3	63.55	0.148	0.117	0.030	0.000
608.00	1137.7	33.49	0.030	0.030	0.000	0.000
607.00	239.7	11.92	0.000	0.000	0.000	0.000
606.00	0.9	0.26	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
4.99	0.85	606.47	9.9	0.89	606.92	24.98	1.17	607.42
34.97	1.25	607.73	49.9	1.32	608.13	99.92	1.57	608.98
199.84	0.96	610.03	299.7	0.76	610.55	399.69	0.73	610.96
499.62	0.73	611.22	599.5	0.76	611.41	749.43	0.80	611.68

INFORMATION LISTING F R BRIDGE SECTION 420

OPENING COEF. 0.800 ORIFICE COEF. 0.600 ROADWAY COEF. 0.900

OPENING	ELEVATION	END AREA	Q CONTROL
	610.90	76.79	954.38
	609.90	60.79	672.25
	608.90	44.79	425.19
	607.90	28.79	219.15
	606.90	12.79	64.93

ROADWAY	ELEVATION	FLOW OVER ROAD (CFS)
	625.00	37039.11
	624.00	30975.37
	623.00	25284.22
	622.00	19991.92
	621.00	15131.12
	620.00	10744.22
	619.00	6889.31
	618.00	3653.53
	617.00	1191.11

THE HEAD-LOSS IS REF ECTED BETWEEN THE EXIT AND APPROACH SECTION. A RATING CURVE IS NOT DEVELOPED SEPARATELY FOR THE BRIDGE. NORMAL PROFILES ARE COMPUTED WHEN THE BRIDGE DOES NOT CONTROL THE FLOW.

OUTPUT LISTING FOR SECTION 421

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
55.	55.	1065.	1065.	4.34

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
622.00	428886.1	7930.04	9.022	0.000	0.000	9.022
621.00	370588.8	7240.04	9.022	0.000	0.000	9.022
620.00	315682.0	6550.04	9.022	0.000	0.000	9.022
619.00	264305.5	5860.04	9.022	0.000	0.000	9.022
618.00	216619.3	5170.04	9.022	0.000	0.003	9.019
617.00	172809.2	4480.04	9.022	0.000	0.035	8.987
616.00	133096.4	3790.04	9.022	0.003	0.064	8.955
615.00	97760.2	3100.05	9.019	0.032	1.253	7.734
614.00	67213.5	2411.48	8.987	0.032	2.973	5.981
613.00	41837.9	1725.29	8.955	1.221	4.753	2.980
612.00	23463.0	1093.09	7.734	1.752	5.779	0.202
611.00	11537.0	552.85	5.981	3.000	2.939	0.041
610.00	5381.0	192.96	2.980	2.778	0.202	0.000
609.00	2698.3	63.55	0.202	0.160	0.041	0.000
608.00	1137.7	33.49	0.041	0.041	0.000	0.000
607.00	239.7	11.92	0.000	0.000	0.000	0.000
606.00	0.9	0.26	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
4.97	0.67	606.60	9.95	0.75	607.05	24.89	1.03	607.55
34.84	1.12	607.87	49.78	1.20	608.25	99.56	1.24	609.12
199.13	0.69	610.26	298.70	0.55	610.96	398.27	0.33	612.13
497.84	0.28	613.05	597.41	0.24	614.04	746.76	0.20	615.78

OUTPUT LISTING FOR SECTION 425

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
1065.	1065.	944.	944.	4.27

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
625.00	570204.3	10829.09	20.523	0.000	0.000	20.523
624.00	494716.0	9929.09	20.523	0.000	0.000	20.523
623.00	423480.5	9029.09	20.523	0.000	0.000	20.523
622.00	356660.3	8129.09	20.523	0.000	0.000	20.523
621.00	294439.3	7229.09	20.523	0.000	0.000	20.523
620.00	237029.2	6329.09	20.523	0.000	0.000	20.523
619.00	184678.8	5429.09	20.523	0.000	0.329	20.194
618.00	137687.3	4529.09	20.523	0.000	1.976	18.547
617.00	96427.3	3629.09	20.523	0.329	3.129	17.064
616.00	61883.5	2730.52	20.94	1.647	4.695	13.851
615.00	35925.6	1880.52	18.47	1.482	16.823	0.241
614.00	16538.5	1099.08	17.64	3.212	13.689	0.162
613.00	4824.0	401.40	13.51	13.610	0.241	0.000
612.00	1463.4	40.27	0.41	0.078	0.162	0.000
611.00	639.6	21.51	0.62	0.162	0.000	0.000
610.00	141.4	6.94	0.00	0.000	0.000	0.000
609.00	5.3	0.64	0.00	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
4.91	1.06	609.62	9.83	1.21	610.07	24.58	1.52	610.62
34.41	1.61	610.98	49.16	1.77	611.32	98.32	1.23	612.10
196.64	0.61	612.76	294.96	0.59	613.13	393.28	0.51	613.51
491.61	0.45	613.98	589.93	0.38	614.54	737.41	0.27	615.93

OUTPUT LISTING FOR SECTION 427

DISTANCES DOWNSTREAM CHANNEL	DOWNSTREAM VALLEY	UPSTREAM CHANNEL	UPSTREAM VALLEY	DRAINAGE AREA SQUARE MILES
944.	944.	11 1.	1151.	4.06

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
630.00	570700.3	10496.05	20.103	0.000	0.000	20.103
629.00	497351.8	9646.05	20.103	0.000	0.000	20.103
628.00	427996.8	8796.05	20.103	0.000	0.000	20.103
627.00	362784.5	7946.05	20.103	0.000	0.000	20.103
626.00	301883.3	7096.05	20.103	0.000	0.000	20.103
625.00	245486.1	6246.05	20.103	0.000	0.000	20.103
624.00	193817.1	5396.05	20.103	0.000	0.343	19.760
623.00	147143.8	4546.05	20.103	0.000	1.202	18.901
622.00	105793.6	3696.05	20.103	0.343	2.827	16.932
621.00	70911.3	2848.91	19.760	0.858	6.519	12.381
620.00	43182.6	2031.05	18.901	1.968	9.814	7.118
619.00	22797.5	1262.75	16.932	4.551	11.828	0.553
618.00	10206.4	616.13	12.381	5.262	6.840	0.278
617.00	3912.7	194.02	7.118	6.565	0.553	0.000
616.00	1963.1	58.40	0.553	0.274	0.278	0.000
615.00	889.3	29.29	0.278	0.278	0.000	0.000
614.00	221.5	9.90	0.000	0.000	0.000	0.000
613.00	4.3	0.57	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
4.72	1.33	613.31	9.45	1.36	613.67	23.63	1.62	614.23
33.08	1.72	614.47	47.27	1.81	614.82	94.54	2.00	615.60
189.08	1.46	616.51	283.62	1.27	617.06	378.16	1.15	617.31
472.70	1.06	617.58	567.24	0.99	617.88	709.05	0.86	618.30

OUTPUT LISTING FOR SECTION 4 9

DISTANCES				DRAINAGE AREA
DOWNSTREAM		UPSTREAM		SQUARE MILES
CHANNEL	VALLEY	CHANNEL	VALLEY	
1151.	1151.	43.	43.	3.37

ELEVATION	TOTAL KD	END AREA	AREA FLOODED BY DEPTH INCREMENTS (ACRES). TOTAL	0-1 FOOT	1-3 FEET	3+ FEET
635.00	120184.1	2451.09	3.436	0.000	0.000	3.436
634.00	101942.4	2201.09	3.436	0.000	0.000	3.436
633.00	84876.2	1951.09	3.436	0.000	0.000	3.436
632.00	69057.3	1701.09	3.436	0.000	0.000	3.436
631.00	54569.9	1451.09	3.436	0.000	0.041	3.394
630.00	41515.3	1201.09	3.436	0.000	0.885	2.550
629.00	30019.1	951.09	3.436	0.041	1.854	1.539
628.00	20340.1	701.23	3.394	0.843	1.570	0.980
627.00	14169.2	473.38	2.550	1.011	0.827	0.712
626.00	10777.7	328.66	1.539	0.559	0.509	0.470
625.00	8129.3	234.67	0.980	0.268	0.311	0.400
624.00	5813.8	167.39	0.712	0.241	0.120	0.350
623.00	4102.8	118.16	0.470	0.070	0.279	0.120
622.00	2567.3	79.97	0.400	0.050	0.350	0.000
621.00	1373.5	45.53	0.350	0.229	0.120	0.000
620.00	610.2	18.35	0.120	0.120	0.000	0.000
619.00	205.4	8.04	0.000	0.000	0.000	0.000
618.00	13.5	1.26	0.000	0.000	0.000	0.000

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
4.08	1.38	618.24	8.16	1.57	618.57	20.41	1.92	619.24
28.57	2.08	619.54	40.82	2.23	619.98	81.65	2.05	620.78
163.30	2.18	621.84	244.95	2.37	622.60	326.60	2.51	623.23
408.25	2.57	623.81	489.90	2.61	624.29	612.38	2.65	624.93

// PAUSE

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*****************************************
HEC2 VERSION UPDATED JAN 1975
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09
MODIFICATIONS 52,53,54,55,56,57,58
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T1       MONTREAL RIVER-GOGEBIC COUNTY, MICHIGAN-PROJECT MANAGER, DENNIS COX
T2       100-YEAR FLOW=3380 CFS
T3       MONTREAL RIVER--CITY OF IRONWOOD, MICHIGAN-JOB NO. 5555-51

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

     -10.       4.       -0.       -0. -1.000000     -0.00     -0.0      -0.     -0.000    -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


3720 ASSUMED CRITICAL DEPTH


CCHV=     .300 CEHV=     .500
2096 WSEL NOT GIVEN,AVG OF MAX,MIN 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       STN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


        FIELD SECTION AT TOP OF WATERFALLS

    23.78      3.84   1418.84   1418.84     -0.00   1420.16      1.33      0.00      0.00   1424.20
    3380.        0.     2608.     772.        0.     252.      219.        0.        0.   1415.30
     0.00      0.00     10.35      3.52      .064      .034      .064     0.000   1415.00     67.85
  .010748       -0.       -0.       -0.         0        16         1      0.00    196.26    264.11


3301 HV CHANGED MORE THAN HVINS

    23.83      5.96   1421.06      0.00      0.00   1421.48       .42      1.04       .27   1422.40
    3380.        0.     2270.    1110.        0.     375.      436.        4.        1.   1415.60
      .01      0.00      6.06      2.55      .064      .034      .064      .033   1415.10     77.95
  .002158      235.      250.      260.         2         0         1      0.00    220.26    298.21


    23.88      6.39   1421.59      0.00      0.00   1422.08       .49       .56       .04   1420.60
    3380.        0.     2358.    1022.        1.     365.      382.        8.        2.   1416.10
      .03       .59      6.47      2.68      .064      .034      .064      .033   1415.20     91.79
  .002281      240.      250.      265.         3         0         1      0.00    191.06    282.84


    23.92      6.82   1422.12      0.00      0.00   1422.71       .58       .58       .05   1418.80
    3380.        7.     2452.     921.        6.     351.      332.       13.        3.   1416.50
      .04      1.26      6.99      2.77      .064      .034      .064      .033   1415.30    107.58
  .002318      235.      250.      260.         1         0         1      0.00    162.39    269.97
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FIELD SECTION

23.97	7.16	1422.66	0.00	0.00	1423.44	.77	.63	.10	1417.10
3380.	15.	2558.	807.	10.	322.	274.	16.	4.	1417.00
.05	1.56	7.95	2.95	.049	.034	.064	.033	1415.50	120.58
.002699	240.	250.	265.	2	0	1	0.00	137.71	258.30

3301 HV CHANGED MORE THAN HVINS

SECNO	DEPTH	C/SEL	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	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
24.12	9.25	1424.55	0.00	0.00	1424.69	.13	1.06	.19	1423.10
3380.	442.	2619.	319.	305.	801.	299.	34.	10.	1421.80
.13	1.45	3.27	1.07	.053	.034	.060	.034	1415.30	590.57
.000807	770.	780.	800.	2	0	1	0.00	492.90	1083.38
24.27	9.97	1425.07	0.00	0.00	1425.15	.09	.45	.01	1422.90
3380.	495.	2483.	402.	394.	932.	440.	63.	19.	1421.60
.22	1.26	2.66	.91	.053	.034	.060	.034	1415.10	588.89
.000438	770.	780.	800.	2	0	1	0.00	528.23	1117.12

SECTION A - IRONWOOD CORPORATE LIMITS

24.41	10.38	1425.38	0.00	0.00	1425.44	.06	.25	.01	1422.30
3310.	480.	2362.	468.	447.	1010.	535.	97.	29.	1421.50
.33	1.07	2.34	.87	.056	.034	.056	.034	1415.00	587.90
.000304	760.	780.	800.	2	0	1	0.00	549.14	1137.04

3470 ENCROACHMENT STATIONS= 490.0 605.0 TYPE= 1 TARGET= 115.000

SECTION B

24.60	8.95	1425.75	0.00	0.00	1426.06	.31	.49	.12	1424.00
3310.	2.	3308.	0.	2.	735.	0.	128.	37.	100000.00
.40	.74	4.50	0.00	.049	.034	.049	.034	1416.80	492.57
.000938	1000.	1000.	1000.	0	0	1	0.00	112.43	605.00

NORMAL BRIDGE,NRD= 4 MIN ELTRD= 1430.70 MAX ELLC= 1427.90

SECTION C - U.S. 2 BRIDGE/WESTBOUND LANES - DOWNSTREAM FACE

BRIDGE SKEW = 30 DEGREES

24.60	8.92	1425.82	0.00	0.00	1426.08	.26	.01	.02	1430.70
3310.	0.	3310.	0.	0.	807.	0.	128.	37.	1430.90
.40	0.00	4.10	0.00	.030	.030	.030	.034	1416.90	580.60
.000521	8.	8.	8.	2	0	1	0.00	109.20	689.80

SECTION C - U.S. 2 BRIDGE/WESTBOUND LANES - UPSTREAM FACE

BRIDGE SKEW = 30 DEGREES

24.61	8.32	1425.82	0.00	0.00	1426.13	.31	.03	.02	1430.70
3310.	0.	3310.	0.	0.	742.	0.	129.	37.	1430.90
.40	0.00	4.46	0.00	.030	.030	.030	.034	1417.50	580.60
.000680	45.	45.	45.	2	0	1	0.00	109.20	689.80

24.61	8.33	1425.83	0.00	0.00	1426.13	.31	.00	.00	1430.70
3310.	0.	3310.	0.	0.	742.	0.	129.	37.	1430.90
.40	0.00	4.46	0.00	.030	.034	.030	.034	1417.50	580.60
.000873	1.	1.	1.	0	0	1	0.00	109.20	689.80

24.62	8.03	1425.83	0.00	0.00	1426.17	.34	.02	.01	1430.70
3310.	0.	3310.	0.	0.	711.	0.	129.	37.	1430.90
.40	0.00	4.66	0.00	.030	.034	.030	.034	1417.80	580.60
.001000	23.	23.	23.	0	0	1	0.00	109.20	689.80

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

NORMAL BRIDGE,NRD= 4 MIN ELTRD= 1430.70 MAX ELLC= 1427.90

SECTION C - U.S. 2 BRIDGE/EASTBOUND LANES - DOWNSTREAM FACE

BRIDGE SKEW = 30 DEGREES

24.62	8.03	1425.83	0.00	0.00	1426.17	.34	.00	.00	1430.70
3310.	0.	3310.	0.	0.	711.	0.	129.	37.	1430.90
.40	0.00	4.65	0.00	.030	.030	.030	.034	1417.80	580.60
.000778	1.	1.	1.	0	0	1	0.00	109.20	689.80

SECTION C - U.S. 2 BRIDGE/EASTBOUND LANES - UPSTREAM FACE

BRIDGE SKEW = 30 DEGREES

24.63	7.44	1425.84	0.00	0.00	1426.25	.41	.04	.04	1430.70
3310.	0.	3310.	0.	0.	645.	0.	130.	37.	1430.90
.40	0.00	5.13	0.00	.030	.030	.030	.034	1418.40	580.60
.001062	45.	45.	45.	2	0	1	0.00	109.20	689.80

24.63	7.44	1425.84	0.00	0.00	1426.25	.41	.00	.00	1430.70
3310.	0.	3310.	0.	0.	645.	0.	130.	37.	1430.90
.40	0.00	5.13	0.00	.056	.038	.060	.034	1418.40	580.60
.001703	1.	1.	1.	0	0	1	0.00	109.20	689.80

3470 ENCROACHMENT STATIONS= 475.0 696.0 TYPE= 1 TARGET= 221.000

SECTION D

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    24.64      7.14  1426.14      0.00      0.00  1426.38       .24       .08       .05  1425.00
    3310.       48.     3262.       0.       53.     823.        0.      131.       37. 100000.00
      .41       .90      3.97      0.00      .056      .038      .060      .034   1419.00    475.00
 .001243       56.       56.       56.         2         0         1      0.00    221.00    696.00


3470 ENCROACHMENT STATIONS=      150.0     1250.0  TYPE=      1  TARGET=     1100.000

        SECTION E

    24.89      8.28  1427.78      0.00      0.00  1427.84       .06      1.41       .05  1429.50
    3310.        0.     2241.     1069.        0.     998.      998.      169.       52.  1427.00
      .60      0.00      2.24      1.07      .060      .041      .060      .036   1419.50    241.52
 .001011     1020.     1360.      750.         1         0         1      0.00   1008.48   1250.00


        SECTION F

    25.08      9.43  1428.43      0.00      0.00  1428.51       .08       .66       .01  1425.00
    3310.     1125.     1570.      615.      924.     505.      462.      208.       67.  1424.00
      .71      1.22      3.11      1.33      .056      .041      .056      .037   1420.00     79.68
 .000540      830.      970.      830.         2         0         1      0.00    575.63    655.32


    25.12      7.03  1428.53      0.00      0.00  1428.83       .30       .21       .11  1426.50
    3310.      690.     2170.      451.      461.     407.      253.      216.       70.  1425.50
      .73      1.50      5.33      1.78      .060      .041      .060      .037   1421.50    110.81
 .002112      250.      220.      170.         2         0         1      0.00    522.19    633.00


3470 ENCROACHMENT STATIONS=       70.0      360.0  TYPE=      1  TARGET=      -70.000

        SECTION G

    25.17      6.11  1429.11      0.00      0.00  1429.75       .64       .75       .17  1431.30
    3310.        0.     3037.      273.        0.     455.      121.      221.       72.  1426.00
      .74      0.00      6.68      2.26      .053      .041      .060      .037   1423.00    124.44
 .004611      250.      250.      250.         2         0         1      0.00    178.33    302.78


    SECNO     DEPTH     CHSEL     CHINS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
    Q         QLOB      WCH       WROB      ALOB      ACH       AROB      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=       70.0      360.0  TYPE=      1  TARGET=      -70.000
    25.24      6.15  1430.95      0.00      0.00  1431.59       .63      1.82       .00  1433.10
    3310.        0.     3033.      277.        0.     458.      124.      226.       74.  1427.80
      .76      0.00      6.62      2.24      .053      .041      .060      .037   1424.80    124.28
 .004495      400.      400.      400.         3         0         1      0.00    179.35    303.62


        SECTION H

    25.32      6.28  1432.88      0.00      0.00  1433.66       .78      2.01       .07  1431.00
    3310.       29.     2846.      434.       10.     377.      155.      231.       75.  1430.00
      .77      1.79      7.54      2.80      .060      .045      .060      .036   1426.60     37.74
 .005710      450.      400.      380.         2         0         1      0.00    177.19    214.93
```

25.37	5.76	1434.66	0.00	0.00	1435.74	1.09	1.93	.16	1433.30
3310.	15.	2985.	310.	8.	340.	109.	234.	77.	1432.30
.78	1.79	8.77	2.84	.060	.045	.060	.038	1428.90	42.56
.008838	310.	275.	270.	2	0	1	0.00	166.45	209.02

3301 HV CHANGED MORE THAN HVINS

25.39	5.92	1435.62	0.00	0.00	1437.26	1.64	1.24	.28	1436.10
3310.	0.	3310.	0.	0.	322.	0.	235.	77.	1435.50
.79	0.00	10.27	.56	.060	.045	.060	.038	1429.70	45.51
.016541	105.	105.	105.	2	0	1	0.00	90.96	136.47
25.40	6.43	1436.43	0.00	0.00	1437.81	1.38	.47	.08	1437.00
3310.	0.	3310.	0.	0.	352.	0.	235.	77.	1436.50
.79	0.00	9.41	0.00	.060	.045	.060	.038	1430.00	42.71
.013178	32.	32.	32.	5	0	1	0.00	87.92	130.64
25.40	6.60	1436.70	0.00	0.00	1438.05	1.35	.23	.01	1437.50
3310.	0.	3310.	0.	0.	355.	0.	236.	77.	1437.00
.79	0.00	9.32	0.00	.060	.045	.060	.038	1430.10	41.88
.012864	18.	18.	18.	0	0	1	0.00	88.26	130.13
25.41	6.76	1437.36	0.00	0.00	1438.70	1.35	.65	.00	1438.90
3310.	0.	3310.	0.	0.	355.	0.	236.	77.	1438.60
.79	0.00	9.31	0.00	.060	.045	.060	.038	1430.60	40.35
.012812	51.	51.	51.	0	0	1	0.00	87.71	128.06
25.42	6.91	1437.61	0.00	0.00	1439.15	1.33	.44	.00	1439.80
3310.	0.	3310.	0.	0.	357.	0.	236.	77.	1439.60
.79	0.00	9.27	0.00	.060	.045	.060	.038	1430.90	41.69
.012321	35.	35.	35.	0	0	1	0.00	85.59	127.27

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
25.42	7.11	1438.11	0.00	0.00	1439.37	1.26	.20	.02	1440.30
3310.	0.	3310.	0.	0.	347.	0.	236.	77.	1440.10
.79	0.00	9.01	0.00	.060	.045	.060	.038	1431.00	42.92
.011075	17.	17.	17.	2	0	1	0.00	84.51	127.43

SECTION I

25.42	7.07	1438.27	0.00	0.00	1439.58	1.31	.19	.03	1440.80
3310.	0.	3310.	0.	0.	350.	0.	237.	77.	1440.80
.79	0.00	9.20	0.00	.060	.045	.060	.038	1431.20	46.72
.011217	17.	17.	17.	2	0	1	0.00	79.74	126.46
25.43	7.41	1438.71	0.00	0.00	1439.79	1.09	.14	.07	1440.80
3310.	0.	3310.	0.	0.	395.	0.	237.	77.	1440.80
.79	0.00	8.35	0.00	.060	.045	.060	.038	1431.30	43.93
.009090	14.	14.	14.	3	0	1	0.00	88.00	131.93

25.43	7.53	1438.93	0.00	0.00	1439.94	1.01	.12	.02	1440.90
3310.	0.	3310.	0.	0.	411.	0.	237.	77.	1440.90
.79	0.00	8.06	0.00	.060	.045	.060	.038	1431.40	45.71
.008339	14.	14.	14.	2	0	1	0.00	90.71	136.42
25.43	7.55	1439.25	0.00	0.00	1440.18	.94	.22	.02	1441.00
3310.	0.	3310.	0.	0.	426.	0.	237.	77.	1441.10
.79	0.00	7.77	0.00	.060	.045	.060	.038	1431.70	51.89
.007543	28.	28.	28.	2	0	1	0.00	92.81	144.71
25.44	7.45	1439.75	0.00	0.00	1440.60	.85	.39	.03	1441.20
3310.	0.	3310.	0.	0.	448.	0.	238.	77.	1441.50
.79	0.00	7.39	0.00	.060	.045	.060	.038	1432.30	66.11
.006487	56.	56.	56.	2	0	1	0.00	94.52	160.63

SECTION J

25.47	7.13	1440.53	0.00	0.00	1441.29	.76	.66	.03	1441.70
3310.	0.	3310.	0.	0.	473.	0.	239.	78.	1442.20
.80	0.00	7.00	0.00	.060	.045	.060	.038	1433.40	97.80
.005334	113.	113.	113.	1	0	1	0.00	93.60	191.40

SECTION K

25.51	6.38	1441.88	0.00	0.00	1443.06	1.18	1.56	.21	1447.50
3310.	0.	3310.	0.	0.	379.	0.	241.	78.	1448.00
.81	0.00	8.73	0.00	.064	.045	.064	.039	1435.50	97.21
.009385	225.	225.	225.	1	0	1	0.00	82.21	179.42

SECNO	DEPTH	CMSEL	CRINS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	BTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
25.55	6.28	1443.76	0.00	0.00	1445.02	1.23	1.93	.02	1449.50
3310.	0.	3310.	0.	0.	372.	0.	243.	78.	1450.00
.81	0.00	8.91	0.00	.064	.045	.064	.039	1437.50	97.56
.009919	200.	200.	200.	2	0	1	0.00	81.63	179.20

SECTION L

25.57	6.10	1445.10	0.00	0.00	1446.63	1.52	1.47	.15	1447.00
3310.	0.	3310.	0.	0.	334.	0.	244.	79.	1448.00
.82	0.00	9.91	0.00	.060	.045	.060	.039	1439.00	108.79
.011083	140.	140.	140.	2	0	1	0.00	66.33	175.12
25.64	6.61	1448.81	0.00	0.00	1450.11	1.30	3.41	.07	1452.00
3310.	0.	3284.	26.	0.	357.	14.	247.	79.	1447.30
.83	0.00	9.19	1.89	.060	.045	.060	.039	1442.20	175.99
.008632	350.	350.	350.	1	0	1	0.00	85.15	262.13
25.66	6.84	1449.94	0.00	0.00	1450.94	1.00	.75	.09	1453.50
3310.	0.	3075.	235.	0.	371.	82.	248.	80.	1447.10
.83	0.00	8.23	2.87	.060	.045	.060	.039	1443.10	196.29

.006498	100.	100.	100.	2	0	1	0.00	118.54	314.84

25.67	7.01	1450.51	0.00	0.00	1451.30	.78	.29	.06	1454.20
3310.	0.	2851.	459.	0.	378.	144.	248.	80.	1447.00
.83	0.00	7.54	3.18	.060	.045	.060	.039	1443.50	205.94
.005209	50.	50.	50.	2	0	1	0.00	134.07	340.01

SECTION M

25.68	7.05	1451.05	0.00	0.00	1451.59	.55	.23	.07	1455.00
3310.	0.	2502.	808.	0.	378.	268.	249.	80.	1447.00
.84	0.00	6.61	3.01	.064	.045	.064	.039	1444.00	215.75
.003944	50.	50.	50.	2	0	1	0.00	157.79	373.54

SECTION N

25.74	5.75	1452.75	0.00	0.00	1453.60	.85	1.85	.15	1458.00
3310.	0.	3310.	0.	0.	446.	0.	252.	81.	1458.00
.85	0.00	7.42	0.00	.064	.045	.064	.039	1447.00	217.64
.012036	360.	320.	80.	2	0	1	0.00	150.49	368.13

SECTION O

25.88	7.27	1459.27	0.00	0.00	1460.08	.82	6.47	.01	1461.50
3310.	0.	3310.	0.	0.	457.	0.	260.	83.	1461.50
.87	0.00	7.25	0.00	.064	.045	.060	.040	1452.00	94.42
.006489	750.	750.	700.	3	0	1	0.00	99.98	194.41

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

SECTION P

26.02	8.00	1462.50	0.00	0.00	1462.83	.33	2.60	.15	1460.60
3310.	571.	2710.	29.	258.	541.	25.	270.	85.	1460.50
.92	2.21	5.01	1.18	.060	.045	.060	.040	1454.50	84.60
.002265	470.	750.	1000.	4	0	1	0.00	220.04	304.64

SECTION Q

26.16	8.15	1464.15	0.00	0.00	1464.48	.32	1.64	.00	1462.10
3310.	544.	2736.	30.	256.	555.	25.	285.	89.	1462.00
.97	2.13	4.92	1.19	.060	.045	.060	.041	1456.00	84.08
.002118	750.	750.	770.	3	0	1	0.00	219.54	303.61

SECTION R

26.23	7.90	1464.90	0.00	0.00	1465.12	.22	.62	.03	1465.00
3310.	0.	3293.	17.	0.	866.	24.	291.	91.	1464.00
.99	0.00	3.80	.69	.045	.041	.049	.041	1457.00	605.79

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.001514     310.     350.     400.        2        0        1     0.00   248.25   854.04


        SECTION S

  26.27     8.18  1465.18     0.00     0.00  1465.43      .25      .29      .01  1468.80
  3310.       0.    3114.     196.       0.     764.      99.     295.      92.  1461.40
   1.01     0.00     4.07     1.98     .034     .041     .045     .041  1457.00   162.31
.001424     200.     200.     200.        2        0        1     0.00   216.15   378.46


  26.30     6.55  1465.45     0.00     0.00  1465.84      .38      .34      .07  1465.50
  3310.       0.    2575.     735.       0.     475.     252.     299.      93.  1461.90
   1.02     0.00     5.42     2.92     .034     .041     .045     .041  1458.90   341.17
.002636     180.     180.     180.        0        0        1     0.00   240.20   581.37


        SECTION T

  26.31     6.46  1465.46     0.00     0.00  1465.95      .49      .06      .05  1465.20
  3310.       0.    2650.     659.       I.     433.     262.     299.      93.  1462.00
   1.02      .65     6.12     2.51     .034     .041     .049     .041  1459.00   359.83
.003304      20.      20.      20.        2        0        1     0.00   241.67   601.51


  26.33     6.81  1466.01     0.00     0.00  1466.38      .37      .40      .03  1465.40
  3310.       4.    2513.     793.       4.     463.     317.     301.      94.  1462.20
   1.03     1.06     5.43     2.50     .034     .045     .049     .041  1459.20   353.03
.002875     129.     129.     129.        2        0        1     0.00   263.63   616.66


CCHV=     .300 CEHV=     .500
 WATER EL=X5 CARD=  1466.010

3470 ENCROACHMENT STATIONS=        .0     273.0  TYPE=     1  TARGET=     272.999

        CHANNEL SHAPE CHANGES ABRUPTLY TO NARROW TRAPEZOIDAL SECTION WITH


        STEEP SIDE SLOPES. SEE HYDRAULICS BOOKLET FOR EXPLANATION OF MODELING.

  26.33     6.81  1466.01     0.00     0.00  1467.01     1.00      .00      .32  1467.40
  1830.       0.    1830.       0.       0.     226.       0.     301.      94. 100000.00
   1.03     0.00     8.03     0.00     .030     .045     .030     .041  1459.20   232.35
.007148       1.       1.       1.        0        0        1     0.00    39.27   271.62


  SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        FV        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=        .0     273.0  TYPE=     1  TARGET=     272.999

        SECTION U

  26.37     7.89  1467.49     0.00     0.00  1468.20      .71     1.10      .09  1467.80
  1830.       0.    1830.       0.       0.     271.       0.     302.      94. 100000.00
   1.03     0.00     6.75     0.00     .041     .045     .041     .041  1459.60   232.08
.004329     200.     200.     200.        2        0        1     0.00    40.91   272.99
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3470 ENCROACHMENT STATIONS=          .0      164.5  TYPE=      1  TARGET=      164.499
    26.38      8.16  1467.66      0.00      0.00  1468.41      .75       .20       .02  1469.50
    1830.        0.    1830.        0.        0.     263.       0.      303.       94. 100000.00
     1.04      0.00     6.96      0.00      .041     .045     .041      .041  1459.50    129.90
  .004568       44.      44.       44.         2        0        1      0.00    34.60    164.50


OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1469.50 ELREA=     1469.10


          SECTION V - NORRIE ST./POPLAR ST. BRIDGE - DOWNSTREAM FACE. HIGH WATER

          MARK FOR FLOOD OF APRIL 1960 = ELEV. 1467.69

    26.38      8.17  1467.67      0.00      0.00  1468.42      .75       .00       .00  1469.50
    1830.        0.    1830.        0.        0.     263.       0.      303.       94.  1469.10
     1.04      0.00     6.96      0.00      .035     .038     .035      .041  1459.50    129.90
  .003252        1.       1.        1.         0        0        1      0.00    34.60    164.50


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    -0.00      1.68      3.09     -0.00     34.60     -0.00    257.20     -0.00   1459.50   1459.50

PRESSURE FLOW

  EGPRS     EGLWC       H3       QWEIR      QPR      BAREA     ELLC     ELTRD     CLASS

  1468.99   1468.42     0.00        0.     1830.      257.   1467.50   1469.10    10.00


OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1469.50 ELREA=     1469.10


          SECTION V - NORRIE ST./POPLAR ST. BRIDGE - UPSTREAM FACE

    26.38      8.86  1468.36      0.00      0.00  1466.99      .63       .57      0.00  1469.50
    1830.        0.    1830.        0.        0.     287.       0.      303.       94.  1469.10
     1.04      0.00     6.37      0.00      .035     .038     .035      .041  1459.50    129.90
  .002523       30.      30.       30.         2        0        1      0.00    34.60    164.50


CCHV=     .300 CEHV=     .500

3470 ENCROACHMENT STATIONS=          .0      164.5  TYPE=      1  TARGET=      164.499
    26.38      8.86  1468.36      0.00      0.00  1466.99      .63       .00       .00  1469.50
    1830.        0.    1830.        0.        0.     287.       0.      303.       94. 100000.00
     1.04      0.00     6.37      0.00      .045     .041     .045      .041  1459.50    129.90
  .002935        1.       1.        1.         0        0        1      0.00    34.60    164.50


3470 ENCROACHMENT STATIONS=          .0      545.0  TYPE=      1  TARGET=      544.999

          SECTION

    26.40      9.63  1468.83      0.00      0.00  1469.25      .42       .19       .06  1469.20
    3310.        0.    2682.      628.        0.     472.     347.      304.       95.  1468.00
     1.04      0.00     5.68     1.51      .049     .041     .049      .041  1459.20    245.72
```

1960 H.W. ≈ 1469.04 for a Q = 3400 cfs

THIS REPORT

Qp = 1830 cfs @ 1468.99
Qw = 1509.46 cfs @ 1469.00
Qw = 1315.68 cfs @ 1468.90
Qw = 1490 cfs @ 1468.99

EG 1468.99 = 1830 + 1490
= 3320 cfs
Q100 = 3310 cfs
∴ close enough

```
.002048      84.      84.      84.        2        0        1     0.00   299.28   545.00

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=        .0      555.0  TYPE=      1  TARGET=      554.999

        SECTION X

   26.41     9.06  1469.26     0.00     0.00  1469.43      .17      .11      .07  1468.70
    3310.       1.     2392.     917.       4.     640.     546.     306.      95.  1466.00
    1.05      .37     3.74     1.68     .049     .041     .049     .041  1460.20   252.44
 .000803      90.      90.      90.        2        0        1     0.00   302.56   555.00


3470 ENCROACHMENT STATIONS=      307.0      440.0  TYPE=      1  TARGET=      133.000

        SECTION Y

   26.45     8.15  1469.35     0.00     0.00  1469.81      .47      .23      .15  1467.70
    3310.      49.     2983.     279.      33.     523.     96.     310.      96.  1466.00
    1.06     1.48     5.70     2.89     .049     .041     .049     .041  1461.20   307.00
 .001921      210.     200.     190.        2        0        1     0.00   133.00   440.00


        SECTION Z - CENTERLINE OF MINNEAPOLIS-ST. PAUL/SAULT STE. MARIE

        RAILROAD BRIDGE

   26.46     8.78  1469.48     0.00     0.00  1469.89      .41      .05      .02  1468.00
    3310.      48.     3261.       1.      34.     629.      2.     311.      96.  1467.00
    1.06     1.39     5.19      .70     .053     .038     .053     .041  1460.70    27.50
 .001188      40.      40.      40.        2        0        1     0.00   100.91   124.42


3470 ENCROACHMENT STATIONS=      270.0      360.0  TYPE=      1  TARGET=      90.000

        SECTION AA

   26.47     9.06  1469.66     0.00     0.00  1469.98      .32      .06      .03100000.00
    3310.       0.     3310.       0.       0.     731.      0.     312.      95. 100000.00
    1.06     0.00     4.53     0.00     .049     .041     .049     .041  1460.60   270.00
 .001107      50.      50.      50.        2        0        1     0.00    90.00   360.00


3470 ENCROACHMENT STATIONS=      275.0      355.0  TYPE=      1  TARGET=      80.000
   26.47     8.64  1469.64     0.00     0.00  1470.05      .41      .03      .05100000.00
    3310.       0.     3310.       0.       0.     644.      0.     312.      96. 100000.00
    1.07     0.00     5.14     0.00     .049     .041     .049     .041  1461.00   275.00
 .001496      21.      21.      21.        2        0        1     0.00    80.00   355.00


3470 ENCROACHMENT STATIONS=      278.0      353.0  TYPE=      1  TARGET=      75.000
   26.48     8.43  1469.63     0.00     0.00  1470.10      .48      .02      .03100000.00
    3310.       0.     3310.       0.       0.     598.      0.     312.      96. 100000.00
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     1.07      0.00      5.53      0.00      .049      .041      .049      .041  1461.20    278.00
  .001794       12.       12.       12.         2         0         1      0.00    75.00    353.00


3470 ENCROACHMENT STATIONS=      279.0      351.0  TYPE=      1  TARGET=      72.000
    26.48      8.31  1469.61      0.00      0.00  1470.13       .52       .01       .02100000.00
    3310.        0.     3310.        0.        0.     572.        0.     312.       96. 100000.00
     1.07      0.00      5.78      0.00      .049      .041      .049      .041  1461.30    279.00
  .001997        5.        5.        5.         2         0         1      0.00    72.00    351.00


3301 HV CHANGED MORE THAN HVINS

    26.48      7.56  1468.96      0.00      0.00  1470.82      1.86       .02       .67  1479.70
    3310.        0.     3310.        0.        0.     302.        0.     312.       96.  1479.70
     1.07      0.00     10.95      0.00      .053      .041      .053      .041  1461.40      0.00
  .015242        5.        5.        5.         3         0         1      0.00    70.00     70.00

    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


          SECTION BB - CENTERLINE OF CHICAGO & NORTHWESTERN RAILROAD BRIDGE

    26.48      7.50  1469.20      0.00      0.00  1471.12      1.92       .27       .03  1480.00
    3310.        0.     3310.        0.        0.     298.        0.     312.       96.  1480.00
     1.07      0.00     11.11      0.00      .053      .041      .053      .041  1461.70      0.00
  .015993       17.       17.       17.         2         0         1      0.00    70.00     70.00


3301 HV CHANGED MORE THAN HVINS

    26.48      8.59  1470.31      0.00      0.00  1471.52      1.22       .19       .21  1480.02
    3310.        0.     3310.        0.        0.     374.        0.     312.       96.  1480.02
     1.07      0.00      8.86      0.00      .053      .041      .053      .041  1461.72      0.00
  .007781       18.       18.       18.         3         0         1      0.00    70.00     70.00


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      365.0      445.0  TYPE=      1  TARGET=      80.000
    26.49      9.27  1471.00      0.00      0.00  1471.72       .71       .04       .15  1467.93
    3310.       84.     3216.        8.       30.     469.        5.     313.       96.  1469.93
     1.07      2.84      6.86      1.62      .056      .041      .049      .041  1461.73    365.00
  .002711       10.       10.       10.         3         0         1      0.00    80.00    445.00


3470 ENCROACHMENT STATIONS=      355.0      445.0  TYPE=      1  TARGET=      90.000
    26.49      9.37  1471.11      0.00      0.00  1471.76       .65       .03       .02  1467.94
    3310.      159.     3142.        9.       59.     476.        6.     313.       97.  1469.94
     1.07      2.70      6.60      1.54      .056      .041      .049      .041  1461.74    355.00
  .002469       10.       10.       10.         2         0         1      0.00    90.00    445.00


3470 ENCROACHMENT STATIONS=      335.0      445.0  TYPE=      1  TARGET=     110.000
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     26.49      9.52  1471.28      0.00      0.00  1471.84       .56       .05       .03  1467.96
     3310.      279.    3020.       11.      114.      485.        6.      313.       97.  1469.96
      1.07      2.46      6.22      1.65      .056      .041      .049      .041  1461.76    335.00
   .002137       20.       20.       20.         2         0         1      0.00    110.00    445.00


3470 ENCROACHMENT STATIONS=      293.0      445.0  TYPE=      1  TARGET=      152.000

         SECTION CC

     26.50      9.69  1471.49      0.00      0.00  1471.95       .46       .08       .03  1468.00
     3310.      425.    2873.       12.      205.      496.        7.      314.       97.  1470.00
      1.07      2.07      5.79      1.65      .056      .041      .049      .041  1461.80    293.00
   .001796       42.       42.       42.         2         0         1      0.00    152.00    445.00


CCHV=     .300 CEHV=     .500

3470 ENCROACHMENT STATIONS=       80.0      280.0  TYPE=      1  TARGET=      200.000

         SECTION DD

     26.56     10.46  1472.16      0.00      0.00  1472.37       .21       .35       .07  1467.60
     3310.      233.    2495.      582.      160.      602.      291.      320.       98.  1468.00
      1.10      1.46      4.15      2.00      .053      .041      .049      .041  1461.70     80.00
   .000724      350.      320.      350.         0         0         1      0.00    200.00    280.00


     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      ICONT    CORAR    TOPWID     ENDST


3470 ENCROACHMENT STATIONS=       35.0      115.0  TYPE=      1  TARGET=       80.000

         SECTION EE

     26.60      8.45  1472.25      0.00      0.00  1472.77       .53       .24       .16  1469.30
     3310.        0.    3310.        0.        0.      569.        0.      324.       99. 100000.00
      1.11      0.00      5.42      0.00      .049      .038      .034      .041  1463.80     35.00
   .001829      210.      220.      250.         2         0         1      0.00     60.00    115.00


3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=      173.3      234.2  TYPE=      1  TARGET=       60.900
     26.61      7.97  1472.07      0.00      0.00  1473.11      1.04       .08       .26  1472.70
     3310.        0.    3310.        0.        0.      404.        0.      325.       99. 100000.00
      1.11      0.00      8.20      0.00      .049      .038      .038      .041  1464.10    174.78
   .004045       30.       30.       30.         2         0         1      0.00     59.17    233.95


     26.61      7.76  1471.96      0.00      0.00  1473.31      1.34       .05       .15  1473.80
     3310.        0.    3310.        0.        0.      356.        0.      325.       99.  1474.90
      1.11      0.00      9.30      0.00      .049      .038      .038      .041  1464.20    219.06
   .005571       10.       10.       10.         2         0         1      0.00     63.29    272.35


     26.61      7.50  1471.80      0.00      0.00  1473.60      1.79       .07       .23  1475.00
     3310.        0.    3310.        0.        0.      308.        0.      325.       99.  1476.40
      1.11      0.00     10.75      0.00      .049      .038      .038      .041  1464.30    263.16
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.008096      10.      10.      10.       2        0        1     0.00    47.64   310.81

  26.61     7.34  1471.74     0.00     0.00  1473.73     1.99      .03      .10  1475.50
  3310.       0.    3310.       0.       0.     292.       0.     325.      99.  1475.50
   1.11     0.00    11.33     0.00     .049     .038     .038     .041  1464.40   282.00
.009474       4.       4.       4.        2        0        1     0.00    46.00   328.00


3470 ENCROACHMENT STATIONS=     282.0     328.0  TYPE=     1  TARGET=      46.000
OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1475.50 ELREA=   100000.00

        SECTION FF - SILVER STREET BRIDGE - DOWNSTREAM FACE. HIGH WATER MARK

        AT GAGING STATION FOR FLOOD OF MAY 2, 1954 WAS AT ELEV. 1468.28 - THF

        DISCHARGE WAS 1080 CFS. BRIDGE SKEW = 30 DEGREES

  26.61     7.36  1471.76     0.00     0.00  1473.74     1.99      .01      .00  1475.50
  3310.       0.    3310.       0.       0.     293.       0.     325.      99. 100000.00
   1.11     0.00    11.32     0.00     .040     .038     .040     .041  1464.40   282.00
.009435       1.       1.       1.        0        0        1     0.00    46.00   328.00


SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    -0.00     2.57      3.00      -0.00     46.00     -0.00     303.60    -0.00     1465.10   1464.40


3301 HV CHANGED MORE THAN HVINS

   SECNO     DEPTH     CHSEL     CHINS     WSELR     ES        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     COPAR     TOPWID      ENDST


PRESSURE AND WEIR FLOW

  EGPRS     EGLWC     H3        QWEIR     QPR       BAREA     ELLC      ELTRD     CLASS

  1476.35   1474.44   0.00      16.       3288.     309.      1472.10   1476.00   30.00


3470 ENCROACHMENT STATIONS=     282.0     328.0  TYPE=     1  TARGET=      46.000
OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     1475.50 ELREA=   100000.00

        SECTION FF - SILVER STREET BRIDGE - UPSTREAM FACE. HIGH WATER MARK FOR

        THE FLOOD OF RECORD = ELEV. 1475.55. THE DISCHARGE WAS 3400 CFS, AND

        IT OCCURRED ON APRIL 24, 1960. BRIDGE SKEW = 30 DEGREES
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1960 H.W. = 1475.55 @ 3400 cfs
REPORT = 1475.35 @ 3100 cfs

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     26.63     10.25   1475.35      0.00      0.00   1476.29       .94      2.54      0.00   1475.50
     3310.        0.     3310.        0.        0.      426.        0.      326.       99. 100000.00
      1.11      0.00      7.77      0.00      .040      .038      .040      .041   1465.10    282.00
   .003069       70.       70.       70.         3         0         2      0.00     46.00    328.00

 CCHV=     .300 CEHV=     .500

 3470 ENCROACHMENT STATIONS=      282.0      328.0  TYPE=      1  TARGET=      46.000
     26.63     10.25   1475.35      0.00      0.00   1476.29       .94       .00       .00   1475.50
     3310.        0.     3310.        0.        0.      426.        0.      326.       99. 100000.00
      1.11      0.00      7.77      0.00      .048      .033      .042      .040   1465.10    282.00
   .002310        1.        1.        1.         0         0         1      0.00     46.00    328.00

 3470 ENCROACHMENT STATIONS=       40.0      100.0  TYPE=      1  TARGET=      60.000

          SECTION GG

     26.63     11.32   1475.92      0.00      0.00   1476.44       .51       .02       .13100000.00
     3260.        0.     3260.        0.        0.      566.        0.      326.       99. 100000.00
      1.11      0.00      5.76      0.00      .048      .033      .042      .040   1464.60     40.00
   .001045       14.       14.       14.         2         0         1      0.00     60.00    100.00

     26.70     10.34   1476.44      0.00      0.00   1476.88       .44       .42       .02   1476.50
     3260.        0.     2359.      401.        0.      508.      249.      332.      100.   1473.50
      1.13      0.00      5.63      1.61      .045      .033      .039      .040   1466.10     39.07
   .001062      400.      400.      400.         2         0         1      0.00    230.31    259.38

 3470 ENCROACHMENT STATIONS=         .0      625.0  TYPE=      1  TARGET=     624.999

          SECTION HH

     26.78      9.42   1477.12      0.00      0.00   1477.15       .03       .15       .12   1473.20
     3260.     1704.     1555.        1.      1579.      650.        1.      345.      104.   1476.00
      1.21      1.08      1.83       .48      .048      .036      .048      .040   1467.70     25.94
   .000205      320.      400.      420.         2         0         1      0.00    599.06    625.00

          SECTION II

     26.89      9.63   1477.23      0.00      0.00   1477.35       .12       .15       .04   1474.20
     3260.      907.     2284.       68.      801.      720.       59.      372.      111.   1474.00
      1.27      1.13      3.17       .99      .045      .033      .042      .040   1467.60     63.79
   .000341      580.      600.      600.         2         0         1      0.00    476.77    540.56

 3470 ENCROACHMENT STATIONS=      155.0      505.0  TYPE=      1  TARGET=     350.000

          SECTION JJ

     27.00      9.72   1477.42      0.00      0.00   1477.55       .13       .20       .01   1473.50
     3260.      517.     2694.       48.      426.      854.       73.      391.      116.   1476.00
      1.33      1.21      3.15       .66      .045      .033      .042      .040   1467.70    155.00
   .000345      560.      570.      600.         2         0         1      0.00    350.00    505.00

    SECNO     DEPTH     CHSEL     CRINS     MSELK      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
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    SLOPE     XLOBL     XLCH     XLOBR    ITRIAL    IDC      ICONT    CORAR    TOPWID    ENDST


3470 ENCROACHMENT STATIONS=        .0     395.0  TYPE=     1  TARGET=     394.999

        SECTION KK

    27.08      7.48  1477.48      0.00      0.00  1478.07      .59      .29      .23  1474.00
    3260.      196.     3064.       0.      99.     485.       0.     401.     119.  1480.00
     1.35      1.98      6.31      0.00     .048     .033     .048     .040  1470.00   123.15
  .001951      490.      420.      400.        2        0        1     0.00   140.57   263.71


3470 ENCROACHMENT STATIONS=        .0     549.0  TYPE=     1  TARGET=     548.999

        SECTION LL

    27.18      8.22  1478.52      0.00      0.00  1478.64      .12      .43      .14  1477.40
    3260.     1124.     2136.       0.     793.     650.       0.     412.     122. 100000.00
     1.40      1.42      3.29      0.00     .048     .033     .048     .039  1470.30   171.12
  .000491      410.      520.      550.        2        0        1     0.00   377.87   549.00


3470 ENCROACHMENT STATIONS=        .0     474.0  TYPE=     1  TARGET=     473.999

        SECTION MM

    27.29      8.72  1478.82      0.00      0.00  1478.88      .06      .22      .02  1477.70
    3260.     1459.     1801.       0.    1157.     768.       0.     436.     127. 100000.00
     1.49      1.26      2.35      0.00     .048     .033     .048     .039  1470.10    28.16
  .000273      650.      580.      520.        2        0        1     0.00   445.84   474.00


        SECTION NN

    27.58      7.41  1479.41      0.00      0.00  1479.59      .18      .65      .06  1474.40
    3260.      916.     1781.     563.     438.     414.     381.     491.     141.  1476.00
     1.62      2.09      4.30      1.48     .043     .033     .048     .039  1472.00    10.98
  .000751     1600.     1540.     1100.        2        0        1     0.00   362.14   373.12


3470 ENCROACHMENT STATIONS=      271.0     399.0  TYPE=     1  TARGET=     128.000

        SECTION OO

    28.13      9.80  1481.10      0.00      0.00  1481.35      .25     1.73      .03  1478.10
    3260.        0.     3260.       0.        0.     817.       0.     559.     157. 100000.00
     1.82      0.00      3.99      0.00     .045     .027     .045     .037  1471.30   271.00
  .000488     2650.     2920.     2950.        2        0        1     0.00   128.00   399.00


3470 ENCROACHMENT STATIONS=      236.0     310.0  TYPE=     1  TARGET=      74.000
    28.16      8.58  1480.98      0.00      0.00  1481.63      .66      .08      .20100000.00
    3260.        0.     3260.       0.        0.     501.       0.     560.     159. 100000.00
     1.83      0.00      6.50      0.00     .045     .027     .045     .037  1472.40   236.00
  .001354      130.      110.       90.        2        0        1     0.00    74.00   310.00


3470 ENCROACHMENT STATIONS=      227.0     291.0  TYPE=     1  TARGET=      64.000
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     28.16      8.22  1480.92      0.00      0.00  1481.76       .84       .03      .09100000.00
     3260.        0.     3260.        0.        0.     443.        0.      560.      158. 100000.00
      1.83      0.00      7.35      0.00      .045      .027      .045      .037  1472.70    227.00
   .001741       20.       20.       20.         2         0         1      0.00     64.00    291.00


3470 ENCROACHMENT STATIONS=      217.0      268.0  TYPE=      1  TARGET=      51.000
     28.16      7.84  1480.74      0.00      0.00  1482.04      1.30       .05      .23100000.00
     3260.        0.     3260.        0.        0.     357.        0.      561.      158. 100000.00
      1.83      0.00      9.13      0.00      .045      .027      .045      .037  1472.90    217.00
   .002812       35.       25.       15.         2         0         1      0.00     51.00    268.00


    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       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      212.0      258.0  TYPE=      1  TARGET=      46.000
     28.17      7.63  1480.63      0.00      0.00  1482.22      1.59       .03      .15100000.00
     3260.        0.     3260.        0.        0.     322.        0.      561.      158. 100000.00
      1.83      0.00     10.13      0.00      .045      .027      .045      .037  1473.00    212.00
   .003562       10.       10.       10.         2         0         1      0.00     46.00    258.00


3470 ENCROACHMENT STATIONS=      208.0      249.0  TYPE=      1  TARGET=      41.000
     28.17      7.43  1480.43      0.00      0.00  1482.50      2.07       .04      .24100000.00
     3260.        0.     3260.        0.        0.     282.        0.      561.      158. 100000.00
      1.83      0.00     11.54      0.00      .045      .027      .045      .037  1473.00    208.00
   .004870       10.       10.       10.         2         0         1      0.00     41.00    249.00


3470 ENCROACHMENT STATIONS=      205.0      243.0  TYPE=      1  TARGET=      38.000
     28.17      7.25  1480.25      0.00      0.00  1482.74      2.49       .03      .21100000.00
     3260.        0.     3260.        0.        0.     258.        0.      561.      158. 100000.00
      1.83      0.00     12.66      0.00      .045      .027      .045      .037  1473.00    205.00
   .006089        5.        5.        5.         2         0         1      0.00     38.00    243.00


3470 ENCROACHMENT STATIONS=      203.0      239.0  TYPE=      1  TARGET=      36.000
     28.17      6.99  1480.09      0.00      0.00  1482.96      2.87       .03      .19100000.00
     3260.        0.     3260.        0.        0.     240.        0.      561.      158. 100000.00
      1.83      0.00     13.60      0.00      .045      .027      .045      .037  1473.10    203.00
   .007284        5.        5.        5.         2         0         1      0.00     36.00    239.00


7185 MIN SPECIFIC ENERGY


3720 ASSUMED CRITICAL DEPT-

    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       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      201.2      235.6  TYPE=      1  TARGET=      34.400
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```
    28.17      6.83  1479.93  1479.93      0.00  1483.25      3.32       .03      0.00  1482.30
    3260.        0.    3260.       0.        0.     223.        0.      561.      158. 100000.00
     1.83      0.00    14.62     0.00      .045     .027      .045      .037  1473.10    201.20
  .008779        5.       4.       5.         2        5         1      0.00     34.40    235.60


3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=      201.2      235.6  TYPE=      1  TARGET=       34.400

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      1482.30 ELREA=    100000.00

        SECTION PP - OMA STREET BRIDGE - DOWNSTREAM FACE

        BRIDGE SKEW = 25 DEGREES

    28.17      9.25  1481.35     0.00      0.00  1483.58      2.23       .01       .33  1482.30
    3260.        0.    3260.       0.        0.     272.        0.      561.      158. 100000.00
     1.83      0.00    12.00     0.00      .028     .024      .028      .037  1473.10    201.20
  .003879        1.       1.       1.        10        0         1      0.00     34.40    235.60


SPECIAL BRIDGE

SB_ XK        XKOR       COFQ       RDLEN      BWC        BWP        BAREA      SS         ELCHU      ELCHD
    -0.00      1.68       3.00      -0.00     34.40      -0.00     294.10     -0.00    1473.30    1473.10


3301 HV CHANGED MORE THAN HVINS

   SECNO     DEPTH     CHSEL     CRIWS     WSELP     EG        HV        HL        DLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      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      HJ        QLEIR     QPR       BAREA     ELLC      ELTRD     CLASS

  1484.55   1483.78    0.00      0.       3260.      294.    1482.00   1486.00    10.00


3470 ENCROACHMENT STATIONS=      201.2      235.6  TYPE=      1  TARGET=       34.400

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=      1482.30 ELREA=    100000.00

        SECTION PP - OMA STREET BRIDGE - UPSTREAM FACE

        BRIDGE SKEW = 25 DEGREES

    28.17      9.64  1482.94     0.00      0.00  1484.55      1.62       .97      0.00  1482.30
    3260.        0.    3260.       0.        0.     320.        0.      561.      158. 100000.00
     1.83      0.00    10.20     0.00      .028     .024      .028      .037  1473.30    201.20
  .002509       20.      20.      20.         3        0         1      0.00     34.40    235.60
```

The ROB is a pocket area which water does pond. However @ sec. 28.191 the OB do not allow this area to be used as floodway. Sec 28.191 is only 90 feet U/S.

Balsa Street is higher than flood plain / Dennis Co.
5-6-77.

```
3470 ENCROACHMENT STATIONS=      201.2      235.6  TYPE=      1  TARGET=      34.400
    28.18      9.64  1482.94      0.00      0.00  1484.56      1.61       .00       .00  1482.30
    3260.        0.     3260.        0.        0.     320.       0.      561.      158. 100000.00
     1.83      0.00     10.20      0.00      .042     .027      .045      .037  1473.30    201.20
  .003173       1.        1.        1.         0        0         1      0.00     34.40    235.60


3470 ENCROACHMENT STATIONS=      237.2      279.6  TYPE=      1  TARGET=      42.400
    28.18     10.40  1483.50      0.00      0.00  1484.69      1.19       .01       .13  1482.40
    3260.       10.     3250.        0.        6.     370.       0.      561.      158. 100000.00
     1.83      1.68      8.78      0.00      .042     .027      .045      .037  1473.10    237.20
  .001979        1.        4.        5.         3        0         1      0.00     42.40    279.60


3470 ENCROACHMENT STATIONS=      326.9      389.3  TYPE=      1  TARGET=      62.400
    28.18     11.03  1484.03      0.00      0.00  1484.83       .79       .01       .12  1482.60
    3260.       41.     3219.        0.       27.     447.       0.      561.      158. 100000.00
     1.83      1.54      7.20      0.00      .042     .027      .045      .037  1473.00    326.90
  .001162        9.       10.       15.         2        0         1      0.00     62.40    389.30


3470 ENCROACHMENT STATIONS=      507.3      609.7  TYPE=      1  TARGET=     102.400
    28.18     11.58  1484.48      0.00      0.00  1484.94       .46       .02       .10  1483.10
    3260.       66.     3194.        0.       62.     578.       0.      561.      158. 100000.00
     1.83      1.07      5.53      0.00      .042     .027      .045      .037  1472.90    507.30
  .000600       15.       20.       30.         2        0         1      0.00    102.40    609.70


CCHV=     .300 CEHV=     .500

3470 ENCROACHMENT STATIONS=     1033.0     1245.0  TYPE=      1  TARGET=     212.000

         SECTION QQ

    28.19     12.39  1484.79      0.00      0.00  1485.03       .24       .02       .07  1484.60
    3260.        3.     3255.        2.       17.     829.       8.      562.      158.  1484.20
     1.84       .21      3.93       .26      .042     .027      .045      .037  1472.40  1033.00
  .000303       35.       55.       70.         2        0         1      0.00    207.42  1240.42


3470 ENCROACHMENT STATIONS=         .0      525.0  TYPE=      1  TARGET=     524.999

         SECTION RR

    28.26     13.10  1485.10      0.00      0.00  1485.13       .02       .03       .07  1477.60
    3260.       620.     2538.        1.      937.    2075.       3.      578.      161.  1482.00
     1.92       .66      1.27       .41      .045     .027      .048      .037  1472.00    39.57
  .000039      350.      340.      350.         2        0         1      0.00    485.33   525.00


3280 CROSS SECTION      28.43 EXTENDED      5.14 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


3470 ENCROACHMENT STATIONS=         .0      690.0  TYPE=      1  TARGET=     689.999
```

```
SECTION SS

    28.43     15.14  1485.14      0.00      0.00  1485.16       .02       .03       .00  1477.90
    3170.     1271.    1718.      181.     2343.    1168.      425.      655.      173.  1480.00
     2.18       .54     1.47       .43      .048     .027      .045      .037   1470.00    56.25
  .000027     1000.     940.      900.         2        0         1      0.00    633.75   690.00

3280 CROSS SECTION      28.48 EXTENDED       3.14 FEET

3470 ENCROACHMENT STATIONS=          .0      820.0  TYPE=      1  TARGET=      819.999
    28.48     12.13  1485.13      0.00      0.00  1485.18       .05       .01       .02  1480.90
    3170.      743.    2083.      344.     1095.     959.      607.      674.      177.  1480.00
     2.22       .68     2.17       .57      .048     .027      .045      .036   1473.00    84.01
  .000076      260.     260.      260.         1        0         1      0.00    735.99   820.00

3280 CROSS SECTION      28.53 EXTENDED       3.12 FEET

3470 ENCROACHMENT STATIONS=          .0      760.0  TYPE=      1  TARGET=      759.999
    28.53      9.12  1485.12      0.00      0.00  1485.26       .14       .03       .05  1483.90
    3170.      232.    2513.      425.      316.     747.      434.      686.      181.  1480.00
     2.24       .73     3.37       .98      .048     .027      .045      .036   1476.00   294.35
  .000255      250.     250.      250.         2        0         1      0.00    465.65   760.00

3265 DIVIDED FLOW

3280 CROSS SECTION      28.55 EXTENDED       2.94 FEET

3470 ENCROACHMENT STATIONS=          .0      640.0  TYPE=      1  TARGET=      639.999

        HIGH WATER MARK FOR FLOOD OF APRIL 1960 = ELEV. 1484.69

    28.55      7.74  1484.94      0.00      0.00  1485.52       .58       .04       .22  1485.10
    3170.       74.     3015.       80.       87.     482.       71.      688.      181.  1484.00
     2.25       .85     6.26      1.14      .048     .027      .045      .036   1477.20   347.75
  .001275       89.      89.       89.         2        0         1      0.00    284.92   640.00

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

3280 CROSS SECTION      28.55 EXTENDED       3.20 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       RTN     ELMIN        SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR   TOPWID       ENDST

3470 ENCROACHMENT STATIONS=          .0      640.0  TYPE=      1  TARGET=      639.999
```

CONCRETE DAM - DOWNSTREAM END - REPEAT OF SECTION SS WITH KNOWN CREST

ELEVATION OF DAM ADDED TO SECTION

```
     28.55      4.20  1485.20  1485.20      0.00  1486.44      1.24       .00      0.00  1485.10
     3170.      141.     2989.     140.     123.     309.      90.      688.      181.   1484.00
      2.25      1.14      9.35     1.56     .048     .016     .045      .036  1481.00    335.04
   .001755        1.        1.       1.       30       11         1      0.00   304.96    640.00

3280 CROSS SECTION      28.55 EXTENDED       3.20 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

3470 ENCROACHMENT STATIONS=          .0      640.0  TYPE=      1  TARGET=      639.999
     28.55      4.21  1465.21  1485.20      0.00  1486.45      1.24       .01       .00  1485.10
     3170.      142.     2887.     141.     124.     309.      90.      688.      181.   1484.00
      2.25      1.14      9.34     1.56     .048     .016     .045      .036  1481.00    334.77
   .001745        3.        3.       3.        0        5         1      0.00   305.23    640.00

3280 CROSS SECTION      28.55 EXTENDED       4.51 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=       325.0      640.0  TYPE=      1  TARGET=      315.000
     28.55      9.32  1486.52     0.00      0.00  1486.75       .23       .00       .30  1485.10
     3170.      348.     2583.     239.     332.     607.     188.      688.      181.   1484.00
      2.25      1.05      4.26     1.27     .048     .027     .045      .036  1477.20    325.00
   .000435        1.        1.       1.        3        0         1      0.00   315.00    640.00

3280 CROSS SECTION      28.58 EXTENDED       4.64 FEET

3470 ENCROACHMENT STATIONS=          .0      630.0  TYPE=      1  TARGET=      629.999
     28.58      7.64  1486.64     0.00      0.00  1486.83       .19       .07       .01  1485.40
     3170.      837.     2253.      81.     742.     552.      55.      693.      183.   1483.00
      2.26      1.13      4.08     1.45     .045     .027     .045      .036  1479.00     88.91
   .000498      156.      156.     156.        2        0         1      0.00   541.09    630.00

3265 DIVIDED FLOW

3280 CROSS SECTION      28.60 EXTENDED       3.50 FEET

3470 ENCROACHMENT STATIONS=          .0      660.0  TYPE=      1  TARGET=      659.999
     28.60      6.40  1486.60     0.00      0.00  1487.02       .42       .07       .12  1485.60
     3170.      284.     2587.     299.     249.     452.     132.      695.      184.   1483.00
      2.27      1.14      5.73     2.26     .045     .027     .045      .036  1480.20    160.12
   .001275       60.       100.     120.        2        0         1      0.00   499.07    660.00
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3265 DIVIDED FLOW

3280 CROSS SECTION      28.61 EXTENDED      2.66 FEET


3470 ENCROACHMENT STATIONS=          .0      700.0  TYPE=      1  TARGET=      699.999
    28.61      5.57  1486.67      0.00      0.00  1487.18      .51       .11       .05  1487.50
    3170.       49.    2467.      653.       62.     387.     240.      696.      184.   1483.00
     2.27       .80     6.37      2.72      .045     .027     .045      .036  1481.10   209.80
  .001826       45.      75.       90.         0        0        1      0.00   319.18   700.00


3265 DIVIDED FLOW

3280 CROSS SECTION      28.62 EXTENDED      3.00 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=          .0      760.0  TYPE=      1  TARGET=      759.999
    28.62      5.29  1486.99      0.00      0.00  1487.32      .33       .08       .06  1488.10
    3170.       16.    2014.     1140.       30.     371.     448.      697.      185.   1483.00
     2.27       .55     5.43      2.54      .045     .027     .045      .036  1481.70   227.98
  .001375       30.      50.       60.         2        0        1      0.00   334.75   760.00


3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY


3720 ASSUMED CRITICAL DEPTH


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=          .0      790.0  TYPE=      1  TARGET=      789.999

          SECTION TT - TRUN OUD CORPORATE LIMITS

    28.63      5.02  1487.02  1487.02      0.00  1488.04      1.02       .06      0.00  1488.40
    3170.        5.    2767.     398.        9.     320.     184.      698.      185.   1486.00
     2.27       .63     8.63      2.16      .045     .027     .045      .036  1482.00   247.43
  .004159       15.      25.       30.        30       11        1      0.00   317.20   790.00
```