The following table is a guide to the Tributary numbers assigned to the various creeks that flow into Airport Creek in the SCWA HYDRO output data on the following pages:

TRIBUTARY 1	Overland sheet flow from upstream areas east of the S.M.A.R.T. railroad grade generally entering Airport Creek from the south. The time of concentration for this tributary represents the controlling upstream time of concentration for reasonably significant flow entering Airport Creek at its upstream end.
TRIBUTARY 2	Redwood Creek (including historic watershed of Ordinance Creek lying to the east of Runway 1/19, diverted to Redwood Creek in 1985)
TRIBUTARY 3	Ordinance Creek Remnant (historic watershed lying west of Runway 1/19)
TRIBUTARY 65	Airport Creek, US 101 to Windsor Creek Confluence

RUN DATE 12-21-2009 S O N O M A C O U N T Y W A T E R A G E N C Y TIME 10:45:34
R A T I O N A L M E T H O D H Y D R O L O G Y -- Version 2.0;01015

RECORD 1: 2009 UPDATE - SONOMA COUNTY AIRPORT MASTER PLAN HYDROLOGY
RECORD 2: AIRPORT CREEK
RECORD 3: FILE NAME- AIRPRTBR.DAT QUAD MAP- HEALDSBURG ZONE- 1A WORK ORDER- 1148.04

TRIBUTARY 1

REC NUM	CP	AR	ELEV OR SLOPE	DIST	C	TIME	DELTA AREA	K	ADD	TRIBS	CH	N OR Q	VARIABLES Z	B	DP	COMMENTS
4	1	A	119.000	3620.0	0.426	15.0	54.3	1.20	0 0	0 0	OF	0.000	0.0	0.0	0.0	X HWY 101
5	2	B	109.000	3740.0	0.433	0.0	55.1	1.17	0 0	0 0	PP	0.014	0.0	0.0	0.0	ENTER AIRPORT X NWPRR

CP	AR	T10	T25	T100	I10	I25	I100	SUM AREA	SUM KCDA	V10	V25	V100	DIA 10	DIA 25	DIA 100	Q10	Q25	Q100	
1	A	15.0	15.0	15.0	1.72	1.97	2.41	54.3	27.8	0.0	0.0	0.0	0	0	0	47.7	54.6	66.9	X HWY 101
2	B	27.5	27.0	26.4	1.25	1.44	1.79	109.4	55.7	5.0	5.2	5.4	42	44	47	69.5	80.2	99.5	ENTER AIRPORT X NWPRR

TRIBUTARY 2

REC NUM	CP	AR	ELEV OR SLOPE	DIST	C	TIME	DELTA AREA	K	ADD	TRIBS	CH	N OR Q	VARIABLES Z	B	DP	COMMENTS
6	1	A	92.000	0.0	0.000	0.0	696.0	1.17	0 0	0 0	KC	0.000	0.0	0.0	0.0	REDWOOD CREEK

CP	AR	T10	T25	T100	I10	I25	I100	SUM AREA	SUM KCDA	V10	V25	V100	DIA 10	DIA 25	DIA 100	Q10	Q25	Q100	
1	A	86.2	83.4	79.6	0.68	0.79	1.00	696.0	643.0	0.0	0.0	0.0	0	0	0	439.0	511.0	642.1	REDWOOD CREEK

TRIBUTARY 3

REC NUM	CP	AR	ELEV OR SLOPE	DIST	C	TIME	DELTA AREA	K	ADD	TRIBS	CH	N OR Q	VARIABLES Z	B	DP	COMMENTS
7	5	E	110.000	0.0	0.900	15.0	2.0	1.17	0 0	0 0	OF	0.000	20.0	2.0	0.0	ORDINANCE CRK REMNANT
8	6	F	108.000	1100.0	0.900	0.0	16.0	1.17	0 0	0 0	OC	0.035	10.0	2.0	0.9	X TAXIWAY A
9	7	G	87.000	850.0	0.900	0.0	15.0	1.17	0 0	0 0	OC	0.035	5.0	2.0	0.9	X EMER VEHICLE RD
10	8	H	82.000	1450.0	0.900	0.0	60.0	1.17	0 0	0 0	OC	0.035	1.1	6.5	2.3	
11	9	I	77.000	700.0	0.900	0.0	6.0	1.17	0 0	0 0	OC	0.035	1.7	5.2	2.3	X WIN RD ENTER APT CK

CP	AR	T10	T25	T100	I10	I25	I100	SUM AREA	SUM KCDA	V10	V25	V100	DIA 10	DIA 25	DIA 100	Q10	Q25	Q100	
5	E	15.0	15.0	15.0	1.72	1.97	2.41	2.0	2.1	0.0	0.0	0.0	0	0	0	3.6	4.1	5.1	ORDINANCE CRK REMNANT
6	F	30.6	29.9	28.9	1.18	1.36	1.71	18.0	19.0	1.2	1.2	1.3	0	0	0	22.3	25.9	32.3	X TAXIWAY A
7	G	33.4	32.9	31.8	1.13	1.30	1.62	33.0	34.7	5.1	4.8	4.8	0	0	0	39.1	45.1	56.3	X EMER VEHICLE RD
8	H	40.7	40.4	38.7	1.02	1.16	1.46	93.0	97.9	3.3	3.2	3.5	0	0	0	99.4	114.1	143.1	
9	I	43.0	42.9	41.0	0.99	1.13	1.42	99.0	104.2	4.9	4.7	5.1	0	0	0	102.7	117.7	147.8	X WIN RD ENTER APT CK

TRIBUTARY 65

REC NUM	CP	AR	ELEV OR SLOPE	DIST	C	TIME	DELTA AREA	K	ADD	TRIBS	CH	N OR Q	VARIABLES Z	B	DP	COMMENTS
12	1	A	120.000	5550.0	0.444	15.0	106.6	1.17	0 0	0 0	OF	0.000	0.0	0.0	0.0	ENTER PA
13	2	B	109.000	2300.0	0.764	0.0	36.8	1.20	1 0	0 0	OC	0.035	0.0	10.5	2.6	X NWPRR ADD T1
14	3	C	106.700	650.0	0.802	0.0	84.7	1.17	0 0	0 0	OC	0.035	0.0	14.5	3.6	

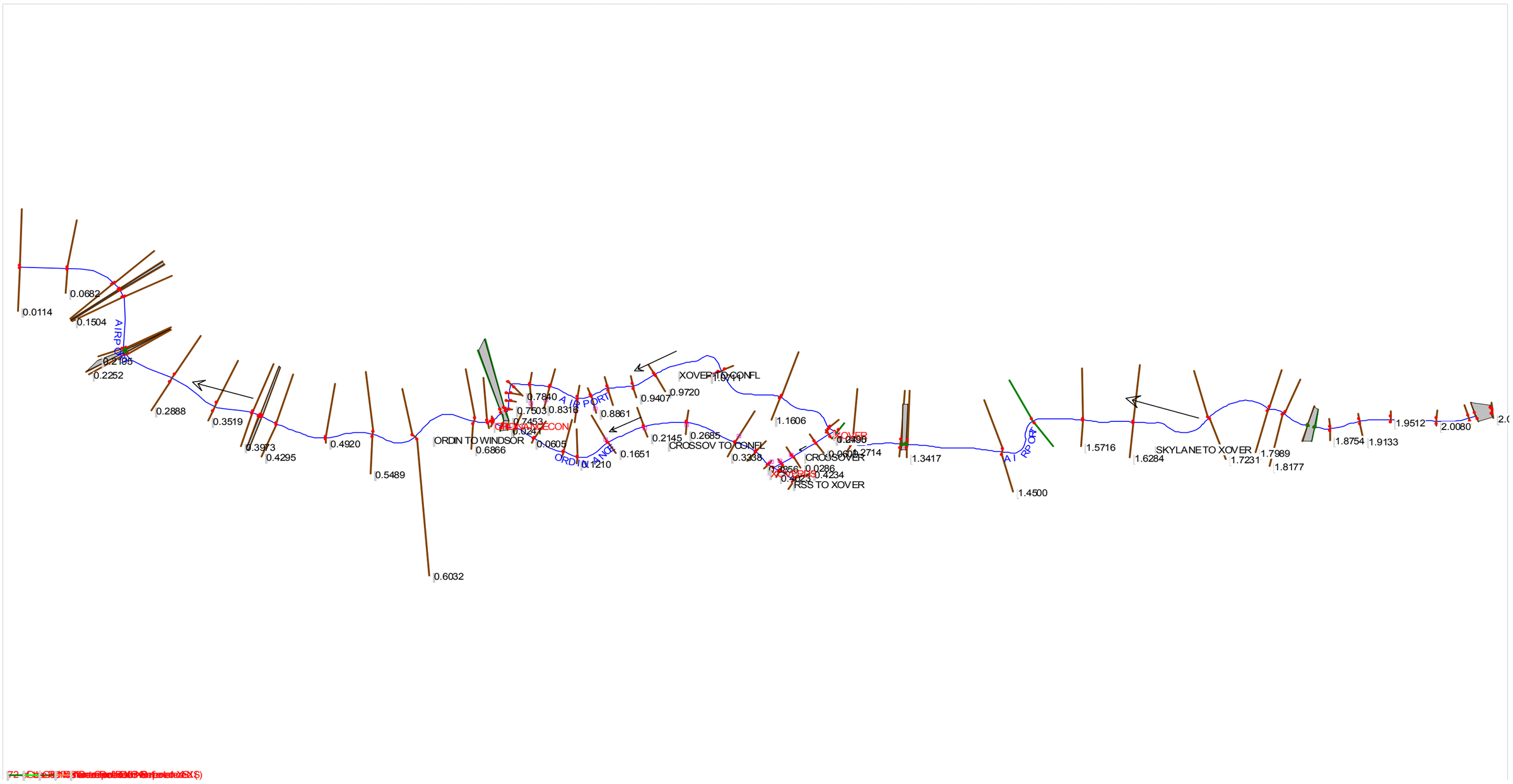
15	4	D	100.000	1450.0	0.817	0.0	137.8	1.17	0	0	0	0	OC	0.035	0.0	16.0	3.9	X SKYLANE BLVD
16	5	E	96.000	1520.0	0.654	0.0	60.5	1.17	0	0	0	0	OC	0.035	0.0	19.1	4.7	EXIT PA
17	6	F	95.000	1700.0	0.350	0.0	47.0	1.17	2	0	0	0	OC	0.035	0.0	25.4	6.4	ADD REDWOOD CK
18	7	G	85.000	1400.0	0.350	0.0	63.8	1.17	0	0	0	0	OC	0.035	0.0	19.9	4.9	DN STR RCH OD ARPT CK
19	8	H	77.000	1940.0	0.350	0.0	126.1	1.17	3	0	0	0	OC	0.035	0.0	22.3	5.5	X WINDSOR RD
20	9	I	73.000	1500.0	0.350	0.0	127.6	1.17	0	0	0	0	OC	0.035	0.0	24.6	6.2	
21	10	J	64.000	2000.0	0.350	0.0	37.3	1.17	0	0	0	0	OC	0.035	0.0	22.3	5.5	ENTER WINDSOR CK

CP	AR	T10	T25	T100	I10	I25	I100	SUM AREA	SUM KCDA	V10	V25	V100	DIA 10	DIA 25	DIA 100	Q10	Q25	Q100	
1	A	15.0	15.0	15.0	1.72	1.97	2.41	106.6	55.4	0.0	0.0	0.0	0	0	0	95.2	108.9	133.5	ENTER PA
2	B	24.3	23.6	23.3	1.33	1.55	1.91	143.4	89.1	4.1	4.5	4.6	0	0	0	118.8	138.0	170.3	X NWPRR ADD T1
2	B	27.5	27.0	26.4	1.25	1.44	1.79	252.8	144.8	4.1	4.5	4.6	0	0	0	180.9	208.6	258.7	TRIBUTARIES ADDED
3	C	30.0	29.3	28.7	1.19	1.38	1.71	337.5	224.3	4.3	4.7	4.7	0	0	0	267.4	309.4	383.4	
4	D	34.5	33.6	32.8	1.11	1.28	1.60	475.3	356.0	5.4	5.6	6.0	0	0	0	394.4	456.9	568.0	X SKYLANE BLVD
5	E	39.8	38.8	37.7	1.03	1.19	1.48	535.8	402.3	4.7	4.9	5.2	0	0	0	412.8	478.8	596.2	EXIT PA
6	F	50.4	49.0	47.5	0.91	1.05	1.31	582.8	421.5	2.7	2.8	2.9	0	0	0	412.8	478.8	596.2	ADD REDWOOD CK
6	F	86.2	83.4	79.6	0.68	0.79	1.00	1278.8	1064.5	2.7	2.8	2.9	0	0	0	726.7	846.1	1063.0	TRIBUTARIES ADDED
7	G	89.2	86.2	82.3	0.67	0.78	0.98	1342.6	1090.7	7.8	8.3	8.8	0	0	0	731.2	851.8	1070.4	DN STR RCH OD ARPT CK
8	H	94.2	90.9	86.8	0.65	0.76	0.95	1468.7	1142.3	6.5	6.8	7.1	0	0	0	744.2	867.4	1089.6	X WINDSOR RD
8	H	94.2	90.9	86.8	0.65	0.76	0.95	1567.7	1246.5	6.5	6.8	7.1	0	0	0	812.1	946.5	1189.0	TRIBUTARIES ADDED
9	I	98.5	95.2	90.9	0.64	0.74	0.93	1695.3	1298.8	5.7	5.8	6.2	0	0	0	826.2	962.6	1209.4	
10	J	103.4	100.0	95.3	0.62	0.72	0.91	1732.6	1314.1	6.9	7.0	7.6	0	0	0	826.2	962.6	1209.4	ENTER WINDSOR CK

Airport Creek System Hydraulics

The resultant flow data from the hydrology study was applied as input for detailed Airport Creek hydraulic backwater calculations as input for the HEC-RAS hydraulic model of the existing channels of Airport Creek and Ordinance Creek (Estimated peak flow values for the two-year event were derived by multiplying the 10-year peak flow values obtained from the HYDRO calculation output by a factor of 0.79). Airport Creek is the creek of interest in the case of this project, so the HEC-RAS model reflects the condition of peak flow in Airport Creek for 2,10, 25 & 100-year storm events. The hydraulic model includes a high-flow ditch connection intertie between Airport Creek and Ordinance Creek, therefore the associated flow values assigned to Ordinance Creek during peak flow conditions in Airport Creek are accordingly calibrated for this condition. HEC-RAS modeling software has the flexibility to permit a combined model of both Airport Creek and Ordinance Creek, with results that indicate that peak flows in (west) Ordinance Creek are actually increased from those computed by the HYDRO hydrology software (which only considers the Ordinance Creek watershed), because HEC-RAS takes into account the contribution of the crossover ditch from Airport Creek. Previous studies have assigned a nominal 200 cfs transfer from Airport Creek to Ordinance Creek via this ditch, however the backwater conditions present in Ordinance Creek at the downstream end of the ditch reduces the available conveyance capacity of the crossover ditch such that flow transfers are at somewhat lower values, depending on which storm event is being examined.

HEC-RAS RIVER STATION DIAGRAM – AIRPORT CREEK & ORDINANCE CREEK CROSS SECTION LOCATIONS



HEC-RAS Version 4.1.0 Jan 2010
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X       X   X     X  X    X
X     X  X        X            X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X            X  X     X    X        X
X     X  X        X    X       X   X    X    X        X
X     X  XXXXXX    XXXX        X    X   X    X   XXXXX
```

PROJECT DATA
Project Title: AIRPORT/ORDINANCE CREEK HYDRAULIC STUDY
Project File : 114804.prj
Run Date and Time: 3/7/2011 4:51:23 PM

Project in English units

Project Description:
STS Runway Extension & Safety Improvements Project
Airport Creek - 10' US of Skylane Blvd Culvert to Windsor Creek Confluence
Ordinance Creek - Emergency Vehicle Road to Airport Creek Confluence
Existing Cross Connection Ditch included in Existing Conditions Model
Assumed starting HGL's for Airport Creek are from Windsor Cumulative Drainage
Impact Mitigation Program Update (1999)

PLAN DATA

Plan Title: XOVER DITCH FLOW TRANSFER FOR EQ. EGL
Plan File : j:\J\1148\dwg\1148 04\ENG\HEC-RAS\114804.p03

Geometry Title: AIRPORT/ORDINANCE CREEK EX. GEOMETRY
Geometry File : j:\J\1148\dwg\1148 04\ENG\HEC-RAS\114804.g01

Flow Title : BYPASS AND ORD. CRK FLOWS FOR EQ. EGL
Flow File : j:\J\1148\dwg\1148 04\ENG\HEC-RAS\114804.f03

Plan Description:
FLOWS SUBTRACTED FROM AIRPORT CREEK AND ADDED TO CROSSOVER DITCH. DS ORDINANCE CREEK PEAK FLOW VALUES ASSUMED REPRESENTATIVE OF CROSSOVER FLOW PLUS ORDINANCE CREEK FLOW AT A POST-PEAK TIME OF CONCENTRATION, AS COMPUTED FOR AIRPORT CREEK AT THE CROSSOVER DITCH. EGL EQUALIZED AT US JUNCTION OF CROSSOVER DITCH.

Plan Summary Information:

Number of:	Cross Sections	= 80	Multiple Openings	=	0
	Culverts	= 2	Inline Structures	=	0
	Bridges	= 6	Lateral Structures	=	0

Computational Information

Water surface calculation tolerance	= 0.01
Critical depth calculation tolerance	= 0.01
Maximum number of iterations	= 20
Maximum difference tolerance	= 0.3
Flow tolerance factor	= 0.001

Computation Options

Critical depth computed only where necessary	
Conveyance Calculation Method:	At breaks in n values only
Friction Slope Method:	Average Conveyance
Computational Flow Regime:	Mixed Flow

FLOW DATA

Flow Title: BYPASS AND ORD. CRK FLOWS FOR EQ. EGL
Flow File : j:\J\1148\dwg\1148 04\ENG\HEC-RAS\114804.f03

Flow Data (cfs)

River	Reach	RS	2yr	10yr	25yr	100yr
AIRPORT	SKYLANE TO XOVER	2.0792	211.2	267.4	309.4	383.4
AIRPORT	SKYLANE TO XOVER	2.0080	310.9	393.6	457.6	567.8
AIRPORT	SKYLANE TO XOVER	1.8754	325.6	412.1	479.5	596.1
AIRPORT	SKYLANE TO XOVER	1.4500	574	726.7	846.1	1063
AIRPORT	SKYLANE TO XOVER	1.2490	578	731.2	851.8	1070.4
AIRPORT	XOVER TO CONFL	1.2384	540	671.2	771.8	955.4
AIRPORT	XOVER TO CONFL	0.7503	550.4	684.2	787.4	974.6
AIRPORT	ORDIN TO WINDSOR	0.7028	642.1	812.1	946.5	1189
AIRPORT	ORDIN TO WINDSOR	0.4295	653.1	826.2	962.6	1209.4

ORDINANCE	RSS TO XOVER	0.4234	32	39.1	45.1	56.3
ORDINANCE	CROSSOVER	0.0795	38	60	80	115
ORDINANCE	CROSSOV TO CONFL	0.3856	57.4	83.2	107.1	149
ORDINANCE	CROSSOV TO CONFL	0.1210	89.2	102.7	154.4	208
ORDINANCE	CROSSOV TO CONFL	0.0335	92.1	106.8	159.2	214

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
AIRPORT	SKYLANE TO XOVER	2yr	Normal S = 0.0015	
AIRPORT	SKYLANE TO XOVER	10yr	Normal S = 0.0015	
AIRPORT	SKYLANE TO XOVER	25yr	Normal S = 0.0015	
AIRPORT	SKYLANE TO XOVER	100yr	Normal S = 0.0015	
AIRPORT	ORDIN TO WINDSOR	2yr		Known WS = 73.87
AIRPORT	ORDIN TO WINDSOR	10yr		Known WS = 74.4
AIRPORT	ORDIN TO WINDSOR	25yr		Known WS = 74.73
AIRPORT	ORDIN TO WINDSOR	100yr		Known WS = 75.79
ORDINANCE	RSS TO XOVER	2yr	Normal S = 0.0015	
ORDINANCE	RSS TO XOVER	10yr	Normal S = 0.0015	
ORDINANCE	RSS TO XOVER	25yr	Normal S = 0.0015	
ORDINANCE	RSS TO XOVER	100yr	Normal S = 0.0015	

GEOMETRY DATA

Geometry Title: AIRPORT/ORDINANCE CREEK EX. GEOMETRY
Geometry File : j:\J\1148\dwg\1148 04\ENG\HEC-RAS\114804.g01

Reach Connection Table

River	Reach	Upstream Boundary	Downstream Boundary
AIRPORT	SKYLANE TO XOVER		XOVER
AIRPORT	XOVER TO CONFL	XOVER	ORDINANCECON
AIRPORT	ORDIN TO WINDSOR	ORDINANCECON	
ORDINANCE	RSS TO XOVER		XOVERDS
ORDINANCE	CROSSOVER	XOVER	XOVERDS
ORDINANCE	CROSSOV TO CONFL	XOVERDS	ORDINANCECON

JUNCTION INFORMATION

Name: XOVER
Description: UPSTREAM END OF CROSSOVER DITCH
Energy computation Method

Length across Junction River	Reach		Tributary River	Reach	Length	Angle
AIRPORT	SKYLANE TO XOVER	to AIRPORT	XOVER TO CONFL		56	
AIRPORT	SKYLANE TO XOVER	to ORDINANCE	CROSSOVER		70	

Name: ORDINANCECON
Description:
Energy computation Method

Length across Junction River	Reach		Tributary River	Reach	Length	Angle
AIRPORT	XOVER TO CONFL	to AIRPORT	ORDIN TO WINDSOR		124	
ORDINANCE	CROSSOV TO CONFL	to AIRPORT	ORDIN TO WINDSOR		40	

Name: XOVERDS
Description: DS END OF CROSSOVER DITCH (ORDINANCE CREEK)
Energy computation Method

Length across Junction River	Reach		Tributary River	Reach	Length	Angle
ORDINANCE	RSS TO XOVER	to ORDINANCE	CROSSOV TO CONFL		88.5	
ORDINANCE	CROSSOVER	to ORDINANCE	CROSSOV TO CONFL		102	

CROSS SECTION

RIVER: AIRPORT
REACH: SKYLANE TO XOVER RS: 2.0792

INPUT
Description: 2.0792 SCWA SECNO 111.60
Station Elevation Data num= 6

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
460	103.2	494	102.22	495	95.7	507.5	95.7	519.5	102.74
564	103.26								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
460	.035	494	.08	519.5	.05

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           494   519.5               10      10      10             .1       .3

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 2.0773

INPUT
Description: 2.0773 SCWA SECNO 111.50 US SKYLANE CULVERT
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     460   103.2     480     102     491   95.73     514   95.73     524     103
     525     103   527.5   102.5     530     103     531     103   537.5  105.94
   540.5     106

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     460    .035     480    .035     524     .05

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           480     524               104     104     104             .1       .3

BRIDGE


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 2.0648

INPUT
Description: Skylane Blvd. Culvert

Distance from Upstream XS =       1
Deck/Roadway Width        =     102
Weir Coefficient          =     2.8
Upstream  Deck/Roadway Coordinates
    num=      22
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     360   103.2             377     103             390   103.1
     410   103.1             486   102.8             491  102.83    95.7
   491.6  102.83    98.1     492  102.84      99   492.7  102.84    99.9
   493.5  102.85   100.5   494.5  102.85   100.9   495.5  102.86     101
     500  102.89     101   509.3  102.94     101   510.3  102.95   100.9
   511.3  102.96   100.5   512.1  102.96    99.9   512.7  102.97      99
```

```
   513.1  102.97    98.1   513.8  102.97    95.7     540  103.14
     570  103.24

Upstream Bridge Cross Section Data
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     460   103.2     480     102     491   95.73     514   95.73     524     103
     525     103   527.5   102.5     530     103     531     103   537.5  105.94
   540.5     106

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     460    .035     480    .035     524     .05

Bank Sta: Left   Right    Coeff Contr.   Expan.
          480     524             .1       .3

Downstream  Deck/Roadway Coordinates
    num=      22
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     360   103.2             377     103             390   103.1
     410   103.1             486   102.8             491  102.83    95.7
   491.6  102.83    98.1     492  102.84      99   492.7  102.84    99.9
   493.5  102.85   100.5   494.5  102.85   100.9   495.5  102.86     101
     500  102.89     101   509.3  102.94     101   510.3  102.95   100.9
   511.3  102.96   100.5   512.1  102.96    99.9   512.7  102.97      99
   513.1  102.97    98.1   513.8  102.97    95.7     540  103.14
     570  103.24

Downstream Bridge Cross Section Data
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     462   102.2     479   101.8     491   95.58     514   95.58     525   101.8
     560   102.5     602     115

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     462    .035     479     .08     525    .035

Bank Sta: Left   Right    Coeff Contr.   Expan.
          479     525             .3       .5
Sediment Elevation = 0

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
```

```
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =   102.2
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
Selected Low Flow Methods = Energy

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 2.0576

INPUT
Description: 2.0576 SCWA SECNO 110.5 DS SKYLANE CULVERT
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     462   102.2     479   101.8     491   95.58     514   95.58     525   101.8
     560   102.5     602     115

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     462    .035     479     .08     525    .035

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           479     525               50      50      50             .3       .5
Sediment Elevation = 0

CROSS SECTION
```

```
RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 2.0478

INPUT
Description: 2.0478 SCWA SECNO 110.1
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     400   102.2     420   101.8   432.5   95.52   447.5   95.52     460   101.8
     472   102.5     540     115

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     400    .035     420     .08     460     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           420     460              210     210     210             .1       .3
Sediment Elevation = 0

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 2.0080

INPUT
Description: 2.0080 SCWA SECNO 800
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     491  101.45     506  101.45   518.5    95.2   533.5    95.2     546  101.45
     555  101.45     603   117.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     491    .035     506     .08     546     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           506     546              300     300     300             .1       .3
Sediment Elevation = 0

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.9512
```

```
INPUT
Description: 1.9512 SCWA SECNO 500
Station Elevation Data    num=       6
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
      45   101.3    57.5   94.75    72.5   94.75    86.5   102.3   107.5   102.5
   127.5   112.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
      45     .04      45     .08    86.5     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
            45    86.5              200     200     200             .1       .3
Sediment Elevation = 0

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.9133

INPUT
Description: 1.9133 SCWA SECNO 300
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
      53     100     160     100     163    98.5     180    98.5     188   94.45
     203   94.45     211    98.5     240     100     250     105

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
      53     .04     180     .08     211     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           180     211              200     200     200             .1       .3
Sediment Elevation = 0

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.8754

INPUT
Description: 1.8754 SCWA SECNO 100
```

```
Station Elevation Data    num=       8
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     100      99     130      99     166   98.15     174   94.15     189   94.15
     197   98.15     233      99     250     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     100     .04     166     .08     197     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           166     197               70     100     130             .1       .3
Sediment Elevation = 0

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.8565

INPUT
Description: 1.8565 SCWA SECNO 1086
===== Road to Treatment Pond ===========
             91x58" silted LO-HED RCP ======
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
    1750   102.3    1758    98.3    1808      98  1851.2    99.5  1851.2      94
    1858      94    1858    99.5    1958   100.2    1983     102

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
    1750     .04  1851.2    .035    1858     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1851.2    1858               42      42      42             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
    1750  1851.2      98       F
    1858    1983    99.5       F
Sediment Elevation = 0

CULVERT


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.8525
```

```
INPUT
Description: Airport WWTP Access Road

Distance from Upstream XS =       1
Deck/Roadway Width        =      40
Weir Coefficient          =       3
Upstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
  1851.2    99.5            1858    99.5

Upstream Bridge Cross Section Data
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
    1750   102.3    1758    98.3    1808      98  1851.2    99.5  1851.2      94
    1858      94    1858    99.5    1958   100.2    1983     102

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
    1750     .04  1851.2    .035    1858     .04

Bank Sta: Left   Right    Coeff Contr.   Expan.
        1851.2    1858             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
    1750  1851.2      98       F
    1858    1983    99.5       F
Sediment Elevation = 0

Downstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
  1851.2    99.1            1858    99.1

Downstream Bridge Cross Section Data
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
    1750   101.9    1758    97.9    1808    97.6  1851.2    99.1  1851.2    93.6
    1858    93.6    1858    99.1    1958    99.8    1983   101.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
    1750     .04  1851.2     .08    1858     .04
```

```
Bank Sta: Left   Right    Coeff Contr.   Expan.
        1851.2    1858            .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
    1750  1851.2      98       F
    1858    1983      99       F

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =      98
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Culverts =  1

Culvert Name     Shape      Rise    Span
WWTP ACCESS      Ellipse    4.83    7.58
FHWA Chart # 29- Horizontal Ellipse; Concrete
FHWA Scale # 1 - Square edge with headwall
Solution Criteria = Highest U.S. EG
Culvert Upstrm Dist  Length    Top n  Bottom n  Depth Blocked  Entrance Loss Coef   Exit Loss Coef
                  1      40     .014     .035       .5                    .5                1
Upstream   Elevation =  93.5
           Centerline Station =  1854.6
Downstream Elevation =  93.1
           Centerline Station =  1854.6

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.8485

INPUT
Description: 1.8485 SCWA SECNO 1844
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
    1750   101.9    1758    97.9    1808    97.6  1851.2    99.1  1851.2    93.6
    1858    93.6    1858    99.1    1958    99.8    1983   101.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
    1750     .04  1851.2     .08    1858     .04
```

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1851.2    1858              163     163     163             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
    1750  1851.2      98       F
    1858    1983      99       F

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.8177

INPUT
Description: 1.8177 SCWA SECNO 1681
Station Elevation Data    num=       8
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     770    98.5     820      98    1108      97    1114      94    1121      94
    1130    96.4    1230      96    1360     105

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     770     .04    1108     .08    1130     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1108    1130               99      99      99             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.7989

INPUT
Description: 1.7989 SCWA SECNO 31
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     850      99    1050    97.4    1120    94.9    1122    93.2    1129    93.1
    1132    94.8    1140    95.2    1150      97    1197   102.5    1400     110

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     850     .04    1120     .08    1150     .04
```

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1120    1150              400     400     400             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.7231

INPUT
Description: 1.7231 SCWA SECNO 30
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    97.2    1000    97.2    1079    95.5    1084    93.8    1087      91
    1092    91.4    1093    93.9    1200    96.7    1400     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .04    1079     .08    1093     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1079    1093              500     500     500             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.6284

INPUT
Description: 1.6284 SCWA SECNO 29
Station Elevation Data    num=       8
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      98     900    97.7    1023    92.5    1025    91.1    1030    91.2
    1032    92.4    1200   101.7    1400     102

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1023     .08    1032    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1023    1032              300     300     300             .2       .4

CROSS SECTION
```

```
RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.5716

INPUT
Description: 1.5716 SCWA SECNO 28
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    96.1     865    92.3     964    92.6     969    89.9     974    89.9
     976      92    1000    95.1    1030   100.1    1070   105.1    1300   105.1

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     964     .08     976    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           964     976              300     300     300             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.5148

INPUT
Description: 1.5148 SCWA SECNO 27 200' UPSTREAM OF REDWOOD CREEK
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    95.5     900      92    1006    88.5    1015    84.4    1020    84.5
    1023    86.4    1042    90.8    1070      97    1120      97    1350     101

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1006     .08    1042    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1006    1042              342     342     342             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.4500

INPUT
```

```
Description: 1.4500 SCWA SECNO 26
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    95.5    1000    95.5    1060    93.4    1079    88.5    1089    85.5
    1094    85.7    1099    88.5    1230    97.3    1450     105

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1060     .08    1099    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1060    1099              593     593     593             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.3417

INPUT
Description: 1.3417 SCWA SECNO 25.2
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    94.7     850    90.6     860    90.7     877    85.3     887    85.3
     915    89.6     960    93.5    1050    95.9    1250     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     860     .08     915    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           860     915                9       9       9             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.3361

INPUT
Description: 1.3361 SCWA SECNO 25.1 Emergency Vehicle Xing - 77x52" CAA
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     400      95     408      91     418   90.95  436.58   90.95  436.58   86.18
  437.74   85.41  439.79   85.28  441.84   85.41     443   86.18     443   90.95
```

```
     493   90.95     518      95     708     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     400    .055  436.58    .035     443    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        436.58     443                25      25      25             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     400  436.58   90.95       F
     443     708   90.95       F

BRIDGE


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.3338

INPUT
Description: Emergency Vehicle Access Road
Distance from Upstream XS =      .5
Deck/Roadway Width        =      24
Weir Coefficient          =     2.6
Upstream  Deck/Roadway Coordinates
    num=       5
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
  436.58   90.95   87.24  437.74   90.95   89.18  439.79   90.95   89.61
  441.84   90.95   89.18     443   90.95   87.24

Upstream Bridge Cross Section Data
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     400      95     408      91     418   90.95  436.58   90.95  436.58   86.18
  437.74   85.41  439.79   85.28  441.84   85.41     443   86.18     443   90.95
     493   90.95     518      95     708     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     400    .055  436.58    .035     443    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
        436.58     443             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
```

```
     400  436.58   90.95       F
     443     708   90.95       F

Downstream  Deck/Roadway Coordinates
    num=       5
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
  436.58   90.65   87.18  437.74   90.65   89.12  439.79   90.65   89.55
  441.84   90.65   89.12     443   90.65   86.12

Downstream Bridge Cross Section Data
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     400      95     408      91     419   90.65  436.58   90.65  436.58   86.12
  437.74   85.35  439.79   85.22  441.84   85.35     443   86.12     443   90.65
     483   90.65     518      95     708     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     400    .055  436.58     .08     443    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
        436.58     443            .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     400  436.58   90.25       F
     443     708   90.25       F

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
Selected Low Flow Methods = Energy

High Flow Method
       Energy Only

Additional Bridge Parameters
```

```
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.3315

INPUT
Description: 1.3315 SCWA SECNO 25
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     400      95     408      91     419   90.65  436.58   90.65  436.58   86.12
  437.74   85.35  439.79   85.22  441.84   85.35     443   86.12     443   90.65
     483   90.65     518      95     708     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     400    .055  436.58     .08     443    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        436.58     443                9       9       9             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     400  436.58   90.25       F
     443     708   90.25       F

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.3163

INPUT
Description: 1.3163 SCWA SECNO 24.9
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    94.7     850    90.6     860    90.7     877    85.2     887    85.2
     915    89.6     960    93.5    1050    95.9    1250     100

Manning's n Values        num=       3
```

```
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     860     .08     915    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           860     915              308     308     308             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.2714

INPUT
Description: 1.2714 SCWA SECNO 24
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    93.3     851    90.8     865    84.7     872      85     877    86.5
     925    90.6     958    93.2     985    93.3    1015    96.3    1235      98

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     851     .08     877    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           851     877              118     118     118             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: SKYLANE TO XOVER   RS: 1.2490

INPUT
Description: 1.2490 US Ordinance Creek Cross Connection Ditch
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      93     817      93   835.2    91.3   846.2    88.5   852.4    87.8
   857.3    84.6   869.1      85   874.6    87.4   891.8      90   914.2    91.7
   936.1    92.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   835.2     .08   874.6    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
```

```
        835.2   874.6               56      56      56             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 1.2384

INPUT
Description: 1.2384 DS Ordinance Creek Cross Connection Ditch
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    92.6   808.3    92.3     830    91.2   839.4    84.8   847.7    84.7
   851.4    88.5   866.9    88.1   885.3    89.7   902.3    90.6   921.7    92.1

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     830     .08   851.4    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           830   851.4              411     411     411             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 1.1606

INPUT
Description: 1.1606 SCWA SECNO 23
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    90.9     890    91.3     946      89     958    86.8     964    81.1
     970    81.9     978    87.6    1075    91.5    1300      92

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     958     .08     978    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           958     978              472     472     472             .2       .4

CROSS SECTION
```

```
RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 1.0711

INPUT
Description: 1.0711
Station Elevation Data    num=      14
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    90.4   812.2    90.3   819.2    89.5   834.8    89.2   844.8    90.5
   880.8    88.4   886.9    82.7   889.4    80.6     915    80.7   916.3    83.6
   921.6    86.8   935.5    87.8   949.3    90.4   980.3      90

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   880.8     .08   921.6    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         880.8   921.6              465     523     567             .2       .4
Left Levee      Station=   844.8      Elevation=    90.5

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.9720

INPUT
Description: 0.9720
Station Elevation Data    num=      12
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    89.1   835.4    89.2   869.7    88.6   891.8    87.9   909.9    87.5
   929.1    83.5     933      80   945.8    80.1   947.9    82.8  967.63    86.3
   994.3    87.7    1020    88.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   929.1     .08   947.9    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         929.1   947.9              165     165     165             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.9407
```

```
INPUT
Description: 0.9407
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   804.3    87.8   835.7    87.5   857.5    87.1   868.4    83.3   871.1    79.6
   879.9    79.9   902.4    84.9   924.5    86.2   956.5    87.9

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   804.3    .055   868.4     .08   902.4    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         868.4   902.4              164     164     164             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.9096

INPUT
Description: 0.9096
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    87.5   827.5    87.5   846.6    86.9   888.4    85.5   908.5      83
   919.4    79.1     934      79   939.4      84   947.8    86.9   971.6    87.3
  1005.1    87.9

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   908.5     .08   939.4    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         908.5   939.4              114     124     130             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.8861

INPUT
Description: 0.8861
Station Elevation Data    num=      11
```

```
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   802.8    86.7   828.3      87   843.2    86.9   871.3      86   900.5    85.2
   915.4    81.8   918.1    78.4   930.1    78.3   932.8    83.3   951.8    85.1
   982.8    86.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   802.8    .055   915.4     .08   932.8    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         915.4   932.8              114      91      64             .2       .4
Left Levee      Station=   828.3      Elevation=      87

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.8688

INPUT
Description: 0.8688
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    86.9   825.2    86.2   859.2    86.5   875.7    86.7   916.7    86.4
     938      86   959.5      82   961.6      78     968    78.1   979.8    82.8
  1009.6      84  1040.4    85.7  1062.2    86.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   959.5     .08   979.8    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         959.5   979.8              164     197     214             .2       .4
Left Levee      Station=   875.7      Elevation=    86.7

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.8316

INPUT
Description: 0.8316
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
```

```
     800    85.8   833.7    85.9   861.5    86.2   895.9      85   927.7    83.5
   950.6    81.2   958.2    78.4   964.8      78     967    81.3   978.2      85
   999.4    85.5  1045.1    86.6  1082.6    86.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   950.6     .08     967    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         950.6     967              130     130     130             .2       .4
Left Levee      Station=   861.5      Elevation=    86.2

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.8069

INPUT
Description: 0.8069
Station Elevation Data    num=      14
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     818    85.5   850.6    85.2   865.2    85.6   895.5    85.3   923.2    85.2
   941.3    84.6     968    84.2   988.2    81.4   990.7    77.5     999    78.1
  1001.8    80.7  1021.1    84.3  1042.6    85.1  1077.7    86.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     818    .055   988.2     .08  1001.8    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         988.2  1001.8              103     129     139             .2       .4
Left Levee      Station=   865.2      Elevation=    85.6

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7840

INPUT
Description: 0.7840 90 DEGREE BEND @ WINDSOR ROAD
Station Elevation Data    num=      12
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    83.7   833.3    83.3   862.3    83.4   881.7    83.1   894.4      80
```

```
   898.5    77.4   905.8    77.5     911    80.2   918.5      81   927.5    84.8
   930.8    85.6   942.3      86

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   881.7     .08   930.8     .02

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         881.7   930.8               32      64      86             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7719

INPUT
Description: 0.7719
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    83.7   828.7    83.3   857.1    83.1   866.4      82   873.2    77.2
     883      77   893.6    85.2

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   866.4     .08   893.6     .02

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         866.4   893.6               56      56      56             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7614

INPUT
Description: 0.7614
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      83   826.4    83.8   832.6    82.8   838.7    77.5     851    78.1
   860.5    84.9   863.6    85.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
```

```
     800    .055   832.6     .08   860.5     .02

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         832.6   860.5             58.5    58.5    58.5             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7503

INPUT
Description: 0.7503
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    83.4   813.3    82.9     823    78.2   831.5    76.5   834.9    76.8
     841    77.7   841.5    85.1

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   813.3     .08   841.5     .02

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         813.3   841.5               50      26       0             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7453

INPUT
Description: 0.7453 US FACE OF WINDSOR ROAD CULVERT
===== Windsor Road
            ==================================================
Station Elevation Data    num=      14
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   812.3      87   839.3    86.3   862.6    85.9   882.8    85.4   883.8    85.4
   883.8    75.5   899.1    74.3     911    75.6     911    85.2   912.7    85.2
   923.4    85.1   937.7    85.1   979.3    85.3  1433.3      86

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   812.3    .055   883.8     .08     911     .02
```

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         883.8     911               28      28      28             .2       .4

BRIDGE


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7427

INPUT
Description: Windsor Road Box Culvert

Distance from Upstream XS =       1
Deck/Roadway Width        =    26.2
Weir Coefficient          =       3
Upstream  Deck/Roadway Coordinates
    num=       6
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     800    89.1             860    86.5           883.8    85.4    82.6
     911    85.2    82.6    1060    85.2            1260    85.5

Upstream Bridge Cross Section Data
Station Elevation Data    num=      14
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   812.3      87   839.3    86.3   862.6    85.9   882.8    85.4   883.8    85.4
   883.8    75.5   899.1    74.3     911    75.6     911    85.2   912.7    85.2
   923.4    85.1   937.7    85.1   979.3    85.3  1433.3      86

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   812.3    .055   883.8     .08     911     .02

Bank Sta: Left   Right    Coeff Contr.   Expan.
         883.8     911             .2       .4

Downstream  Deck/Roadway Coordinates
    num=       6
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     740    89.1             800    86.5           936.5    85.4    82.6
     964    85.2    82.6    1000    85.2            1200    85.5

Downstream Bridge Cross Section Data
Station Elevation Data    num=      15
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   864.3    86.9   887.2    86.4   912.6    85.9   934.6    85.4   936.5    85.4
```

```
   936.5    75.5   946.4    75.9     964    78.7     964    85.1   979.8    85.4
   984.7      85  1034.7    85.5  1091.4    85.6    1187    85.9    1484      86

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   864.3    .055   936.5     .08     964    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
         936.5     964             .2       .4

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =    85.2
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
Selected Low Flow Methods = Energy

High Flow Method
       Pressure and Weir flow
           Submerged Inlet Cd          =
           Submerged Inlet + Outlet Cd =.7001401
           Max Low Cord                =    82.6

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: AIRPORT
REACH: XOVER TO CONFL     RS: 0.7396

INPUT
Description: 0.7396 DS FACE OF WINDSOR ROAD BOX CULVERT
```

Station Elevation Data num= 15

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
864.3	86.9	887.2	86.4	912.6	85.9	934.6	85.4	936.5	85.4
936.5	75.5	946.4	75.9	964	78.7	964	85.1	979.8	85.4
984.7	85	1034.7	85.5	1091.4	85.6	1187	85.9	1484	86

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
864.3	.055	936.5	.08	964	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
936.5	964	67.5	70.5	77.5	.2	.4

CROSS SECTION

RIVER: AIRPORT
REACH: XOVER TO CONFL RS: 0.7262

INPUT
Description: 0.7262 US AIRPORT ORDINANCE CONFLUENCE
Station Elevation Data num= 8

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
852.2	80.4	858.6	76.3	862.3	76.5	868.9	77.4	874.3	80.8
886.1	82.8	889.8	82.6	912.8	83.1				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
852.2	.055	852.2	.08	874.3	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
852.2	874.3	115	124	100	.1	.3

CROSS SECTION

RIVER: AIRPORT
REACH: ORDIN TO WINDSOR RS: 0.7028

INPUT
Description: 0.7028 100' DS OF AIRPORT/ORDINANCE CONFLUENCE
Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
809.7	84.8	826	84.4	842.5	79.5	845.9	76.1	857	75.8
860.4	79	877.7	81.6	883.3	81.7	898.3	81.7	918	83

```
    1153    85.1

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   809.7    .055   842.5     .08   860.4    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         842.5   860.4             85.5    85.5    85.5             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.6866

INPUT
Description: 0.6866 SCWA SECNO 15
Station Elevation Data    num=      12
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    84.5     890    84.3     953    82.7     971    78.8     974    75.9
     984    76.9     995    76.3     999    77.6    1000      79    1014    82.6
    1150    84.3    1350    84.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     971     .08    1014    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           971    1014             440     440     440             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.6032

INPUT
Description: 0.6032 SCWA SECNO 14
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
       0    84.6     937      78     939    73.7     972      75     978      80
    1100    83.2    1300    83.2

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
```

```
       0    .055     937     .08     978    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           937     978              287     287     287             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.5489

INPUT
Description: 0.5489 SCWA SECNO 13
Station Elevation Data    num=      12
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     700     120     934    98.3     949    93.3   958.9    83.5     959    78.3
     968    74.1     973    74.1     977    76.5     980    77.2     986    84.1
    1180    78.9    1400      84

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     700    .055     949     .08     986    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           949     986              300     300     300             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.4920

INPUT
Description: 0.4920 SCWA SECNO 12
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      82     816    80.4     826    77.5     835    71.7     840    72.5
     841    74.2     878    77.2     906    79.5    1006    81.7    1206      82

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     826     .08     841    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           826     841              330     330     330             .2       .4
```

CROSS SECTION

RIVER: AIRPORT
REACH: ORDIN TO WINDSOR RS: 0.4295

INPUT
Description: 0.4295 SCWA SECNO 11.1
Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
800	82.3	1010	79.4	1023	75.8	1033	75.7	1039	70.3
1046	70.2	1051	77.3	1067	76.3	1155	79.9	1200	80.1
1400	84								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
800	.055	1039	.08	1051	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
1039	1051	105	105	.2	.4

CROSS SECTION

RIVER: AIRPORT
REACH: ORDIN TO WINDSOR RS: 0.4096

INPUT
Description: 0.4096 SCWA SECNO 11
Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
800	82.3	1010	79.4	1023	75.8	1039	77.3	1042	70.3
1046	70.2	1051	77.3	1067	77.3	1155	79.9	1200	80.1
1400	84								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
800	.055	1039	.08	1051	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
1039	1051	15	15	.2	.4

BRIDGE

RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.4082

INPUT
Description: Bridge #3 Farm Bridge C
Distance from Upstream XS =   1
Deck/Roadway Width   =   13
Weir Coefficient   =   2.6
Upstream Deck/Roadway Coordinates
    num=   2
     Sta Hi Cord Lo Cord   Sta Hi Cord Lo Cord
     800   77.3   75.7   1400   77.3   75.7

Upstream Bridge Cross Section Data
Station Elevation Data   num=   11
     Sta   Elev   Sta   Elev   Sta   Elev   Sta   Elev   Sta   Elev
     800   82.3   1010   79.4   1023   75.8   1039   77.3   1042   70.3
    1046   70.2   1051   77.3   1067   77.3   1155   79.9   1200   80.1
    1400   84

Manning's n Values   num=   3
     Sta   n Val   Sta   n Val   Sta   n Val
     800   .055   1039   .08   1051   .055

Bank Sta: Left   Right   Coeff Contr.   Expan.
          1039   1051   .2   .4

Downstream Deck/Roadway Coordinates
    num=   2
     Sta Hi Cord Lo Cord   Sta Hi Cord Lo Cord
     800   77.3   75.7   1400   77.3   75.7

Downstream Bridge Cross Section Data
Station Elevation Data   num=   11
     Sta   Elev   Sta   Elev   Sta   Elev   Sta   Elev   Sta   Elev
     800   82.3   1010   79.4   1023   75.8   1039   77.3   1042   70.3
    1046   70.2   1051   77.3   1067   77.3   1155   79.9   1200   80.1
    1400   84

Manning's n Values   num=   3
     Sta   n Val   Sta   n Val   Sta   n Val
     800   .055   1039   .08   1051   .055

Bank Sta: Left   Right   Coeff Contr.   Expan.

```
          1039    1051            .2       .4

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =    77.3
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
Selected Low Flow Methods = Energy

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.4068

INPUT
Description: 0.4068 SCWA SECNO 10.9
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    82.3    1010    79.4    1023    75.8    1039    77.3    1042    70.3
    1046    70.2    1051    77.3    1067    77.3    1155    79.9    1200    80.1
    1400      84

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1039     .08    1051    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
```

```
          1039    1051               50      50      50             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.3973

INPUT
Description: 0.3973 SCWA SECNO 10.8
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    82.3    1010    79.4    1023    75.8    1033    75.7    1038    70.3
    1046    70.2    1051    73.7    1067    76.3    1155    79.9    1200    80.1
    1400      84

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1033     .08    1051    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1033    1051              240     240     240             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.3519

INPUT
Description: 0.3519 SCWA SECNO 10
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    80.2     872    78.7     886    74.7     896    70.8     905    70.3
     911    74.2     937    76.9    1010    79.6    1050    79.5    1250      80

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     872     .08     937    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           872     937              333     333     333             .2       .4

CROSS SECTION
```

```
RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.2888

INPUT
Description: 0.2888 SCWA SECNO 9
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      82     950    79.5    1027    77.2    1041    74.9    1057    70.2
    1063    69.8    1084    76.3    1200    75.9    1230    81.7    1400     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1027     .08    1084    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1027    1084              336     336     336             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.2252

INPUT
Description: 0.2252 SCWA SECNO 8
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      80     980    77.9    1064    73.9    1074      67    1076    66.7
    1079    67.5    1085    74.7    1130    74.1    1200    79.7    1400     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055    1064     .08    1085    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1064    1085               15      15      15             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.2223

INPUT
```

```
Description: 0.2223 SCWA SECNO 7
===== Farm Bridge B
           ================================================
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      78     980    77.9  1073.9    73.9  1073.9      67    1076    66.7
    1085    67.5    1085    74.7    1130    74.1    1200    79.7    1400     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055  1073.9     .08    1085    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1073.9    1085               15      15      15             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     800  1073.9    74.9       F
    1085    1400    74.9       F

BRIDGE


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.2209

INPUT
Description: Bridge #2 Farm Bridge B

Distance from Upstream XS =       1
Deck/Roadway Width        =      13
Weir Coefficient          =       3
Upstream  Deck/Roadway Coordinates
    num=       7
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     800      78      78     980    77.9    77.9  1073.9    74.9    73.3
    1085    74.9    73.3    1130    74.1    74.1    1200    79.7    79.7
    1400     100     100

Upstream Bridge Cross Section Data
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      78     980    77.9  1073.9    73.9  1073.9      67    1076    66.7
    1085    67.5    1085    74.7    1130    74.1    1200    79.7    1400     100

Manning's n Values        num=       3
```

```
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055  1073.9     .08    1085    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
        1073.9    1085            .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     800  1073.9    74.9       F
    1085    1400    74.9       F

Downstream  Deck/Roadway Coordinates
    num=       7
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     700      78      78     880    77.9    77.9   973.9    74.9    73.3
     985    74.9    73.3    1030    74.1    74.1    1100    79.7    79.7
    1300     100     100

Downstream Bridge Cross Section Data
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      80     880    77.9   973.9    73.9     974      67     976    66.7
   984.9    67.5     985    74.7    1030    74.1    1100    79.7    1300     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   973.9     .08     985    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
         973.9     985            .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     800   973.9    74.1       F
     985    1300    74.1       F

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =    74.1
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
```

```
       Energy
Selected Low Flow Methods = Energy

High Flow Method
       Pressure and Weir flow
           Submerged Inlet Cd          =
           Submerged Inlet + Outlet Cd =.7001401
           Max Low Cord                =    73.3

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.2195

INPUT
Description: 0.2195 SCWA SECNO 5
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      80     880    77.9   973.9    73.9     974      67     976    66.7
   984.9    67.5     985    74.7    1030    74.1    1100    79.7    1300     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   973.9     .08     985    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         973.9     985               15      15      15             .2       .4
Ineffective Flow     num=       2
   Sta L   Sta R    Elev  Permanent
     800   973.9    74.1       F
     985    1300    74.1       F

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.2167
```

```
INPUT
Description: 0.2167 SCWA SECNO 4
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    78.7     890      77     927    75.2     964    70.5     966    66.4
     979    67.3     985    73.2    1010    73.9    1075    79.7    1300     100

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     964     .08     985    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           964     985              350     350     350             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.1504

INPUT
Description: 0.1504 SCWA SECNO 3.1
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    76.4    1000    76.4    1106    76.6    1153    70.3    1160    67.6
    1168    67.1    1175    72.2    1200    74.9    1300    76.4    1500    76.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1153     .08    1175    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1153    1175               50      50      50             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.1409

INPUT
Description: 0.1409 SCWA SECNO 3
This is a REPEATED section.
===== Farm
```

```
            Bridge A ========================== GR / 1984 Aerials =======
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    76.4    1000    76.4    1106    76.6    1163      73    1165    67.6
    1168    67.1    1175      73    1200    74.9    1300    76.4    1500    76.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1163     .08    1175    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1163    1175               12      12      12             .2       .4

BRIDGE


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.1398

INPUT
Description: Bridge #1 Farm Bridge A
Distance from Upstream XS =       1
Deck/Roadway Width        =      10
Weir Coefficient          =     2.6
Upstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     800      73    71.4    1500      73    71.4

Upstream Bridge Cross Section Data
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    76.4    1000    76.4    1106    76.6    1163      73    1165    67.6
    1168    67.1    1175      73    1200    74.9    1300    76.4    1500    76.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1163     .08    1175    .045

Bank Sta: Left   Right    Coeff Contr.   Expan.
          1163    1175             .2       .4

Downstream  Deck/Roadway Coordinates
    num=       2
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
```

```
     800      73    71.4    1500      73    71.4

Downstream Bridge Cross Section Data
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    76.4    1000    76.4    1106    76.6    1163      73    1165    67.6
    1168    67.1    1175      73    1200    74.9    1300    76.4    1500    76.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1163     .08    1175    .045

Bank Sta: Left   Right    Coeff Contr.   Expan.
          1163    1175             .2       .4

Upstream Embankment side slope              =       0 horiz. to 1.0 vertical
Downstream Embankment side slope            =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins         =      73
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
Selected Low Flow Methods = Energy

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Do not add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.1386
```

```
INPUT
Description: 0.1386 SCWA SECNO 2.9
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    76.4    1000    76.4    1106    76.6    1163      73    1165    67.6
    1168    67.1    1175      73    1200    74.9    1300    76.4    1500    76.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1163     .08    1175    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1163    1175              50      50      50             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.1292

INPUT
Description: 0.1292 SCWA SECNO 2.8
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    76.4    1000    76.4    1106    76.6    1153      73    1160    67.6
    1168    67.1    1175      73    1200    74.9    1300    76.4    1500    76.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1153     .08    1175    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1153    1175              322     322     322            .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.0682

INPUT
Description: 0.0682 SCWA SECNO 2
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    75.4     924    74.5     958    67.4     960    64.1     965    64.3
```

```
     971    69.6     984    70.8     997    73.5    1075    75.7    1300    75.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05     958     .08     971    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           958     971              300     300     300             .2       .4

CROSS SECTION


RIVER: AIRPORT
REACH: ORDIN TO WINDSOR   RS: 0.0114

INPUT
Description: 0.0114 SCWA SECNO 1
XENIX File
             _____________________________________________________
             Airport
_____ Sonoma County Water Agency views X-sections looking
             upstream._____
....... 72' UPSTREAM OF WINDSOR CREEK
             ................................
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    74.2    1000    74.2    1068    72.7    1091    68.6    1103    59.6
    1112    59.7    1115    66.4    1161    70.1    1300    71.3    1500    71.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800     .05    1091     .08    1112    .045

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          1091    1112               60      60      60             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: RSS TO XOVER       RS: 0.4234

INPUT
Description: 0.4234 1 FT DS OF 30" SD
Station Elevation Data    num=      13
```

```
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    93.8   827.3    93.1     840    91.5   857.5    90.6   865.8    92.8
   874.5    92.7   891.4      92   899.7    88.6   903.3    87.2   910.9    88.5
   919.8    91.9   941.7    92.4   977.5    92.2

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   891.4     .08   919.8    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         891.4   919.8            111.4   111.4   111.4             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: RSS TO XOVER       RS: 0.4023

INPUT
Description: 0.4023 US OF CONFLUENCE WITH CROSSOVER DITCH
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    91.5   813.6    90.5     822    92.2   838.4    89.4   843.7    87.1
   848.6    87.3     854    89.8   867.8    90.5   887.8    91.1

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   838.4     .08     854    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
         838.4     854             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOVER          RS: 0.0795

INPUT
Description: 0.0795 DS OF CROSSOVER DITCH CONNECTION WITH AIRPORT CREEK
Station Elevation Data    num=       6
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800      93   816.6    92.6   830.6    89.4   837.3    89.3   848.2    92.2
   867.1    92.6
```

```
Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   816.6    .055   848.2    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         816.6   848.2               98      98      98             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOVER          RS: 0.0609

INPUT
Description: 0.0609
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    92.5   834.5    92.3   863.3    92.4   876.9    91.4   885.9    88.8
   891.3    88.7   896.9    90.4   909.3    93.3     915    92.7   932.9    92.3
   957.3    92.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   876.9    .055   896.9    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         876.9   896.9               171     171     171             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOVER          RS: 0.0286

INPUT
Description: 0.0286
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    92.1   835.8    91.5   865.8    91.6     880    90.6   884.6    89.1
     891      89   897.6    90.6   907.4    92.3   912.2    91.3   936.9    91.2
     966    90.9

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     880    .055   897.6    .055
```

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
          880   897.6               85      85      85             .2       .4
Right Levee     Station=   907.4      Elevation=    92.3

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOVER          RS: 0.0125

INPUT
Description: 0.0125 US OF CONFLUENCE WITH ORDINANCE CREEK
Station Elevation Data    num=       8
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    91.1   820.9    90.8   826.7      89   835.2    89.1   841.1    90.4
     849      92   853.1    90.8   868.6    90.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   820.9    .055   841.1    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
         820.9   841.1             .2       .4
Right Levee     Station=     849      Elevation=      92

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.3856

INPUT
Description: 0.3856 DS CROSSOVER DITCH
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    93.2   813.2    92.6   817.8    93.4   834.1    89.4   839.1      87
   842.4    87.1     852    90.1   869.4    91.3   873.2    90.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   834.1     .08     852    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         834.1     852              121     121     121             .2       .4
```

```
Right Levee     Station=   869.4      Elevation=    91.3

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.3629

INPUT
Description: 0.3629
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    95.9   831.8      92   850.7    91.8   864.8      90   879.1    87.6
   881.9    86.7   886.8    86.4     892    89.2   922.9    90.1   947.4    90.1
   982.2    90.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   879.1     .08     892    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         879.1     892              153     153     153             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.3338

INPUT
Description: 0.3338
Station Elevation Data    num=      16
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    94.7   821.6    92.5   847.8    90.3   873.5    90.2     907    87.8
   908.2      86   913.6    85.8     915    87.3   929.2    88.9   958.1    89.6
   988.7    89.3  1023.2    89.3    1067    89.6  1088.3    90.4  1125.4    90.4
  1160.4    90.9

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055     907     .08     915    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
           907     915              345     345     345             .2       .4
Right Levee     Station=   958.1      Elevation=    89.6
```

CROSS SECTION

RIVER: ORDINANCE
REACH: CROSSOV TO CONFL RS: 0.2685

INPUT
Description: 0.2685
Station Elevation Data num= 15

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
800	87.9	826.9	88	834.5	86.7	842.6	88.2	852.4	86.5
854.9	87.5	863	87.8	875.7	86.6	880.4	84.8	885.6	84.2
887.1	87	895.2	87.9	913.4	87.8	934.8	88.1	964.4	88.4

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
800	.055	875.7	.08	887.1	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
875.7	887.1	285	285	.2	.4

Left Levee Station= 863 Elevation= 87.8

CROSS SECTION

RIVER: ORDINANCE
REACH: CROSSOV TO CONFL RS: 0.2145

INPUT
Description: 0.2145
Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
800	86.9	827.2	86.7	835.4	85.6	845.4	86.9	855.2	85.6
857.1	86.5	862.7	86.6	871	85.1	873.7	83.4	876.2	83.5
883.4	86.3	896.4	86.5	917.2	87.2	947.6	87.2	973.8	87
1012.5	87.4								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
800	.055	871	.08	883.4	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
871	883.4	260.5	260.5	.2	.4

Left Levee Station= 862.7 Elevation= 86.6

CROSS SECTION

RIVER: ORDINANCE
REACH: CROSSOV TO CONFL RS: 0.1651

INPUT
Description: 0.1651
Station Elevation Data num= 15

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
800	86.3	835	86.1	863.7	85.5	882.3	84.9	887.2	83.1
891.3	83.1	894.8	84.3	909.8	86.6	939.9	86.1	971.8	85.8
1007.4	85.9	1048.9	87.1	1067.1	86.8	1085.4	86.7	1105.8	87

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
800	.055	882.3	.08	894.8	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
882.3	894.8	233	233	.2	.4

Right Levee Station= 909.8 Elevation= 86.6

CROSS SECTION

RIVER: ORDINANCE
REACH: CROSSOV TO CONFL RS: 0.1210

INPUT
Description: 0.1210
Station Elevation Data num= 12

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
800	90.6	820.3	84.4	842.3	83	843.7	81.9	846.6	81.9
848	83.6	861.3	84.7	888.9	84.7	933.8	85.4	969.1	85.7
1002.3	85.9	1041.7	85.9						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
800	.055	842.3	.08	848	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
842.3	848	103	103	.2	.4

CROSS SECTION

```
RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.1015

INPUT
Description: 0.1015
Station Elevation Data    num=      13
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    90.7   818.8    85.3   842.8    82.9   844.9    81.6     848    81.4
     849    83.2   869.4    84.9   900.2    85.1   931.1    85.1   962.7    85.3
     996    86.2    1034      86  1072.8    86.9

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   842.8     .08     849    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         842.8     849              216     216     216             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.0605

INPUT
Description: 0.0605
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    93.9   807.8    88.9   828.6    81.9     831    80.3   835.8    80.5
   838.2    82.3   863.6    84.5   894.1    85.1   920.8    84.8   947.4    85.8
   970.7      86

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   828.6     .08   838.2    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         828.6   838.2            142.5   142.5   142.5             .2       .4

CROSS SECTION


RIVER: ORDINANCE
```

```
REACH: CROSSOV TO CONFL   RS: 0.0335

INPUT
Description: 0.0335
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
     800    89.7   815.6    86.3   829.9      83   853.7    81.5   854.8    79.8
   858.4    79.8   859.5    80.8   885.2      84     925    85.1   962.8    84.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
     800    .055   853.7     .08   859.5    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         853.7   859.5             49.5    49.5    49.5             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.0241

INPUT
Description: 0.0241 US WINDSOR ROAD 5x4 RCB
Station Elevation Data    num=       8
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   827.5    88.8   840.7    86.1   845.1    81.1   845.2    80.3   850.2    80.3
   858.1      86   870.4      87   897.4    86.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   827.5    .055   840.7     .08   858.1    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         840.7   858.1               40      40      40             .2       .4

CULVERT


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.0203

INPUT
Description:
Distance from Upstream XS =       1
```

```
Deck/Roadway Width        =      38
Weir Coefficient          =     2.6
Upstream  Deck/Roadway Coordinates
    num=       4
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     800    91.2             832      90           884.5    87.4
   934.9    85.5

Upstream Bridge Cross Section Data
Station Elevation Data    num=       8
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   827.5    88.8   840.7    86.1   845.1    81.1   845.2    80.3   850.2    80.3
   858.1      86   870.4      87   897.4    86.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   827.5    .055   840.7     .08   858.1    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
         840.7   858.1             .2       .4

Downstream  Deck/Roadway Coordinates
    num=       4
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
     800    91.2             832      90           884.5    87.4
   934.9    85.5

Downstream Bridge Cross Section Data
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   810.2    90.9   828.3      89   835.5    84.9   848.5    77.3   853.8    78.3
   864.3    86.9   887.2    86.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   810.2    .055   828.3     .08   864.3    .055

Bank Sta: Left   Right    Coeff Contr.   Expan.
         828.3   864.3             .2       .4

Upstream Embankment side slope             =       0 horiz. to 1.0 vertical
Downstream Embankment side slope           =       0 horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .98
Elevation at which weir flow begins        =
Energy head used in spillway design        =
```

```
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Culverts =  1

Culvert Name     Shape      Rise    Span
WIND RD CULV         Box       4       5
FHWA Chart # 8 - flared wingwalls
FHWA Scale # 1 - Wingwall flared 30 to 75 deg.
Solution Criteria = Highest U.S. EG
Culvert Upstrm Dist  Length    Top n  Bottom n  Depth Blocked  Entrance Loss Coef   Exit Loss Coef
                  1      38     .014     .014        0                   .5                1
Upstream   Elevation =  80.3
           Centerline Station =  847.7
Downstream Elevation =  80.2
           Centerline Station =  848.6

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.0165

INPUT
Description: 0.0165 DS WINDSOR RD 5x4 RCB
Station Elevation Data    num=       7
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   810.2    90.9   828.3      89   835.5    84.9   848.5    77.3   853.8    78.3
   864.3    86.9   887.2    86.4

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   810.2    .055   828.3     .08   864.3    .055

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         828.3   864.3             63.5    63.5    63.5             .2       .4

CROSS SECTION


RIVER: ORDINANCE
REACH: CROSSOV TO CONFL   RS: 0.0045

INPUT
Description: 0.0045 23.5 FT US OF CONFLUENCE WITH AIRPORT CREEK
```

Station Elevation Data num= 5

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
807.7	84.1	829.3	80.9	832.4	77.8	840.8	77.2	847	79.9

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
807.7	.055	829.3	.08	847	.055

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
829.3	847	23.5	23.5	.2	.4

SUMMARY OF MANNING'S N VALUES

River:AIRPORT

Reach	River Sta.	n1	n2	n3
SKYLANE TO XOVER	2.0792	.035	.08	.05
SKYLANE TO XOVER	2.0773	.035	.035	.05
SKYLANE TO XOVER	2.0648	Bridge		
SKYLANE TO XOVER	2.0576	.035	.08	.035
SKYLANE TO XOVER	2.0478	.035	.08	.04
SKYLANE TO XOVER	2.0080	.035	.08	.04
SKYLANE TO XOVER	1.9512	.04	.08	.04
SKYLANE TO XOVER	1.9133	.04	.08	.04
SKYLANE TO XOVER	1.8754	.04	.08	.04
SKYLANE TO XOVER	1.8565	.04	.035	.04
SKYLANE TO XOVER	1.8525	Culvert		
SKYLANE TO XOVER	1.8485	.04	.08	.04
SKYLANE TO XOVER	1.8177	.04	.08	.04
SKYLANE TO XOVER	1.7989	.04	.08	.04
SKYLANE TO XOVER	1.7231	.04	.08	.04
SKYLANE TO XOVER	1.6284	.055	.08	.055
SKYLANE TO XOVER	1.5716	.055	.08	.055
SKYLANE TO XOVER	1.5148	.055	.08	.055
SKYLANE TO XOVER	1.4500	.055	.08	.055
SKYLANE TO XOVER	1.3417	.055	.08	.055
SKYLANE TO XOVER	1.3361	.055	.035	.055
SKYLANE TO XOVER	1.3338	Bridge		
SKYLANE TO XOVER	1.3315	.055	.08	.055
SKYLANE TO XOVER	1.3163	.055	.08	.055
SKYLANE TO XOVER	1.2714	.055	.08	.055
SKYLANE TO XOVER	1.2490	.055	.08	.055

XOVER TO CONFL	1.2384	.055	.08	.055
XOVER TO CONFL	1.1606	.055	.08	.055
XOVER TO CONFL	1.0711	.055	.08	.055
XOVER TO CONFL	0.9720	.055	.08	.055
XOVER TO CONFL	0.9407	.055	.08	.055
XOVER TO CONFL	0.9096	.055	.08	.055
XOVER TO CONFL	0.8861	.055	.08	.055
XOVER TO CONFL	0.8688	.055	.08	.055
XOVER TO CONFL	0.8316	.055	.08	.055
XOVER TO CONFL	0.8069	.055	.08	.055
XOVER TO CONFL	0.7840	.055	.08	.02
XOVER TO CONFL	0.7719	.055	.08	.02
XOVER TO CONFL	0.7614	.055	.08	.02
XOVER TO CONFL	0.7503	.055	.08	.02
XOVER TO CONFL	0.7453	.055	.08	.02
XOVER TO CONFL	0.7427	Bridge		
XOVER TO CONFL	0.7396	.055	.08	.055
XOVER TO CONFL	0.7262	.055	.08	.055
ORDIN TO WINDSOR	0.7028	.055	.08	.055
ORDIN TO WINDSOR	0.6866	.055	.08	.055
ORDIN TO WINDSOR	0.6032	.055	.08	.055
ORDIN TO WINDSOR	0.5489	.055	.08	.055
ORDIN TO WINDSOR	0.4920	.055	.08	.055
ORDIN TO WINDSOR	0.4295	.055	.08	.055
ORDIN TO WINDSOR	0.4096	.055	.08	.055
ORDIN TO WINDSOR	0.4082	Bridge		
ORDIN TO WINDSOR	0.4068	.055	.08	.055
ORDIN TO WINDSOR	0.3973	.055	.08	.055
ORDIN TO WINDSOR	0.3519	.055	.08	.055
ORDIN TO WINDSOR	0.2888	.055	.08	.055
ORDIN TO WINDSOR	0.2252	.055	.08	.055
ORDIN TO WINDSOR	0.2223	.055	.08	.055
ORDIN TO WINDSOR	0.2209	Bridge		
ORDIN TO WINDSOR	0.2195	.055	.08	.055
ORDIN TO WINDSOR	0.2167	.055	.08	.055
ORDIN TO WINDSOR	0.1504	.05	.08	.045
ORDIN TO WINDSOR	0.1409	.05	.08	.045
ORDIN TO WINDSOR	0.1398	Bridge		
ORDIN TO WINDSOR	0.1386	.05	.08	.045
ORDIN TO WINDSOR	0.1292	.05	.08	.045
ORDIN TO WINDSOR	0.0682	.05	.08	.045
ORDIN TO WINDSOR	0.0114	.05	.08	.045

River:ORDINANCE

Reach	River Sta.	n1	n2	n3
RSS TO XOVER	0.4234	.055	.08	.055
RSS TO XOVER	0.4023	.055	.08	.055
CROSSOVER	0.0795	.055	.055	.055
CROSSOVER	0.0609	.055	.055	.055
CROSSOVER	0.0286	.055	.055	.055
CROSSOVER	0.0125	.055	.055	.055
CROSSOV TO CONFL	0.3856	.055	.08	.055
CROSSOV TO CONFL	0.3629	.055	.08	.055
CROSSOV TO CONFL	0.3338	.055	.08	.055
CROSSOV TO CONFL	0.2685	.055	.08	.055
CROSSOV TO CONFL	0.2145	.055	.08	.055
CROSSOV TO CONFL	0.1651	.055	.08	.055
CROSSOV TO CONFL	0.1210	.055	.08	.055
CROSSOV TO CONFL	0.1015	.055	.08	.055
CROSSOV TO CONFL	0.0605	.055	.08	.055
CROSSOV TO CONFL	0.0335	.055	.08	.055
CROSSOV TO CONFL	0.0241	.055	.08	.055
CROSSOV TO CONFL	0.0203	Culvert		
CROSSOV TO CONFL	0.0165	.055	.08	.055
CROSSOV TO CONFL	0.0045	.055	.08	.055

SUMMARY OF REACH LENGTHS

River: AIRPORT

Reach	River Sta.	Left	Channel	Right
SKYLANE TO XOVER	2.0792	10	10	10
SKYLANE TO XOVER	2.0773	104	104	104
SKYLANE TO XOVER	2.0648	Bridge		
SKYLANE TO XOVER	2.0576	50	50	50
SKYLANE TO XOVER	2.0478	210	210	210
SKYLANE TO XOVER	2.0080	300	300	300
SKYLANE TO XOVER	1.9512	200	200	200
SKYLANE TO XOVER	1.9133	200	200	200
SKYLANE TO XOVER	1.8754	70	100	130
SKYLANE TO XOVER	1.8565	42	42	42
SKYLANE TO XOVER	1.8525	Culvert		
SKYLANE TO XOVER	1.8485	163	163	163

SKYLANE TO XOVER	1.8177	99	99	99
SKYLANE TO XOVER	1.7989	400	400	400
SKYLANE TO XOVER	1.7231	500	500	500
SKYLANE TO XOVER	1.6284	300	300	300
SKYLANE TO XOVER	1.5716	300	300	300
SKYLANE TO XOVER	1.5148	342	342	342
SKYLANE TO XOVER	1.4500	593	593	593
SKYLANE TO XOVER	1.3417	9	9	9
SKYLANE TO XOVER	1.3361	25	25	25
SKYLANE TO XOVER	1.3338	Bridge		
SKYLANE TO XOVER	1.3315	9	9	9
SKYLANE TO XOVER	1.3163	308	308	308
SKYLANE TO XOVER	1.2714	118	118	118
SKYLANE TO XOVER	1.2490	56	56	56
XOVER TO CONFL	1.2384	411	411	411
XOVER TO CONFL	1.1606	472	472	472
XOVER TO CONFL	1.0711	465	523	567
XOVER TO CONFL	0.9720	165	165	165
XOVER TO CONFL	0.9407	164	164	164
XOVER TO CONFL	0.9096	114	124	130
XOVER TO CONFL	0.8861	114	91	64
XOVER TO CONFL	0.8688	164	197	214
XOVER TO CONFL	0.8316	130	130	130
XOVER TO CONFL	0.8069	103	129	139
XOVER TO CONFL	0.7840	32	64	86
XOVER TO CONFL	0.7719	56	56	56
XOVER TO CONFL	0.7614	58.5	58.5	58.5
XOVER TO CONFL	0.7503	50	26	0
XOVER TO CONFL	0.7453	28	28	28
XOVER TO CONFL	0.7427	Bridge		
XOVER TO CONFL	0.7396	67.5	70.5	77.5
XOVER TO CONFL	0.7262	115	124	100
ORDIN TO WINDSOR	0.7028	85.5	85.5	85.5
ORDIN TO WINDSOR	0.6866	440	440	440
ORDIN TO WINDSOR	0.6032	287	287	287
ORDIN TO WINDSOR	0.5489	300	300	300
ORDIN TO WINDSOR	0.4920	330	330	330
ORDIN TO WINDSOR	0.4295	105	105	105
ORDIN TO WINDSOR	0.4096	15	15	15
ORDIN TO WINDSOR	0.4082	Bridge		
ORDIN TO WINDSOR	0.4068	50	50	50
ORDIN TO WINDSOR	0.3973	240	240	240
ORDIN TO WINDSOR	0.3519	333	333	333
ORDIN TO WINDSOR	0.2888	336	336	336
ORDIN TO WINDSOR	0.2252	15	15	15

ORDIN TO WINDSOR	0.2223	15	15	15
ORDIN TO WINDSOR	0.2209	Bridge		
ORDIN TO WINDSOR	0.2195	15	15	15
ORDIN TO WINDSOR	0.2167	350	350	350
ORDIN TO WINDSOR	0.1504	50	50	50
ORDIN TO WINDSOR	0.1409	12	12	12
ORDIN TO WINDSOR	0.1398	Bridge		
ORDIN TO WINDSOR	0.1386	50	50	50
ORDIN TO WINDSOR	0.1292	322	322	322
ORDIN TO WINDSOR	0.0682	300	300	300
ORDIN TO WINDSOR	0.0114	60	60	60

River: ORDINANCE

Reach	River Sta.	Left	Channel	Right
RSS TO XOVER	0.4234	111.4	111.4	111.4
RSS TO XOVER	0.4023			
CROSSOVER	0.0795	98	98	98
CROSSOVER	0.0609	171	171	171
CROSSOVER	0.0286	85	85	85
CROSSOVER	0.0125			
CROSSOV TO CONFL	0.3856	121	121	121
CROSSOV TO CONFL	0.3629	153	153	153
CROSSOV TO CONFL	0.3338	345	345	345
CROSSOV TO CONFL	0.2685	285	285	285
CROSSOV TO CONFL	0.2145	260.5	260.5	260.5
CROSSOV TO CONFL	0.1651	233	233	233
CROSSOV TO CONFL	0.1210	103	103	103
CROSSOV TO CONFL	0.1015	216	216	216
CROSSOV TO CONFL	0.0605	142.5	142.5	142.5
CROSSOV TO CONFL	0.0335	49.5	49.5	49.5
CROSSOV TO CONFL	0.0241	40	40	40
CROSSOV TO CONFL	0.0203	Culvert		
CROSSOV TO CONFL	0.0165	63.5	63.5	63.5
CROSSOV TO CONFL	0.0045	23.5	23.5	23.5

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: AIRPORT

Reach	River Sta.	Contr.	Expan.
SKYLANE TO XOVER	2.0792	.1	.3
SKYLANE TO XOVER	2.0773	.1	.3
SKYLANE TO XOVER	2.0648	Bridge	
SKYLANE TO XOVER	2.0576	.3	.5
SKYLANE TO XOVER	2.0478	.1	.3
SKYLANE TO XOVER	2.0080	.1	.3
SKYLANE TO XOVER	1.9512	.1	.3
SKYLANE TO XOVER	1.9133	.1	.3
SKYLANE TO XOVER	1.8754	.1	.3
SKYLANE TO XOVER	1.8565	.2	.4
SKYLANE TO XOVER	1.8525	Culvert	
SKYLANE TO XOVER	1.8485	.2	.4
SKYLANE TO XOVER	1.8177	.2	.4
SKYLANE TO XOVER	1.7989	.2	.4
SKYLANE TO XOVER	1.7231	.2	.4
SKYLANE TO XOVER	1.6284	.2	.4
SKYLANE TO XOVER	1.5716	.2	.4
SKYLANE TO XOVER	1.5148	.2	.4
SKYLANE TO XOVER	1.4500	.2	.4
SKYLANE TO XOVER	1.3417	.2	.4
SKYLANE TO XOVER	1.3361	.2	.4
SKYLANE TO XOVER	1.3338	Bridge	
SKYLANE TO XOVER	1.3315	.2	.4
SKYLANE TO XOVER	1.3163	.2	.4
SKYLANE TO XOVER	1.2714	.2	.4
SKYLANE TO XOVER	1.2490	.2	.4
XOVER TO CONFL	1.2384	.2	.4
XOVER TO CONFL	1.1606	.2	.4
XOVER TO CONFL	1.0711	.2	.4
XOVER TO CONFL	0.9720	.2	.4
XOVER TO CONFL	0.9407	.2	.4
XOVER TO CONFL	0.9096	.2	.4
XOVER TO CONFL	0.8861	.2	.4
XOVER TO CONFL	0.8688	.2	.4
XOVER TO CONFL	0.8316	.2	.4
XOVER TO CONFL	0.8069	.2	.4
XOVER TO CONFL	0.7840	.2	.4
XOVER TO CONFL	0.7719	.2	.4
XOVER TO CONFL	0.7614	.2	.4
XOVER TO CONFL	0.7503	.2	.4
XOVER TO CONFL	0.7453	.2	.4
XOVER TO CONFL	0.7427	Bridge	
XOVER TO CONFL	0.7396	.2	.4

XOVER TO CONFL	0.7262		.1	.3
ORDIN TO WINDSOR	0.7028		.2	.4
ORDIN TO WINDSOR	0.6866		.2	.4
ORDIN TO WINDSOR	0.6032		.2	.4
ORDIN TO WINDSOR	0.5489		.2	.4
ORDIN TO WINDSOR	0.4920		.2	.4
ORDIN TO WINDSOR	0.4295		.2	.4
ORDIN TO WINDSOR	0.4096		.2	.4
ORDIN TO WINDSOR	0.4082	Bridge		
ORDIN TO WINDSOR	0.4068		.2	.4
ORDIN TO WINDSOR	0.3973		.2	.4
ORDIN TO WINDSOR	0.3519		.2	.4
ORDIN TO WINDSOR	0.2888		.2	.4
ORDIN TO WINDSOR	0.2252		.2	.4
ORDIN TO WINDSOR	0.2223		.2	.4
ORDIN TO WINDSOR	0.2209	Bridge		
ORDIN TO WINDSOR	0.2195		.2	.4
ORDIN TO WINDSOR	0.2167		.2	.4
ORDIN TO WINDSOR	0.1504		.2	.4
ORDIN TO WINDSOR	0.1409		.2	.4
ORDIN TO WINDSOR	0.1398	Bridge		
ORDIN TO WINDSOR	0.1386		.2	.4
ORDIN TO WINDSOR	0.1292		.2	.4
ORDIN TO WINDSOR	0.0682		.2	.4
ORDIN TO WINDSOR	0.0114		.2	.4

River: ORDINANCE

Reach	River Sta.	Contr.	Expan.
RSS TO XOVER	0.4234	.2	.4
RSS TO XOVER	0.4023	.2	.4
CROSSOVER	0.0795	.2	.4
CROSSOVER	0.0609	.2	.4
CROSSOVER	0.0286	.2	.4
CROSSOVER	0.0125	.2	.4
CROSSOV TO CONFL	0.3856	.2	.4
CROSSOV TO CONFL	0.3629	.2	.4
CROSSOV TO CONFL	0.3338	.2	.4
CROSSOV TO CONFL	0.2685	.2	.4
CROSSOV TO CONFL	0.2145	.2	.4
CROSSOV TO CONFL	0.1651	.2	.4
CROSSOV TO CONFL	0.1210	.2	.4
CROSSOV TO CONFL	0.1015	.2	.4

CROSSOV TO CONFL	0.0605		.2	.4
CROSSOV TO CONFL	0.0335		.2	.4
CROSSOV TO CONFL	0.0241		.2	.4
CROSSOV TO CONFL	0.0203	Culvert		
CROSSOV TO CONFL	0.0165		.2	.4
CROSSOV TO CONFL	0.0045		.2	.4

HEC-RAS Plan: EQUAL_EGL

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
SKYLANE TO XOVER	2.0792	2yr	211.20	95.70	101.46	97.66	101.52	0.002338	2.05	102.79	23.20	0.17
SKYLANE TO XOVER	2.0792	10yr	267.40	95.70	102.13	97.98	102.21	0.002519	2.25	116.68	24.45	0.18
SKYLANE TO XOVER	2.0792	25yr	309.40	95.70	102.55	98.19	102.64	0.002637	2.39	131.00	36.53	0.19
SKYLANE TO XOVER	2.0792	100yr	383.40	95.70	103.34	98.55	103.42	0.002049	2.30	185.86	104.00	0.17
SKYLANE TO XOVER	2.0773	2yr	211.20	95.73	101.48	97.06	101.51	0.000109	1.15	184.28	41.02	0.10
SKYLANE TO XOVER	2.0773	10yr	267.40	95.73	102.17	97.28	102.19	0.000115	1.26	213.18	45.67	0.10
SKYLANE TO XOVER	2.0773	25yr	309.40	95.73	102.59	97.43	102.61	0.000120	1.34	233.87	54.07	0.10
SKYLANE TO XOVER	2.0773	100yr	383.40	95.73	103.37	97.68	103.40	0.000115	1.42	264.61	71.81	0.10
SKYLANE TO XOVER	2.0648		Bridge									
SKYLANE TO XOVER	2.0576	2yr	211.20	95.58	101.32		101.34	0.000529	1.09	193.06	44.24	0.09
SKYLANE TO XOVER	2.0576	10yr	267.40	95.58	101.90		101.92	0.000587	1.22	219.75	55.42	0.10
SKYLANE TO XOVER	2.0576	25yr	309.40	95.58	102.23		102.25	0.000618	1.31	242.66	64.35	0.10
SKYLANE TO XOVER	2.0576	100yr	383.40	95.58	102.70		102.73	0.000637	1.41	286.60	98.66	0.11
SKYLANE TO XOVER	2.0478	2yr	211.20	95.52	101.27		101.30	0.000860	1.39	152.18	37.90	0.12
SKYLANE TO XOVER	2.0478	10yr	267.40	95.52	101.85		101.88	0.001050	1.53	174.61	43.09	0.13
SKYLANE TO XOVER	2.0478	25yr	309.40	95.52	102.17		102.21	0.001095	1.64	191.90	64.64	0.13
SKYLANE TO XOVER	2.0478	100yr	383.40	95.52	102.63		102.66	0.001134	1.78	224.36	72.71	0.14
SKYLANE TO XOVER	2.0080	2yr	310.90	95.20	100.92		100.99	0.002115	2.05	151.38	37.69	0.18
SKYLANE TO XOVER	2.0080	10yr	393.60	95.20	101.45		101.53	0.002390	2.29	171.96	64.00	0.19
SKYLANE TO XOVER	2.0080	25yr	457.60	95.20	101.75		101.84	0.002511	2.45	191.17	64.90	0.20
SKYLANE TO XOVER	2.0080	100yr	567.80	95.20	102.19		102.30	0.002635	2.67	219.93	66.21	0.21
SKYLANE TO XOVER	1.9512	2yr	310.90	94.75	100.20		100.28	0.002689	2.26	137.47	35.49	0.20
SKYLANE TO XOVER	1.9512	10yr	393.60	94.75	100.59		100.69	0.003287	2.59	151.68	36.97	0.23
SKYLANE TO XOVER	1.9512	25yr	457.60	94.75	100.78		100.91	0.003918	2.88	158.78	37.68	0.25
SKYLANE TO XOVER	1.9512	100yr	567.80	94.75	101.05		101.23	0.005070	3.36	169.18	38.71	0.28
SKYLANE TO XOVER	1.9133	2yr	310.90	94.45	99.81		99.86	0.001594	1.89	174.18	75.90	0.16
SKYLANE TO XOVER	1.9133	10yr	393.60	94.45	100.08		100.15	0.002199	2.31	203.66	167.16	0.19
SKYLANE TO XOVER	1.9133	25yr	457.60	94.45	100.24		100.32	0.002197	2.36	234.58	167.49	0.19
SKYLANE TO XOVER	1.9133	100yr	567.80	94.45	100.49		100.56	0.002156	2.42	280.87	167.98	0.19
SKYLANE TO XOVER	1.8754	2yr	325.60	94.15	99.54		99.57	0.001250	1.68	222.85	142.13	0.14
SKYLANE TO XOVER	1.8754	10yr	412.10	94.15	99.76		99.80	0.001382	1.83	254.38	145.66	0.15
SKYLANE TO XOVER	1.8754	25yr	479.50	94.15	99.90		99.95	0.001473	1.93	276.25	148.38	0.16

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
SKYLANE TO XOVER	1.8754	100yr	596.10	94.15	100.13		100.19	0.001599	2.07	310.19	150.00	0.16
SKYLANE TO XOVER	1.8565	2yr	325.60	94.00	98.89	98.89	99.29	0.008330	6.16	81.71	83.50	0.49
SKYLANE TO XOVER	1.8565	10yr	412.10	94.00	99.05	99.05	99.49	0.009467	6.63	96.04	88.63	0.52
SKYLANE TO XOVER	1.8565	25yr	479.50	94.00	99.17	99.17	99.63	0.010202	6.92	106.33	92.14	0.54
SKYLANE TO XOVER	1.8565	100yr	596.10	94.00	99.34	99.34	99.84	0.011360	7.37	122.36	97.35	0.56
SKYLANE TO XOVER	1.8525		Culvert									
SKYLANE TO XOVER	1.8485	2yr	325.60	93.60	98.31	98.31	98.69	0.034499	5.43	67.22	77.98	0.44
SKYLANE TO XOVER	1.8485	10yr	412.10	93.60	98.44	98.44	98.86	0.036961	5.86	77.64	81.99	0.45
SKYLANE TO XOVER	1.8485	25yr	479.50	93.60	98.53	98.53	99.02	0.037663	5.75	85.71	84.96	0.46
SKYLANE TO XOVER	1.8485	100yr	596.10	93.60	98.69	98.69	99.25	0.037843	5.81	99.26	89.74	0.45
SKYLANE TO XOVER	1.8177	2yr	325.60	94.00	97.54	96.59	97.57	0.001265	1.23	252.13	300.70	0.13
SKYLANE TO XOVER	1.8177	10yr	412.10	94.00	97.82	96.68	97.85	0.000962	1.14	346.96	384.43	0.12
SKYLANE TO XOVER	1.8177	25yr	479.50	94.00	98.00	96.74	98.02	0.000832	1.10	419.67	437.91	0.11
SKYLANE TO XOVER	1.8177	100yr	596.10	94.00	98.25	96.84	98.27	0.000687	1.06	533.88	467.38	0.10
SKYLANE TO XOVER	1.7989	2yr	325.60	93.10	97.32		97.38	0.002915	1.82	158.70	100.38	0.20
SKYLANE TO XOVER	1.7989	10yr	412.10	93.10	97.61		97.68	0.003247	2.07	191.33	130.94	0.22
SKYLANE TO XOVER	1.7989	25yr	479.50	93.10	97.79		97.87	0.003387	2.20	217.62	155.46	0.22
SKYLANE TO XOVER	1.7989	100yr	596.10	93.10	98.05		98.13	0.003432	2.34	262.56	190.19	0.23
SKYLANE TO XOVER	1.7231	2yr	325.60	91.00	96.35		96.40	0.002107	1.74	180.81	146.85	0.16
SKYLANE TO XOVER	1.7231	10yr	412.10	91.00	96.60		96.66	0.002040	1.79	220.54	168.21	0.16
SKYLANE TO XOVER	1.7231	25yr	479.50	91.00	96.77		96.83	0.002010	1.83	251.08	184.54	0.16
SKYLANE TO XOVER	1.7231	100yr	596.10	91.00	97.03		97.10	0.001991	1.90	302.89	212.49	0.16
SKYLANE TO XOVER	1.6284	2yr	325.60	91.10	94.89		94.97	0.004126	2.58	155.05	110.68	0.24
SKYLANE TO XOVER	1.6284	10yr	412.10	91.10	95.05		95.14	0.004957	2.91	172.68	117.20	0.27
SKYLANE TO XOVER	1.6284	25yr	479.50	91.10	95.20		95.30	0.005167	3.06	190.79	123.42	0.28
SKYLANE TO XOVER	1.6284	100yr	596.10	91.10	95.50		95.61	0.004845	3.12	230.29	136.11	0.27
SKYLANE TO XOVER	1.5716	2yr	325.60	89.90	93.51		93.57	0.005224	2.50	160.38	143.32	0.26
SKYLANE TO XOVER	1.5716	10yr	412.10	89.90	93.97		94.02	0.002839	2.03	229.54	154.85	0.20
SKYLANE TO XOVER	1.5716	25yr	479.50	89.90	94.30		94.35	0.002075	1.86	281.77	163.01	0.17
SKYLANE TO XOVER	1.5716	100yr	596.10	89.90	94.83		94.87	0.001399	1.66	372.19	176.26	0.14
SKYLANE TO XOVER	1.5148	2yr	325.60	84.40	93.45		93.46	0.000100	0.61	609.57	195.45	0.04

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
SKYLANE TO XOVER	1.5148	10yr	412.10	84.40	93.91		93.91	0.000110	0.67	701.88	210.50	0.05
SKYLANE TO XOVER	1.5148	25yr	479.50	84.40	94.23		94.24	0.000115	0.70	772.41	221.31	0.05
SKYLANE TO XOVER	1.5148	100yr	596.10	84.40	94.77		94.77	0.000119	0.75	895.28	238.97	0.05
SKYLANE TO XOVER	1.4500	2yr	574.00	85.50	93.29		93.34	0.001131	1.67	348.00	109.95	0.14
SKYLANE TO XOVER	1.4500	10yr	726.70	85.50	93.73		93.78	0.001245	1.85	398.72	126.16	0.15
SKYLANE TO XOVER	1.4500	25yr	846.10	85.50	94.04		94.10	0.001296	1.97	440.51	139.62	0.15
SKYLANE TO XOVER	1.4500	100yr	1063.00	85.50	94.56		94.63	0.001347	2.14	518.72	162.32	0.16
SKYLANE TO XOVER	1.3417	2yr	574.00	85.30	92.77		92.80	0.000731	1.55	412.21	127.96	0.12
SKYLANE TO XOVER	1.3417	10yr	726.70	85.30	93.11		93.16	0.000887	1.78	458.05	136.20	0.13
SKYLANE TO XOVER	1.3417	25yr	846.10	85.30	93.38		93.43	0.000976	1.92	495.53	142.58	0.14
SKYLANE TO XOVER	1.3417	100yr	1063.00	85.30	93.83		93.89	0.001130	2.17	563.47	161.88	0.15
SKYLANE TO XOVER	1.3361	2yr	574.00	85.28	92.39	92.06	92.73	0.005682	6.19	165.64	96.69	0.42
SKYLANE TO XOVER	1.3361	10yr	726.70	85.28	92.77	92.29	93.09	0.005404	6.25	202.74	99.77	0.41
SKYLANE TO XOVER	1.3361	25yr	846.10	85.28	93.06	92.44	93.36	0.005051	6.23	232.26	102.16	0.40
SKYLANE TO XOVER	1.3361	100yr	1063.00	85.28	93.53	92.68	93.83	0.004732	6.26	281.10	106.00	0.39
SKYLANE TO XOVER	1.3338		Bridge									
SKYLANE TO XOVER	1.3315	2yr	574.00	85.22	92.00	91.57	92.26	0.015925	4.48	141.45	87.91	0.31
SKYLANE TO XOVER	1.3315	10yr	726.70	85.22	92.51	91.74	92.74	0.010805	3.87	187.07	92.97	0.26
SKYLANE TO XOVER	1.3315	25yr	846.10	85.22	92.84	91.86	93.07	0.009081	3.66	218.29	96.29	0.24
SKYLANE TO XOVER	1.3315	100yr	1063.00	85.22	93.34	92.09	93.58	0.007664	3.51	267.34	101.28	0.22
SKYLANE TO XOVER	1.3163	2yr	574.00	85.20	92.10		92.15	0.001243	1.87	335.71	112.20	0.15
SKYLANE TO XOVER	1.3163	10yr	726.70	85.20	92.59		92.65	0.001318	2.05	393.01	123.73	0.16
SKYLANE TO XOVER	1.3163	25yr	846.10	85.20	92.91		92.98	0.001371	2.17	434.67	131.48	0.16
SKYLANE TO XOVER	1.3163	100yr	1063.00	85.20	93.41		93.49	0.001471	2.38	503.11	143.30	0.17
SKYLANE TO XOVER	1.2714	2yr	574.00	84.70	91.68		91.74	0.001451	2.02	297.82	105.60	0.16
SKYLANE TO XOVER	1.2714	10yr	726.70	84.70	92.13		92.20	0.001560	2.21	349.26	120.65	0.17
SKYLANE TO XOVER	1.2714	25yr	846.10	84.70	92.44		92.52	0.001632	2.35	387.69	130.76	0.17
SKYLANE TO XOVER	1.2714	100yr	1063.00	84.70	92.90		92.99	0.001769	2.57	451.16	145.94	0.18
SKYLANE TO XOVER	1.2490	2yr	578.00	84.60	91.38		91.48	0.003245	2.70	226.39	75.61	0.23
SKYLANE TO XOVER	1.2490	10yr	731.20	84.60	91.80		91.92	0.003589	3.02	260.15	87.82	0.25
SKYLANE TO XOVER	1.2490	25yr	851.80	84.60	92.07		92.22	0.003951	3.29	285.95	100.74	0.26
SKYLANE TO XOVER	1.2490	100yr	1070.40	84.60	92.49		92.66	0.004285	3.62	331.61	113.62	0.27

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
XOVER TO CONFL	1.2384	2yr	540.00	84.70	91.18		91.29	0.003608	2.82	206.70	79.61	0.23
XOVER TO CONFL	1.2384	10yr	671.20	84.70	91.60		91.72	0.003585	2.97	242.65	93.10	0.23
XOVER TO CONFL	1.2384	25yr	771.80	84.70	91.87		92.00	0.003621	3.09	268.77	101.85	0.24
XOVER TO CONFL	1.2384	100yr	955.40	84.70	92.26		92.43	0.003653	3.26	313.46	113.02	0.24
XOVER TO CONFL	1.1606	2yr	540.00	81.10	89.25		89.46	0.005582	3.91	165.20	79.17	0.29
XOVER TO CONFL	1.1606	10yr	671.20	81.10	89.87		90.05	0.004647	3.62	223.22	109.46	0.27
XOVER TO CONFL	1.1606	25yr	771.80	81.10	90.26		90.42	0.004065	3.72	270.18	128.85	0.25
XOVER TO CONFL	1.1606	100yr	955.40	81.10	90.83		90.97	0.003432	3.61	351.73	156.94	0.24
XOVER TO CONFL	1.0711	2yr	540.00	80.60	88.15	82.99	88.22	0.001415	2.14	259.78	56.30	0.15
XOVER TO CONFL	1.0711	10yr	671.20	80.60	88.75	83.34	88.83	0.001545	2.37	295.62	65.74	0.16
XOVER TO CONFL	1.0711	25yr	771.80	80.60	89.15	83.59	89.24	0.001622	2.52	323.52	74.66	0.17
XOVER TO CONFL	1.0711	100yr	955.40	80.60	89.70	84.04	89.81	0.001810	2.80	368.24	87.08	0.18
XOVER TO CONFL	0.9720	2yr	540.00	80.00	87.13		87.24	0.002529	3.00	212.43	71.70	0.21
XOVER TO CONFL	0.9720	10yr	671.20	80.00	87.64		87.77	0.002700	3.26	253.11	89.87	0.22
XOVER TO CONFL	0.9720	25yr	771.80	80.00	87.99		88.13	0.002823	3.44	288.31	112.83	0.22
XOVER TO CONFL	0.9720	100yr	955.40	80.00	88.46		88.61	0.002950	3.66	347.77	139.79	0.23
XOVER TO CONFL	0.9407	2yr	540.00	79.60	86.69		86.80	0.002763	2.75	215.98	75.13	0.22
XOVER TO CONFL	0.9407	10yr	671.20	79.60	87.19		87.31	0.002870	2.98	256.02	90.45	0.22
XOVER TO CONFL	0.9407	25yr	771.80	79.60	87.52		87.65	0.002967	3.15	289.53	115.24	0.23
XOVER TO CONFL	0.9407	100yr	955.40	79.60	87.97		88.11	0.003020	3.34	353.38	152.20	0.23
XOVER TO CONFL	0.9096	2yr	540.00	79.00	86.36		86.44	0.001682	2.43	252.35	83.51	0.17
XOVER TO CONFL	0.9096	10yr	671.20	79.00	86.83		86.93	0.001828	2.66	295.65	99.05	0.18
XOVER TO CONFL	0.9096	25yr	771.80	79.00	87.14		87.25	0.001954	2.83	329.39	123.29	0.19
XOVER TO CONFL	0.9096	100yr	955.40	79.00	87.54		87.67	0.002355	3.23	387.21	185.16	0.21
XOVER TO CONFL	0.8861	2yr	540.00	78.30	86.04	82.06	86.16	0.002963	3.17	219.64	106.07	0.21
XOVER TO CONFL	0.8861	10yr	671.20	78.30	86.54	82.69	86.65	0.002752	3.20	278.40	128.22	0.21
XOVER TO CONFL	0.8861	25yr	771.80	78.30	86.86	83.12	86.97	0.002572	3.18	321.75	138.38	0.20
XOVER TO CONFL	0.8861	100yr	955.40	78.30	87.24	83.90	87.36	0.002748	3.39	388.39	180.00	0.21
XOVER TO CONFL	0.8688	2yr	540.00	78.00	85.87	82.45	85.94	0.001800	2.41	272.40	107.98	0.17
XOVER TO CONFL	0.8688	10yr	671.20	78.00	86.36	83.14	86.44	0.001878	2.59	333.70	143.62	0.18
XOVER TO CONFL	0.8688	25yr	771.80	78.00	86.70	83.67	86.77	0.001809	2.63	388.18	186.18	0.17
XOVER TO CONFL	0.8688	100yr	955.40	78.00	87.09	84.19	87.16	0.001639	2.59	507.26	262.20	0.17

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
XOVER TO CONFL	0.8316	2yr	540.00	78.00	85.45	82.61	85.54	0.002383	2.84	245.81	114.37	0.20
XOVER TO CONFL	0.8316	10yr	671.20	78.00	85.96	83.03	86.04	0.002220	2.89	312.55	149.88	0.19
XOVER TO CONFL	0.8316	25yr	771.80	78.00	86.29	83.31	86.37	0.002364	3.07	386.83	232.04	0.20
XOVER TO CONFL	0.8316	100yr	955.40	78.00	86.75	83.69	86.82	0.001907	2.88	507.12	282.60	0.18
XOVER TO CONFL	0.8069	2yr	540.00	77.50	85.01	82.43	85.15	0.003795	3.49	208.46	111.42	0.24
XOVER TO CONFL	0.8069	10yr	671.20	77.50	85.57	82.92	85.69	0.003370	3.47	289.13	185.80	0.23
XOVER TO CONFL	0.8069	25yr	771.80	77.50	85.98	83.22	86.06	0.002346	3.01	399.23	246.78	0.19
XOVER TO CONFL	0.8069	100yr	955.40	77.50	86.53	83.68	86.59	0.001612	2.61	537.34	259.70	0.16
XOVER TO CONFL	0.7840	2yr	540.00	77.40	84.76		84.81	0.001695	1.96	310.04	127.41	0.17
XOVER TO CONFL	0.7840	10yr	671.20	77.40	85.36		85.41	0.001376	1.88	388.94	129.81	0.15
XOVER TO CONFL	0.7840	25yr	771.80	77.40	85.81		85.86	0.001170	1.80	446.43	136.86	0.14
XOVER TO CONFL	0.7840	100yr	955.40	77.40	86.38		86.43	0.001057	1.84	526.97	142.30	0.14
XOVER TO CONFL	0.7719	2yr	540.00	77.00	84.60		84.69	0.002621	2.68	234.96	92.82	0.20
XOVER TO CONFL	0.7719	10yr	671.20	77.00	85.23		85.31	0.002151	2.56	293.66	93.60	0.19
XOVER TO CONFL	0.7719	25yr	771.80	77.00	85.69		85.78	0.001864	2.48	337.40	93.60	0.17
XOVER TO CONFL	0.7719	100yr	955.40	77.00	86.26		86.36	0.001807	2.56	390.67	93.60	0.17
XOVER TO CONFL	0.7614	2yr	540.00	77.50	84.26		84.46	0.005862	3.72	159.62	59.60	0.30
XOVER TO CONFL	0.7614	10yr	671.20	77.50	84.93		85.12	0.005001	3.66	199.86	60.72	0.28
XOVER TO CONFL	0.7614	25yr	771.80	77.50	85.42		85.61	0.004305	3.61	230.87	63.60	0.26
XOVER TO CONFL	0.7614	100yr	955.40	77.50	85.98		86.19	0.004234	3.80	266.32	63.60	0.26
XOVER TO CONFL	0.7503	2yr	550.40	76.50	83.97		84.15	0.004610	3.40	167.55	41.42	0.25
XOVER TO CONFL	0.7503	10yr	684.20	76.50	84.63		84.83	0.004671	3.65	195.02	41.47	0.26
XOVER TO CONFL	0.7503	25yr	787.40	76.50	85.12		85.34	0.004642	3.79	215.42	41.50	0.26
XOVER TO CONFL	0.7503	100yr	974.60	76.50	85.62		85.89	0.005430	4.26	236.15	41.50	0.28
XOVER TO CONFL	0.7453	2yr	550.40	74.30	83.97	77.25	84.04	0.001469	2.24	245.98	27.20	0.13
XOVER TO CONFL	0.7453	10yr	684.20	74.30	84.61	77.62	84.72	0.001874	2.60	263.61	27.20	0.15
XOVER TO CONFL	0.7453	25yr	787.40	74.30	85.09	77.87	85.22	0.002172	2.85	276.68	27.20	0.16
XOVER TO CONFL	0.7453	100yr	974.60	74.30	85.61	78.32	85.75	0.002376	3.06	354.27	309.00	0.16
XOVER TO CONFL	0.7427		Bridge									
XOVER TO CONFL	0.7396	2yr	550.40	75.50	83.68		83.80	0.003072	2.86	191.18	27.50	0.19
XOVER TO CONFL	0.7396	10yr	684.20	75.50	84.15		84.32	0.003928	3.35	204.23	27.50	0.22

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
XOVER TO CONFL	0.7396	25yr	787.40	75.50	84.47		84.68	0.004615	3.70	212.98	27.50	0.23
XOVER TO CONFL	0.7396	100yr	974.60	75.50	85.03		85.31	0.005804	4.27	228.38	30.54	0.26
XOVER TO CONFL	0.7262	2yr	550.40	76.30	83.21		83.46	0.007062	4.20	146.57	60.60	0.32
XOVER TO CONFL	0.7262	10yr	684.20	76.30	83.67		83.94	0.007173	4.42	174.34	60.60	0.32
XOVER TO CONFL	0.7262	25yr	787.40	76.30	83.98		84.26	0.007240	4.56	193.12	60.60	0.32
XOVER TO CONFL	0.7262	100yr	974.60	76.30	84.56		84.86	0.006904	4.66	228.40	60.60	0.32
ORDIN TO WINDSOR	0.7028	2yr	642.10	75.80	82.06		82.41	0.009825	5.21	148.06	69.81	0.39
ORDIN TO WINDSOR	0.7028	10yr	812.10	75.80	82.53		82.90	0.009517	5.42	183.05	78.55	0.39
ORDIN TO WINDSOR	0.7028	25yr	946.50	75.80	82.86		83.23	0.009245	5.54	209.84	84.63	0.39
ORDIN TO WINDSOR	0.7028	100yr	1189.00	75.80	83.42		83.82	0.009655	5.99	268.61	135.37	0.40
ORDIN TO WINDSOR	0.6866	2yr	642.10	75.90	81.29		81.56	0.009446	4.19	157.21	49.41	0.38
ORDIN TO WINDSOR	0.6866	10yr	812.10	75.90	81.68		82.01	0.011005	4.72	176.90	52.69	0.42
ORDIN TO WINDSOR	0.6866	25yr	946.50	75.90	81.93		82.32	0.012230	5.10	190.61	54.85	0.44
ORDIN TO WINDSOR	0.6866	100yr	1189.00	75.90	82.31		82.80	0.014545	5.76	211.73	58.04	0.49
ORDIN TO WINDSOR	0.6032	2yr	642.10	73.70	81.12		81.13	0.000252	0.93	968.91	526.08	0.07
ORDIN TO WINDSOR	0.6032	10yr	812.10	73.70	81.56		81.57	0.000229	0.93	1222.08	606.58	0.06
ORDIN TO WINDSOR	0.6032	25yr	946.50	73.70	81.86		81.87	0.000218	0.93	1410.57	660.18	0.06
ORDIN TO WINDSOR	0.6032	100yr	1189.00	73.70	82.31		82.31	0.000209	0.95	1721.15	740.07	0.06
ORDIN TO WINDSOR	0.5489	2yr	642.10	74.10	80.79		80.91	0.005196	3.27	257.64	176.10	0.27
ORDIN TO WINDSOR	0.5489	10yr	812.10	74.10	81.29		81.38	0.003916	2.96	356.34	216.95	0.23
ORDIN TO WINDSOR	0.5489	25yr	946.50	74.10	81.61		81.69	0.003372	2.82	430.03	243.01	0.21
ORDIN TO WINDSOR	0.5489	100yr	1189.00	74.10	82.07		82.15	0.002868	2.68	551.04	280.60	0.20
ORDIN TO WINDSOR	0.4920	2yr	642.10	71.70	80.03		80.09	0.001596	2.27	319.71	112.74	0.16
ORDIN TO WINDSOR	0.4920	10yr	812.10	71.70	80.55		80.62	0.001744	2.51	385.36	139.28	0.17
ORDIN TO WINDSOR	0.4920	25yr	946.50	71.70	80.89		80.97	0.001815	2.64	435.90	158.13	0.17
ORDIN TO WINDSOR	0.4920	100yr	1189.00	71.70	81.36		81.44	0.001964	2.88	515.27	183.87	0.18
ORDIN TO WINDSOR	0.4295	2yr	653.10	70.20	79.55		79.61	0.001347	2.25	371.07	147.57	0.14
ORDIN TO WINDSOR	0.4295	10yr	826.20	70.20	79.96		80.05	0.001729	2.64	444.20	205.87	0.16
ORDIN TO WINDSOR	0.4295	25yr	962.60	70.20	80.29		80.36	0.001873	2.82	518.16	264.12	0.17
ORDIN TO WINDSOR	0.4295	100yr	1209.40	70.20	80.76		80.82	0.001757	2.83	655.32	322.01	0.17
ORDIN TO WINDSOR	0.4096	2yr	653.10	70.20	79.21	77.75	79.35	0.004927	3.24	235.44	121.03	0.22
ORDIN TO WINDSOR	0.4096	10yr	826.20	70.20	79.59	78.09	79.73	0.005528	3.56	285.23	148.34	0.24

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
ORDIN TO WINDSOR	0.4096	25yr	962.60	70.20	79.88	78.33	80.02	0.005604	3.65	333.23	179.46	0.24
ORDIN TO WINDSOR	0.4096	100yr	1209.40	70.20	80.39	78.64	80.51	0.005253	3.73	452.35	276.10	0.24
ORDIN TO WINDSOR	0.4082		Bridge									
ORDIN TO WINDSOR	0.4068	2yr	653.10	70.20	78.80		79.01	0.008505	4.08	189.23	105.76	0.29
ORDIN TO WINDSOR	0.4068	10yr	826.20	70.20	79.27		79.47	0.007287	3.96	242.69	123.31	0.27
ORDIN TO WINDSOR	0.4068	25yr	962.60	70.20	79.62		79.81	0.007291	4.10	290.32	151.94	0.27
ORDIN TO WINDSOR	0.4068	100yr	1209.40	70.20	80.20		80.36	0.006880	4.20	402.55	252.80	0.27
ORDIN TO WINDSOR	0.3973	2yr	653.10	70.20	78.71		78.79	0.001867	2.67	305.04	113.36	0.17
ORDIN TO WINDSOR	0.3973	10yr	826.20	70.20	79.17		79.26	0.001983	2.88	359.94	126.22	0.18
ORDIN TO WINDSOR	0.3973	25yr	962.60	70.20	79.50		79.60	0.002114	3.04	403.43	142.10	0.19
ORDIN TO WINDSOR	0.3973	100yr	1209.40	70.20	80.03		80.14	0.002570	3.50	493.75	218.49	0.21
ORDIN TO WINDSOR	0.3519	2yr	653.10	70.30	78.09		78.19	0.003433	2.61	261.45	94.99	0.23
ORDIN TO WINDSOR	0.3519	10yr	826.20	70.30	78.48		78.61	0.003868	2.91	300.95	106.94	0.25
ORDIN TO WINDSOR	0.3519	25yr	962.60	70.30	78.76		78.90	0.004093	3.10	332.20	118.16	0.26
ORDIN TO WINDSOR	0.3519	100yr	1209.40	70.30	79.17		79.34	0.004421	3.42	387.40	149.16	0.28
ORDIN TO WINDSOR	0.2888	2yr	653.10	69.80	77.16		77.22	0.002418	2.20	345.72	179.28	0.20
ORDIN TO WINDSOR	0.2888	10yr	826.20	69.80	77.55		77.62	0.002256	2.26	418.00	193.23	0.19
ORDIN TO WINDSOR	0.2888	25yr	962.60	69.80	77.88		77.94	0.002024	2.25	483.09	205.84	0.19
ORDIN TO WINDSOR	0.2888	100yr	1209.40	69.80	78.27		78.35	0.002016	2.37	567.71	221.16	0.19
ORDIN TO WINDSOR	0.2252	2yr	653.10	66.70	76.41		76.48	0.002034	2.51	327.89	147.46	0.17
ORDIN TO WINDSOR	0.2252	10yr	826.20	66.70	76.80		76.88	0.002094	2.65	389.20	160.75	0.18
ORDIN TO WINDSOR	0.2252	25yr	962.60	66.70	77.22		77.29	0.001853	2.59	458.31	174.59	0.17
ORDIN TO WINDSOR	0.2252	100yr	1209.40	66.70	77.57		77.66	0.002078	2.83	521.89	186.35	0.18
ORDIN TO WINDSOR	0.2223	2yr	653.10	66.70	76.35	71.81	76.44	0.003182	2.68	293.66	141.90	0.15
ORDIN TO WINDSOR	0.2223	10yr	826.20	66.70	76.75	72.62	76.84	0.003131	2.73	352.09	156.22	0.15
ORDIN TO WINDSOR	0.2223	25yr	962.60	66.70	77.17	75.27	77.26	0.002635	2.58	421.81	171.33	0.14
ORDIN TO WINDSOR	0.2223	100yr	1209.40	66.70	77.52	75.56	77.62	0.002877	2.76	483.28	183.79	0.15
ORDIN TO WINDSOR	0.2209		Bridge									
ORDIN TO WINDSOR	0.2195	2yr	653.10	66.70	76.31	71.86	76.40	0.003369	2.76	286.60	140.29	0.16
ORDIN TO WINDSOR	0.2195	10yr	826.20	66.70	76.70	72.67	76.80	0.003330	2.81	344.78	154.49	0.16
ORDIN TO WINDSOR	0.2195	25yr	962.60	66.70	77.13	75.30	77.22	0.002763	2.64	414.23	169.69	0.15

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
ORDIN TO WINDSOR	0.2195	100yr	1209.40	66.70	77.48	75.57	77.58	0.003010	2.81	475.07	182.32	0.15
ORDIN TO WINDSOR	0.2167	2yr	653.10	66.40	76.31		76.36	0.000835	1.91	417.87	132.07	0.12
ORDIN TO WINDSOR	0.2167	10yr	826.20	66.40	76.70		76.76	0.000985	2.15	472.13	145.35	0.13
ORDIN TO WINDSOR	0.2167	25yr	962.60	66.40	77.13		77.18	0.001007	2.24	536.85	162.96	0.13
ORDIN TO WINDSOR	0.2167	100yr	1209.40	66.40	77.47		77.54	0.001286	2.59	596.12	184.82	0.15
ORDIN TO WINDSOR	0.1504	2yr	653.10	67.10	75.99		76.05	0.000934	2.02	384.80	162.41	0.13
ORDIN TO WINDSOR	0.1504	10yr	826.20	67.10	76.33		76.39	0.001102	2.26	442.65	186.86	0.14
ORDIN TO WINDSOR	0.1504	25yr	962.60	67.10	76.60		76.70	0.001970	3.10	589.57	700.00	0.19
ORDIN TO WINDSOR	0.1504	100yr	1209.40	67.10	77.10		77.14	0.000983	2.28	933.66	700.00	0.14
ORDIN TO WINDSOR	0.1409	2yr	653.10	67.10	75.74	74.52	75.92	0.006903	4.03	203.37	136.25	0.26
ORDIN TO WINDSOR	0.1409	10yr	826.20	67.10	76.07	74.83	76.25	0.006679	4.10	252.68	163.51	0.26
ORDIN TO WINDSOR	0.1409	25yr	962.60	67.10	76.35	75.21	76.52	0.005920	3.97	302.27	186.77	0.27
ORDIN TO WINDSOR	0.1409	100yr	1209.40	67.10	77.00	75.62	77.06	0.002545	2.77	723.71	700.00	0.18
ORDIN TO WINDSOR	0.1398		Bridge									
ORDIN TO WINDSOR	0.1386	2yr	653.10	67.10	75.16		75.56	0.015759	5.72	138.66	88.82	0.42
ORDIN TO WINDSOR	0.1386	10yr	826.20	67.10	75.73		76.02	0.011220	5.14	201.98	135.41	0.36
ORDIN TO WINDSOR	0.1386	25yr	962.60	67.10	76.14		76.37	0.008135	4.56	264.74	169.39	0.31
ORDIN TO WINDSOR	0.1386	100yr	1209.40	67.10	76.95		77.01	0.002990	2.98	685.89	700.00	0.19
ORDIN TO WINDSOR	0.1292	2yr	653.10	67.10	74.68		74.98	0.007893	4.62	158.62	66.01	0.35
ORDIN TO WINDSOR	0.1292	10yr	826.20	67.10	75.27		75.57	0.007385	4.78	206.15	101.51	0.34
ORDIN TO WINDSOR	0.1292	25yr	962.60	67.10	75.77		76.02	0.005970	4.53	266.09	140.03	0.31
ORDIN TO WINDSOR	0.1292	100yr	1209.40	67.10	76.65		76.82	0.004191	4.12	537.71	700.00	0.27
ORDIN TO WINDSOR	0.0682	2yr	653.10	64.10	73.85		73.94	0.001544	2.48	277.06	82.24	0.15
ORDIN TO WINDSOR	0.0682	10yr	826.20	64.10	74.37		74.48	0.001748	2.75	325.39	103.21	0.16
ORDIN TO WINDSOR	0.0682	25yr	962.60	64.10	74.69		74.81	0.002380	3.29	363.52	142.11	0.19
ORDIN TO WINDSOR	0.0682	100yr	1209.40	64.10	75.76		75.85	0.002133	3.36	617.90	500.00	0.19
ORDIN TO WINDSOR	0.0114	2yr	653.10	59.60	73.87	64.31	73.87	0.000033	0.50	1595.92	485.04	0.03
ORDIN TO WINDSOR	0.0114	10yr	826.20	59.60	74.40	64.98	74.40	0.000034	0.53	1898.45	700.00	0.03
ORDIN TO WINDSOR	0.0114	25yr	962.60	59.60	74.73	65.44	74.73	0.000035	0.54	2129.45	700.00	0.03
ORDIN TO WINDSOR	0.0114	100yr	1209.40	59.60	75.79	66.21	75.79	0.000024	0.47	2871.45	700.00	0.02

HEC-RAS Plan: EQUAL_EGL

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
RSS TO XOVER	0.4234	2yr	32.00	87.20	90.24	88.49	90.25	0.001352	0.95	33.84	19.78	0.13
RSS TO XOVER	0.4234	10yr	39.10	87.20	90.61	88.58	90.63	0.001155	0.94	41.53	21.91	0.12
RSS TO XOVER	0.4234	25yr	45.10	87.20	90.87	88.65	90.88	0.001070	0.95	48.14	29.22	0.12
RSS TO XOVER	0.4234	100yr	56.30	87.20	91.24	88.80	91.25	0.000993	0.97	60.73	39.57	0.11
RSS TO XOVER	0.4023	2yr	32.00	87.10	90.11		90.12	0.001092	0.96	34.85	25.75	0.12
RSS TO XOVER	0.4023	10yr	39.10	87.10	90.51		90.52	0.000795	0.91	47.28	36.29	0.10
RSS TO XOVER	0.4023	25yr	45.10	87.10	90.78		90.79	0.000640	0.89	59.38	52.10	0.09
RSS TO XOVER	0.4023	100yr	56.30	87.10	91.17		91.17	0.000480	0.84	83.54	72.07	0.08
CROSSOVER	0.0795	2yr	38.00	89.30	91.26		91.29	0.002016	1.36	27.51	22.18	0.22
CROSSOVER	0.0795	10yr	60.00	89.30	91.68		91.72	0.002142	1.59	37.67	25.64	0.23
CROSSOVER	0.0795	25yr	80.00	89.30	91.97		92.02	0.002285	1.76	45.51	28.01	0.24
CROSSOVER	0.0795	100yr	115.00	89.30	92.37		92.43	0.002469	2.01	57.73	38.43	0.26
CROSSOVER	0.0609	2yr	38.00	88.70	91.12		91.14	0.001105	1.22	31.96	22.09	0.17
CROSSOVER	0.0609	10yr	60.00	88.70	91.52		91.56	0.001327	1.50	41.60	26.45	0.19
CROSSOVER	0.0609	25yr	80.00	88.70	91.80		91.84	0.001459	1.72	49.62	31.41	0.20
CROSSOVER	0.0609	100yr	115.00	88.70	92.17		92.23	0.001685	2.05	62.44	38.01	0.22
CROSSOVER	0.0286	2yr	38.00	89.00	90.79	89.92	90.84	0.003113	1.72	22.37	21.41	0.27
CROSSOVER	0.0286	10yr	60.00	89.00	91.15	90.17	91.22	0.003124	2.04	31.46	28.66	0.26
CROSSOVER	0.0286	25yr	80.00	89.00	91.41	90.36	91.48	0.003177	2.27	39.35	33.71	0.29
CROSSOVER	0.0286	100yr	115.00	89.00	91.74	90.64	91.83	0.003305	2.58	58.93	82.67	0.31
CROSSOVER	0.0125	2yr	38.00	89.00	90.42	89.81	90.46	0.005812	2.02	18.79	19.05	0.36
CROSSOVER	0.0125	10yr	60.00	89.00	90.80	90.04	90.88	0.005145	2.28	26.63	22.16	0.35
CROSSOVER	0.0125	25yr	80.00	89.00	91.06	90.21	91.15	0.004756	2.47	34.93	41.50	0.35
CROSSOVER	0.0125	100yr	115.00	89.00	91.42	90.48	91.52	0.004041	2.62	51.38	46.15	0.33
CROSSOV TO CONFL	0.3656	2yr	57.40	87.00	89.81	88.52	89.87	0.006030	1.98	29.18	18.62	0.27
CROSSOV TO CONFL	0.3656	10yr	83.20	87.00	90.20	88.81	90.28	0.006431	2.28	37.20	22.67	0.28
CROSSOV TO CONFL	0.3656	25yr	107.10	87.00	90.46	89.04	90.56	0.006866	2.55	43.82	27.43	0.30
CROSSOV TO CONFL	0.3656	100yr	149.00	87.00	90.82	89.39	90.95	0.007346	2.92	54.69	34.22	0.32
CROSSOV TO CONFL	0.3629	2yr	57.40	86.40	89.30		89.34	0.003258	1.67	36.01	26.36	0.20
CROSSOV TO CONFL	0.3629	10yr	83.20	86.40	89.69		89.73	0.003259	1.87	49.27	42.00	0.21
CROSSOV TO CONFL	0.3629	25yr	107.10	86.40	89.90		89.96	0.003577	2.07	59.25	50.67	0.22
CROSSOV TO CONFL	0.3629	100yr	149.00	86.40	90.21		90.28	0.004094	2.38	80.02	102.68	0.24
CROSSOV TO CONFL	0.3338	2yr	57.40	85.80	88.79	87.31	88.83	0.003336	1.81	37.81	35.11	0.20
CROSSOV TO CONFL	0.3338	10yr	83.20	85.80	89.20	87.76	89.25	0.003112	1.92	55.72	54.40	0.19

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
CROSSOV TO CONFL	0.3338	25yr	107.10	85.80	88.32	88.12	89.38	0.004029	2.74	62.41	60.82	0.22
CROSSOV TO CONFL	0.3338	100yr	149.00	85.80	89.04	88.45	89.69	0.003500	2.23	111.33	186.94	0.21
CROSSOV TO CONFL	0.2885	2yr	57.40	84.20	87.63	85.91	87.67	0.003387	1.76	35.76	27.95	0.20
CROSSOV TO CONFL	0.2885	10yr	83.20	84.20	87.75	88.24	87.83	0.005680	2.38	38.24	30.29	0.26
CROSSOV TO CONFL	0.2885	25yr	107.10	84.20	87.98	86.51	88.01	0.003907	2.07	68.83	109.57	0.22
CROSSOV TO CONFL	0.2885	100yr	149.00	84.20	88.05	86.97	88.13	0.006034	2.64	80.73	129.75	0.27
CROSSOV TO CONFL	0.2145	2yr	57.40	83.40	86.59	85.12	86.64	0.003845	1.81	35.17	36.42	0.22
CROSSOV TO CONFL	0.2145	10yr	83.20	83.40	86.82	86.48	86.86	0.003041	1.72	55.32	94.42	0.20
CROSSOV TO CONFL	0.2145	25yr	107.10	83.40	87.01	85.75	87.04	0.002896	1.77	84.76	112.84	0.20
CROSSOV TO CONFL	0.2145	100yr	149.00	83.40	87.50	86.11	87.60	0.000832	1.09	191.62	212.50	0.11
CROSSOV TO CONFL	0.1851	2yr	57.40	83.10	85.66	84.45	85.69	0.003395	1.69	40.56	47.47	0.21
CROSSOV TO CONFL	0.1851	10yr	83.20	83.10	85.82	84.75	85.87	0.004672	2.09	48.99	58.30	0.25
CROSSOV TO CONFL	0.1851	25yr	107.10	83.10	86.30	84.99	86.33	0.002531	1.75	84.42	107.12	0.19
CROSSOV TO CONFL	0.1851	100yr	149.00	83.10	87.54	86.39	87.64	0.000691	0.43	448.41	305.80	0.04
CROSSOV TO CONFL	0.1210	2yr	89.20	81.90	85.10		85.13	0.001989	1.47	76.84	96.66	0.15
CROSSOV TO CONFL	0.1210	10yr	102.70	81.90	85.32		85.34	0.001429	1.31	99.35	111.25	0.13
CROSSOV TO CONFL	0.1210	25yr	154.40	81.90	86.12		86.13	0.000495	0.90	232.22	227.02	0.08
CROSSOV TO CONFL	0.1210	100yr	208.00	81.90	87.52		87.52	0.000062	0.39	554.37	231.62	0.03
CROSSOV TO CONFL	0.1015	2yr	89.20	81.40	84.79		84.84	0.004009	2.09	51.09	44.20	0.22
CROSSOV TO CONFL	0.1015	10yr	102.70	81.40	85.07		85.12	0.003445	2.05	66.33	74.47	0.20
CROSSOV TO CONFL	0.1015	25yr	154.40	81.40	86.06		86.07	0.000510	0.95	216.43	189.94	0.08
CROSSOV TO CONFL	0.1015	100yr	208.00	81.40	87.51		87.52	0.000064	0.41	575.17	261.71	0.03
CROSSOV TO CONFL	0.0805	2yr	89.20	80.30	84.24		84.27	0.001020	1.67	62.58	38.92	0.16
CROSSOV TO CONFL	0.0805	10yr	102.70	80.30	84.62		84.65	0.001413	1.58	76.94	49.36	0.14
CROSSOV TO CONFL	0.0805	25yr	154.40	80.30	85.97		85.98	0.000378	1.00	221.72	150.71	0.08
CROSSOV TO CONFL	0.0805	100yr	208.00	80.30	87.50		87.50	0.000073	0.53	460.64	158.74	0.04
CROSSOV TO CONFL	0.0335	2yr	92.10	79.80	84.14		84.15	0.000448	0.88	116.55	65.30	0.08
CROSSOV TO CONFL	0.0335	10yr	106.80	79.80	84.55		84.56	0.000358	0.83	146.47	81.78	0.07
CROSSOV TO CONFL	0.0335	25yr	159.20	79.80	85.95		85.95	0.000112	0.50	327.26	145.67	0.04
CROSSOV TO CONFL	0.0335	100yr	214.00	79.80	87.49		87.49	0.000039	0.38	557.70	152.67	0.02
CROSSOV TO CONFL	0.0241	2yr	92.10	80.30	83.93	82.26	84.06	0.010284	2.96	31.10	12.82	0.33
CROSSOV TO CONFL	0.0241	10yr	106.80	80.30	84.35	82.43	84.48	0.008899	2.92	36.62	13.57	0.31
CROSSOV TO CONFL	0.0241	25yr	159.20	80.30	85.80	82.97	85.91	0.005591	2.71	58.64	16.85	0.26
CROSSOV TO CONFL	0.0241	100yr	214.00	80.30	87.42	83.45	87.48	0.001960	2.04	123.25	63.16	0.16

HEC-RAS Plan: EQUAL_EGL (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
CROSSOV TO CONFL	0.0203		Culvert									
CROSSOV TO CONFL	0.0165	2yr	92.10	77.30	82.72		82.76	0.001609	1.46	63.22	19.98	0.14
CROSSOV TO CONFL	0.0165	10yr	106.80	77.30	83.20		83.23	0.001471	1.46	73.01	21.37	0.14
CROSSOV TO CONFL	0.0165	25yr	159.20	77.30	83.56		83.62	0.002481	1.97	80.92	22.43	0.18
CROSSOV TO CONFL	0.0165	100yr	214.00	77.30	84.17		84.25	0.002907	2.25	95.14	24.22	0.20
CROSSOV TO CONFL	0.0045	2yr	92.10	77.20	82.67		82.69	0.000622	1.08	89.06	29.68	0.09
CROSSOV TO CONFL	0.0045	10yr	106.80	77.20	83.15		83.17	0.000562	1.08	104.86	32.91	0.09
CROSSOV TO CONFL	0.0045	25yr	159.20	77.20	83.48		83.52	0.000981	1.46	116.22	35.14	0.11
CROSSOV TO CONFL	0.0045	100yr	214.00	77.20	84.09		84.12	0.001101	1.65	138.58	39.20	0.12