

Mastec - Master Utility Plans - Development

EXHIBIT F  
EROSION CONTROL PLAN

# HUITT-ZOLIARS

Huitt-Zollars, Inc. / Consulting Engineers / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2416 / 214-871-3311 / FAX 214-871-0757

Invoice  
Due upon receipt

PROJECT: 0582-06 1.32 ACRE TRACT/ADDISON, TEXAS INVOICE # 11062  
SURVEY STAKING NOVEMBER 30, 1989

PERIOD: OCT. 22 THRU NOV. 18, 1989

TO: MR. JERRY KING  
C/O ASSOCIATED AIR CENTER, INC  
8321 LEMMON AVE.  
DALLAS TX 75209

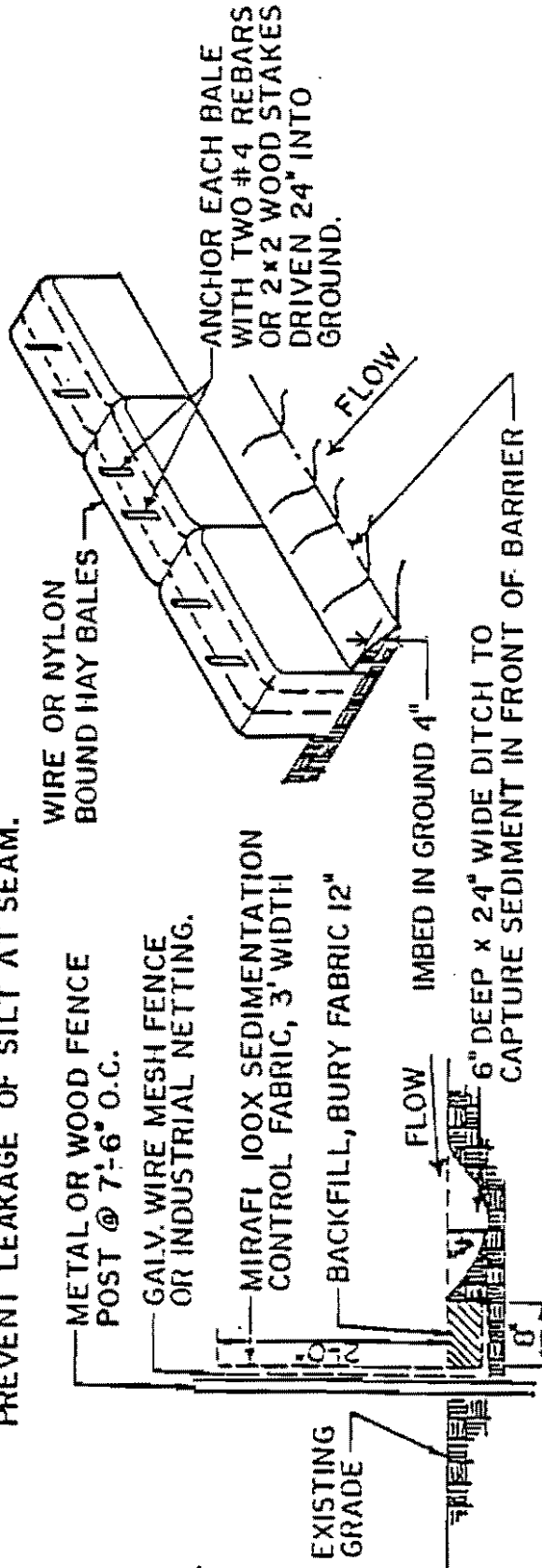
LABOR CHARGES	HOURS	RATE	AMOUNT
OFFICER	3.00	90.00	270.00
ENGINEER II	8.00	70.00	560.00
SURVEY PARTY CHIEF	6.00	85.00	510.00
TOTAL LABOR CHARGES	17.00		1,340.00
TOTAL THIS INVOICE			1,340.00

APPROVED BY 

NOTE: THIS INVOICE COVERS SURVEY STAKING FOR FILLING AND PREPARING INFORMATION FOR COUNCIL, GEOTECHNICAL ENGINEER, ETC.

NOTE:

OVERLAP FABRIC AT JOINTS AT POST TO PREVENT LEAKAGE OF SILT AT SEAM.



FILTER FABRIC BARRIER

HAY BALE BARRIER

NOTE: EITHER TYPE OF SILT FENCE IS ACCEPTABLE.

SILT FENCE

NO SCALE

BEING a tract of land out of the A. Bledsoe Survey, Abstract No. 157 and being part of a tract conveyed to Joe M. Combs and Dorothy E. Combs by Charles Ray Allen and Georgis Ann Allen recorded in Volume 68033, Page 1015, Deed Record of Dallas County, Texas, said tract now lying within the Corporation Limits of the Town of Addison, being more particularly described as follows:

BEGINNING at a set iron rod at the Northwest corner of the above described tract said point being in the East line of Winnwood Road (60 foot Right of Way) as deeded to Dallas County as recorded in Volume 1826, Page 48, Deed Records of Dallas County and near an old post found;

THENCE North 39 degrees 21 minutes 49 seconds East with the general line of old crooked wire fence a distance of 356.02 feet to a point in the center of White Rock Creek;

THENCE South 32 degrees 50 minutes 00 seconds West along the centerline of said creek a distance of 80.30 feet to an angle point in the creek;

THENCE South 12 degrees 00 minutes 00 seconds West continuing along said centerline of creek a distance of 152.00 feet to an angle point in said creek;

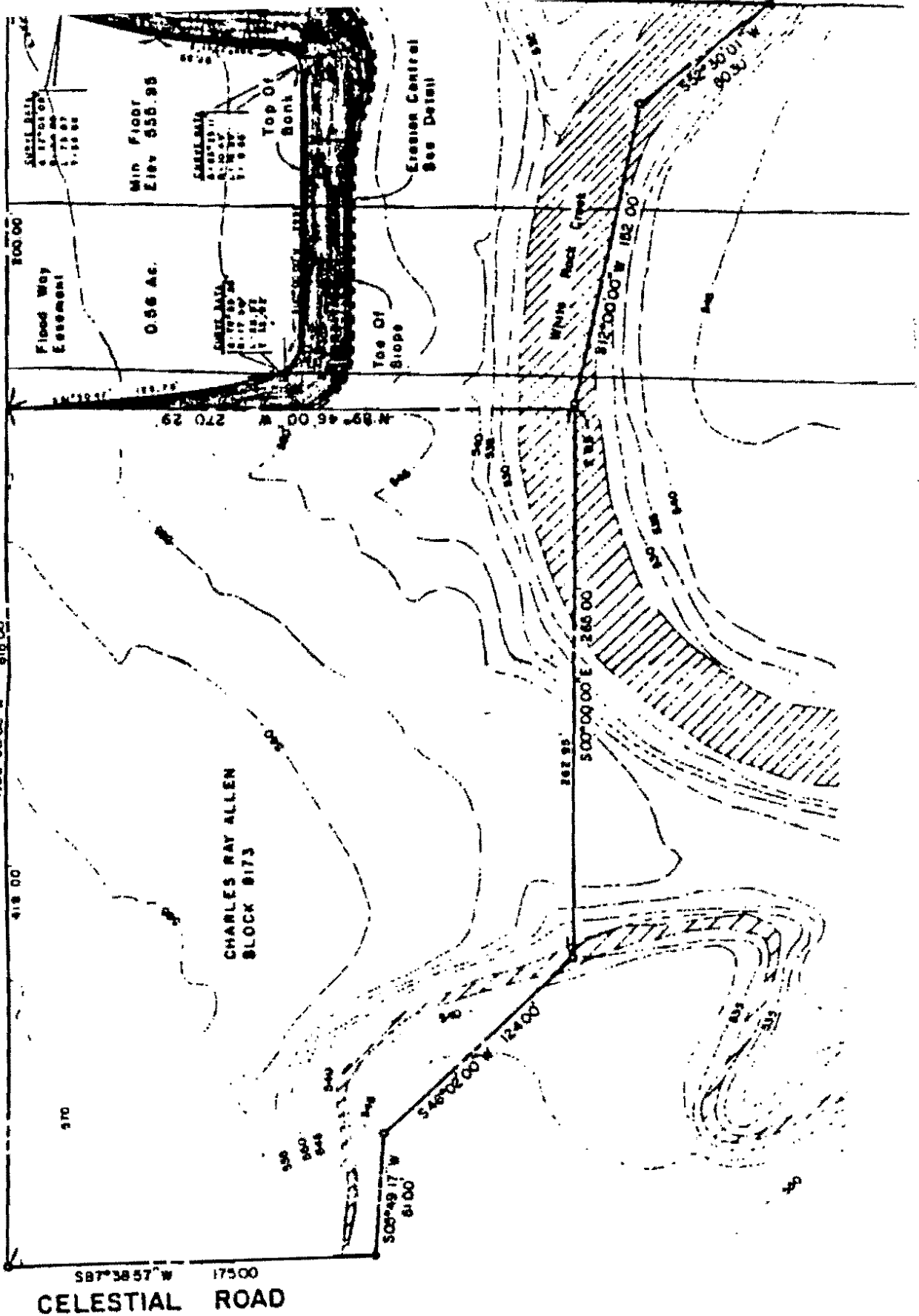
THENCE South 00 degrees 00 minutes 00 seconds East departing said centerline of creek a distance of 3.50 feet to a point for a corner in the creek;

THENCE South 39 degrees 21 minutes 49 seconds West a distance of 260.70 feet to a set iron rod in the East line of said Winnwood Road as referenced above;

THENCE North 00 degrees 00 minutes 00 seconds West along said East line of Winnwood Road a distance of 200.00 feet to the Point of Beginning and containing 37,536 square feet or 1.321 Acres of Land: more or less.

1512

WINWOOD ROAD





WINNWOOD ROAD AT CELESTIAL ROAD

FLOOD STUDY

ALTERNATIVE B

PREPARED FOR:

CHARLES ALLEN  
14516 WINNWOOD ROAD  
DALLAS, TEXAS 75240

PREPARED BY:

HUITT-ZOLLARS, INC.  
3131 MCKINNEY AVENUE  
SUITE 600  
DALLAS, TEXAS 75204



# HUITT-ZOLLARS

Huitt-Zollars, Inc. / Consulting Engineers / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204 / 214-871-3311

September 9, 1985

Mr. Michael Askew, P.E.  
Program Manager  
Storm Water Management Department  
City of Dallas  
1500 West Mockingbird Lane  
Dallas, Texas 75235

RE: Winnwood Road at Celestial Road Flood Study  
Huitt-Zollars, Job No. 0582-02

Dear Mr. Askew:

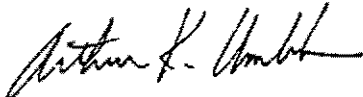
The following report is a copy of the hydraulic analysis performed on White Rock Creek within the vicinity of the above referenced property. This submittal includes a written narrative, copy of the PC-WSP Computer Calculations, and drawings of the site and cross sections of the study area.

Based on this analysis, the tract proposed to be reclaimed from the existing floodplain will have little effect on the 100 year water surface profile.

After you review this information, we would be pleased to meet with you should further discussion be requested.

Sincerely,

HUITT-ZOLLARS, INC.  
Consulting Engineers



Arthur K. Umble  
Project Manager

AKU/ber

# HUITT-ZOLLARS

Huitt-Zollars, Inc. / Consulting Engineers / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204 / 214-871-3311

September 9, 1985

Mr. Ron Whitehead, Town Manager  
Town of Addison  
P.O. Box 144  
Addison, Texas 75001

RE: Winnwood Road at Celestial Road Flood Study  
Huitt-Zollars, Job No. 0582-02

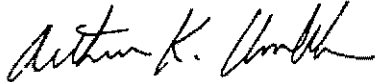
Dear Mr. Whitehead:

The following report is a copy of the hydraulic analysis performed on White Rock Creek within the vicinity of the above referenced property. The information contained within this report will assist the City of Dallas Stormwater Management Department in their evaluation for a fill permit.

Please contact the writer if further information is required.

Sincerely,

HUITT-ZOLLARS, INC.  
Consulting Engineers



Arthur K. Umble  
Project Manager

AKU/CML:ber

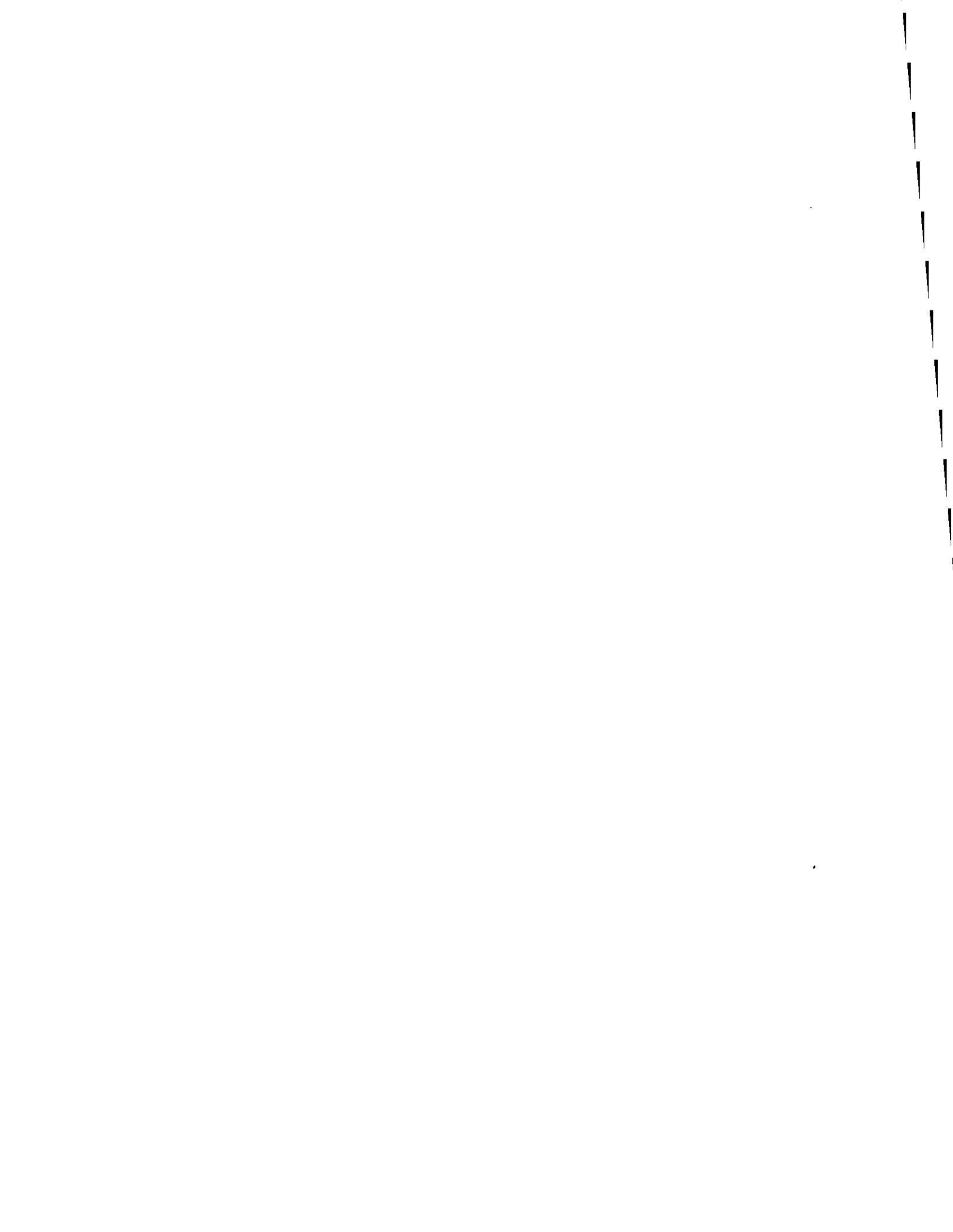


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EXHIBIT C: Water Surface Profile  
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WINNWOOD ROAD AT CELESTIAL ROAD  
FLOOD STUDY

INTRODUCTION

As shown on Exhibit A, the project site is located approximately 400 feet North of the intersection of Winnwood Road and Celestial Road in the Town of Addison, Texas. The site consists of approximately 1.37 acres of land bordered on the East by White Rock Creek. The majority of the site lies within the 100-year flood plain, as shown on Exhibit B.

This study was undertaken to determine the amount of land which can be reclaimed from the flood plain through the use of conventional fill.

METHODOLOGY

PC-WSP, an adaptation of the WSP4 program developed by Albert H. Halff and Associates, Inc. for the City of Dallas floodplain management studies, was used to perform the hydraulic analysis.

Existing cross-sections and the flow rate for White Rock Creek within the vicinity of the project site were obtained from the City of Dallas Department of Stormwater Management. Additional cross-section information was obtained from the field and incorporated into the existing computer model to provide a true and accurate model of the site. The results of this analysis are included in Appendix 1.

The computer model data and the results of the analysis of the proposed fill are included in Appendix 2. The proposed fill has been designed to comply with the "10 point" criteria specified by the City of Dallas Department of Stormwater Management. The equal reduction in conveyance analysis is included in Appendix 3.

#### RESULTS

Table 1 lists the 100-Year Water Surface Elevation for the Existing Conditions Analysis and the Proposed Conditions Analysis. Based on a comparison of the two conditions, the reclamation of the land will have no adverse effect on the water surface elevation. The fill is to be sloped as shown on Exhibit E, with at least fifty percent of the fill having a slope not to exceed 3:1 and the remaining length of the fill to have a slope not exceeding 6:1 as required by the City of Dallas Department of Stormwater Management. To conform with the computer model for the proposed conditions, the slope of the fill and the floodway management area are to be planted with grass and well-maintained. The boundary description of the land to be reclaimed is included in Appendix 4.

To prevent erosion of the fill in place during intermittent construction phases, erosion control is to be implemented as shown on Exhibit F. A temporary drainage ditch is to be constructed at the toe of the slope. A row of hay bales are to be placed on the downstream bank of the ditch. Each bale is to be secured with 2 - 4 x 4 posts driven 24 inches into the ground.

TABLE 1

## 100-YEAR WATER SURFACE ELEVATION

CROSS-SECTION NUMBER	HUITT-ZOLLARS ANALYSIS OF EXISTING CONDITION	HUITT-ZOLLARS ANALYSIS OF PROPOSED CONDITION
136	553.70	553.70
137	554.36	554.36
138	554.74	554.72
138A	554.82	554.78
138B	554.95	554.95
140	555.19	555.19
140A	555.56	555.56
140B	555.78	555.78
140C	556.02	556.02
140D	556.26	556.26
141	556.26	556.26
142	556.59	556.59

**APPENDICES**



APPENDIX 1

EXISTING CONDITIONS ANALYSIS

EXISTING  
WSP JK. EXS

FILE	WHITE ROCK CREEK AT WINWOOD AND CELESTIAL RD. - EXIST.				
30-ELEV	36760.	555.70			
INHAL	142.				
SECTION	136.	150.	185.		1.
GENERAL	544.			1.	1.
CEMENT	1.	D	0.12	190.	545.
CEMENT	2.	C	0.06	295.	544.
CEMENT	3.	D	0.09	645.	560.
ATA	9.	560.	140.	550.	199.
ATA	150.	545.	203.	540.	207.
ATA	221.	524.5	251.	524.5	268.
ATA	287.	540.	295.	544.	295.
ATA	375.	544.	385.	542.	408.
ATA	412.	543.	500.	545.	680.
ATA	845.	560.	845.	560.	
NOTABLE					
NEW	37100.				-1.
SECTION	137.	363.	354.		1.
GENERAL	541.			1.	1.
CEMENT	1.	D	0.12	195.	544.
CEMENT	2.	C	0.06	305.	541.
CEMENT	3.	D	0.09	610.	543.
CEMENT	4.	D	0.04	360.	560.
ATA	0.	560.	9.	555.	23.
ATA	26.	531.	37.	531.	60.
ATA	60.	544.	103.	545.	127.
ATA	195.	544.	218.	540.	228.
ATA	260.	525.5			
ATA	270.	535.	285.	540.	305.
ATA	365.	541.	335.	541.	385.
ATA	420.	545.8	440.	546.8	465.
ATA	610.	543.	610.	543.	710.
ATA	817.	550.	900.	560.	900.
NOTABLE					
SECTION	138.	80.	110.		1.
GENERAL	545.			1.	1.
CEMENT	1.	D	0.05	228.	544.
CEMENT	2.	C	0.045	347.	545.
CEMENT	3.	D	0.09	675.	543.
CEMENT	4.	D	0.04	1050.	560.
ATA	0.	560.	25.	558.	70.
ATA	200.	547.	228.	544.	228.
ATA	230.	541.	240.	541.	244.
ATA	268.	526.5	295.	526.5	310.
ATA	320.	540.	335.	544.	347.
ATA	347.	545.	485.	545.8	585.
ATA	530.	546.	675.	543.	675.
ATA	775.	545.	885.	550.	1050.
NOTABLE					
SECTION	138A.	100.	150.		1.
GENERAL	543.8			1.	1.
CEMENT	1.	D	0.05	237.	544.3
CEMENT	2.	C	0.045	330.	543.8
CEMENT	3.	D	0.09	450.	546.8
CEMENT	4.	D	0.04	691.1	555.00
ATA	0.	557.8	100.	550.8	200.
ATA	287.	544.3	257.	526.4	274.
ATA	292.	526.8	330.	543.8	340.
ATA	357.	547.8	450.	545.8	491.
ATA	600.	543.1	700.	544.5	600.
ATA	891.	533.8	891.1	555.00	
NOTABLE					
SECTION	138B.	441.	300.		1.

CEMENT	2.	C	0.045	485.	545.2	
CEMENT	3.	C	0.05	300.	540.4	
CEMENT	4.	C	0.045	495.	545.9	
CEMENT	5.	D	0.05	495.	545.2	
CEMENT	6.	D	0.04	535.	559.5	
ATA	0.	553.	100.	550.3	200.	544.1
ATA	229.	541.2	247.	534.7	255.	543.2
ATA	250.	540.7	300.	540.4	324.	535.4
ATA	350.	523.8	400.	526.7	405.	545.3
ATA	495.	545.2	500.	544.7	700.	548.5
ATA	600.	551.	600.	555.4	675.	558.6
ATA	695.	553.5				

NOTABLE SECTION 140. 402. 450. 1. 1280+70

GENERAL	543.			1.	1.	
CEMENT	1.	D	0.065	575.	545.	
CEMENT	2.	C	0.040	670.	543.	
CEMENT	3.	D	0.080	920.	565.	
ATA	-120.	555.				
ATA	-120.	560.	0.	555.	130.	548.
ATA	255.	545.			270.	544.
ATA	300.	546.	300.	547.	390.	547.
ATA	430.	547.	575.	545.	578.	540.
ATA	594.	530.	610.	528.	640.	528.
ATA	658.	540.	670.	543.	690.	542.
ATA	720.	550.	740.	554.	790.	550.
ATA	800.	562.	920.	565.		

NOTABLE SECTION 1400. 170. 167. 1.

GENERAL	545.			1.	1.	
CEMENT	1.	D	0.04	357.	547.	
CEMENT	2.	D	0.065	560.	546.	
CEMENT	3.	C	0.04	640.	540.	
CEMENT	4.	D	0.080	732.	557.	
ATA	0.	560.	155.	560.	220.	545.
ATA			283.	545.	302.	546.
ATA	357.	547.	442.	547.	560.	546.
ATA	563.	545.	567.	540.	570.	535.
ATA	583.	530.	590.	529.	625.	529.
ATA	630.	530.	641.	535.	648.	540.
ATA	651.	541.	652.	542.	655.	543.
ATA	656.	544.	682.	545.	690.	545.
ATA	710.	550.	729.	555.	735.	556.
ATA	752.	557.				

NOTABLE SECTION 1400. 55. 102. 1

GENERAL	545.			1.	1.	
CEMENT	1.	D.	0.04	369.	547.	
CEMENT	2.	D.	0.065	600.	540.	
CEMENT	3.	C.	0.045	685.	540.	
CEMENT	4.	D.	0.08	809.	561.	
ATA	0.	560.	186.	560.	270.	545.
ATA					331.	546.
ATA	389.	547.	518.	547.	545.	545.
ATA	505.	545.	555.	544.	557.	543.
ATA	600.	542.	605.	541.	608.	540.
ATA	666.	529.	679.	530.	683.	535.
ATA	665.	540.	653.	545.	732.	546.
ATA	742.	547.	730.	548.	758.	549.
ATA	756.	550.	775.	555.	790.	550.
ATA	800.	561.				

NOTABLE SECTION 1400. 55. 55. 1.

GENERAL	540.			1.	1.	
CEMENT	1.	D	0.04	357.	547.	

5



SECTION	U.	V. 00	012.	055.
ATA	9.0	560.	175.	560.
ATA	385.	547.	445.	548.
ATA	555.	547.	600.	545.
ATA	625.	544.	645.	543.
ATA	672.	541.	675.	540.
ATA	697.	539.	720.	529.
ATA	750.	530.	757.	535.
ATA	765.	545.	767.	546.
ATA	782.	548.	785.	549.
ATA	795.	555.	805.	550.

NOTABLE SECTION	GENERAL	EGMENT	EGMENT	EGMENT
1400.	80.	172.		1.
535.			1.	1.
1.	D.	0.06	662.	535.
2.	C.	0.045	760.	540.
3.	D.	0.08	810.	565.
0.	547.	228.	547.	414.
445.	548.	535.	548.	565.
600.	546.	605.	545.	625.
645.	543.	665.	542.	671.
675.	540.	692.	535.	695.
720.	529.	742.	529.	749.
755.	535.	760.	540.	763.
765.	546.	776.	547.	780.
782.	549.	785.	550.	795.
805.	560.	810.	565.	

NOTABLE SECTION	GENERAL	EGMENT	EGMENT	EGMENT
141.	105.	100.		1.
545.			1.	1.
1.	C.	0.06	730.	546.
2.	D.	0.045	850.	565.
0.	565.	0.	560.	10.
300.	560.	325.	547.	460.
605.	548.	650.	546.	730.
736.	545.	757.	530.	775.
780.	529.	800.	529.	805.
850.	565.			530.

NOTABLE SECTION	GENERAL	EGMENT	EGMENT	EGMENT
142.	1.	1.		1.
545.			1.	1.
1.	D.	0.06	734.	545.
2.	C.	0.04	944.	565.
0.	565.	0.	560.	40.
300.	560.	325.	547.	380.
500.	549.	570.	549.	530.
650.	545.	712.	545.	734.
765.	540.	783.	530.	730.
834.	529.	852.	535.	680.
934.	560.	944.	565.	

NOTABLE

1277+16

1288+69

SECTION 136.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=			
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS			
	CHANNEL 1.	VALLEY 1.	CHANNEL 153.	VALLEY 135.		NO. 1 .120	NO. 2 .060	NO. 3 .050	NO.
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.			
		550.00	648849.3	644471.6	1293321.0	11631.25			
		555.00	611663.6	566353.8	1180043.0	10296.08			
		558.00	575458.9	498043.4	1073542.0	9413.99			
		557.00	539723.7	420221.8	965945.5	8656.09			
		556.00	505426.2	378733.6	876159.8	7997.60			
		555.00	471461.0	313086.3	784517.3	7190.09			
		554.00	439009.7	263347.0	702356.7	6521.99			
		553.00	407047.3	216040.0	623087.3	5869.45			
		552.00	376225.4	174338.8	550564.3	5253.20			
		551.00	346565.6	137711.4	484217.0	4671.11			
		550.00	317419.8	103958.4	421418.2	4108.50			
		549.00	289750.1	78948.5	366738.6	3609.50			
		548.00	262993.8	53281.3	316275.2	3094.50			
		547.00	237030.9	32586.9	270027.9	2623.50			
		546.00	212515.0	18402.8	230921.8	2193.00			
		545.00	189899.6	7895.0	197795.6	1756.19			
		544.00	169199.4	1549.5	170748.9	1434.55			
		543.00	153295.9	526.9	153733.8	1269.22			
		542.00	138285.2	110.1	138395.2	1145.23			
		541.00	124246.1	.0	124246.1	1044.67			
		540.00	111196.8	.0	111196.8	957.91			
		539.00	98155.3	.0	98155.3	875.25			
		538.00	85922.6	.0	85922.6	795.51			
		537.00	74469.8	.0	74469.8	718.37			
		536.00	63758.1	.0	63758.1	643.69			
		535.00	53938.9	.0	53938.9	571.87			
		534.00	45021.4	.0	45021.4	503.02			
		533.00	36962.4	.0	36962.4	437.37			
		532.00	29663.4	.0	29663.4	374.79			
		531.00	23157.5	.0	23157.5	315.48			
		530.00	17444.5	.0	17444.5	259.51			
		529.00	12409.9	.0	12409.9	206.50			
		528.00	8105.4	.0	8105.4	155.03			
		527.00	4610.5	.0	4610.5	108.21			
		526.00	1965.1	.0	1965.1	62.57			
		525.00	319.0	.0	319.0	20.34			
		524.50	.0	.0	.0	.00			

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
36700.00	5.81	553.70						

SECTION	DISTANCE				DRAINAGE AREA, SQ. MI	STATION					
	DOWNSTREAM CHANNEL	VALLEY	UPSTREAM CHANNEL	VALLEY		NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
157.	158.	185.	363.	364.	1.00	.120	.060	.050	.040		
			RD VALUES			END AREA					
	ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.						
	550.00	553418.6	1395866.0	1959285.0	14617.90						
	559.00	527584.6	1249666.0	1768451.0	13653.02						
	558.00	492054.7	1086997.0	1561062.0	12654.74						
	567.00	458118.0	982562.4	1411060.0	11765.78						
	555.00	424540.2	820650.6	1244931.0	10043.32						
	555.00	392559.5	709159.3	1095758.0	9350.65						
	554.00	361186.4	590636.1	951822.5	9065.57						
	553.00	331009.9	489056.8	820166.8	8201.57						
	552.00	302039.9	397948.4	699979.3	7386.61						
	551.00	273741.3	312700.3	586521.6	6522.57						
	550.00	247039.0	241345.9	488384.8	5713.36						
	549.00	221240.5	177853.8	399142.4	4920.88						
	548.00	196370.1	122424.1	318794.2	4145.11						
	547.00	173066.5	61167.5	254194.1	3405.20						
	546.00	150839.8	48878.5	199717.9	2726.49						
	545.00	129705.4	26172.1	155577.5	2125.56						
	544.00	110656.6	21535.0	132391.6	1710.97						
	543.00	95241.1	17056.9	112340.0	1425.60						
	542.00	81520.3	13151.8	94672.1	1209.55						
	541.00	69069.4	10228.1	79297.5	1026.97						
	540.00	63323.7	8359.7	76683.4	905.21						
	539.00	60660.1	6575.9	67256.0	800.65						
	538.00	52898.1	5013.2	57911.3	703.86						
	537.00	45777.7	3670.9	49448.6	613.37						
	536.00	39390.6	2558.4	41959.1	530.18						
	535.00	33454.3	1679.4	35173.7	453.81						
	534.00	27837.9	990.2	28826.1	383.45						
	533.00	22495.3	478.8	22974.1	317.99						
	532.00	17655.8	146.0	17802.9	257.64						
	531.00	13344.6	2.6	13347.1	203.39						
	530.00	9555.5	.0	9555.5	161.72						
	529.00	6288.9	.0	6288.9	122.72						
	528.00	3605.7	.0	3605.7	85.49						
	527.00	1650.8	.0	1650.8	49.59						
	526.00	253.9	.0	253.9	16.23						
	525.50	.0	.0	.0	.00						

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	3.96	554.36						

SECTION 130.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION#					
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS					
	CHANNEL 363.	VALLEY 364.	CHANNEL 80.	VALLEY 110.		NO. 1 .050	NO. 2 .045	NO. 3 .050	NO. 4 .040	NO. 5	NO. 6
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.					
		560.00	819843.8	1337897.0	2157740.0	13087.55					
		559.00	766986.2	1165262.0	1932249.0	12353.50					
		558.00	718993.4	1009823.0	1728816.0	11357.80					
		557.00	666470.9	853586.9	1524058.0	10371.56					
		555.00	617316.0	726000.6	1345317.0	9436.63					
		555.00	569926.6	603598.3	1176525.0	8517.64					
		554.00	524323.4	493626.5	1017950.0	7636.55					
		553.00	480448.7	396560.3	877028.9	6792.12					
		552.00	437568.7	306840.8	744409.6	5968.63					
		551.00	396976.8	233013.8	629990.6	5192.31					
		550.00	357897.0	168252.4	525949.4	4443.22					
		549.00	319729.4	112556.7	432286.1	3721.98					
		548.00	284062.0	71353.9	355405.9	3058.78					
		547.00	249859.7	39601.6	289461.3	2426.10					
		546.00	217126.6	16927.7	234053.3	1853.99					
		545.00	186440.3	5397.4	191837.7	1440.08					
		544.00	168057.3	1755.1	169612.3	1210.16					
		543.00	149034.5	25.3	149059.8	1032.87					
		542.00	130137.2	.0	130137.2	928.91					
		541.00	119134.7	.0	119134.7	833.80					
		540.00	106529.2	.0	106529.2	753.63					
		539.00	92803.1	.0	92803.1	678.63					
		538.00	79257.1	.0	79257.1	606.65					
		537.00	66817.8	.0	66817.8	537.50					
		536.00	55417.3	.0	55417.3	471.32					
		535.00	45043.4	.0	45043.4	407.82					
		534.00	35636.6	.0	35636.6	346.96					
		533.00	27252.9	.0	27252.9	289.90					
		532.00	19924.8	.0	19924.8	233.74					
		531.00	13663.9	.0	13663.9	181.37					
		530.00	8395.8	.0	8395.8	131.78					
		529.00	4568.9	.0	4568.9	86.60					
		528.00	1869.2	.0	1869.2	47.41					
		527.00	292.0	.0	292.0	14.39					
		526.50	.0	.0	.0	.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.48	554.74						



SECTION 138A.	DISTANCE					STATION#					
	DOWNSTREAM		UPSTREAM		GRAINAGE	'N' VALUE BY SEGMENTS					
	CHANNEL	VALLEY	CHANNEL	VALLEY	AREA, SQ FT	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
	80.	110.	100.	150.	1.00	.050	.045	.050	.040		
	RD VALUES					END AREA					
	ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.						
	558.00	553463.4	1324199.0	1983663.0	10512.93						
	557.00	618331.3	1138162.0	1756493.0	10027.47						
	556.00	577942.8	961848.4	1539791.0	9151.70						
	555.00	538669.8	800118.1	1338788.0	8250.45						
	554.00	500538.6	653670.7	1154209.0	7445.35						
	553.00	463168.9	517412.8	980581.7	6611.05						
	552.00	427636.2	407448.0	835084.2	5817.62						
	551.00	392858.0	306019.4	698877.4	5042.30						
	550.00	359211.3	217393.9	576605.3	4294.14						
	549.00	327116.9	146245.0	473362.0	3583.10						
	548.00	295785.6	84045.4	379830.9	2893.21						
	547.00	265953.0	40163.4	306116.7	2250.81						
	546.00	237564.7	15550.4	253115.0	1727.05						
	545.00	210439.6	2625.1	213064.8	1345.67						
	544.00	184658.6	4.3	184672.7	1133.35						
	543.00	164371.4	.0	164371.4	1041.28						
	542.00	145729.8	.0	145729.8	953.23						
	541.00	128285.7	.0	128285.7	863.38						
	540.00	112014.6	.0	112014.6	786.71						
	539.00	96291.8	.0	96291.8	708.24						
	538.00	83154.0	.0	83154.0	633.77						
	537.00	70431.4	.0	70431.4	562.22						
	536.00	58829.1	.0	58829.1	494.66						
	535.00	48307.6	.0	48307.6	429.23						
	534.00	38841.6	.0	38841.6	367.73						
	533.00	30326.7	.0	30326.7	309.28						
	532.00	22965.9	.0	22965.9	254.63						
	531.00	16560.7	.0	16560.7	203.17						
	530.00	11044.7	.0	11044.7	154.71						
	529.00	6640.9	.0	6640.9	109.97						
	528.00	3200.3	.0	3200.3	68.36						
	527.00	866.7	.0	866.7	30.88						
	526.00	7.2	.0	7.2	1.92						
	525.00	.0	.0	.0	.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37109.00 4.56 554.82



SECTION 140.	DOWNSIDE		UPSTREAM		DRAINAGE AREA, SQ MI 1.00	STATION=1285-70 'N' VALUE BY SEGMENTS					
	CHANNEL 442.	VALLEY 358.	CHANNEL 402.	VALLEY 450.		NO. 1 .065	NO. 2 .040	NO. 3 .080	NO. 4	NO. 5	NO. 6
						RD VALUES			END AREA		
		ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.					
		565.00	1085691.0	1755675.0	2841366.0				16313.50		
		564.00	1000339.0	1568785.0	2569124.0				15280.17		
		563.00	976622.6	1394842.0	2371465.0				14265.50		
		562.00	923339.6	1224922.0	2148262.0				13256.94		
		561.00	871755.4	1071089.0	1942845.0				12272.79		
		560.00	821050.6	920469.4	1751520.0				11310.03		
		559.00	771655.8	805666.0	1581322.0				10379.34		
		558.00	723601.1	700559.3	1424160.0				9455.84		
		557.00	676439.6	599251.3	1275691.0				8643.79		
		556.00	631004.6	508919.3	1139924.0				7842.18		
		555.00	586417.4	423488.1	1009906.0				7054.12		
		554.00	543494.2	346662.7	890175.9				6329.82		
		553.00	501850.1	276226.1	778076.1				5620.21		
		552.00	461058.7	210002.4	671061.1				4927.07		
		551.00	422455.4	156326.2	578782.6				4271.64		
		550.00	384698.0	107445.0	492144.0				3650.18		
		549.00	348205.3	63759.0	413964.3				3009.65		
		548.00	313738.7	36475.3	350214.0				2421.78		
		547.00	280524.7	17069.9	297594.6				1909.28		
		546.00	248622.8	6110.9	254733.7				1494.52		
		545.00	218629.1	2591.7	221220.7				1269.76		
		544.00	191264.5	965.9	192230.3				1120.20		
		543.00	165324.5	138.3	165462.9				996.58		
		542.00	145827.0	8.0	145835.0				895.29		
		541.00	127550.0	.0	127550.0				806.76		
		540.00	110771.5	.0	110771.5				724.00		
		539.00	94192.3	.0	94192.3				645.55		
		538.00	78950.2	.0	78950.2				570.20		
		537.00	65025.1	.0	65025.1				497.95		
		536.00	52404.0	.0	52404.0				428.00		
		535.00	41148.9	.0	41148.9				362.94		
		534.00	31126.5	.0	31126.5				300.05		
		533.00	22340.0	.0	22340.0				240.14		
		532.00	14857.3	.0	14857.3				163.32		
		531.00	8687.4	.0	8687.4				129.55		
		530.00	3995.7	.0	3995.7				79.00		
		529.00	1299.5	.0	1299.5				34.94		
		528.00	.0	.0	.0				.00		

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	5.15	555.19						

SECTION 1400.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=			
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS			
	CHANNEL 55.	VALLEY 102.	CHANNEL 55.	VALLEY 65.		NO. 1 040	NO. 2 055	NO. 3 045	NO. 060
	ELEVATION		RD VALUES		TOTAL	END AREA SQ. FT.			
	565.00	960442.9	1739970.0	2700413.0	13357.50				
	564.00	913229.9	1546663.0	2459884.0	12545.76				
	563.00	866352.2	1357961.0	2223414.0	11736.52				
	562.00	820696.8	1182279.0	2003175.0	10528.30				
	561.00	776152.1	1052222.0	1828384.0	10136.71				
	560.00	732508.2	969244.8	1721753.0	9370.86				
	559.00	689958.2	891818.7	1581777.0	8689.30				
	558.00	648144.2	771424.3	1419569.0	8065.80				
	557.00	607750.3	660918.1	1268668.0	7449.10				
	556.00	568052.3	555259.0	1123352.0	6835.70				
	555.00	529721.7	459329.7	989060.4	6228.69				
	554.00	492438.4	370954.2	863952.6	5626.34				
	553.00	455853.8	287620.7	743474.6	5027.10				
	552.00	421068.7	217756.6	638815.3	4435.54				
	551.00	389951.6	153374.4	540326.0	3845.86				
	550.00	353875.4	97214.3	451059.7	3262.50				
	549.00	322448.4	55385.1	377833.4	2684.41				
	548.00	292035.2	27963.2	320018.4	2153.73				
	547.00	262646.9	12832.4	275539.3	1711.22				
	546.00	234651.4	8568.4	243219.8	1495.02				
	545.00	209507.8	4728.5	213236.3	1324.47				
	544.00	184475.4	2123.2	185599.5	1177.60				
	543.00	162112.4	734.6	162847.0	1043.86				
	542.00	140891.4	164.2	141055.6	939.02				
	541.00	120635.9	29.9	120656.8	845.00				
	540.00	102154.1	.0	102154.1	758.00				
	539.00	85797.8	.0	85797.8	674.00				
	538.00	70651.2	.0	70651.2	592.00				
	537.00	56741.3	.0	56741.3	512.00				
	536.00	44183.8	.0	44183.8	434.12				
	535.00	33014.2	.0	33014.2	358.25				
	534.00	23529.5	.0	23529.5	285.46				
	533.00	15606.7	.0	15606.7	216.98				
	532.00	9122.3	.0	9122.3	152.80				
	531.00	4223.5	.0	4223.5	93.20				
	530.00	1076.6	.0	1076.6	38.34				
	529.00	.0	.0	.0	.00				

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	5.42	556.02						

ROCK CREEK AT WINNWOOD AND CELESTIAL RD. - EXIST.

RUN DATE-07 24 85

SECTION 1400.	DISTANCE		DRAINAGE		STATION#				
	DOWNSTREAM CHANNEL 55.	VALLEY 65.	UPSTREAM CHANNEL 80.	VALLEY 172.	AREA, SQ MI 1.00	NO. 1 .060	NO. 2 .045	NO. 3 .060	NO. 4
					N VALUE BY SEGMENTS				
					END AREA				
					SQ. FT.				
					KD VALUES				
					ELEVATION	CHANNEL	VALLEY	TOTAL	
					565.00	895767.0	2179355.0	3079143.0	15871.00
					564.00	856955.1	1998659.0	2845654.0	15061.50
					563.00	814432.1	1800649.0	2615992.0	14283.15
					562.00	773148.1	1623022.0	2366171.0	13445.86
					561.00	732498.4	1450874.0	2188365.0	12539.30
					560.00	692789.6	1286941.0	1979730.0	11833.84
					559.00	654049.9	1131780.0	1785330.0	11030.22
					558.00	615354.2	982467.9	1598422.0	10227.82
					557.00	579100.6	844566.6	1423567.0	9428.14
					556.00	542856.0	712357.3	1255213.0	8629.78
					555.00	507805.0	591502.0	1099308.0	7833.98
					554.00	473668.0	479721.3	953350.1	7040.10
					553.00	440142.4	373989.3	814131.8	6247.50
					552.00	408176.1	284600.3	652776.4	5458.10
					551.00	376808.9	201552.6	578761.3	4653.90
					550.00	346349.3	129415.3	475736.1	3883.50
					549.00	317303.8	74777.4	392981.2	3100.54
					548.00	289148.3	35636.7	324835.0	2353.98
					547.00	261882.0	12707.4	274589.4	1738.21
					546.00	235822.5	12707.4	248523.9	1490.24
					545.00	210915.5	8511.3	219426.8	1313.85
					544.00	187117.8	4768.3	191886.1	1168.61
					543.00	164431.7	2657.7	167089.5	1040.50
					542.00	142883.2	1617.2	144500.5	931.89
					541.00	122500.7	1072.5	123573.3	837.80
					540.00	103500.8	695.9	104196.7	750.50
					539.00	86504.0	383.8	87287.8	666.70
					538.00	71496.5	178.2	71674.8	585.30
					537.00	57320.8	60.4	57381.3	506.30
					536.00	44509.8	11.8	44521.7	429.84
					535.00	32883.8	.0	32883.8	355.50
					534.00	23664.6	.0	23664.6	284.63
					533.00	15735.0	.0	15735.0	217.25
					532.00	9209.1	.0	9209.1	153.50
					531.00	4253.8	.0	4253.8	93.89
					530.00	1067.4	.0	1067.4	38.36
					529.00	.0	.0	.0	.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.20	556.26						

SECTION 141.	DOWNSTREAM		UPSTREAM		DRAINAGE AREA, SQ MI 1.00	STATION=1277-16 'N' VALUE BY SECTION			
	CHANNEL 20.	VALLEY 172.	CHANNEL 106.	VALLEY 100.		NO. 1 .060	NO. 2 .045	NO. 3	
					RD VALUES			END AREA	
					ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.
					555.00	1291515.0	857226.6	2058744.0	12262.00
					554.00	1049494.0	811310.1	1860804.0	11433.15
					553.00	900649.1	765826.1	1666475.0	10584.78
					552.00	754510.4	722079.5	1456530.0	9738.25
					551.00	649536.9	679299.7	1328538.0	8398.81
					550.00	565608.1	637623.5	1203232.0	7067.22
					553.00	523359.8	597346.0	1120708.0	7353.25
					558.00	505768.1	557940.4	1066709.0	6823.86
					557.00	444642.5	520174.4	964517.0	6282.82
					556.00	369859.2	483265.3	853055.4	5749.51
					555.00	302151.3	447787.4	749948.8	5221.89
					554.00	240047.4	413535.7	655553.1	4595.36
					553.00	181676.6	380052.1	551738.7	4171.83
					552.00	133449.3	348545.9	481995.2	3653.14
					551.00	89443.2	317769.0	407213.0	3136.53
					550.00	51768.2	288183.5	339871.8	2522.86
					549.00	25525.1	254181.3	285706.4	2113.55
					548.00	9635.9	235318.3	245804.2	1678.33
					547.00	2197.7	207721.6	209919.3	1333.98
					546.00	365.3	184265.3	184731.6	1155.75
					545.00	.0	167255.2	167255.2	1047.14
					544.00	.0	148346.8	148346.8	960.68
					543.00	.0	136371.3	136371.3	876.37
					542.00	.0	113505.6	113505.6	794.84
					541.00	.0	97737.5	97737.5	715.49
					540.00	.0	83211.3	83211.3	639.29
					539.00	.0	69804.3	69804.3	565.77
					538.00	.0	57507.3	57507.3	494.54
					537.00	.0	46316.3	46316.3	426.89
					536.00	.0	36256.4	36256.4	361.56
					535.00	.0	27359.4	27359.4	298.79
					534.00	.0	19487.7	19487.7	238.65
					533.00	.0	12786.9	12786.9	181.19
					532.00	.0	7275.4	7275.4	126.37
					531.00	.0	3133.3	3133.3	74.34
					530.00	.0	700.5	700.5	26.93
					529.00	.0	.0	.0	.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	6.30	555.25						

SECTION 142.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=1266+03 WF VALUE BY SEGMENT			
	DOWNSTREAM		UPSTREAM			NO. 1 0.60	NO. 2 0.40	NO. 3 0.00	W
	CHANNEL 106.	VALLEY 100.	CHANNEL 1.	VALLEY 1.					
	ELEVATION				NO VALUES				END AREA SQ. FT.
			CHANNEL	VALLEY	TOTAL				
			565.00	1421428.0	1241164.0	2652552.0			14153.50
			564.00	1331111.0	1086537.0	2417648.0			13211.50
			563.00	1241772.0	935082.2	2176884.0			12269.62
			562.00	1156343.0	796316.2	1952659.0			11331.22
			561.00	1073897.0	671226.1	1745083.0			10398.62
			560.00	995607.5	566647.8	1562255.0			9468.73
			559.00	925594.3	473755.4	1441150.0			8658.50
			558.00	860594.7	398657.5	1309162.0			7927.65
			557.00	799618.3	345050.8	1244669.0			7291.80
			556.00	740644.0	303842.5	1119487.0			6682.11
			555.00	683313.0	261741.6	987056.5			6061.80
			554.00	627629.3	229322.5	871952.6			5485.31
			553.00	573797.7	198692.1	762395.3			4959.52
			552.00	521039.5	169335.5	657378.5			4473.31
			551.00	469912.1	142260.1	578172.1			3750.55
			550.00	420030.8	116605.1	497639.0			3124.66
			549.00	371935.2	92362.5	429597.7			2659.54
			548.00	325247.8	69296.5	365144.3			2156.48
			547.00	279495.4	47332.7	317429.1			1814.95
			546.00	234458.3	26471.8	274669.8			1545.93
			545.00	189271.1	14631.5	239362.7			1400.51
			544.00	144449.7	7990.0	209449.7			1266.15
			543.00	99914.3	3995.0	183914.3			1141.42
			542.00	55766.5	1988.5	160768.5			1024.44
			541.00	11523.3	976.5	135923.3			915.20
			540.00	12156.9	976.5	121566.9			814.83
			539.00	101825.7	976.5	101825.7			720.53
			538.00	83759.8	976.5	83759.8			629.50
			537.00	67371.5	976.5	67371.5			542.33
			536.00	52753.1	976.5	52753.1			459.05
			535.00	39897.8	976.5	39897.8			379.54
			534.00	28637.5	976.5	28637.5			303.69
			533.00	19328.3	976.5	19328.3			232.78
			532.00	11650.5	976.5	11650.5			166.60
			531.00	5735.5	976.5	5735.5			105.40
			530.00	1755.1	976.5	1755.1			49.15
			529.00	0.0	976.5	0.0			0.00
	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
	37190.00	5.27	555.53						

includes C.II on 138 +

NO	SECTION	AREA	WIDTH	AT	WIDTH	AREA	CELESTIAL	NO	PROPOSED
182	GENERAL	544							
185	SECTION	185							1.
185	GENERAL	544							
1.	ELEMENT	0	0.12		190		545		
2.	ELEMENT	0	0.06		255		544		
3.	ELEMENT	0	0.09		345		550		
4.	ELEMENT	0	0.04		140		550	190	545
190	STA	545			260		500	287	535
221	STA	524.5			261		524.5	358	530
287	STA	540			295		544	295	544
375	STA	544			385		542	408	542
412	STA	543			550		545	550	550
545	STA	550			545		550		
371000	NOTABLE								
137	SECTION	363			354				1.
541	GENERAL								
1.	ELEMENT	0	0.12		195		544		
2.	ELEMENT	0	0.06		305		541		
3.	ELEMENT	0	0.09		610		543		
4.	ELEMENT	0	0.04		900		550		
0	STA	550			9		555	23	535
26	STA	531			37		531	50	540
80	STA	544			163		545	127	545
195	STA	544			218		540	220	525.5
250	STA	525.5							
270	STA	525			355		540	305	541
305	STA	541			335		541	395	545
420	STA	545.8			440		545.8	455	545
610	STA	543			610		543	710	545
817	STA	550			900		550	950	550
100	NOTABLE								
100	SECTION	80			110				1.
545	GENERAL								
1.	ELEMENT	0	0.045		228		544		
2.	ELEMENT	0	0.045		317		545		
3.	ELEMENT	0	0.09		675		543		
4.	ELEMENT	0	0.04		1050		550		
0	STA	550			140		555.74	170.29	547.84
200	STA	547			228		544	228	544
230	STA	541			240		541	244	540
250	STA	526.5			295		526.5	310	530
320	STA	540			335		544	347	545
347	STA	545			485		545.8	505	545.8
550	STA	545			575		543	575	543
775	STA	545			885		550	1050	550
1000	NOTABLE								
1000	SECTION	1000			150				1.
543.8	GENERAL								
1.	ELEMENT	0	0.05		237		544.8		
2.	ELEMENT	0	0.045		300		543.8		
3.	ELEMENT	0	0.09		450		545.8		
4.	ELEMENT	0	0.04		691.1		555.8		
0	STA	557.5			140		555.88	162.1	545.80
200	STA	544.8							
257	STA	544.8			257		526.1	274	525.8
292	STA	526.5			300		543.8	340	544.1
397	STA	547.5			450		545.8	491	545.7
500	STA	545.1			700		544.5	800	545.7
891	STA	555.8			891.1		555.8		
1000	NOTABLE								
1000	SECTION	1000			555				1.



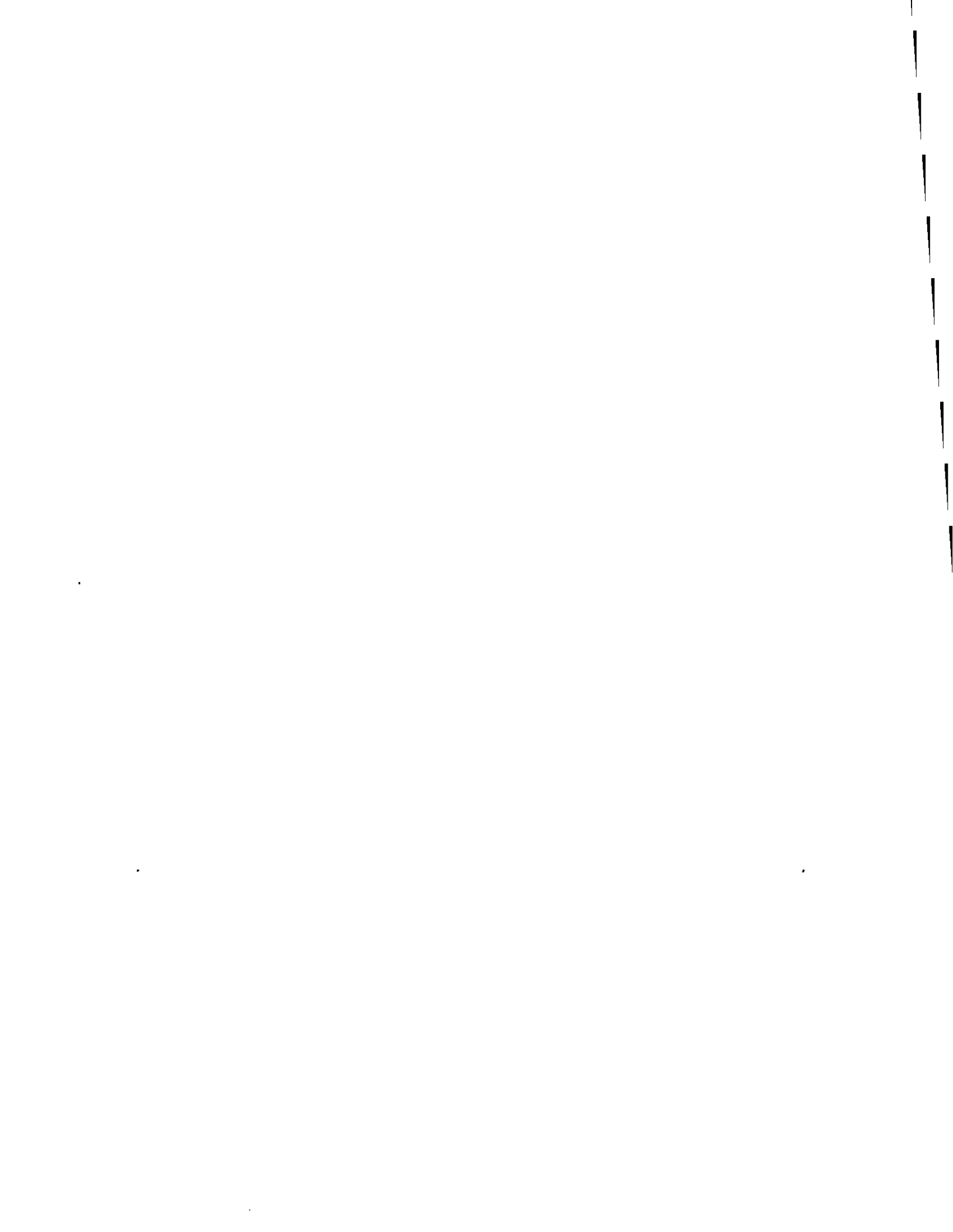
CONCRETE	1.	0	0.045	265.	543.2	
CONCRETE	3.	0	0.05	300	540.4	
CONCRETE	4.	0	0.045	405.	545.9	
CONCRETE	5.	0	0.09	495.	545.2	
CONCRETE	6.	0	0.04	395.	553.5	
DATA	0	555.	100	550.3	200.	544.1
DATA	205	541.2	247.	534.7	265.	543.2
DATA	250	540.7	300.	540.4	324.	525.4
DATA	350.	525.8	400.	525.7	405.	545.9
DATA	495.	545.2	500.	544.7	700.	545.5
DATA	800.	551.	550.	555.1	875.	558.5
DATA	895.	559.5				
NOTABLE SECTION	1400.	402.	450		1.	1080+70
GENERAL	543.			1.	1.	
CONCRETE	1.	0	0.055	575.	545.	
CONCRETE	2.	0	0.040	570.	543.	
CONCRETE	3	0	0.050	920	555.	
DATA	-120.	555.				
DATA	-120.	550.	0.	555.	100	540.
DATA	255.	545.			270.	544.
DATA	300	545.	350	547.	350	547.
DATA	430.	547.	575.	545.	570.	540.
DATA	531	530.	510	520.	540	520.
DATA	650.	540.	570.	543.	690.	542.
DATA	700	550	700	554.	750.	550.
DATA	800.	552.	920.	555.		
NOTABLE SECTION	1400	170.	167.		1.	
GENERAL	545.			1.	1.	
CONCRETE	1.	0	0.04	357.	547.	
CONCRETE	2.	0	0.055	550.	545.	
CONCRETE	3.	0	0.04	540.	540.	
CONCRETE	4.	0	0.050	752.	557.	
DATA	0.	550.	155.	550	220.	545.
DATA			280.	545.	302.	545.
DATA	357.	547.	442.	547.	550	545.
DATA	550.	545.	557.	540.	570.	535.
DATA	580.	530.	590	520.	625.	520.
DATA	630.	530.	541.	535.	640.	540.
DATA	651.	541.	552.	542.	655.	543.
DATA	655.	541.	552.	545.	690.	545.
DATA	710	550	700	555.	735.	555.
DATA	752.	557.				
NOTABLE SECTION	1400.	55.	102.		1.	
GENERAL	545.			1.	1.	
CONCRETE	1.	0.	0.04	320	547.	
CONCRETE	2.	0.	0.055	500.	540.	
CONCRETE	3.	0.	0.045	525.	540.	
CONCRETE	4.	0.	0.05	800	551.	
DATA	0.	550	155	550.	270.	545.
DATA					301	545.
DATA	350	547	510	547	545	545.
DATA	555	545	595	544	557	543.
DATA	590	540	605	541	600	540
DATA	650.	520	570.	530.	620.	535.
DATA	655	540	555	545.	732.	545.
DATA	742.	547	750.	540.	750.	545.
DATA	755	550	775	555	750	550
DATA	800	551.				
NOTABLE SECTION	1400	55	55		1	
GENERAL	540			1	1	

SEGMENT	3.	0	0.005	765	545	
SEGMENT	4.	0.	0.00	810	555	
DATA	0.0	550	175	550	514	547
DATA	369	547	445	540	535	540
ATA	555	547	500	545	507	545
DATA	525	541	545	540	555	542
DATA	570	541	575	540	552	535
ATA	597	530	720	529	743	529
ATA	750	530	757	535	760	540
DATA	755	545	757	545	770	547
DATA	792	540	785	540	786	550
ATA	795	555	805	550	812	555

EXOTABLE						
SECTION	1400	50	172			1.
GENERAL	555			1.	1.	
SEGMENT	1.	0.	0.005	592	535	
SEGMENT	2.	0.	0.045	750	540	
SEGMENT	3.	0	0.00	810	555	
DATA	0.	547	228	547	414	547
DATA	445	540	555	540	555	547
DATA	500	545	605	545	625	544
DATA	545	540	655	540	671	541
DATA	575	540	682	535	695	530
DATA	720	529	742	529	749	530
DATA	755	535	760	540	763	545
DATA	755	545	775	547	780	540
DATA	792	540	785	550	795	555
DATA	805	550	810	555		

EXOTABLE						
SECTION	141	105	100			1. 1277+16
GENERAL	545			1.	1.	
SEGMENT	1.	0	0.005	730	545	
SEGMENT	2.	0	0.045	850	555	
DATA	0	555	0	560	10	550
DATA	300	550	325	547	450	540
DATA	505	540	550	545	730	545
DATA	735	545	757	530	775	530
DATA	790	529	800	529	805	530
DATA	850	555				

EXOTABLE						
SECTION	142	1.	1.			1. 1280+09
GENERAL	545			1.	1.	
SEGMENT	1.	0	0.005	734	545	
SEGMENT	2.	0	0.04	844	555	
DATA	0	555	0	550	40	550
DATA	300	550	325	547	300	547
DATA	500	540	570	540	550	547
DATA	550	545	712	545	734	545
DATA	755	540	783	530	790	529
DATA	824	529	852	535	890	550
DATA	934	550	944	555		



SECTION 105	DISTANCE				STATION=							
	UPSTREAM		UPSTREAM		BRIDGE		"N" VALUE BY SEGMENTS					
	CHANNEL	VALLEY	CHANNEL	VALLEY	AREA, SQ. FT.	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	
1.	1	105	105	1.00	120	050	050	END AREA				
		ELEVATION		RD VALUES		TOTAL		SQ. FT.				
		Channel	Valley	Channel	Valley							
		553.00	545549.3	544471.6	544471.6	1293321.0		11031.25				
		553.00	511559.5	508953.8	508953.8	1180043.0		10205.88				
		553.00	575498.9	498043.4	498043.4	1073542.0		3413.93				
		557.00	539723.7	430221.8	430221.8	969945.5		8636.89				
		556.00	545426.2	370733.6	370733.6	876153.8		7507.60				
		555.00	471451.0	313055.3	313055.3	784517.3		7190.89				
		554.00	439609.7	263347.0	263347.0	702355.7		6521.93				
		553.00	407047.3	216040.0	216040.0	623067.3		5269.45				
		552.00	376225.4	174338.8	174338.8	550654.3		5053.20				
		551.00	344595.6	137711.4	137711.4	484217.0		4671.11				
		550.00	317419.8	100998.4	100998.4	421418.2		4188.50				
		549.00	289799.1	76949.5	76949.5	365736.6		3659.50				
		548.00	262993.8	53261.3	53261.3	318275.2		3094.50				
		547.00	237060.9	32995.9	32995.9	270027.9		2623.50				
		546.00	212519.0	18492.8	18492.8	230921.8		2193.00				
		545.00	189099.6	7895.0	7895.0	197755.6		1795.19				
		544.00	169199.4	1549.5	1549.5	170748.9		1434.55				
		543.00	153296.2	525.9	525.9	153733.0		1359.22				
		542.00	138285.2	110.1	110.1	138595.2		1145.23				
		541.00	124245.1	.0	.0	124245.1		1044.67				
		540.00	111195.8	.0	.0	111195.8		957.91				
		539.00	99155.3	.0	.0	99155.3		875.25				
		538.00	88322.6	.0	.0	88322.6		795.51				
		537.00	78463.8	.0	.0	78463.8		718.37				
		536.00	69758.1	.0	.0	69758.1		643.69				
		535.00	62938.9	.0	.0	62938.9		571.87				
		534.00	57921.4	.0	.0	57921.4		503.82				
		533.00	53562.4	.0	.0	53562.4		437.37				
		532.00	49863.4	.0	.0	49863.4		374.79				
		531.00	46857.5	.0	.0	46857.5		315.48				
		530.00	44444.5	.0	.0	44444.5		259.51				
		529.00	42409.9	.0	.0	42409.9		206.50				
		528.00	4105.4	.0	.0	4105.4		155.03				
		527.00	4610.5	.0	.0	4610.5		108.21				
		526.00	1955.1	.0	.0	1955.1		62.97				
		525.00	319.0	.0	.0	319.0		20.34				
		524.50	.0	.0	.0	.0		.00				

CFS VELOCITY ELEV.      CFS VELOCITY ELEV.      CFS VELOCITY ELEV.  
 36700.00      5.81      553.70





SECTION 188A	DISTANCE				DRAINAGE AREA, SQ. FT.	STATION=					
	DOWNSTREAM		UPSTREAM			BY VALUE BY SEGMENTS					
	CHANNEL NO.	VALLEY 110	CHANNEL 100	VALLEY 150		NO. 1 000	NO. 2 005	NO. 3 050	NO. 4 000	NO. 5	NO. 6
		ELEVATION	CHANNEL	VALLEY	TOTAL						
		559.00	559463.4	1215712.0	1675176.0						16204.59
		557.00	518331.3	1054354.0	1673685.0						9432.81
		556.00	577942.8	983487.8	1481431.0						8521.86
		555.00	535523.8	755317.9	1306639.0						7659.71
		554.00	500528.5	656799.7	1187929.0						7108.29
		553.00	459169.9	507852.4	970961.0						6563.49
		552.00	427526.2	402087.7	829613.9						5839.73
		551.00	392852.0	304062.6	696914.6						4935.00
		550.00	359211.3	217466.7	576687.0						4227.41
		549.00	327115.9	145838.0	472954.9						3548.90
		548.00	295785.5	84714.4	380499.9						2883.29
		547.00	255353.9	40275.5	305629.0						2249.18
		546.00	237564.7	15550.7	253115.4						1727.86
		545.00	210429.6	2525.2	213054.8						1345.67
		544.00	184558.5	4.3	184572.7						1133.35
		543.00	154371.4	0	154371.4						1041.28
		542.00	145729.8	0	145729.8						953.23
		541.00	128285.7	0	128285.7						859.38
		540.00	112814.5	0	112814.5						786.71
		539.00	95891.8	0	95891.8						709.24
		538.00	83154.0	0	83154.0						633.77
		537.00	70431.4	0	70431.4						562.22
		536.00	58829.1	0	58829.1						494.06
		535.00	48307.5	0	48307.5						429.23
		534.00	38841.6	0	38841.6						367.73
		533.00	30325.7	0	30325.7						309.28
		532.00	22965.9	0	22965.9						254.63
		531.00	16550.7	0	16550.7						203.17
		530.00	11044.7	0	11044.7						154.71
		529.00	6540.9	0	6540.9						109.97
		528.00	3200.3	0	3200.3						68.35
		527.00	855.7	0	855.7						30.88
		526.00	7.2	0	7.2						1.62
		525.00	0	0	0						0.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
371.00	0.00	4.82	554.78					

SECTION 1558	DISTANCE		STATIONING		AREA SQ FT 1 00	STATIONING					
	QUANTIFICATION		UPSTATION			% VALUE BY ELEMENTS					
	CHANNEL 100	VALLEY 150	CHANNEL 102	VALLEY 152		NO. 1 050	NO. 2 045	NO. 3 050	NO. 4 045	NO. 5 050	NO. 6 045
	ELEVATION		NO VALUES		TOTAL	END AREA SQ. FT.					
	569.00	1173915.0	1594592.0	2678417.0	13197.35						
	559.00	1106956.0	1324798.0	2433694.0	12311.90						
	558.00	1044445.0	1147952.0	2191887.0	11429.84						
	557.00	982264.2	978996.9	1961261.0	10560.93						
	555.00	921246.4	821106.9	1742353.0	9656.42						
	555.00	861979.0	678927.5	1540901.0	8830.49						
	554.00	804368.6	558341.7	1359738.0	8007.72						
	553.00	747950.2	444169.0	1192063.0	7195.07						
	552.00	694191.3	352356.6	1046548.0	6438.28						
	551.00	641570.6	269777.1	910347.8	5705.22						
	550.00	590627.0	197522.0	788149.0	5007.76						
	549.00	541987.9	140599.5	682497.5	4360.59						
	548.00	494482.9	90619.6	584796.6	3737.51						
	547.00	449208.9	59138.9	500347.8	3160.45						
	546.00	406659.1	29322.4	435981.4	2647.07						
	545.00	366318.8	14298.2	380619.0	2244.72						
	544.00	328271.2	7388.8	335660.0	1965.02						
	543.00	293032.8	3806.1	296839.0	1789.74						
	542.00	259458.5	1416.0	260874.5	1607.68						
	541.00	228286.9	306.0	228512.8	1444.15						
	540.00	199443.6	.0	199443.6	1299.10						
	539.00	174481.6	.0	174481.6	1173.86						
	538.00	151518.4	.0	151518.4	1056.16						
	537.00	130061.2	.0	130061.2	944.50						
	536.00	110340.6	.0	110340.6	839.83						
	535.00	92154.1	.0	92154.1	742.03						
	534.00	75427.7	.0	75427.7	649.51						
	533.00	59975.7	.0	59975.7	559.40						
	532.00	46161.4	.0	46161.4	471.66						
	531.00	33797.7	.0	33797.7	325.60						
	530.00	22966.5	.0	22966.5	201.43						
	529.00	13964.0	.0	13964.0	119.46						
	528.00	6674.1	.0	6674.1	59.35						
	527.00	1727.3	.0	1727.3	15.22						
	526.00	14.1	.0	14.1	1.58						
	525.00	.0	.0	.0	.00						

QFS VELOCITY ELEV. QFS VELOCITY ELEV. QFS VELOCITY ELEV.  
 37100.00 4.22 554.95



SECTION (10)	DISTANCE		DISTANCE		OROWAGE AREA, SQ. FT. 1.00	STATION=1283+70 BY VALUE BY SEGMENTS					
	CHANNEL NO.	VALLEY NO.	CHANNEL NO.	VALLEY NO.		NO. 1 0.55	NO. 2 0.40	NO. 3 0.08	NO. 4	NO. 5	NO. 6
		ELEVATION	CHANNEL NO.	VALLEY NO.	TOTAL	END AREA SQ. FT.					
		555.00	1089591.0	1755675.0	2841366.0						16313.50
		554.00	1090009.0	1566785.0	2599124.0						15209.17
		553.00	976522.5	1394842.0	2371465.0						14065.50
		552.00	923333.5	1224922.0	2148255.0						13056.94
		551.00	871755.4	1071099.0	1942645.0						12272.79
		550.00	821050.5	930469.4	1751520.0						11510.80
		549.00	771555.3	809555.0	1581322.0						10979.34
		548.00	723591.1	700559.3	1424150.0						9495.34
		547.00	676439.5	599251.3	1275551.0						8643.79
		546.00	631004.5	509919.3	1139924.0						7842.18
		545.00	586417.4	423488.1	1009996.0						7054.12
		544.00	543494.2	346582.7	899175.9						6329.82
		543.00	501950.1	276226.1	779875.1						5620.21
		542.00	461858.7	210002.4	671061.1						4927.87
		541.00	422456.4	156325.2	578782.5						4271.64
		540.00	384698.0	107445.0	492144.0						3630.18
		549.00	348205.3	65753.0	413954.3						3069.66
		548.00	313738.7	36475.3	359214.0						2421.78
		547.00	280524.7	17069.9	297594.5						1909.28
		546.00	248622.8	6110.9	254733.7						1494.52
		545.00	218529.1	2551.7	221220.7						1269.75
		544.00	191254.5	955.9	192230.3						1120.20
		543.00	165324.5	139.3	165452.9						996.58
		542.00	140627.0	0.0	140627.0						855.20
		541.00	127550.0	0.0	127550.0						806.75
		540.00	110771.5	0.0	110771.5						724.00
		539.00	94192.0	0.0	94192.0						645.55
		538.00	78950.2	0.0	78950.2						570.28
		537.00	65025.1	0.0	65025.1						497.95
		536.00	52404.0	0.0	52404.0						428.60
		535.00	41148.3	0.0	41148.3						362.94
		534.00	31125.5	0.0	31125.5						300.85
		533.00	22340.0	0.0	22340.0						240.14
		532.00	14857.0	0.0	14857.0						183.32
		531.00	8687.4	0.0	8687.4						129.55
		530.00	3955.7	0.0	3955.7						79.00
		529.00	1209.5	0.0	1209.5						34.94
		528.00	0.0	0.0	0.0						0.00

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 5.15 555.19

SECTION LINE	DISTANCE				STATION=						
	DOWNSTREAM		UPSTREAM		DRAINAGE AREA SQ FT 1.00	'N' VALUE BY SEGMENTS					
	CHANNEL NO. 1	VALLEY 150	CHANNEL 170	VALLEY 157		NO. 1 NO.	NO. 2 NO.	NO. 3 NO.	NO. 4 NO.	NO. 5 NO.	NO. 5 NO.
		ELEVATION	CHANNEL	VALLEY	TOTAL	EQ. AREA SQ. FT.					
		560.00	782381.3	825090.5	1708352.0	8745.00					
		559.00	785433.0	814058.5	1551094.0	8152.73					
		558.00	691953.8	706005.5	1397100.0	7551.35					
		557.00	647051.5	600959.4	1256221.0	6978.51					
		555.00	604228.2	515913.4	1121142.0	6402.78					
		555.00	562703.1	432442.0	996145.0	5845.07					
		554.00	522335.4	355624.2	878159.5	5297.84					
		553.00	482739.4	282107.1	764045.5	4755.27					
		552.00	445120.0	219099.5	664820.0	4225.71					
		551.00	409262.9	161771.3	570034.0	3791.00					
		550.00	372545.0	110561.7	483107.5	3183.57					
		549.00	338851.3	70718.7	409369.9	2677.83					
		548.00	309590.2	39571.2	344551.4	2179.00					
		547.00	274095.3	15245.5	289641.8	1719.10					
		545.00	249058.8	5521.4	250550.0	1395.27					
		545.00	229593.5	775.1	221359.7	1170.00					
		544.00	195782.7	444.3	196227.0	1065.97					
		543.00	171949.2	257.0	172206.2	973.50					
		542.00	149000.8	100.0	149009.7	884.81					
		541.00	127899.9	15.0	127905.0	799.00					
		540.00	107919.2	0	107919.2	716.00					
		539.00	90551.0	0	90551.0	635.00					
		538.00	74535.5	0	74535.5	558.00					
		537.00	59911.9	0	59911.9	482.00					
		536.00	46528.4	0	46528.4	408.12					
		535.00	34748.8	0	34748.8	335.27					
		534.00	24845.9	0	24845.9	267.59					
		533.00	16633.9	0	16633.9	203.79					
		532.00	9925.5	0	9925.5	144.50					
		531.00	4832.5	0	4832.5	90.40					
		530.00	1438.0	0	1438.0	41.17					
		529.00	0	0	0	0.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100	00	5.00	555.55					

SECTION 1400	DISTANCE				DRAINAGE AREA SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			IN' VALUE BY SEGMENTS					
	CHANNEL (70)	VALLEY (67)	CHANNEL (55)	VALLEY (102)		NO. 1 .000	NO. 2 .065	NO. 3 .015	NO. 4 .080	NO. 5	NO. 6
	ELEVATION		40' VALUES		TOTAL		END AREA SQ. FT.				
	551.00	525258.0	502730.5	1492550.0	3252.50						
	550.00	550100.1	473704.5	1329945.0	3509.37						
	550.00	515382.0	504855.1	1329200.0	7856.74						
	552.00	481173.2	595005.5	1179180.0	7254.44						
	557.00	448259.3	599355.1	1048595.0	6504.58						
	555.00	415333.4	507175.5	925110.0	6110.25						
	555.00	384857.4	422562.1	807559.5	5547.59						
	554.00	354727.3	344705.1	699433.1	4992.74						
	553.00	325229.5	271073.8	596303.3	4443.19						
	552.00	297351.0	209037.5	505399.3	3905.94						
	551.00	270699.5	151599.5	421690.1	3373.45						
	550.00	243704.3	101027.0	344811.9	2849.00						
	549.00	218972.7	62704.5	281677.3	2337.50						
	548.00	195090.2	32154.4	227384.5	1839.35						
	547.00	172149.1	10562.5	182519.7	1385.42						
	545.00	150400.3	4209.1	154697.4	1079.14						
	545.00	129060.8	2273.7	132147.5	905.00						
	544.00	110833.2	1375.5	112200.7	804.17						
	543.00	92811.7	692.8	93504.5	708.88						
	542.00	76037.3	224.2	76261.5	619.33						
	541.00	60553.8	29.2	60583.0	532.80						
	540.00	46525.3	.0	46525.3	453.50						
	539.00	36623.4	.0	36623.4	379.43						
	538.00	27971.6	.0	27971.6	311.21						
	537.00	20502.3	.0	20502.3	248.85						
	536.00	14516.3	.0	14516.3	192.69						
	535.00	9573.3	.0	9573.3	142.24						
	534.00	5637.3	.0	5637.3	99.47						
	533.00	3195.3	.0	3195.3	62.66						
	532.00	1450.5	.0	1450.5	34.75						
	531.00	483.3	.0	483.3	15.21						
	530.00	81.3	.0	81.3	3.80						
	529.00	.0	.0	.0	.00						

CF3 VELOCITY ELEV      CF3 VELOCITY ELEV      CF3 VELOCITY ELEV  
 37100.00      6.30      555.78

SECTION 1400.	DISTANCE		DISTANCE		AREA SQ FT 1.00	STATION=					
	DOWNSTREAM CHANNEL 55.	VALLEY 100.	UPSTREAM CHANNEL 55.	VALLEY 55.		NO. 1 ADV	NO. 2 ADV	NO. 3 ADV	NO. 4 ADV	NO. 5 ADV	NO. 6 ADV
	ELEVATION		NO VALUES		TOTAL	CROSS AREA SQ. FT					
	555.00	960442.9	1739979.0	2700413.0	13357.50						
	554.00	913220.9	1646553.0	2499804.0	12546.75						
	553.00	866352.2	1357961.0	2223414.0	11735.52						
	552.00	820995.8	1182279.0	2006176.0	10929.30						
	551.00	775162.1	1052222.0	1829934.0	10135.71						
	550.00	732509.2	989244.0	1721753.0	9579.06						
	559.00	689959.2	891618.7	1561777.0	8669.30						
	558.00	648144.2	771404.0	1419559.0	8055.80						
	557.00	607759.3	650918.1	1266558.0	7449.10						
	556.00	568952.9	552299.0	1123352.0	6835.70						
	555.00	529721.7	459338.7	999000.4	6228.59						
	554.00	492439.4	378954.2	863392.6	5626.34						
	553.00	458959.8	297620.7	743174.6	5027.10						
	552.00	421059.7	217755.6	630015.3	4435.54						
	551.00	389951.6	153374.4	540926.0	3845.86						
	550.00	359975.4	97214.3	451099.7	3262.50						
	549.00	322449.4	59385.1	377833.4	2684.41						
	548.00	292835.2	27969.2	320018.4	2159.73						
	547.00	262545.9	13692.4	275539.3	1711.22						
	546.00	232651.4	6569.4	243219.8	1495.82						
	545.00	206597.9	4729.5	213236.3	1324.47						
	544.00	184476.4	2123.2	185599.5	1177.60						
	543.00	162112.1	734.6	162847.0	1049.85						
	542.00	140691.4	164.2	141955.6	939.02						
	541.00	120035.9	20.9	120656.8	845.00						
	540.00	102154.1	.0	102154.1	752.00						
	539.00	85797.8	.0	85797.8	674.00						
	538.00	70951.2	.0	70951.2	592.00						
	537.00	55741.3	.0	55741.3	512.00						
	536.00	44183.8	.0	44183.8	434.12						
	535.00	33014.2	.0	33014.2	358.25						
	534.00	23529.5	.0	23529.5	285.46						
	533.00	15596.7	.0	15596.7	215.98						
	532.00	9122.3	.0	9122.3	152.50						
	531.00	4223.5	.0	4223.5	89.20						
	530.00	1075.5	.0	1075.5	39.34						
	529.00	.0	.0	.0	.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 57100 00 5.42 555.82

SECTION (100)	DISTANCE				BRADAGE AREA SQ FT 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			BY VALUE BY SEGMENTS					
	CHANNEL 55	VALLEY 55	CHANNEL 50	VALLEY 172		NO. 1 50	NO. 2 105	NO. 3 100	NO. 4	NO. 5	NO. 6
	ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.						
	555.00	559787.8	2179355.8	3479143.8	15871.00						
	554.00	855555.1	1955555.8	2545554.8	15461.50						
	553.00	814452.1	1800549.8	2515062.8	14253.16						
	552.00	773148.1	1625522.8	2396171.8	13445.86						
	551.00	732495.4	1450874.8	2183359.8	12639.30						
	550.00	692798.5	1255841.8	1979730.8	11833.84						
	550.00	654049.9	1131760.8	1785850.8	11030.22						
	550.00	615954.2	982467.8	1598422.8	10227.82						
	557.00	579100.6	844555.6	1423667.8	9428.14						
	555.00	542955.8	712357.8	1255213.8	8629.78						
	555.00	507985.8	591582.8	1099308.8	7833.98						
	554.00	473658.8	479721.8	953350.1	7040.10						
	553.00	440142.4	373989.8	814151.8	6247.50						
	552.00	408175.1	284577.8	692775.4	5458.10						
	551.00	378008.9	201952.6	579761.5	4669.90						
	550.00	348340.8	129415.8	475756.1	3880.50						
	549.00	317908.8	74777.4	392081.2	3100.54						
	548.00	289148.8	35255.7	324835.8	2355.98						
	547.00	261882.8	12787.4	274589.4	1738.21						
	546.00	235822.6	12787.4	244539.9	1490.24						
	545.00	210915.6	8511.8	219426.8	1313.85						
	544.00	187117.8	4752.8	191895.1	1150.81						
	543.00	164431.7	2557.7	167009.6	1040.50						
	542.00	142988.2	1517.2	144540.6	931.59						
	541.00	122590.7	1072.6	123573.8	837.80						
	540.00	103570.8	695.8	104156.7	750.58						
	539.00	86984.8	382.8	87287.8	666.78						
	538.00	71495.6	178.2	71674.8	585.39						
	537.00	57328.8	80.4	57381.8	506.38						
	536.00	44589.8	11.8	44521.7	429.84						
	535.00	32888.8	.8	32883.8	355.58						
	534.00	22654.6	.8	22654.6	284.65						
	533.00	15735.8	.8	15735.8	217.25						
	532.00	9399.1	.8	9399.1	153.68						
	531.00	4253.8	.8	4253.8	93.90						
	530.00	1867.4	.8	1867.4	38.36						
	529.00	.8	.8	.8	.80						

CFS	VELOCITY	ELEV	CFS	VELOCITY	ELEV	CFS	VELOCITY	ELEV
37100.00	4.28	555.15						



SECTION 142.	DISTANCE		STATION=1286+63		W' VALUE BY SEGMENTS						
	DOWNSTREAM	UPSTREAM	CHANNEL	VALLEY	GRAINAGE	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
	106.	100	1.	1	AREA. 50 FT	600	600				
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA					
						SQ. FT.					
		555.00	1421428.0	1241164.0	2662592.0						14153.50
		554.00	1331111.0	1096537.0	2417648.0						13211.38
		553.00	1241772.0	935002.2	2176854.0						12269.82
		552.00	1155349.0	756516.2	1952659.0						11331.22
		551.00	1070207.0	671226.1	1745033.0						10395.82
		550.00	985207.0	586047.0	1552255.0						9459.73
		550.00	925324.3	518755.4	1444159.0						8552.00
		550.00	865504.7	500537.6	1332162.0						7527.55
		557.00	799618.3	445050.0	1244568.0						7291.00
		556.00	740544.0	359242.6	1116487.0						6522.11
		555.00	685515.0	301741.6	997056.6						6061.00
		554.00	632529.0	239322.5	871952.6						5498.51
		553.00	581707.7	186692.1	752399.0						4899.92
		552.00	535039.0	132335.6	637375.6						4323.04
		551.00	489912.1	82260.1	576172.1						3750.55
		550.00	447033.0	50005.1	497699.0						3184.65
		549.00	401035.2	27962.6	438997.7						2650.54
		548.00	355047.0	12256.6	365144.0						2193.40
		547.00	314496.1	2502.7	317429.1						1814.55
		546.00	274498.3	171.6	274669.0						1545.93
		545.00	239271.1	31.6	239302.7						1400.81
		544.00	209449.7	0	209449.7						1265.15
		543.00	183914.0	0	183914.0						1141.42
		542.00	160760.6	0	160760.6						1024.44
		541.00	139923.0	0	139923.0						915.20
		540.00	121526.0	0	121526.0						814.83
		539.00	101826.7	0	101826.7						720.33
		538.00	83759.0	0	83759.0						629.50
		537.00	67371.6	0	67371.6						542.33
		536.00	52753.1	0	52753.1						459.05
		535.00	39607.0	0	39607.0						379.34
		534.00	28627.6	0	28627.6						303.63
		533.00	19320.0	0	19320.0						232.79
		532.00	11630.0	0	11630.0						166.60
		531.00	5735.6	0	5735.6						105.40
		530.00	1755.1	0	1755.1						49.15
		529.00	0	0	0						0.00

OFS VELOCITY      ELEV.      OFS VELOCITY      ELEV.      OFS VELOCITY      ELEV.  
 37100.00      5.27      555.65

APPENDIX 3

EQUAL REDUCTION OF CONVEYANCE ANALYSIS



TITLE	WHITE ROCK CREEK AT WINWOOD AND CELESTIAL RD. - PROPOSED					
OSM-ELEV	36700.	559.70				
FINAL	142.					
XSECTION	135.	150.	165.		1.	
GENERAL	544.			1.	1.	
SEGMENT	1.	0	0.12	150.	545.	
SEGMENT	2.	C	0.06	295.	544.	
SEGMENT	3.	0	0.09	845.	550.	
DATA	0.	550.	140.	550.	190.	545.
DATA	190.	545.	200.	540.	207.	535.
DATA	221.	524.5	261.	524.5	260.	530.
DATA	287.	540.	295.	544.	295.	544.
DATA	375.	544.	305.	542.	400.	542.
DATA	412.	543.	500.	545.	600.	550.
DATA	845.	550.	845.	550.		
EXTABLE						
OSM	37100.					-1.
XSECTION	137.	363.	364.			1.
GENERAL	541.			1.	1.	
SEGMENT	1.	0	0.12	195.	544.	
SEGMENT	2.	C	0.06	305.	541.	
SEGMENT	3.	0	0.09	510.	543.	
SEGMENT	4.	0	0.04	900.	550.	
DATA	0.	550.	9.	555.	23.	535.
DATA	26.	531.	37.	531.	60.	540.
DATA	80.	544.	103.	545.	127.	545.
DATA	195.	544.	210.	540.	220.	525.5
DATA	250.	525.5				
DATA	270.	535.	285.	540.	305.	541.
DATA	305.	541.	335.	541.	385.	546.
DATA	420.	545.8	440.	545.8	465.	545.
DATA	510.	543.	610.	543.	710.	545.
DATA	817.	550.	900.	550.	900.	550.
EXTABLE						
XSECTION	138.	80.	110.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	0	0.045	220.	544.	
SEGMENT	2.	C	0.045	347.	545.	
SEGMENT	3.	0	0.09	675.	543.	
SEGMENT	4.	0	0.04	1050.	550.	
DATA	0.	550.	140.	555.74	170.29	547.84
DATA	200.	547.	220.	544.	228.	544.
DATA	230.	541.	240.	541.	244.	540.
DATA	250.	525.5	255.	525.5	310.	530.
DATA	320.	540.	335.	544.	347.	545.
DATA	347.	545.	425.	545.8	505.	545.8
DATA	530.	545.	675.	543.	675.	543.
DATA	775.	545.	865.	550.	1050.	550.
EXTABLE						
XSECTION	139A.	100.	150.			1.
GENERAL	543.8			1.	1.	
SEGMENT	1.	0	0.05	237.	544.3	
SEGMENT	2.	C	0.045	330.	543.8	
SEGMENT	3.	0	0.09	450.	545.8	
SEGMENT	4.	0	0.042	891.1	555.0	
DATA	0.	557.5	140.	555.60	162.2	545.00
DATA	200.	544.5				
DATA	237.	544.3	257.	525.4	274.	525.8
DATA	292.	525.6	330.	543.8	348.	544.1
DATA	397.	547.5	450.	545.8	491.	545.7
DATA	600.	545.1	700.	544.5	800.	545.7
DATA	891.	553.5	891.1	555.0		
EXTABLE						
XSECTION	135B.	442.	353.			1.
GENERAL	540.			1.	1.	

WSPJK. EQ1  
 Equal Reaction  
 n  
 Convergence

SEGMENT	1.	0	0.05	229.	541.2	
SEGMENT	2.	C	0.045	255.	543.2	
SEGMENT	3.	0	0.05	300.	540.4	
SEGMENT	4.	C	0.045	405.	545.9	
SEGMENT	5.	0	0.03	495.	545.2	
SEGMENT	5.	0	0.04	895.	559.5	
DATA	0.	555.	100.	550.3	200.	544.1
DATA	229.	541.2	247.	534.7	255.	543.2
DATA	280.	540.7	360.	540.4	324.	525.4
DATA	350.	525.0	460.	525.7	405.	545.9
DATA	495.	545.2	500.	544.7	700.	545.5
DATA	800.	551.	850.	555.4	875.	559.5
DATA	895.	559.5				
ENDTABLE						
XSECTION	140.	402.	430.			1. 1239+70
GENERAL	543.			1.	1.	
SEGMENT	1.	0	0.055	575.	545.	
SEGMENT	2.	C	0.040	570.	543.	
SEGMENT	3.	0	0.030	920.	555.	
DATA	-120.	555.				
DATA	-120.	550.	0.	555.	130.	548.
DATA	255.	545.			270.	544.
DATA	300.	545.	350.	547.	390.	547.
DATA	430.	547.	575.	545.	570.	540.
DATA	594.	530.	510.	520.	640.	520.
DATA	550.	540.	570.	543.	690.	542.
DATA	720.	550.	740.	554.	790.	550.
DATA	800.	562.	920.	555.		
ENDTABLE						
XSECTION	140A.	170.	157.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	0	0.04	357.	547.	
SEGMENT	2.	0	0.055	550.	545.	
SEGMENT	3.	C	0.04	640.	540.	
SEGMENT	4.	0	0.030	752.	557.	
DATA	0.	550.	155.	550.	220.	545.
DATA			283.	545.	302.	545.
DATA	357.	547.	442.	547.	550.	545.
DATA	553.	545.	557.	540.	570.	525.
DATA	553.	530.	550.	520.	625.	529.
DATA	530.	530.	541.	535.	640.	540.
DATA	551.	541.	552.	542.	655.	543.
DATA	555.	544.	552.	545.	690.	545.
DATA	710.	550.	729.	555.	735.	555.
DATA	752.	557.				
ENDTABLE						
XSECTION	140B.	55.	102.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	0	0.04	389.	547.	
SEGMENT	2.	0	0.055	600.	540.	
SEGMENT	3.	C	0.045	685.	540.	
SEGMENT	4.	0	0.03	809.	551.	
DATA	0.	550.	185.	550.	270.	545.
DATA					331.	545.
DATA	389.	547.	518.	547.	545.	545.
DATA	585.	545.	595.	544.	597.	543.
DATA	590.	542.	605.	541.	600.	540.
DATA	553.	529.	570.	530.	620.	535.
DATA	535.	540.	593.	545.	732.	545.
DATA	742.	547.	750.	548.	750.	549.
DATA	752.	550.	775.	555.	790.	550.
DATA	809.	551.				
ENDTABLE						
XSECTION	140C.	55.	55.			1.
GENERAL	540.			1.	1.	
SEGMENT	1	0	0.04	389	547	

SEGMENT	2.	D.	0.065	675.	540.	
SEGMENT	3.	C.	0.045	765.	545.	
SEGMENT	4.	D.	0.00	812.	565.	
DATA	0.0	560.	175.	550.	214.	547.
DATA	369.	547.	445.	548.	535.	548.
DATA	565.	547.	600.	545.	607.	545.
DATA	625.	544.	645.	543.	655.	542.
DATA	672.	541.	675.	540.	682.	535.
DATA	697.	539.	720.	529.	743.	529.
DATA	750.	538.	757.	535.	760.	540.
DATA	765.	545.	767.	545.	770.	547.
DATA	782.	548.	785.	549.	786.	550.
DATA	795.	555.	805.	560.	812.	555.

ENTABLE

XSECTION	1400.	80.	172.			1.
GENERAL	535.			1.	1.	
SEGMENT	1.	D.	0.06	692.	535.	
SEGMENT	2.	C.	0.045	760.	540.	
SEGMENT	3.	D.	0.00	810.	565.	
DATA	0.	547.	228.	547.	414.	547.
DATA	445.	548.	535.	548.	565.	547.
DATA	600.	545.	605.	545.	625.	544.
DATA	645.	543.	665.	542.	671.	541.
DATA	675.	540.	692.	535.	695.	530.
DATA	720.	529.	742.	529.	749.	530.
DATA	755.	535.	760.	540.	763.	545.
DATA	765.	545.	776.	547.	780.	548.
DATA	782.	549.	785.	550.	795.	555.
DATA	805.	560.	810.	565.		

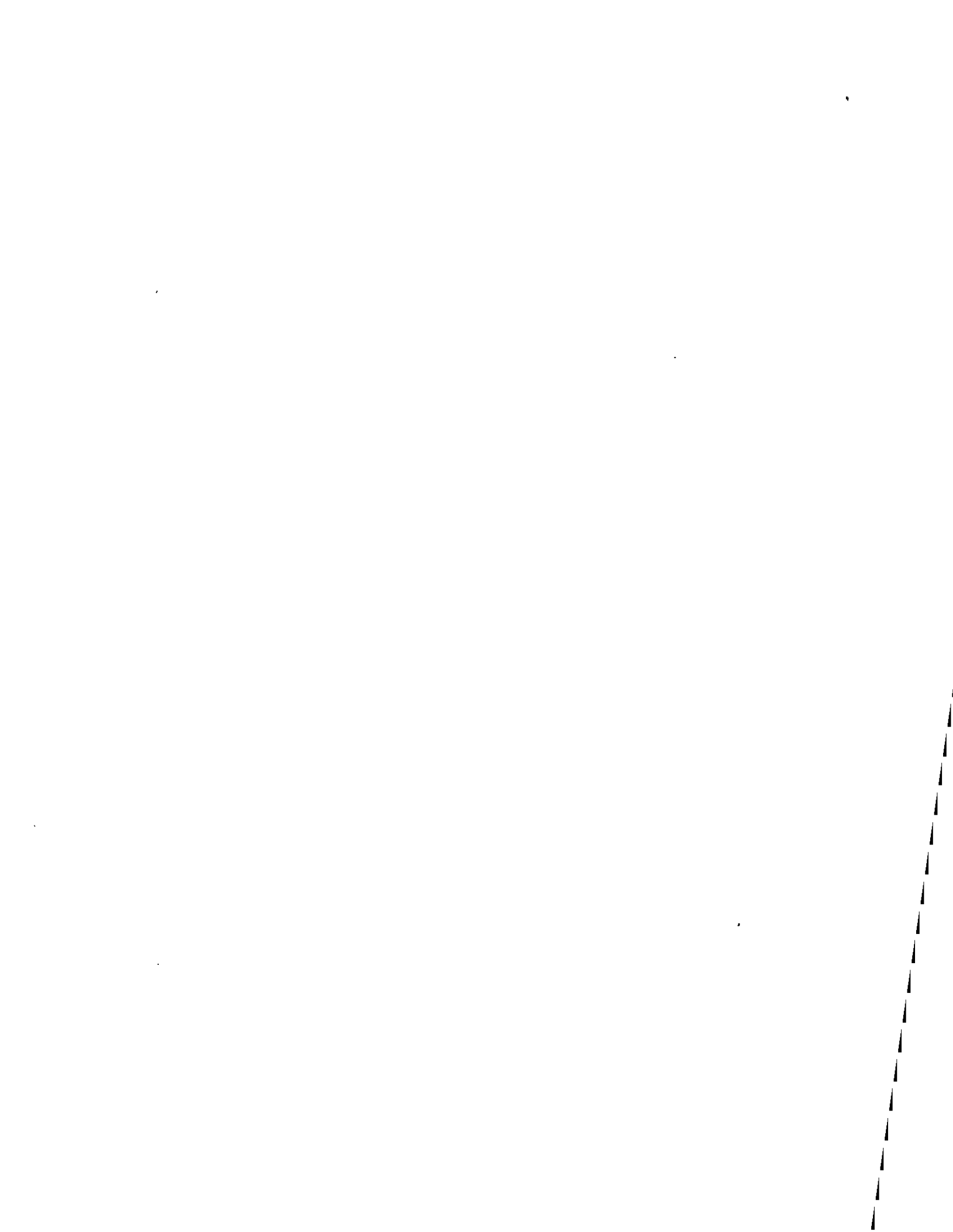
ENTABLE

XSECTION	141.	105.	100.			1.	1277+16
GENERAL	545.			1.	1.		
SEGMENT	1.	C	0.06	730.	545.		
SEGMENT	2.	D	0.045	850.	565.		
DATA	0.	565.	0.	560.	10.	559.	
DATA	300.	560.	325.	547.	450.	548.	
DATA	605.	548.	650.	545.	730.	545.	
DATA	736.	545.	757.	530.	775.	530.	
DATA	780.	529.	800.	525.	805.	530.	
DATA	850.	565.					

ENTABLE

XSECTION	142.	1.	1.			1.	1280+63
GENERAL	545.			1.	1.		
SEGMENT	1.	D	0.06	754.	545.		
SEGMENT	2.	C	0.04	944.	565.		
DATA	0.	565.	0.	560.	40.	558.	
DATA	300.	560.	325.	547.	390.	547.	
DATA	500.	549.	570.	549.	590.	547.	
DATA	650.	545.	712.	545.	734.	545.	
DATA	765.	548.	783.	530.	790.	529.	
DATA	834.	529.	852.	535.	890.	550.	
DATA	934.	560.	944.	565.			

ENTABLE



SECTION 155.	DISTANCE		DRAINAGE		STATION=							
	DOWNSTREAM CHANNEL 1.	VALLEY 1.	UPSTREAM CHANNEL 155.	VALLEY 155.	AREA SQ MI 1.00	NO. 1 .120	NO. 2 .060	NO. 3 .090	NO. 4	NO. 5	NO. 6	
					RD VALUES		END AREA					
		ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.						
		560.00	645849.3	644471.6	1253321.0	11031.25						
		559.00	611689.6	568353.0	1120043.0	10206.00						
		558.00	575498.9	498043.4	1073542.0	9413.99						
		557.00	539723.7	438221.0	969945.5	8636.09						
		556.00	505426.2	378733.6	876159.8	7907.60						
		555.00	471451.0	319056.3	784517.3	7190.09						
		554.00	439009.7	263347.0	702355.7	6521.99						
		553.00	407047.3	210040.0	629067.3	5969.45						
		552.00	376225.4	174338.8	560654.3	5453.20						
		551.00	346505.6	137711.4	494217.0	4971.11						
		550.00	317419.8	100958.4	421418.2	4509.50						
		549.00	289799.1	76948.5	365738.6	4089.50						
		548.00	262993.8	53281.3	316275.2	3694.50						
		547.00	237000.9	32996.9	270027.9	3323.50						
		546.00	212519.0	18402.8	230921.0	2993.00						
		545.00	189889.6	7996.0	197795.6	2736.19						
		544.00	169199.4	1549.5	170749.9	2434.55						
		543.00	153206.9	526.9	150733.8	2199.22						
		542.00	138285.2	110.1	136336.2	1945.23						
		541.00	124246.1	.0	124246.1	1744.67						
		540.00	111196.8	.0	111196.8	1597.91						
		539.00	98155.3	.0	98155.3	1475.25						
		538.00	85922.6	.0	85922.6	1375.51						
		537.00	74459.8	.0	74459.8	1293.37						
		536.00	63758.1	.0	63758.1	1224.69						
		535.00	53938.9	.0	53938.9	1167.87						
		534.00	45021.4	.0	45021.4	1120.82						
		533.00	36962.4	.0	36962.4	1081.37						
		532.00	29663.4	.0	29663.4	1047.79						
		531.00	23157.5	.0	23157.5	1018.40						
		530.00	17444.5	.0	17444.5	992.51						
		529.00	12409.9	.0	12409.9	969.50						
		528.00	8105.4	.0	8105.4	949.03						
		527.00	4610.5	.0	4610.5	930.21						
		526.00	1956.1	.0	1956.1	912.97						
		525.00	319.0	.0	319.0	897.34						
		524.50	.0	.0	.0	890.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 36700.00 5.81 553.70

SECTION 137.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'W' VALUE BY SEGMENTS					
	CHANNEL 158.	VALLEY 185.	CHANNEL 363.	VALLEY 354.		NO. 1 .120	NO. 2 .060	NO. 3 .050	NO. 4 .040	NO. 5	NO. 6
	ELEVATION		ELEVATION		WD VALUES		END AREA				
	CHANNEL		VALLEY		TOTAL		SQ. FT.				
	550.00	563410.6	1395065.0	1959285.0	14617.00						
	559.00	527524.6	1240065.0	1762461.0	13653.02						
	558.00	492054.7	1068997.0	1561052.0	12694.74						
	557.00	458118.0	952952.4	1411000.0	11765.78						
	556.00	424540.2	820330.6	1244531.0	10643.32						
	555.00	392598.5	705159.0	1055758.0	9950.05						
	554.00	361186.4	596636.1	951822.5	9065.57						
	553.00	331009.9	489095.0	820105.0	8201.57						
	552.00	302030.9	397948.4	699979.3	7356.61						
	551.00	273741.3	312780.3	585521.6	6522.57						
	550.00	247039.0	241345.9	486324.8	5713.36						
	549.00	221248.5	177893.8	395142.4	4920.88						
	548.00	196370.1	122424.1	318794.2	4145.11						
	547.00	173086.6	81107.5	254194.1	3406.20						
	546.00	150839.5	49878.5	199717.9	2736.49						
	545.00	129795.4	26172.1	155877.5	2125.58						
	544.00	110856.6	21535.0	132391.6	1710.07						
	543.00	95241.1	17099.9	112340.0	1425.08						
	542.00	81520.3	13151.0	94672.1	1209.55						
	541.00	69669.4	10220.1	79297.5	1026.97						
	540.00	60023.7	8359.7	66683.4	905.21						
	539.00	50600.1	6575.9	57256.0	800.66						
	538.00	42898.1	5013.2	49911.3	703.86						
	537.00	35777.7	3670.9	43448.6	613.37						
	536.00	29390.6	2568.4	36959.1	530.18						
	535.00	23494.3	1679.4	30173.7	453.81						
	534.00	17837.9	990.2	23828.1	383.45						
	533.00	12495.3	478.8	17974.1	317.99						
	532.00	17556.8	146.0	17802.9	257.64						
	531.00	13344.6	2.6	13347.1	203.39						
	530.00	9555.5	.0	9555.5	161.72						
	529.00	6288.9	.0	6288.9	122.72						
	528.00	3605.7	.0	3605.7	85.49						
	527.00	1550.8	.0	1550.8	49.99						
	526.00	253.9	.0	253.9	16.23						
	525.50	.0	.0	.0	.00						
	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.		
	37100.00	3.96	554.36								

SECTION 100.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'M' VALUE BY SEGMENTS					
	CHANNEL 363.	VALLEY 354.	CHANNEL 80.	VALLEY 110.		NO. 1 .045	NO. 2 .045	NO. 3 .050	NO. 4 .040	NO. 5	NO. 6
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.					
		550.00	819043.0	1275435.0	2095279.0	12955.68					
		559.00	766986.2	1119547.0	1880633.0	11932.83					
		558.00	715993.4	971544.9	1687538.0	10974.40					
		557.00	665470.9	834060.7	1499532.0	10031.85					
		555.00	617316.0	718464.6	1335781.0	9167.88					
		555.00	569526.6	605369.2	1175296.0	8318.75					
		554.00	524323.4	498189.3	1022433.0	7504.25					
		553.00	480448.7	402282.0	882730.6	6712.53					
		552.00	437568.7	312972.3	750541.0	5953.82					
		551.00	396976.0	238229.7	635206.4	5184.40					
		550.00	357637.0	172146.2	529843.2	4452.28					
		549.00	319729.4	114722.0	434451.4	3737.47					
		548.00	284052.0	72091.3	356143.3	3058.32					
		547.00	249859.7	39652.4	289512.1	2427.64					
		546.00	217125.6	16992.2	234117.8	1858.99					
		545.00	185440.3	5407.1	191847.4	1448.88					
		544.00	158057.3	1757.0	159814.2	1210.16					
		543.00	149034.5	25.3	149059.8	1032.87					
		542.00	130137.2	.0	130137.2	928.91					
		541.00	119134.7	.0	119134.7	833.88					
		540.00	106529.2	.0	106529.2	753.83					
		539.00	92803.1	.0	92803.1	678.63					
		538.00	79257.1	.0	79257.1	606.65					
		537.00	66817.8	.0	66817.8	537.60					
		536.00	55417.3	.0	55417.3	471.32					
		535.00	45043.4	.0	45043.4	407.82					
		534.00	35635.6	.0	35635.6	345.96					
		533.00	27252.9	.0	27252.9	288.90					
		532.00	19924.8	.0	19924.8	233.74					
		531.00	13633.9	.0	13633.9	181.37					
		530.00	8395.8	.0	8395.8	131.78					
		529.00	4568.0	.0	4568.0	85.68					
		528.00	1869.2	.0	1869.2	47.41					
		527.00	292.0	.0	292.0	14.29					
		525.50	.0	.0	.0	.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.58	554.72						

SECTION 1584	DISTANCE					STATION=					
	DOWNSTREAM		UPSTREAM		DRAINAGE AREA, SQ MI 1.00	'K' VALUE BY SEGMENTS					
	CHANNEL 00.	VALLEY 110.	CHANNEL 100.	VALLEY 150.		NO. 1 .050	NO. 2 .045	NO. 3 .050	NO. 4 .042	NO. 5	NO. 6
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.					
		558.00	659463.4	1169451.0	1822914.0	19004.83					
		557.00	618331.3	1014369.0	1632701.0	9442.81					
		556.00	577942.8	869498.5	1447441.0	8621.06					
		555.00	528669.8	759942.6	1278612.0	7859.71					
		554.00	500532.6	613522.1	1114061.0	7108.29					
		553.00	463168.9	499192.1	962361.0	6363.49					
		552.00	427636.2	387433.2	815069.4	5639.73					
		551.00	392058.0	292975.9	685033.9	4926.03					
		550.00	359211.3	209470.2	568681.5	4227.41					
		549.00	327116.9	141468.8	468585.8	3548.90					
		548.00	295785.5	81614.4	377399.9	2883.29					
		547.00	265953.3	38241.1	304794.4	2249.18					
		546.00	237554.7	15027.8	252582.5	1727.06					
		545.00	210439.6	2561.6	213001.2	1345.67					
		544.00	184669.5	4.3	184672.7	1133.35					
		543.00	164371.4	.0	164371.4	1041.28					
		542.00	145729.8	.0	145729.8	953.23					
		541.00	128285.7	.0	128285.7	868.38					
		540.00	112814.6	.0	112814.6	786.71					
		539.00	98351.8	.0	98351.8	708.24					
		538.00	83164.0	.0	83164.0	633.77					
		537.00	70431.4	.0	70431.4	562.22					
		536.00	58829.1	.0	58829.1	494.06					
		535.00	48307.6	.0	48307.6	429.23					
		534.00	38841.6	.0	38841.6	367.73					
		533.00	30326.7	.0	30326.7	309.28					
		532.00	22965.9	.0	22965.9	254.63					
		531.00	16558.7	.0	16558.7	203.17					
		530.00	11044.7	.0	11044.7	154.71					
		529.00	6540.9	.0	6540.9	109.97					
		528.00	3200.3	.0	3200.3	60.36					
		527.00	866.7	.0	866.7	30.00					
		526.00	7.2	.0	7.2	1.62					
		525.00	.0	.0	.0	.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.82	554.79						



SECTION 1385	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION-					
	DOWNSTREAM		UPSTREAM			'M' VALUE BY SEGMENTS					
	CHANNEL 100.	VALLEY 150.	CHANNEL 442.	VALLEY 358.		NO. 1 .050	NO. 2 .045	NO. 3 .050	NO. 4 .045	NO. 5 .050	NO. 6 .040
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.					
		560.00	1179515.0	1504502.0	2678017.0	13137.25					
		559.00	1100095.0	1324799.0	2433694.0	12311.90					
		558.00	1044445.0	1147362.0	2191807.0	11429.84					
		557.00	982264.2	978995.9	1961261.0	10550.93					
		556.00	921245.4	821106.9	1742353.0	9696.42					
		555.00	861973.0	675327.5	1530901.0	8838.49					
		554.00	804399.5	555341.7	1359730.0	8007.72					
		553.00	747930.2	444153.0	1192083.0	7195.07					
		552.00	694191.3	352356.6	1046548.0	6438.29					
		551.00	641570.6	268777.1	910347.8	5705.22					
		550.00	590627.0	197522.0	788149.0	5007.76					
		549.00	541987.9	140509.5	682497.5	4360.59					
		548.00	494482.9	90313.6	584796.6	3737.51					
		547.00	449200.9	55138.9	504347.8	3160.45					
		546.00	406659.1	29322.4	435981.4	2647.07					
		545.00	366319.8	14200.2	380599.0	2244.72					
		544.00	328271.2	7560.8	335660.0	1905.82					
		543.00	293032.8	3905.1	296939.0	1709.74					
		542.00	259458.5	1416.0	260874.5	1607.60					
		541.00	228205.9	306.0	228512.8	1444.15					
		540.00	199443.6	.0	199443.6	1299.10					
		539.00	174481.6	.0	174481.6	1173.86					
		538.00	151518.4	.0	151518.4	1056.16					
		537.00	130061.2	.0	130061.2	944.50					
		536.00	110340.6	.0	110340.6	839.83					
		535.00	92164.1	.0	92164.1	742.00					
		534.00	75427.7	.0	75427.7	649.51					
		533.00	59875.7	.0	59875.7	559.40					
		532.00	46161.4	.0	46161.4	471.55					
		531.00	33797.7	.0	33797.7	385.60					
		530.00	22865.5	.0	22865.5	301.43					
		529.00	13864.0	.0	13864.0	219.46					
		528.00	6674.1	.0	6674.1	139.35					
		527.00	1727.3	.0	1727.3	61.22					
		526.00	14.1	.0	14.1	1.98					
		525.00	.0	.0	.0	.00					

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 4.22 554.95

SECTION 100	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=1253+70 'N' VALUE BY SEGMENTS					
	DOWNSTREAM		UPSTREAM			NO. 1 .065	NO. 2 .040	NO. 3 .060	NO. 4	NO. 5	NO. 6
	CHANNEL 442	VALLEY 359	CHANNEL 402	VALLEY 430							
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.					
		565.00	1095691.0	1755675.0	2841366.0	16313.50					
		564.00	1090339.0	1568785.0	2599124.0	15260.17					
		563.00	975622.6	1394842.0	2371465.0	14265.50					
		562.00	923333.6	1224922.0	2148255.0	13255.94					
		561.00	871755.4	1071009.0	1942845.0	12272.79					
		560.00	821050.6	930459.4	1751520.0	11310.03					
		559.00	771655.8	809656.0	1581322.0	10379.34					
		558.00	723901.1	700559.3	1424160.0	9495.64					
		557.00	676439.6	599251.3	1275691.0	8643.79					
		556.00	631004.6	500919.3	1139924.0	7842.18					
		555.00	586417.4	423489.1	1009906.0	7064.12					
		554.00	543494.2	346682.7	890176.9	6329.82					
		553.00	501850.1	276226.1	778076.1	5620.21					
		552.00	461058.7	210002.4	671061.1	4927.07					
		551.00	422456.4	156326.2	578782.6	4271.64					
		550.00	384698.0	107446.0	492144.0	3630.18					
		549.00	348205.3	65759.0	413954.3	3009.66					
		548.00	313738.7	36475.3	350214.0	2421.78					
		547.00	280524.7	17069.9	297594.6	1909.28					
		546.00	248622.0	6110.9	254733.7	1494.52					
		545.00	218929.1	2591.7	221220.7	1263.76					
		544.00	191264.5	965.9	192200.3	1120.20					
		543.00	165324.5	130.3	165462.9	996.59					
		542.00	140827.0	8.0	145835.0	885.20					
		541.00	127550.0	.0	127550.0	806.76					
		540.00	110771.5	.0	110771.5	724.00					
		539.00	94192.3	.0	94192.3	645.55					
		538.00	78950.2	.0	78950.2	570.20					
		537.00	65026.1	.0	65026.1	497.95					
		536.00	52404.0	.0	52404.0	428.80					
		535.00	41148.9	.0	41148.9	362.94					
		534.00	31126.5	.0	31126.5	300.06					
		533.00	22340.0	.0	22340.0	240.14					
		532.00	14857.3	.0	14857.3	183.32					
		531.00	8687.4	.0	8687.4	129.55					
		530.00	3995.7	.0	3995.7	79.00					
		529.00	1209.5	.0	1209.5	34.94					
		528.00	.0	.0	.0	.00					
		CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	
		37100.00	5.15	555.19							

SECTION 140A.	DISTANCE				DRAINAGE AREA SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'W' VALUE BY SEGMENTS					
	CHANNEL 402.	VALLEY 430.	CHANNEL 170.	VALLEY 157.		NO. 1 040	NO. 2 065	NO. 3 040	NO. 4 060	NO. 5	NO. 6
ELEVATION	NO VALUES		NO VALUES		END AREA SQ. FT.						
	CHANNEL	VALLEY	CHANNEL	VALLEY	TOTAL						
560.00	782301.3	925090.5			1708592.0	8746.00					
559.00	736433.0	814660.6			1551054.0	8152.73					
558.00	691063.0	705035.5			1397100.0	7551.36					
557.00	647251.5	600959.4			1256221.0	6978.61					
556.00	604228.2	516913.4			1121142.0	6402.78					
555.00	562700.1	433442.0			996145.9	5946.07					
554.00	522335.4	355624.2			878159.5	5529.84					
553.00	482739.4	282107.1			764846.5	5155.27					
552.00	445120.0	219639.5			664800.3	4825.71					
551.00	408352.9	161771.3			570024.3	4501.03					
550.00	372546.0	110551.7			483107.6	4183.67					
549.00	338551.3	70713.7			409369.9	3877.03					
548.00	305990.2	36671.2			344551.4	3579.00					
547.00	274395.3	15245.5			289641.0	3291.10					
546.00	245059.0	5521.4			250500.3	3016.27					
545.00	220993.6	776.1			221369.7	2754.00					
544.00	195782.7	444.3			196227.0	2506.97					
543.00	171949.2	267.0			172216.2	2273.60					
542.00	149300.8	100.9			149409.7	2054.81					
541.00	127889.9	15.9			127906.0	1859.90					
540.00	107913.2	.0			107913.2	1676.00					
539.00	90581.3	.0			90581.3	1506.00					
538.00	74536.6	.0			74536.6	1350.00					
537.00	59811.9	.0			59811.9	1208.00					
536.00	46528.4	.0			46528.4	1078.12					
535.00	34740.0	.0			34740.0	956.27					
534.00	24846.9	.0			24846.9	842.69					
533.00	16633.9	.0			16633.9	736.79					
532.00	9925.5	.0			9925.5	638.60					
531.00	4832.6	.0			4832.6	548.40					
530.00	1438.0	.0			1438.0	464.17					
529.00	.0	.0			.0	386.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	6.00	555.55						

SECTION 1408	DISTANCE		STATION=									
	DOWNSTREAM		UPSTREAM		DRAINAGE		'W' VALUE BY SEGMENTS					
	CHANNEL 170	VALLEY 167	CHANNEL 55	VALLEY 102	AREA, SQ FT 1.00	NO. 1 040	NO. 2 065	NO. 3 045	NO. 4 000	NO. 5	NO. 6	
	ELEVATION		RD VALUES		TOTAL	END AREA SQ. FT.						
		561.00	585858.0	906730.6	1492590.0							9252.50
		550.00	550100.1	879754.6	1429945.0							8509.37
		559.00	515382.0	804065.1	1326240.0							7856.74
		550.00	481173.2	696006.6	1179100.0							7354.44
		557.00	448209.9	600355.1	1048595.0							6684.30
		556.00	415833.4	507175.6	923110.0							6110.25
		555.00	384857.4	422692.1	807539.5							5547.59
		554.00	354727.9	344705.1	699439.1							4992.74
		553.00	325229.5	271073.0	596300.3							4443.10
		552.00	297351.0	209037.5	506389.3							3905.94
		551.00	270099.5	151590.6	421650.1							3373.46
		550.00	243784.9	101027.0	344811.9							2840.00
		549.00	218972.7	62704.6	281677.3							2337.00
		548.00	195090.2	32194.4	227284.6							1899.36
		547.00	172140.1	10662.6	182610.7							1505.42
		546.00	150400.3	4209.1	154697.4							1078.14
		545.00	129868.0	2278.7	132147.5							906.00
		544.00	110839.2	1375.5	112200.7							804.17
		543.00	92811.7	692.0	93504.5							700.00
		542.00	76037.3	224.2	76261.5							610.33
		541.00	60553.0	29.2	60583.0							532.00
		540.00	46625.9	.0	46625.9							450.50
		539.00	36623.4	.0	36623.4							379.43
		538.00	27971.0	.0	27971.0							311.21
		537.00	20602.9	.0	20602.9							240.85
		536.00	14516.3	.0	14516.3							192.69
		535.00	9573.9	.0	9573.9							142.24
		534.00	5837.9	.0	5837.9							98.47
		533.00	3195.0	.0	3195.0							62.66
		532.00	1450.5	.0	1450.5							34.75
		531.00	483.3	.0	483.3							15.21
		530.00	81.0	.0	81.0							3.88
		529.00	.0	.0	.0							.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	6.20	555.78						

SECTION 1400.	DISTANCE					STATION=					
	DOWNSTREAM		UPSTREAM		DRAINAGE	'W' VALUE BY SEGMENTS					
	CHANNEL 55.	VALLEY 102.	CHANNEL 55.	VALLEY 65.	AREA, SQ FT 1.00	NO. 1 .040	NO. 2 .065	NO. 3 .045	NO. 4 .080	NO. 5	NO. 6
	ELEVATION		NO VALUES		TOTAL	END AREA SQ. FT.					
	555.00	960442.9	1739970.0	27000413.0	13357.50						
	564.00	913220.9	1546563.0	2459084.0	12545.75						
	563.00	866352.2	1357051.0	2223414.0	11736.52						
	562.00	820036.8	1182279.0	2003175.0	10929.39						
	561.00	776152.1	1032222.0	1828304.0	10135.71						
	560.00	732508.2	989244.8	1721753.0	9379.06						
	559.00	689958.2	891818.7	1581777.0	8689.30						
	558.00	648144.2	771424.3	1419569.0	8065.60						
	557.00	607750.3	650918.1	1260668.0	7449.19						
	556.00	568052.9	555299.0	1123352.0	6835.70						
	555.00	529721.7	459338.7	969060.4	6228.69						
	554.00	492438.4	370954.2	853392.6	5625.34						
	553.00	455853.8	287629.7	743474.6	5027.19						
	552.00	421058.7	217755.6	638815.3	4435.54						
	551.00	386951.6	153374.4	540325.0	3845.86						
	550.00	353875.4	97214.3	451090.7	3262.50						
	549.00	322448.4	55395.1	377633.4	2684.41						
	548.00	292035.2	27583.2	320018.4	2153.73						
	547.00	262546.9	12892.4	275539.3	1711.22						
	546.00	234651.4	8569.4	243219.8	1495.02						
	545.00	208597.8	4729.5	213236.3	1324.47						
	544.00	184475.4	2123.2	186599.5	1177.60						
	543.00	162112.4	734.5	162847.0	1048.86						
	542.00	140891.4	164.2	141855.6	939.02						
	541.00	120835.9	20.9	120855.8	845.00						
	540.00	102154.1	.0	102154.1	758.00						
	539.00	85797.8	.0	85797.8	674.00						
	538.00	70651.2	.0	70651.2	592.00						
	537.00	56741.3	.0	56741.3	512.00						
	536.00	44183.8	.0	44183.8	434.12						
	535.00	33014.2	.0	33014.2	358.26						
	534.00	23529.5	.0	23529.5	285.46						
	533.00	15506.7	.0	15506.7	216.98						
	532.00	9122.3	.0	9122.3	152.80						
	531.00	4223.5	.0	4223.5	93.20						
	530.00	1075.6	.0	1075.6	38.34						
	529.00	.0	.0	.0	.00						

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	5.42	555.82						

SECTION 1400.	DISTANCE		DRAINAGE		STATION=							
	DOWNSTREAM CHANNEL 55.	W/LEY 65.	UPSTREAM CHANNEL 80.	W/LEY 172.	AREA, SQ MI 1.00	'N' VALUE BY SEGMENTS						
					NO. 1 NO. 2 NO. 3 NO. 4 NO. 5 NO. 6							
					.050 .045 .030							
					END AREA							
					SQ. FT.							
					NO VALUES							
					TOTAL							
					ELEVATION							
			CHANNEL	VALLEY								
			899787.0	2179355.0								15971.00
			856955.1	1959699.0								15861.90
			814432.1	1800649.0								14253.16
			779148.1	1623022.0								13445.85
			732495.4	1450074.0								12639.30
			692789.6	1286941.0								11833.84
			654049.9	1131788.0								11030.22
			615954.2	982467.9								10227.82
			579180.6	844956.6								9428.14
			542856.0	712357.3								8629.78
			507885.0	591582.8								7833.98
			473658.8	479721.3								7048.10
			440142.4	373989.3								6247.58
			408175.1	284500.3								5458.18
			376988.9	201952.6								4669.90
			346340.3	129415.8								3883.50
			317383.8	74777.4								3108.54
			289148.3	35686.7								2358.98
			261882.0	12707.4								1738.21
			235822.5	12707.4								1490.24
			210915.5	8511.3								1313.85
			187117.8	4768.3								1168.01
			164431.7	2657.7								1040.58
			142883.2	1617.2								931.58
			122500.7	1072.5								837.80
			103500.8	695.9								759.58
			86904.0	383.8								665.78
			71495.5	178.2								585.30
			57320.8	68.4								506.30
			44509.8	11.8								429.84
			32993.8	.0								355.50
			23664.6	.0								284.63
			15735.0	.0								217.25
			9289.1	.0								152.68
			4253.8	.0								93.90
			1867.4	.0								38.36
			.0	.0								.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.20	556.26						

SECTION	DISTANCE		UPSTREAM		DRAINAGE AREA, SQ MI	STATION=1277+16					
	DOWNSTREAM CHANNEL	VALLEY	CHANNEL	VALLEY		'N' VALUE BY SEGMENTS					
141.	89.	172.	106.	100.	1.00	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
						.060	.045				
		ELEVATION	NO VALUES		TOTAL	END AREA					
			CHANNEL	VALLEY		SQ. FT.					
		565.00	1201515.0	857209.6	2958744.0						12282.00
		564.00	1049494.0	811310.1	1860604.0						11433.16
		563.00	900649.1	765826.1	1666475.0						10554.78
		562.00	764510.4	722079.5	1486590.0						9739.25
		561.00	649336.9	679200.7	1328539.0						8998.01
		560.00	565600.1	637623.5	1203232.0						8267.22
		559.00	523359.8	597348.0	1120709.0						7593.26
		558.00	500769.1	557940.4	1066709.0						6923.86
		557.00	444642.6	520174.4	965917.0						6282.82
		556.00	369989.2	483206.3	853095.4						5749.91
		555.00	302161.3	447787.4	749942.8						5221.89
		554.00	240007.4	413535.7	653563.1						4695.36
		553.00	181676.6	380062.1	561739.7						4171.69
		552.00	133449.3	349545.9	481995.2						3653.14
		551.00	89443.2	317769.8	407213.0						3136.63
		550.00	51769.2	286103.6	339871.8						2622.80
		549.00	25525.1	250101.3	285706.4						2113.56
		548.00	9695.9	233318.3	243004.2						1678.33
		547.00	2197.7	207721.6	209919.3						1333.98
		546.00	366.3	184365.3	184731.6						1155.75
		545.00	.0	167255.2	167255.2						1047.14
		544.00	.0	148346.8	148346.8						960.68
		543.00	.0	130071.3	130071.3						876.37
		542.00	.0	113505.6	113505.6						794.64
		541.00	.0	97737.6	97737.6						715.49
		540.00	.0	83211.8	83211.8						639.29
		539.00	.0	69904.3	69904.3						565.77
		538.00	.0	57507.3	57507.3						494.94
		537.00	.0	46316.3	46316.3						426.80
		536.00	.0	36290.4	36290.4						361.50
		535.00	.0	27350.4	27350.4						296.73
		534.00	.0	19407.7	19407.7						228.65
		533.00	.0	12796.9	12796.9						181.19
		532.00	.0	7275.4	7275.4						126.37
		531.00	.0	3133.8	3133.8						74.34
		530.00	.0	700.6	700.6						26.93
		529.00	.0	.0	.0						.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	6.30	556.26						

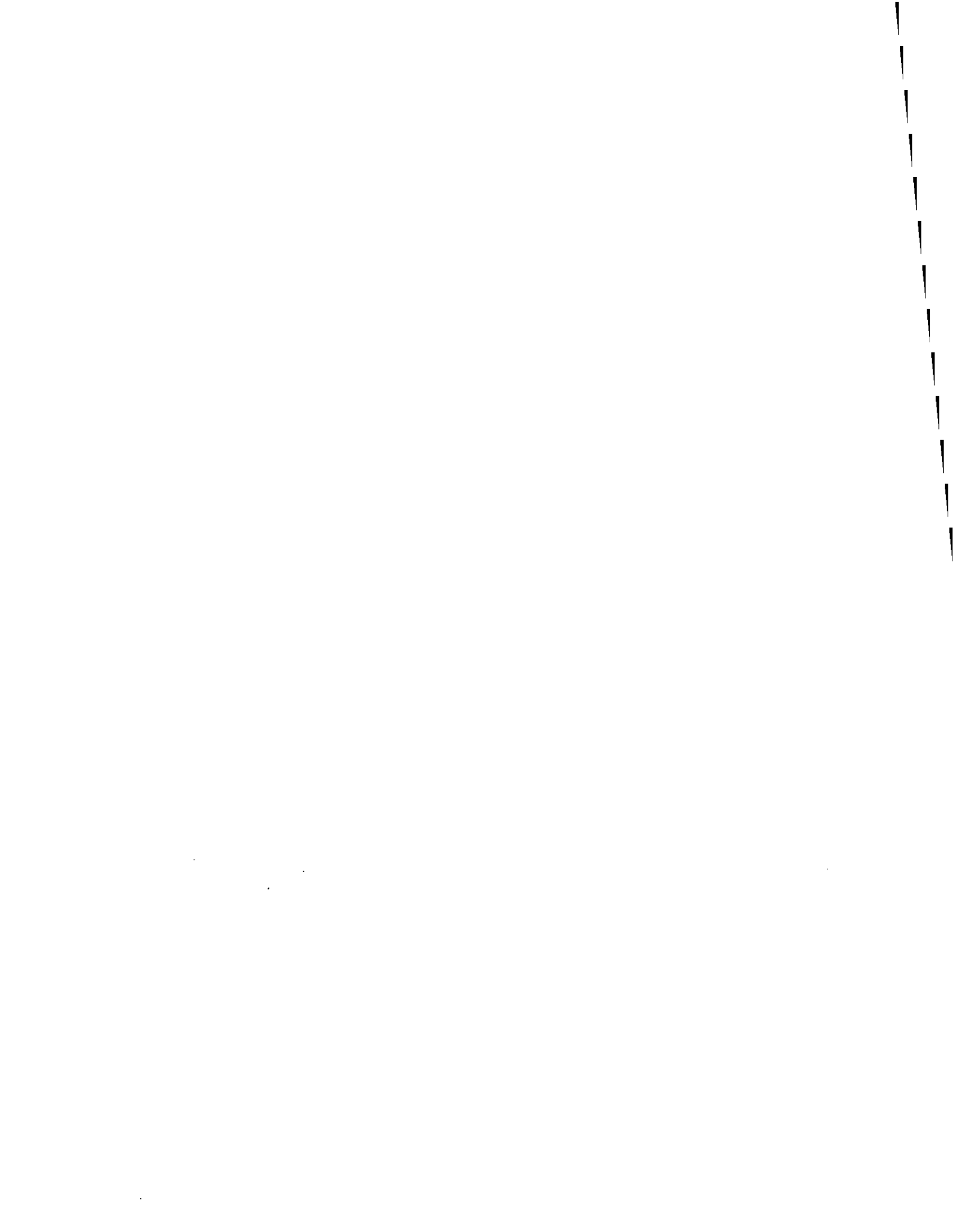
STATION	DISTANCE		DRAINAGE		'N' VALUE BY SEGMENTS						
	DOWNSTREAM	UPSTREAM	CHANNEL	VALLEY	AREA SQ FT	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
	105.	100.	1.	1.	1.00	.050	.250				
	ELEVATION		K0 VALUES		TOTAL	END AREA					
	CHANNEL	VALLEY	CHANNEL	VALLEY	SQ. FT.						
565.00	1421428.0	1241164.0	2862592.0	14153.50							
564.00	1331111.0	1082537.0	2417548.0	13211.30							
563.00	1241772.0	935062.2	2176854.0	12259.82							
562.00	1156343.0	795516.2	1992659.0	11331.22							
561.00	1073007.0	671226.1	1745039.0	10396.82							
560.00	995607.9	565547.8	1562255.0	9459.73							
559.00	925394.3	518755.4	1444150.0	8558.80							
558.00	860504.7	508557.6	1369162.0	7927.65							
557.00	799618.3	445850.8	1244669.0	7251.80							
556.00	740544.0	369842.6	1110487.0	6682.11							
555.00	685315.0	301741.6	987056.6	6081.80							
554.00	632629.9	238322.6	871952.6	5488.51							
553.00	581707.7	180692.1	762399.8	4939.92							
552.00	535009.9	132335.6	667376.6	4323.04							
551.00	489912.1	88260.1	578172.1	3750.55							
550.00	447093.0	50605.1	497699.0	3184.65							
549.00	401035.2	27962.5	428997.7	2650.54							
548.00	356847.8	12296.5	369144.3	2130.40							
547.00	314496.4	2932.7	317429.1	1814.95							
546.00	274498.3	171.5	274669.8	1545.93							
545.00	238271.1	31.5	238302.7	1400.31							
544.00	209449.7	.0	209449.7	1266.15							
543.00	183914.3	.0	183914.3	1141.42							
542.00	160789.5	.0	160789.5	1024.44							
541.00	139923.3	.0	139923.3	915.20							
540.00	121586.9	.0	121586.9	814.83							
539.00	101826.7	.0	101826.7	720.33							
538.00	83759.8	.0	83759.8	629.50							
537.00	67371.5	.0	67371.5	542.33							
536.00	52753.1	.0	52753.1	469.95							
535.00	39907.8	.0	39907.8	379.34							
534.00	28687.6	.0	28687.6	300.69							
533.00	19328.3	.0	19328.3	232.79							
532.00	11630.3	.0	11630.3	166.60							
531.00	5735.5	.0	5735.5	105.40							
530.00	1755.1	.0	1755.1	49.15							
529.00	.0	.0	.0	.00							

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 5.27 555.53



APPENDIX 4

BOUNDARY DESCRIPTION IN FLOODWAY EASEMENT



FLOODWAY EASEMENT

STATE OF TEXAS

COUNTY OF DALLAS

WHEREAS, Charles Ray Allen and wife Georgia Ann Allen are the owners of a tract of land situated in the A. Bledsoe Survey, Abstract No. 157, City of Addison, Dallas County, Texas and being more particularly described as follows;

COMMENCING at the intersection of the North line of Celestial Road, and the East line of Winnwood Road, an iron stake for corner;

THENCE, North 00°00'00" E, along the East line of Winnwood Road, a distance of 418.00 feet to the POINT OF BEGINNING;

THENCE, North 00°00'00" E, along the East line of Winnwood Road, a distance of 200.00 feet to an iron rod found for corner;

THENCE, S 89°46'00" E, along a fence, a distance of 5.22 feet to a point of tangency, said point also being the beginning of a curve to the left having a central angle of 22°02'08", a radius of 190.00 feet, a chord bearing of S 74°24'07" E, and a chord length of 72.62 feet;

THENCE, along the said curve to the left an arc length of 73.07 feet to a point of tangency;

THENCE, S 85°25'11" E, a distance of 57.39 feet to a point of tangency, said point also being the beginning of a curve to the right having a central angle of 85°25'11", a radius of 10.45 feet, a chord bearing of S 42°42'35" E, and a chord length 14.18 feet;

THENCE, along the said curve to the right an arc length of 15.59 feet to a point;

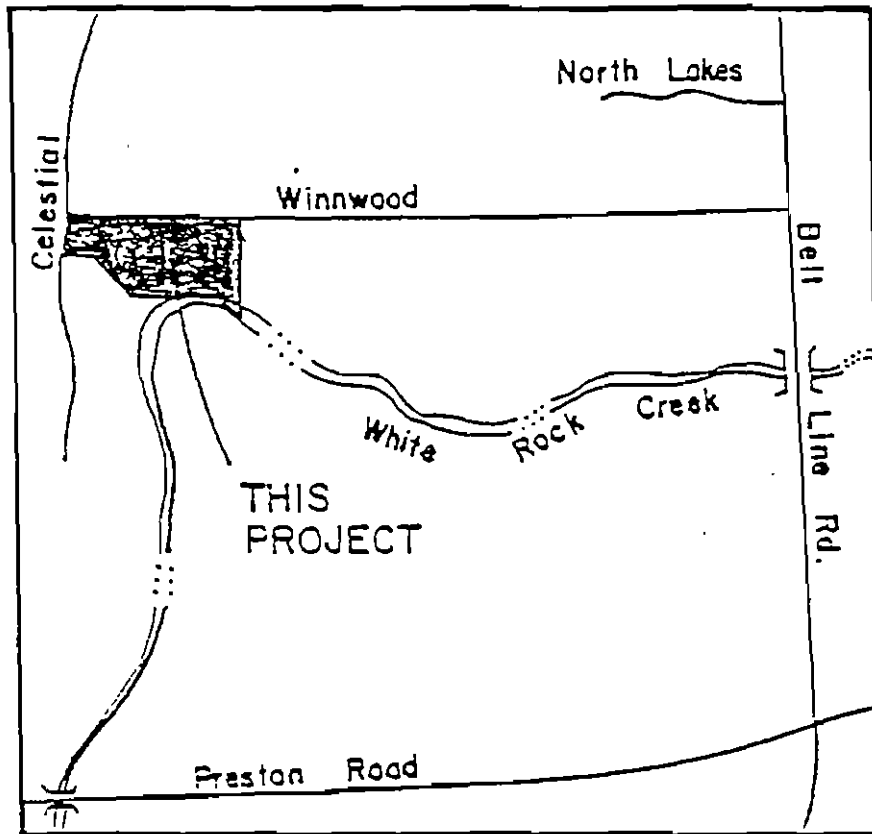
THENCE, South 00°00'00" W, a distance of 129.99 feet to a point of tangency, said point also being the beginning of a curve to the right having a central angle of 76°59'30", a radius of 17.500 feet a chord bearing of S 38°29'45" W, and a chord length of 21.79 feet;

THENCE, along the said curve to the right an arc length of 23.52 feet to a point;

THENCE, S 81°50'47" W, a distance of 129.75 feet to the POINT OF BEGINNING and CONTAINING 24550.427 Square Feet or 0.56360 Acres of Land more or less.

**EXHIBITS**

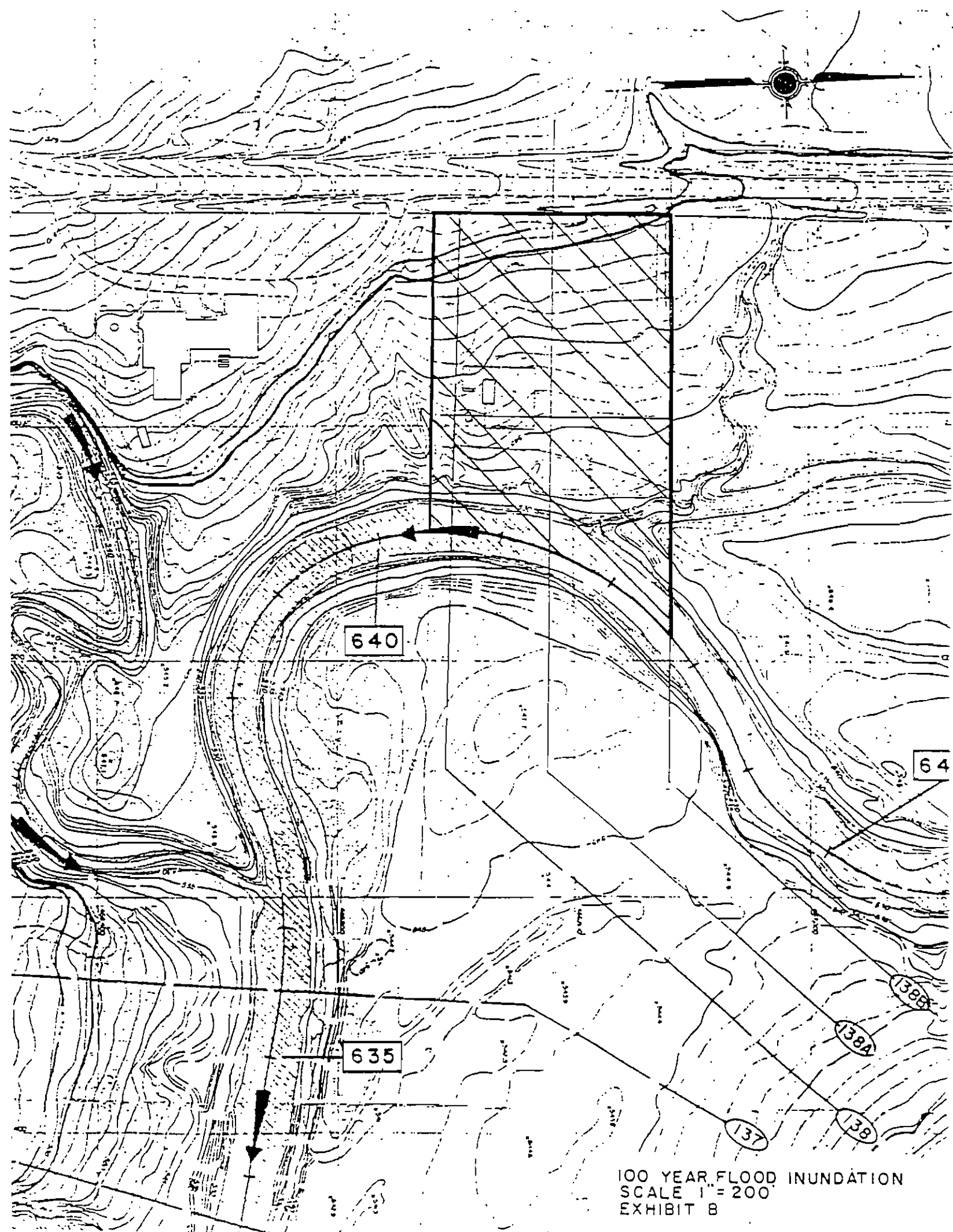
EXHIBIT A  
VICINITY MAP



Location Map  
n.t.s.

EXHIBIT B

100-YEAR INUNDATION LIMITS



640

64

635

1388

1384

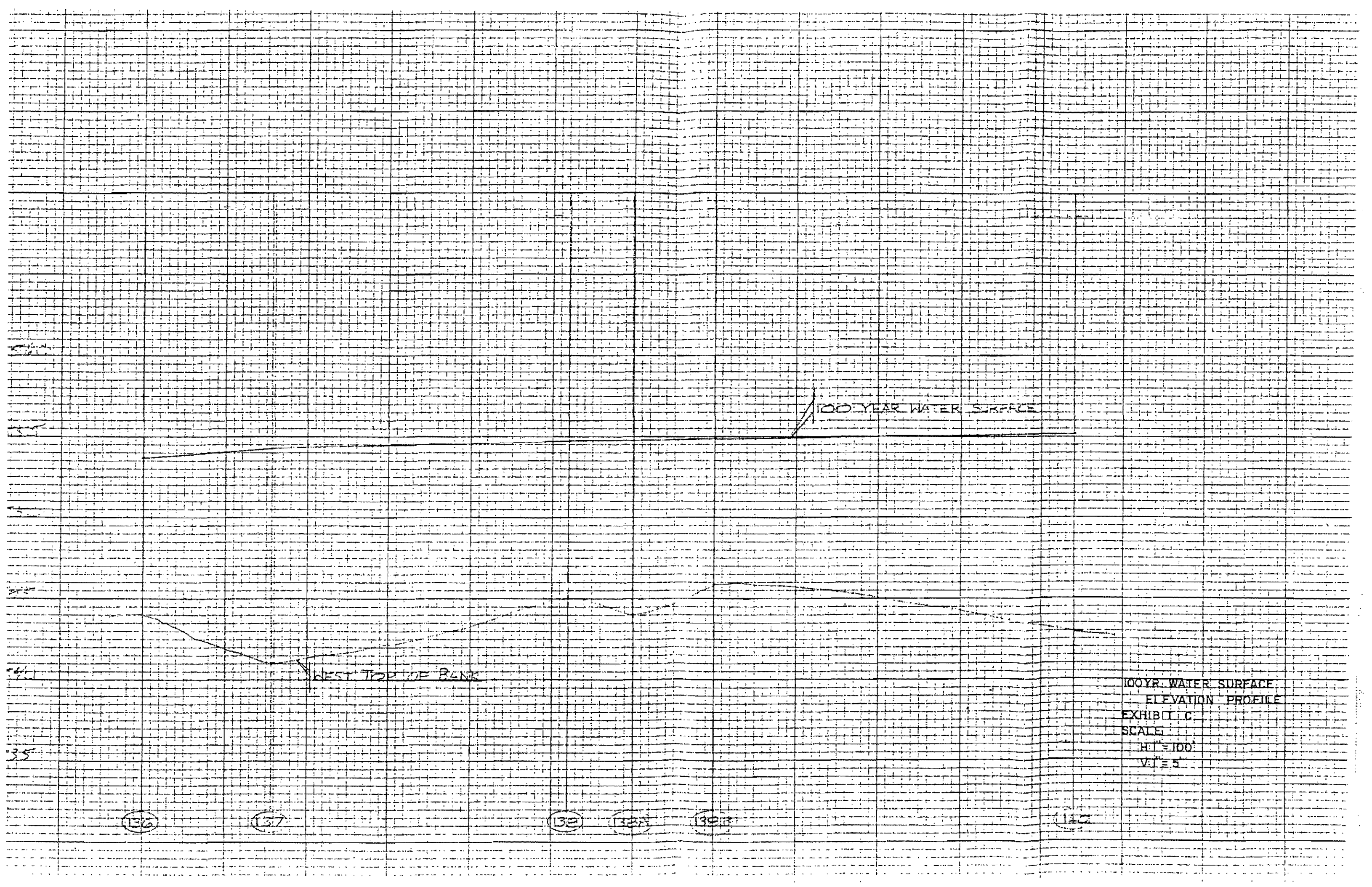
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100 YEAR FLOOD INUNDATION  
SCALE 1" = 200'  
EXHIBIT B



EXHIBIT C  
WATER SURFACE PROFILE



100-YEAR WATER SURFACE

WEST TOP OF BANK

100YR WATER SURFACE  
ELEVATION PROFILE  
EXHIBIT C  
SCALE  
H:V = 100'  
V:1 = 5

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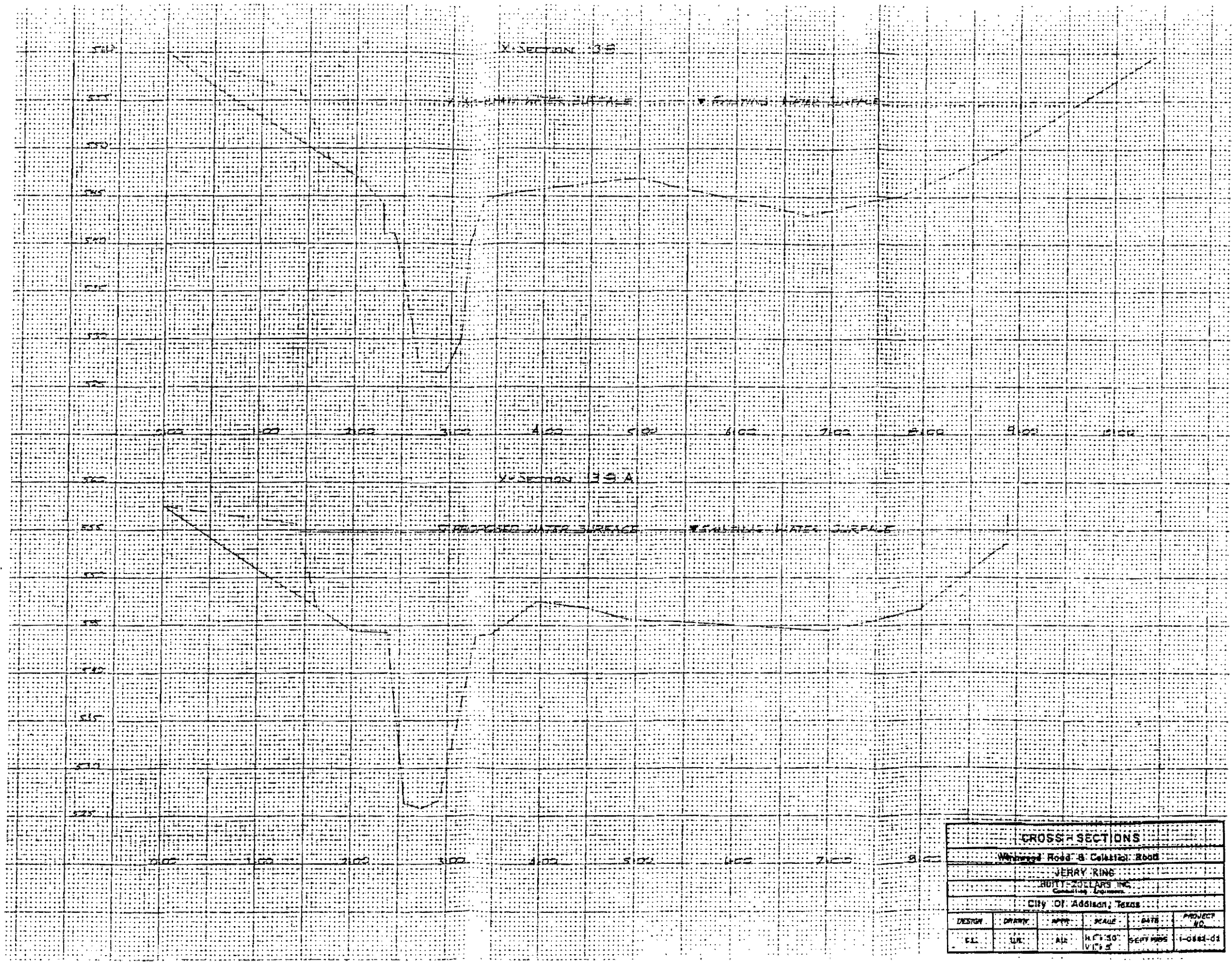
138

138A

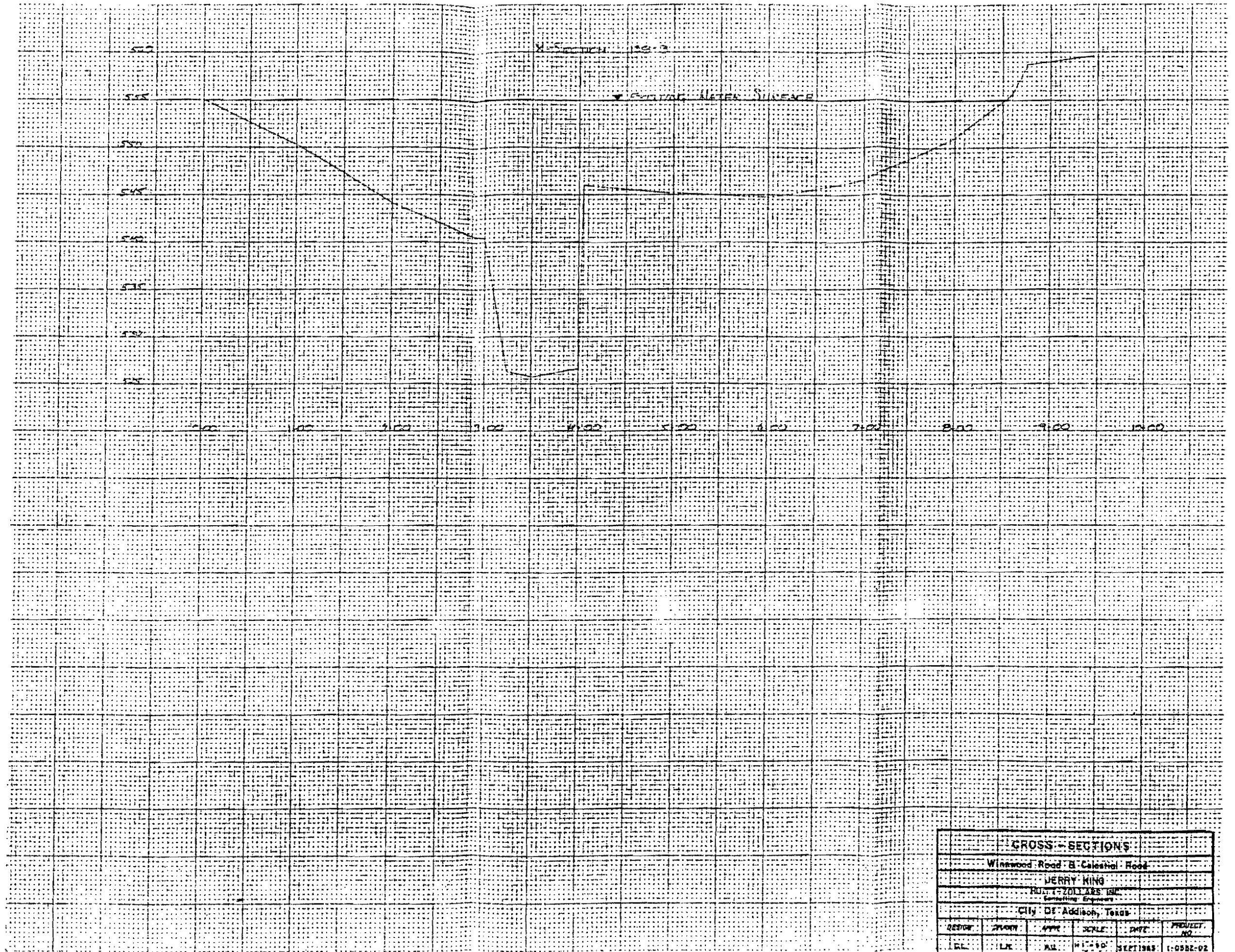
138B

140

EXHIBIT D  
CROSS-SECTIONS



CROSS SECTIONS					
Wainwright Road & Collette Road					
JERRY RINE					
BUTTS-DELLARS INC. Consulting Engineers					
City of Addison, Texas					
DESIGN	DRAWN	APP'D	SCALE	DATE	PROJECT NO.
ELL	UK	AIR	H.V. 30' V.H. 5'	SEPT 1998	1-0882-01



<b>CROSS-SECTIONS</b>					
Winwood Road B. Calesthal Road					
JERRY KING					
RUI T. ZOLLARS INC.					
Consulting Engineers					
City of Addison, Texas					
DESIGN	WORK	APP.	SCALE	DATE	PROJECT NO.
REL.	1:1	AL.	1" = 10'	SEPT 1983	1-0582-02

EXHIBIT E  
RECLAMATION PLAN

WINNWOOD ROAD AT CELESTIAL ROAD

FLOOD STUDY

ALTERNATIVE A

PREPARED FOR:

CHARLES ALLEN  
14516 WINNWOOD ROAD  
DALLAS, TEXAS 75240

PREPARED BY:

HUITT-ZOLLARS, INC.  
3131 MCKINNEY AVENUE  
SUITE 600  
DALLAS, TEXAS 75204

# HUITT-ZOLLARS

Huitt-Zollars, Inc. / Consulting Engineers / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204 / 214-871-3311

September 9, 1985

Mr. Michael Askew, P.E.  
Program Manager  
Storm Water Management Department  
City of Dallas  
1500 West Mockingbird Lane  
Dallas, Texas 75235

RE: Winnwood Road at Celestial Road Flood Study  
Huitt-Zollars, Job No. 0582-02

Dear Mr. Askew:

The following report is a copy of the hydraulic analysis performed on White Rock Creek within the vicinity of the above referenced property. This submittal includes a written narrative, copy of the PC-WSP Computer Calculations, and drawings of the site and cross sections of the study area.

Based on this analysis, the tract proposed to be reclaimed from the existing floodplain will have little effect on the 100 year water surface profile.

After you review this information, we would be pleased to meet with you should further discussion be requested.

Sincerely,

HUITT-ZOLLARS, INC.  
Consulting Engineers



Arthur K. Umble  
Project Manager

AKU/ber



# HUITT-ZOLLARS

Huitt-Zollars, Inc. / Consulting Engineers / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204 / 214-871-3311

September 9, 1985

Mr. Ron Whitehead, Town Manager  
Town of Addison  
P.O. Box 144  
Addison, Texas 75001

RE: Winnwood Road at Celestial Road Flood Study  
Huitt-Zollars, Job No. 0582-02

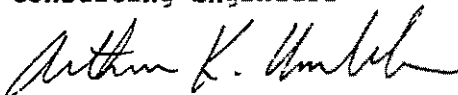
Dear Mr. Whitehead:

The following report is a copy of the hydraulic analysis performed on White Rock Creek within the vicinity of the above referenced property. The information contained within this report will assist the City of Dallas Stormwater Management Department in their evaluation for a fill permit.

Please contact the writer if further information is required.

Sincerely,

HUITT-ZOLLARS, INC.  
Consulting Engineers



Arthur K. Umble  
Project Manager

AKU/CML:ber



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EXHIBIT C: Water Surface Profile  
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WINNWOOD ROAD AT CELESTIAL ROAD  
FLOOD STUDY

INTRODUCTION

As shown on Exhibit A, the project site is located approximately 400 feet North of the intersection of Winnwood Road and Celestial Road in the Town of Addison, Texas. The site consists of approximately 1.37 acres of land bordered on the East by White Rock Creek. The majority of the site lies within the 100-year flood plain, as shown on Exhibit B.

This study was undertaken to determine the amount of land which can be reclaimed from the flood plain through the use of a landscaped retaining wall system.

METHODOLOGY

PC-WSP, an adaptation of the WSP4 program developed by Albert H. Halff and Associates, Inc. for the City of Dallas floodplain management studies, was used to perform the hydraulic analysis.

Existing cross-sections and the flow rate for White Rock Creek within the vicinity of the project site were obtained from the City of Dallas Department of Stormwater Management. Additional cross-section information was obtained from the field and incorporated into the existing computer model to provide a true and accurate model of the site. The results of this analysis are included in Appendix 1.

The computer model data and the results of the analysis for the proposed retaining wall are included in Appendix 2. The proposed retaining wall has been designed to comply with the "10 point" criteria specified by the City of Dallas Department of Stormwater Management. However, it should be noted that, due to the properties of the retaining wall and clearing, an increase in conveyance resulted. Therefore, there was no need to create an equal reduction of conveyance model for this site.

#### RESULTS

Table 1 lists the 100-Year Water Surface Elevation for the Existing Conditions Analysis and the Proposed Conditions Analysis. Based on a comparison of the two conditions, the reclamation of the land will have no adverse effect on the water surface elevation. The wall is to be located as shown on Exhibit E. To conform with the computer model for the proposed conditions, the floodway management area are to be planted with grass and well-maintained. The boundary description of the land to be reclaimed is included in Appendix 4. A typical section of the retaining wall is shown on Exhibit F.

TABLE 1

## 100-YEAR WATER SURFACE ELEVATION

CROSS-SECTION NUMBER	HUITT-ZOLLARS ANALYSIS OF EXISTING CONDITION	HUITT-ZOLLARS ANALYSIS OF PROPOSED CONDITION
136	553.70	553.70
137	554.36	554.36
138	554.74	554.72
138A	554.82	554.78
138B	554.95	554.91
140	555.19	555.19
140A	555.56	555.56
140B	555.78	555.78
140C	556.02	556.02
140D	556.26	556.26
141	556.26	556.26
142	556.59	556.59

APPENDICES

APPENDIX 1  
EXISTING CONDITIONS ANALYSIS



FILE WHITE ROCK CREEK AT WINWOOD AND CELESTIAL RD. - EXIST.

EXISTING

WSP JK. EXS

BM-ELEV	36700.	555.70			
FINAL	142.				
SECTION	136.	153.	165.		1.
GENERAL	544.			1.	1.
SEGMENT	1.	D	0.12	190.	545.
SEGMENT	2.	C	0.06	295.	544.
SEGMENT	3.	D	0.05	345.	560.
DATA	0.	550.	140.	550.	190.
DATA	150.	545.	203.	540.	207.
DATA	221.	524.5	251.	524.5	263.
DATA	287.	540.	295.	544.	295.
DATA	375.	544.	385.	542.	403.
DATA	412.	543.	500.	545.	630.
DATA	645.	550.	845.	560.	550.
ENDTABLE					
NEW	37100.				-1.
SECTION	137.	353.	354.		1.
GENERAL	541.			1.	1.
SEGMENT	1.	D	0.12	195.	544.
SEGMENT	2.	C	0.06	305.	541.
SEGMENT	3.	D	0.09	610.	543.
SEGMENT	4.	D	0.04	360.	560.
DATA	0.	550.	9.	535.	23.
DATA	26.	531.	37.	531.	60.
DATA	80.	544.	103.	545.	127.
DATA	195.	544.	218.	540.	228.
DATA	260.	525.5			
DATA	270.	535.	285.	540.	305.
DATA	305.	541.	335.	541.	385.
DATA	420.	545.8	440.	546.8	455.
DATA	610.	543.	610.	543.	710.
DATA	817.	550.	900.	560.	900.
ENDTABLE					
SECTION	138.	60.	110.		1.
GENERAL	545.			1.	1.
SEGMENT	1.	D	0.05	228.	544.
SEGMENT	2.	C	0.045	347.	545.
SEGMENT	3.	D	0.09	675.	543.
SEGMENT	4.	D	0.04	1050.	550.
DATA	0.	550.	25.	558.	70.
DATA	200.	547.	223.	544.	223.
DATA	230.	541.	240.	541.	244.
DATA	268.	525.5	255.	525.5	310.
DATA	320.	540.	335.	544.	347.
DATA	347.	545.	485.	546.8	505.
DATA	530.	546.	675.	543.	675.
DATA	775.	545.	865.	550.	1050.
ENDTABLE					
SECTION	138A.	100.	150.		1.
GENERAL	543.8			1.	1.
SEGMENT	1.	D	0.05	237.	544.3
SEGMENT	2.	C	0.045	330.	543.8
SEGMENT	3.	D	0.09	450.	545.8
SEGMENT	4.	D	0.04	691.1	555.00
DATA	0.	557.5	100.	550.8	200.
DATA	237.	544.3	257.	525.4	274.
DATA	252.	515.8	330.	543.8	345.
DATA	337.	547.3	450.	545.8	451.
DATA	600.	545.1	700.	544.3	600.
DATA	851.	555.5	851.1	555.00	
ENDTABLE					
SECTION	138B.	41.	553.		

To All

To All

SEGMENT	1.	0	0.05	229.	541.2	
SEGMENT	2.	0	0.045	255.	543.2	
SEGMENT	3.	0	0.05	300.	549.4	
SEGMENT	4.	0	0.045	405.	545.9	
SEGMENT	5.	0	0.09	495.	545.2	
SEGMENT	6.	0	0.04	895.	559.5	
ATA	0.	555.	100.	550.3	200.	544.1
DATA	229.	541.2	247.	551.7	255.	543.2
DATA	250.	540.7	300.	549.4	324.	535.4
ATA	350.	525.6	409.	526.7	495.	545.9
DATA	435.	545.2	600.	544.7	700.	546.5
DATA	600.	531.	850.	555.4	875.	558.5
ATA	855.	559.5				

NOTABLE SECTION 140. 402. 430. 1. 1283+70

GENERAL	543.			1.	1.	
SEGMENT	1.	D	0.055	575.	545.	
SEGMENT	2.	C	0.040	670.	543.	
SEGMENT	3.	D	0.050	920.	565.	
ATA	-120.	565.				
DATA	-120.	560.	0.	555.	130.	548.
DATA	255.	545.			270.	544.
ATA	300.	545.	360.	547.	350.	547.
ATA	430.	547.	575.	545.	575.	540.
DATA	594.	530.	610.	528.	640.	528.
ATA	658.	540.	670.	543.	696.	542.
ATA	720.	550.	740.	554.	790.	558.
DATA	800.	552.	920.	555.		

NOTABLE SECTION	140A.	170.	167.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	D	0.04	357.	547.	
SEGMENT	2.	D	0.055	560.	546.	
SEGMENT	3.	C	0.04	648.	540.	
SEGMENT	4.	D	0.050	752.	557.	
ATA	0.	560.	155.	560.	220.	545.
ATA			283.	545.	392.	546.
DATA	357.	547.	442.	547.	560.	546.
DATA	563.	545.	567.	540.	570.	535.
ATA	603.	530.	590.	529.	625.	529.
DATA	630.	530.	641.	535.	648.	540.
DATA	651.	541.	652.	542.	655.	543.
ATA	656.	544.	682.	545.	690.	545.
ATA	710.	550.	729.	555.	735.	555.
DATA	752.	557.				

NOTABLE SECTION	140B.	55.	102.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	D.	0.04	389.	547.	
SEGMENT	2.	D.	0.055	600.	540.	
SEGMENT	3.	C.	0.045	655.	540.	
SEGMENT	4.	D.	0.09	809.	551.	
ATA	0.	560.	186.	560.	270.	545.
ATA					331.	545.
DATA	389.	547.	518.	547.	545.	546.
DATA	585.	545.	595.	544.	557.	543.
ATA	600.	542.	605.	541.	608.	540.
DATA	655.	529.	679.	530.	683.	535.
DATA	685.	540.	695.	545.	732.	546.
ATA	742.	547.	750.	548.	758.	549.
DATA	765.	530.	775.	555.	790.	560.
DATA	805.	551.				

NOTABLE SECTION 140C. 55. 65 1.

SEGMENT	3.	C.	0.045	755.	545.	
SEGMENT	4.	D.	0.08	812.	555.	
ATA	0.0	560.	175.	560.	214.	547.
DATA	363.	547.	445.	546.	535.	548.
DATA	565.	547.	600.	545.	607.	545.
ATA	625.	544.	645.	545.	655.	542.
DATA	672.	541.	675.	540.	682.	535.
DATA	697.	538.	720.	529.	743.	529.
ATA	750.	530.	757.	535.	760.	540.
DATA	763.	545.	757.	545.	778.	547.
DATA	782.	548.	785.	549.	786.	550.
DATA	795.	555.	805.	559.	812.	555.
NOTABLE						
XSECTION	1400.	80.	172.			1.
GENERAL	535.			1.	1.	
SEGMENT	1.	D.	0.06	682.	535.	
SEGMENT	2.	C.	0.045	769.	540.	
SEGMENT	3.	D.	0.08	810.	565.	
ATA	0.	547.	228.	547.	414.	547.
ATA	445.	548.	535.	548.	565.	547.
DATA	600.	545.	605.	545.	625.	544.
DATA	645.	543.	665.	542.	671.	541.
ATA	675.	540.	682.	535.	695.	538.
DATA	720.	529.	742.	529.	749.	530.
DATA	755.	535.	760.	540.	763.	545.
ATA	765.	546.	775.	547.	780.	548.
DATA	782.	549.	785.	550.	795.	555.
DATA	805.	560.	810.	565.		
NOTABLE						
XSECTION	141.	106.	100.			1. 1277+18
GENERAL	545.			1.	1.	
SEGMENT	1.	C.	0.06	730.	546.	
SEGMENT	2.	D.	0.045	850.	555.	
DATA	0.	565.	0.	560.	19.	559.
DATA	300.	550.	325.	547.	450.	548.
ATA	605.	548.	650.	546.	730.	546.
DATA	735.	545.	757.	539.	775.	538.
DATA	780.	529.	800.	529.	805.	530.
ATA	850.	565.				
NOTABLE						
XSECTION	142.	1.	1.			1. 1280+59
GENERAL	546.			1.	1.	
SEGMENT	1.	D.	0.06	734.	545.	
SEGMENT	2.	C.	0.04	944.	565.	
DATA	0.	565.	0.	560.	40.	558.
ATA	300.	550.	325.	547.	390.	547.
DATA	500.	549.	570.	549.	590.	547.
DATA	550.	546.	712.	545.	734.	545.
ATA	765.	540.	783.	530.	790.	529.
ATA	834.	529.	852.	535.	880.	530.
DATA	934.	560.	944.	565.		
NOTABLE						

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SECTION 136.	DISTANCE				DRAINAGE AREA, SQ. MI 1.00	STATION-			
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SECT			
	CHANNEL 1.	VALLEY 1.	CHANNEL 155.	VALLEY 185.		NO. 1 .120	NO. 2 .050	NO. 3 .050	
	ELEVATION		NO VALUES		TOTAL	END AREA			
		CHANNEL	VALLEY			SQ. FT.			
	550.00	648849.3	644471.6		1293321.0	11031.25			
	559.00	611889.6	568353.8		1100042.0	10205.08			
	558.00	575498.9	498043.4		1073542.0	9413.99			
	557.00	539723.7	430221.8		963945.5	8635.09			
	556.00	505426.2	370733.6		876159.8	7907.60			
	555.00	471451.0	313066.3		784517.3	7190.09			
	554.00	439009.7	263347.0		702355.7	6521.99			
	553.00	407047.3	216040.0		623087.3	5869.45			
	552.00	376225.4	174338.8		556854.3	5259.20			
	551.00	346505.6	137711.4		484217.0	4671.11			
	550.00	317419.8	103998.4		421418.2	4108.50			
	549.00	289798.1	78948.5		366738.6	3589.50			
	548.00	262993.8	59281.3		316275.2	3094.50			
	547.00	237038.9	32596.9		270027.9	2623.50			
	546.00	212519.0	18402.8		230921.8	2193.00			
	545.00	189899.6	7656.0		197795.6	1796.19			
	544.00	169199.4	1549.5		170748.9	1434.55			
	543.00	153295.9	526.3		153733.8	1269.22			
	542.00	138285.2	110.1		138395.2	1145.23			
	541.00	124245.1	.0		124245.1	1044.67			
	540.00	111196.8	.0		111196.8	957.91			
	539.00	98155.3	.0		98155.3	875.25			
	538.00	85922.6	.0		85922.6	795.51			
	537.00	74459.8	.0		74459.8	718.37			
	536.00	63758.1	.0		63758.1	643.69			
	535.00	53938.9	.0		53938.9	571.87			
	534.00	45021.4	.0		45021.4	503.62			
	533.00	36962.4	.0		36962.4	437.37			
	532.00	29663.4	.0		29663.4	374.79			
	531.00	23157.5	.0		23157.5	315.48			
	530.00	17444.5	.0		17444.5	259.51			
	529.00	12409.9	.0		12409.9	206.50			
	528.00	8105.4	.0		8105.4	156.03			
	527.00	4610.5	.0		4610.5	108.21			
	526.00	1965.1	.0		1965.1	52.97			
	525.00	319.0	.0		319.0	20.34			
	524.50	.0	.0		.0	.00			
	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
	36700.00	5.81	553.70						

SECTION 157.	DISTANCE-----				GRAINAGE AREA, SQ. FT 1.00	STATION=				
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS				
	CHANNEL 158.	VALLEY 185.	CHANNEL 363.	VALLEY 364.		NO. 1 .120	NO. 2 .060	NO. 3 .050	NO. 4 .040	NO. 5 IN
	ELEVATION		K0 VALUES		END AREA					
			CHANNEL	VALLEY	TOTAL	SQ. FT.				
	560.00		553419.6	1395866.0	1359285.0	14817.00				
	559.00		527584.6	1240866.0	1768451.0	13653.82				
	558.00		492054.7	1088997.0	1581952.0	12694.74				
	557.00		458119.0	952962.4	1411980.0	11765.78				
	556.00		424540.2	820390.6	1244931.0	10843.32				
	555.00		392598.5	703159.8	1095758.0	9950.95				
	554.00		361186.4	590636.1	951822.5	9065.57				
	553.00		331099.9	489095.8	820165.8	8201.57				
	552.00		302030.9	397948.4	699979.3	7356.61				
	551.00		273741.3	312780.3	596521.6	6522.57				
	550.00		247039.0	241345.9	495364.6	5713.36				
	549.00		221240.5	177893.8	399142.4	4920.88				
	548.00		196370.1	122424.1	318794.2	4145.11				
	547.00		173086.6	81107.5	254194.1	3405.20				
	546.00		150839.5	48878.5	199717.9	2726.49				
	545.00		129708.4	26172.1	155877.5	2125.58				
	544.00		110855.6	21535.0	132931.6	1710.07				
	543.00		95241.1	17090.9	112340.0	1425.08				
	542.00		81520.3	13151.8	94672.1	1209.55				
	541.00		69069.4	10220.1	79297.5	1026.97				
	540.00		58323.7	8359.7	66663.4	905.21				
	539.00		50680.1	6575.9	57256.0	800.66				
	538.00		52898.1	5013.2	57911.3	703.86				
	537.00		45777.7	3670.9	49448.6	613.37				
	536.00		39390.6	2568.4	41959.1	530.18				
	535.00		33494.3	1679.4	35173.7	453.81				
	534.00		27837.9	990.2	28828.1	383.45				
	533.00		22495.3	478.8	22974.1	317.99				
	532.00		17655.8	146.0	17802.9	257.64				
	531.00		13344.6	2.6	13347.1	203.39				
	530.00		9555.5	.0	9555.5	161.72				
	529.00		6280.9	.0	6280.9	122.72				
	528.00		3605.7	.0	3605.7	85.49				
	527.00		1550.8	.0	1550.8	49.89				
	526.00		253.5	.0	253.9	16.23				
	525.50		.0	.0	.0	.00				

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	3.96	554.36						

SECTION 138.	DISTANCE		DRAINAGE		STATION=					
	DOWNSTREAM CHANNEL 363.	VALLEY 364.	UPSTREAM CHANNEL 50.	VALLEY 110.	AREA, SQ MI 1.00	NO. 1 .050	NO. 2 .045	NO. 3 .050	NO. 4 .040	NO. 5
					K0 VALUES		END AREA			
		ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.				
		550.00	819845.8	1337897.0	2157740.0					13387.55
		559.00	766586.2	1165262.0	1962249.0					12353.50
		558.00	715993.4	1009623.0	1725815.0					11357.80
		557.00	665470.9	858586.0	1524058.0					10371.98
		555.00	617316.0	728000.6	1345317.0					9436.88
		555.00	569926.6	603558.3	1173525.0					8517.64
		554.00	524323.4	493626.3	1017950.0					7636.55
		553.00	480448.7	396580.3	877028.9					6792.12
		552.00	437568.7	306840.8	744409.6					5968.63
		551.00	396976.8	233013.8	629990.5					5192.31
		550.00	357697.0	168252.4	525949.4					4443.22
		549.00	319729.4	112556.7	432286.1					3721.38
		548.00	284052.0	71353.9	355405.9					3050.78
		547.00	249853.7	39601.6	289451.3					2426.10
		546.00	217125.6	16927.7	234053.3					1856.99
		545.00	186440.3	5397.4	191837.7					1448.98
		544.00	168057.3	1755.1	169812.3					1210.15
		543.00	149034.3	25.3	149059.3					1032.87
		542.00	130137.2	.0	130137.2					928.91
		541.00	119134.7	.0	119134.7					833.80
		540.00	106529.2	.0	106529.2					753.63
		539.00	92863.1	.0	92863.1					678.63
		538.00	79257.1	.0	79257.1					606.65
		537.00	66817.8	.0	66817.8					537.60
		536.00	55417.3	.0	55417.3					471.32
		535.00	45043.4	.0	45043.4					407.82
		534.00	35636.6	.0	35636.6					346.95
		533.00	27252.9	.0	27252.9					288.36
		532.00	19924.8	.0	19924.8					233.74
		531.00	13633.9	.0	13633.9					181.37
		530.00	8395.8	.0	8395.8					131.79
		529.00	4568.0	.0	4568.0					86.50
		528.00	1869.2	.0	1869.2					47.41
		527.00	292.0	.0	292.0					14.29
		525.50	.0	.0	.0					.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.48	554.74						

SECTION 108A.	DISTANCE		DRAINAGE		STATION						
	DOWNSTREAM CHANNEL 80.	VALLEY 110.	UPSTREAM CHANNEL 100.	VALLEY 150.	AREA, SQ. FT. 1.00	NO. 1 .050	NO. 2 .045	NO. 3 .030	NO. 4 .040	NO. 5	NO.
					KD VALUES		END AREA				
		ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.					
		556.00	653463.4	1324199.0	1983663.0	10912.33					
		557.00	618331.3	1138162.0	1756493.0	10027.47					
		556.00	577942.8	961848.4	1539791.0	9151.70					
		555.00	538669.8	800118.1	1338728.0	8290.45					
		554.00	500538.8	653670.7	1154209.0	7445.36					
		553.00	463168.9	517412.8	980581.7	6611.95					
		552.00	427636.2	407448.0	835084.2	5817.62					
		551.00	392858.0	306019.4	698877.4	5042.30					
		550.00	359211.3	217393.9	576665.3	4294.14					
		549.00	327116.9	146245.0	473362.0	3593.10					
		548.00	295785.5	84045.4	379830.9	2893.21					
		547.00	265953.3	40163.4	306116.7	2250.81					
		546.00	237564.7	15550.4	253115.0	1727.05					
		545.00	210439.6	2625.1	213064.8	1345.67					
		544.00	184669.5	4.3	184672.7	1133.35					
		543.00	164371.4	.0	164371.4	1041.28					
		542.00	145729.8	.0	145729.8	953.23					
		541.00	128285.7	.0	128285.7	868.38					
		540.00	112014.6	.0	112014.6	786.71					
		539.00	96891.8	.0	96891.8	708.24					
		538.00	83164.0	.0	83164.0	633.77					
		537.00	70431.4	.0	70431.4	562.22					
		536.00	58829.1	.0	58829.1	494.66					
		535.00	48307.6	.0	48307.6	429.23					
		534.00	38841.6	.0	38841.6	367.73					
		533.00	30326.7	.0	30326.7	309.28					
		532.00	22965.9	.0	22965.9	254.63					
		531.00	16560.7	.0	16560.7	203.17					
		530.00	11044.7	.0	11044.7	154.71					
		529.00	6540.9	.0	6540.9	109.97					
		528.00	3290.3	.0	3290.3	68.36					
		527.00	866.7	.0	866.7	30.08					
		526.00	7.2	.0	7.2	1.02					
		525.00	.0	.0	.0	.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.56	554.82						



ROCK CREEK AT WINNWOOD AND CELESTIAL RD. - EXIST.

RUN DATE=07 24 85

SECTION 1368.	DOWNSSTREAM		UPSTREAM		DRAINAGE AREA, SQ FT 1.00	STATION=				
	CHANNEL 100.	VALLEY 150.	CHANNEL 442.	VALLEY 356.		'N' VALUE BY SEGMENTS				
						NO. 1 .050	NO. 2 .045	NO. 3 .050	NO. .045	
						END AREA SQ. FT.				
						KD VALUES				
						ELEVATION	CHANNEL	VALLEY	TOTAL	
						550.00	1173915.0	1504502.0	2678417.0	13137.25
						553.00	1108896.0	1324798.0	2433694.0	12311.90
						558.00	1044445.0	1147362.0	2191807.0	11429.84
						557.00	982264.2	978996.0	1961261.0	10550.93
						556.00	921246.4	821196.0	1742442.0	9596.42
						555.00	861973.0	678927.5	1540901.0	8838.49
						554.00	804398.5	555341.7	1359740.0	8007.72
						553.00	747930.2	444183.0	1192113.0	7195.97
						552.00	694191.3	352356.6	1046548.0	6438.28
						551.00	641870.6	268777.1	910647.8	5785.22
						550.00	590627.0	197522.0	788149.0	5007.76
						549.00	541967.9	140509.5	682477.5	4360.59
						548.00	494482.9	90313.6	584796.5	3737.51
						547.00	449208.3	52108.9	501317.2	3160.45
						546.00	406559.1	29322.4	435881.4	2647.97
						545.00	366318.8	14200.2	382119.0	2244.72
						544.00	328271.2	7388.8	335660.0	1885.02
						543.00	293032.8	3806.1	296839.0	1789.74
						542.00	259458.5	1416.0	260874.5	1607.68
						541.00	228206.9	306.0	228512.8	1444.15
						540.00	199443.6	.0	199443.6	1239.10
						539.00	174481.6	.0	174481.6	1173.86
						538.00	151518.4	.0	151518.4	1056.15
						537.00	130061.2	.0	130061.2	944.50
						536.00	110340.6	.0	110340.6	839.83
						535.00	92164.1	.0	92164.1	742.03
						534.00	75427.7	.0	75427.7	649.51
						533.00	59975.7	.0	59975.7	559.40
						532.00	45161.4	.0	45161.4	471.56
						531.00	33797.7	.0	33797.7	385.60
						530.00	22866.5	.0	22866.5	301.43
						529.00	13864.0	.0	13864.0	219.46
						528.00	6874.1	.0	6874.1	159.35
						527.00	1727.3	.0	1727.3	61.22
						526.00	14.1	.0	14.1	1.36
						525.00	.0	.0	.0	.00

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	4.22	554.35						

SECTION 140.	DISTANCE		DRAINAGE		STATION=1283+70					
	DOWNSTREAM CHANNEL 442.	VALLEY 358.	UPSTREAM CHANNEL 402.	VALLEY 430.	AREA, SQ FT 1.00	'N' VALUE BY SEGMENTS				
					NO. 1 NO. 2 NO. 3 NO. 4 NO. 5 NO.					
					.065 .040 .000					
					END AREA					
					SQ. FT.					
ELEVATION		CHANNEL	VALLEY	TOTAL						
555.00	1085691.0	1755675.0	2841365.0	16313.50						
554.00	1000339.0	1568765.0	2599124.0	15269.17						
553.00	975522.6	1394842.0	2371465.0	14265.50						
552.00	923353.6	1224922.0	2146255.0	13256.94						
551.00	871755.4	1071069.0	1942345.0	12272.79						
550.00	821050.6	930469.4	1751520.0	11310.03						
559.00	771655.8	809666.0	1581322.0	10379.34						
558.00	723601.1	700559.3	1424160.0	9495.84						
557.00	675439.6	599251.3	1275691.0	8643.79						
556.00	631004.6	508919.3	1139924.0	7842.16						
555.00	586417.4	423488.1	1009996.0	7064.12						
554.00	543494.2	346682.7	890175.9	6329.82						
553.00	501850.1	276226.1	778075.1	5629.21						
552.00	461058.7	210062.4	671061.1	4927.07						
551.00	422456.4	156326.2	578782.6	4271.64						
550.00	384658.0	107446.0	492144.0	3630.18						
549.00	348205.3	65759.0	413564.3	3009.66						
548.00	313738.7	36475.3	350214.0	2421.78						
547.00	280524.7	17069.9	297594.6	1909.28						
546.00	248622.8	6110.9	254733.7	1494.52						
545.00	218629.1	2591.7	221220.7	1269.76						
544.00	191264.5	965.9	192230.3	1120.20						
543.00	165324.5	138.3	165462.9	996.58						
542.00	145827.0	8.0	145835.0	895.20						
541.00	127550.0	.0	127550.0	806.76						
540.00	110771.5	.0	110771.5	724.00						
539.00	94192.3	.0	94192.3	645.55						
538.00	78950.2	.0	78950.2	570.20						
537.00	65025.1	.0	65025.1	497.95						
536.00	52404.0	.0	52404.0	428.00						
535.00	41148.9	.0	41148.9	362.94						
534.00	31126.5	.0	31126.5	300.05						
533.00	22340.0	.0	22340.0	240.14						
532.00	14857.3	.0	14857.3	163.32						
531.00	8667.4	.0	8667.4	123.55						
530.00	3995.7	.0	3995.7	79.00						
529.00	1209.5	.0	1209.5	34.34						
528.00	.0	.0	.0	.00						

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	5.15	555.19						

SECTION 140A.	DISTANCE				DRAINAGE AREA, SQ. MI 1.00	STATION#					
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS					
	CHANNEL 402.	VALLEY 430.	CHANNEL 170.	VALLEY 167.		NO. 1 .040	NO. 2 .065	NO. 3 .040	NO. 4 .060	NO. 5	NO.
	ELEVATION				END AREA						
	CHANNEL		VALLEY		SQ. FT.						
	TOTAL		TOTAL								
	560.00	752301.3	326000.5	1706392.0	8745.60						
	553.00	736433.0	814660.5	1551094.0	8152.73						
	556.00	691063.8	706036.5	1337100.0	7561.35						
	557.00	647261.5	608959.4	1256221.0	6978.61						
	556.00	604228.2	516913.4	1121142.0	6402.73						
	555.00	562743.1	433442.8	996145.3	5845.97						
	554.00	522335.4	355624.2	878159.5	5297.84						
	553.00	482739.4	282107.1	764846.5	4755.27						
	552.00	445120.8	219699.5	664829.3	4225.71						
	551.00	408262.9	161771.3	570034.3	3701.63						
	550.00	372545.0	110561.7	483107.6	3183.67						
	549.00	338651.3	78718.7	409369.9	2677.63						
	548.00	305956.2	38671.2	344551.4	2179.00						
	547.00	274395.3	15246.5	289641.6	1719.10						
	546.00	245058.8	5521.4	250580.5	1396.27						
	545.00	220593.6	776.1	221369.7	1170.00						
	544.00	195782.7	444.3	196227.0	1066.97						
	543.00	171949.2	267.0	172216.2	973.60						
	542.00	149368.8	100.3	149409.7	884.81						
	541.00	127889.9	16.9	127906.8	798.90						
	540.00	107919.2	.0	107919.2	716.00						
	539.00	90581.3	.0	90581.3	636.00						
	538.00	74536.6	.0	74536.6	558.00						
	537.00	59811.9	.0	59811.9	482.00						
	536.00	46528.4	.0	46528.4	408.12						
	535.00	34748.8	.0	34748.8	336.27						
	534.00	24846.9	.0	24846.9	267.69						
	533.00	16633.9	.0	16633.9	203.79						
	532.00	9925.5	.0	9925.5	144.60						
	531.00	4832.5	.0	4832.5	90.40						
	530.00	1433.8	.0	1433.8	41.17						
	529.00	.0	.0	.0	.00						
	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.		
	37100.00	6.00	535.35								

SECTION 140B.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS					
	CHANNEL 176.	VALLEY 167.	CHANNEL 55.	VALLEY 102.		NO. 1 .040	NO. 2 .065	NO. 3 .045	NO. 4 .000	NO. 5 NI	
	ELEVATION				END AREA						
			CHANNEL	VALLEY	TOTAL	SQ. FT.					
			561.00	585853.8	966730.6	1492590.9	3252.56				
			560.00	550186.1	879754.6	1429945.9	8599.37				
			559.00	515582.8	804865.1	1328248.8	7356.74				
			558.00	481173.2	698806.6	1175160.9	7264.44				
			557.00	448239.3	600355.1	1048595.0	6584.38				
			556.00	415953.4	507176.6	923110.0	6110.25				
			555.00	384857.4	422682.1	807559.5	5547.59				
			554.00	354727.9	344705.1	659433.1	4992.74				
			553.00	325229.5	271073.8	556303.3	4443.10				
			552.00	297351.8	209037.5	506369.3	3905.94				
			551.00	270699.5	151590.6	421690.1	3373.45				
			550.00	243784.9	101027.9	344911.9	2843.80				
			549.00	218972.7	62704.6	281677.3	2337.80				
			548.00	195099.2	32194.4	227284.6	1839.36				
			547.00	172148.1	10552.6	182810.7	1365.42				
			546.00	150468.3	4209.1	154697.4	1078.14				
			545.00	129668.8	2278.7	132147.5	905.00				
			544.00	110833.2	1375.5	112288.7	804.17				
			543.00	92811.7	692.8	93594.5	700.88				
			542.00	76037.3	224.2	76261.5	618.33				
			541.00	60553.8	29.2	60583.0	532.80				
			540.00	46625.9	.0	46625.9	453.50				
			539.00	36623.4	.0	36623.4	379.43				
			538.00	27971.8	.0	27971.8	311.21				
			537.00	20682.9	.0	20682.9	248.85				
			536.00	14516.3	.0	14516.3	192.69				
			535.00	9573.9	.0	9573.9	142.24				
			534.00	5837.9	.0	5837.9	98.47				
			533.00	3195.8	.0	3195.8	62.66				
			532.00	1450.5	.0	1450.5	34.75				
			531.00	483.3	.0	483.3	15.21				
			530.00	81.8	.0	81.8	3.88				
			529.00	.0	.0	.0	.00				
	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.		
	37190.00	6.20	555.78								

SECTION 1400.	DISTANCE					DRAINAGE AREA, SQ MI 1.00	STATION=		
	DOWNSTREAM		UPSTREAM		'N VALUE BY SEGMENT				
	CHANNEL 55.	VALLEY 102.	CHANNEL 55.	VALLEY 65.	NO. 1 .040		NO. 2 .065	NO. 3 .045	END AREA SQ. FT.
		ELEVATION	CHANNEL	VALLEY	TOTAL				
		565.00	960442.9	1739970.0	2700413.0			13357.50	
		564.00	913220.9	1546563.0	2459784.0			12546.76	
		563.00	865352.2	1357061.0	2223414.0			11736.52	
		562.00	820636.8	1182279.0	2003175.0			10928.30	
		561.00	776162.1	1052222.0	1828384.0			10136.71	
		560.00	732596.2	969244.8	1721753.0			9370.06	
		559.00	689958.2	891810.7	1581777.0			8689.30	
		558.00	648144.2	771424.3	1419569.0			8065.60	
		557.00	607750.3	660910.1	1268660.0			7449.10	
		556.00	568052.9	555259.0	1123312.0			6835.70	
		555.00	529721.7	459338.7	989060.4			6228.69	
		554.00	492438.4	376954.2	869392.6			5626.34	
		553.00	455853.8	287620.7	743474.6			5027.10	
		552.00	421058.7	217755.6	638814.3			4435.54	
		551.00	386951.6	153374.4	540326.0			3946.66	
		550.00	353676.4	97214.3	450890.7			3262.50	
		549.00	322448.4	55365.1	377813.4			2684.41	
		548.00	292035.2	27983.2	320018.4			2153.73	
		547.00	262646.9	12892.4	275539.3			1711.22	
		546.00	234651.4	6568.4	243219.8			1435.02	
		545.00	208597.8	4723.5	213236.3			1324.47	
		544.00	184476.4	2123.2	186559.5			1177.60	
		543.00	162112.4	734.6	162847.0			1048.86	
		542.00	140891.4	154.2	141045.6			939.02	
		541.00	120835.9	20.9	120856.8			845.00	
		540.00	102154.1	.0	102154.1			750.00	
		539.00	85797.8	.0	85797.8			674.00	
		538.00	70651.2	.0	70651.2			592.00	
		537.00	56741.3	.0	56741.3			512.00	
		536.00	44183.8	.0	44183.8			434.12	
		535.00	33014.2	.0	33014.2			358.26	
		534.00	23529.5	.0	23529.5			285.45	
		533.00	15666.7	.0	15666.7			216.98	
		532.00	9122.3	.0	9122.3			152.00	
		531.00	4223.3	.0	4223.3			93.20	
		530.00	1076.6	.0	1076.6			38.34	
		529.00	.0	.0	.0			.00	

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	5.42	556.02						

DATA	292.	525.6	300.	540.8	309.	544.1
DATA	397.	517.5	450.	546.8	491.	549.7
DATA	500.	545.1	700.	544.5	800.	546.7
DATA	891.	559.5	891.1	555.0		
EXTABLE						
SECTION	1308.	442.	358.			1.
GENERAL	548.			1.	1.	
SEGMENT	1.	0	0.05	155.	555.95	
SEGMENT	2.	0	0.025	150.	546.50	
SEGMENT	3.	0	0.042	300.	540.4	
SEGMENT	4.	0	0.045	405.	545.9	
SEGMENT	5.	0	0.09	495.	545.2	
SEGMENT	5.	0	0.040	895.	559.5	
DATA	0.	555.95	155.	555.95	155.	551.95
DATA	150.	551.95	150.	546.50		
DATA	200.	544.1				
DATA	229.	541.2	247.	534.7	265.	543.2
DATA	280.	540.7	300.	540.4	324.	536.4
DATA	350.	525.8	400.	526.7	405.	545.9
DATA	495.	545.2	500.	544.7	700.	546.5
DATA	600.	551.	850.	555.4	875.	558.6
DATA	895.	559.5				

EXTABLE						
SECTION	140.	402.	430			1. 126070
GENERAL	543.			1.	1.	
SEGMENT	1.	0	0.055	575.	545.	
SEGMENT	2.	0	0.040	570.	543.	
SEGMENT	3.	0	0.000	920.	555.	
DATA	-120.	565.				
DATA	-120.	560.	0.	555.	130.	540.
DATA	255.	545.			270.	544.
DATA	300.	545.	360.	547.	390.	547.
DATA	430.	547.	575.	545.	570.	540.
DATA	594.	530.	510.	520.	540.	520.
DATA	650.	540.	670.	543.	650.	542.
DATA	720.	550.	740.	554.	790.	550.
DATA	860.	562.	920.	565.		

EXTABLE						
SECTION	1400.	170.	167.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	0	0.04	357.	547.	
SEGMENT	2.	0	0.055	560.	545.	
SEGMENT	3.	0	0.04	640.	540.	
SEGMENT	4.	0	0.000	752.	557.	
DATA	0	560.	155.	560.	200.	545.
DATA			260.	545.	302.	546.
DATA	357	547.	462.	547.	560.	545.
DATA	563.	545.	567.	540.	570.	535.
DATA	563.	530.	590.	529.	625.	529.
DATA	630.	530.	641.	535.	640.	540.
DATA	651.	541.	652.	542.	655.	543.
DATA	656.	544.	652.	545.	690.	545.
DATA	710.	550.	729.	555.	735.	556.
DATA	752.	557.				

EXTABLE						
SECTION	1400.	55.	102.			1.
GENERAL	545.			1.	1.	
SEGMENT	1.	0	0.04	389.	547.	
SEGMENT	2.	0	0.055	640.	540.	
SEGMENT	3.	0	0.045	695.	540.	
SEGMENT	4.	0	0.00	809.	551.	
DATA	0	550.	185.	550.	270.	545.
DATA					321.	545.
DATA	389.	547.	510.	547.	545.	545.
DATA	565.	545.	595.	544.	557.	543.

DATA	668.	529.	670.	530.	583.	535.
DATA	685.	540.	693.	545.	732.	546.
DATA	712.	547.	750.	549.	759.	549.
DATA	765.	550.	775.	555.	790.	550.
DATA	809.	551.				
ENDTABLE						
SECTION	1400.	55.	65.			1.
GENERAL	540.			1.	1.	
SEGMENT	1.	0.	0.04	399.	547.	
SEGMENT	2.	0.	0.045	675.	540.	
SEGMENT	3.	0.	0.045	765.	545.	
SEGMENT	4.	0.	0.09	812.	555.	
DATA	0.0	550.	175.	550.	214.	547.
DATA	399.	547.	445.	540.	535.	540.
DATA	555.	547.	600.	545.	607.	545.
DATA	625.	544.	645.	549.	655.	542.
DATA	672.	541.	675.	540.	682.	535.
DATA	697.	530.	720.	529.	743.	529.
DATA	750.	530.	757.	535.	760.	540.
DATA	765.	545.	767.	545.	779.	547.
DATA	782.	540.	785.	549.	786.	550.
DATA	795.	555.	805.	550.	812.	555.
ENDTABLE						
SECTION	1400.	80.	172.			1.
GENERAL	535.			1.	1.	
SEGMENT	1.	0.	0.05	692.	535.	
SEGMENT	2.	0.	0.045	760.	540.	
SEGMENT	3.	0.	0.08	810.	555.	
DATA	0.	547.	228.	547.	414.	547.
DATA	445.	540.	535.	540.	555.	547.
DATA	600.	545.	605.	545.	625.	544.
DATA	645.	549.	655.	542.	671.	541.
DATA	675.	540.	692.	535.	695.	530.
DATA	720.	529.	742.	529.	749.	530.
DATA	755.	535.	760.	540.	763.	545.
DATA	765.	545.	775.	547.	780.	540.
DATA	782.	549.	785.	550.	795.	555.
DATA	805.	550.	810.	555.		
ENDTABLE						
SECTION	141.	106.	100.			1. 1277+16
GENERAL	545.			1.	1.	
SEGMENT	1.	0.	0.05	730.	545.	
SEGMENT	2.	0.	0.045	850.	555.	
DATA	0.	555.	0.	550.	10.	550.
DATA	300.	550.	325.	547.	450.	540.
DATA	605.	540.	650.	545.	730.	545.
DATA	735.	545.	757.	530.	775.	530.
DATA	780.	529.	800.	529.	805.	530.
DATA	850.	555.				
ENDTABLE						
SECTION	142.	1.	1.			1. 1280+63
GENERAL	545.			1.	1.	
SEGMENT	1.	0.	0.06	734.	545.	
SEGMENT	2.	0.	0.04	944.	555.	
DATA	0.	555.	0.	550.	40.	550.
DATA	300.	550.	325.	547.	300.	547.
DATA	500.	549.	570.	549.	590.	547.
DATA	650.	545.	712.	545.	734.	545.
DATA	755.	540.	783.	530.	790.	529.
DATA	834.	529.	852.	535.	880.	550.
DATA	934.	550.	944.	555.		
ENDTABLE						

SECTION 136	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS					
	CHANNEL 1.	VALLEY 1.	CHANNEL 158.	VALLEY 185		NO. 1 120	NO. 2 060	NO. 3 090	NO. 4	NO. 5	NO. 6
		ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.					
		550.00	548849.0	544471.6	1093321.0	11051.25					
		559.00	511689.6	550353.0	1109043.0	10206.00					
		550.00	575490.9	490043.4	1073542.0	9413.99					
		557.00	509723.7	490221.0	969945.5	8636.09					
		556.00	505426.2	370733.6	876159.8	7907.60					
		555.00	471451.0	313055.0	784517.3	7190.09					
		554.00	435009.7	263347.0	702356.7	6521.99					
		553.00	407047.3	216000.0	623007.3	5959.45					
		552.00	376225.4	174330.0	550554.3	5253.20					
		551.00	346505.6	137711.4	484217.0	4671.11					
		550.00	317419.0	100993.4	421418.2	4100.50					
		549.00	289790.1	75909.5	367730.6	3529.50					
		548.00	263593.0	53261.3	316275.2	3094.50					
		547.00	237000.0	32936.9	270027.9	2623.50					
		546.00	212519.0	18402.0	230921.0	2153.00					
		545.00	189039.6	7835.0	197795.6	1756.19					
		544.00	169159.4	1549.5	170748.9	1434.55					
		543.00	153206.9	525.9	153733.8	1259.22					
		542.00	138285.2	110.1	138395.2	1145.23					
		541.00	124245.1	.0	124245.1	1044.67					
		540.00	111195.0	.0	111195.0	957.91					
		539.00	98155.0	.0	98155.0	875.25					
		538.00	85922.5	.0	85922.5	795.51					
		537.00	74459.0	.0	74459.0	718.37					
		536.00	63758.1	.0	63758.1	643.69					
		535.00	53830.9	.0	53830.9	571.87					
		534.00	45021.4	.0	45021.4	503.02					
		533.00	36962.4	.0	36962.4	437.37					
		532.00	29653.4	.0	29653.4	374.79					
		531.00	23157.5	.0	23157.5	315.09					
		530.00	17444.5	.0	17444.5	259.51					
		529.00	12409.9	.0	12409.9	206.50					
		528.00	8105.4	.0	8105.4	156.03					
		527.00	4510.5	.0	4510.5	109.21					
		526.00	1965.1	.0	1965.1	62.97					
		525.00	319.0	.0	319.0	20.34					
		524.50	.0	.0	.0	.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
36700.00	5.81	553.70						



SECTION 137.	DISTANCE				GRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'M' VALUE BY SEGMENTS					
	CHANNEL 158.	VALLEY 185.	CHANNEL 363.	VALLEY 364.		NO. 1 .120	NO. 2 .050	NO. 3 .090	NO. 4 .040	NO. 5	NO. 6
	NO VALUES					END AREA					
	ELEVATION	CHANNEL	VALLEY	TOTAL	SQ. FT.						
	560.00	563412.6	1395265.0	1958285.0	14617.00						
	559.00	527584.6	1240055.0	1767451.0	13653.02						
	558.00	492054.7	1068997.0	1581052.0	12694.74						
	557.00	456118.0	952952.4	1411090.0	11765.78						
	556.00	424540.2	820350.6	1244931.0	10043.32						
	555.00	392598.5	703159.0	1095758.0	9550.05						
	554.00	361196.4	590636.1	951822.5	9065.57						
	553.00	331009.9	489095.0	820105.0	8201.57						
	552.00	302030.9	397942.4	699973.0	7356.61						
	551.00	273741.3	312700.3	586521.6	6522.57						
	550.00	247039.0	241345.9	488384.0	5713.35						
	549.00	221200.5	177893.0	399142.4	4920.88						
	548.00	196370.1	122424.1	318794.2	4145.11						
	547.00	173006.6	81107.5	254194.1	3405.20						
	546.00	150839.5	48878.5	199717.9	2726.49						
	545.00	129705.4	26172.1	155877.5	2126.58						
	544.00	110895.5	21536.0	132391.6	1710.07						
	543.00	95241.1	17098.9	112340.0	1425.08						
	542.00	81520.0	13151.0	94672.1	1209.55						
	541.00	69069.4	10228.1	79297.5	1026.97						
	540.00	58023.7	8359.7	66383.4	885.21						
	539.00	48600.1	6575.9	55176.0	760.66						
	538.00	40090.1	5013.2	45103.3	643.86						
	537.00	32777.7	3670.9	36448.6	519.37						
	536.00	26390.6	2568.4	28959.1	420.18						
	535.00	20894.0	1679.4	22573.4	343.81						
	534.00	16307.9	990.2	17318.1	283.45						
	533.00	12495.0	470.0	12965.0	217.99						
	532.00	8656.0	145.0	8801.0	167.54						
	531.00	4844.5	2.5	4847.0	93.38						
	530.00	955.5	.0	955.5	161.72						
	529.00	6200.0	.0	6200.0	122.72						
	528.00	3605.7	.0	3605.7	85.49						
	527.00	1550.0	.0	1550.0	49.99						
	526.00	253.9	.0	253.9	16.23						
	525.00	.0	.0	.0	.00						

QFS	VELOCITY	ELEV.	QFS	VELOCITY	ELEV.	QFS	VELOCITY	ELEV.
37100.00	3.95	554.36						

SECTION 130	DISTANCE		UPSTREAM		DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSIDE	VALLEY	CHANNEL	VALLEY		'N' VALUE BY SEGMENTS					
	353	364	30	110	NO. 1 .050	NO. 2 .025	NO. 3 .002	NO. 4 .045	NO. 5 .050	NO. 6 .040	
	ELEVATION	CHANNEL	VALLEY	TOTAL	END AREA SQ. FT.						
	550.00	819043.0	1326454.0	2145298.0	12877.15						
	559.00	766996.2	1157789.0	1924775.0	11856.24						
	559.00	715993.4	1006896.0	1722890.0	10594.24						
	557.00	665470.9	860173.1	1525644.0	9969.43						
	556.00	617516.0	730210.6	1350535.0	9118.44						
	555.00	569926.6	611651.3	1181579.0	8261.47						
	554.00	524323.4	502654.0	1026978.0	7477.22						
	553.00	480449.7	405147.4	885596.0	6651.45						
	552.00	437568.7	314027.3	751795.1	5916.63						
	551.00	396976.0	230284.7	627261.5	5169.15						
	550.00	357697.0	171511.1	529208.1	4437.22						
	549.00	319729.4	113906.6	433635.9	3720.85						
	548.00	284052.0	72056.5	356108.4	3059.79						
	547.00	249959.7	39933.0	289792.7	2426.10						
	546.00	217125.6	17038.2	234163.8	1858.99						
	545.00	186440.3	5414.0	191854.3	1449.08						
	544.00	158067.3	1753.3	159815.5	1210.16						
	543.00	149034.5	25.3	149059.8	1032.97						
	542.00	130137.2	.0	130137.2	928.91						
	541.00	119134.7	.0	119134.7	833.80						
	540.00	106529.2	.0	106529.2	753.63						
	539.00	92903.1	.0	92903.1	678.63						
	538.00	79257.1	.0	79257.1	606.65						
	537.00	65617.0	.0	65617.0	537.60						
	536.00	55417.3	.0	55417.3	471.32						
	535.00	45043.4	.0	45043.4	407.82						
	534.00	35636.6	.0	35636.6	346.96						
	533.00	27252.9	.0	27252.9	288.90						
	532.00	19924.0	.0	19924.0	233.74						
	531.00	13633.9	.0	13633.9	181.37						
	530.00	8296.0	.0	8296.0	131.78						
	529.00	4568.0	.0	4568.0	86.60						
	528.00	1869.2	.0	1869.2	47.41						
	527.00	292.0	.0	292.0	14.29						
	526.50	.0	.0	.0	.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 4.61 554.72

4.48 554.74

EX.

SECTION 138A	DISTANCE					STATION=					
	DOWNSTREAM		UPSTREAM		DRAINAGE AREA, SQ MI 1.00	W' VALUE BY SEGMENTS					
	CHANNEL 80.	VALLEY 110.	CHANNEL 100.	VALLEY 150.		NO. 1 .050	NO. 2 .025	NO. 3 .002	NO. 4 .045	NO. 5 .050	NO. 6 .040
	ELEVATION				NO VALUES	END AREA					
	CHANNEL		VALLEY		TOTAL	SQ. FT.					
	559.00	659463.4	1297851.0	1957315.0	10224.42						
	557.00	618331.3	1120524.0	1738855.0	9357.40						
	556.00	577942.8	952175.4	1530118.0	8554.50						
	555.00	536559.8	797295.6	1335555.0	7809.18						
	554.00	500530.6	655003.3	1155302.0	7070.17						
	553.00	463160.9	523237.0	995405.9	6395.63						
	552.00	427535.2	414592.9	842229.1	5619.28						
	551.00	392950.0	313707.2	706555.1	4912.90						
	550.00	359211.3	224457.9	583669.2	4221.45						
	549.00	327116.9	151650.7	478767.6	3546.91						
	548.00	295785.5	87519.5	383304.9	2883.74						
	547.00	265953.3	41547.7	307501.0	2249.24						
	546.00	237564.7	15141.6	252706.3	1727.05						
	545.00	210439.6	2792.3	213221.9	1345.67						
	544.00	184650.5	4.3	184652.7	1133.35						
	543.00	164371.4	.0	164371.4	1041.28						
	542.00	145729.9	.0	145729.9	953.23						
	541.00	126285.7	.0	126285.7	868.38						
	540.00	112014.6	.0	112014.6	786.71						
	539.00	96591.8	.0	96591.8	709.24						
	538.00	83164.0	.0	83164.0	633.77						
	537.00	70431.4	.0	70431.4	562.22						
	536.00	58929.1	.0	58929.1	494.06						
	535.00	48307.6	.0	48307.6	429.23						
	534.00	38841.6	.0	38841.6	367.73						
	533.00	30326.7	.0	30326.7	309.22						
	532.00	22955.9	.0	22955.9	254.63						
	531.00	16560.7	.0	16560.7	203.17						
	530.00	11044.7	.0	11044.7	154.71						
	529.00	6540.9	.0	6540.9	109.97						
	528.00	3200.3	.0	3200.3	68.36						
	527.00	855.7	.0	855.7	30.06						
	526.00	7.2	.0	7.2	1.92						
	525.00	.0	.0	.0	.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 4.86 554.77

EX. 2.56 554.82

SECTION 1384	DISTANCE				DRAINAGE AREA, SQ FT 1.00	STATION					
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS					
	CHANNEL 150	VALLEY 150	CHANNEL 442	VALLEY 350		NO. 1 .050	NO. 2 .025	NO. 3 .042	NO. 4 .045	NO. 5 .050	NO. 6 .000
	ELEVATION		NO VALUES		END AREA SQ. FT.						
			CHANNEL	VALLEY	TOTAL						
	560.00		985971.7	1657683.0	2643654.0						12436.64
	559.00		939079.9	1470209.0	2409289.0						11551.29
	558.00		894560.9	1285882.0	2170441.0						10659.24
	557.00		835701.7	1113950.0	1949650.0						9800.63
	556.00		787633.1	953946.0	1741579.0						8981.94
	555.00		740792.4	811754.0	1552547.0						8239.31
	554.00		695136.3	682736.0	1377873.0						7532.35
	553.00		650269.9	562502.0	1212773.0						6849.17
	552.00		607302.6	459022.7	1066325.0						6189.52
	551.00		565112.1	363145.4	928257.5						5541.46
	550.00		524006.9	278671.3	802758.2						4910.78
	549.00		484653.1	200433.3	685086.4						4300.20
	548.00		445999.5	145053.3	591052.0						3719.31
	547.00		408975.0	90967.7	500942.7						3157.09
	546.00		373783.1	61992.7	435775.0						2646.90
	545.00		340350.2	39649.3	380000.0						2244.72
	544.00		308670.3	26510.7	335181.0						1955.02
	543.00		278562.9	17546.5	296109.4						1703.74
	542.00		249360.3	10602.2	260042.6						1607.68
	541.00		221607.6	6566.3	228173.9						1444.16
	540.00		195324.7	4413.1	199737.8						1299.10
	539.00		172123.1	2526.9	174650.0						1173.06
	538.00		150004.0	1301.1	151605.1						1056.16
	537.00		129666.0	510.2	130176.2						944.50
	536.00		110221.1	169.1	110390.2						839.83
	535.00		92151.6	13.4	92165.0						742.00
	534.00		75427.7	.0	75427.7						649.51
	533.00		59975.7	.0	59975.7						559.40
	532.00		46161.4	.0	46161.4						471.96
	531.00		33797.7	.0	33797.7						385.60
	530.00		22866.5	.0	22866.5						301.43
	529.00		13964.0	.0	13964.0						219.46
	528.00		6674.1	.0	6674.1						139.35
	527.00		1727.3	.0	1727.3						61.22
	526.00		14.1	.0	14.1						1.90
	525.00		.0	.0	.0						.00

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100 00 4.54 554.90  
 EX. 4.22 552.95

SECTION 140.	DISTANCE		DRAINAGE		STATION=1283+70					
	DOWNSTREAM CHANNEL 442.	VALLEY 352.	UPSTREAM CHANNEL 402.	VALLEY 430.	AREA, SQ MI 1.00	'N' VALUE BY SEGMENTS				
					NO. 1 NO. 2 NO. 3 NO. 4 NO. 5 NO. 6					
					.055 .040 .000					
					END AREA					
					SQ. FT.					
ELEVATION		CHANNEL	VALLEY	TOTAL						
565.00	1065691.0	1755675.0	2841366.0	16313.50						
564.00	1030339.0	1668785.0	2599124.0	15200.17						
563.00	976622.5	1594842.0	2371465.0	14265.50						
562.00	923333.5	1224922.0	2149255.0	13256.94						
561.00	871755.4	1071089.0	1942845.0	12272.79						
560.00	821050.5	930469.4	1751520.0	11310.00						
559.00	771655.0	809666.0	1581322.0	10379.34						
558.00	723601.1	708559.3	1424150.0	9495.84						
557.00	676439.5	599251.3	1276691.0	8643.79						
556.00	631004.5	506919.3	1139924.0	7842.18						
555.00	586417.4	433488.1	1009906.0	7064.12						
554.00	543494.2	386662.7	890176.3	6329.62						
553.00	501850.1	276226.1	778076.1	5620.21						
552.00	461850.7	210002.4	671061.1	4927.07						
551.00	422455.4	156326.2	578782.5	4271.64						
550.00	384630.0	107446.0	492144.0	3630.18						
549.00	348205.3	65759.0	413964.3	3069.66						
548.00	313730.7	36475.3	358214.0	2421.79						
547.00	280524.7	17069.9	297594.6	1909.39						
546.00	248522.0	6110.9	254733.7	1494.52						
545.00	218629.1	2591.7	221220.7	1269.76						
544.00	191264.5	965.9	192230.3	1120.20						
543.00	165324.5	139.3	165462.9	996.50						
542.00	140827.0	0.0	140827.0	895.20						
541.00	127560.0	0.0	127560.0	806.76						
540.00	114771.5	0.0	114771.5	724.00						
539.00	94192.3	0.0	94192.3	645.55						
538.00	78350.2	0.0	78350.2	570.20						
537.00	65026.1	0.0	65026.1	497.95						
536.00	52404.0	0.0	52404.0	428.00						
535.00	41148.9	0.0	41148.9	362.94						
534.00	31126.5	0.0	31126.5	300.05						
533.00	22340.0	0.0	22340.0	240.14						
532.00	14957.3	0.0	14957.3	183.32						
531.00	8687.4	0.0	8687.4	129.55						
530.00	3995.7	0.0	3995.7	79.00						
529.00	1209.5	0.0	1209.5	34.94						
528.00	0.0	0.0	0.0	0.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.

37100.00 5.15 555.19

EX. 5.15 555.19

SECTION 1109.	DISTANCE				GRAINAGE AREA, SQ FT 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'N' VALUE BY SEGMENTS					
	CHANNEL 402.	VALLEY 430.	CHANNEL 170.	VALLEY 167.		NO. 1 .000	NO. 2 .055	NO. 3 .040	NO. 4 .050	NO. 5	NO. 6
	ELEVATION		NO VALUES		END AREA						
			CHANNEL	VALLEY	TOTAL	SQ. FT.					
	559.00		782301.3	925899.5	1708202.0	8746.00					
	559.00		735433.0	814650.6	1551084.0	8152.73					
	558.00		691053.0	785036.5	1397100.0	7551.36					
	557.00		647351.5	686959.4	1256221.0	6978.61					
	556.00		604228.2	516913.4	1121142.0	6402.78					
	555.00		562703.1	433442.0	996145.9	5946.07					
	554.00		522335.4	355924.2	878159.5	5297.84					
	553.00		482739.4	282197.1	764936.5	4755.27					
	552.00		445129.0	219699.5	664828.3	4225.71					
	551.00		409262.0	161771.3	571034.3	3701.03					
	550.00		372546.0	110551.7	483107.6	3183.67					
	549.00		339651.3	70718.7	409369.9	2677.83					
	548.00		305890.2	38571.2	344561.4	2179.00					
	547.00		274995.3	15246.5	289541.8	1719.10					
	546.00		245958.0	5521.4	250539.3	1396.27					
	545.00		220583.6	776.1	221369.7	1170.00					
	544.00		195762.7	444.3	196227.0	1066.97					
	543.00		171949.2	267.0	172216.2	973.60					
	542.00		149908.0	100.9	149409.7	884.81					
	541.00		127889.9	16.9	127906.8	799.90					
	540.00		107919.2	.0	107919.2	716.00					
	539.00		90561.3	.0	90561.3	636.00					
	538.00		74536.6	.0	74536.6	568.00					
	537.00		59811.9	.0	59811.9	492.00					
	536.00		46528.4	.0	46528.4	408.12					
	535.00		34748.0	.0	34748.0	336.27					
	534.00		24946.9	.0	24946.9	267.93					
	533.00		16633.9	.0	16633.9	203.79					
	532.00		9925.5	.0	9925.5	144.60					
	531.00		4832.6	.0	4832.6	90.40					
	530.00		1438.0	.0	1438.0	41.17					
	529.00		.0	.0	.0	.00					

CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.	CFS	VELOCITY	ELEV.
37100.00	6.00	555.56						

SECTION 1400.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			FW VALUE BY SEGMENTS					
	CHANNEL 170.	VALLEY 167.	CHANNEL 55.	VALLEY 102.		NO. 1 040	NO. 2 065	NO. 3 045	NO. 4 090	NO. 5	NO. 6
		ELEVATION	CHANNEL	VALLEY	TOTAL	FW AREA SQ. FT.					
		551.00	585858.8	906739.6	1492590.0	9352.50					
		550.00	550180.1	879764.6	1409945.0	8549.37					
		559.00	515382.8	804865.1	1320240.0	7856.74					
		558.00	481173.2	699006.6	1179180.0	7264.44					
		557.00	448209.9	600355.1	1048596.0	6684.30					
		556.00	415933.4	507176.6	923110.0	6110.25					
		555.00	384857.4	422682.1	807559.6	5547.59					
		554.00	354727.9	344706.1	699433.1	4992.74					
		553.00	325229.5	271073.8	596503.3	4443.10					
		552.00	297351.8	209087.5	506309.3	3905.94					
		551.00	270099.5	151690.6	421690.1	3373.46					
		550.00	243784.9	101027.0	344811.9	2849.00					
		549.00	218972.7	62784.6	281677.3	2337.00					
		548.00	195090.2	32194.4	227284.6	1839.36					
		547.00	172148.1	10662.6	182810.7	1385.42					
		546.00	150468.3	4209.1	154637.4	1078.14					
		545.00	129068.8	2278.7	132147.5	905.00					
		544.00	110833.2	1375.5	112000.7	804.17					
		543.00	92811.7	692.8	93504.5	700.00					
		542.00	76037.3	224.2	76261.5	618.33					
		541.00	60553.8	29.2	60583.0	552.00					
		540.00	46625.9	.0	46625.9	453.50					
		539.00	36623.4	.0	36623.4	379.49					
		538.00	27971.8	.0	27971.8	311.21					
		537.00	20602.9	.0	20602.9	248.85					
		536.00	14516.3	.0	14516.3	192.89					
		535.00	9573.9	.0	9573.9	142.24					
		534.00	5837.9	.0	5837.9	98.47					
		533.00	3195.8	.0	3195.8	62.66					
		532.00	1450.5	.0	1450.5	34.75					
		531.00	483.3	.0	483.3	15.21					
		530.00	81.8	.0	81.8	3.00					
		529.00	.0	.0	.0	.00					
		CFS	VELOCITY	ELEV	CFS	VELOCITY	ELEV	CFS	VELOCITY	ELEV	
		37100.00	5.30	555.77							

SECTION LAW.	DISTANCE				DRAINAGE AREA, SQ. MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			'W' VALUE BY SEGMENTS					
	CHANNEL 55.	VALLEY 102.	CHANNEL 55.	VALLEY 65.		NO. 1 .040	NO. 2 .065	NO. 3 .045	NO. 4 .000	NO. 5	NO. 6
	ELEVATION		NO VALUES		TOTAL		END AREA				
	SQ. FT.										
	555.00	960402.9	1739970.0	2700413.0	13357.50						
	564.00	913220.9	1546563.0	2459884.0	12545.75						
	563.00	866352.2	1357061.0	2223414.0	11736.52						
	562.00	820075.0	1182279.0	2003175.0	10920.00						
	561.00	776162.1	1052222.0	1828384.0	10136.71						
	560.00	732500.2	969244.0	1721753.0	9370.06						
	559.00	689550.2	891810.7	1591777.0	8689.30						
	558.00	649144.2	771424.3	1419569.0	8065.00						
	557.00	607750.3	660910.1	1260660.0	7449.10						
	556.00	568052.9	555299.0	1123352.0	6835.70						
	555.00	529721.7	459330.7	989060.4	6220.69						
	554.00	492430.4	370954.2	863392.6	5626.34						
	553.00	455853.0	287620.7	743474.6	5027.10						
	552.00	421050.7	217756.6	630815.3	4435.54						
	551.00	386951.6	159374.4	540326.0	3845.86						
	550.00	353076.4	97214.0	451090.7	3262.50						
	549.00	322440.4	55365.1	377803.4	2684.41						
	548.00	293005.2	27980.2	320910.4	2153.73						
	547.00	262646.9	12892.4	275539.3	1711.22						
	546.00	234651.4	8560.4	243219.0	1495.02						
	545.00	208507.0	4728.5	213236.3	1324.47						
	544.00	184476.4	2123.2	185599.5	1177.60						
	543.00	162112.4	734.6	162847.0	1040.06						
	542.00	140991.4	164.2	141056.6	939.02						
	541.00	120035.9	20.9	120056.0	845.00						
	540.00	102164.1	.0	102164.1	750.00						
	539.00	85797.0	.0	85797.0	674.00						
	538.00	70651.2	.0	70651.2	592.00						
	537.00	56741.3	.0	56741.3	512.00						
	536.00	44180.0	.0	44180.0	434.12						
	535.00	33014.2	.0	33014.2	350.26						
	534.00	23529.5	.0	23529.5	265.46						
	533.00	15606.7	.0	15606.7	216.90						
	532.00	9122.3	.0	9122.3	152.00						
	531.00	4223.5	.0	4223.5	93.20						
	530.00	1076.6	.0	1076.6	38.34						
	529.00	.0	.0	.0	.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 5.42 556.01



SECTION 1400.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=					
	DOWNSTREAM		UPSTREAM			W' VALUE BY SEGMENTS					
	CHANNEL 55.	VALLEY 65.	CHANNEL 80.	VALLEY 172.		NO. 1 .050	NO. 2 .045	NO. 3 .030	NO. 4	NO. 5	NO. 6
	ELEVATION				END AREA SQ. FT.						
			CHANNEL	VALLEY	TOTAL						
	565.00		899787.8	2179355.8	3079143.8						15871.00
	564.00		856955.1	1988699.8	2845654.9						15061.90
	563.00		814432.1	1800649.8	2615082.0						14253.16
	562.00		773148.1	1623022.0	2396171.0						13445.86
	561.00		732495.4	1458874.8	2191369.2						12639.30
	560.00		692789.6	1296941.8	1979730.4						11833.84
	559.00		654049.9	1131760.8	1785809.6						11030.22
	558.00		615954.2	982467.9	1598422.1						10227.82
	557.00		579100.6	844566.6	1423667.2						9428.14
	556.00		542856.8	712357.3	1255213.1						8629.78
	555.00		507886.8	591582.8	1099469.6						7830.98
	554.00		473658.8	479721.3	953380.1						7040.18
	553.00		440142.4	379389.3	814131.7						6247.50
	552.00		408176.1	294600.3	692776.4						5459.18
	551.00		378280.9	221952.6	598761.5						4669.50
	550.00		349340.3	159416.8	508756.1						3880.50
	549.00		317383.8	107777.4	425161.2						3100.54
	548.00		285148.3	65996.7	351145.0						2353.98
	547.00		251882.8	27977.4	279860.2						1738.21
	546.00		225822.6	12787.4	238610.0						1499.24
	545.00		210915.6	8511.3	219426.9						1313.85
	544.00		187117.8	4762.3	191880.1						1158.01
	543.00		164431.7	2657.7	167089.4						1040.50
	542.00		142893.2	1517.2	144410.4						931.69
	541.00		122500.7	1072.6	123573.3						837.80
	540.00		103500.9	695.9	104196.8						750.50
	539.00		86904.8	383.8	87288.6						666.70
	538.00		71496.6	178.2	71674.8						585.30
	537.00		57328.8	60.4	57389.2						506.30
	536.00		44509.8	11.8	44521.6						429.84
	535.00		32983.8	.0	32983.8						355.50
	534.00		23664.6	.0	23664.6						284.63
	533.00		15735.8	.0	15735.8						217.25
	532.00		9209.1	.0	9209.1						153.60
	531.00		4253.8	.0	4253.8						93.90
	530.00		1067.4	.0	1067.4						38.36
	529.00		.0	.0	.0						.00

CFS VELOCITY ELEV.      CFS VELOCITY ELEV.      CFS VELOCITY ELEV.  
 37100.00      4.20      556.25

SECTION 141.	DISTANCE				DRAINAGE AREA, SQ MI 1.00	STATION=1277+15 'N' VALUE BY SEGMENTS					
	DOWNSTREAM		UPSTREAM			NO. 1 .050	NO. 2 .045	NO. 3	NO. 4	NO. 5	NO. 6
	CHANNEL 80.	VALLEY 172.	CHANNEL 106.	VALLEY 100.							
	ELEVATION		NO VALUES		TOTAL		END AREA				
			CHANNEL	VALLEY			SQ. FT.				
	555.00		1201515.0	857228.6	2058744.0		12292.00				
	554.00		1049194.0	811310.1	1860504.0		11433.16				
	553.00		900549.1	755826.1	1656375.0		10584.78				
	552.00		764510.4	722079.5	1486590.0		9730.25				
	551.00		649236.9	679200.7	1328438.0		8890.01				
	550.00		566600.1	637623.5	1204223.0		8067.22				
	559.00		523359.0	597340.0	1120700.0		7393.26				
	558.00		500760.1	557940.4	1058700.0		6820.86				
	557.00		444642.6	520174.4	964817.0		6282.82				
	556.00		399999.2	483206.3	883205.4		5749.91				
	555.00		302161.3	447787.4	749948.8		5221.09				
	554.00		240047.4	413535.7	653583.1		4695.36				
	553.00		181676.6	380062.1	561738.7		4171.69				
	552.00		133449.3	348545.9	481995.2		3653.14				
	551.00		89443.2	317769.8	407213.0		3136.53				
	550.00		51768.2	289100.6	339071.8		2622.80				
	549.00		25525.1	260181.3	285706.4		2113.56				
	548.00		9685.9	233510.3	243004.2		1678.33				
	547.00		2197.7	207721.6	209919.3		1333.98				
	546.00		366.3	184265.3	184791.6		1155.75				
	545.00		.0	167255.2	167255.2		1047.14				
	544.00		.0	148346.8	148346.8		950.68				
	543.00		.0	130371.3	130371.3		876.37				
	542.00		.0	113505.6	113505.6		794.64				
	541.00		.0	97737.6	97737.6		715.49				
	540.00		.0	83211.8	83211.8		639.29				
	539.00		.0	69804.3	69804.3		565.77				
	538.00		.0	57507.3	57507.3		494.94				
	537.00		.0	46316.3	46316.3		426.80				
	536.00		.0	36299.4	36299.4		361.50				
	535.00		.0	27350.4	27350.4		298.79				
	534.00		.0	19407.7	19407.7		238.65				
	533.00		.0	12786.9	12786.9		181.19				
	532.00		.0	7275.4	7275.4		126.37				
	531.00		.0	3133.8	3133.8		74.34				
	530.00		.0	700.6	700.6		26.33				
	529.00		.0	.0	.0		.00				

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 6.31 556.25

SECTION 142.	DISTANCE		DRAINAGE		STATION=1288+69						
	DOWNSTREAM	UPSTREAM	CHANNEL	VALLEY	AREA, SQ MI	'N' VALUE BY SEGMENTS					
	CHANNEL 106.	VALLEY 109.	CHANNEL 1.	VALLEY 1.	1.00	NO. 1 060	NO. 2 040	NO. 3	NO. 4	NO. 5	NO. 6
ELEVATION		NO VALUES		TOTAL		END AREA SQ FT.					
	555.00	1421428.0	1241164.0	2652592.0	14153.50						
	554.00	1331111.0	1096537.0	2417540.0	13211.30						
	553.00	1241772.0	935002.2	2176354.0	12259.82						
	552.00	1156343.0	796316.2	1952659.0	11331.22						
	551.00	1073907.0	671226.1	1745033.0	10395.82						
	550.00	995607.9	566647.0	1552255.0	9460.73						
	550.00	925394.3	518755.4	1444150.0	8650.30						
	550.00	860504.7	500557.6	1369152.0	7927.65						
	557.00	799618.3	445050.0	1244669.0	7291.80						
	555.00	740644.0	369042.6	1110407.0	6692.11						
	555.00	685315.0	301741.6	987056.6	6001.80						
	554.00	632629.9	239322.6	871952.6	5400.51						
	553.00	581707.7	180692.1	762399.8	4999.92						
	552.00	535009.9	132335.6	667375.6	4323.04						
	551.00	499912.1	89260.1	578172.1	3750.35						
	550.00	467090.8	56625.1	497699.0	3184.65						
	549.00	401035.2	27962.6	428997.7	2650.54						
	548.00	355847.8	12295.5	368144.3	2193.40						
	547.00	314496.4	2932.7	317429.1	1814.35						
	546.00	274498.3	171.6	274669.9	1545.93						
	545.00	239271.1	31.6	239302.7	1400.31						
	544.00	209449.7	.0	209449.7	1266.16						
	543.00	183914.3	.0	183914.3	1141.42						
	542.00	160760.5	.0	160760.5	1024.44						
	541.00	139923.3	.0	139923.3	915.20						
	540.00	121506.9	.0	121506.9	814.83						
	539.00	101826.7	.0	101826.7	720.33						
	538.00	83759.8	.0	83759.8	629.50						
	537.00	67371.6	.0	67371.6	542.33						
	536.00	52753.1	.0	52753.1	459.05						
	535.00	39907.8	.0	39907.8	379.34						
	534.00	28627.6	.0	28627.6	303.63						
	533.00	19320.3	.0	19320.3	232.79						
	532.00	11650.3	.0	11650.3	155.50						
	531.00	5735.6	.0	5735.6	105.40						
	530.00	1755.1	.0	1755.1	49.16						
	529.00	.0	.0	.0	.00						

CFS VELOCITY ELEV. CFS VELOCITY ELEV. CFS VELOCITY ELEV.  
 37100.00 5.27 556.98

APPENDIX 3

BOUNDARY DESCRIPTION OF FLOODWAY EASEMENT

FLOODWAY EASEMENT

WHEREAS, Charles Ray Allen and wife Georgia Ann Allen are the owners of a tract of land situated in the A. Bledsoe Survey, Abstract No. 157, City of Addison, Dallas County, Texas and being more particularly described as follows;

COMMENCING, at the intersection of the North line of Celestial Road, and the East line of Winnwood Road, an iron stake for a corner;

THENCE, North 00° 00' 00" E, along the East line of Winnwood Road, a distance of 418.00 feet to the POINT OF BEGINNING;

THENCE, North 00° 00' 00" E, along the East line of Winnwood Road a distance of 200.00 feet to an iron rod found for corner;

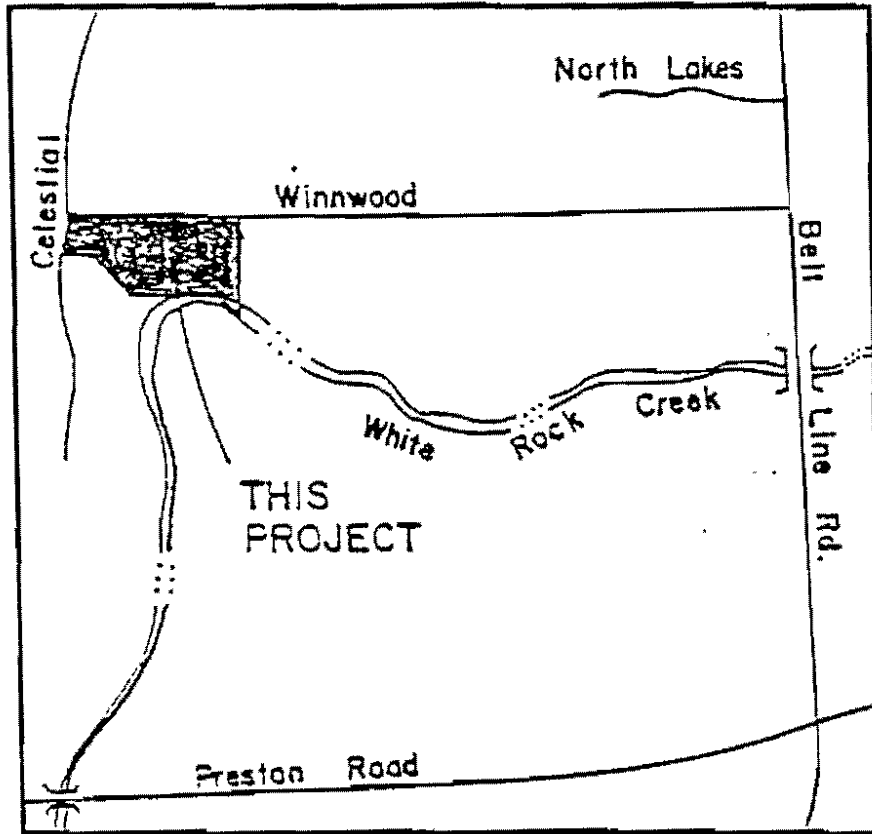
THENCE, S 89° 46' 00" E, with general line of wire fence part of way, a distance of 155.00 feet to a point for a corner;

THENCE, South 00° 00' 00" W, and leaving the above said point a distance of 200.00 feet to a point for a corner;

THENCE, N 89° 46' 00" W, a distance of 155.00 feet to the POINT OF BEGINNING and CONTAINING 30,999.743 Square Feet or 0.71166 Acres of Land, more or less.

**EXHIBITS**

EXHIBIT A  
VICINITY MAP

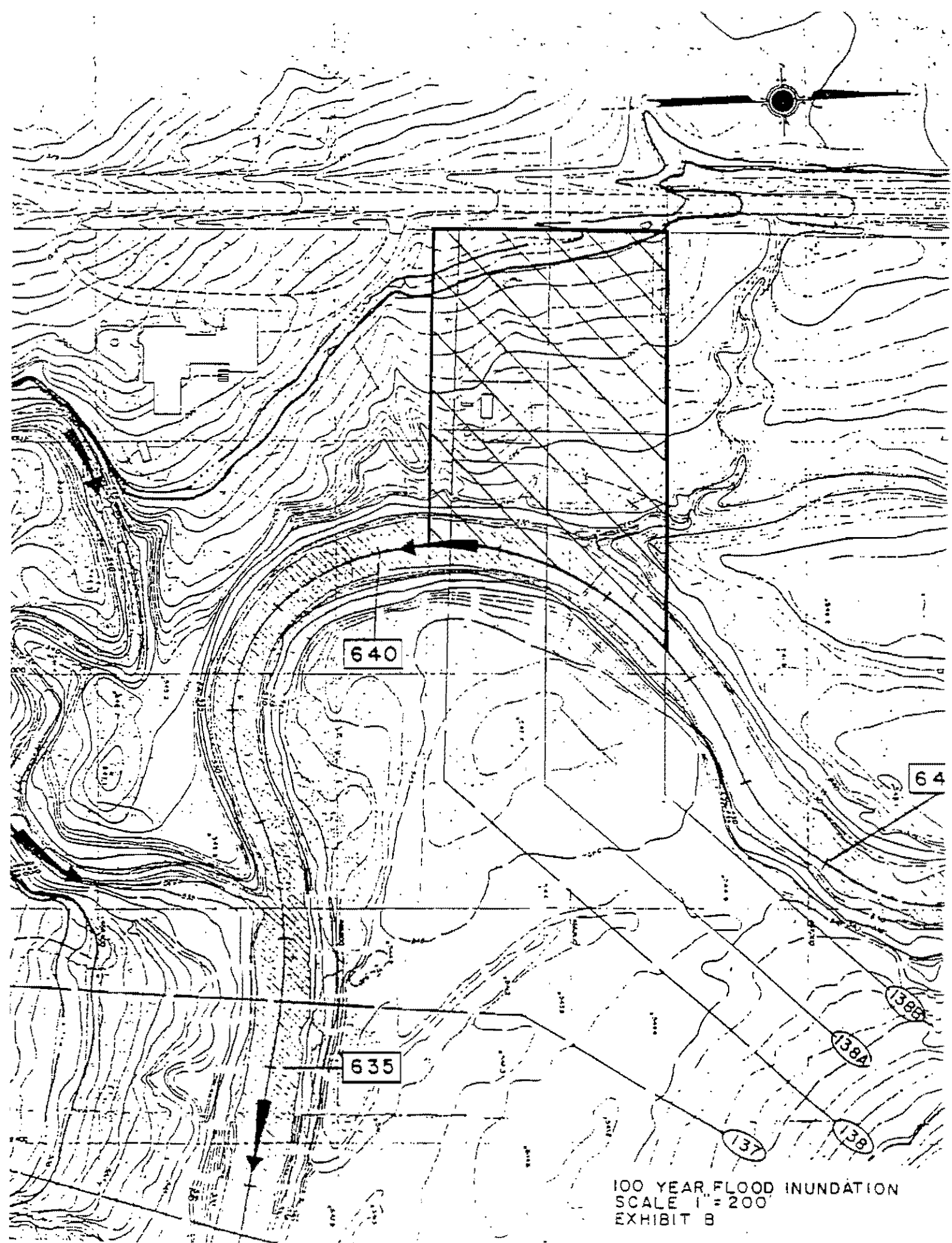


Location Map  
n.t.s.



EXHIBIT B

100-YEAR INUNDATION LIMITS



640

64

635

1386

138A

137

138

100 YEAR FLOOD INUNDATION  
SCALE 1" = 200'  
EXHIBIT B

EXHIBIT C

WATER SURFACE PROFILE

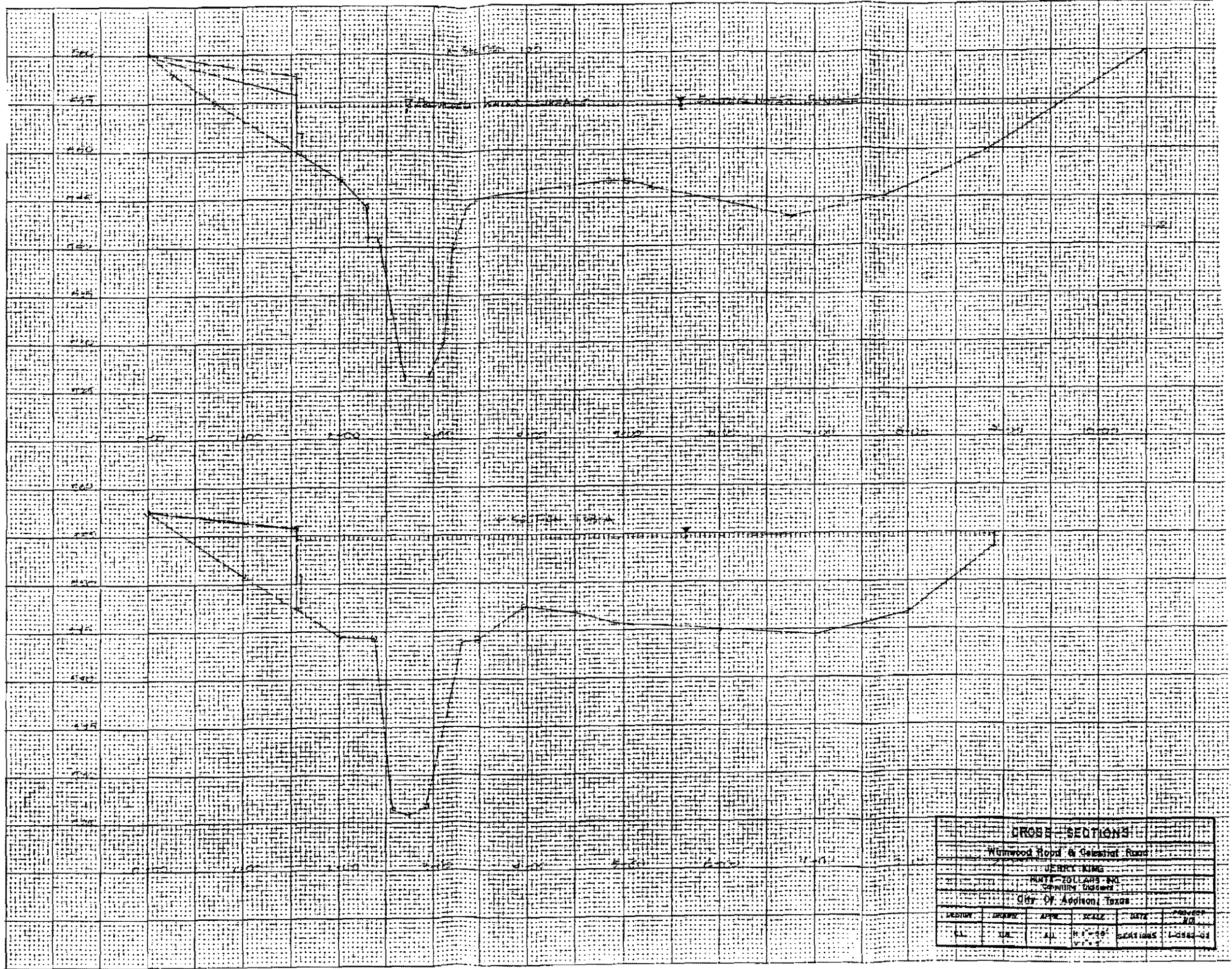
100 YEAR WATER SURFACE

100YR WATER SURFACE  
ELEVATION PROFILE  
EXHIBIT C  
SCALE  
H:1" = 100'  
V:1" = 5'

13510

140

EXHIBIT D  
CROSS-SECTIONS



CROSS SECTIONS					
Wimwood Road & Chestnut Road					
JERRY KING					
MAYNARD & SONS					
City of Addison, Texas					
DESIGN	DRAWN	APP'D	SCALE	DATE	PROJECT NO.
11	11	11	1" = 10'	SECTION 1	11-11-54



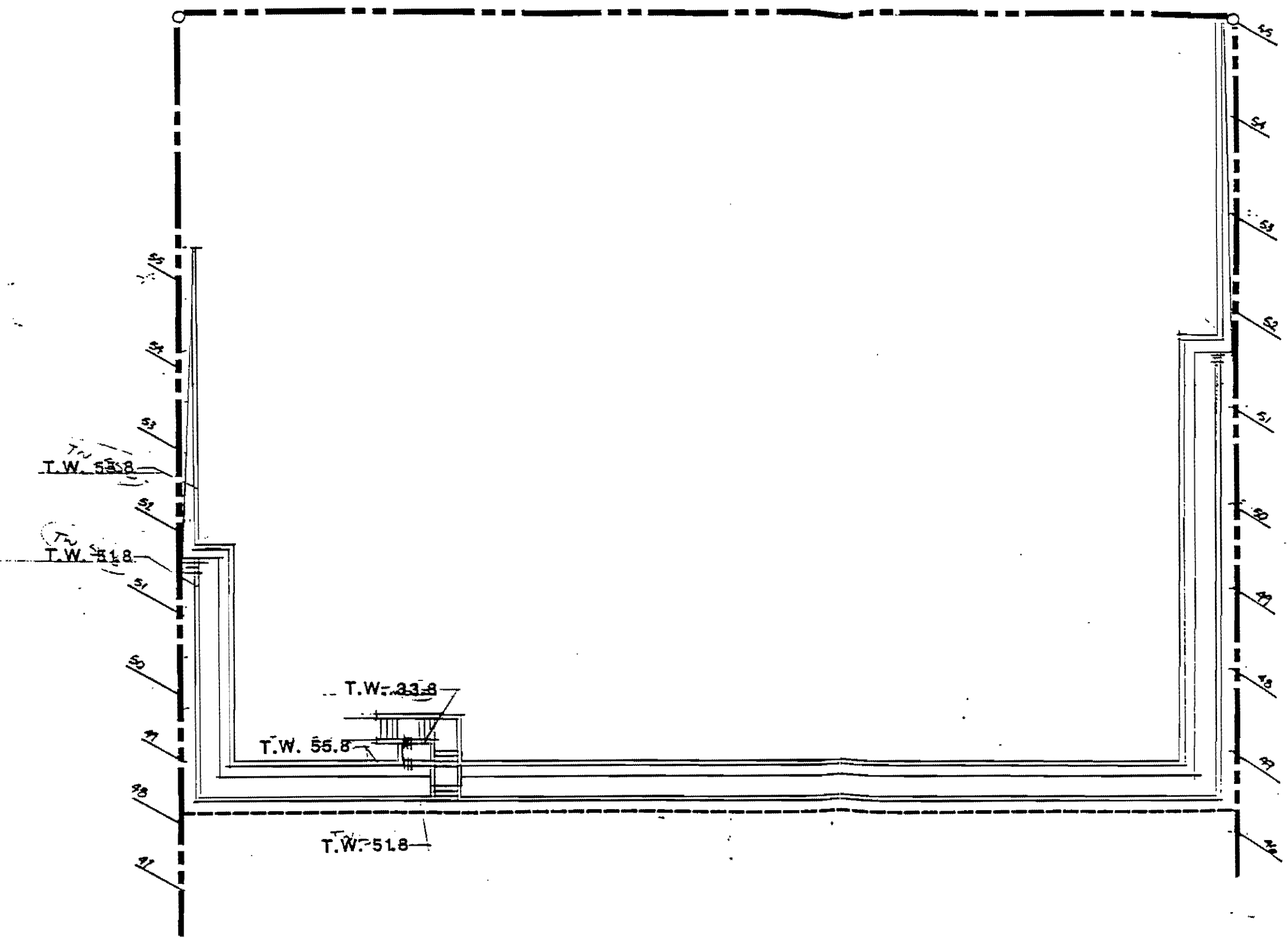
EXHIBIT E  
RECLAMATION PLAN





EXHIBIT F  
RETAINING WALL TYPICAL SECTION

MINIMUM COVER RD.



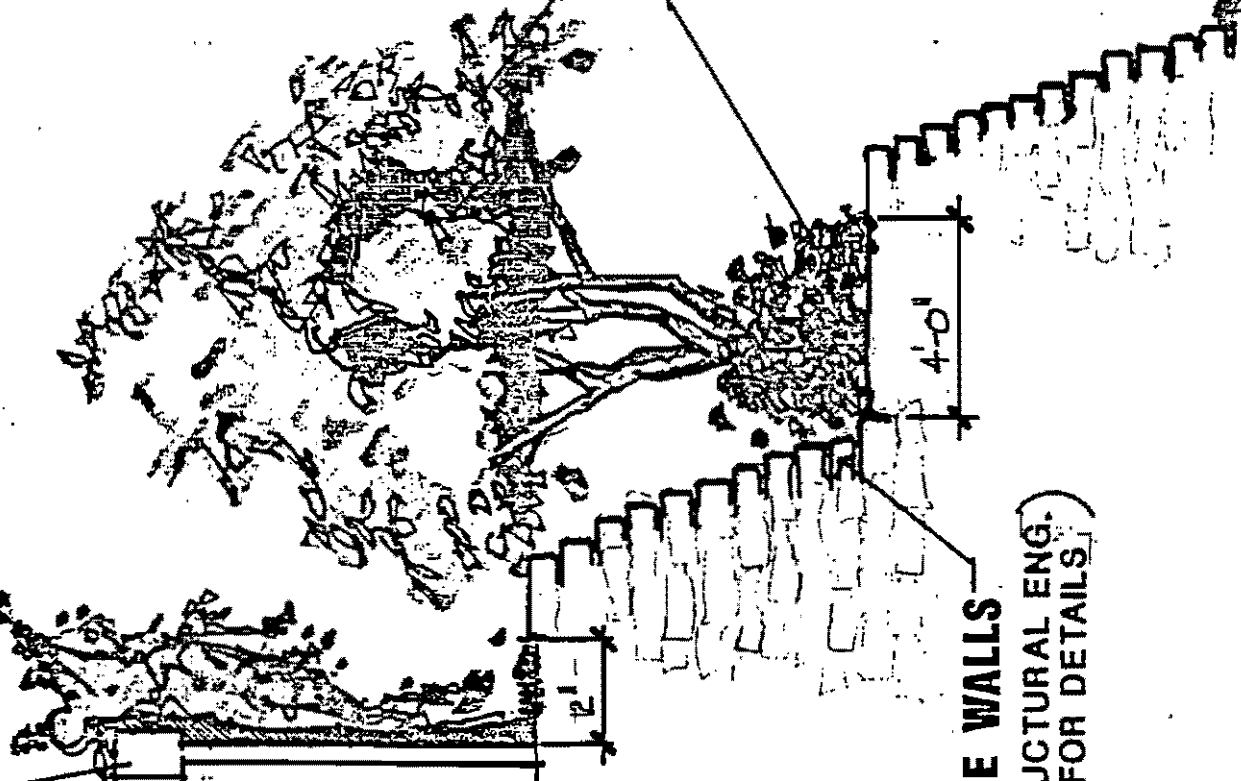
NOTE: SCREEN FENCE TO BE  
 INSTALLED PER THE  
 WALL  
 WALL = 3.90' 50 FT

ENVIRO DESIGN  
 LANDSCAPE ARCHITECTS  
 7424 Greenville Ave. • Suite 200  
 Dallas, TX 75231

SCALE: = 20'-0"

6 FT. HIGH SCREEN

CLIMBING VINES



STONE WALLS

(SEE STRUCTURAL ENG. PLANS FOR DETAILS)

ORNAMENTAL TREE

SHRUBS OR GROUND COVER

GRASS

TYPICAL WALL SECTION FOR

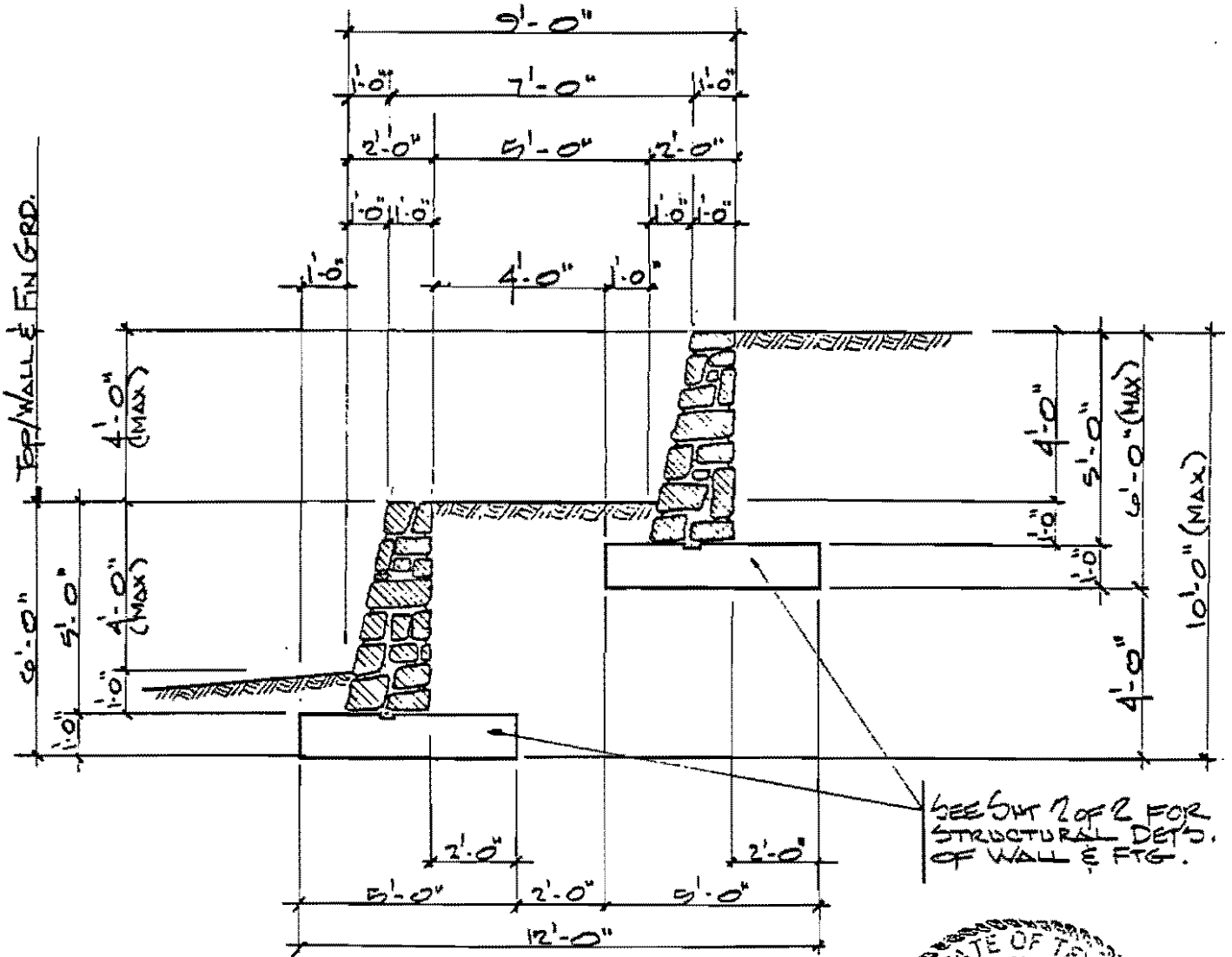
DATE: 9-10-05

NO SCALE

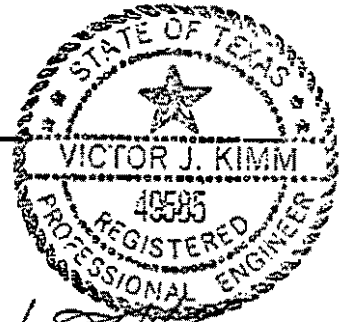
TO CREEK →

ENVIRO DESIGN  
LANDSCAPE ARCHITECTS  
3424 Greenbriar Ave. Suite 200  
Dallas, TX 75231

1. RETAINING WALL ARE DESIGNED THE WEIGHT OF EARTH AT 120 #/CU. FT.
2. CONTRACTOR SHALL PROVIDED VERT. EXP. JOINTS @ 30'-0" O.C. USING 12" NON-EXTRUDED FILLER. STAGGER EXP. JTS BETWEEN UPPER & LOWER WALLS.



TYP. SECT. @ RETAINING WALL  
4'-1'-0"



*Victor J. Kimm*  
9/19/85

**HUITT-ZOLLARS**  
Dallas/Houston/Fort Worth/Collin County/Phoenix  
Huittt-Zollars, Inc./Consulting Engineers  
3131 McKinney Avenue/Suite 600  
Dallas, Texas 75204/214-871-3311

RETAINING WALL DETAILS  
JERRY KING RESIDENCE  
JOB NO: 0592-02 DATE: 18 SEPT 85

1  
OF 2  
VJK VJK

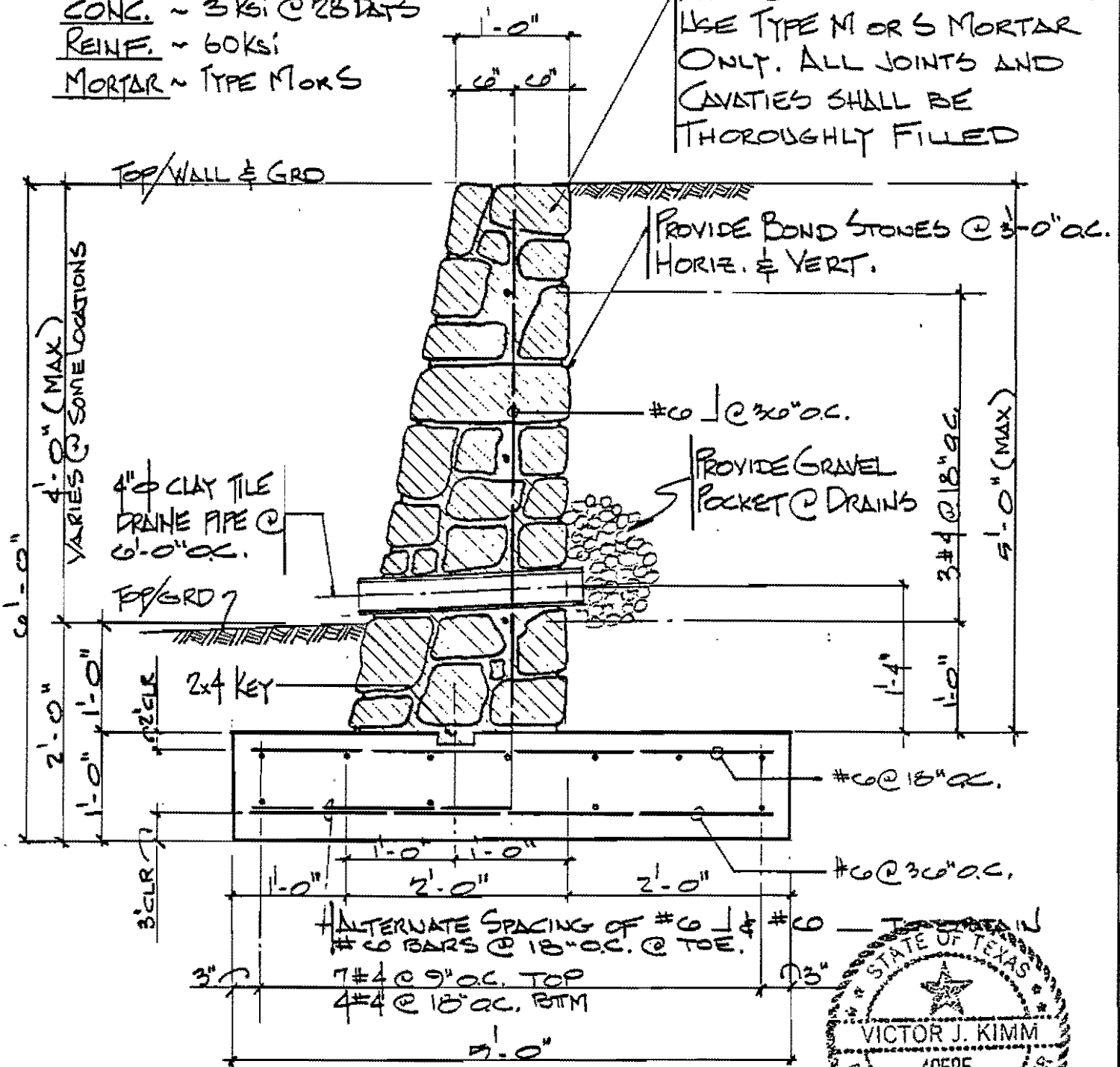
MATERIAL SPECS:

CONC. ~ 3ksi @ 28 DAYS

REINF. ~ 60ksi

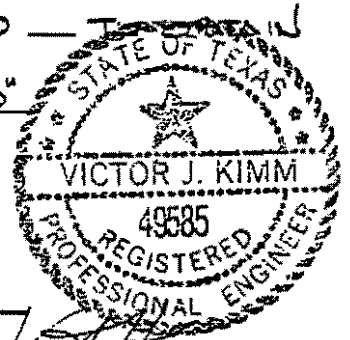
MORTAR ~ TYPE M OR S

RUBBLE STONE CONSTRUCTION  
USE TYPE M OR S MORTAR  
ONLY. ALL JOINTS AND  
CAVITIES SHALL BE  
THOROUGHLY FILLED



TYPICAL SECT. W/REINF. ~ A-A

3/4" = 1'-0"



*[Signature]*  
9/19/85

**HUTT-ZOLLARS**

Dallas/Houston/Fort Worth/Collin County/Phoenix

Hutt-Zollars, Inc./Consulting Engineers  
313 McKinney Avenue/Suite 600  
Dallas, Texas 75204/214-971-3311

RETAINING WALL DETAILS

JERRY KING RESIDENCE

JOB NO: 0982-02 DATE: 18 SEPT 85

2  
2 OF 2

OWN VIK  
CHK VZ