RD212306,9/10/2004,R:\Proj\estimates\final estimate\R-2206C Drain Sum.xls

RD212306

COMPUTED BY: TCE TO, RPS DATE: 5/1/2004

CHECKED BY: SEC, REO DATE: 6/1/2004

METRIC

PROJECT NO.	SHEET NO.
R-2206C	3-E

DIVISION OF HIGHWAYS

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 1200mm & UNDER)

SIZE / THICKNESS OR GAUGE

STATION	LOCATION (LT, RT, M, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 375	450	450 CLASS IV	600	600 CLASS IV	750	750 CLASS IV	900	900 CLASS IV	1050	1050 CLASS IV	1200	1200 CLASS IV
SHEET 15																				
Y13 12+08	RT	83		272.229																
Y13 12+08	RT	83	84		271.419	271.371		9.6												
Y13 12+08	LT	84		272.229																
Y13 12+08	LT	84	OUT		271.321	267.700														
SR2 11+45	RT	85	86		267.099	263.440		27.6												
L 217+70	RT	86		264.250																
L 217+70	RT	86	87		263.440	263.314		25.2												
L 217+70	CL	87		264.699																
L 217+70	CL	87	90		263.264	262.388		80.4												
L 217+70	LT	88		264.573																
L 217+70	LT	88	87		263.763	263.314		25.2												
SHEET 16																				
L 218+07	CL	89	OUT		256.809	252.483								87.6						
L 218+50	CL	90		263.812																
L 218+50	CL	90	94		262.311	262.032			25.2											
L 218+50	RT	91		264.429																
L 218+50	RT	91	90		263.619	262.388		20.4												
L 218+50	LT	92																		
L 218+78	LT	92	93		266.500	262.232														
L 218+77	LT	93		263.072																
L 218+77	LT	93	94		262.182	262.032			25.2											
L 218+75	CL	94		263.531																
L 218+75	CL	94	OUT		261.982	256.900														
L 220+68	LT	95																		
L 220+68	LT	95	96		261.950	259.967														
L 220+68	LT	96		260.807																
L 220+68	LT	96	97		259.917	259.653			26.4											
L 220+74	CL	97		261.300																
L 220+74	CL	97	98		259.603	259.233			26.4											
L 220+80	RT	98		260.807																
L 220+80	RT	98	OUT		259.183	258.700					19.2									
L 221+05	CL	99	OUT		259.800	259.857							67.2							
SHEET 17																				
L 222+60	LT	100		259.022																
L 222+60	LT	100	101		258.184	258.151		9.6												
L 222+68	LT	101		259.825																
L 222+68	LT	101	102		258.101	257.871		18.0												
L 222+68	CL	102		259.969																
L 222+68	CL	102	103		257.821	257.610			18.0											
SHEET TOTALS								216.0	121.2	0.0	19.2	0.0	67.2	87.6	0.0	0.0	0.0	0.0	0.0	0.0

STATION	LOCATION	FROM	TO	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 400 1.63	450 1.63	600 1.63	600	800 2.01	800	1000 2.01	1000	375mm SIDE DRAIN PIPE	450mm SIDE DRAIN PIPE	600mm SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. METERS R.C.P.	C.S.P.	QUANITIES FOR DRAINAGE STRUCTURES PER EACH (0 THRU 1.50)	*TOTAL L.M. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') METERS A 1.5 THRU 3.00	B 3.00 AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G
SHEET 15																							
Y13 12+08	RT	83															1						
Y13 12+08	RT	83	84																				
Y13 12+08	LT	84															1						
Y13 12+08	LT	84	OUT	14.4																			
SR2 11+45	RT	85	86																				
L 217+70	RT	86															1						
L 217+70	RT	86	87																				
L 217+70	CL	87															1						
L 217+70	CL	87	90																				
L 217+70	LT	88															1						
L 217+70	LT	88	87																				
SHEET 16																							
L 218+07	CL	89	OUT																				
L 218+50	CL	90															1						
L 218+50	CL	90	94																				
L 218+50	RT	91															1						
L 218+50	RT	91	90																				
L 218+50	LT	92																					
L 218+78	LT	92	93		12.0																		
L 218+77	LT	93															1						
L 218+77	LT	93	94																				
L 218+75	CL	94															1	0.049					
L 218+75	CL	94	OUT			31.2																	
L 220+68	LT	95																					
L 220+68	LT	95	96		6.0																		
L 220+68	LT	96															1						
L 220+68	LT	96	97																				
L 220+74	CL	97															1	0.197					
L 220+74	CL	97	98																				
L 220+80	RT	98															1	0.124					
L 220+80	RT	98	OUT																				
L 221+05	CL	99	OUT																				
SHEET 17																							
L 222+60	LT	100															1						
L 222+60	LT	100	101																				
L 222+68	LT	101															1						
L 222+68	LT	101	102																				
L 222+68	CL	102															1	0.648					
L 222+68	CL	102	103																				
SHEET TOTALS				14.4	18.0	31.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	1.018	0.000	0	0	0	0

STATION	LOCATION	FROM	TO	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	M.D.I. TYPE "A" STD. 840.17 OR 840.26	M.D.I. TYPE "B" STD. 840.18 OR 840.27	M.D.I. TYPE "D" STD. 840.19 OR 840.28	M.D.I. FRAME WITH GRATE STD. 840.22	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	J.B. STD. 840.31 OR 840.32	M.H. STD. 840.51 OR 840.53	M.H. FRAME AND COVER STD. 840.54	B.D.O. STD. 850.10	B.D.O. STD. 850.11	SPRING BOX STD. 840.41	150 mm PVC (m)	450 mm TEE-RISER STD. 1630.01	600 mm TEE-RISER STD. 1630.01	T.B.D.I. STD. 840.35	JB STD. 840.34	REINFORCED TAPERED INLET - SEE SHEET 2-V	TEMP. STEEL COVER	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" M^3 STD. 840.72	CONC. ENDWALL FOR TAPERED INLET SEE SHEET 2-W. CLASS "B", M^3.	PIPE REMOVAL (METERS)	REMARKS
SHEET 15																													
Y13 12+08	RT	83									1										1							10	T.B.D.I. w/ NARROW SLOT
Y13 12+08	RT	83	84																										
Y13 12+08	LT	84									1										1								T.B.D.I. w/ NARROW SLOT
Y13 12+08	LT	84	OUT																						2 @ 400				
SR2 11+45	RT	85	86																										
L 217+70	RT	86					1			1																			
L 217+70	RT	86	87																										
L 217+70	CL	87					1				1																		
L 217+70	CL	87	90																										
L 217+70	LT	88					1			1																			
L 217+70	LT	88	87																										
SHEET 16																													
L 218+07	CL	89	OUT																										METHOD 'B' INSTALLATION
L 218+50	CL	90					1			1																			
L 218+50	CL	90	94																										
L 218+50	RT	91																			1			1					2 G.I. w/ FUTURE FLAT GRATES
L 218+50	RT	91	90																										
L 218+50	LT	92													1														
L 218+78	LT	92	93																						2 @ 450				
L 218+77	LT	93					1				1																		
L 218+77	LT	93	94																										
L 218+75	CL	94					1				1																		
L 218+75	CL	94	OUT																						2 @ 600				
L 220+68	LT	95													1														
L 220+68	LT	95	96																						2 @ 450				
L 220+68	LT	96					1			1																			
L 220+68	LT	96	97																										
L 220+74	CL	97					1			1																			
L 220+74	CL	97	98																										
L 220+80	RT	98					1			1																			
L 220+80	RT	98	OUT																										
L 221+05	CL	99	OUT																										
SHEET 17																													
L 222+60	LT	100					1			1																			
L 222+60	LT	100	101																										
L 222+68	LT	101																			1			1					2 G.I. w/ FUTURE FLAT GRATES
L 222+68	LT	101	102																										
L 222+68	CL	102					1			1																			
L 222+68	CL	102	103																										
SHEET TOTALS				0	0	0	11	0	0	8	5	0	0	0	2	0	0	0	0	0	4	0	0	2	2@400, 4@450, 2@600	0.0	0.0	10.0	

ABBREVIATIONS

C.B.	CATCH BASIN
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I.(N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
B.D.O.	BERM DRAINAGE OUTLET