DS21241

COMPUTED BY: PMW/SHB DATE: 7/29/2004

CHECKED BY: DCK DATE: 7/29/2004

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

METRIC

PROJECT NO.	SHEET NO.
R-2539C	3-B

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

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C.P. PIPE (UNLESS NOTED OTHERWISE) 300	375	450	450 CLASS IV	600	600 CLASS IV	750	750 CLASS IV	900	900 CLASS IV	1050	1050 CLASS IV	1200	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 400 1.63	DUCTILE IRON PIPE, CLASS 50 (UNLESS NOTED OTHERWISE) 300	400	450	600	750	900	1050	1200	375mm SIDE DRAIN PIPE	450mm SIDE DRAIN PIPE	600mm SIDE DRAIN PIPE	750mm SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. METERS R.C.P.	C.S.P.
SHEET 8																																			
Y 10+52	L	21																												12.0					
Y 10+88	M																																		
Y 10+94	L																																		
Y 11+00	L																																		
Y 11+18	L	IN	22		11.80	11.60			13.2																										
Y 11+18	L	22		12.52																															
Y 11+18	L	22	23		11.53	11.46	X																	27.6											
Y 11+45	L	23		12.66																															
L 169+43	L	23	24		11.31	11.21	X																		40.8										
L 169+86	L	24		12.42																															
L 169+86	L	24	24A		11.21	11.10																			21.6										
L 169+88	R	24A		12.69																															
L 169+88	R	24A	27		11.00	10.76																			48.0										
Y 12+09	L																																		
Y 12+22	R																																		
L 169+88	R	25		12.33																															
L 169+88	R	25	24A		11.64	11.33																	4.8												
L 170+36	R	26		11.78																															
L 170+36	R	26	27		11.09	10.99																	4.8												
L 170+36	R	27		11.80																															
L 170+36	R	27	30		10.66	9.70																			54.0										
L 170+86	R	31		10.40																															
L 170+86	R	31	30		9.64	9.62				6.0																									
L 170+48	L	28		11.63																															
L 170+48	L	28	29		11.72	10.16			40.8																										
L 170+90	L	29		10.97																															
L 170+90	M	29	30		10.06	9.70			19.2																										
L 170+90	R	30		10.97																															
L 170+90	R	30	32		9.62	9.36						28.8																							
SHEET 9																																			
L 171+19	R	32		10.56																															
L 171+19	R	32	33		9.26	9.10						19.2																							
L 171+24	L																																		
L 171+38	R	33		10.42																															
L 171+38	R	IN	33		9.49	9.25				6.0																									
L 171+38	R	33	35A		9.00	7.94								50.4																					
L 171+72	R																																		
L 171+87	R	34		9.05																															
L 171+87	R	34	35		8.36	8.34			4.8																										
L 171+88	R	35		9.09																															
L 171+88	R	35	35A		8.34	8.31			6.0																										
L 171+88	R	35A		10.23																															
L 171+88	R	35A	36		7.84	7.74								18.0																					
L 171+88	L	36		9.68																															
L 171+88	L	36	37		7.59	7.28										62.4																			
L 172+30	R																																		
L 172+51	M	IN	37		7.89	7.43								26.4																					
SHEET TOTALS									84.0	12.0		48.0		94.8		62.4							9.6	27.6	164.4					12.0					

STATION	LOCATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0 THRU 1.50)	*TOTAL METERS 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	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	T.B.D.I. STD. 840.35 OR 840.36	T.B.D.I. FRAME AND GRATE STD. 840.37	DRIVEWAY D.I.STD. 840.30	DRIVEWAY GRATE & FRAME (M)	MOD. CONC. FLUME W/ CONC. DITCH FOR 750 C&G (SEE DETAIL 2-Z)	J.B. STD. 840.31 OR 840.32	M.H. FRAME AND COVER STD. 840.54	D.I. NARROW FRAME AND GRATE STD. 840.13	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. 840.20	M.D.I. FRAME WITH TWO GRATES STD. 840.20	M.D.I. FRAME WITH GRATE STD. 840.22	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. FRAME WITH GRATE STD. 840.29	M.D.I. FRAME WITH TWO GRATES STD. 840.29	MOD.CONC. FLUME W/ CONC./RIP RAP DITCH FOR 200X450 CURB (SEE DETAIL 2-AA)	MOD.CONC. FLUME W/ RIP RAP DITCH FOR 750 C&G (SEE DETAIL 2-Z)	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" M^3 STD. 840.72	CONC. & BRICK PIPE PLUG, M^3 STD. 840.71	PIPE REMOVAL (METERS)	REMARKS
SHEET 8																																				
Y 10+52	L	21																																		
Y 10+88	M																																	0.16		PLUG 600 RCP & REMOVE EX. DI
Y 10+94	L																																		11.8	REMOVE 600 RCP
Y 11+00	L																																		32.9	REMOVE 750 RCP & EX. DI
Y 11+18	L	IN	22																																	
Y 11+18	L	22		1			1	1																												
Y 11+18	L	22	23																																	
Y 11+45	L	23		1			1		1																											
L 169+43	L	23	24																																	
L 169+86	L	24		1			1			1																										
L 169+86	L	24	24A																																27.4	REMOVE 375 CMP & EX. DI
L 169+88	R	24A		1	0.185		1		1																											
L 169+88	R	24A	27																																	
Y 12+09	L																															1					
Y 12+22	R																																		6.5	300 RCP
L 169+88	R	25		1							1	1																								
L 169+88	R	25	24A																																23.8	REMOVE 375 CMP, EX. DI, & EX. CONC FLUME
L 170+36	R	26		1							1	1																								SDB (SEE SEALED DRAINAGE SPECIAL PROVISION)
L 170+36	R	26	27																																24.5	REMOVE 375 CMP & EX. DI
L 170+36	R	27		1			1		1																											SDB (SEE SEALED DRAINAGE SPECIAL PROVISION)
L 170+36	R	27	30																																1.2	REMOVE 375 CMP & EX. DI
L 170+86	R	31		1							1	1																								
L 170+86	R	31	30																																	
L 170+48	L	28		1			1			1																										
L 170+48	L	28	29																																	
L 170+90	L	29		1			1			1																										
L 170+90	M	29	30																																	
L 170+90	R	30		1			1		1																											
L 170+90	R	30	32																																	
SHEET 9																																				
L 171+19	R	32		1			1		1																											
L 171+19	R	32	33																																46.8	450 RCP
L 171+24	L																																		6.4	DRIVEWAY PIPE (NO SIZE)
L 171+38	R	33		1			1		1																											
L 171+38	R	IN	33																																	
L 171+38	R	33	35A																																33.2	450 RCP
L 171+72	R																																		35.6	REMOVE 450 RCP & EX. DI
L 171+87	R	34		1									1	1																						
L 171+87	R	34	35																																2.8	REMOVE PVC (NO SIZE) & EX. DI
L 171+88	R	35		1							1	1																								
L 171+88	R	35	35A																																	
L 171+88	R	35A		1			1		1																											
L 171+88	R	35A	36																																	
L 171+88	L	36		1	0.59		1			1																										
L 171+88	L	36	37																																	
L 172+30	R																																		9.5	REMOVE 450 RCP & 2 EX. 2.3 HW
L 172+51	M	IN	37																																6.0	450 RCP
SHEET TOTALS				17	0.78		12	1	7	4	4	4	1	1																		1			0.16	268.4	

ABBREVIATIONS	
C.B.	CATCH BASIN
B.D.O.	BERM DRAIN OUTLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
O.T.C.B.	OPEN THROAT CATCH BASIN
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
S.D.B.	SEALED DRAINAGE BOX