RD104,10/13/00,G:\Admin\DataMasters\Excel_sheets\Drainage_Summaries.xls

COMPUTED BY: RWZ DATE: MARCH 2004

CHECKED BY: WCP DATE: APRIL 2004

METRIC

PROJECT NO. R-513C SHEET NO. 3-F

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

STATION	LOCATION (LT, RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 300	375	450	600	750	900	1050	1200	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 300 (1.63)	400 (1.63)	450 (1.63)	600 (1.63)	800 (2.01)	900 (2.01)	1000 (2.01)	1200 (2.01)	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.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0 THRU 1.50)	*TOTAL L.F. 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	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 TWO GRATES STD. 840.20	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32	MANHOLE STD. 840.51	M.H. STD. 840.51 OR 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT D.I. TO J.B.	ADJUST D.I.	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD. 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL (METERS)	REMARKS
312+00 -L-	CL	149		42.9																									1										1			1													
		149	150		42.09	41.94	*		28.8																																														
312+00 -L-	LT	150		43.03																									1										1			1													
		150	151		41.94	42.84			22.8																																														
19+03 -Y9-	LT	151		43.65																									1										1					1											
44+43 -Y8-	LT	152		43.35																									1										1					1											
		152	153		42.54	42.19			19.2																																														
44+40 -Y8-	RT	153		43.08																									1										1					1											
		153	148		42.19	40.81	*			207.6																																													
20+95 -Y9-	LT	154																						9.6																															
21+54 -Y9-	LT	155																						9.6																															
13+62 -Y4-	CL	156			41.2	41				81.6 (CL IV)																																													
13+59 -Y4-	RT	157		49.57																									1										1		1														
		157	158		48.76	48.69			14.4																				1																										
13+58 -Y4-	LT	158		49.6	48.69	41.4											34.8																						1		1										2 @ 400				
14+38 -Y4-	RT	159		49.57																									1										1		1														
		159	160		48.76	48.69			14.4																																														
14+41 -Y4-	LT	160		49.57	48.69	41.4											36.0												1										1		1										2 @ 400				
14+45 -Y4-	CL	161			40.8	40.4				85.2 (CL IV)																																													
316+60 -L-	CL	162		42.2																									1										1			1													
		162	163		41.39	40.19			118.8																																														
317+79 -L-	LT	163		41.1																																													1						SEE DETAIL SHEET 2K
317+79 -L-	RT	164		42.16																									1										1			1													
		164	163		41.35	40.19			9.6																																														
317+79 -L-		165		42.26																									1										1			1													
		165	163		41.45	40.19			2.4																																														
319+34 -L-	CL	166		40.95	40.04																																												1						SEE DETAIL SHEET 2K
319+46 -L-	CL	167		40.92	40.01																																												1						SEE DETAIL SHEET 2K
319+34 -L-	RT	168			39.39	EXIST.									4.8												4.6																									0.74			
320+00 -L-	CL	169		40.8																									1											1		1													
		169	167		40.16	40.01				54.0																																													
320+30 -L-	LT	170			EXIST.	39.87				4.8																																										0.33			REMOVE FES
[illegible]3+43 -Y9-	CL	171			39.29	39.21									30.0												4.6																												
53+00 -Y8-	CL	172			41	41						22.8																																											
54+40 -Y8-	CL	173			41.29	41				20.4																																													
324+93 -L-	CL	174		41.21	39.71																																													1					
324+93 -L-	RT	175			40.3	39.95						27.6																																											REMOVE FES
10+10 -Y8C-	CL	176			41.54	41.42			38.4																																														
NOT USED		177																																																					
SHEET TOTALS									268.8	286.8		50.4			34.8		70.8							19.2			9.2		13										12	1	4	6		3					3	1	4 @ 400	1.07			
										166.8 (CL IV)																																													

ABBREVIATIONS

C.B. CATCH BASIN
N.D.I. NARROW DROP INLET
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
T.B.D.I. TRAFFIC BEARING DROP INLET
T.B.J.B. TRAFFIC BEARING JUNCTION BOX