RA1-D6HNJ01,7/24/2003,R:\Roadway\Estimate\Final\Drainage_Summary.xls

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RA1-FLD8501

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-0620	3-E

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

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

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. PIPE (UNLESS NOTED OTHERWISE) SHADED BLOCK = CLASS IV R.C. PIPE 12	15	18	24	30	36	42	48	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 12 .064	15 .064	18 .064	24" .064	30" .079	36" .079	42" .109	48" .109	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	36" SIDE DRAIN PIPE
SHEET 8																										
-L- 66 + 22	RT	91	OUT		156.58	156.29	X					36														
-Y7- 11 + 00	RT	94		166.19																						
-Y7- 11 + 00	RT	94	95		163.69	163.04			32																	
-Y7- 11 + 00	LT	95		166.19																						
-Y7- 11 + 00	LT	95	95A		162.79	162.64	X			4																
-Y7- 11 + 07	LT	95A		166.04																						
-Y7- 11 + 07	LT	95A	96		162.64	161.78	X			44																
-Y7- 11 + 50	LT	96		165.18																						
-L- 67 + 76	LT	92		164.80																						
-L- 67 + 76	LT	92	93		162.50	162.34			28																	
-Y7- 11 + 50	RT	93		165.44																						
-Y7- 11 + 50	RT	93	96		162.34	161.78			32																	
-Y7- 11 + 50	LT	96	97		161.78	160.26					60															
-Y7- 12 + 08	LT	97		164.16																						
-Y7- 12 + 08	LT	97	98		160.26	159.76					76															
-L- 69 + 20	LT	98		163.51																						
-L- 69 + 20	LT	98	99		159.61	159.00					80															
-L- 70 + 00	LT	99		162.75																						
-L- 70 + 00	LT	99	100		158.85	158.09					152															
-L- 71 + 50	LT	100		161.50																						
-L- 71 + 50	LT	100	101		158.09	157.02					28															
-L- 71 + 80	LT	101		161.69																						
-L- 71 + 72	LT	IN	101		159.50	157.02					48															
-Y8- 16 + 00	RT	105		165.04																						
-Y8- 16 + 00	RT	105	104		161.94	158.40			52																	
-L- 72 + 85	LT	104		160.70																						
-L- 72 + 85	LT	104	103		158.40	158.20			40																	
-L- 72 + 55	LT	103		161.30																						
-L- 72 + 55	LT	103	102		158.20	158.00			40																	
-L- 72 + 25	LT	102		162.14																						
-L- 72 + 25	LT	102	101		158.00	157.02			44																	
-L- 71 + 80	LT	101	106		156.52	156.18	X					92														
-L- 71 + 72	RT	106		161.28																						
-L- 71 + 72	RT	106	107		156.18	155.65						44														
-L- 72 + 15	RT	107		161.37																						
-L- 72 + 15	RT	107	OUT		155.50	151.10						44														
-L- 74 + 20	RT	108		161.63																						
-L- 74 + 20	RT	108	109		158.53	158.04			36																	
-L- 74 + 40	RT	109		161.04																						
-Y8- 16 + 55	LT	110		163.87																						
-L- 76 + 50	LT	111		161.00																						
-L- 76 + 50	LT	111	112A		158.07	153.05			152																	
-L- 77 + 83	LT	112		156.49																						
-L- 77 + 83	LT	112A	112		152.90	152.83			24																	
SHEET TOTALS									480	48	444	216														

STATION	LOC.	FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL."B") LIN. FT. A 5.0' THRU 10.0'	B 10.0' 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. (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	T.B.D.I. STD. 840.35 OR 840.32	T.B.J.B. STD. 840.34	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	BERM DRAINAGE OUTLET STD 850.10	24x24x15 RC PIPE TEES, CLASS III	15x15x15 RC PIPE TEES, CLASS III	18x18x18 RC PIPE TEES, CLASS III	CONVERT EXISTING DROP INLET TO JUNCTION BOX	CONVERT EXISTING DROP INLET TO CATCH BASIN	CONCRETE APRON FOR CATCH BASIN STD. 852.05	CONCRETE APRON FOR DROP INLET STD. 852.06	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 LIN. FT.	REMARKS
SHEET 8																																					
-L- 66 + 22	RT	91	OUT																																		
-Y7- 11 + 00	RT	94				1			1		1																										
-Y7- 11 + 00	RT	94	95																																		
-Y7- 11 + 00	LT	95				1			1			1																									
-Y7- 11 + 00	LT	95	95A																																		
-Y7- 11 + 07	LT	95A				1			1			1																									
-Y7- 11 + 07	LT	95A	96																																		
-Y7- 11 + 50	LT	96				1			1			1																									
-L- 67 + 76	LT	92				1							1	1																						18	
-L- 67 + 76	LT	92	93																																		
-Y7- 11 + 50	RT	93				1			1		1																										
-Y7- 11 + 50	RT	93	96																																	74	
-Y7- 11 + 50	LT	96	97																																		
-Y7- 12 + 08	LT	97				1			1	1																											
-Y7- 12 + 08	LT	97	98																																		
-L- 69 + 20	LT	98				1			1			1																									
-L- 69 + 20	LT	98	99																																		
-L- 70 + 00	LT	99				1			1			1																									
-L- 70 + 00	LT	99	100																																		
-L- 71 + 50	LT	100				1			1			1																									
-L- 71 + 50	LT	100	101																																		
-L- 71 + 80	LT	101				1	0.17		1	1																											
-L- 71 + 72	LT	IN	101																																	125	REMOVE DI
-Y8- 16 + 00	RT	105				1			1		1																										
-Y8- 16 + 00	RT	105	104																																		
-L- 72 + 85	LT	104				1							1	1																							
-L- 72 + 85	LT	104	103																																		
-L- 72 + 55	LT	103				1			1		1																										
-L- 72 + 55	LT	103	102																																		
-L- 72 + 25	LT	102				1			1		1																										
-L- 72 + 25	LT	102	101																																	62	REMOVE CB
-L- 71 + 80	LT	101	106																																	37	
-L- 71 + 72	RT	106				1	0.10		1	1																											
-L- 71 + 72	RT	106	107																																		
-L- 72 + 15	RT	107				1	0.87		1			1																									
-L- 72 + 15	RT	107	OUT																																		
-L- 74 + 20	RT	108				1			1		1																										
-L- 74 + 20	RT	108	109																																		
-L- 74 + 40	RT	109																											1								CONVERT TBDI TO JB
-Y8- 16 + 55	LT	110																												1							CONVERT DI TO CB, TYPE "G" GRATE REQ'D
-L- 76 + 50	LT	111				1							1	1																							
-L- 76 + 50	LT	111	112A																																		
-L- 77 + 83	LT	112				1			1			1																									
-L- 77 + 83	LT	112A	112																																		
SHEET TOTALS						20	1.14		17	3	6	8	3	3															1	1						316	