COMPUTED BY: GSBLELL DATE: 3/29/2012

CHECKED BY: AJFOSTER DATE: 4/15/2014

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2519B	3D-18

RD25193

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & 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	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	C.S. PIPE 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"
-L- STA. 355+15	RT	2822		2717.70																																							
-L- STA. 354+33	RT	2822	2821		2714.95	2705.59			160'																																		
-L- STA. 353+53	RT	2821		2710.58																																							
-L- STA. 352+26	RT	2823			2705.64	2702.64																																					
-L- STA. 352+27	RT	2821	2823		2705.34	2702.64				124'																																	
-L- STA. 349+77	RT	2827		2697.85																																							
-L- STA. 349+64	RT	2823	2827		2702.64	2694.85				248'																																	
-DR13- STA. 11+31	LT	2826		2680.60																																							
-DR13- STA. 10+86.5	LT	2827	2826		2694.85	2677.60																84'																					
-DR13- STA. 11+33	CL	2826	2806		2677.60	2676.70				48'																																	
SHEET 29																																											
-L- STA. 358+90	LT	2901	2902		2719.00	2715.03							68'																														
-L- STA. 358+14.08	LT	2902		2734.82																																							
-L- STA. 359+00	CL	2926		2736.19																																							
-L- STA. 358+88	LT	2926	2902		2731.95	2715.03			48'																																		
-L- STA. 358+45.52	CL	2902	2903		2715.03	2710.86																																					
-L- STA. 358+14.08	RT	2903		2724.42																																							
-L- STA. 358+01.13	RT	2903	2904		2710.86	2708.39							40'																														
-L- STA. 359+01.18	LT																																										
-L- STA. 358+54.14	CL																																										
-L- STA. 359+45.28	LT	2914							32'																																		
-L- STA. 367+00	CL	2905		2772.05																																							
-L- STA. 366+25.84	LT	2905	2906		2767.57	2760.57																																148'					
-L- STA. 365+50	CL	2906		2764.81																																							
-L- STA. 365+50	LT	2906	2907		2760.57	2757.83																																68'					
-L- STA. 365+50	LT	2907		2760.63																																							
-L- STA. 365+00	LT	2907	2908		2757.83	2753.54			96'																																		
-L- STA. 364+00	LT	2908		2756.29																																							
-L- STA. 365+50	LT	2909			2774.40																																						
-L- STA. 364+00	LT	2909	2908		2774.40	2753.29																48'																					
-L- STA. 362+50	LT	2908	2910		2753.29	2736.04				396'																																	
-L- STA. 361+59.28	CL																																										
-L- STA. 360+50	LT	2910		2739.04																																							
-L- STA. 360+50	CL	2925		2742.78																																							
-L- STA. 360+51	LT	2910	2925		2743.18	2735.14																																					
-L- STA. 360+50	CL	2925	2911		2735.14	2727.17																	40'																				
-L- STA. 360+50	RT	2911		2730.67																																							
-L- STA. 360+25	RT	2911	2912		2727.17	2726.77																	48'																				
-L- STA. 360+00	RT	2912		2731.17																																							
-L- STA. 359+81	RT	2912	2913		2726.77	2715.85																	84'																				
-L- STA. 368+10.29	LT	2918		2775.24																																							
-L- STA. 368+10.30	LT	2918	2917		2772.49	2769.20															24'																						
-L- STA. 368+43.84	LT	2916	2919		2761.55	2751.67																									132'												
-L- STA. 367+27	LT	2919		2775.21																																							
-L- STA. 367+87.06	RT																																										
-L- STA. 367+32.86	RT	2919	2920		2751.67	2739.23																																					
-L- STA. 366+81.41	RT	2920		2747.20																																							
-L- STA. 366+67.08	RT	2920	2921		2739.23	2739.20																									32'												
-L- STA. 370+50	CL	2922		2791.43																																							
-L- STA. 370+50	LT	2922	2923		2786.71	2783.14																																68'					
-L- STA. 370+50	LT	2923		2785.94																																							
-L- STA. 370+25.86	LT	2923	2924		2783.14	2775.43															52'																						
SHEET 30																																											
-L- STA. 371+25	LT	3002	2923		2791.55	2783.14			140'																																		
-L- STA. 372+00	LT	3002		2794.35																																							
-L- STA. 371+91.41	LT	3001			2814.80																																						
-L- STA. 371+95.77	LT	3001	3002		2814.80	2791.55															48'																						
-L- STA. 371+93	CL																																										
-L- STA. 372+49.76	CL																																										
-L- STA. 373+37	RT																																										
-L- STA. 375+50	CL	3003		2818.70																																							
-L- STA. 375+46.56	RT	3003	3004		2814.95	2815.25																																84'					
-L- STA. 375+46.57	LT	3005		2833.35																																							
SHEET TOTALS									476'	816'			108'								124'	132'	172'							56'			164'				368'						

STATION / SIZE / THICKNESS OR GAUGE	36" R.C. PIPE (CLASS V)	42" R.C. PIPE (CLASS V)	30" WELDED PIPE, .500" THICK, GRADE B	36" WELDED PIPE, .500" THICK, GRADE B	42" WELDED PIPE, .625" THICK, GRADE B	48" WELDED PIPE, .625" THICK, GRADE B	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	ENDWALLS CU. YARDS C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	LIN. FT. A 5.0' THRU 10.0'	LIN. FT. 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	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	SPRING BOX STD. 840.41	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	T.B.G.D.I. STD. 840.35	T.B.J.B. STD. 840.34	J.B. STD. 840.31 OR 840.32	PARALLEL PIPE END SECTION STD. 310.02 OR 310.04	M. H. FRAME AND COVER STD. 840.54	OT CATCH BASIN OR STD. 840D04 (SHEET 2C-10)	PREFORMED SCOUR HOLE	FLOWABLE FILL	J.B. STD. 840.52	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	CS PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
-L- STA. 355+15									1												1					1																	
-L- STA. 354+33																																											
-L- STA. 353+53									1	0.24											1					1																	
-L- STA. 352+26									1												1					1																	
-L- STA. 352+27																																											
-L- STA. 349+77									1												1					1																	
-L- STA. 349+64																																											
-DR13- STA. 11+31									1									1	1																								
-DR13- STA. 10+86.5																																											
-DR13- STA. 11+33																																											
SHEET 29																																											
-L- STA. 358+90																																											
-L- STA. 358+14.08									1	5	9.79																					1				1							
-L- STA. 359+00									1																					1		1											
-L- STA. 358+88																																					21						
-L- STA. 358+45.52			116'																																								
-L- STA. 358+14.08									1	5	3.56																					1				1							
-L- STA. 358+01.13																																											
-L- STA. 359+01.18																																										80'	REMOVE EXIST. 24" RC PIPE & HW
-L- STA. 358+54.14																																					4						PLUG /FILL EXIST. 30" CM PIPE W/FLOWEBLE MAT'L
-L- STA. 359+45.28																																											
-L- STA. 367+00									1			1		1				1																									
-L- STA. 366+25.84																																											
-L- STA. 365+50									1			1		1				1																									
-L- STA. 365+50																																											
-L- STA. 365+50									1													1				1																	
-L- STA. 365+00																																											
-L- STA. 364+00									1													1				1																	
-L- STA. 365+50									1													1				1																	
-L- STA. 364+00																																								2@18"			
-L- STA. 362+50																																											
-L- STA. 361+59.28																																					21						PLUG & FILL EXIST. 18" CMP, REMOVE HW
-L- STA. 360+50									1													1				1																	
-L- STA. 360+50									1	2.64																				1		1											
-L- STA. 360+51			56'																																								
-L- STA. 360+50																																											
-L- STA. 360+50									1													1				1																	
-L- STA. 360+25																																											
-L- STA. 360+00									1													1				1																	
-L- STA. 359+81																																											
-L- STA. 368+10.29									1													1					1																
-L- STA. 368+10.30																																											
-L- STA. 368+43.84						132'		4.50																																			
-L- STA. 367+27									1	5	13.54																					1				1							
-L- STA. 367+87.06																																					57						PLUG /FILL EXIST. 42" CM PIPE W/FLOWEBLE MAT'L &REM.HW
-L- STA. 367+32.86				144'																																							
-L- STA. 366+81.41									1	2.97																				1													
-L- STA. 366+67.08																																											
-L- STA. 370+50									1			1		1				1																									
-L- STA. 370+50																																											
-L- STA. 370+50									1													1				1																	
-L- STA. 370+25.86																																											
SHEET 30																																											
-L- STA. 371+25																																											
-L- STA. 372+00									1													1				1																	
-L- STA. 371+91.41									1													1				1																	
-L- STA. 371+95.77																																								2@15"			
-L- STA. 371+93																																					1						PLUG & FILL EXIST. 15" CM PIPE
-L- STA. 372+49.76																																					1						PLUG & FILL EXIST. 15" CM PIPE
-L- STA. 373+37																																					1						PLUG & FILL EXIST. 15" CM PIPE
-L- STA. 375+50									1				1		1	1																											
-L- STA. 375+46.56																																											
-L- STA. 375+46.57									1	5	0.3											1				1																140'	REMOVE EXIST. 24" CM PIPE & HW
SHEET TOTALS			116'	144'			4.500		26	25.85	27.19	3		3		1	3	2	2	2	13			10	5			3		5			106	3	2@15", 2@18"			220'	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(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