COMPUTED BY:	GSBLELL	DATE:	3/29/2012
CHECKED BY:	AJFOSTER	DATE:	4/16/2014

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2519B	3D-20

RD26641O

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	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) SIZE 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
							THICKNESS OR GAUGE												
-L- STA. 397+75.42	RT	3116		2797.22															
-L- STA. 397+78.31	RT	3116	3117		2791.34	2791.32					12'								
SHEET 32																			
-L- STA. 402+59.77	LT	3202		2888.31															
-L- STA. 402+59.77	CL	3229		2891.13															
-L- STA. 402+59.77	LT	3229	3202		2887.01	2884.40			60'										
-L- STA. 403+43	LT	3203		2886.05															
-L- STA. 403+01.08	LT	3202	3203		2884.40	2881.30					80'								
-L- STA. 404+03.83	LT	3203	3206		2881.30	2873.49					120'								
-L- STA. 404+64	LT	3206		2883.27															
-L- STA. 404+64	LT	3206	3207		2873.49	2873.00													
-L- STA. 404+64	CL	3207		2885.17															
-L- STA. 404+64	RT	3207	3208		2873.00	2872.52													
-L- STA. 404+64	RT	3208		2883.33															
-L- STA. 404+54.48	RT	3208	3209		2872.52	2845.36													
-L- STA. 404+44.3	RT	3209		2849.74															
-L- STA. 404+42.95	RT	3209	3210		2844.86	2844.84						8'							
-L- STA. 403+63.82	CL	3204																	
-L- STA. 403+63.83	RT	3204	3205			2853.00													
-L- STA. 404+92.61	CL																		
-L- STA. 406+16.38	RT	3212							24'										
-L- STA. 405+84	CL	3211		2881.87															
-L- STA. 407+09.5	CL	3211	3214		2878.12	2870.12													
-L- STA. 408+35	LT	3213		2873.59															
-L- STA. 408+35	LT	3213	3214		2870.84	2870.12													
-L- STA. 408+35	CL	3214		2874.84															
-L- STA. 409+17.37	CL	3214	3217		2870.12	2864.42													
-L- STA. 409+46.50	CL																		
-L- STA. 409+74.11	LT																		
-L- STA. 409+51.47	RT	3201																	
-L- STA. 410+00	LT	3215	3216		2872.99	2865.04													
-L- STA. 410+00	LT	3216		2867.79															
-L- STA. 410+00	LT	3216	3217		2865.04	2864.42													
-L- STA. 410+00	CL	3217		2869.89															
-L- STA. 410+00	RT	3217	3218		2863.67	2863.20													
-L- STA. 410+60	CL	3219		2867.78															
-L- STA. 410+30	CL	3219	3217		2863.54	2864.42													
-L- STA. 410+67	RT	3220		2866.42															
-L- STA. 410+33.42	RT	3220	3218		2861.67	2863.20			64'										
-L- STA. 410+00	RT	3218		2868.41															
-L- STA. 410+00	RT	3218	3228		2863.20	2826.26													
-L- STA. 410+00	RT	3228		2830.26															
-L- STA. 409+20.59	RT	3227		2860.50															
-L- STA. 409+60	RT	3227	3228		2856.50	2826.26													
-L- STA. 410+48.22	RT	3228	3221		2826.26	2788.64													
-L- STA. 410+97.01	RT	3221		2793.04															
-L- STA. 410+98.7	RT	3221	3222		2788.14	2788.12						8'							
-DR17- STA. 13+00	RT	3223		2830.90															
-DR17- STA. 13+00	LT	3224		2830.90															
-DR17- STA. 13+00	CL	3223	3224		2828.10	2825.05			20'										
SHEET TOTALS									168'		212'	16'							

STATION	C.S. PIPE 12"	15"	18"	24"	30"	36"	42"	48"	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"
	.064	.064	.064	.064	.079	.079	.109	.109																
-L- STA. 397+75.42																								
-L- STA. 397+78.31																								
SHEET 32																								
-L- STA. 402+59.77																								
-L- STA. 402+59.77																								
-L- STA. 402+59.77																								
-L- STA. 403+43																								
-L- STA. 403+01.08																								
-L- STA. 404+03.83																								
-L- STA. 404+64																								
-L- STA. 404+64												48'												
-L- STA. 404+64																								
-L- STA. 404+64												48'												
-L- STA. 404+64																								
-L- STA. 404+54.48				68'																				
-L- STA. 404+44.3																								
-L- STA. 404+42.95																								
-L- STA. 403+63.82																								
-L- STA. 403+63.83	96'																							
-L- STA. 404+92.61																								
-L- STA. 406+16.38																								
-L- STA. 405+84																								
-L- STA. 407+09.5																	252'							
-L- STA. 408+35																								
-L- STA. 408+35																	48'							
-L- STA. 408+35																								
-L- STA. 409+17.37																	164'							
-L- STA. 409+46.50																								
-L- STA. 409+74.11																								
-L- STA. 409+51.47	38'																							
-L- STA. 410+00		24'																						
-L- STA. 410+00																								
-L- STA. 410+00									48'															
-L- STA. 410+00																								
-L- STA. 410+00																				48'				
-L- STA. 410+60																								
-L- STA. 410+30																	60'							
-L- STA. 410+67																								
-L- STA. 410+33.42																								
-L- STA. 410+00																								
-L- STA. 410+00				84'																				
-L- STA. 410+00																								
-L- STA. 409+20.59																								
-L- STA. 409+60		92'																						
-L- STA. 410+48.22				128'																				
-L- STA. 410+97.01																								
-L- STA. 410+98.7																								
-DR17- STA. 13+00																								
-DR17- STA. 13+00																								
-DR17- STA. 13+00																								
SHEET TOTALS	134'	116'		280'					48'			96'					524'			48'				

STATION	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.	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	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	GS 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. 397+75.42									1	0.88																						1											
-L- STA. 397+78.31																																											
SHEET 32																																											
-L- STA. 402+59.77									1												1				1																		
-L- STA. 402+59.77									1																							1		1									
-L- STA. 402+59.77																																											
-L- STA. 403+43									1												1				1																		
-L- STA. 403+01.08																																					8					PLUG /FILL EXIST. 18" CMP
-L- STA. 404+03.83																																											
-L- STA. 404+64									1	4.78											1				1												1					PLUG /FILL EXIST. 18" CMP
-L- STA. 404+64																																											
-L- STA. 404+64									1	5	2.17	1		1				1																									
-L- STA. 404+64																																					14					
-L- STA. 404+64									1	5	0.81												1				1															
-L- STA. 404+54.48																																							2@24"				
-L- STA. 404+44.3									1																							1		1									
-L- STA. 404+42.95																																											
-L- STA. 403+63.82									1																			1															
-L- STA. 403+63.83																																											
-L- STA. 404+92.61																																					4					PLUG & FILL EXIST. 10" CM PIPE
-L- STA. 406+16.38																																	1										
-L- STA. 405+84									1			1		1				1																									
-L- STA. 407+09.5																																											
-L- STA. 408+35									1												1				1																		
-L- STA. 408+35																																											
-L- STA. 408+35									1			1		1				1																									
-L- STA. 409+17.37																																											
-L- STA. 409+46.50																																					5					PLUG /FILL EXIST. 18" CMP
-L- STA. 409+74.11																																					2				60'	REMOVE EXIST. CM PIPE
-L- STA. 409+51.47									1																			1									5					PLUG & FILL EXIST. 24" CM PIPE
-L- STA. 410+00																																							2@15"				
-L- STA. 410+00									1												1				1																		
-L- STA. 410+00																																											
-L- STA. 410+00									1	1.22		1		1				1																									
-L- STA. 410+00																																											
-L- STA. 410+00									1			1		1				1																									
-L- STA. 410+60																																											
-L- STA. 410+30																																											
-L- STA. 410+67									1												1				1																		
-L- STA. 410+33.42																																											
-L- STA. 410+00									1	0.21											1				1																		
-L- STA. 410+00																																							2@24"				
-L- STA. 410+00									1																										1								
-L- STA. 409+20.59									1																										1								
-L- STA. 409+60																																							2@15"				
-L- STA. 410+48.22																																							2@24"				
-L- STA. 410+97.01									1																							1		1									
-L- STA. 410+98.7																																											
-DR17- STA. 13+00									1												1				1																		
-DR17- STA. 13+00									1	0.85											1				1																		
-DR17- STA. 13+00																																											
SHEET TOTALS									23	17.94	2.98	5		5							3	7		2	7	3			4	1	3	2		39			4@15",6@24"			60'	

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