R0248621

COMPUTED BY:	EGH	DATE:	10/24/2014
CHECKED BY:	SNM	DATE:	10/27/2014

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2915A	3D-2

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)

LINE & STATION	LOCATION (LT, RT, OR CL)	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	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 12+83	LT																		
RPA 11+15	LT	411		3004.50															
		411	410		2997.50	2993.00													
RPA 10+77	RT	455		3012.00															
		455	411		3006.00	2997.70													
RPB 7+56	RT																		
RPB 7+61	RT	412		3000.11															
		412	413		2997.35	2996.60													
RPB 8+12	RT																		
RPB 8+15	CL																		
RPB 8+80	RT	413		3003.51															
		413	450		2984.10	2983.50													
RPB 9+35	CL																		
L 17+25	LT	414		3004.75															
		414	413		2996.80	2995.50													
SR2 15+38	RT	415		3008.05															
		415	414		3003.80	2996.80													
	RT	456	415		3006.00	3004.00													
L 19+00	LT	416		3003.53															
		416	414		2999.80	2998.90													
RPB 12+32	CL																		
RPB 12+35	LT																		
RPB 14+10	LT																		
RPB 15+57	LT																		
L 20+50	LT	417		3003.55															
		417	416		3000.80	3000.00													
L 18+50	RT	420		3017.58															
		420	421		3014.40	3010.20													
L 20+00	RT	421		3013.45															
		421	422		3010.00	3002.70													
L 22+00	RT	422		3007.50															
		422	425		2999.50	2999.00													
L 23+00	RT	423		3004.40															
		423	422		3000.20	2999.70													
L 25+50	RT	424		2989.20															
		424	426		2985.50	2985.00													
L 22+00	RT	425		3005.50															
		425	424		2998.00	2986.50													
L 26+50	RT	429		3034.00															
		429	426		3032.00	2986.00				152					X				
L 26+45	LT																		
L 26+50	RT	426		2989.40															
		426	427		2985.00	2984.60													
L 26+00	CL	453		2993.00															
		453	427		2989.00	2986.00													
L 26+50	LT	427		2994.50															
		427	454		2984.60	2984.20													
L 21+95	RT	428		3036.00															
		428	448		3034.50	3008.10				48					X				
L 27+20	RT	444		3033.00															
						SHEET TOTAL				48	152								

LINE & STATION	C.S. PIPE SIZE 12	15	18	24	30	36	42	48	R.C. PIPE CLASS III SIZE 12	15	18	24	30	36	42	48	R.C. PIPE CLASS IV SIZE 12	15	18	24	30	36	42	48	** " R.C. PIPE (CLASS V)	15" RC PIPE CULVERTS, CONTRACTOR DESIGN	18" RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE
	0.064	0.064	0.064	0.064	0.079	0.079	0.109	0.109																					
L 12+83																													
RPA 11+15																													
															132														
RPA 10+77																													
															80														
RPB 7+56																													
RPB 7+61																													
										120																			
RPB 8+12																													
RPB 8+15																													
RPB 8+80																													
													116																
RPB 9+35																													
L 17+25																													
													208																
SR2 15+38																													
													152																
													52																
L 19+00																													
										176																			
RPB 12+32																													
RPB 12+35																													
RPB 14+10																													
RPB 15+57																													
L 20+50																													
										144																			
L 18+50																													
										152																			
L 20+00																													
										200																			
L 22+00																													
										48																			
L 23+00																													
										100																			
L 25+50																													
													96																
L 22+00																													
												348																	
L 26+50																													
L 26+45																													
L 26+50																													
													68																
L 26+00																													
										52																			
L 26+50																													
													64																
L 21+95																													
L 27+20																													
SHEET TOTAL										992		348	528	228		212													

LINE & STATION	18" SIDE DRAIN PIPE	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 *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL."B") PER EACH (0' THRU 5.0')	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 STD. 852.04 OR 852.06	CATCH BASIN STD. 852.05	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	G.D.I. FRAME WITH TWO GRATES STD. 840.20 WIDE/FLAT	G.D.I. FRAME WITH TWO GRATES STD. 840.22 WIDE/SAG	G.D.I. FRAME WITH TWO GRATES STD. 840.29 NARROW/FLAT	G.D.I. FRAME WITH TWO GRATES STD. 840.24 NARROW/SAG	J.B. STD. 840.31 OR 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	MANHOLE FRAME AND COVER STD. 840.54	BERM DRAINAGE OUTLET (BDO) STD. 850.10	BERM DRAINAGE OUTLET (BDO) STD. 850.11	CONCRETE MEDIAN DI TYPE-A, EXTRA DEPTH (840D17)	FLOWABLE FILL (C.Y.)	15" SIDE DRAIN PIPE ELBOWS	18" SIDE DRAIN PIPE ELBOWS NO. & SIZE	24" SIDE DRAIN PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PSH (PREFORMED SCOUR HOLE (QTY., EACH) PIPE REMOVAL LIN. FT.	15" PIPE END SECTION	18" PIPE END SECTION	REMARKS
L 12+83																																	144				REMOVE 24" RCP
RPA 11+15				1	2.00																1			1													
RPA 10+77		6																																			STD. 838.01
RPB 7+56																																	53				REMOVE 18" RCP
RPB 7+61				1															1			1															
RPB 8+12																																	49				REMOVE 15" RCP
RPB 8+15																																	128				REMOVE 30" RCP
RPB 8+80				1	5.00	9.41												1							1												
RPB 9+35																																	128				REMOVE 30" RCP
L 17+25				1	2.95																1			1													
SR2 15+38				1															1			1															
L 19+00				1															1			1															
RPB 12+32																																	60				REMOVE DI & 6" HDPE
RPB 12+35																																	101				REMOVE 18" HDPE
RPB 14+10																																0.130					PLUG 18" RCP
RPB 15+57																																	36				REMOVE 18" RCP
L 20+50				1															1			1															
L 18+50				1																	1			1													TB 2GI
L 20+00				1																	1			1													TB 2GI
L 22+00				1	3.00																1			1													TB 2GI
L 23+00				1																	1			1													TB 2GI
L 25+50				1															1			1															
L 22+00				1	2.50														1			1															
L 26+50																														1							24" BERM DITCH OUTLET PIPE
																																		2			
L 26+45																																	71				REMOVE 15" RCP
L 26+50				1															1			1															
L 26+00				1															1			1															
L 26+50				1	4.90																1			1													TB 2GI
																																					18" BERM DITCH OUTLET PIPE
L 21+95																														1		2					
L 27+20																														1							15" BERM DITCH OUTLET PIPE
SHEET TOTAL		6		16	20.4	9.4							3	5		5	9			2		5	2	2	1	1			2	2	0.13		770			

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