RA-1553

COMPUTED BY: BNE DATE: 2/22/2017

CHECKED BY: JGD DATE: 2/22/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2707C	3D-3

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.

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	MIN. REQUIRED SLOPE %	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											
425+03 -L-	LT	704		792.7															
		704	705		790.0	789.6													
426+00 -L-	LT	705		793.7															
		705	706		789.6	770.5			68							X			
435+00 -L-	RT	801		800.8															
		801	803		798.1	797.8													
435+00 -L-	LT	802		800.8															
		802	803		798.1	797.8													
435+00 -L-	CL	803		801.6															
		803	806		797.6	794.8													
432+50 -L-	RT	804		798.9															
		804	806		796.2	795.0													
432+50 -L-	LT	805		798.2															
		805	806		795.5	795.0													
432+50 -L-	CL	806		799.0															
		806	708		794.3	789.0													
428+00 -L-	RT	707		795.3															
		707	708		792.6	789.7													
427+50 -L-	CL	708		793.7															
		708	709		789.0	787.6													
427+50 -L-	LT	709		792.3															
		709	710		787.1	770.5						156				X			
449+50 -L-	RT	901																	
		901	902		852.7	815.8			108							X			
449+50 -L-	RT	902		818.5															
		902	903		815.8	811.1													
446+50 -L-	RT	903		813.8															
		903	905		810.8	810.0													
446+50 -L-	LT	904		813.7															
		904	905		811.0	810.2													
446+50 -L-	CL	905		814.2															
		905	909		809.5	805.8													
443+50 -L-	RT	906																	
		906	907		855.5	806.7				104						X			
443+50 -L-	RT	907		809.7															
		907	909		806.7	806.3													
443+50 -L-	LT	908		809.7															
		908	909		807.0	806.5													
443+50 -L-	CL	909		810.5															
		909	811		805.8	802.7													
440+50 -L-	RT	810		806.5															
		810	811		803.8	803.4													
440+50 -L-	CL	811		807.4															
		811	812		802.7	802.0													
440+50 -L-	LT	812		806.7															
		812	813		801.5	785.0						112				X			
451+50 -L-	CL	910		820.3															
		910	912		817.6	817.2													
SHEET TOTALS									176	104		268							

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"	24" R.C. PIPE (CLASS V)	30" R.C. PIPE (CLASS V)	36" R.C. PIPE (CLASS V)	42" R.C. PIPE CULVERTS, CONTRACTOR DESIGN
THICKNESS OR GAUGE	.064	.064	.064	.064	.079	.079	.109	.109																				
425+03 -L-																												
																		96										
426+00 -L-																												
435+00 -L-																												
										76																		
435+00 -L-																												
										76																		
435+00 -L-																												
											248																	
432+50 -L-																												
										76																		
432+50 -L-																												
										76																		
432+50 -L-																												
												500																
428+00 -L-																												
										92																		
427+50 -L-																												
												76																
427+50 -L-																												
449+50 -L-																												
449+50 -L-																												
										296																		
446+50 -L-																												
											72																	
446+50 -L-																												
										72																		
446+50 -L-																												
												296																
443+50 -L-																												
443+50 -L-																												
											76																	
443+50 -L-																												
443+50 -L-																												
												296																
440+50 -L-																												
										76																		
440+50 -L-																												
												76																
440+50 -L-																												
451+50 -L-																												
																		56										
SHEET TOTALS										840	396	1244						152										

STATION	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')	LIN. FT. 5.0' THRU 10.0' A	10.0' AND ABOVE B	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B')	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	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	T.B.D.I. STD. 840.35	T.B.J.B. STD. 840.34	J.B. STD. 840.31 OR 840.32	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO T.B.J.B.	1" STEEL COVER	CONCRETE ENDWALL AND SLUICE GATE STD. 838.02	8" SLUICE GATE	15" SIDE DRAIN PIPE ELBOWS	18" SIDE DRAIN PIPE ELBOWS	24" SIDE DRAIN PIPE ELBOWS	30" SIDE DRAIN PIPE ELBOWS	36" SIDE DRAIN PIPE ELBOWS	BERM DITCH OUTLET STD. 850.10	BERM DITCH OUTLET STD. 850.11	CONCRETE AND BRICK PIPE PLUG STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
425+03 -L-			1												1		1																										
426+00 -L-			1												1		1																										
																																2											
435+00 -L-			1												1				1																								
435+00 -L-			1												1				1																								
435+00 -L-			1												1				1																								
432+50 -L-			1												1				1																								
432+50 -L-			1												1				1																								
432+50 -L-			1												1				1																								
428+00 -L-			1												1				1																								
427+50 -L-			1												1				1																								
427+50 -L-			1	0.3											1				1																								
																																		2									
449+50 -L-																																							1				
																																1											
449+50 -L-			1												1				1																								
446+50 -L-			1												1				1																								
446+50 -L-			1												1				1																								
443+50 -L-																																							1				
																																	1										
443+50 -L-			1												1				1																								
443+50 -L-			1												1				1																								
443+50 -L-			1												1				1																								
440+50 -L-			1												1				1																								
440+50 -L-			1												1				1																								
440+50 -L-			1	0.3											1				1																								
																																		2									
451+50 -L-			1												1				1																								
SHEET TOTALS			22	0.5											7	15		2		20												3	1		4		2						

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINUM ALLOY
C.B.	CATCH BASIN
C.S.	CORRUGATED STEEL
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
H.D.P.E	HIGH DENSITY POLYETHYLENE
J.B.	JUNCTION BOX
M.H.	MANHOLE
N.S.	NARROW SLOT
P.V.C.	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
W.S.	WIDE SLOT