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-5

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) 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"
		1202	1203		857.5	857.2																					76															
484+50 -L-	CL	1203		861.0																																						
		1203	1206		856.9	852.3																						352														
481+00 -L-	RT	1204		855.7																																						
		1204	1206		853.0	852.5																					76															
481+00 -L-	LT	1205		855.7																																						
		1205	1206		853.0	852.5																					76															
481+00 -L-	CL	1206		856.5																																						
		1206	1109		851.8	847.5																							352													
477+50 -L-	LT	1108		851.2																																						
		1108	1109		848.5	848.2																					76															
477+50 -L-	CL	1109		852.9																																						
		1109	1110		847.5	846.5																							76													
477+50 -L-	RT	1110		851.2																																						
		1110	1112		846.5	844.4																							72													
476+83 -L-	RT	1111																																								
		1111	1112		843.7	843.2																													12							
476+77 -L-	RT	1112		852.2																																						
		1112	1113		843.2	837.6																													184							
475+88 -L-	LT	1113		844.0																																						
		1113	1114		835.0	834.8																													24							
22+50 -Y4REV-	RT	1115		873.3																																						
		1115	1116		870.8	870.6																															32						
22+68 -Y4REV-	LT	1116		874.0																																						
		1116	1117		870.6	870.0			20																																	
490+00 -L-	LT	1207		870.4																																						
		1208	1208		867.7	866.4																															100						
489+00 -L-	LT	1208		869.1																																						
		1208	1209		866.4	864.1																															56						
489+00 -L-	CL	1209		866.8																																						
		1209	1211		864.1	863.7																															56						
490+00 -L-	RT	1210		870.4																																						
		1210	1211		867.7	863.7																															100						
489+00 -L-	RT	1211		869.1																																						
		1211	1212		863.5	863.0																																100					
488+00 -L-	RT	1212		867.8																																						
		1212	1213		863.0	861.8				28																																
490+10 -L-	RT	1301																																								
		1301	1303		849.0	834.0																																				
499+00 -L-	LT	1305		881.9																																						
		1305	1306		879.2	878.0																															96						
498+00 -L-	LT	1306		880.7																																						
		1306	1308		878.0	874.6																															56						
498+00 -L-	RT	1307		877.6																																						
		1307	1308		874.9	874.6																					76															
498+00 -L-	CL	1308		878.4																																						
		1308	1310		874.6	870.6																					396															
SHEET TOTALS									20	28																	776	352	500						220		496	100					

STATION	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	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. A 5.0' THRU 10.0'	LIN. FT. B 10.0' AND ABOVE	*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. 840.19 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
484+50 -L-							1													1					1																	
481+00 -L-							1													1					1																	
481+00 -L-							1													1					1																	
481+00 -L-							1												1						1																	
477+50 -L-							1													1					1																	
477+50 -L-							1	0.5											1					1																	
477+50 -L-							1												1					1																	
476+83 -L-					6.0																																					
476+77 -L-							1	4.0																				1	1													
475+88 -L-							1	4.0																				1	1													
22+50 -Y4REV-							1													1						1																
22+68 -Y4REV-							1													1						1																
490+00 -L-							1													1		1																				
489+00 -L-							1													1		1																				
489+00 -L-							1													1					1																	
490+00 -L-							1													1		1																				
489+00 -L-							1	0.7												1		1																				
488+00 -L-							1													1		1																				
490+10 -L-																																										
499+00 -L-							1													1		1																				
498+00 -L-							1													1		1																				
498+00 -L-							1													1					1																	
498+00 -L-							1													1					1																	
SHEET TOTALS		188			6		21	9.1											3	16		7		10		2		2	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