1612LP-M70196

COMPUTED BY: URS DATE: 02/15/2017

CHECKED BY: NJD DATE: 02/15/2017

PROJECT NO.	SHEET NO.
R-3100B	3D-8

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

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 / SIZE / THICKNESS OR GAUGE	OFFSET		STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 15 (.064)	18 (.064)	24 (.064)	30 (.079)	60 (.109)	R. C. PIPE CLASS III 15	18	24	30	R. C. PIPE CLASS IV 15	18	24	30	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY
L 123+60	40	RT	1210		1008.2																												
			1210	1213		1005.2	1004.8																				84						
L 124+45	10	LT	1211		1009.2																												
			1211	1213		1006.0	1005.0																				48						
			1212	1213		1013.0	1005.0											36															
L 124+45	40	RT	1213		1008.0																												
			1213	1217		1004.8	1004.1																				132						
L 125+10	10	LT	1214		1009.0																												
			1214	1215		1005.8	1005.5																				68						
L 125+80	10	LT	1215		1008.7																												
			1215	1217		1005.5	1004.5																				52						
			1216	1217		1010.5	1004.5	0.4										36															
L 125+80	39	RT	1217		1007.5																												
			1217	1220		1004.1	1002.6	0.8																			168						
L 127+50	10	LT	1218		1006.8																												
			1218	1220		1003.6	1002.6																				48						
			1219	1220		1008.5	1002.6											32															
L 127+50	39	RT	1220		1005.6																												
			1220	1221		1002.3	1000.9	0.6																				108					
L 128+60	39	RT	1221		1004.2																												
			1221	1222		1000.4	1000.2																						48				
L 128+65	10	LT	1222		1005.4																												
			1222	1223		1000.2	1000.0																		28								
L 128+70	39	LT	1223		1005.8																												
			1223	1224		1000.0	999.4				36																						
L 130+10	9	LT	1225		1003.5																												
			1225	1226		1000.4	999.3																				48						
L 130+10	39	RT	1226		1002.3																												
			1226	1228		999.3	997.9																				108						
			1227	1230		997.2	996.9																				52						
L 131+20	39	RT	1228		1000.9																												
			1228	1229		997.9	997.7																				48						
L 131+20	9	LT	1229		1002.2																												
			1229	1230		997.7	997.3																68										
L 131+87	8	RT	1230		1001.0																												
			1230	1301		996.7	996.4																	60									
			1231	1221		1005.2	1001.2											24															
Y8 11+11	25	RT	1250						32																								
Y8 12+29	22	LT	1251						28																								
L 123+18	83	RT	1253						20																								
L 124+57	74	RT	1254						24																								
L 125+93	73	RT	1255						20																								
L 126+25	74	RT	1256						20																								
L 127+70	71	RT	1257						24																								
L 129+36	54	RT	1258						28																								
Y8 13+27	19	RT	1259						44																								
L 132+45	9	LT	1301		1000.8																												
			1301	1302		995.7	995.5																		32								
L 132+46	39	LT	1302		1001.1																												
			1302	1303		995.5	992.6				44																						
							SHEET TOTALS		240		80							128					68	60	60		856	108	48				

STRUCTURE FROM	TO	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 0' THRU 5' EACH	A 5' THRU 10' LIN. FT.	B 10' AND ABOVE LIN. FT.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. TYPE "D" STD. 840.19 OR STD. 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. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.D.I. STD. 840.35	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	15" PIPE END SECTION	CONVERT EXISTING D.I. TO J.B. W/MH	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	PREFORMED SCOUR HOLE (PER EACH)	DRAINAGE INLET TRANSITIONAL GUTTER SECT. EA	FLOWABLE FILL CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
1210		1			1		1																														
1210	1213																																				
1211		1													1		1																1				
1211	1213																																				
1212	1213																										1			1							
1213		1			1		1																														
1213	1217																																				
1214		1													1		1																1				
1214	1215																																				
1215		1													1		1																1				
1215	1217																																				
1216	1217																										1			1							
1217		1			1		1																														
1217	1220																																				
1218		1													1		1																1				
1218	1220																																				
1219	1220																										1			1							
1220		1			1		1																														
1220	1221																																				
1221		1			1		1																														
1221	1222																																				
1222		1	0.2												1		1																1				
1222	1223																																				
1223		1	0.8		1			1																													
1223	1224																																				
1225		1							1			1	1																				1				
1225	1226																																				
1226		1			1		1																														
1226	1228																																				
1227	1230																													1							
1228		1			1		1																														
1228	1229																																				
1229		1							1			1	1																				1				
1229	1230																																				
1230		1							1			1	1																				1				
1230	1301																																				
1231	1221																										1			1							
1250																																					
1251																																					
1253																																					
1254																																					
1255																																					
1256																																					
1257																																					
1258																																					
1259																																					
1301		1	0.1						1			1	1																								
1301	1302																																				
1302		1	0.6		1			1																									1				
1302	1303																																				
SHEET TOTALS		18	1.7		9		7	2	4			4	4		5		5										4			5			9				

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINIUM 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