CARYLAPHILLIPS

COMPUTED BY:	William M. Hines	DATE:	2/15/16
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-3109A	3D-7

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	STRUCTURE NUMBER 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	36	42	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
		1010	1006		583.2	582.6												
L 102+35	67 LT	1011		587.4														
		1011	1010		584.7	584.4												
		1012	1013		596.2	587.3												
L 104+00	67 RT	1013		590.8														
		1013	1014		587.3	587.2												
L 104+00	14 RT	1014		593.4														
		1014	1010		587.2	583.7												
L 105+60	2 RT	1015		595.1														
		1015	1014		591.3	587.9												
L 107+15	2 LT	1016		597.0														
		1016	1015		593.1	591.3												
L 108+25	0 CL	1101			593.2	584.3												
L 108+50	6 LT	1102		598.6														
		1102	1016		594.7	593.1												
L 109+76	0 CL	1103			589.5	583.5												
Y13 12+50	25 LT	1104		604.3														
		1104	1105		601.5	591.1	0.7	112									X	X
L 109+50	112 LT	1107		595.4														
		1107	1106		590.1	588.0	0.8			80							X	X
		1108	1109		602.0	594.0	0.9											
L 111+11	67 LT	1109		598.3														
		1109	1107		593.5	590.1	0.7			168							X	X
L 111+11	14 RT	1110		602.2														
		1110	1109		598.3	594.3												
L 112+23	14 RT	1111		603.6														
		1111	1110		599.7	598.3												
L 115+00	67 LT	1112		603.1														
		1112	1109		600.1	594.0	1.0		388								X	X
L 115+00	14 RT	1113		607.0														
		1113	1112		601.5	600.3												
L 115+00	67 RT	1114		604.5														
		1114	1113		601.7	601.5												
L 117+60	67 LT	1115		606.3														
		1115	1112		603.3	600.1	0.5		260								X	X
L 117+60	14 RT	1116		610.2														
		1116	1115		604.8	603.6	0.3											
L 117+60	67 RT	1117		607.7														
		1117	1116		604.9	604.8												
L 120+20	14 RT	1119		613.5														
		1119	1116		609.6	604.8												
L 122+80	66 LT	1201		612.8														
		1201	1202		610.0	609.8												
L 122+80	14 RT	1202		616.7														
		1202	1204		609.8	609.0												
L 122+80	67 RT	1203		614.1														
		1203	1202		611.4	609.8												
L 125+37	14 RT	1204		619.9														
		1204	1205		609.0	604.8	0.6											
L 126+00	47 LT	1207		620.1														
SHEET TOTALS								112	648	248								

FROM	TO	C. S. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	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	R. C. PIPE CLASS V 12	15	18	30
1010	1006									168															
1011																									
1011	1010						84																		
1012	1013				28																				
1013																									
1013	1014								56																
1014																									
1014	1010								168																
1015																									
1015	1014														164										
1016																									
1016	1015														156										
1101									212																
1102																									
1102	1016														136										
1103													352												
1104																									
1104	1105																								
1107																									
1107	1106																								
1108	1109			28																					
1109																									
1109	1107																								
1110																									
1110	1109														84										
1111																									
1111	1110														112										
1112																									
1112	1109																								
1113																									
1113	1112						84																		
1114																									
1114	1113						56																		
1115																									
1115	1112																								
1116																									
1116	1115						84																		
1117																									
1117	1116						56																		
1119																									
1119	1116														264										
1201																									
1201	1202						80																		
1202																									
1202	1204						260																		
1203																									
1203	1202						56																		
1204																									
1204	1205						68																		
1207																									
SHEET TOTALS				28	28		828		436	168			352		916										

FROM	TO	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	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
1010	1006										
1011					1						
1011	1010										
1012	1013										
1013					1						
1013	1014										
1014					1	1.2					
1014	1010										
1015					1						
1015	1014										
1016					1						
1016	1015										
1101											
1102					1						
1102	1016										
1103				6.000							
1104					1						
1104	1105										
1107					1	0.3					
1107	1106										
1108	1109										
1109					1						
1109	1107										
1110					1						
1110	1109										
1111					1						
1111	1110										
1112					1						
1112	1109										
1113					1	0.5					
1113	1112										
1114					1						
1114	1113										
1115					1						
1115	1112										
1116					1	0.4					
1116	1115										
1117					1						
1117	1116										
1119					1						
1119	1116										
1201					1						
1201	1202										
1202					1	1.9					
1202	1204										
1203					1						
1203	1202										
1204					1	5.0	0.9				
1204	1205										
1207					1						
SHEET TOTALS				6.000	23	9.3	0.9				

FROM	TO	D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05 (CONCRETE TRANSITIONAL SECTION)	4" CONCRETE PAVED DITCH, S.Y. STD 850.01	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/ GRATE STD. 840.20	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/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	M.H. FRAME AND COVER STD. 840.54
1010	1006																			
1011								1							1					
1011	1010																			
1012	1013			31																
1013								1							1					
1013	1014																			
1014							1				1									
1014	1010																			
1015								1			1									
1015	1014																			
1016								1			1									
1016	1015																			
1101																				
1102								1			1									
1102	1016																			
1103																				
1104								1							1					
1104	1105																			
1107							1								1					
1107	1106																			
1108	1109			11																
1109							1								1					
1109	1107																			
1110		1						1			1									
1110	1109																			
1111								1			1									
1111	1110																			
1112								1							1					
1112	1109																			
1113								1			1									
1113	1112																			
1114								1							1					
1114	1113																			
1115								1							1					
1115	1112																			
1116								1			1									
1116	1115																			
1117								1							1					
1117	1116																			
1119								1			1									
1119	1116																			
1201								1							1					
1201	1202																			
1202								1			1									
1202	1204																			
1203								1							1					
1203	1202																			
1204								1			1									
1204	1205																			
1207								1									1			
SHEET TOTALS		1		42			3	20			11				11		1			

FROM	TO	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	15" SLUICE GATE	18" SLUICE GATE	30" SLUICE GATE	PIPE CLEAN-OUT (PER EACH)	PREFORMED SCOUR HOLE (PER EACH)	ENERGY DISSIPATOR BASIN	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
1010	1006																	
1011																		
1011	1010																	
1012	1013			1			1											
1013																		
1013	1014																	
1014																		
1014	1010																	
1015																		
1015	1014																	
1016																		
1016	1015																	
1101																		
1102																		
1102	1016																	
1103																		
1104																		
1104	1105																	
1107																		
1107	1106																	
1108	1109		1			1												
1109																		
1109	1107																	
1110																		
1110	1109																	
1111																		
1111	1110																	
1112																		
1112	1109																	
1113																		
1113	1112																	
1114																		
1114	1113																	
1115																		
1115	1112																	
1116																		
1116	1115																	
1117																		
1117	1116																	
1119																		
1119	1116																	
1201																		
1201	1202																	
1202																		
1202	1204																	
1203																		
1203	1202																	
1204																		
1204	1205																	
1207																		
SHEET TOTALS			1	1		1	1											

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