CARYLTBURNS

COMPUTED BY: SUNGATE DESIGN GROUP **DATE:** 8/1/2017

CHECKED BY: MICHAEL BAKER ENGINEERING **DATE:** 8/14/2017

PROJECT NO.	SHEET NO.
R-5703	3D-5

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	OFFSET	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %
		1409	1410		56.8	55.9	
L 211+78	0 CL	1410		58.6			
		1410	1413		55.6	55.5	
L 214+16	60 RT	1411		61.4			
		1411	1419		57.9	57.3	0.8
L 214+16	59 LT	1412		61.4			
		1412	1420		57.9	56.9	0.8
L 211+78	60 LT	1413		60.3			
		1413	1414		55.0	44.8	2.4
L 206+15	60 LT	1417		68.5			
		1417	1406		65.1	63.1	
L 211+78	60 RT	1418		60.3			
		1418	1410		56.8	55.9	
L 214+06	60 RT	1419		61.3			
		1419	1420		56.5	56.2	
L 214+06	59 LT	1420		61.3			
		1420	1413		56.2	55.0	
L 224+28	59 LT	1501		67.0			
		1501	1503		63.6	62.6	
L 224+28	59 RT	1502		67.0			
		1502	1503		63.6	62.6	
L 224+28	0 CL	1503		65.4			
		1503	1506		62.6	59.5	
L 226+77	110 LT	1505		60.7			
		1505	1506		60.7	58.7	
L 227+19	0 CL	1506		67.0			
		1506	1507		58.7	58.1	
L 224+38	59 LT	1508		67.1			
		1508	1501		63.6	63.6	
L 234+49	0 CL	1601	1604		59.6	57.2	
L 235+00	0 CL	1602		71.4			
		1602	1603		68.6	59.8	
L 249+74	0 CL	1701	1702		58.4	53.4	
L 250+03	0 CL	1703		74.4			
		1703	1704		71.7	55.0	
L 256+09	0 CL	1801		72.6			
		1801	1806		69.8	56.5	
L 256+14	0 CL	1802			59.3	56.5	
L 256+59	0 CL	1803			60.5	56.5	
L 260+15	0 CL	1804			64.0	59.1	
L 262+00	0 CL	1805		70.8			
		1805	1807		68.1	65.0	
Y5 15+26	23 LT	1808			63.0	62.0	
Y5 10+62	25 RT	1809			56.0	55.5	
L 267+50	0 CL	1901		69.1			
		1901	1902		66.3	65.9	
L 269+10	0 CL	1902		68.8			
		1902	1908		65.9	58.0	0.8
L 274+00	0 CL	1904		76.4			
		1904	1909		73.6	65.0	

SIZE / THICKNESS OR GAUGE: Side Drain Pipe (RCP, CSP, CAAP, HDPE, or PVC) and C. S. PIPE

FROM	TO	Side Drain 12	Side Drain 15	Side Drain 18	Side Drain 24	Side Drain 30	Side Drain 36	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C.S. 12 .064	C.S. 15 .064	C.S. 18 .064	C.S. 24 .064	C.S. 30 .079			C.S. 36 .079
1409	1410		180							X										
1410																				
1410	1413																			
1411																				
1411	1419		12							X										
1412																				
1412	1420		12							X										
1413																				
1413	1414															56				
1417																				
1417	1406		12							X										
1418																				
1418	1410																			
1419																				
1419	1420																			
1420																				
1420	1413				232					X										
1501																				
1501	1503																			
1502																				
1502	1503																			
1503																				
1503	1506		292							X										
1505																				
1505	1506																			
1506																				
1506	1507																			
1508																				
1508	1501		12							X										
1601	1604																			
1602																				
1602	1603																			
1701	1702																			
1703																				
1703	1704													152						
1801																				
1801	1806													136						
1802																				
1803																				
1804																				
1805																				
1805	1807																			
1808																				
1809																				
1901																				
1901	1902		160							X										
1902																				
1902	1908																			
1904																				
1904	1909																			
SHEET TOTALS			680		232									288		56				

R. C. PIPE

FROM	TO	CLASS III 12	CLASS III 15	CLASS III 18	CLASS III 24	CLASS III 30	CLASS III 36	CLASS III 42	CLASS IV 12	CLASS IV 15	CLASS IV 18	CLASS IV 24	CLASS IV 30	CLASS IV 36	CLASS IV 42	CLASS IV 48	CLASS V 12	CLASS V 15	CLASS V 18	CLASS V 24	CLASS V 30	CLASS V 36	CLASS V 42	CLASS V 48
1409	1410																							
1410																								
1410	1413										60													
1411																								
1411	1419																							
1412																								
1412	1420																							
1413																								
1413	1414																							
1417																								
1417	1406																							
1418																								
1418	1410									60														
1419																								
1419	1420											120												
1420																								
1420	1413																							
1501																								
1501	1503									60														
1502																								
1502	1503									60														
1503																								
1503	1506																							
1505																								
1505	1506				120																			
1506																								
1506	1507				108																			
1508																								
1508	1501																							
1601	1604						236																	
1602																								
1602	1603		116																					
1701	1702							276																
1703																								
1703	1704																							
1801																								
1801	1806																							
1802					256																			
1803						260																		
1804					228																			
1805																								
1805	1807		92																					
1808											36													
1809													32											
1901																								
1901	1902																							
1902																								
1902	1908		124																					
1904																								
1904	1909		112																					
SHEET TOTALS			444		712	260	236	276		180	96	120	32											

QUANTITIES FOR DRAINAGE STRUCTURES — NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)

FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	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
1409	1410										
1410					1						
1410	1413										
1411					1						
1411	1419										
1412					1						
1412	1420										
1413					1	0.3					
1413	1414										
1417					1						
1417	1406										
1418					1						
1418	1410										
1419					1						
1419	1420										
1420					1	0.1					
1420	1413										
1501					1						
1501	1503										
1502					1						
1502	1503										
1503					1						
1503	1506										
1505											
1505	1506										
1506					1	3.3					
1506	1507										
1508					1						
1508	1501										
1601	1604	3.400									
1602					1						
1602	1603										
1701	1702	4.500									
1703					1						
1703	1704										
1801					1						
1801	1806										
1802											
1803											
1804											
1805					1						
1805	1807										
1808											
1809											
1901					1						
1901	1902										
1902					1						
1902	1908										
1904					1						
1904	1909										
SHEET TOTALS		7.900			20	3.7					

FROM	TO	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/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	J.B. STD. 840.31 OR STD. 840.32	M.H. FRAME AND COVER STD. 840.54	ADJUST 2GI	15" C.S. ELBOW, 0.064" THICK	18" C.S. ELBOW, 0.064" THICK	24" C.S. ELBOW, 0.064" THICK	30" SLUICE GATE	36" SLUICE GATE	MODIFIED CONC. FLUME	PIPE CLEAN OUT EA	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
1409	1410																									
1410								1			1															
1410	1413																									
1411								1		1																
1411	1419																									
1412								1		1																
1412	1420																									
1413							1			1																
1413	1414																	2								
1417								1		1																
1417	1406																									
1418								1		1																
1418	1410																									
1419							1			1																
1419	1420																									
1420							1			1																
1420	1413																									
1501								1		1																
1501	1503																									
1502								1		1																
1502	1503																									
1503								1			1															
1503	1506																									
1505																										
1505	1506																									
1506							1				1															
1506	1507																									
1508								1		1																
1508	1501																									
1601	1604																									
1602								1			1															
1602	1603																									
1701	1702																									
1703								1			1															
1703	1704															2										
1801								1			1															
1801	1806															2										
1802																										
1803																										
1804																										
1805								1			1															
1805	1807																									
1808																										
1809																										
1901								1			1															
1901	1902																									
1902								1			1															
1902	1908																									
1904								1			1															
1904	1909																									
SHEET TOTALS							4	16		10	10					4		2								

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