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

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

CARYLTBURNS

PROJECT NO.	SHEET NO.
R-5703	3D-10

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	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Side Drain Pipe (RCP, CSP, CAAP, HDPE, or PVC) 12	15	18	24	30	36	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 12 .064	15 .064	18 .064	24 .064	30 .079			36 .079
Y8 46+10	160 RT	2572		59.0																						
		2572	2530		59.0	58.9																				
Y8 46+00	0 CL	2573		64.5																						
		2573	2543		61.8	53.9			252							X										
Y1 38+27	0 CL	2701	2703		73.8	73.8																				
Y1 38+29	0 CL	2702	2704		73.8	73.8																				
Y1 44+89	0 CL	2705			74.5	74.2																				
Y1 38+55	0 CL	2706	2708		73.7	73.5																				
Y1 38+57	0 CL	2707	2709		73.7	73.5																				
Y8 20+00	0 CL	2801		72.9																						
		2801	2803		70.9	70.7																				
Y8 20+50	0 CL	2802		73.1																						
		2802	2801		71.1	70.9			52							X										
Y8 27+74	107 RT	2901		68.0																						
		2901	2902		68.0	67.0																				
Y8 28+07	0 CL	2902		73.2																						
		2902	2903		67.0	65.9	0.3																			
Y8 31+00	0 CL	2904		72.4																						
		2904	2905		70.5	69.7			52							X										
Y8 30+50	0 CL	2905		72.5																						
		2905	2906		69.7	69.3	0.3																			
Y8 34+00	75 RT	2907		71.9																						
		2907	2540		69.1	68.2			304							X										
Y8 51+90	75 RT	3001		50.2																						
		3001	3008		46.1	44.6	0.4			64						X										
Y8 52+50	0 CL	3002		47.3																						
		3002	3003		44.6	36.1			328							X										
Y8 55+77	1 RT	3003		40.1																						
Y8 60+81	1 RT	3004		36.2																						
DR4 19+58	20 LT	3005		52.0																						
		3005	3006		52.0	49.1																				
DR4 19+50	20 RT	3006		52.1																						
		3006	3007		49.1	46.3				52						X										
DR4 19+37	70 RT	3007		49.5																						
		3007	3001		46.3	46.1				36						X										
Y9 10+84	0 CL	3009	3014		32.4	32.1																				
DR4 12+25	0 CL	3010			35.0	34.9																				
DR4 10+20	0 CL	3011			35.5	35.0																				
DR4 21+74	20 RT	3013			66.1	65.4																				
Y9 10+79	24 LT	3014		37.5																						
		3014	3015		32.1	32.0					44					X										
Y8 39+89	96 RT	T01								72						X										
Y8 49+51	118 RT	T02								64						X										
SERV1 26+57	38 LT	0657								28																
SERV1 41+04	45 LT	0706							20																	
Y8 52+63	12 LT																									
Y8 55+76	30 LT																									
Y8 60+81	30 LT																									
Y1 33+64	1 RT																									
Y8 39+89	96 RT	T01																								
SHEET TOTALS									1008	316	44															

LINE & STATION	FROM	TO	R. C. PIPE CLASS III 12	15	18	24	30	36	42	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V 12	15	18	24	30	36	42	48
Y8 46+10	2572																								
	2572	2530						36																	
Y8 46+00	2573																								
	2573	2543																							
Y1 38+27	2701	2703			24																				
Y1 38+29	2702	2704			24																				
Y1 44+89	2705																				80				
Y1 38+55	2706	2708			48																				
Y1 38+57	2707	2709			48																				
Y8 20+00	2801																								
	2801	2803		84																					
Y8 20+50	2802																								
	2802	2801																							
Y8 27+74	2901																								
	2901	2902					116																		
Y8 28+07	2902																								
	2902	2903					120																		
Y8 31+00	2904																								
	2904	2905																							
Y8 30+50	2905																								
	2905	2906		92																					
Y8 34+00	2907																								
	2907	2540																							
Y8 51+90	3001																								
	3001	3008																							
Y8 52+50	3002																								
	3002	3003																							
Y8 55+77	3003																								
Y8 60+81	3004																								
DR4 19+58	3005																								
	3005	3006			44																				
DR4 19+50	3006																								
	3006	3007																							
DR4 19+37	3007																								
	3007	3001																							
Y9 10+84	3009	3014											92												
DR4 12+25	3010												64												
DR4 10+20	3011											84													
DR4 21+74	3013											32													
Y9 10+79	3014																								
	3014	3015																							
Y8 39+89	T01																								
Y8 49+51	T02																								
SERV1 26+57	0657																								
SERV1 41+04	0706																								
Y8 52+63																									
Y8 55+76																									
Y8 60+81																									
Y1 33+64																									
Y8 39+89	T01																								
SHEET TOTALS				176	188		236	36				116	156								80				

LINE & STATION	FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES 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/ 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
Y8 46+10	2572		3.400																																		
	2572	2530																																			
Y8 46+00	2573					1													1			1															
	2573	2543																																			
Y1 38+27	2701	2703																																	0.4500		
Y1 38+29	2702	2704																																	0.4500		
Y1 44+89	2705																																				
Y1 38+55	2706	2708																															1		0.4500		
Y1 38+57	2707	2709																															1		0.4500		
Y8 20+00	2801					1														1		1															
	2801	2803																																			
Y8 20+50	2802					1														1		1															
	2802	2801																																			
Y8 27+74	2901																																				
	2901	2902																																			
Y8 28+07	2902					1	1.2												1			1															
	2902	2903																																			
Y8 31+00	2904					1														1		1															
	2904	2905																																			
Y8 30+50	2905					1													1			1															
	2905	2906																																			
Y8 34+00	2907					1													1			1															
	2907	2540																																			
Y8 51+90	3001					1													1			1															
	3001	3008																																			
Y8 52+50	3002					1													1			1															
	3002	3003																																			
Y8 55+77	3003																									1											
Y8 60+81	3004																									1											
DR4 19+58	3005																																				
	3005	3006																																			
DR4 19+50	3006					1													1				1														
	3006	3007																																			
DR4 19+37	3007					1									1																						
	3007	3001																																			
Y9 10+84	3009	3014																																			
DR4 12+25	3010																																				
DR4 10+20	3011																																				
DR4 21+74	3013																																				
Y9 10+79	3014					1	0.4																	1	1												
	3014	3015																																			
Y8 39+89	T01																																				TEMP PIPE
Y8 49+51	T02																																				TEMP PIPE
SERV1 26+57	0657																																				
SERV1 41+04	0706																																				
Y8 52+63																																		3			
Y8 55+76																																		4			
Y8 60+81																																		3			
Y1 33+64																																		17			
Y8 39+89	T01																																			72	REMOVE TEMP PIPE
SHEET TOTALS			3.400			12	1.6								1				7	3		9	1	1	1	2							2	27	1.8000	72	

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

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