CARYLTBURNS

COMPUTED BY:	Ecological Engineering LLP	DATE:	6/28/2017
CHECKED BY:	Ecological Engineering LLP	DATE:	6/28/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-5935	3D-6

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) 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	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	54	60	66	72	78	84	R. C. PIPE CLASS IV 12	15	18	24	30	36	42
			0819	0821		131.6	131.5																													20				
L 67+85	72	LT	0820		131.6																																			
			0820	0822		129.1	129.0																													32				
L 67+85	10	LT	0821		135.0																																			
			0821	0822		131.5	130.7																													28				
L 67+85	40	LT	0822		134.0																																			
			0822	0825		128.1	127.8																													88				
L 67+91	58	RT	0823		134.8																																			
			0823	0824		128.1	128.0																														56			
L 68+45	64	RT	0824		132.9																																			
			0824	0828		128.0	127.8																		84															
L 68+75	40	LT	0825		134.2																																			
			0825	0830		127.8	127.4																													128				
L 69+30	10	RT	0826		134.7																																			
			0826	0827		131.3	130.4																													28				
L 69+30	40	RT	0827		133.6																																			
			0827	0828		130.4	129.3																													24				
L 69+30	64	RT	0828		133.2																																			
			0828	0829		127.8	127.7																		20															
L 69+52	64	RT	0829		132.8																																			
			0829	0832		127.7	127.5																		104															
L 70+00	40	LT	0830		134.4																																			
			0830	0836		127.4	126.7																													240				
L 70+00	72	LT	0831		130.6																																			
			0831	0830		128.1	128.0																													32				
L 70+56	71	RT	0832		132.9																																			
			0832	0833		127.5	127.5																		36															
L 70+94	70	RT	0833		132.2																																			
			0833	0835		127.5	127.4																		56															
L 71+11	40	RT	0834		134.0																																			
			0834	0833		130.8	129.0																													36				
L 71+50	74	RT	0835		131.1																																			
			0835	0838		127.4	127.1																		124															
L 72+40	40	LT	0836		134.3																																			
			0836	0841		128.6	127.8																														260			
L 72+75	40	RT	0837		140.3																																			
			0837	0838		137.1	129.5				32				x		x	x	x																					
L 72+75	72	RT	0838		132.0																																			
			0838	0839		127.1	127.0																																68	
L 73+46	78	RT	0839		132.5																																			
			0839	0840		127.0	126.8																																52	
L 74+00	77	RT	0840		132.1																																			
			0840	0843		126.8	126.4																		132															
L 75+00	40	LT	0841		133.9																																			
			0841	0846		127.8	127.5																														88			
L 75+15	51	RT	0842		133.0																																			
			0842	0844		129.7	129.5																													64				
L 75+33	80	RT	0843		133.2																																			
			0843	0902		126.4	126.1																		112															
L 75+80	51	RT	0844		132.8																																			
							SHEET TOTALS				32														668											720	404		120	

FROM	TO	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	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	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	ADJUST M.H.	SPECIAL DI 840D14 SEE SHEET 2C-2	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.	18" DRAINAGE PIPE ELBOWS	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
0819	0821																																								
0820							1											1	1																						
0820	0822																																								
0821							1							1				1	1																						
0821	0822																																								
0822							1	0.9		1	1																														
0822	0825																																								
0823							1	1.7															1							1											
0823	0824																																								
0824																												1													Adjust MH
0824	0828																																								
0825							1	1.4		1		1																													
0825	0830																																								
0826							1							1				1	1																						
0826	0827																																								
0827							1			1	1																														
0827	0828																																								
0828							1	0.4															1							1											
0828	0829																																								
0829							1	0.1											1										1												
0829	0832																																								
0830							1	1.9		1			1																												
0830	0836																																								
0831							1											1	1																						
0831	0830																																								
0832							1	0.3															1							1											
0832	0833																																								
0833							1																1							1											
0833	0835																																								
0834							1			1			1																												
0834	0833																																								
0835							1												1										1												
0835	0838																																								
0836							1	2.6		1	1																														
0836	0841																																								
0837							1			1		1																													
0837	0838																																				2				
0838							1												1										1												
0838	0839																																								
0839							1	0.5																	1					1											
0839	0840																																								
0840							1	0.3											1										1												
0840	0843																																								
0841							1	1.1		1			1																												
0841	0846																																								
0842							1			1		1																													
0842	0844																																								
0843							1	1.8											1										1												
0843	0902																																								
0844							1			1		1																													
SHEET TOTALS							24	13.0		10	3	4	3	2				4	9				4		1			1	5	5							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