NC10477

COMPUTED BY:	ADS	DATE:	3/20/15
CHECKED BY:	SHB	DATE:	9/29/15

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2409C	3D-2

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	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
L 43+30	92 LT	0701		2867.8															
		0701	0702		2865.3	2840.5													
L 42+95	122 RT	0702		2856.8															
		0702	0703		2822.3	2822.0													
L 46+47	29 LT	0704		2920.3															
		0704	0705		2917.6	2916.6		16											
L 51+43	78 LT	0706		2899.5															
		0706	0707		2893.3	2876.0	0.5												
L 51+50	44 LT	0707		2879.0															
		0707	0708		2876.0	2875.3	0.5												
L 51+60	25 RT	0708		2881.8															
		0708	0709		2875.3	2820.0	1.7												
L 51+62	112 RT	0709		2825.0															
		0709	0710		2813.1	2813.0	0.5		20										
L 49+25	17 RT	0711		2901.8															
		0711	0712		2899.0	2834.0													
L 54+65	60 LT	0801		2851.7															
		0801	0803		2850.2	2849.2													
L 55+00	42 RT	0802		2852.3															
		0802	0803		2851.0	2849.5		56											
L 54+50	33 RT	0803		2853.1															
		0803	0821		2849.2	2822.5	0.5												
L 58+75	66 RT	0805		2838.1															
		0805	0806		2836.9	2820.7													
L 58+75	26 RT	0806		2823.5															
		0806	0808		2820.7	2811.9	0.5	100											
L 59+75	41 LT	0807		2815.0															
		0807	0808		2812.3	2811.9	0.5												
L 59+75	29 RT	0808		2815.3															
		0808	0810		2811.9	2780.1	6.4												
L 60+75	71 RT	0809		2778.0															
		0809	0810		2775.5	2775.5					16								
L 60+82	60 RT	0810		2783.8															
		0810	0812		2775.5	2765.0					188								
L 61+60	80 LT	0811		2775.1															
		0811	0812		2771.4	2758.4													
L 62+67	57 RT	0812		2770.2															
		0812	0813		2758.4	2758.3													
L 62+82	29 LT	0814		2793.2															
		0814	0815		2789.9	2788.9		16											
L 64+50	38 LT	0816		2779.9															
		0816	0818		2778.6	2762.0													
L 65+31	67 LT	0817		2752.9															
		0817	0818		2752.9	2752.5	0.6				20								
L 65+31	47 LT	0818		2765.9															
		0818	0819		2752.5	2750.0	1.2												
L 65+31	56 RT	0819		2754.9															
		0819	0820		2739.8	2739.7	0.5					20							
L 54+38	75 RT	0821		2827.5															
		0821	0804		2815.6	2815.5	0.5		16										
						SHEET TOTALS		188	36		224	20							

LINE & STATION / SIZE / THICKNESS OR GAUGE	C. S. PIPE 12	15	18	24	30	24	30	36	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	24" WELDED STEEL PIPE 0.5" THICK, GRADE B	30" WELDED STEEL PIPE 0.5" THICK, GRADE B	15" SIDE DRAIN PIPE	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
	.064	.064	.064	.064	.079	0.168	0.168	.109																								
L 43+30																																
							224																									
L 42+95																																
							32																									
L 46+47																																
L 51+43																																
			36																													
L 51+50																																
											72																					
L 51+60																																
			88																													
L 51+62																																
L 49+25																																
	108																															
L 54+65																																
																		96														
L 55+00																																
L 54+50																																
		48																														
L 58+75																																
	40																															
L 58+75																																
L 59+75																																
									72																							
L 59+75																																
	112																															
L 60+75																																
L 60+82																																
L 61+60																																
																					176											
L 62+67																																
														16																		
L 62+82																																
L 64+50																																
	80																															
L 65+31																																
L 65+31																																
																									104							
L 65+31																																
L 54+38																																
SHEET TOTALS	340	172				256			72	72				16				96				176			104							

LINE & STATION / SIZE / THICKNESS OR GAUGE	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) A: 0' THRU 5' EACH	A: 5' THRU 10' LIN. FT.	A: 10' AND ABOVE LIN. FT.	B: 0' THRU 5' EACH	B: 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		ROD & LUG COUPLINGS W/SLEEVE GASKETS	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. (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	T.B.D.I. STD. 840.35	M.H. STD. 840.52	M.H. FRAME AND COVER STD. 840.54	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (11 SY)	BERM DITCH OUTLET STD. 850.11 (31 SY)	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
L 43+30																																										OPEN END
												1																					2								
L 42+95	1	5.0	24.5																							1	1														
												1																					2								
L 46+47	1																					1			1																
L 51+43																																		1							
												1																			2								53	
L 51+50	1														1			1																							
L 51+60	1	1.5																					1				1														
												1																			2										
L 51+62	1	5.0	1.9																				1				1														
L 49+25	1														1							1																			
												1																			2										
L 54+65																																										OPEN END
L 55+00																																										OPEN END
L 54+50	1																						1				1														
												1																			2										
L 58+75																																		1							
												1																			2										
L 58+75	1														1			1																							
L 59+75	1														1			1																							
L 59+75	1														1			1																							
												1																			2										
L 60+75																																										OPEN END
L 60+82	1	3.3																					1				1														
L 61+60																																										OPEN END
L 62+67	1	5.0	1.1																				1				1														
L 62+82	1																					1				1															
L 64+50																																										OPEN END
												1																			2										
L 65+31																																										OPEN END
L 65+31	1	5.0	3.4																							1	1														
																																				13					
L 65+31	1	5.0	5.1																							1	1														
L 54+38	1	5.0	1.9																				1				1														
SHEET TOTALS	16	34.8	37.9									9			5			4		3	6		2	3	9	8	6		4	2		13			53		

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