COMPUTED BY: KCBE DATE: 6/29/2016

CHECKED BY: RAM DATE: 9/6/2016

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-3100A	3D-2

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
L 48+83	RT	612		985.1															
		612	613		980.3	962.1			56							X			
L 50+00	LT	614		983.9															
		614	615		982	964.2			100							X			
L 50+14	RT	616		987.8															
		616	617		984.6	980.3													
L 50+14	RT	617		983.5															
		617	618		980.3	962.1			136							X			
L 51+68	LT	619		991.4															
		619	620		988.7	987													
L 53+74	LT	701		997.8															
		701	703		992.9	990.8													
		701	702		992.9	993.9													
L 53+87	LT	702		997.5															
		702	704		993.9	994.2							52						
L 55+00	LT	705		1001.8															
		705	706		994.9	994.5													
L 55+51	RT	707			997	994.2													
L 55+77	RT	708		1003.8															
		708	709		1000.6	1000.4													
L 56+66	RT	709		1006.7															
		709	710		1000.4	1000.2													
L 58+08	RT	711		1011.3															
		711	712		1008.1	1006.1													
L 59+52	LT	713																	
L 60+47	RT	714		1019															
		714	715		1015.8	1013.7													
L 63+70	LT	716		1029.5															
		716	717		1026.8	1023.4													
L 65+75	CL	801																	
L 68+00	LT	802		1040.5															
		802	803		1037.7	1035.3													
L 70+47	RT	804			1037.7	1031.5													
L 71+50	LT	805		1045.7															
		805	806		1043	1036.2													
L 74+10	LT	807																	
L 74+11	RT	808																	
L 75+00	LT	809		1048.7															
		809	810		1045.9	1043.9													
L 75+37	LT	811																	
L 76+28	RT	812																	
L 77+12	LT	813																	
L 78+32	RT	814																	
SHEET TOTALS									292				52						

STATION	C.S. PIPE SIZE 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS III SIZE 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV SIZE 12"	15"	18"	24"	30"	36"	42"	48"
	THICKNESS OR GAUGE .064	.064	.064	.064	.079	.079	.109	.109																
L 48+83																								
L 50+00																								
L 50+14																								
																		48						
L 50+14																								
L 51+68																								
																		72						
L 53+74																								
																						88		
																						60		
L 53+87																								
																	3.4							
L 55+00																								
																		80						
L 55+51																	2.3							
L 55+77																								
																		88						
L 56+66																								
																		60						
L 58+08																								
																		60						
L 59+52																								
L 60+47																								
																		64						
L 63+70																								
																		80						
L 65+75																								
L 68+00																								
																		76						
L 70+47																			280					
L 71+50																								
																		88						
L 74+10																								
L 74+11																								
L 75+00																								
																		76						
L 75+37																								
L 76+28																								
L 77+12																								
L 78+32																								
SHEET TOTALS																		792	280	68	148			

STATION	"A" " R.C. PIPE (CLASS V)	"A"" RC PIPE CULVERTS, CONTRACTOR DESIGN	"A"" RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	LIN. FT. A 5.0' THRU 10.0'	LIN. FT. B 10.0' AND ABOVE	"TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B')	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET STD. 852.06	
L 48+83								1									
L 50+00								1									
L 50+14								1								1	
L 50+14								1									
L 51+68								1									
L 53+74								1									
L 53+87								1									
						3.4											
L 55+00								1	1.9								
L 55+51						2.3											
L 55+77								1								1	
L 56+66								1	1.3							1	
L 58+08								1								1	
L 59+52				24													
L 60+47								1								1	
L 63+70								1									
L 65+75																	
L 68+00								1									
L 70+47						3											
L 71+50								1									
L 74+10					24												
L 74+11					28												
L 75+00								1									
L 75+37					76												
L 76+28				24													
L 77+12																	
L 78+32				20													
SHEET TOTALS				68	128	8.7		16	3.2							5	

STATION	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME WITH TWO GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. (W.S. FLAT) FRAME WITH TWO GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME WITH TWO GRATES STD. 840.22	G.D.I. (W.S. SAG) FRAME WITH GRATE STD. 840.22	G.D.I. (W.S. FLAT) FRAME WITH TWO GRATES STD. 840.29	OPEN THROAT C.B. STD. 840.04 OR STA. 840.05	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	J.B. STD. 840.31 OR 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	G.D.I. (N.S. SAG) FRAME WITH TWO GRATES STD. 840.24	BERM DRAINAGE OUTLET STD. 850.10	BERM DRAINAGE OUTLET STD. 850.11	CONC. TRANSTIONAL SECTION FOR DI [EA] [SEE DETAIL 2C-2]	CONVERT EXISTING D.I. TO J.B. WITH M.H.	PARALLEL PIPE END SECTION STD. 310.02 15"	18"	24"	C.S. ELBOWS 15"	18"	24"	PREFORMED SCOUR HOLE	FLOWABLE FILL	CONC. AND BRICK PIPE PLUG (C.Y.) STD. 840.71	PIPE REMOVAL LIN. FT.	REMARKS
L 48+83				1		1																														
L 50+00				1			1																													
L 50+14	1	1																																		
L 50+14				1			1																													
L 51+68				1		1													1																	
L 53+74				1		1													1																	
L 53+87				1			1																													
L 55+00				1		1													1																	
L 55+51																																				
L 55+77	1	1	1																																	
L 56+66	1	1	1																																	
L 58+08	1	1	1																																	
L 59+52																													1							
L 60+47	1	1	1																																	
L 63+70				1		1													1																	
L 65+75																																				
L 68+00				1		1													1																	
L 70+47																																				
L 71+50				1		1													1																	
L 74+10																														1						
L 74+11																														1						
L 75+00				1		1													1																	
L 75+37																														1						
L 76+28																													1							
L 77+12																																				
L 78+32																													1							
SHEET TOTALS		5	5	5	11		8	3											7		3	3														668

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX