COMPUTED BY:	MJD	DATE:	1/11/2012
CHECKED BY:	SKR	DATE:	7/18/14

RD266446

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-3465	3D-4

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".

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

STATION / SIZE / THICKNESS OR GAUGE / -L-	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) 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
	CL	701	702		285.9	285.7													
63+55	CL	702		288.7	285.7														
	CL	702	704		285.7	283.9													
63+70	RT	704		286.9	283.9														
	RT	704	703		283.9	289.0			28										
	RT	704	705		283.9	281.0													
65+80	RT	705		284.0	281.0														
	RT	705	706		281.0	280.1	X												
66+34	RT	706		283.7	280.1														
	RT	706	711		280.1	279.2	X												
67+48	RT	711		284.7	278.3														
67+48	RT	711	707		278.3	278.3	X												
	RT	707		284.0	278.3														
	RT	711	710		278.5	279.8	X												
69+28	RT	710		287.3	279.8														
	RT	710	709		279.8	280.7	X												
71+00	RT	709		289.8	280.7														
	RT	709	708		280.7	281.0	X			24							X	X	
	RT	708		287.9	281.0														
65+80	CL	712		285.8	282.8														
	CL	712	713		282.8	282.5													
66+53	CL	713		285.5	282.5														
	CL	713	714		282.5	282.3	X												
67+22	CL	714		286.3	275.9														
	CL	714	711		277.9	278.3	X												
	CL	714	718		275.9	275.7	X												
	CL	714	723		282.3	283.5													
	LT	718		285.7	275.7														
	LT	718	719		275.7	273.1													
	LT	718	717		282.5	282.9	X												
68+14	LT	717		285.9	282.9														
	LT	717	716		282.9	284.4													
69+35	LT	716		287.4	284.4														
	LT	716	715		284.4	286.2													
70+60	LT	715		289.2	286.2														
	LT	715	724		286.2	287.0													
71+00	RT	709	803		286.8	287.9													
68+00	CL	723		286.6	283.5														
70+52	CL	724		290.2	287.0														
72+55	RT	803		290.9	287.9														
	RT	803	802		287.9	288.7													
	CL	802		292.0	288.7														
	CL	802	801		288.7	288.8	X												
72+19	CL	801		291.8	288.8														
75+55	CL	804		292.1	289.1														
	CL	804	805		289.1	287.8													
77+05	CL	805		290.8	287.8														
	CL	805	806		287.8	286.6													
78+66	CL	806		289.6	285.3														
	CL	806	812		285.3	285.1	X												
	LT	812		289.1	285.1														
	LT	812	813		285.1	283.9	X												
80+21	LT	813		289.8	283.9														
SHEET TOTALS									28	24									

STATION	FROM	TO	C.S. PIPE 12" (.064)	15" (.064)	18" (.064)	24" (.064)	30" (.079)	36" (.079)	42" (.109)	48" (.109)	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"	24" WELDED STEEL PIPE, 0.5" THICK	30" WELDED STEEL PIPE, 0.5" THICK	36" WELDED STEEL PIPE, 0.5" THICK	4 SIDE OPEN THROAT CATCH BASIN (SEE DETAIL 2C-6)	ADJUST CB	ADJUST DI	CONVERT TBDI TO TBJB (SEE DETAIL 2C-4)	TEMP. STEEL PLATE COVERS FOR DRAINAGE STRUCTURES (SEE DETAIL 2C-5)	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02
	701	702																		20																	
63+55	702																																	1			1
	702	704																		56																	
63+70	704																																	1			1
	704	703																																			
	704	705																		208																	
65+80	705																																	1			1
	705	706																		56																	
66+34	706																																	1			1
	706	711																			116																
67+48	711																																	1	1.4		1
67+48	711	707																						20													
	707																																	1	0.7		
	711	710																				180															
69+28	710																																	1	2.5		1
	710	709																				172															
71+00	709																																	1	4.1		1
	709	708																																			
	708																																	1	1.9		
65+80	712																																	1			1
	712	713																		76																	
66+53	713																																	1			1
	713	714																		72																	
67+22	714																																	1	5	0.4	
	714	711																							64												
	714	718																							36												
	714	723																		76																	
	718																																	1	5		1
	718	719																							48												
	718	717																		96																	
68+14	717																																	1			1
	717	716																		124																	
69+35	716																																	1			1
	716	715																		128																	
70+60	715																																	1			1
	715	724																		60																	
71+00	709	803																		156																	
68+00	723																																	1			
70+52	724																																	1			
72+55	803																																	1			1
	803	802																		40																	
	802																																	1			1
	802	801																		36																	
72+19	801																																	1			1
75+55	804																																	1			1
	804	805																		152																	
77+05	805																																	1			1
	805	806																		164																	
78+66	806																													1			1	1			1
	806	812																			32																
	812																																	1			1
	812	813																			92																
80+21	813																																	1	0.9		
SHEET TOTALS																				1520	240	352		20	148					1			1	26	21.5	0.4	20

STATION	FROM	TO	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	O.T.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	GRATE WITH FRAME, DRIVEWAY DROP INLET STD. 840.30	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	T.B.D.I. STD. 840.35	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	M.H. FRAME AND COVER STD. 840.54	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32	T.B.J.B. STD. 840.34	4" CONCRETE PAVED DITCH, S.Y.	ENERGY DISSIPATOR BASIN	FLOWABLE FILL (CY)	DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. 'B' C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
	701	702																								58	REMOVE 18" RCP FROM MEDIAN
63+55	702			1			1																			72	REMOVE 15" RCP AND DI
	702	704																									
63+70	704			1																							
	704	703																		11			2 @ 15"				BERM DRAINAGE OUTLET
	704	705																									
65+80	705			1																							
	705	706																									
66+34	706		1																								
	706	711																									
67+48	711				1																						
67+48	711	707																								23	REMOVE 30" HDPE AND TIE INTO PROP. 2GI
	707											1					1										
	711	710																								300	REMOVE 24" HDPE AND DI
69+28	710				1																						
	710	709																								60	REMOVE 18" HDPE
71+00	709				1																						
	709	708																									
	708								1	1																	TIE EXISTING 18" HDPE INTO PROP. DI
65+80	712			1			1																			41	REMOVE 15' RCP
	712	713																									
66+53	713		1				1																				
	713	714																									
67+22	714															1		1									
	714	711																									
	714	718																									REMOVE 30" RCP AT PROPOSED PIPE
	714	723																									
	718			1																							
	718	719																			1						
	718	717																									
68+14	717			1																							
	717	716																									
69+35	716			1																							
	716	715																								73	REMOVE 18" RCP
70+60	715			1																							
	715	724																									
71+00	709	803																									
68+00	723					1								1	1												
70+52	724					1								1	1												
72+55	803				1																						
	803	802																									
	802				1		1																				
	802	801																									
72+19	801				1		1																				
75+55	804			1			1																				
	804	805																									
77+05	805			1			1																				
	805	806																									
78+66	806		1				1																				PREFAB TB BOX IN PHASE 1 & FINISH IN LATER PHASE
	806	812																									
	812		1																								
	812	813																									
80+21	813															1			1								
SHEET TOTALS			4	10	6	2	8		1	1		1		2	2	2	1	1	1	11	1		2 @ 15"			627	

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