RAL-WS033

COMPUTED BY: SLK DATE: 12/31/2013

CHECKED BY: GSP DATE: 12/31/2013

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-3615B	3D-9

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)

STATION / SIZE / THICKNESS OR GAUGE	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	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"	48"
-L- 267+50	LT	140	141		820.98	819.03																															52						
-L- 270+00	CL	138		831.59	828.59																																						
-L- 270+00	LT	138	139		828.59	826.64																															52						
-L- 270+00	LT	139		829.64	826.64																																						
-L- 267+50	LT	139	141		826.64	819.03																															248						
-Y37N- 16+33	CL																																										
-Y37N- 14+84	LT	301A		839.49	830.05																																						
-Y37N- 14+81	RT																																										
-Y37N- 14+19	RT	300		839.35	836.6																																						
-Y37N- 14+25	LT	300	301		836.6	836.51																															32						
-Y37N- 14+25	LT	301		839.35	833.08																																						
-Y37S- 11+38	RT	237		843.17	840.17																																						
-Y37S- 11+38	LT	237	238		840.17	840.08																															32						
-Y37S- 11+38	LT	238		843.17	840.08																																						
-Y37S- 10+65	LT	238	239		840.08	839.69			84																																		
-Y37S- 10+65	LT	239		843.34	839.69																																						
-L- 259+99	RT	239	240		839.69	832.62			140																																		
-L- 259+99	RT	240		835.37	832.62																																						
-L- 263+02	RT	240	241		832.62	820.54			304																																		
-L- 263+02	RT	241		823.29	820.54																																						
-L- 264+11	RT	241	243A		820.54	816.37			112																																		
-Y40- 11+17	RT	242		820.89	817.89																																						
-Y40- 11+16	LT	242	243		817.89	817.78																															36						
-Y40- 11+16	LT	243		820.89	817.78																																						
-L- 264+11	RT	243	243A		817.78	816.37			40																																		
-L- 264+11	RT	243A		822	816.37																																						
-L- 266+31	RT	243A	244		816.37	806.67					220																																
-L- 260+26	LT	245		828	824.57																																						
-L- 261+31	RT	245	246		824.57	824.25						108																															
-L- 261+31	RT	246		828.9	824.25																																						
-L- 262+28	RT	246	248		824.25	822.34																																		100			
-Y39- 13+56	RT	247		827.45	824.45																																						
-L- 262+29	RT	247	248		824.45	823.59																															80						
-L- 262+29	RT	248		826.59	822.34																																						
-L- 263+43	RT	248	249		822.34	815						116																															
-L- 263+43	RT	249		819	815																																						
-L- 266+21	RT	249	250		815	807.82						280																															
-L- 271+45	RT	170A																																									
-L- 263+43	RT	170A	170B						36																																		
-L- 263+43	RT	170A	170C									80																															
-L- 272+42	CL	168A		835.58	831.16																																						
-L- 272+03	RT	168A	170		831.16	825.5																																		116			
SHEET TOTALS									716		220	584																									532			216			

STATION	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')	*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	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE 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. (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/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	M.H. FRAME AND COVER STD. 840.54	GENEREC PIPE ITEM - REMOVE AND RESET FES	CONVERT EXISTING D.I. TO J.B.	ADJUST C.B.	15" SLUICE GATE	18" SLUICE GATE	24" SLUICE GATE	30" SLUICE GATE	MODIFIED CONCRETE FLUME	PREFORMED SCOUR HOLE	FLOWABLE FILL CY	CONC. & BRICK PIPE PLUG STD. 840.71 CY	CONC. COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
-L- 267+50																																					
-L- 270+00					1			1		1			1																								
-L- 270+00																																					
-L- 270+00					1			1		1																											
-L- 267+50																																					
-Y37N- 16+33																																				177	15: CONC.
-Y37N- 14+84																										1								0.045			15" CONC
-Y37N- 14+81																																		0.045			REMOVE CB
-Y37N- 14+19					1			1	1																												
-Y37N- 14+25																																					
-Y37N- 14+25					1	0.8		1	1																												
																																				88	3-18" CONC., 2CB
-Y37S- 11+38					1			1			1																										
-Y37S- 11+38																																					
-Y37S- 11+38					1			1		1																											
-Y37S- 10+65																																					
-Y37S- 10+65					1																1		1														
-L- 259+99																																					
-L- 259+99					1									1	1																						
-L- 263+02																																					
-L- 263+02					1									1	1																						
-L- 264+11																																					
-Y40- 11+17					1			1	1																												
-Y40- 11+16																																					
-Y40- 11+16					1			1	1																												
-L- 264+11																																					
-L- 264+11					1																1		1														
-L- 266+31																																					
-L- 260+26					1									1	1																					60	2-15"CONC
-L- 261+31																																					
-L- 261+31					1									1	1																						
-L- 262+28																																					
-Y39- 13+56					1			1		1																											
-L- 262+29																																					
-L- 262+29					1			1			1																										
-L- 263+43																																					
-L- 263+43					1									1	1																						
-L- 266+21																																					
-L- 271+45					1																									1							SEE DETAIL SHEET 2D-3
-L- 263+43																																					
-L- 263+43																																					
-L- 272+42					1			1			1		1																								
-L- 272+03																																					
SHEET TOTALS					19	0.8		11	4	4	3		2	5	5						2		2			1				1				0.09		325	

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