RAL-WS033

COMPUTED BY: SLK DATE: 12/31/2013

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-3615B	3D-10

**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	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL
-L- 272+50	CL	168B		835.67	830.19		
-L- 272+42	CL	168B	168A		830.19	830.16	
-L- 272+50	CL	169		836.51	833.51		
-L- 272+50	CL	169	168B		833.51	832.67	
-L- 272+50	LT	168		834.56	830.31		
-L- 272+50	CL	168	168B		830.31	830.61	
-L- 275+54	LT	167		838	834.25		
-L- 272+50	LT	167	168		834.25	830.81	
-L- 275+50	CL	166		839.45	836.45		
-L- 275+54	LT	166	167		836.45	836.33	
-L- 277+50	LT	165		841.19	837.94		
-L- 275+54	LT	165	167		837.94	834.25	
-L- 279+50	LT	164		847.94	844.19		
-L- 279+50	LT	164	165		844.19	837.94	
-L- 279+50	RT	163		847.86	844.86		
-L- 279+50	CL	163	164		844.86	844.19	
-L- 281+00	LT	162		852.73	848.98		
-L- 277+50	LT	162	164		848.98	844.19	
-L- 281+00	RT	161		852.73	849.73		
-L- 277+50	LT	161	162		849.73	849.48	
-L- 282+50	LT	160		857.54	853.79		
-L- 281+00	LT	160	162		853.79	848.98	
-L- 282+50	RT	159		857.54	854.54		
-L- 282+50	LT	159	160		854.54	854.29	
-L- 284+00	LT	158		862.34	858.59		
-L- 282+50	LT	158	160		858.59	853.79	
-L- 284+00	RT	157		862.34	859.34		
-L- 284+00	LT	157	158		859.34	859.09	
-L- 285+50	LT	156		867.06	863.81		
-L- 284+00	LT	156	158		863.81	859.09	
-L- 286+00	RT	155		868.57	865.57		
-L- 285+50	LT	155	156		865.57	864.06	
-L- 287+50	LT	154		872.69	869.44		
-L- 285+50	LT	154	156		869.44	863.81	
-L- 287+50	RT	153		872.69	869.69		
-L- 287+50	LT	153	154		869.69	869.44	
-L- 289+00	LT	152		876.33	873.33		
-L- 287+50	LT	152	154		873.33	869.44	
-L- 288+50	RT	151		876.81	873.81		
-L- 288+50	LT	151	152		873.81	873.33	
-L- 290+50	LT	150		880.05	876.46		
-L- 289+00	LT	150	152		876.46	873.33	
-L- 290+50	RT	149		879.75	876.75		
-L- 290+50	LT	149	150		876.75	876.46	
-L- 292+00	LT	148		881.92	878.68		
-L- 290+50	LT	148	150		878.68	876.46	
-L- 292+00	RT	147		881.92	878.92		
-L- 292+00	LT	147	148		878.92	878.68	
SHEET TOTALS							

Size / Thickness or Gauge (all cells empty on this sheet):

DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC)												C.S. PIPE								R.C. PIPE CLASS III							
12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"
												.064	.064	.064	.064	.079	.079	.109	.109								

STATION	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"	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
-L- 272+50													1			1			1		1
-L- 272+42					8																
-L- 272+50													1			1		1			1
-L- 272+50		20																			
-L- 272+50													1			1		1			
-L- 272+50					32																
-L- 275+54													1			1		1			
-L- 272+50				300																	
-L- 275+50													1			1		1			1
-L- 275+54		40																			
-L- 277+50													1			1		1			
-L- 275+54				196																	
-L- 279+50													1			1		1			
-L- 279+50				200																	
-L- 279+50													1			1			1		
-L- 279+50		84																			
-L- 281+00													1			1		1			
-L- 277+50				152																	
-L- 281+00													1			1			1		
-L- 277+50		80																			
-L- 282+50													1			1		1			
-L- 281+00				152																	
-L- 282+50													1			1			1		
-L- 282+50		80																			
-L- 284+00													1			1		1			
-L- 282+50				152																	
-L- 284+00													1			1			1		
-L- 284+00		80																			
-L- 285+50													1			1		1			
-L- 284+00			152																		
-L- 286+00													1			1			1		
-L- 285+50		96																			
-L- 287+50													1			1		1			
-L- 285+50			200																		
-L- 287+50													1			1			1		
-L- 287+50		80																			
-L- 289+00													1			1		1			
-L- 287+50		152																			
-L- 288+50													1			1			1		
-L- 288+50		104																			
-L- 290+50													1			1		1			
-L- 289+00		152																			
-L- 290+50													1			1			1		
-L- 290+50		60																			
-L- 292+00													1			1		1			
-L- 290+50		152																			
-L- 292+00													1			1			1		
-L- 292+00		80																			
SHEET TOTALS		1260	352	1152	40								24			24		14	10		3

Structure item columns (all cells empty on this sheet):

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

STATION	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- 272+50 (167–168)		0.065		80	12" CMP, REMOVE JB, PLUG 18"CONC
-L- 275+54 (165–167)				40	2-24" CONC
-L- 281+00 (162)				28	12" CONC
-L- 285+50 (155–156)				60	15" CONC
-L- 289+00 (150–152)	5.5	0.045		43	15" CONC, REMOVE 2-CB
SHEET TOTALS	5.5	0.11		251	

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