COMPUTED BY: CGM DATE: 3/06/14

CHECKED BY: JRR DATE:

PROJECT NO. U-2579B SHEET NO. 3D-18

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

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 %	SIDE DRAIN PIPE (STATEWIDE TIER) (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	48	DO NOT USE RCP
58+00 -Y4-	LT	0360		858.2	858.2										
		0360	0359		858.2	845.0				28					X
58+00 -Y4-	LT	0359		849.7	844.5										
		0359	0358		844.5	842.6					300				
55+00 -Y4-	LT	0358		847.9	842.6										
		0358	OUT		842.6	842.0					60				
57+57 -Y4-	CL	0363			850.8	EX									
57+60 -Y4-	RT	0364							12						
60+91 -Y4-	CL	0365		855.5											
60+76 -Y4-	RT	0366							16						
67+34 -Y4-	CL	0367		867.1	864.4										
		0367	0368		864.4	857.2		400							
-Y4- 63+34	CL	0368		859.9	EX										
-Y4- 63+34	RT	0369	OUT		EX	850.0			24						
-Y4- 65+23	LT	0370	OUT		847.0	838.2									
-Y4- 64+97	RT	INLET	0371		847.0	EX									
-Y4- 64+39	RT	0372		EX											
		0372	OUT		EX	838.2									
-Y4RPBD- 79+15	RT	0373		868.1	865.3										
		0373	0459		865.3	865.0		24							
-Y4RPBD- 79+19	RT	0459		870.5	865.3										
		0459	0374		865.3	865.0									
-Y4RPBD- 79+36	LT	0374		866.2	863.4										
		0374	0375		863.4	861.8		148							
-Y4RPBD- 80+77	LT	0375		864.5	861.8										
		0375	OUT		861.8	849.0									
-Y4RPBD- 75+19	RT	0376			895.0	884.0			152						
-Y4RPBD- 75+71	CL	0377			876.0	874.0									
Y4RPBD- 67+40	RT	0378		910.9	907.9										
		0378	0379		907.9	907.7									
-Y4RPBD- 67+40	LT	0379		911.2	907.7										
		0379	0380		907.7	898.2			260						
SHEET TOTALS								572	464	28	360				

FROM	TO	C. S. PIPE (SE: SHOP ELONGATED) 15 .064	18 .064	24 .064	30 .064	36 .079	42 .109	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	42	48	R. C. PIPE CLASS V 24	30	36	8" DIP (DUCTILE IRON PIPE)	42" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	48" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	36" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	18" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	30" WELDED STEEL PIPE, 0.500, TRENCLESS INSTALLATION	36" WELDED STEEL PIPE, 0.500, TRENCLESS INSTALLATION	42" WELDED STEEL PIPE, 0.625, TRENCLESS INSTALLATION	48" WELDED STEEL PIPE, 0.625, TRENCLESS INSTALLATION	ENDWALLS STD. 838.01 OR STD. 838.11 OR 838.80 (UNLESS NOTED OTHERWISE) CY
0360																																	
0360	0359																																
0359																																	
0359	0358																																
0358																																	
0358	OUT																																
0363																																	
0364																																	
0365																																	
0366																																	
0367																																	
0367	0368																																
0368																																	
0369	OUT																																
0370	OUT																													276		
INLET	0371									72																							
0372																																	
0372	OUT									20																							5.000
0373																																	
0373	0459																																
0459																																	
0459	0374																																
0374																																	
0374	0375																																
0375																																	
0375	OUT	116																															
0376																																	
0377										144																							
0378																																	
0378	0379							92																									
0379																																	
0379	0380																																
SHEET TOTALS		116						92		236																				276			10.000

FROM	TO	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 0' THRU 5' EACH	A 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	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT 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	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. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	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.D.I. STD. 840.36	STEEL GRATE AND FRAME STD. 840.37	SPRING BOX STD. 840.41	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING O.T.C.B. TO 2GI
0360																											
0360	0359																										
0359		1	0.2											1				1									
0359	0358																										
0358		1	0.3											1				1									
0358	OUT																										
0363																		1									1
0364																											
0365																			1								1
0366																											
0367		1													1			1									
0367	0368																										
0368		1													1			1									
0369	OUT																										
0370	OUT																										
INLET	0371																										
0372																											
0372	OUT																										
0373		1													1			1									
0373	0459																										
0459		1													1					1							
0459	0374																										
0374		1													1			1									
0374	0375																										
0375		1													1			1									
0375	OUT																										
0376																											
0377																											
0378		1													1			1									
0378	0379																										
0379		1													1			1									
0379	0380																										
SHEET TOTALS		10	0.5											2	8			10	1	1							2

FROM	TO	15" SIDE DRAIN PIPE ELBOW	18" SIDE DRAIN PIPE ELBOW	24" SIDE DRAIN PIPE ELBOW	30" SIDE DRAIN PIPE ELBOW	36" SIDE DRAIN PIPE ELBOW	15" C.S. PIPE ELBOW	18" C.S. PIPE ELBOW	24" C.S. PIPE ELBOW	42" C.S. PIPE ELBOW	BERM DITCH OUTLET STD. 850.10	MODIFIED CONC. FLUME	PREFORMED SCOUR HOLE (PER EACH)	ENERGY DISSIPATION BASIN	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
0360											1								BERM DITCH OUTLET
0360	0359			1															
0359																			
0359	0358																		
0358																			
0358	OUT																		
0363																	0.130		(2 X .065) Specoal Detail, See Sheet 2D-4
0364																0.4500			
0365																			Special Detail, See Sheet 2D-4
0366																0.4500			
0367																	0.130		(2 X .065)
0367	0368																		
0368																			
0369	OUT															0.4500			
0370	OUT																		WELDED STEEL
INLET	0371															0.6600			
0372																0.6600			
0372	OUT																		Special Detail, See Sheet 2D-5
0373																			
0373	0459																		
0459																			
0459	0374																		
0374																			
0374	0375																		
0375																			
0375	OUT						2												
0376																		44	
0377																		175	
0378																			
0378	0379																		
0379																			
0379	0380																	765	
SHEET TOTALS				1			2				1					2.6700	0.260	984	

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