RAL-2UA2440BPJ

COMPUTED BY: CGM DATE: 3/06/14

CHECKED BY: JRR DATE:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-2579B	3D-16

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
20+00 -Y1-	LT	0319		911.2	908.5										
		0319	0320		908.5	908.1	X	80							
19+23 -Y1-	LT	0320		910.9	908.1										
		0320	OUT		908.1	892.0		60							X
48+00 -Y1-	LT	0321		885.5	882.8										
		0321	0322		882.8	869.4		304							
50+99 -Y1-	LT	0322		872.2	869.2										
		0322	OUT		869.2	868.0									
52+66 -Y1-	LT	0323		864.4	861.7										
		0323	0324		861.7	861.4									
52+66 -Y1-	RT	0324		864.5	861.4										
		0324	OUT		861.4	854.0		68							X
13+52 -Y2-	RT	0325						20							
14+25 -Y2-	RT	0028						20							
28+63 -Y2-	CL	0326			938.2	937.6									
28+88 -Y4-	RT	0327		905.1	900.7										
		0327	327A		900.7	EX			12						
28+91 -Y4-	RT	327A		EX											
29+07 -Y4-	CL	0328		906.1	EX										
32+00 -Y4-	RT	0329		897.3	894.6										
		0329	0330		894.6	892.3		84							
32+82 -Y4-	RT	0330		895.9	890.2										
		0330	330A		890.2	EX				8					
32+87 -Y4-	RT	330A		EX											
33+36 -Y4-	CL	0331		894.9	EX										
33+97 -Y4-	LT	332A	0332		EX	884.9				8					
33+50 -Y4-	LT	0333		893.1	890.3										
		0333	0332		890.3	887.9		48							
		0334	0335		890.4	889.4						36			
32+69 -Y4-	RT	0334		895.8	890.4										
		0334	0330		890.4	890.2				20					
33+00 -Y4-	RT	0335		895.8	889.4										
		0335	0336		889.4	883.2									
33+97 -Y4-	LT	0332		891.5	884.9										
		0332	0336		884.9	884.2				20					
34+15 -Y4-	LT	0336		889.4	882.7										
		0336	OUT		882.7	877.5							96		
SHEET TOTALS								684	12	56		36	96		

LINE & STATION	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	QUANTITIES FOR DRAINAGE STRUCTURES 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
20+00 -Y1-	0319																																		1						
	0319	0320																																							
19+23 -Y1-	0320																																		1						
	0320	OUT																																							
48+00 -Y1-	0321																																		1						
	0321	0322																																							
50+99 -Y1-	0322																																		1						
	0322	OUT								120																															
52+66 -Y1-	0323																																		1						
	0323	0324							88																																
52+66 -Y1-	0324																																		1						
	0324	OUT																																							
13+52 -Y2-	0325																																								
14+25 -Y2-	0028																																								
28+63 -Y2-	0326																	92																							
28+88 -Y4-	0327																																		1						
	0327	327A																																							
28+91 -Y4-	327A																																								
29+07 -Y4-	0328																																								
32+00 -Y4-	0329																																		1						
	0329	0330																																							
32+82 -Y4-	0330																																		1	0.7					
	0330	330A																																							
32+87 -Y4-	330A																																								
33+36 -Y4-	0331																																								
33+97 -Y4-	332A	0332																																	1						
33+50 -Y4-	0333																																		1						
	0333	0332																																							
	0334	0335																																							
32+69 -Y4-	0334																																	4.500							
	0334	0330																																							
33+00 -Y4-	0335																																		1	1.4					
	0335	0336																												200											
33+97 -Y4-	0332																																		1	1.6					
	0332	0336																																							
34+15 -Y4-	0336																																		1	1.7					
	0336	OUT																																							
SHEET TOTALS									88	120							92															200			4.500	14	5.4					

NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)

LINE & STATION	FROM	TO	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	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
20+00 -Y1-	0319								1					1																									
	0319	0320																																					
19+23 -Y1-	0320								1					1																									
	0320	OUT																				2											1						PREFORMED SCOUR HOLE
48+00 -Y1-	0321								1				1																									43	
	0321	0322																																					
50+99 -Y1-	0322								1				1																										
	0322	OUT																																				62	
52+66 -Y1-	0323								1				1																										
	0323	0324																																			0.050		
52+66 -Y1-	0324								1				1																										
	0324	OUT																				2																	
13+52 -Y2-	0325																																					20	
14+25 -Y2-	0028																																					20	
28+63 -Y2-	0326																																					41	
28+88 -Y4-	0327								1			1																											
	0327	327A																																					
28+91 -Y4-	327A																																			0.4500			
29+07 -Y4-	0328											1									1																		Special Detail, See Sheet 2D-4
32+00 -Y4-	0329								1			1																											
	0329	0330																																					
32+82 -Y4-	0330														1				1																				
	0330	330A																																					
32+87 -Y4-	330A																																			0.5500			
33+36 -Y4-	0331											1									1																		Special Detail, See Sheet 2D-4
33+97 -Y4-	332A	0332													1				1																	0.5500			
33+50 -Y4-	0333								1			1																											
	0333	0332																																					
	0334	0335																																					
32+69 -Y4-	0334																																						DOUBLE PIPE
	0334	0330																																					
33+00 -Y4-	0335														1				1																				
	0335	0336																																					WELDED STEEL
33+97 -Y4-	0332														1				1																				
	0332	0336																																					
34+15 -Y4-	0336														1				1																				
	0336	OUT																																					
SHEET TOTALS									9			5	4	2	5				5		2	4											1			1.5500	0.050	186	

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