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-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".

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

LINE & STATION / SIZE / THICKNESS OR GAUGE	OFFSET	STRUCTURE NUMBER FROM	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	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
39+50 -Y1-	RT	0056		905.2	902.5																																
		0056	0059		902.5	894.3		304																													
42+50 -Y1-	RT	0059		902.2	894.3																																
		0059	OUT		894.3	868.0		76							X																						
42+50 -Y1-	LT	0057		902.0	899.2																																
		0057	0059		899.2	894.3																												104							
45+00 -Y1-	RT	0058		897.8	895.1																																
		0058	0059		895.1	894.3		252																													
501+17 -L-	LT	65A		909.0	906.3																																
		65A	0065		906.3	906.0		20																													
501+00 -L-	LT	0065		908.7	906.0																																
		0065	0066		906.0	905.6																						96									
501+00 -L-	CL	0066		908.3	905.3																																
		0066	0067		905.3	905.1																							100								
501+50 -L-	RT	0067		908.1	905.1																																
		0067	OUT		905.1	885.5			76						X																						
501+61 -L-	LT	68A			879.0																																
		68A	0068		879.0	863.6																															
507+53 -L-	LT	69A			872.0																																
		69A	0069		872.0	864.6																															
509+96 -L-	RT	0070																																			
504+85 -L-	LT	0071		914.5	911.7																																
		0071	0072		911.7	905.8																						72									
504+85 -L-	CL	0072		913.5	904.5																																
		0072	0073		904.5	904.2																									84						
504+85 -L-	RT	0073		914.3	904.2																																
		0073	OUT		904.2	867.8					104				X																						
507+00 -L-	CL	0076		916.4	905.2																																
		0076	0072		905.2	904.5					216																										
507+00 -L-	LT	0074		917.5	914.7																																
		0074	0076		914.7	906.5																						72									
507+00 -L-	RT	0075		917.2	914.5																																
		0075	0076		914.5	906.5																						84									
		77A	0077		909.5	907.4																		116													
512+50 -L-	CL	0077		917.8	906.9																																
		0077	0076		906.9	905.2					552																										
515+30 -L-	CL	0084		914.9	908.2																																
		0084	0077		908.2	907.4				280																											
515+30 -L-	RT	0083		912.8	910.1																																
		0083	0084		910.1	909.0																		92															
						SHEET TOTALS		652	76	280	872											92		116					428	100		84					

LINE & STATION	FROM	TO	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 (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
39+50 -Y1-	0056												1													1					1
	0056	0059																													
42+50 -Y1-	0059												1	2.9												1					1
	0059	OUT																													
42+50 -Y1-	0057												1													1					1
	0057	0059																													
45+00 -Y1-	0058												1													1					1
	0058	0059																													
501+17 -L-	65A												1													1	1				
	65A	0065																													
501+00 -L-	0065												1													1	1				
	0065	0066																													
501+00 -L-	0066												1													1			1		
	0066	0067																													
501+50 -L-	0067												1													1	1				
	0067	OUT																													
501+61 -L-	68A											6.000																			
	68A	0068			352																										
507+53 -L-	69A											6.000																			
	69A	0069			452																										
509+96 -L-	0070		296										1																		
504+85 -L-	0071												1													1	1				
	0071	0072																													
504+85 -L-	0072												1	4.0											1				1		
	0072	0073																													
504+85 -L-	0073												1	5.0	0.1											1	1				
	0073	OUT																													
507+00 -L-	0076												1	5.0	1.2										1				1		
	0076	0072																													
507+00 -L-	0074												1													1	1				
	0074	0076																													
507+00 -L-	0075												1													1	1				
	0075	0076																													
	77A	0077																													
512+50 -L-	0077												1	5.0	0.9										1				1		
	0077	0076																													
515+30 -L-	0084												1	1.7											1				1		
	0084	0077																													
515+30 -L-	0083												1													1			1		
	0083	0084																													
SHEET TOTALS			296		804							12.000	18	23.6	2.2										4	13	7		6		4

LINE & STATION	FROM	TO	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
39+50 -Y1-	0056																										
	0056	0059																									
42+50 -Y1-	0059																										
	0059	OUT								2											1						PREFORMED SOUR HOLE
42+50 -Y1-	0057																										
	0057	0059																									
45+00 -Y1-	0058																										
	0058	0059																									
501+17 -L-	65A																										
	65A	0065																									
501+00 -L-	0065																										
	0065	0066																									
501+00 -L-	0066																										
	0066	0067																									
501+50 -L-	0067																										SHOULDER DRAIN OUTLET
	0067	OUT									2																
501+61 -L-	68A																										
	68A	0068																									
507+53 -L-	69A																										
	69A	0069																									
509+96 -L-	0070					1																					
504+85 -L-	0071																										SHOULDER DRAIN OUTLET
	0071	0072																									
504+85 -L-	0072																										
	0072	0073																									
504+85 -L-	0073																										SHOULDER DRAIN OUTLET
	0073	OUT											2														
507+00 -L-	0076																										
	0076	0072																									
507+00 -L-	0074																										SHOULDER DRAIN OUTLET
	0074	0076																									
507+00 -L-	0075																										SHOULDER DRAIN OUTLET
	0075	0076																									
	77A	0077																									
512+50 -L-	0077																										
	0077	0076																									
515+30 -L-	0084																										
	0084	0077																									
515+30 -L-	0083																										SHOULDER DRAIN OUTLET
	0083	0084																									
SHEET TOTALS						1				2	2		2								1						

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