COMPUTED BY:	CGM	DATE:	3/06/14
CHECKED BY:	JRR	DATE:	

RD253046

PROJECT NO.	SHEET NO.
U-2579B	3D-17

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)

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

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	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 (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	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
36+35 -Y4-	CL	0337		886.3	EX																																																											1									1																		Special Detail, See Sheet 2D-4
39+35 -Y4-	CL	0338		877.7	EX																																																										1									1																		Special Detail, See Sheet 2D-4
39+62 -Y4-	RT	0339	OUT		EX	868.5			28																																																																														0.4500			
38+75 -Y4-	RT	0340		877.8	875.0																																									1														1			1																											
		0340	OUT		875.0	868.5		96																																																																																				
38+66 -Y4-		340A		877.4	874.6																																									1														1			1																											
		340A	OUT		874.6	854.8		160							X																																																											2																	
43+00 -Y4-	RT	0341		869.3	866.6																																									1														1	1																												
		0341	0342		866.6	865.2																								64																																																																
43+00 -Y4-	CL	0342		868.0	865.2																																									1														1			1																							5				
		0342	0343		865.2	865.0																								64																																																															
43+00 -Y4-	LT	0343		869.7	865.0																																									1														1	1																												
		0343	OUT		865.0	851.6		44							X																																																											2											1						PREFORMED SCOUR HOLE
46+00 -Y4-	RT	0344		861.3	858.6																																									1														1	1																												
		0344	0345		858.6	857.3																								64																																																						5				
46+00 -Y4-	CL	0345		860.0	857.3																																									1														1			1																											
		0345	0346		857.3	857.1																								68																																																															
46+00 -Y4-	LT	0346		861.7	857.1																																									1														1	1																												
		0346	OUT		857.1	853.3		40																																																																																	1						PREFORMED SCOUR HOLE
50+36 -Y-4	CL	0347		851.8	EX																																																									1									1																		Special Detail, See Sheet 2D-4
50+37 -Y4-	RT	0349		852.7	EX																																									1														1	1																												
		0349	OUT		EX	845.5																																																																																									
52+50 -Y4-	RT	0350		850.7	847.9																																									1														1	1																												
		0350	0351		847.9	845.8																								64																																																																	
54+73 -Y4-	RT	0353		849.9	847.2																																									1														1	1																												
		0353	0356		847.2	846.6		228																						64																																																											0.464		(4 X 0.116)
54+73 -Y4-	CL	0356		849.3	846.6																																									1														1	1																												
		0356	0351		846.6	845.8																								64																																																																	
52+50 -Y4-	CL	0351		849.9	845.8																																									1														1			1																											
		0351	0352		845.8	845.1																						96																																																																							
52+50 -Y4-	LT	0352		848.4	845.1																																									1														1			1																											
		0352	OUT		845.1	844.0			64																																																																																						
54+27 -Y4-	LT	0354	OUT		840.8	837.6																																								254			2.000																																																WELDED STEEL
61+00 -Y4-	LT	0362																																																																																		1								BERM DITCH OUTLET
		0362	0361		861.5	848.8					24				X																																																															1														
61+00 -Y4-	LT	0361		854.1	848.8																																									1	0.3											1				1																											0.130		(2 X .065)
		0361	0359		848.8	844.5					300																																																																																				
						SHEET TOTALS		568	92		324											96							452															254			2.000	15	0.3											1	14	8		10									3	4			1						1		2		10	0.4500	0.594		