RALL329

COMPUTED BY:	Matthew D. Stratton, EI	DATE:	4/22/2024
CHECKED BY:	Paul Cameron, PE	DATE:	4/22/2024

PROJECT NO.	SHEET NO.
U-5813	3D-2

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 (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	HDPE 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48
Y5 11+93	28 RT	0709	OUT		763.9	757.0		68											X																
L 51+57	63 RT	0710	OUT		769.9	769.0		32											X																
L 43+75	64 RT	0712	OUT		803.6	802.2		36											X																
L 45+29	63 LT	0713	OUT		796.8	795.8		36											X																
Y4_REV 13+40	56 LT	0714		777.4																															
L 46+72	69 LT	0716	OUT		791.4	787.6			72																										
L 54+19	73 LT	0718		751.6																															
		0718	0703		743.8	741.0																													36
L 54+19	44 LT	0719		768.4																															
		0719	0718		763.4	749.3																28													
L 54+19	44 RT	0720		768.4																															
		0720	0719		765.4	763.4																								88					
L 56+11	8 LT	0801		771.4																															
		0801	0814		768.3	766.9																							52						
L 67+30	64 LT	0803		817.0																															
		0803	0805		813.0	812.0																									72				
L 67+27	8 RT	0805		820.9																															
		0805	0817		812.0	807.6																									48				
L 55+53	59 LT	0806		770.7	759.0																														
L 59+50	64 RT	0807	OUT		782.0	780.0		44											X																
Y6 10+59	6 LT	0808	OUT		794.4	784.1																								128					
L 62+70	61 RT	0809	OUT		802.0	799.1		36											X																
L 63+95	61 RT	0810	OUT		806.0	805.1		32											X																
Y7 12+53	37 LT	0811	OUT		808.1	805.6		32											X																
L 68+07	64 LT	0812	OUT		824.0	813.0			152										X																
L 56+11	44 RT	0814		770.7																															
		0814	0826		766.9	766.5																							88						
L 66+71	6 LT	0815		818.4																															
		0815	0805		815.2	812.0																							56						
L 58+81	63 RT	0816	OUT		778.7	777.1		40											X																
L 67+60	45 RT	0817		821.7																															
		0817	0804		807.6	799.0																	56												
Y7 10+55	22 RT	0819	OUT		794.4	794.0		24											X																
L 56+81	74 LT	0820		769.6	760.7																														
L 57+74	69 LT	0822	0820		777.2	762.2	0.9																							184					
L 68+23	44 RT	0823		824.5																															
		0823	0817		819.5	816.4																							60						
L 55+74	44 RT	0825		769.8																															
		0825	0814		767.1	766.9																							36						
L 57+00	44 RT	0826		773.3																															
		0826	0802		766.5	753.8															48														
Y7 11+79	35 LT	0827	EX0802		796.4	794.6	0.5																								44				
Y7 11+08	22 LT	EX0803	OUT																															8	
L 73+18	39 LT	0901	0904		843.0	840.5	0.4																							64					
L 73+09	8 LT	0904		847.3																															
		0904	0907		840.5	839.5	0.4																							56					
Y8 10+98	29 RT	0905	OUT		851.9	851.2		32											X																
Y8 12+32	20 RT	0906	OUT		848.0	846.8		40											X																
L 72+84	44 RT	0907		845.5																															
		0907	0903		833.5	820.4	0.5															56													
SHEET TOTALS								452	224												48	84	56						292	520	164			8	36

FROM	TO	30" WELDED STEEL PIPE 0.500" THICK, GRADE B IN SOIL	30" WELDED STEEL PIPE 0.500" THICK, GRADE B NOT IN SOIL	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY 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. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.2	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.2	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/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.2
0709	OUT																													
0710	OUT																													
0712	OUT																													
0713	OUT																													
0714																														
0716	OUT																													
0718							1	2.8																						
0718	0703																													
0719							1														1									1
0719	0718																													
0720							1														1									1
0720	0719																													
0801							1								1			1	1											
0801	0814																													
0803							1													1								1		
0803	0805																													
0805							1	3.9							1															
0805	0817																													
0806							1	5.0	1.7																					
0807	OUT																													
0808	OUT																													
0809	OUT																													
0810	OUT																													
0811	OUT																													
0812	OUT																													
0814							1														1									1
0814	0826																													
0815							1								1			1	1											
0815	0805																													
0816	OUT																													
0817							1	5.0	4.1																					
0817	0804																													
0819	OUT																													
0820							1	3.9																						
0822	0820																													
0823							1														1									1
0823	0817																													
0825							1														1									1
0825	0814																													
0826							1	1.8													1									1
0826	0802																													
0827	EX0802																													
EX0803	OUT																													
0901	0904																													
0904							1	1.8							1			1	1											
0904	0907																													
0905	OUT																													
0906	OUT																													
0907							1	5.0	2.0												1									1
0907	0903																													
SHEET TOTALS							16	29.2	7.8						4			3	3	1	7							1		7

FROM	TO	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING OTCB TO J.B.	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	ADJUST C.B.	15" SIDE DRAIN ELBOW	18" SIDE DRAIN ELBOW	24" SIDE DRAIN ELBOW	30" SIDE DRAIN ELBOW	36" SIDE DRAIN ELBOW	TEMP STEEL PLATE (SEE SHEET 2C-4)	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
0709	OUT																						
0710	OUT																					35	Remove 15" CMP
0712	OUT																					22	Remove 15" CMP
0713	OUT																					32	Remove 15" CMP
0714																					0.5526	27	Remove 15" RCP
0716	OUT																					52	Remove 18" CMP
0718		1						1														150	Remove 48" RCP
0718	0703																					43	Remove 96" CMP
0719																							
0719	0718														2								HDPE Elbows
0720																							
0720	0719																						
0801																							
0801	0814																		1				
0803																						91	Remove 18" RCP
0803	0805																						
0805					1	1																	
0805	0817																						
0806								1				1											
0807	OUT																					34	Remove 15" CMP
0808	OUT																					57	Remove 15" RCP
0809	OUT																					30	Remove 15" CMP
0810	OUT																					34	Remove 15" CMP
0811	OUT																					21	Remove 15" PCP
0812	OUT																					178	Remove 15" CMP
0814																							
0814	0826																						
0815																			1				
0815	0805																						
0816	OUT																					22	Remove 15" CMP
0817		1						1															
0817	0804															2							HDPE Elbows
0819	OUT																					21	Remove 15" RCP
0820								1				1										36	Remove 36" RCP
0822	0820																					138	Remove 18" RCP
0823																							
0823	0817																						
0825																							
0825	0814																						
0826																							
0826	0802													2									HDPE Elbows
0827	EX0802																						
EX0803	OUT																						
0901	0904																						
0904																			1			113	Remove 18" RCP
0904	0907																						
0905	OUT																					20	Remove 15" RCP
0906	OUT																					33	Remove 15" RCP
0907																							
0907	0903														2								HDPE Elbows
SHEET TOTALS		2			1	1		4				2		2	4	2			3		0.5526	1189	

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