COMPUTED BY:	BJF	DATE:	6/22/2023
CHECKED BY:	ARV	DATE:	6/23/2023

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
C-5621	3D-1

R02/08/21

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	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) SIZE 12	15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
THICKNESS OR GAUGE																			
L 20+25	15 RT	0401A		817.63															
		0401A	0402		813.00	806.90													
L 19+10	20 RT	0403		817.13															
		0403	0401A		813.70	813.10													
L 18+57	22 RT	0404		817.03															
		0404	0403		814.00	813.80													
L 19+17	19 LT	0405		817.13															
		0405	0406		814.30	814.10													
L 18+57	22 LT	0406		817.03															
		0406	0407		814.00	813.00													
Y3A 12+14	24 LT	0407		816.70															
		0407	0408		812.90	812.60													
L 13+62	50 LT	0409		819.76															
		0409	0410		816.00	815.90													
L 13+71	51 LT	0410		819.65															
		0410	0410A		815.60	812.40													
Y2 19+14	55 RT	0410A		817.70															
		0410A	0430		812.30	808.00													
L 13+54	54 RT	0411		819.73															
		0411	0412		815.30	815.00													
L 13+61	56 RT	0412		819.63															
		0412	0413		814.90	811.90													
Y1A 11+25	44 RT	0413		816.23															
		0413	0415		811.80	809.60													
Y1A 11+34	77 RT	0414		817.30															
		0414	0440		813.90	811.50													
Y1A 11+93	59 RT	0415		815.13															
		0415	0417		809.50	807.70													
Y1A 12+48	32 RT	0416		812.13															
		0416	0417		807.30	807.00													
Y1A 12+50	59 RT	0417		811.30															
		0417	0418		806.90	805.80													
Y1A 13+27	61 RT	0418		809.86															
		0418	0419		805.00	804.60													
Y1A 13+89	61 RT	0419		808.80															
		0419	0422		804.40	804.30													
Y1A 11+68	2 RT	0420		815.91															
		0420	0441		812.74	811.62													
L 17+06	26 RT	0423		817.36															
L 17+08	33 LT	0424		817.23															
		0424	0437		814.00	813.70													
Y3A 11+98	24 RT	0425		815.46															
		0425	0426		812.46	809.94													
Y3A 11+37	22 RT	0426		812.84															
		0426	0442		809.94	804.51													
L 15+45	44 LT	0428		818.23															
		0428	0443		815.23	814.43													
L 15+39	26 RT	0429		818.63															
		0429	0434		812.00	811.80													
Y2 17+96	41 RT	0430		811.70															
						SHEET TOTAL													

LINE & STATION	C.S. PIPE 12	15	18	24	30	36	42	48	R.C. PIPE CLASS III 12	15	18	24	30	36	42	48	R.C. PIPE CLASS IV 12	15	18	24	R.C. PIPE CLASS V 12	15	18	24	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS OTHERWISE NOTED) CY	REINFORCED ENDWALLS CY	MASONRY DRAINAGE STRUCTURE CY	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE
THICKNESS OR GAUGE	0.064	0.064	0.064	0.064	0.079	0.079	0.109	0.109																					
L 20+25																													
																	188												
L 19+10																													
																	116												
L 18+57																													
																	56												
L 19+17																													
																	64												
L 18+57																													
																	36												
Y3A 12+14																													
									72																				
L 13+62																													
									12																				
L 13+71																													
									48																				
Y2 19+14																													
									120																				
L 13+54																													
									8																				
L 13+61																													
									80																				
Y1A 11+25																													
									72																				
Y1A 11+34																													
									60																				
Y1A 11+93																													
									56																				
Y1A 12+48																													
									28																				
Y1A 12+50																													
									80																				
Y1A 13+27																													
										64																			
Y1A 13+89																													
										12																			
Y1A 11+68																													
																	32												
L 17+06																													
L 17+08																													
																	64												
Y3A 11+98																													
																	56												
Y3A 11+37																													
																				88									
L 15+45																													
																	112												
L 15+39																													
									40																				
Y2 17+96																													
SHEET TOTAL									676	76							724			88									

| LINE & STATION | ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P. | C.S.P. | QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') PER EACH (0' THRU 5.0') | LIN.FT. A 5.0' THRU 10.0' | B 10.0' AND ABOVE | C.B. STD. 840.01 OR STD. 840.02 | FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E | F | G | CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06 | C.B. STD. 852.05 | D.I. STD. 840.14 OR STD. 840.15 | D.I. FRAME AND GRATE STD. 840.16 | G.D.I. TYPE "A" STD. 840.17 OR 840.26 | G.D.I. TYPE "B" STD. 840.18 OR 840.27 | G.D.I. TYPE "D" STD. 840.19 OR 840.28 | T.B. G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.29 | G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20 | G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22 | G.D.I. (W.S. SAG) FRAME W/ 3 GRATES STD. 840.22 | G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24 | J.B. STD. 840.31 OR 840.32 | T.B. J.B. STD. 840.34 | T.B.G.D.I. STD. 840.35 | T.B.G.D.I. STD. 840.36 | STEEL FRAME AND TWO GRATES STD. 840.37 | STEEL FRAME AND GRATE STD. 840.37 | M.H. STD. 840.31, STD. 840.32, OR STD.33 | M.H. FRAME AND COVER STD. 840.54 | CONVERT EXISTING D.I. TO C.B. | CONVERT EXISTING C.B. TO J.B. | CONVERT EXISTING D.I. TO J.B. | CONVERT EXISTING J.B. TO 2 G.I. | CONVERT C.B. TO D.I. | ADJUST EXISTING MANHOLE | ADJUST EXISTING C.B. | ADJUST D.I. | ADJUST JGI | 15" C.S. ELBOW | 18" C.S. ELBOW | 24" C.S. ELBOW | 30" C.S. ELBOW | PARALLEL PIPE END SECTION - PRECAST CONCRETE SECTION FOR 15" TO 24" STD. 310.02 | CROSS PIPE END SECTION - PRECAST CONCRETE SECTION FOR 18" TO 30" STD. 310.03 | BERM DITCH OUTLET STD. 850.10 (PER EACH) | BERM DITCH OUTLET STD. 850.11 (PER EACH) | CONC. COLLARS CL. "B" C.Y. STD. 840.72 | FLOWABLE FILL, C.Y. | CONC. & BRICK PLUG, C.Y. STD. 840.71 | PIPE REMOVAL LIN. FT. | REMARKS |
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