COMPUTED BY:	CJH	DATE:	3/11/2022
CHECKED BY:	WJW	DATE:	5/4/2022

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
I-5987A	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	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 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										
		1906	1902		142.70	142.30												
LA 320+50	3 LT	1907		149.70														
		1907	1908		145.60	145.50												
LA 320+50	3 RT	1908		149.93														
		1908	1910		145.50	143.70	.3											
LA 313+87	72 LT	1911		147.38														
		1911	1912		139.50	138.60												
LA 314+58	3 RT	1913		148.58														
		1913	1909		141.90	139.50	.3											
LA 325+00	3 LT	1914		152.91														
		1914	1915		148.00	147.90												
LA 325+00	3 RT	1915		153.08														
		1915	1908		147.90	145.50												
LA 331+86	3 LT	2001		153.21														
		2001	2005		148.20	148.00												
LA 331+57	3 RT	2002		153.23														
		2002	2003		148.50	148.40												
LA 331+57	3 LT	2003		153.15														
		2003	2001		148.40	148.20												
LA 331+00	3 RT	2004		153.28														
		2004	2002		149.10	148.80												
LA 332+10	3 LT	2005		153.22														
		2005	2007		145.40	144.80												
LA 332+10	3 RT	2006		153.27														
		2006	2005		145.50	145.40												
LA 332+10	105 LT	2007		148.60														
LA 332+10	100 RT	2008		148.60														
		2008	2006		146.10	145.50												
LA 338+98	103 RT	2009		145.70														
		2009	2010		142.20	142.00												
LA 338+98	3 RT	2010		152.26														
		2010	2011		142.00	141.90												
LA 338+98	3 LT	2011		152.22														
		2011	2012		141.90	141.70												
LA 338+98	105 LT	2012		146.50														
LA 331+86	73 LT	2013		152.58														
		2013	2014		148.70	144.90												
Y2 17+28	43 LT	3301		141.70														
Y2 17+33	43 RT	3302		141.30														
		3301	3302		137.20	136.80												
Y2 14+61	34 RT	3303			144.00	143.90			80									
Y2 20+23	68 RT	3304			141.30	141.20			64									
Y2 22+03	91 RT	3305			142.40	142.30												
Y2 22+04	90 LT	3306			143.30	142.60			32									
Y2 23+51	20 RT	3307		164.17														
		3307	3308		160.00	159.60												
Y2 23+51	18 LT	3308		164.20														
		3308	3310		159.60	143.50												
							SHEET TOTAL		176									

LINE & STATION	C. S. PIPE SIZE 15	18	24	30	36	42	48	R. C. PIPE CLASS III SIZE 15	18	24	30	36	42	48	R. C. PIPE CLASS IV SIZE 15	18	24	30	36	42	48
THICKNESS OR GAUGE	0.064	0.064	0.064	0.079	0.079	0.109	0.109														
															52						
LA 320+50																					
																8					
LA 320+50																					
LA 313+87																					
															36						
LA 314+58																					
LA 325+00																					
															8						
LA 325+00																					
															448						
LA 331+86																					
																24					
LA 331+57																					
																8					
LA 331+57																					
																28					
LA 331+00																					
															60						
LA 332+10																					
LA 332+10																					
																	8				
LA 332+10																					
LA 332+10																					
LA 338+98																					
LA 338+98																					
LA 338+98																					
LA 338+98																					
LA 331+86																					
	30																				
Y2 17+28																					
Y2 17+33																					
Y2 14+61																					
Y2 20+23																					
Y2 22+03																136					
Y2 22+04																					
Y2 23+51																					
															36						
Y2 23+51																					
	64																				
SHEET TOTAL	94														640	204		8		8	172

| LINE & STATION | 16" WELDED STEEL PIPE 0.25" THICK, GRADE B IN SOIL | 18" WELDED STEEL PIPE 0.25" THICK, GRADE B IN SOIL | 24" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL | 30" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL | 36" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL | 42" WELDED STEEL PIPE 0.625" THICK, GRADE B IN SOIL | 48" WELDED STEEL PIPE 0.625" THICK, GRADE B IN SOIL | 16" WELDED STEEL PIPE 0.25" THICK, GRADE B NOT IN SOIL | 18" WELDED STEEL PIPE 0.25" THICK, GRADE B NOT IN SOIL | 24" WELDED STEEL PIPE 0.50" THICK, GRADE B NOT IN SOIL | 30" WELDED STEEL PIPE 0.50" THICK, GRADE B NOT IN SOIL | 36" WELDED STEEL PIPE 0.50" THICK, GRADE B NOT IN SOIL | 42" WELDED STEEL PIPE 0.625" THICK, GRADE B NOT IN SOIL | 48" WELDED STEEL PIPE 0.625" THICK, GRADE B NOT IN SOIL | ENDWALLS STD. 838.01 OR STD.838.11 (UNLESS OTHERWISE NOTED) CY | REINFORCED ENDWALLS CY | 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' | LIN.FT. 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 | 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. (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.D.I. STD. 840.35 | T.B.D.I. FOR STEEL GRATES STD. 840.36 | STEEL FRAME AND TWO GRATES STD. 840.37 | M.H. STD. 840.51, STD. 840.52, OR STD.53 | M.H. FRAME AND COVER STD. 840.54 | TEMP STEEL PLATE COVER MASONARY DRAINAGE | 15" C.S. ELBOW | 15" SIDE DRAIN PIPE ELBOW | FLOWABLE FILL, C.Y. | PIPE REMOVAL LIN. FT. | REMARKS |
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