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-5

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	C. S. PIPE 15 (0.064)	18 (0.064)	24 (0.064)	30 (0.079)	36 (0.079)	42 (0.109)	48 (0.109)	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48
			604	605		122.10	121.90																															60		
Y1RPB 14+36	23	LT	605		128.03																																			
			605	636		121.90	121.60																															80		
LA 95+00	3	LT	606		130.85																																			
			606	610		126.50	125.50	.3																										36						
LA 95+00	3	RT	607		130.72																																			
			607	606		126.60	126.50																											8						
LA 95+35	3	RT	608		130.70																																			
			608	610		125.20	125.10																												12					
LA 95+35	70	RT	609		130.17																																			
			609	608		125.60	125.20																												68					
LA 95+35	3	LT	610		130.81																																			
			610	648		125.10	125.00	.4																											24					
LA 95+80	70	LT	611		130.12																																			
			611	638		124.40	124.20																													40				
LA 96+00	70	RT	612		130.29																																			
			612	609		126.20	125.90																											68						
LA 96+50	4	LT	613		130.92																																			
			613	648		126.80	125.50	.3																										96						
LA 96+50	3	RT	614		130.93																																			
			614	613		126.90	126.80																											12						
LA 101+00	3	LT	615		132.48																																			
			615	639		128.30	126.90																																	
LA 101+00	3	RT	616		132.50																																			
			616	615		128.40	128.30																											8						
LA 105+50	3	RT	617		133.64																																			
			617	618		129.60	129.40																											40						
LA 105+93	3	RT	618		133.60																																			
			618	619		129.10	129.00																												8					
LA 105+93	3	LT	619		133.72																																			
			619	621		129.00	128.60																												84					
LA 106+78	3	RT	620		133.76																																			
			620	621		129.70	129.00																											8						
LA 106+78	3	LT	621		133.61																																			
			621	656		128.60	126.00																																	
LA 107+50	3	LT	622		133.69																																			
			622	621		129.60	129.00																											72						
LA 113+00	3	RT	623		135.58																																			
			623	626		131.50	130.90																											48						
LA 113+48	3	LT	625		135.86																																			
			625	624		130.50	126.00	.4																																
LA 113+48	3	RT	626		135.54																																			
			626	625		130.60	130.50																												8					
LA 114+00	3	RT	627		135.59																																			
			627	626		131.40	130.90																											48						
LA 110+00	3	LT	628		134.57																																			
			628	647		130.50	129.90																																	
Y1RPC 14+59	32	RT	631		130.30																																			
			631	534		125.70	125.00																													104				
Y1RPB 20+40	134	LT	632		124.90																																			
SHEET TOTAL																																		444	204	144		140		

STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	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
604	605																			
605																		1	1.2	
605	636																			
606																		1		
606	610																			
607																		1		
607	606																			
608																		1	0.5	
608	610																			
609																		1		
609	608																			
610																		1	0.8	
610	648																			
611																		1	0.8	
611	638																			
612																		1		
612	609																			
613																		1		
613	648																			
614																		1		
614	613																			
615																		1		
615	639	48							48											
616																		1		
616	615																			
617																		1		
617	618																			
618																		1		
618	619																			
619																		1		
619	621																			
620																		1		
620	621																			
621																		1	0.1	
621	656		52							52										
622																		1		
622	621																			
623																		1		
623	626																			
625																		1	0.4	
625	624		56							56										
626																		1		
626	625																			
627																		1		
627	626																			
628																		1		
628	647	44							44											
631																		1		
631	534																			
632																6.0				
SHEET TOTAL		92	108						92	108						6.0		24	3.8	

STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	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	CONCRETE TRANSITIONAL SECTION 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
604	605																										129	
605																			1	1								
605	636																											
606																			1	1								
606	610																											
607																			1	1								
607	606																											
608																			1	1								
608	610																											
609																			1	1								
609	608																										116	
610																			1	1								
610	648																										84	
611																			1	1								
611	638																										41	
612																			1	1								
612	609																											
613																			1	1								
613	648																										311	
614																			1	1								
614	613																									8.6		
615																			1	1								
615	639																											
616																			1	1								
616	615																											
617																			1	1								
617	618																											
618																			1	1								
618	619																											
619																			1	1								
619	621																											
620																			1	1								
620	621																											
621																			1	1								
621	656																											
622																			1	1								
622	621																											
623																			1	1								
623	626																											
625																			1	1								
625	624																									6.2		
626																			1	1								
626	625																											
627																			1	1								
627	626																											
628																			1	1								
628	647																									13.6	231	
631																			1	1								
631	534																											
632																												
SHEET TOTAL																			24	24						28.4	912	

ABBREVIATIONS

C.A.A - CORRUGATED ALUMINUM INLET
C.B - CATCH BASIN
C.S. - CORRUGATED STEEL
D.I. - DROP INLET
G.D.I. - GRATED DROP INLET
P.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