COMPUTED BY: CJH DATE: 3/11/2022

CHECKED BY: WJW DATE: 5/4/2022

PROJECT NO.	SHEET NO.
I-5987A	3D-14

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	C. S. PIPE 15 (0.064)	18 (0.064)	24 (0.064)	30 (0.079)	36 (0.079)	42 (0.109)	48 (0.109)
		1746	1726		167.10	148.30													100						
SR2 37+99	32 LT	1749		149.40																					
		1749	1742		147.20	146.20	.4																		
SR2 25+45	31 LT	1754		150.30																					
SR2 25+45	32 RT	1755		150.00																					
		1754	1755		146.80	146.50																			
Y1ARPD 20+70	65 RT	1756		150.90																					
Y1ARPD 20+50	68 LT	1757		150.50																					
		1756	1757		147.40	147.00																			
Y1A 28+07	32 LT	1758		151.00																					
Y1A 28+95	34 RT	1759		150.50																					
		1758	1759		147.50	147.00																			
Y1A 32+45	57 LT	1760		152.00																					
Y1A 32+55	48 RT	1761		151.50																					
		1760	1761		147.00	146.50																			
Y1A 35+11	82 LT	1762		151.80																					
Y1A 35+26	89 RT	1763		151.30																					
		1762	1763		147.30	146.80																			
LA 282+40	3 LT	1764		152.30																					
		1764	1765		148.10	148.00																			
LA 282+40	3 RT	1765		152.27																					
		1765	1706		148.00	147.50																			
Y1A 32+05	1 LT	1766		155.30																					
		1766	1767		151.00	150.50																			
Y1A 31+50	1 LT	1767		154.28																					
		1767	1768		149.10	146.80																			
Y1ARPA 26+50	26 RT	1770		171.20																					
		1770	1772		167.30	150.00													72						
Y1ARPA 28+50	26 RT	1771		173.26																					
		1771	1770		169.40	167.30																			
Y1ARPB 21+62	23 LT	1773		165.44																					
		1773	1778		161.50	147.90	.7												60						
Y1A 26+51	40 RT	1774			147.60	147.50		60																	
SR2 39+90	43 RT	1775			147.20	147.10		20																	
Y1A 27+12	35 LT	1776			147.70	147.60		40																	
Y1ARPD 20+28	23 LT	1779		159.81																					
		1779	1780		155.90	147.00	.6												40						
Y1ARPC 26+00	26 RT	1781		172.80																					
		1781	1782		168.90	150.10													72						
Y1A 45+43	25 RT	1783		173.34																					
		1783	1744		169.40	167.80																			
Y1A 31+86	49 LT	1784			147.60	148.40		28																	
Y1A 30+20	34 LT	1785			148.00	147.90		32																	
Y1A 48+22	CL	1786		159.65																					
		1786	1742		146.70	145.80																			
Y1A 47+40	2 RT	1787		163.95																					
		1787	1786		158.00	146.70																			
LA 276+00	87 LT	1788		149.64																					
		1788	1734		144.30	143.90																			
LA 271+85	89 RT	1789		149.94																					
SHEET TOTAL								180											344						

LINE & STATION	FROM	TO	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48	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
	1746	1726																												
SR2 37+99	1749																													
	1749	1742									192																			
SR2 25+45	1754																													
SR2 25+45	1755																													
	1754	1755											64																	
Y1ARPD 20+70	1756																													
Y1ARPD 20+50	1757																													
	1756	1757											132																	
Y1A 28+07	1758																													
Y1A 28+95	1759																													
	1758	1759												116																
Y1A 32+45	1760																													
Y1A 32+55	1761																													
	1760	1761														104														
Y1A 35+11	1762																													
Y1A 35+26	1763																													
	1762	1763													172															
LA 282+40	1764																													
	1764	1765								8																				
LA 282+40	1765																													
	1765	1706								48																				
Y1A 32+05	1766																													
	1766	1767									52																			
Y1A 31+50	1767																													
	1767	1768									48																			
Y1ARPA 26+50	1770																													
	1770	1772																												
Y1ARPA 28+50	1771																													
	1771	1770								200																				
Y1ARPB 21+62	1773																													
	1773	1778																												
Y1A 26+51	1774																													
SR2 39+90	1775																													
Y1A 27+12	1776																													
Y1ARPD 20+28	1779																													
	1779	1780																												
Y1ARPC 26+00	1781																													
	1781	1782																												
Y1A 45+43	1783																													
	1783	1744								40																				
Y1A 31+86	1784																													
Y1A 30+20	1785																													
Y1A 48+22	1786																													
	1786	1742											72																	
Y1A 47+40	1787																													
	1787	1786								88																				
LA 276+00	1788																													
	1788	1734											216																	
LA 271+85	1789																													
SHEET TOTAL										384	292		484	116	172	104														

LINE & STATION	FROM	TO	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
	1746	1726																												2				
SR2 37+99	1749				1													1		1														
	1749	1742																																
SR2 25+45	1754		2.3																															
SR2 25+45	1755		2.3																															
	1754	1755																																
Y1ARPD 20+70	1756		2.3																															
Y1ARPD 20+50	1757		2.3																															
	1756	1757																																
Y1A 28+07	1758		3.4																															
Y1A 28+95	1759		3.4																															
	1758	1759																																
Y1A 32+45	1760		6.0																															
Y1A 32+55	1761		6.0																															
	1760	1761																																
Y1A 35+11	1762		4.5																															
Y1A 35+26	1763		4.5																															
	1762	1763																																
LA 282+40	1764				1																					1	1							
	1764	1765																																
LA 282+40	1765				1																					1	1							
	1765	1706																																
Y1A 32+05	1766				1							1		1	1																			
	1766	1767																																
Y1A 31+50	1767				1	0.2						1		1	1																			
	1767	1768																																
Y1ARPA 26+50	1770				1																					1	1							
	1770	1772																												2				
Y1ARPA 28+50	1771				1																					1	1							
	1771	1770																																
Y1ARPB 21+62	1773				1																					1	1							
	1773	1778																												2				
Y1A 26+51	1774																																	
SR2 39+90	1775																																	
Y1A 27+12	1776																																	
Y1ARPD 20+28	1779				1																					1	1							
	1779	1780																																
Y1ARPC 26+00	1781				1																					1	1							
	1781	1782																												2			26	
Y1A 45+43	1783				1																					1	1							
	1783	1744																																
Y1A 31+86	1784																																	
Y1A 30+20	1785																																	
Y1A 48+22	1786				1	5.0	3.0																	1						1						
	1786	1742																																
Y1A 47+40	1787				1	0.9						1		1	1																			
	1787	1786																																
LA 276+00	1788				1	0.3										1				1														
	1788	1734																																
LA 271+85	1789				1																					1	1							
SHEET TOTAL			37.0		15	6.4	3.0					3		3	3	1		1		2				1		9	9		1		8			26	

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