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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-3825B	3D-11

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 %
Y12A 12+42	31	RT	2004		306.2			
			2004	2007		303.0	302.3	0.3
Y12A 12+54	35	LT	2007		305.3			
			2007	2008		302.3	301.0	0.8
L 222+22	55	LT	2008		304.0			
			2008	2011		300.7	300.2	0.4
L 222+22	56	RT	2011		304.0			
			2011	2013		300.2	296.0	0.9
L 220+70	50	RT	2012		306.6			
			2012	2011		303.6	301.0	
L 224+50	52	LT	2020		300.3			
			2020	2028		297.3	295.3	
L 226+80	40	LT	2021		296.8			
			2021	2022		293.8	290.9	
L 228+60	39	LT	2022		293.9			
			2022	2023		290.6	290.2	0.4
L 228+60	40	RT	2023		293.9			
			2023	2026		290.2	289.2	2.0
L 224+80	40	RT	2024		300.1			
			2024	2025		297.1	293.5	
L 227+00	40	RT	2025		296.5			
			2025	2023		293.5	290.9	
L 229+16	86	RT	2027					
L 225+75	52	LT	2028		298.3			
			2028	2021		295.3	293.8	
L 216+50	38	RT	2030		310.2			
			2030	1911		307.2	306.9	
L 216+50	37	LT	2031		309.4			
			2031	2032		306.1	301.7	
L 233+80	39	LT	2101		287.4			
			2101	2102		285.4	285.1	
L 232+50	39	LT	2102		288.1			
			2102	2103		285.1	284.8	
L 231+20	39	LT	2103		289.6			
			2103	2106		283.8	283.4	
L 233+60	40	RT	2104		287.5			
			2104	2105		284.5	284.0	
L 232+50	40	RT	2105		288.1			
			2105	2106		284.0	283.3	
L 231+20	40	RT	2106		289.6			
			2106	2107		283.3	275.6	2.5
L 231+13	77	LT	2108		283.7			
			2108	2135		279.7	278.6	
			2110	2111		289.3	283.9	
Y12B 10+67	42	RT	2111		287.7			
			2111	2112		283.4	283.0	
Y12B 10+68	37	RT	2112					
Y12B 10+67	39	LT	2114		286.9			
			2115	2116		280.0	279.6	
L 238+54	61	LT	2116		283.8			

Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) and C. S. PIPE

STRUCTURE (FROM–TO)	Drainage Pipe 15	18	24	30	36	42	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 15 (.064)	18 (.064)	24 (.064)	30 (.079)
2004															
2004–2007															
2007															
2007–2008															
2008															
2008–2011															
2011															
2011–2013		52													
2012															
2012–2011															
2020															
2020–2028															
2021															
2021–2022															
2022															
2022–2023															
2023															
2023–2026		40													
2024															
2024–2025															
2025															
2025–2023															
2027		64													
2028															
2028–2021															
2030															
2030–1911	48														
2031															
2031–2032	40						X			X	X				
2101															
2101–2102															
2102															
2102–2103															
2103															
2103–2106															
2104															
2104–2105															
2105															
2105–2106															
2106															
2106–2107												64			
2108															
2108–2135															
2110–2111	68														
2111															
2111–2112															
2112															
2114															
2115–2116			80												
2116															
SHEET TOTALS	156	156	80									64			

R. C. PIPE CLASS IV

STRUCTURE (FROM–TO)	15	18	24	30	36	42	48
2004							
2004–2007	68						
2007							
2007–2008	36						
2008							
2008–2011							
2011							
2011–2013							
2012							
2012–2011	152						
2020							
2020–2028	124						
2021							
2021–2022	180						
2022							
2022–2023							
2023							
2023–2026							
2024							
2024–2025	220						
2025							
2025–2023	160						
2027							
2028							
2028–2021	104						
2030							
2030–1911							
2031							
2031–2032							
2101							
2101–2102	128						
2102							
2102–2103	128						
2103							
2103–2106							
2104							
2104–2105	108						
2105							
2105–2106	128						
2106							
2106–2107							
2108							
2108–2135							44
2110–2111							
2111							
2111–2112	4						
2112							
2114							
2115–2116							
2116							
SHEET TOTALS	1540						44

WELDED STEEL PIPE GRADE B 0.5" THICK

STRUCTURE (FROM–TO)	15 IN SOIL	18 IN SOIL	24 IN SOIL	30 IN SOIL	36 IN SOIL	42 IN SOIL	48 IN SOIL	15 NOT IN SOIL	18 NOT IN SOIL	24 NOT IN SOIL	30 NOT IN SOIL	36 NOT IN SOIL	42 NOT IN SOIL	48 NOT IN SOIL
2004														
2004–2007														
2007														
2007–2008														
2008														
2008–2011		54							54					
2011														
2011–2013														
2012														
2012–2011														
2020														
2020–2028														
2021														
2021–2022														
2022														
2022–2023		38							38					
2023														
2023–2026														
2024														
2024–2025														
2025														
2025–2023														
2027														
2028														
2028–2021														
2030														
2030–1911														
2031														
2031–2032														
2101														
2101–2102														
2102														
2102–2103														
2103														
2103–2106	38							38						
2104														
2104–2105														
2105														
2105–2106														
2106														
2106–2107														
2108														
2108–2135														
2110–2111														
2111														
2111–2112														
2112														
2114														
2115–2116														
2116														
SHEET TOTALS	38	92						38	92					

QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)); FRAME, GRATES, AND HOOD STD. 840.03

STRUCTURE (FROM–TO)	15" TEMPORARY PIPE	18" TEMPORARY PIPE	24" TEMPORARY PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	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	GRATE TYPE E	F	G	
2004							1			1		1		
2004–2007														
2007							1			1			1	
2007–2008														
2008							1			1			1	
2008–2011														
2011							1			1		1		
2011–2013														
2012							1			1		1		
2012–2011														
2020							1			1			1	
2020–2028														
2021							1			1			1	
2021–2022														
2022							1			1			1	
2022–2023														
2023							1			1		1		
2023–2026														
2024							1			1		1		
2024–2025														
2025							1			1		1		
2025–2023														
2027														
2028							1			1			1	
2028–2021														
2030							1			1			1	
2030–1911														
2031							1			1		1		
2031–2032														
2101							1			1			1	
2101–2102														
2102							1			1			1	
2102–2103														
2103							1	0.8		1			1	
2103–2106														
2104							1			1		1		
2104–2105														
2105							1			1		1		
2105–2106														
2106							1	1.3		1		1		
2106–2107														
2108				6.000										
2108–2135														
2110–2111														
2111							1			1		1		
2111–2112														
2112														
2114														
2115–2116														
2116							1							
SHEET TOTALS				6.000			22	2.1		21		11	10	

STRUCTURE (FROM–TO)	CONCRETE TRANSITIONAL SECTION: D.I. STD. 852.04 OR STD. 852.06 OR DETAIL SHEET 2C-2	CONCRETE TRANSITIONAL SECTION: C.B. STD. 852.05	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. (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/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	TEMP STEEL PLATE COVER PSH 2C-8	M.H. FRAME AND COVER STD. 840.54	T.B.J.B. SPECIAL DETAIL PSH 2C-6	15" PIPE END SECTION	18" CROSS PIPE END SECTION	ADJUST C.B.	15" DRAINAGE PIPE ELBOW	18" DRAINAGE PIPE ELBOW	24" DRAINAGE PIPE ELBOW	15" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
2004																													
2004–2007																													
2007																													
2007–2008																													
2008																													
2008–2011																													
2011																													
2011–2013																													
2012																													
2012–2011																													
2020																													
2020–2028																													
2021																													
2021–2022																													
2022																													
2022–2023																													
2023																													
2023–2026																													
2024																													
2024–2025																													
2025																													
2025–2023																													
2027																													
2028																													
2028–2021																													
2030																													
2030–1911																													
2031																													
2031–2032																													
2101																													
2101–2102																													
2102																													
2102–2103																													
2103																													
2103–2106																													
2104																													
2104–2105																													
2105																													
2105–2106																													
2106																													
2106–2107																													
2108																													
2108–2135																													
2110–2111																													
2111																													
2111–2112																													
2112																											0.3990		
2114																			1										
2115–2116																													
2116					1				1																				
SHEET TOTALS					1				1										1								0.3990		

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