11/14/23

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 %	REMARKS
L 12+53	73 RT	0429		811.0				
		0429	0409		803.0	798.3		
L 19+78	415 RT							LINE EX. 48" CMP WITH 285 LF OF CIPP LINER
L 19+85	400 RT							LINE EX. 18" CMP WITH 89 LF OF CIPP LINER

Alternate Pipe (RCP, CSP, CAAP, HDPE, or PVC)

LINE & STATION	12	15	18	24	30	36	42	48		DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PPP	DO NOT USE PVC
L 12+53															
L 19+78															
L 19+85															
SHEET TOTALS (48" or Less)															
PROJECT TOTALS (48" or Less)		50													

LINE & STATION	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48
L 12+53																
		52														
L 19+78																
L 19+85																
SHEET TOTALS (48" or Less)		52														
PROJECT TOTALS (48" or Less)		280		596						2579		236		460		

LINE & STATION			##" x ##" C.S. PIPE ARCH CULVERTS, ##" THICK	##" x ##" C.S. STRUCTURAL PLATE PIPE ARCH, ## GAUGE	48" WELDED STEEL PIPE 0.625" THICK, GRADE B IN SOIL	48" WELDED STEEL PIPE 0.625" THICK, GRADE B NOT IN SOIL	##" WELDED STEEL PIPE ##" THICK, GRADE B (UNDER RR)			ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY
L 12+53											
L 19+78											
L 19+85											
SHEET TOTALS (48" or Less)											
PROJECT TOTALS (48" or Less)					139	139				11	

QUANTITIES FOR DRAINAGE STRUCTURES — NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)

LINE & STATION	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	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G	
L 12+53		1	3.0		1		1		
L 19+78									
L 19+85									
SHEET TOTALS (48" or Less)		1	3		1		1		
PROJECT TOTALS (48" or Less)	4	45	23		25		13	14	

LINE & STATION	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	CONCRETE TRANSITIONAL SECTION C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	C.B. MIN DEPTH STD. (SPECIAL DETAIL)	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	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
L 12+53										
L 19+78										
L 19+85										
SHEET TOTALS (48" or Less)										
PROJECT TOTALS (48" or Less)				2		3	3	9	5	1

LINE & STATION	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.20	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	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/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.
L 12+53												
L 19+78												
L 19+85												
SHEET TOTALS (48" or Less)												
PROJECT TOTALS (48" or Less)				3	3	8		1	1	185		1694

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**

BR-0168
FP 3D-3

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
FORSYTH COUNTY

ROADWAY DESIGN UNIT

REVISIONS