TOMOTHINKPAD2

COMPUTED BY: AMH DATE: 2026-01-20

CHECKED BY: TJC DATE: 2026-02-12

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
BP7.R001	3D-2

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)

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)' OFFSET	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 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 PVC
22+70 -Y-	70.5' LT	431		678.5	673.3															
		431	432		673.3	671.4														
23+50 -Y-	70.5' LT	432		676.6	671.6															
		432	433		671.6	668.5														
24+70 -Y-	70.5' LT	433		673.9	668.5															
25+08 -Y-	68.5' RT	434		673.0	661.0															
		434	435		661.0	659.7							62							
18+07.5 -Y-	60' RT	456		691.9	685.6															
		456	425		685.6	681.6														
21+21 -Y-	CL	460		680.9	676.2															
		460	427		676.2	674.2														
12+64 -L-	CL																			
13+86 -L-	CL																			
21+82 -Y-	30' RT																			
16+97 -L-	99' LT																			
19+35 -L-	126' LT																			
23+74 -Y-	82' RT																			
25+13 -Y-	82' RT																			
30+38 -L-	39 RT																			
SHEET TOTALS													62							
PROJ. TOTALS										156			62							
SAY																				

STATION	FROM	TO	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"	R.C. PIPE CLASS V 12"	15"	18"	24"	30"	36"	42"	48"
22+70 -Y-	431																									
	431	432			80																					
23+50 -Y-	432																									
	432	433			120																					
24+70 -Y-	433																									
25+08 -Y-	434																									
	434	435																								
18+07.5 -Y-	456																									
	456	425				144																				
21+21 -Y-	460																									
	460	427																								
12+64 -L-																										
13+86 -L-																										
21+82 -Y-																										
16+97 -L-																										
19+35 -L-																										
23+74 -Y-																										
25+13 -Y-																										
30+38 -L-																										
SHEET TOTALS					200	144																				
PROJ. TOTALS					444	312	380						268								232					
SAY																										

STATION	FROM	TO	24" WELDED STEEL PIPE 0.250" THICK, GRADE B, IN SOIL	24" WELDED STEEL PIPE 0.250" THICK, GRADE B, NOT IN SOIL	30" WELDED STEEL PIPE 0.375" THICK, GRADE B, IN SOIL	30" WELDED STEEL PIPE 0.375" THICK, GRADE B, NOT IN SOIL	36" WELDED STEEL PIPE 0.500" THICK, GRADE B, IN SOIL	36" WELDED STEEL PIPE 0.500" THICK, GRADE B, NOT IN SOIL	ENDWALLS 838.01 OR STD. 838.11 STD. (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	QUANTITIES FOR DRAINAGE STRUCTURES 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 DROP INLET	CATCH BASIN
22+70 -Y-	431										1	0.2							
	431	432																	
23+50 -Y-	432										1	0.2							
	432	433																	
24+70 -Y-	433										1	0.5							
25+08 -Y-	434										1	5.0	2.0						
	434	435																	
18+07.5 -Y-	456										1	1.3		1		1			
	456	425																	
21+21 -Y-	460										1								
	460	427	52	52															
12+64 -L-																			
13+86 -L-																			
21+82 -Y-																			
16+97 -L-																			
19+35 -L-																			
23+74 -Y-																			
25+13 -Y-																			
30+38 -L-																			
SHEET TOTALS			52	52							6	7.2	2	1		1			
PROJ. TOTALS			52	52	100	100	96	96	3.4		29	22.3	2	5		5		5	
SAY									4			25							

STATION	FROM	TO	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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	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	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	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	18" DRAINAGE PIPE ELBOW	24" DRAINAGE PIPE ELBOW	30" DRAINGE PIPE ELBOW			FLOWABLE FILL CY	PIPE CLEANOUT EA		PIPE REMOVAL LIN. FT.	REMARKS
22+70 -Y-	431							1		1																							
	431	432																															
23+50 -Y-	432							1		1																							
	432	433																															
24+70 -Y-	433							1		1																							
25+08 -Y-	434						1			1																							
	434	435																															
18+07.5 -Y-	456																																
	456	425																															
21+21 -Y-	460							1			1																						
	460	427																															
12+64 -L-																													25.7				PLUG AND FLOW FILL EXISTING 18" CMP
13+86 -L-																													8.0				PLUG AND FLOW FILL EXISTING 15" CMP
21+82 -Y-																													8.7				PLUG AND FLOW FILL EXISTING 18" RCP
16+97 -L-																																58	REMOVE EXISTING 15" CMP
19+35 -L-																																71	REMOVE EXISTING 15" CMP
23+74 -Y-																																266	REMOVE EXISTING 30" RCP
25+13 -Y-																																32	REMOVE 32 LF OF EXISTING 18" RCP
30+38 -L-																														2			CLEAN OUT EXISTING 12" CMP
SHEET TOTALS							1	4		4	1																		42.4	2		427	TOTALS
PROJ. TOTALS			1				6	12		21	2					5				1			3	4					42.4	2		427	PROJ. TOTALS
SAY																													45	1.2	0.2	430	SAY

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