JOSH-HP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

COMPUTED BY: Joshua G. Dalton, P.E. DATE: 5/20/2016

CHECKED BY: DATE:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
SS-4903BR	3D-1

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".

Choose Project Tier

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)'	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	C.S. PIPE 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109
11+95 -L-	LT	401		32.2																							
		401	402		29.2	28.8																					
11+95 -L-	RT	402		32.2																							
		402	403		28.8	27.1																					
11+26 -L-	LT	404																									
		404	406		26.1	25.7	X																				
405 OMITTED																											
12+50 -L-	LT	406		31.3																							
		406	407		25.7	25.2	X																				
14+00 -L-	LT	407		31.3																							
		407	409		25.2	24.9	X																				
408 OMITTED																											
13+33 -RAB-		409		33.0																							
		409	414		24.3	23.8	X																				
410 OMIITTED																											
10+95 -Y2-	LT	411		30.0	26.5																						
10+45 -Y2-	LT	412		33.8																							
		412	409		26.4	24.9																					
10+95 -Y2-	LT	413		32.7																							
		413	411		29.7	26.8																					
14+27 -Y1-	LT	414		32.6																							
		414	420		23.3	22.8	X																				
11+20 -RAB-	RT	415		32.1																							
		415	414		28.6	25.1																					
11+55 -RAB-	RT	416		32.2																							
		416	415		28.8	28.6																					
11+22 -RAB-	RT	417		31.9																							
		417	415		28.9	28.6																					
11+52 -RAB-	RT	418		31.9																							
		418	416		28.9	28.8																					
12+57 -Y1-	LT	419		31.2																							
		419	420		29.0	24.6																					
12+57 -Y1-	LT	420		31.6																							
		420	422		22.8	22.5	X																				
11+85 -Y1-	LT	421		31.0																							
		421	422		28.7	24.3																					
11+85 -Y1-	LT	422		31.5																							
		422	425		22.5	22.1	X																				
11+34 -Y1-	LT	423		31.4																							
		423	424		28.2	28.0																					
10+81 -Y1-	LT	424		31.3																							
		424	425		28.0	27.0																					
10+81 -Y1-	LT	425		31.0																							
		425	427		22.1	21.7	X																				
10+85 -Y1-	RT	426		31.0																							
9+76 -Y1-	LT	427		30.6	21.6																						
10+95 -Y2-	RT	428		32.8																							
		428	429		29.8	29.7																					
11+49 -Y2-	RT	430																									
PROJECT TOTALS																											

STATION	STRUCTURE NO. FROM	STRUCTURE NO. 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"	30" DUCTILE IRON PIPE	***RC PIPE CULVERTS, CONTRACTOR DESIGN	***RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	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
11+95 -L-	401																									1			1		1	
	401	402										42																				
11+95 -L-	402																									1			1			1
	402	403										16																				
11+26 -L-	404																															
	404	406				124																										
																										1						
405 OMITTED																																
12+50 -L-	406																									1	0.6					
	406	407				152																										
14+00 -L-	407																									1	1.1					
	407	409				92																										
408 OMITTED																																
13+33 -RAB-	409																									1	3.7		1		1	
	409	414																	128													
410 OMIITTED																																
10+95 -Y2-	411																									1						
10+45 -Y2-	412																									1						
	412	409				68																										
10+95 -Y2-	413																									1			1			1
	413	411		32																												
14+27 -Y1-	414																									1	4.3					
	414	420						168																								
11+20 -RAB-	415																									1			1	1		
	415	414		68																												
11+55 -RAB-	416																									1			1			1
	416	415										48																				
11+22 -RAB-	417																									1						
	417	415		20																												
11+52 -RAB-	418																									1						
	418	416		20																												
12+57 -Y1-	419																									1						
	419	420		12																												
12+57 -Y1-	420																									1	3.8		1		1	
	420	422						72																								
11+85 -Y1-	421																									1						
	421	422		16																												
11+85 -Y1-	422																									1	4.0		1		1	
	422	425						104																								
11+34 -Y1-	423																									1						
	423	424		56																												
10+81 -Y1-	424																									1						
	424	425		16																												
10+81 -Y1-	425																									1	3.9		1		1	
	425	427						104																								
10+85 -Y1-	426																															
9+76 -Y1-	427																									1	4.0		1		1	
10+95 -Y2-	428																									1			1		1	
	428	429		24																												
																										1						
11+49 -Y2-	430																					40										
PROJECT TOTALS				264		436	0	448				106							128			40				24	25.4		11	1	7	3

STATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	CONVERT DI TO JB	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. FRAME WITH GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	TEMP. STEEL PLATE	T.B.J.B. STD. 840.34	M.H. FRAME AND COVER STD. 840.54	T.B.D.I. STD. 840.35	ADJUST C.B.	DRAINAGE PIPE ELBOWS NO. & SIZE	FLOWABLE MATERIAL (CU. YD.)	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
11+95 -L-	401																						
	401	402																					REMOVE EST 70 LF EXIST. 24" RCP
11+95 -L-	402																						
	402	403																					
11+26 -L-	404																						RETAIN EXISTING DI
	404	406																				61	REMOVE 61 LF EXIST. 24" RCP AND FES
					1	1																	
405 OMITTED																							
12+50 -L-	406				1	1																	REMOVE EXISTING DI
	406	407																					REMOVE EXISTING DI AND 30" RCP
14+00 -L-	407				1	1																	
	407	409																					REMOVE EXISTING DI AND 30" RCP
408 OMITTED						1																	
13+33 -RAB-	409																						
	409	414																					
410 OMIITTED																							
10+95 -Y2-	411				1	1																	
10+45 -Y2-	412						1									1							
	412	409																					REMOVE 64 LF EXISTING 24" RCP
10+95 -Y2-	413																						
	413	411																					
14+27 -Y1-	414		1		1	1								1									
	414	420																					
11+20 -RAB-	415																						
	415	414																					
11+55 -RAB-	416																						
	416	415																					
11+22 -RAB-	417				1	1																	
	417	415																					
11+52 -RAB-	418				1	1																	
	418	416																					
12+57 -Y1-	419												1				1						
	419	420																					REMOVE DI AND EXIST. 15" RCP
12+57 -Y1-	420																						
	420	422																					
11+85 -Y1-	421				1	1																	
	421	422																					
11+85 -Y1-	422																						
	422	425																					
11+34 -Y1-	423												1				1						REMOVE DI
	423	424																		5			FILL EXIST. 15" RCP W/ FLOWABLE MAT.
10+81 -Y1-	424				1	1																	
	424	425																					
10+81 -Y1-	425																						REMOVE JB AND 12" CMP
	425	427																		4.2			FILL EXIST. 15" RCP W/ FLOWABLE MAT.
10+85 -Y1-	426																	1					
9+76 -Y1-	427																						
10+95 -Y2-	428																						
	428	429																					
									1			1											
11+49 -Y2-	430																						REMOVE EST 37 LF EXISTING 15" RCP
PROJECT TOTALS					9	10	1		1			1	2	1	0	1	2	1			0	61	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX