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BELAM-NEW

COMPUTED BY:	DJS	DATE:	04/19/2023
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2707D	3D-5

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	OFFSET	STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Side Drain Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) 15	18	24	30	36	42	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE HDPE	DO NOT USE PVC	DO NOT USE PP PIPE	C. S. PIPE 15 (.064)	18 (.064)	24 (.064)	36 (.079)
L 734+50	58 LT	1108		800.5																		
		1108	1109		795.7	768.0	1.3	72						X								
L 734+50	130 LT	1109																				
L 728+50	94 RT	1110		803.0																		
		1110	1111		803.0	778.1																
L 728+50	115 LT	1111		784.0																		
		1111	1112		776.1	776.0																
L 739+00	58 LT	1201		793.8																		
		1201	1202		791.0	789.2																
L 739+00	0 CL	1202		792.0																		
		1202	1203		789.2	788.8	0.4															
L 739+00	79 RT	1203		792.3																		
		1203	1204		788.8	788.5	0.5															
L 742+00	0 CL	1205		791.2																		
		1205	1206		788.5	787.9																
L 741+08	0 CL	1206		791.0																		
		1206	1208		787.9	787.7																
L 741+20	58 LT	1207		792.9																		
		1207	1208		790.1	789.8																
L 741+08	58 LT	1208		792.9																		
		1208	1209		787.7	752.0			92					X								
L 741+08	147 LT	1209																				
L 750+00	105 LT	1210		790.7																		
		1210	1211		787.9	787.4	0.4															
L 750+00	0 CL	1211		796.4																		
		1211	1212		787.4	786.7	0.6															
L 750+00	105 RT	1212		790.7																		
		1212	1213		785.5	783.6																
L 747+00	105 RT	1213		788.8																		
		1213	1214		783.0	782.5																
L 745+50	77 RT	1214		792.7																		
		1214	1215		782.5	782.2																
L 745+50	0 CL	1215		793.5																		
		1215	1216		782.2	781.7																
L 745+00	104 LT	1216		788.0																		
		1216	1217		781.7	753.8						144		X								
L 743+62	148 LT	1217		760.0																		
		1217	1218		753.8	753.7						12										
L 756+00	64 LT	1301		799.4																		
		1301	1302		796.6	795.0																
L 755+50	0 CL	1302		797.8																		
		1302	1305		795.0	794.7																
Y3 25+00	35 LT	1303		838.6																		
		1303	1304		835.8	835.5																
Y3 25+25	34 RT	1304		838.4																		
		1304	1305		835.5	794.7	0.8	120						X								
L 755+50	65 RT	1305		799.5																		
		1305	1212		794.0	786.0																
Y3 21+50	19 RT	1306		813.3																		
		1306	1307		810.6	810.1		16														
							SHEET TOTALS	208	92			156										

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	R. C. PIPE CLASS V 30	48	42" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	48" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	16" WELDED STEEL PIPE 0.281" THICK, GRADE B (50% IN SOIL, 50% NOT IN SOIL)	18" WELDED STEEL PIPE 0.312" THICK, GRADE B (50% IN SOIL, 50% NOT IN SOIL)	30" WELDED STEEL PIPE 0.500" THICK, GRADE B (50% IN SOIL, 50% NOT IN SOIL)	42" WELDED STEEL PIPE 0.625" THICK, GRADE B (50% IN SOIL, 50% NOT IN SOIL)	48" WELDED STEEL PIPE 0.688" THICK, GRADE B (50% IN SOIL, 50% NOT IN SOIL)	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY
1108																									
1108	1109																								
1109																									
1110																									4.500
1110	1111													212											
1111																									
1111	1112													24											
1201																									
1201	1202								56																
1202																									
1202	1203	80																							
1203																									
1203	1204		52																						
1205																									
1205	1206	92																							
1206																									
1206	1208		56																						
1207																									
1207	1208								12																
1208																									
1208	1209																								
1209																									
1210																									
1210	1211	104																							
1211																									
1211	1212	104																							
1212																									
1212	1213				296																				
1213																									
1213	1214					152																			
1214																									
1214	1215					76																			
1215																									
1215	1216					116																			
1216																									
1216	1217																								
1217																									
1217	1218																								
1301																									
1301	1302								80																
1302																									
1302	1305	64																							
1303																									
1303	1304	72																							
1304																									
1304	1305																								
1305																									
1305	1212			548																					
1306																									
1306	1307																								
SHEET TOTALS		516	108	548	296	344			148					236											4.500

FROM	TO	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 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		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 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/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29
1108		1											1			1				
1108	1109																			
1109																				
1110																				
1110	1111																			
1111		1	2.9																	
1111	1112																			
1201		1											1			1				
1201	1202																			
1202		1											1					1		
1202	1203																			
1203		1											1					1		
1203	1204																			
1205		1											1					1		
1205	1206																			
1206		1											1					1		
1206	1208																			
1207		1											1			1				
1207	1208																			
1208		1	0.1										1			1				
1208	1209																			
1209																				
1210		1											1					1		
1210	1211																			
1211		1	4.0										1					1		
1211	1212																			
1212		1	0.3									1						1		
1212	1213																			
1213		1	0.8									1						1		
1213	1214																			
1214		1	5.0	0.2								1						1		
1214	1215																			
1215		1	5.0	1.3								1						1		
1215	1216																			
1216		1	1.3									1						1		
1216	1217																			
1217		1	1.2																	
1217	1218																			
1301		1											1					1		
1301	1302																			
1302		1											1					1		
1302	1305																			
1303		1											1						1	
1303	1304																			
1304		1											1						1	
1304	1305																			
1305		1	0.5									1						1		
1305	1212																			
1306		1											1							1
1306	1307																			
SHEET TOTALS		23	21.1	1.5								6	15			4		14	2	1

FROM	TO	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	SPRING BOX STD. 840.41	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING D.I. TO J.B. w/ MH	ADJUST D.I.	15" SIDE DRAIN PIPE ELBOW	18" SIDE DRAIN PIPE ELBOW	24" SIDE DRAIN PIPE ELBOW	30" SIDE DRAIN PIPE ELBOW	36" SIDE DRAIN PIPE ELBOW	18" SLUICE GATE (25" SIZE SLUICE GATE)	24" SLUICE GATE (32" SIZE SLUICE GATE)	30" SLUICE GATE (38.75" SIZE SLUICE GATE)	BERM DITCH OUTLET STD. 850.10	BERM DITCH OUTLET STD. 850.11	ENERGY DISSIPATION BASIN	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
1108																								
1108	1109								2															
1109																			1					
1110																								
1110	1111																							
1111		1				1																		
1111	1112																							
1201																								
1201	1202																							
1202																								
1202	1203																							
1203																								
1203	1204																							
1205																								
1205	1206																							
1206																								
1206	1208																							
1207																								
1207	1208																							
1208																								
1208	1209									2														
1209																			1					
1210																								
1210	1211																							
1211																								
1211	1212																							
1212																								
1212	1213																							
1213																								
1213	1214																							
1214																								
1214	1215																							
1215																								
1215	1216																							
1216																								
1216	1217												2											
1217		1				1																		
1217	1218																							
1301																								
1301	1302																							
1302																								
1302	1305																							
1303																								
1303	1304																							
1304																								
1304	1305								2															
1305																								
1305	1212																							
1306																								
1306	1307																							
SHEET TOTALS		2				2			4	2			2						2					

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