RD266191

COMPUTED BY:	CAF	DATE:	09/16/15
CHECKED BY:	VBB	DATE:	09/17/15

PROJECT NO.	SHEET NO.
B-4490	3D-4

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	Offset		Structure Number From	To	Top Elevation (FT.)	Invert Elevation (FT.)	Invert Elevation (FT.)	Minimum Required Slope (%)	Side Drain Pipe (RCP, CSP, CAAP or HDPE) 12	15	18	24	30	36	42	48	54	60	66	72	78	84		DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. Pipe 12 (.064)	15 (.064)	18 (.064)		R. C. Pipe Class III 12	15
			1108	1114		89.3	89.2	1.7																									
Y11 11+45	14	RT	1109		92.4																												
			1109	1110		90.2	89.9																										
Y11 11+62	14	RT	1110		92.1																												
			1110	1111		89.9	89.8																										
Y11 11+62	14	LT	1111		92.1																												
			1111	1112		89.8	89.7																										
Y11 11+67	22	LT	1112		92.8																												
			1112	1116		88.9	88.4	1.7																									
Y11 11+50	14	LT	1113		92.3																												
Y3 13+89	35	LT	1114		92.8																												
			1114	1116		89.2	88.9																										
Y3 14+31	39	RT	1115		92.1																												
Y3 14+39	26	LT	1116		93.3																												
			1116	1115		88.4	87.8	1.9																									
Y3 17+67	36	RT	1201		90.1																												
			1201	1204		87.0	86.6	0.3																									
Y3 18+30	57	RT	1204		92.0																												
			1204	0605		86.7	86.5																										
Y3 17+67	8	LT	1205		91.9																												
			1205	1201		88.9	86.9																										
Y3 22+32	60	LT	1301		91.3																												
			1301	1321		88.3	87.1																										
Y3 25+98	8	RT	1303		93.3																												
			1303	1327		89.7	84.3																										
Y3 25+98	36	LT	1304		91.5																												
			1304	1305		88.5	83.8																										
Y3 26+33	36	LT	1305		91.5																												
Y3 26+98	58	LT	1308		90.6																												
DR1 14+77	96	LT	1309		91.4																												
			1309	1310		85.3	85.0	0.3																									
Y3 25+56	70	RT	1311		91.1																												
Y3 26+34	23	LT	1312		91.3																												
Y3 26+99	50	LT	1313		91.0																												
Y3 27+11	47	RT	1314		91.5																												
Y3 27+06	8	RT	1315		92.6																												
Y3 27+14	68	RT	1316		91.3																												
Y3 24+97	88	RT	1318		90.0																												
DR1 13+79	57	LT	1319		91.5																												
			1319	1507		88.0	85.5																										
Y3 22+83	74	RT	1320		86.9																												
			1320	1309		85.7	85.3																										
Y3 22+07	60	LT	1321		91.5																												
			1321	1302		87.4	86.9																										
Y3 27+06	12	RT	1322		92.5																												
Y3 25+56	8	RT	1323		92.8																												
			1323	1303		89.8	89.7																										
Y3 25+56	42	LT	1324		92.6																												
			1324	1304		89.2	88.5																										
Y3 26+40	8	RT	1327		93.0																												
SHEET TOTALS																																	

From	To	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	54	60	66	72	78	84		Endwalls Std. 838.01 or Std. 838.11 (Unless Noted Otherwise) CY
1108	1114		28																						
1109																									
1109	1110										20														
1110																									
1110	1111										32														
1111																									
1111	1112			12																					
1112																									
1112	1116						36																		
1113																									
1114																									
1114	1116				52																				
1115																									
1116																									
1116	1115						68																		
1201																									
1201	1204			64																					
1204																									
1204	0605						68																		
1205																									
1205	1201		44																						
1301																									
1301	1321		24																						
1303																									
1303	1327		44																						
1304																									
1304	1305		38																						
1305																									
1308																									
1309																									
1309	1310						68																		
1311																									
1312																									
1313																									
1314																									
1315																									
1316																									
1318																									
1319																									
1319	1507			64																					
1320																									
1320	1309		12																						
1321																									
1321	1302				28																				
1322																									
1323																									
1323	1303		44																						
1324																									
1324	1304		44																						
1327																									
SHEET TOTALS			278	140	80		240				52														

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		Concrete Transitional Section D.I. Std. 852.04 or Std. 852.06	Catch Basin (See Detail 2C-6)	D.I. Std. 840.14 or Std. 840.15	D.I. Frame and Grates Std. 840.16	G.D.I. Type "B" Std. 840.18 or Std. 840.27	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	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.	Convert Existing J.B. to D.I.	Flowable Fill CY	Concrete Collars Cl. "B" Std. 840.72 CY	Pipe Removal LIN. FT.	Remarks
1108	1114																										
1109		1			1		1																				USE STD. 840D02
1109	1110																										
1110		1			1	1																					USE STD. 840D02
1110	1111																										
1111		1			1	1																					USE STD. 840D02
1111	1112																										
1112		1														1			1								
1112	1116																										
1113		1			1			1																			USE STD. 840D02
1114		1														1			1								
1114	1116																										
1115		1										1	1														
1116		1															1		1								
1116	1115																										
1201		1			1	1					1																
1201	1204																										
1204		1	0.3													1			1								
1204	0605																										
1205		1			1	1					1																
1205	1201																										
1301		1			1	1																					
1301	1321																										
1303		1			1			1			1																
1303	1327																										
1304		1			1			1																			
1304	1305																										
1305		1	2.7		1		1																				
1308		1	1.9									1	1														
1309		1	1.1													1			1								
1309	1310																										
1311																				1							
1312		1	2.4														1										
1313																						1					
1314																			1	1							
1315		1			1		1																		0.4465		
1316													1										1				
1318													1								1						
1319		1										1	1														
1319	1507																										
1320																											
1320	1309																										
1321		1			1			1																			
1321	1302																										
1322		1	3.7		1	1					1																
1323		1			1			1			1																
1323	1303																										
1324		1			1			1																			
1324	1304																										
1327		1			1			1																			
SHEET TOTALS		25	12.1		16	6	3	7			5	3	5			4	2		6	2	1	1	1		0.4465		

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