COMPUTED BY: RWP DATE: 2/18/2014

CHECKED BY: RSW DATE: 6/8/2014

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".

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. R-2603 SHEET NO. 3D-10

STATEWIDE
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"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	C.S. PIPE 15" .064	18" .064	24" .064	36" .079	42" .109	48" .109	R.C. PIPE CLASS III 15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 15"	18"	24"	30"	36"	42"	48"	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" 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 MASONRY DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE: COL. 'A' + (1.3 X COL. 'B') PER EACH (0' THRU 5.0')	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	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	O.T.C.B. STD. 840.04 OR 840.05	D.I. STD. 840.14 OR 840.15	D.I. FRAME & GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	J.B. STD. 840.31 OR 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35 (FOR CAST IRON FRAME & GRATES)		DRIVEWAY DROP INLET, STD. 840.30				G.D.I. (N.S.) FRAME WITH SAG GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO SAG GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH SAG GRATE STD. 840.29	G.D.I. (N.S.) FRAME WITH TWO FLAT GRATES STD. 840.29	FRAME WITH GRATES, DRIVEWAY DROP INLET, STD. 840.30	MANHOLE FRAME AND COVER STD. 840.54	TEMPORARY 1" STEEL COVER (SEE DETAIL ON SHEET 2C-10)	PREFORMED SCOUR HOLE		BERM DRAINAGE OUTLET (SY) STD. 850.10 OR 850.11	CONVERT EXIST. D.I. TO J.B. w / MH (SEE DETAIL ON SHEET 2C-4)			ADJUST EXIST. C.B.	ADJUST EXIST. D.I.	FLOWABLE FILL (CY)	CORR. STEEL PIPE ELBOWS - NO. & SIZE (INCHES)	DRAINAGE PIPE ELBOWS - NO. & SIZE (INCHES)	CONC. & BRICK PIPE PLUG (C.Y.) STD. 840.71	CONC. COLLARS CL. "B" (C.Y.) STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
-L- 174+00	RT	1601																																					52																																													30	REM 18"
-L- 179+00	CL	1602		1128.0	1125.0																																						1			1			1		1																																						
		1602	1603		1125.0	1123.6																		52																																																														
-L- 178+50	CL	1603		1126.6	1123.6																																						1			1			1		1																																						
		1603	1604		1123.6	1120.1																		44																																																															
-L- 178+50	LT	1604		1125.1	1120.1																																						1													1											1																				
		1604	1606		1120.1	1115.9			160																																																																													
-L- 176+89 (IN)	LT	1605	1606		1120.6	1115.9				16				X																																																													11												
-L- 176+90	LT	1606		1118.9	1115.9																																						1													1											1																				
		1606	1624		1115.9	1107.7				212																																																																											48	REM 15"
-L- 174+77	LT	1624		1110.7	1107.7																																						1													1											1																				
		1624	1607		1107.7	1099.3				180																																																																												
-L- 173+00	LT	1607		1104.3	1099.3																																						1													1											1																				
-L- 172+65 (OUT)	LT	1607	1512		1099.3	1090.6				56				X																																																																									
-Y18- 31+64	LT	1608		1126.9	1122.9																																						1												1											1	1																			46	REM 18"
		1608	1609		1122.9	1122.2																		44																																																															
-Y18- 31+61	CL	1609		1129.2	1122.2																																						1	2.0							1			1	1																																				
		1609	1610		1122.2	1119.1																		120																																																													61	REM 18"
-L- 181+50	RT	1610		1126.6	1119.1																																						1	2.5												1											1																				
-L- 181+00 (OUT)	RT	1610	1611		1119.1	1118.0			48																																																																																
-Y18- 29+02 (IN)	LT	1620	1621		1134.1	1130.8			12					X																																																													11												
-Y18- 29+02	LT	1621		1133.6	1130.8																																						1													1											1																				
		1621	1612		1130.8	1127.5			96																																																																														
-Y18- 30+00	LT	1612		1130.2	1127.2																																						1												1												1																				
		1612	1613		1127.2	1125.0					196																																																																												
-L- 185+00	LT	1613		1128.0	1125.0																																						1												1												1																				
-L- 185+50 (OUT)	LT	1613	1614		1125.0	1124.7					52																																																																												
-L- 184+00 (IN)	RT	1615	1616		1138.2	1123.7			32					X																																																													11												
-L- 184+00	RT	1616		1126.8	1124.0																																						1													1											1																				
		1616	1618		1124.0	1119.4			196																																																																															
-L- 185+91 (IN)	RT	1617	1618		1133.4	1119.4			36					X																																																													11												
-L- 186+00	RT	1618		1122.4	1119.4																																						1													1											1																				
		1618	1702		1119.4	1114.4			148																																																																													
-L- 186+78	CL	1619		1122.9	1119.9																																						1			1		1			1																																						
		1619	1703		1119.9	1113.8																		120																																																														21	REM 15"
NOT USED		1622																																																																																								
-Y18- 34+70	LT	1623		1141.3	1139.4																																						1													1											1																				
-Y18- 34+70 (OUT)	RT	1623	1625		1139.4	1138.5																		76																																																														
SEE PIPES 54" & OVER		1626	1627																																																																																								
-L- 187+50 (IN)	RT	1701	1702		1131.1	1114.7			36					X																																																													11												
-L- 187+50 (IN)	RT	1702		1117.4	1114.4																																						1													1											1																				
		1702	1703		1114.4	1113.5																			80																																																											39	REM 18"
-L- 187+95 (IN)	LT	1704	1703		1115.5	1113.0																				60																																																													
-L- 187+96	CL	1703		1119.5	1113.0																																						1	1.5		1		1			1																																						
		1703	1705		1113.0	1109.6																					120																																																													
-L- 189+16	CL	1705		1115.2	1109.6																																						1	0.6		1		1			1																																						
		1705	1706		1109.6	1108.7																					56																																																													
-L- 189+50	LT	1706		1112.7	1108.7																																						1												1												1																				
		1706	1707		1108.7	1103.7						120																																																																											
-L- 190+68 (IN)	LT	1708	1707		1104.5	1103.2						12		X																																																														31												
-L- 190+70	LT	1707		1107.7	1103.7																																						1												1												1																				
		1707	1709		1103.7	1101.0						72																																																																										
-L- 191+40	LT	1709		1105.0	1101.0																																						1												1												1																				
		1709	1710		1101.0	1095.6						160																																																																										194	REM 2-24"
-L- 192+98 (IN)	LT	1720	1710	1101.8	1095.6					12				X																														1.2																																						11											21	REM 15"
-L- 193+00	LT	1710		1099.6	1095.6																																						1												1												1																			59	REM 18"
-L- 193+50 (OUT)	LT	1710	1711		1095.6	1093.0						52																																																																											
SHEET TOTALS									764	476	248	416												456	80	60	176												52				23	7.8		5		3	2	1	5		1	1	7	10											1	17								97											519	

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.) GRATED DROP INLET (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

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