COMPUTED BY: Henry Bare DATE: 2/13/2015

CHECKED BY: David Fuh DATE: 2/13/2015

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

METRIC

PROJECT NO.	SHEET NO.
R-2413CA	3D-3

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".

NC10362

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 1200mm & UNDER)

STATION	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE 375	450	600	750	900	1050	1200	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
THICKNESS OR GAUGE																		
-NC68SB_DET- 11+90	RT	2B31		273.84	273.00													
-NC68SB_DET- 12+05	CL	2B31	2B32		273.00	272.83	X	36.0							X		X	X
-NC68NB_DET- 13+05	CL	2B41			266.22	265.86												
-NC68SB_DET- 16+34	LT	2B51		264.45	263.86													
-NC68SB_DET- 16+34	LT	2B52		264.62	263.70													
-NC68SB_DET- 16+34	LT	2B51	2B52		263.86	263.70		2.4							X		X	X
-NC68SB_DET- 17+07	LT	2B53		267.00	266.16													
-NC68_NB- 16+42	LT	2B54		267.10	266.03													
-NC68_NB- 16+42	LT	2B53	2B54		266.16	266.03		2.4							X		X	X
-NC68_NB- 16+78	LT	2B55		270.30	269.46													
-NC68_NB- 16+78	LT	2B55	2B56		269.46	269.11		2.4							X		X	X
-LREV_END- 100+60	RT	1004																
99+60	CL	EXIST	DI															
SHEET 3D-3 TOTALS								43.2										
GRAND TOTAL								292.8	20.4	21.6								
ENGLISH TOTAL								961	67	71								
ENGLISH SAY								976	68	72								

STATION	CS PIPE SIZE 400	450	600	800	900	1000	1200	R.C. PIPE CLASS III SIZE 300	375	450	600	750	900	1050	1200	R.C. PIPE CLASS IV SIZE 300	375	450	600	750	900	1050	1200	600mm (24") R.C. PIPE, MAX FILL > 12.0m (40ft), USE LRFD DIRECT DESIGN METHOD (CONTRACTOR DESIGN)	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. METERS R.C.P.	C.S.P.
THICKNESS OR GAUGE	1.63	1.63	1.63	2.01	2.01	2.01	2.01																			
-NC68SB_DET- 11+90																										
-NC68SB_DET- 12+05																										
-NC68NB_DET- 13+05			18.0																							
-NC68SB_DET- 16+34																										
-NC68SB_DET- 16+34																										
-NC68SB_DET- 16+34																										
-NC68SB_DET- 17+07																										
-NC68_NB- 16+42																										
-NC68_NB- 16+42																										
-NC68_NB- 16+78																										
-NC68_NB- 16+78																										
-LREV_END- 100+60																										
99+60																										
SHEET 3D-3 TOTALS			18.0																							
GRAND TOTAL			18.0			9.6			96.0	3.6				4.8			117.6				105.6		94.8	3.4	5.7
ENGLISH TOTAL			59			31			315	12				16			386				346		311	4.4	7.5
																								11.9		
ENGLISH SAY			60			32			320	12				16			392				352		316	12.0	

STATION	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0 THRU 1.50)	METERS A 1.5 THRU 3.0	METERS B 3.0 AND ABOVE	*TOTAL METERS FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL. "B")	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	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 840.26	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 TWO GRATES STD. 840.20	G.D.I. FRAME WITH ONE GRATE STD. 840.22	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	T.B.D.I. STD. 840.35	TEMP. COVER W/ STEEL PLATE. SEE SHT. 2C-3	TEMPORARY CONCRETE LID	CONVERT JB TO 2 GI SEE SHT. 2C-4	CONVERT DI TO 3 GI	J.B. STD. 840.31 OR 840.32	M.H. FRAME AND COVER STD. 840.54	T.B.J.B. STD. 840.34	CONVERT DI TO JB SEE SHT 2C-2	O.T.C.B. STD. 840.04 OR 840.05	CONVERT DI TO TBJB	375 SIDE DRAIN PIPE ELBOWS W/ 1.63 MM THICKNESS	450 SIDE DRAIN PIPE ELBOWS W/ 1.63 MM THICKNESS	600 SIDE DRAIN PIPE ELBOWS W/ 1.63 MM THICKNESS	900 SIDE DRAIN PIPE ELBOWS W/ 2.01 MM THICKNESS	CONC. & BRICK PIPE PLUG, M^3 STD. 840.71	CONC. COLLARS CL. "B" M^3 STD. 840.72	PIPE REMOVAL (METERS)	REMARKS
-NC68SB_DET- 11+90	1													1		1																									
-NC68SB_DET- 12+05																																								36.0	
-NC68NB_DET- 13+05																																								18.0	
-NC68SB_DET- 16+34	1														1	1																									
-NC68SB_DET- 16+34	1																											1													W/ SLAB LID
-NC68SB_DET- 16+34																																								2.4	
-NC68SB_DET- 17+07	1												1		1																										
-NC68_NB- 16+42	1																											1													W/ SLAB LID
-NC68_NB- 16+42																																								2.4	
-NC68_NB- 16+78	1												1		1																										
-NC68_NB- 16+78	1																											1													W/ SLAB LID
-NC68_NB- 16+78																																								2.4	
-LREV_END- 100+60																					1																				
99+60																					1																				
SHEET 3D-3 TOTALS	7												3	1	4						2			1		2													61.2	
GRAND TOTAL	36	0.18							3		3	3	1	23	4	6		29			2		7		2	6	3	5			6	2					2.46	215.2	
ENGLISH TOTAL	36	0.6							3		3	3	1	23	4	6		29			2		7		2	6	3	5			6	2					3.22	706	
ENGLISH SAY	36	0.6							3		3	3	1	23	4	6		29			2		7		2	6	3	5			6	2					4	706	

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