RA-1553

COMPUTED BY:	T.A.HARRIS	DATE:	6/6/13
CHECKED BY:	VBARODAWALA	DATE:	5/12/14

PROJECT NO.	SHEET NO.
R-2514C	3D-7

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 (SIZE / THICKNESS OR GAUGE)	OFFSET		STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %
Y1 20+64	36	LT	2020					
Y1 20+66	36	RT	2021					
L 225+18	96	LT	2022					
L 225+00	0	CL						
L 225+00	120	RT						
L 240+17	9	LT	2101		41.8	39.0		
			2101	2102		39.0	38.0	
L 241+85	18	RT	2103		44.1	40.9		
			2103	2104		40.9	40.6	
L 242+30	14	RT	2104		43.8	40.6		
			2104	2105		40.4	38.2	
L 243+00	0	CL	2105		41.2	38.2		
			2105	2106		38.2	37.1	
L 255+00	0	CL	2201		40.4	37.6		
			2201	2202		37.6	32.4	
L 259+25	1	RT	2203	2204		30.1	30.1	
L 260+00	0	CL	2205	2206		30.1	30.0	
L 262+50	0	CL	2207		38.1	35.4		
			2207	2208		35.4	30.4	
L 262+50	98	LT	2209					
			2209	2210		28.7	28.1	
L 264+50	95	LT	2301					
			2301	2302		28.8	27.9	
Y2 13+96	30	RT	2303					
L 269+50	0	CL	2304		36.0	33.3		
			2304	2305		33.3	29.6	1.1
L 276+55	94	RT	2306					
			2306	2401		26.7	26.1	
L 276+50	0	CL	2307		33.9	31.2		
			2307	2308		31.2	27.0	
L 280+00	90	RT	2402					
			2402	2403		26.6	26.5	
L 283+50	0	CL	2404		31.8	29.1		
			2404	2405		29.1	27.0	1.0
L 287+44	0	CL	2406		31.3	28.3		
			2406	2407		28.3	27.8	
			2406	2410		28.3	28.3	
L 287+52	0	CL	2410		31.3	28.3		
L 288+83	2	RT	2408	2409		27.2	27.1	
L 291+31	1	LT	2501	2502		26.8	26.1	
L 293+50	0	CL	2503		32.5	25.9		
			2503	2504		29.7	25.9	
L 296+25	2	LT	2505	2506		25.8	25.3	
LBUS 21+89	29	RT						
LBUS 22+56	41	LT	2601	2602		37.2	37.0	
DRV1 12+06	8	LT	2603	2604		34.5	34.2	
LBUS 15+53	55	RT	2605					
LBUS 19+42	0	CL	2608					
			2608	2607		32.5	32.2	
LBUS 17+14	52	RT	2609					

STRUCTURE FROM–TO	Side drain 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	DO NOT USE PVC
2020			36								X			
2021				36							X			
2022			28								X			
(L 225+00 CL)			48											
(L 225+00 RT)			48											
2303		48									X			
2605				40							X			
2609				40							X			
SHEET TOTALS		48	160	116										

STRUCTURE FROM–TO	C. A. A. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	48 (.109)	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	R. C. PIPE CLASS V 12	15	18	24	30	36	42	48
2101–2102										88																						
2103–2104										44																						
2104–2105											68																					
2105–2106											100																					
2201–2202										96																						
2203–2204													196																			
2205–2206													188																			
2207–2208										92																						
2209–2210														204																		
2301–2302														212																		
2304–2305										88																						
2306–2401															264																	
2307–2308										104																						
2402–2403														236																		
2404–2405										96																						
2406–2407											92																					
2406–2410											12																					
2408–2409													208																			
2501–2502												216																				
2503–2504										100																						
2505–2506												200																				
2601–2602											76																					
2603–2604												56																				
2608–2607																100																
SHEET TOTALS										708	348	472	592	652	264	100																

STRUCTURE FROM–TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) A: 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	CONCRETE TRANSITIONAL SECTION: C.B. STD. 852.05	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. (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	SPECIAL JB (SEE SPECIAL DETAIL 2C-3)	18" CAAP PIPE ELBOW	JB STD. 840.31 or 840.32	TB G.D.I. STD. 840.36	STEEL GRATE AND FRAME STD. 840.37	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
2020																											22	REMOVE 15" RCP
2021																											23	REMOVE 15" RCP
(L 225+00 CL)																											48	TEMPORARY DRAINAGE, SEE SHEET TMP-26
(L 225+00 RT)																											48	TEMPORARY DRAINAGE, SEE SHEET TMP-26
2101				1												1			1									
2103				1							1		1	1														
2104				1							1		1	1														
2105				1												1			1									
2201				1												1			1									
2207				1												1			1									
2209	3.400																											
2301	3.400																										14	REMOVE 15" RCP
2301–2302																											61	REMOVE 24 RCP
2303																											47	REMOVE 15" RCP
2304				1												1			1									
2306	4.500																											
2307				1												1			1									
2402	3.400																										9	REMOVE 15" RCP
2404				1												1			1									
2406				1												1			1									
2410				1												1			1									
2503				1												1			1									
2505–2506																											25	REMOVE 15" HDPE
(LBUS 21+89)																											13	REMOVE 15" CMP
2601–2602																											34	REMOVE 15" CMP
2603–2604																											40	REMOVE 18" CMP
2605																											20	REMOVE 18" RCP
2608	6.000																										77	REMOVE 30" RCP / 24" CMP
2609																											28	REMOVE 24" CMP
SHEET TOTALS	20.700			12							2		2	2		10			10								509	

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