RD261584

COMPUTED BY:	BROOK ANDERSON	DATE:	1/17/2014
CHECKED BY:	C. H. LEE	DATE:	11/10/2014

PROJECT NO.	SHEET NO.
B-4565	3D-2

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, HDPE, or PVC) 12	15	18	24	30	36	42	48		DO NOT USE RCP	DO NOT USE PVC
			0444	0441		33.0	32.7	0.5											
			0445	0439		33.2	33.1												
L 31+18	4	LT	0502		41.2														
			0502	0505		38.0	37.2												
L 33+05	2	RT	0503		38.3														
			0503	0506		35.1	34.4												
			0504	0507		33.7	33.5												
L 34+12	38	RT	0504		36.7														
			0505	0509		37.2	23.7												
L 31+18	40	LT	0505		40.2														
			0506	0510		34.4	24.9	0.4											
L 33+05	35	LT	0506		37.4														
			0507	0511		33.5	27.5												
L 34+12	33	LT	0507		36.8														
L 32+55	0	CL	0508		39.0														
			0508	0503		35.8	35.1												
L 27+60	31	RT	0516		41.0														
			0516	0515		36.2	25.6	0.5											
L 27+60	4	LT	0517		40.5														
			0517	0516		36.4	36.2												
L 27+50	39	LT	0518		39.5														
			0518	0517		36.5	36.4												
L 26+36	40	LT	0519		39.0														
			0519	0521		35.9	24.0	0.5											
L 26+36	4	LT	0520		39.9														
			0520	0519		36.7	36.0												
L 26+90	4	LT	0522		40.0														
			0522	0520		36.9	36.7												
L 26+36	31	RT	0523		40.4														
			0523	0520		37.4	36.8												
L 25+60	4	LT	0524		40.2														
			0524	0526		37.0	36.1												
L 24+60	4	LT	0525		41.2														
			0525	0527		38.0	36.9												
L 25+85	40	LT	0526		39.1														
			0526	0519		36.1	35.9												
L 24+85	39	LT	0527		39.9														
			0527	0528		36.9	23.9	0.4											
SHEET TOTALS																			
PROJECT TOTALS																			

FROM	TO	C. S. PIPE 12 (.064)	15 (.064)	36 (.079)			42 (.109)	48 (.109)	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48
0444	0441															
0445	0439									20						
0502																
0502	0505															
0503																
0503	0506															
0504	0507															
0504																
0505	0509		64													
0505																
0506	0510		52													
0506																
0507	0511		44													
0507																
0508																
0508	0503															
0516																
0516	0515		56													
0517																
0517	0516															
0518																
0518	0517															
0519																
0519	0521		48													
0520																
0520	0519															
0522																
0522	0520															
0523																
0523	0520															
0524																
0524	0526															
0525																
0525	0527															
0526																
0526	0519															
0527																
0527	0528		48													
SHEET TOTALS			312							20						
PROJECT TOTALS			368							76	136					

FROM	TO	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V 12	15	18	24	42	48
0444	0441										56				
0445	0439														
0502															
0502	0505										36				
0503															
0503	0506										36				
0504	0507										68				
0504															
0505	0509														
0505															
0506	0510														
0506															
0507	0511														
0507															
0508															
0508	0503										48				
0516															
0516	0515														
0517															
0517	0516										36				
0518															
0518	0517										40				
0519															
0519	0521														
0520															
0520	0519		36												
0522															
0522	0520										56				
0523															
0523	0520										36				
0524															
0524	0526										44				
0525															
0525	0527										44				
0526															
0526	0519										52				
0527															
0527	0528														
SHEET TOTALS			36								552				
PROJECT TOTALS			380	32							1300	228			

Quantities for drainage structures — NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B). Frame, grates, and hood: STD. 840.03.

FROM	TO	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	GRATE TYPE E	F	G		CONCRETE TRANSITIONAL SECTION: D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16
0444	0441														
0445	0439														
0502		1								1				1	1
0502	0505														
0503		1								1				1	1
0503	0506														
0504	0507														
0504		1			1	1									
0505	0509														
0505		1			1			1							
0506	0510														
0506		1			1			1							
0507	0511														
0507		1			1	1									
0508		1								1				1	1
0508	0503														
0516		1			1			1							
0516	0515														
0517		1								1				1	1
0517	0516														
0518		1			1		1								
0518	0517														
0519		1			1	1									
0519	0521														
0520		1								1				1	1
0520	0519														
0522		1								1				1	1
0522	0520														
0523		1			1	1									
0523	0520														
0524		1								1				1	1
0524	0526														
0525		1								1				1	1
0525	0527														
0526		1			1			1							
0526	0519														
0527		1			1			1							
0527	0528														
SHEET TOTALS		18			10	4	1	5		8				8	8
PROJECT TOTALS		44	3.4		24	5	10	9		18				18	18

FROM	TO	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. 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/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	DRIVEWAY D.I. STD. 840.30	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34		M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54		15" C.S. ELBOW	PIPE REMOVAL LIN. FT.	REMARKS
0444	0441																		
0445	0439																		
0502																			
0502	0505																		
0503																			
0503	0506																		
0504	0507																		REMOVE 18" CMP, 2 CB
0504																			
0505	0509																2		
0505																			
0506	0510																2		
0506																			
0507	0511																2		
0507																			
0508																			
0508	0503																		
0516																			
0516	0515																2	37	REMOVE CB, 15" CMP
0517																		55	REMOVE DI, 15" CMP
0517	0516																		
0518																			REMOVE 15" CMP
0518	0517																	27	REMOVE CB, 15" CMP
0519																			
0519	0521																2		
0520																			
0520	0519																		
0522																			
0522	0520																		
0523																			
0523	0520																		
0524																		257	REMOVE DI, 12" HDPE
0524	0526																		
0525																		195	REMOVE DI, 12" HDPE
0525	0527																		
0526																			
0526	0519																		
0527																			
0527	0528																2		
SHEET TOTALS																	12	571	
PROJECT TOTALS			1				1					1			1		14	588	

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