COMPUTED BY: EL STEWART, EI DATE: 1/26/2015

CHECKED BY: D. Bocker, PE DATE: 3/23/2015

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-5524	3-A

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & 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) 12"	15"	18"	24"	30"	36"	42"	48"	Do not use RCP	Do not use CSP	Do not use CAAP	Do not use HDPE
-L-, 12+19.00	RT	0402		131.9															
		0402	0408		128.9	128.6													
-L-, 12+53.00	RT	0403		132.9															
		0403	0406		126.5	126.2				64									
-L-, 12+69.00	RT	0404		133.4															
		0404	403		130.4	130.1			72										
-L-, 13+26.00	RT	0405		132.3															
		0405	0406		129.3	129.1			48										
-L-, 13+29.00	RT	0406		131.9															
		0406	0407		125.7	125.6													
-L-, 13+38.50	RT	0407		133.0															
		0407	0433		117.8	112.5													
-L-, 12+40.00	LT	0408		131.8															
		0408	0433		128.6	128.5			24										
-Y3-, 10+55.00	LT	0410		133.4															
		0410	0407		126.6	126.2													
-Y3-, 10+69.50	LT	0411		130.8															
		0411	0410		127.6	127.3													
-Y3-, 11+21.00	LT	0412		132.7															
		0412	0410		128.9	127.1													
-Y3-, 11+21.00	LT	0413		132.9															
		0413	0412		130.7	129.1			20										
-Y3-, 11+72.09	LT	0414		132.4															
		0414	0412		129.1	128.9													
-Y3-, 12+67.00	LT	0415		133.1															
		0415	0414		129.8	129.1													
-Y3-, 12+67.00	LT	0416		133.8															
		0416	0415		130.6	130.1			16										
-ROUND-, 12+46.50	RT	0417		133.4															
		0417	0412		130.2	129.1													
-Y2-, 10+54.41	LT	0418		132.5															
		0418	0419		129.3	128.7													
-Y2-, 10+53.06	RT	0419		131.7															
		0419	0421		128.7	127.9													
-Y2-, 10+78.10	RT	0420		132.0															
		0420	0419		129.0	128.7													
-ROUND-, 11+74.99	RT	0421		132.3															
		0421	0425		127.9	122.4			56										
-ROUND-, 11+53.40	RT	0422		132.3															
		0422	0421		129.3	127.9													
-Y1-, 10+62.10	LT	0423		131.7															
		0423	0427		128.5	128.3				28									
-Y1-, 11+00.00	LT	0424		131.9															
		0424	0423		128.9	128.7													
-L- 12+58	LT	0433		134.6															
-ROUND-, 11+53.40	RT	0425		124.6															
		0425	0426		122.4	122.2			32										
-ROUND-, 11+39.00	RT	0426		127.3															
		0426	0407		119.2	117.8													
-Y1-, 10+56.00	LT	0427		131.9															
		0427	0426		128.3	123.1				44									
-Y1-, 10+69.00	RT	0428		132.4															
		0428	0423		128.8	128.7													
-Y1-, 10+40.00	RT	0429		132.0															
		0429	0431		129.7	129.6			20										
SHEET 3A TOTALS								0	288	136	0	0	0	0	0	0	0	0	0

Station	From	To	C.S. 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"
-L-, 12+19.00	0402																									
	0402	0408																		48						
-L-, 12+53.00	0403																									
	0403	0406																								
-L-, 12+69.00	0404																									
	0404	403																								
-L-, 13+26.00	0405																									
	0405	0406																								
-L-, 13+29.00	0406																									
	0406	0407																				24				
-L-, 13+38.50	0407																									
	0407	0433																								100
-L-, 12+40.00	0408																									
	0408	0433																								
-Y3-, 10+55.00	0410																									
	0410	0407																				76				
-Y3-, 10+69.50	0411																									
	0411	0410																		60						
-Y3-, 11+21.00	0412																									
	0412	0410																			64					
-Y3-, 11+21.00	0413																									
	0413	0412																								
-Y3-, 11+72.09	0414																									
	0414	0412																			48					
-Y3-, 12+67.00	0415																									
	0415	0414																			92					
-Y3-, 12+67.00	0416																									
	0416	0415																								
-ROUND-, 12+46.50	0417																									
	0417	0412																		24						
-Y2-, 10+54.41	0418																									
	0418	0419																		32						
-Y2-, 10+53.06	0419																									
	0419	0421																		36						
-Y2-, 10+78.10	0420																									
	0420	0419																		24						
-ROUND-, 11+74.99	0421																									
	0421	0425																								
-ROUND-, 11+53.40	0422																									
	0422	0421																		28						
-Y1-, 10+62.10	0423																									
	0423	0427																								
-Y1-, 11+00.00	0424																									
	0424	0423																		32						
-L- 12+58	0433																									
-ROUND-, 11+53.40	0425																									
	0425	0426																								
-ROUND-, 11+39.00	0426																									
	0426	0407																								224
-Y1-, 10+56.00	0427																									
	0427	0426																								
-Y1-, 10+69.00	0428																									
	0428	0423																		28						
-Y1-, 10+40.00	0429																									
	0429	0431																								
SHEET 3A TOTALS			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312	204	100	0	0	0	324

Station	From	To	** " R.C. Pipe (Class V)	**** RC Pipe Culverts, Contractor Design	**** RC Pipe Culverts, Contractor Design	15" Side Drain Pipe	18" 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 Drainage Structures: Per Each (0' thru 5.0')	*Total L.F. for pay quantity shall be Col. 'A' + (1.3 X Col.'B') 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
-L-, 12+19.00	0402									1			1	1				
	0402	0408																
-L-, 12+53.00	0403									1	2							
	0403	0406																
-L-, 12+69.00	0404									1			1	1				
	0404	403																
-L-, 13+26.00	0405									1			1	1				
	0405	0406																
-L-, 13+29.00	0406									1	1							
	0406	0407																
-L-, 13+38.50	0407									1	5	5.2						
	0407	0433																
-L-, 12+40.00	0408									1			1	1				
	0408	0433																
-Y3-, 10+55.00	0410									1	2		1		1			
	0410	0407																
-Y3-, 10+69.50	0411									1								
	0411	0410																
-Y3-, 11+21.00	0412									1			1			1		
	0412	0410																
-Y3-, 11+21.00	0413									1								
	0413	0412																
-Y3-, 11+72.09	0414									1			1	1				
	0414	0412																
-Y3-, 12+67.00	0415									1			1		1			
	0415	0414																
-Y3-, 12+67.00	0416									1								
	0416	0415																
-ROUND-, 12+46.50	0417									1								
	0417	0412																
-Y2-, 10+54.41	0418									1								
	0418	0419																
-Y2-, 10+53.06	0419									1			1	1				
	0419	0421																
-Y2-, 10+78.10	0420									1			1			1		
	0420	0419																
-ROUND-, 11+74.99	0421									1			1			1		
	0421	0425																
-ROUND-, 11+53.40	0422									1			1	1				
	0422	0421																
-Y1-, 10+62.10	0423									1			1	1				
	0423	0427																
-Y1-, 11+00.00	0424									1			1		1			
	0424	0423																
-L- 12+58	0433									1	5	12.1						
-ROUND-, 11+53.40	0425									1								
	0425	0426																
-ROUND-, 11+39.00	0426									1	3							
	0426	0407																
-Y1-, 10+56.00	0427									1								
	0427	0426																
-Y1-, 10+69.00	0428									1								
	0428	0423																
-Y1-, 10+40.00	0429									1								
	0429	0431																
SHEET 3A TOTALS			0	0	0	0	0	0	0	28	18	17.3	14	8	3	3	0	0

Station	From	To	D.I. Std. 840.14 or Std. 840.15	D.I. Frame with Two Grates Std. 840.16	G.D.I. Type "A" Std. 840.17 or 840.26	G.D.I. (N.S.) Frame with Grate Std. 840.24	J.B. Std. 840.31 or 840.32	T.B.J.B. Std. 840.34	Manhole Frame & Cover Std. 840.54	G.D.I. (N.F.) Frame with Grate Std. 840.29	T.B.D.I. Std. 840.35						Side Drain Pipe Elbows No. & Size	Conc. & Brick Pipe Plug, C.Y. Std. 840.71	Conc. Collars Cl. "B" C.Y. Std. 840.72	Pipe Removal Lin. Ft.	Remarks
-L-, 12+19.00	0402																				
	0402	0408																			
-L-, 12+53.00	0403		1	1																	
	0403	0406																			
-L-, 12+69.00	0404																				
	0404	403																			
-L-, 13+26.00	0405																			20.3	REMOVE EXISTING 12" PIPE & D.I.
	0405	0406																			
-L-, 13+29.00	0406		1	1																	
	0406	0407																			
-L-, 13+38.50	0407							1	1									0.524			REMOVE .I, FILL & PLUG 80 LF -36" RCP
	0407	0433																		97	REMOVE 36" RCP
-L-, 12+40.00	0408																				
	0408	0433																			
-Y3-, 10+55.00	0410																				
	0410	0407																			
-Y3-, 10+69.50	0411									1	1							0.013			PLUG & ABANDON EXISITING 8" RCP
	0411	0410																			
-Y3-, 11+21.00	0412																				REMOVE OTSMH
	0412	0410																			
-Y3-, 11+21.00	0413		1	1																	REMOVE OTSMH
	0413	0412																			
-Y3-, 11+72.09	0414																				
	0414	0412																			
-Y3-, 12+67.00	0415																				
	0415	0414																			
-Y3-, 12+67.00	0416									1	1										
	0416	0415																			
-ROUND-, 12+46.50	0417		1	1														0.524		8.55	REM. 15" RCP & OTSMH &D.I. PLUG 179LF -3
	0417	0412																			
-Y2-, 10+54.41	0418		1	1																	
	0418	0419																			
-Y2-, 10+53.06	0419																				
	0419	0421																			
-Y2-, 10+78.10	0420																				
	0420	0419																			
-ROUND-, 11+74.99	0421																				
	0421	0425																			
-ROUND-, 11+53.40	0422																				
	0422	0421																			
-Y1-, 10+62.10	0423																				
	0423	0427																			
-Y1-, 11+00.00	0424																				
	0424	0423																			
-L- 12+58	0433						1		1												REMOVE EXISTING MH
-ROUND-, 11+53.40	0425		1	1																	
	0425	0426																			
-ROUND-, 11+39.00	0426				1	1														20	REMOVE 36" PIPE
	0426	0407																			
-Y1-, 10+56.00	0427		1	1																	
	0427	0426																			
-Y1-, 10+69.00	0428		1	1																	
	0428	0423																			
-Y1-, 10+40.00	0429		1	1																24.08	REM. 18" RCP, REM. CB
	0429	0431																			
SHEET 3A TOTALS			9	9	1	1	1	1	2	2	2							1.1		169.93	

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