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RAL-WS061

COMPUTED BY: Harminder Singh **DATE:** March 10, 2016

CHECKED BY: Max Price **DATE:** March 10, 2016

PROJECT NO.	SHEET NO.
U-2525C	3D-3

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 %
L 313+00	0 CL	0812		870.7			
		0812	0814		868.0	865.8	0.7
L 313+00	84 LT	0814		869.7			
		0814	0815		865.0	832.0	1.9
L 313+50	0 CL	0819			831.5	818.8	3.5
L 320+00	72 LT	0901		883.9			
		0901	0808		879.2	872.7	0.6
L 320+00	0 CL	0902		884.6			
		0902	0901		881.8	879.9	
L 322+50	0 CL	0905			858.7	847.0	3.7
L 323+50	72 LT	0912		890.9			
		0912	0901		887.9	879.7	3.2
L 323+50	0 CL	0914		891.6			
		0914	0912		888.8	888.2	
L 326+50	72 LT	0916		896.5			
		0916	0912		893.7	888.2	0.6
L 326+50	0 CL	0918		897.6			
		0918	0916		894.9	893.7	
L 328+85	70 LT	0919		898.9			
		0919	0916		896.1	893.7	
L 328+85	12 RT	0920		901.0			
		0920	0919		898.3	896.1	
Y1 11+87	21 LT						
L 331+10	70 LT	0922		899.2			
		0922	1005		896.4	895.5	
L 331+10	12 RT	0924		901.3			
		0924	0922		898.5	896.4	
L 333+50	72 LT	1005		898.8			
		1005	1006		895.5	895.2	
L 333+50	0 CL	1006		898.4			
		1006	1007		895.2	894.3	0.3
L 333+50	72 RT	1007		900.3			
		1007	1010		889.3	857.0	4.8
L 335+57	70 RT	1012		896.0			
		1012	1007		891.0	889.3	
L 333+60	185 RT	1001		857.0			
		1001	1015		852.0	850.0	
L 335+76	0 CL	1013		894.4			
		1013	1012		891.7	891.0	
L 335+95	70 LT	1014		894.8			
		1014	1013		892.1	891.7	
L 338+02	102 RT	1030	1031		842.5	808.6	
L 338+77	70 LT	1016		889.8			
		1016	1019		887.1	885.2	
L 338+38	70 RT	1017		890.5			
		1017	1021		886.6	884.2	
L 339+75	72 LT	1019		887.9			
		1019	1020		885.2	884.6	
L 339+75	0 CL	1020		887.3			
		1020	1021		884.6	884.2	

LINE & STATION	FROM	TO	Side Drain Pipe (RCP, CSP, or CAAP) 15	18	24	30	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 15 .064	18 .064	24 .064	30 .079	42 .109	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	R. C. PIPE CLASS V 15	18	24	24" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	36" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	42" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	48" R.C. PIPE CULVERTS, CONTRACTOR DESIGN
L 313+00	0812																																					
	0812	0814																														84						
L 313+00	0814																																					
	0814	0815														84																						
L 313+50	0819																																			364		
L 320+00	0901																																					
	0901	0808																										292										
L 320+00	0902																																					
	0902	0901																														72						
L 322+50	0905																																	316				
L 323+50	0912																																					
	0912	0901																									340											
L 323+50	0914																																					
	0914	0912																														72						
L 326+50	0916																																					
	0916	0912																							292													
L 326+50	0918																																					
	0918	0916																														72						
L 328+85	0919																																					
	0919	0916																							228													
L 328+85	0920																																					
	0920	0919																														80						
Y1 11+87																																						
L 331+10	0922																																					
	0922	1005																							236													
L 331+10	0924																																					
	0924	0922																														84						
L 333+50	1005																																					
	1005	1006																														72						
L 333+50	1006																																					
	1006	1007																														72						
L 333+50	1007																																					
	1007	1010											108																									
L 335+57	1012																																					
	1012	1007																							204													
L 333+60	1001																																					
	1001	1015		148																																		
L 335+76	1013																																					
	1013	1012																														76						
L 335+95	1014																																					
	1014	1013																														76						
L 338+02	1030	1031																																	632			
L 338+77	1016																																					
	1016	1019																							96													
L 338+38	1017																																					
	1017	1021																							136													
L 339+75	1019																																					
	1019	1020																														72						
L 339+75	1020																																					
	1020	1021																														72						
SHEET TOTALS				148										108		84										1192	340	292				904		316	632	364		

LINE & STATION	FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 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	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	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. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.22	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	SPECIAL JUNCTION BOX	M.H. FRAME AND COVER STD. 840.54	ADJUST C.B.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	42" C.S. ELBOW	4" CONCRETE PAVED DITCH, S.Y.	OUTLET CONTROL STRUCTURE BOX STD 840.45	PREFORMED SCOUR HOLE (PER EACH)	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
L 313+00	0812			1															1				1																		
	0812	0814																																							
L 313+00	0814			1														1				1																			
	0814	0815																													2										ROD AND LUG
L 313+50	0819																																								
L 320+00	0901			1														1				1																			
	0901	0808																																							
L 320+00	0902			1															1				1																		
	0902	0901																																							
L 322+50	0905																																								
L 323+50	0912			1															1			1																			
	0912	0901																																							
L 323+50	0914			1															1				1																		
	0914	0912																																							
L 326+50	0916			1															1			1																			
	0916	0912																																							
L 326+50	0918			1															1				1																		
	0918	0916																																							
L 328+85	0919			1															1			1																			
	0919	0916																																							
L 328+85	0920			1															1			1																			
	0920	0919																																							
Y1 11+87																																								16	Pipe Removal: 12" Conc
L 331+10	0922			1															1			1																			
	0922	1005																																							
L 331+10	0924			1															1			1																			
	0924	0922																																							
L 333+50	1005			1															1			1																			
	1005	1006																																							
L 333+50	1006			1															1				1																		
	1006	1007																																							
L 333+50	1007			1	5.0	1.0													1			1																			
	1007	1010																											2							1				ROD AND LUG
L 335+57	1012			1															1			1																			
	1012	1007																																							
L 333+60	1001																																	1					INCLUDED IN BASIN PAY ITEM, SEE SPEC. DETAIL ON 2D-4
	1001	1015																																							
L 335+76	1013			1															1				1																		
	1013	1012																																							
L 335+95	1014			1															1			1																			
	1014	1013																																							
L 338+02	1030	1031																																							
L 338+77	1016			1															1			1																			
	1016	1019																																							
L 338+38	1017			1															1			1																			
	1017	1021																																							
L 339+75	1019			1															1			1																			
	1019	1020																																							
L 339+75	1020			1															1				1																		
	1020	1021																																							
SHEET TOTALS				22	5.0	1.0												2	20			15	7							2		2				1	1			16	

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