RAL-2TK9470H0P

COMPUTED BY:	MKD	DATE:	09/13/2021
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PROJECT NO.	SHEET NO.
U2579-AB	3D-16

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)

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

LINE & STATION / SIZE / THICKNESS OR GAUGE	OFFSET		STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Side Drain Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) 15	18	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	DO NOT USE PP PIPE	C. S. PIPE 15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48	R. C. PIPE CLASS V 42	24" WELDED STEEL PIPE, IN SOIL(OUT OF SOIL)	30" WELDED STEEL PIPE, IN SOIL (OUT OF SOIL)	42" WELDED STEEL PIPE, IN SOIL (OUT OF SOIL)	48" WELDED STEEL PIPE, IN SOIL (OUT OF SOIL)	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY
Y1 15+90	17	LT	1412A		952.0																																						
			1412A	1408A		948.2	948.0																										44										
Y1A 10+95	19	RT	1413A		952.2																																						
			1413A	1417A		945.5	942.5												20																								
Y1A 10+91	17	LT	1415A		952.2																																						
			1415A	1413A		947.2	947.0																										36										
Y1A 10+50	39	LT	1416A		954.4																																						
			1416A	1415A		947.5	947.2																										44										
Y1A 11+00	39	RT	1417A		948.4																																						
			1417A	1414A		943.1	943.0																				24																
			1418A						20																																		
			1501																						60																		
			1502						28																																		
			1503	1506																					84																		
			1504						28																																		
			1505						28																																		
Y15 24+88	1	RT	1601		824.8																																						
			1602	1613																																							
			1603	1602																						20																	
Y15 31+87	1	RT	1606		818.3																																						
			1606	1611		814.0	813.8																4																				
Y15 31+87	1	LT	1611		818.3																																						
			1611	1610		813.8	807.8																																				
Y15 24+88	1	LT	1607		824.2																																						
Y15 24+92	57	LT	1608		824.7																																						
			1608	1609		819.4	808.9										48																										
Y15 25+63	1	LT	1614		824.2																																						
			1614	1607		820.7	820.4																72																				
Y15 22+64	60	LT	1617		826.7																																						
			1617	1618		824.0	803.4										56																										
Y15 27+64	60	LT	1619		822.4																																						
			1619	1620		819.6	809.2										40																										
Y15 30+60	60	LT	1621		818.6																																						
			1621	1622		815.8	807.3										28																										
Y15 34+50	65	LT	1623		815.2																																						
			1623	1732		812.5	812.2																48																				
Y15 36+65	69	LT	1702		816.1																																						
			1702	1733		813.3	813.0																	60																			
Y15 36+76	3	RT	1703		816.5																																						
			1703	1736		807.8	807.8																																	2(2)		
Y15 36+88	112	RT	1705		812.5																																						
			1705	1729		808.3	808.0																						24														
Y15 42+17	3	RT	1708		818.5																																						
			1708	1715		809.6	809.6	0.3																		4																	
Y15 42+28	93	RT	1709		810.7																																						
Y15 42+30	103	RT	1710		814.7																																						
			1710	1709		810.9	810.7	0.9																	12																		
Y15 43+30	103	RT	1711		815.2																																						
			1711	1710		812.2	810.9	0.8																	100																		
SHEET TOTALS									104								172		20				124	60	256	24	24		24				124								2(2)		

STRUCTURE NUMBER FROM	TO	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 D.I. STD. 852.04 OR STD. 852.06	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME W/ 2 GRA. STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRA. STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRA. STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRA. STD. 840.24	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	PIPE CLEANOUT (PER EACH)	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	ADJUST D.I.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	42" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	##" SLUICE GATE (42" SIZE SLUICE GATE)	TRASH RACK	PREFORMED SCOUR HOLE (PER EACH)		FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
1412A		1								1																																				
1412A	1408A																																													
1413A		1	1.5		1		1																																							
1413A	1417A																																	2												
1415A		1					1																																							
1415A	1413A																																													
1416A		1					1																																							
1416A	1415A																																													
1417A		1																			1						1																			
1417A	1414A																																													
1418A																																														
1501																																													133	113' PIPE REMOVAL FOR ALL OF SHEET 15
1502																																														
1503	1506																																													
1504																																														
1505																																														
1601		1																						1	1																					
1602	1613																									1																		0.5526		COLLAR AND EXTEND
1603	1602																																												54	54' PIPE REMOVAL FOR ALL OF SHEET 16
1606		1																						1	1																					
1606	1611																																													
1611		1																						1	1																					
1611	1610																																													RETAIN 12" PIPE
1607		1																						1	1																					
1608		1																						1	1																					
1608	1609																									1						2														
1614		1																						1	1																					
1614	1607																																													
1617		1																						1	1																					
1617	1618																															2														
1619		1																						1	1																					
1619	1620																															2														
1621		1																						1	1																					
1621	1622																															2														
1623		1																						1	1																					
1623	1732																																													
1702		1																						1	1																					
1702	1733																																													
1703		1																						1	1																				262	262' PIPE REMOVAL FOR ALL OF SHEET 17
1703	1736																																													
1705		1												1				1																												
1705	1729																																													
1708		1	3.9																					1	1																					
1708	1715																																													
1709																																											7	0.3528		
1710		1												1				1																												
1710	1709																																													
1711		1												1				1																												
1711	1710																																													
SHEET TOTALS		21	5.4		1		3			1				3				3			1			13	13	2	1					8		2									7	0.9054	449	