RAL-2TK9479H9P

COMPUTED BY:	MKD	DATE:	09/13/2021
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U2579-AB	3D-11

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 %	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
Y15FLYBD 37+24	23 LT	1046		917.5											
		1046	1045		914.1	879.7	3.1								
Y15FLYBD 37+44	23 LT	1047		918.3											
		1047	1046		914.9	914.1	0.8								
Y15FLYBD 39+00	134 LT	1048		873.0											
		1048	1093		873.0	856.4	0.4								
Y15REV 45+52	70 RT	1050		889.0											
		1050	1051		885.5	880.3									
Y15REV 45+38	107 RT	1051		880.3											
Y15REV 41+50	2 RT	1052		880.1											
		1052	1923		875.2	859.8									
Y15RPDREV 39+77	34 LT	1053		896.4											
		1053	1054		893.7	891.3									
Y15RPDREV 39+50	44 RT	1054		894.1											
		1054	1055		890.6	890.5									
Y15FLYBD 55+86	23 LT	1058		950.9											
		1058	1057		947.4	911.0	0.5								
Y15FLYCA 52+20	23 LT	1061		920.7											
		1061	1062		918.0	912.5									
Y15FLYCA 49+89	23 LT	1062		915.3											
		1062	1063		912.5	885.2									
Y15FLYAC 67+50	127 RT	1064		901.1											
		1064	1056		898.4	897.5									
L 799+50	91 RT	1065		882.1											
		1065	1079		879.4	878.0									
L 799+51	95 LT	1066		881.2											
		1066	1079		878.5	878.0									
Y15FLYAC 67+72	22 LT	1067		924.1											
		1067	1064		921.3	898.4									
Y15FLYAC 67+79	22 LT	1068		924.1											
		1068	1067		921.3	921.3									
Y15REV 41+50	2 LT	1069		880.1											
		1069	1052		875.2	875.2									
Y15REV 49+21	2 LT	1070		898.1											
		1070	1037		888.8	888.8									
Y15REV 54+41	2 LT	1071		905.1											
		1071	1034		895.0	894.9	0.6								
Y15FLYAC 47+32	23 LT	1072		934.2											
		1072	1073		929.9	903.0				x			x	x	x
Y15FLYAC 47+32	89 LT	1073		903.0											
Y15REV 41+50	72 RT	1074		879.5											
		1074	1052		875.5	875.2									
Y15LPA 18+30	14 RT	1075		865.5											
		1075	1094		861.5	861.4									
Y15FLYCA 68+27	47 RT	1076													
		1076	1095		888.4	876.5				x			x	x	x
Y15LPA 18+30	41 LT	1077		865.4											
		1077	1075		862.7	861.8									
Y15LPA 64+32	72 LT	1078													
		1078	1032		888.8	862.7	0.7			x			x	x	x
					SHEET TOTALS										

LINE & STATION / SIZE / THICKNESS OR GAUGE	C. S. PIPE 15	18	24	30	36	42	R. C. PIPE CLASS III 12	15	18	24	30	36	42	R. C. PIPE CLASS IV 48	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
	.064	.064	.064	.079	.079	.109																					
Y15FLYBD 37+24																											
	160																										
Y15FLYBD 37+44																											
								16																			
Y15FLYBD 39+00																											
										268																	
Y15REV 45+52																											
	40																										
Y15REV 45+38																											
Y15REV 41+50																											
									648																		
Y15RPDREV 39+77																											
								80																			
Y15RPDREV 39+50																											
										16																	
Y15FLYBD 55+86																											
	88																										
Y15FLYCA 52+20																											
								228																			
Y15FLYCA 49+89																											
	72																										
Y15FLYAC 67+50																											
								164																			
L 799+50																											
								92																			
L 799+51																											
								96																			
Y15FLYAC 67+72																											
Y15FLYAC 67+79																											
								4																			
Y15REV 41+50																											
									4																		
Y15REV 49+21																											
										4																	
Y15REV 54+41																											
									4																		
Y15FLYAC 47+32																											
	68																										
Y15FLYAC 47+32																											
Y15REV 41+50																											
									68																		
Y15LPA 18+30																											
									28																		
Y15FLYCA 68+27																											
	36																										
Y15LPA 18+30																											
								52																			
Y15LPA 64+32																											
		48																									
SHEET TOTALS	464	48						732	752	288																	

LINE & STATION / SIZE / THICKNESS OR GAUGE	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.	A: 10' AND ABOVE LIN. FT.	B	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
Y15FLYBD 37+24	1														1		1																																
																																			2														
Y15FLYBD 37+44	1														1		1																																
Y15FLYBD 39+00																																																	
																																																	RCP-LRFD DIRECT DESIGN
Y15REV 45+52	1														1		1																																
																																			2														
Y15REV 45+38																																											1						
Y15REV 41+50	1														1				1																														
Y15RPDREV 39+77	1														1				1																														
Y15RPDREV 39+50	1														1				1																														
Y15FLYBD 55+86	1				1			1																																									
																																			2														
Y15FLYCA 52+20	1														1		1																																
Y15FLYCA 49+89	1														1		1																																
																																			2														
Y15FLYAC 67+50	1														1				1																														
L 799+50	1														1				1																														
L 799+51	1														1				1																														
Y15FLYAC 67+72	1														1		1																																
Y15FLYAC 67+79	1														1		1																																
Y15REV 41+50	1														1		1																																
Y15REV 49+21	1	4.3													1		1																																
Y15REV 54+41	1	5.0	0.1												1		1																																
Y15FLYAC 47+32	1														1		1																																
																																			2														
Y15FLYAC 47+32																																											1						
Y15REV 41+50	1														1		1																																
Y15LPA 18+30	1				1			1																																									
Y15LPA 64+32																																											1						BDO
																																				2													
SHEET TOTALS	21	9.3	0.1	2			2								19		12		7																12	2				2			2					

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