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TGSDAVID-LAPTOP

COMPUTED BY:	Austin R. Turner, EI	DATE:	4/26/2017
CHECKED BY:	David Petty, PE	DATE:	4/24/2018

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-5776	3D-2

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 %	Drainage 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	DO NOT USE PVC
		0425	0426		1152.9	1151.2														
L 19+58	18 LT	0426		1154.2																
		0426	0428		1149.9	1149.3	1.1													
L 19+71	56 LT	0427	0426		1151.0	1149.9	0.9													
L 19+48	18 RT	0428		1153.5																
		0428	0429		1149.3	1149.1	1.3													
L 20+00	18 RT	0430		1153.5																
		0430	0431		1150.5	1150.3														
L 20+00	18 LT	0431		1154.2																
		0431	0433		1150.2	1150.0														
L 20+50	47 LT	0432		1147.5																
		0432	0433		1144.0	1143.7														
L 20+50	18 LT	0433		1154.2																
		0433	0434		1143.6	1142.8														
L 20+85	18 LT	0435		1154.5																
		0435	0433		1151.4	1151.1														
L 22+44	29 RT	0436		1158.2																
		0436	0437		1155.2	1155.0														
L 22+44	18 LT	0437		1158.6																
		0437	0435		1155.0	1151.5														
L 23+10	18 LT	0438		1161.1																
		0438	0437		1158.0	1155.5														
Y2 15+24	35 RT	0439		1164.1																
		0439	0438		1161.1	1158.1														
Y2 20+30	17 RT	0440		1149.1																
		0440	0441		1146.1	1144.2														
Y2 21+31	14 RT	0441		1147.2																
		0441	0442		1144.1	1143.8			24								X	X		
Y2 21+57	20 RT	0442		1146.0																
		0442	0443		1143.8	1143.7														
Y1 13+13	9 RT	0445		1178.3																
		0445	0404		1175.2	1174.7														
L 19+20	18 RT	0446		1153.8																
		0446	0428		1150.8	1150.5														
		2B-201		1195.7																
		2B-201			1192.7															
		2B-202		1194.7																
		2B-202			1190.9															
Y1 12+24	8 LT																			
Y1 12+31	25 RT																			
Y1 11+54	17 RT																			
Y1 13+25	41 RT																			
Y1 14+80	49 RT																			
Y1 16+13	24 RT																			
Y1 15+28	26 RT																			
SHEET TOTALS									24											
PROJECT TOTALS									68											

LINE & STATION	C. S. PIPE 12	15	18	24	30	36	42	48	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
SIZE																								
THICKNESS OR GAUGE	.064	.064	.064	.064	.079	.079	.109	.109																
																	96							
L 19+58																								
L 19+71																								
L 19+48																								
L 20+00																								
																	36							
L 20+00																								
																	48							
L 20+50																								
																						32		
L 20+50																								
																						72		
L 20+85																								
																	36							
L 22+44																								
																	44							
L 22+44																								
																	156							
L 23+10																								
																	64							
Y2 15+24																								
																	68							
Y2 20+30																								
																	100							
Y2 21+31																								
Y2 21+57																								
																		4						
Y1 13+13																								
																	40							
L 19+20																								
																	28							
Y1 12+24																								
Y1 12+31																								
Y1 11+54																								
Y1 13+25																								
Y1 14+80																								
Y1 16+13																								
Y1 15+28																								
SHEET TOTALS																	716	4				104		
PROJECT TOTALS																	1752	328	32			104		

LINE & STATION	30" Welded Steel Pipe, 0.500" Thick, Grade B in soil	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B) A: 0' THRU 5' EACH	B: 5' THRU 10' LIN. FT.	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	CONVERT CB TO JB w/Slab Lid std. 840.31 or 840.32	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. 840.20	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	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	ENERGY DISSIPATION BASIN	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
L 19+58							1			1			1																											
	36																																							
L 19+71	40																																							
L 19+48							1			1			1																											
	24																																							
L 20+00							1			1			1																											
L 20+00							1			1			1																											
L 20+50				4.500																																				
L 20+50							1	5.0	0.6	1			1																											
																																		1							
L 20+85							1			1			1																											
L 22+44							1			1			1																											
L 22+44							1			1			1																											
L 23+10							1			1			1																											
Y2 15+24							1			1			1																											
Y2 20+30							1			1			1																											
Y2 21+31							1			1			1																											
Y2 21+57							1																		1							1									
																																						0.4465			
Y1 13+13							1																				1	1												
L 19+20							1			1			1																											
							1																			1														SEE SHEET 2B-2 FOR STRUCTURE LOCATION
																																								RETAIN EXISTING 24" RCP
							1			1			1																											SEE SHEET 2B-2 FOR STRUCTURE LOCATION
																																								RETAIN EXISTING 24" RCP
Y1 12+24																																						0.045		
Y1 12+31																																						0.045		
Y1 11+54																																							159	
Y1 13+25																																							187	
Y1 14+80																																							120	
Y1 16+13																																							159	
Y1 15+28																																							36	
SHEET TOTALS				4.500			17	5.0	0.6	14			11	3												1	1	1			1					1		1		0.4465	0.090	661	
PROJECT TOTALS				4.500			43	5.8		34			20	14												1	6	6	1		1					2		1		0.4465	0.090	661	

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