CAR-ADAVIS

COMPUTED BY: Adam Davis, PE DATE: 02/23/2022

CHECKED BY: Ryan Mitchell. PE DATE: 02/23/2022

PROJECT NO.	SHEET NO.
BR-0029	3D-1

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 %	Drainage Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) 12	15	18	24	30	36	42	48
L 10+02	13 RT	0402		3376.7											
		0402	0401		3373.3	3373.2									
L 10+68	15 RT	0403		3382.4											
		0403	0402		3379.2	3373.6	0.3								
L 10+90	16 RT	0404		3384.0											
		0404	0403		3380.9	3379.2									
L 12+02	16 RT	0405		3391.6											
		0405	0404		3388.4	3380.9									
L 13+10	27 RT	0406		3396.0											
		0406	0405		3393.3	3388.4									
L 14+74	20 RT	0407		3403.8											
		0407	0408		3400.6	3400.0			64						
L 17+54	32 LT	0410		3409.8											
		0410	0409		3407.0	3402.8									
L 18+59	7 RT	0411													
Y1 11+50	13 LT	0412		3417.4											
		0412	0413		3415.3	3412.9									
Y1 11+27	8 LT	0413		3415.8											
		0413	0414		3412.8	3409.4									
Y1 12+73	21 RT	0000													
Y1 10+57	62 RT	0000													
L 18+73	22 RT	0000													
Y2 10+54	0 CL	0000													
SHEET TOTALS									64						
PROJECT TOTALS									64						

LINE & STATION	FROM	TO	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	54	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	54
L 10+02	0402																			
	0402	0401												36						
L 10+68	0403																			
	0403	0402											64							
L 10+90	0404																			
	0404	0403											20							
L 12+02	0405																			
	0405	0404											108							
L 13+10	0406																			
	0406	0405											104							
L 14+74	0407																			
	0407	0408																		
L 17+54	0410																			
	0410	0409		104																
L 18+59	0411													80						
Y1 11+50	0412																			
	0412	0413											32							
Y1 11+27	0413																			
	0413	0414											36							
Y1 12+73	0000																			
Y1 10+57	0000																			
L 18+73	0000																			
Y2 10+54	0000																			
SHEET TOTALS				104									364	116						
PROJECT TOTALS				104									364	116						

LINE & STATION	FROM	TO	15" SIDE DRAIN PIPE	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)) 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
L 10+02	0402								1									
	0402	0401																
L 10+68	0403								1									
	0403	0402																
L 10+90	0404								1									
	0404	0403																
L 12+02	0405								1									
	0405	0404																
L 13+10	0406								1									
	0406	0405																
L 14+74	0407								1									
	0407	0408																
L 17+54	0410								1									
	0410	0409																
L 18+59	0411																	
Y1 11+50	0412								1									
	0412	0413																
Y1 11+27	0413								1									
	0413	0414																
Y1 12+73	0000																	
Y1 10+57	0000																	
L 18+73	0000																	
Y2 10+54	0000																	
SHEET TOTALS									9									
PROJECT TOTALS									9									

LINE & STATION	FROM	TO	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. 840.20	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	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29
L 10+02	0402																1
	0402	0401															
L 10+68	0403																1
	0403	0402															
L 10+90	0404																1
	0404	0403															
L 12+02	0405																1
	0405	0404															
L 13+10	0406							1					1				
	0406	0405															
L 14+74	0407							1									1
	0407	0408															
L 17+54	0410							1					1				
	0410	0409															
L 18+59	0411																
Y1 11+50	0412		1														
	0412	0413															
Y1 11+27	0413																1
	0413	0414															
Y1 12+73	0000																
Y1 10+57	0000																
L 18+73	0000																
Y2 10+54	0000																
SHEET TOTALS			1					3					2				6
PROJECT TOTALS			1					3					2				6

LINE & STATION	FROM	TO	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	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	TEMP STEEL PLATE COVER MASONRY DRAINAGE		CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.		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 10+02	0402							1																
	0402	0401																						
L 10+68	0403							1																
	0403	0402																						
L 10+90	0404							1																
	0404	0403																						
L 12+02	0405							1																
	0405	0404																						
L 13+10	0406																							
	0406	0405																						
L 14+74	0407																							
	0407	0408																						
L 17+54	0410																							
	0410	0409																						
L 18+59	0411																							
Y1 11+50	0412																							
	0412	0413																						
Y1 11+27	0413							1																
	0413	0414																						
Y1 12+73	0000																						63	
Y1 10+57	0000																						32	
L 18+73	0000																						46	
Y2 10+54	0000																						20	
SHEET TOTALS								5															161	
PROJECT TOTALS								5															161	

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