COMPUTED BY:	BAJ	DATE:	6/4/20
CHECKED BY:	BJH	DATE:	6/4/20

PROJECT NO.	SHEET NO.
R-3830	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 %	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	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V 12	15	18	24	30	36	42	48	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	
			0532	0531		453.5	453.3			20								X	X																											
Y3 18+38	40	LT	0533		457.9																																		1							
			0533	0520		455.6	455.5			28								X	X																											
Y3 17+35	32	LT	0534		456.8																																		1							
			0534	0522		454.0	452.1			16								X	X																											
DRW4 10+99	26	RT	0535		457.3																																		1			1		1		
			0535	0536		454.0	453.8																40																							
DRW4 10+99	14	LT	0536		457.2																																		1			1			1	
			0536	0537		453.8	453.4																68																							
L 34+68	40	RT	0537		458.8																																		1	0.4		1		1		
			0537	0529		453.4	452.5																184																							
L 38+49	53	LT	0601		453.0																																		1	0.1		1			1	
			0601	0606		447.9	447.0	0.5																	96																					
L 38+49	65	LT	0602		453.5																																		1							
			0602	0601		448.6	448.4	1.1			12							X	X																											
L 38+88	65	LT	0603		452.6																																		1							
			0603	0602		449.1	448.6	1.0			36							X	X																											
L 39+47	48	LT	0604		452.6																																		1			1	1			
			0604	0601		449.6	448.7																96																							
L 40+20	44	LT	0605		453.0																																		1			1		1		
			0605	0604		450.0	449.6																72																							
L 38+49	46	RT	0606		453.2																																		1	1.7		1		1		
			0606	0607		446.5	446.4	0.3																		20																				
L 38+47	68	RT	0607		452.2																																		1	0.8						
			0607	0617		446.4	445.9	0.4																		104																				
L 39+47	52	RT	0608		452.5																																		1			1	1			
			0608	0606		448.6	447.7																96																							
L 40+09	53	RT	0609		452.7																																		1			1			1	
			0609	0608		449.2	448.6																60																							
L 40+09	63	RT	0610		452.2																																		1							
			0610	0609		449.3	449.2			12								X	X																											
L 39+80	63	RT	0611		451.8																																		1							
			0611	0610		449.5	449.3			28								X	X																											
L 40+58	53	RT	0612		453.2																																		1			1			1	
			0612	0609		449.7	449.2																48																							
L 40+71	62	RT	0613		453.5																																		1							
			0613	0612		449.8	449.7																16																							
L 40+62	71	RT	0614		453.0																																		1							
			0614	0613		450.7	449.8			12								X	X																											
Y5 11+03	22	RT	0615		453.2																																		1			1		1		
			0615	0613		450.0	449.8																52																							
Y5 11+03	20	LT	0616		453.2																																		1			1			1	
			0616	0615		450.2	450.0																									40															
L 38+38	170	RT	0617		450.2																																		1							
			0617	0618		445.9	445.6	0.4																		28																				
L 41+74	70	RT	0619		453.0																																		1							
			0619	0620		450.7	450.2																52																							
L 42+18	40	RT	0620		453.8																																		1			1		1		
			0620	0621		450.2	449.7																48																							
L 42+66	40	RT	0621		453.6																																		1			1		1		
SHEET TOTALS										116	48												832		96	152					40								25	3.0		14	2	7	5	

STRUCTURE NUMBER FROM	TO	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	CONCRETE TRANSITIONAL SECTION C.B. STD. 852.05	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 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	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	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	TEMP STEEL COVER, SEE DETAIL SHEET 2C-12	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	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.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.	15" DRAINAGE PIPE ELBOW	18" DRAINAGE PIPE ELBOW	SPECIAL D.I., SEE DETAIL SHEET 2C-6	G.D.I. TYPE 'A' MIN. DEPTH, SEE DETAIL SHEET 2C-7	T.B. 2GI TYPE 'A', SEE DETAIL SHEET 2C-8	BERM DRAINAGE OUTLET STD. 850.10 (SY)	BERM DRAINAGE OUTLET STD. 850.11 (SY)	PIPE CLEANOUT EA	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
0532	0531																																													
0533					1	1																																								
0533	0520																																													
0534					1	1																																								
0534	0522																																													
0535																																														
0535	0536																																													
0536																																														
0536	0537																																													
0537																																														
0537	0529																																													
0601																																														
0601	0606																																													
0602					1	1																																								
0602	0601																																													
0603																1	1																				1									3GI SPECIAL DESIGN
0603	0602																																													
0604																																														
0604	0601																																													
0605																																														
0605	0604																																													
0606																																														
0606	0607																																													
0607					1	1																																								
0607	0617																																													
0608																																														
0608	0606																																													
0609																																														
0609	0608																																													
0610					1	1																																								
0610	0609																																													
0611					1	1																																								
0611	0610																																													
0612																																														
0612	0609																																													
0613																				1							1																			JB W/ MH FRAME & COVER
0613	0612																																													
0614					1	1																																								
0614	0613																																													
0615																																														
0615	0613																																													
0616																																														
0616	0615																																													
0617					1	1																																								
0617	0618																																													
0619					1	1																																								
0619	0620																																													
0620																																														
0620	0621																																													
0621																																														
SHEET TOTALS					9	9										1	1			1							1										1									

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

TGSZJR-LAPTOP