KCI-2M663X2

COMPUTED BY: Will Hines, Jr., PE DATE: 4/12/2018

CHECKED BY: Joshua G. Dalton, PE DATE: 4/12/2018

PROJECT NO.	SHEET NO.
R-5020B	3D-5

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 %
			0661	0656		65.3	65.1	
L 195+10	21	LT	0662					
L 209+44	40	LT	0701		84.3			
			0701	0704		81.0	78.0	
Y26 11+34	12	RT	0702		81.6			
			0702	0703		78.4	78.3	
Y26 11+34	11	LT	0703		81.7			
			0703	0704		78.3	78.0	
Y26 12+36	17	LT	0704		82.7			
			0704	0707		78.0	77.9	
L 210+04	39	RT	0705		83.5			
			0705	0707		78.2	77.6	0.7
L 210+38	39	LT	0707		82.9			
			0707	0709		77.6	73.1	1.1
			0708	0709		73.4	73.3	
L 213+12	54	LT	0708		76.6			
L 213+16	40	LT	0709		76.9			
			0709	0713		72.6	69.9	0.3
L 213+84	54	RT	0710		75.6			
			0710	0711		72.4	70.9	
L 213+84	39	RT	0711		74.1			
			0711	0713		70.9	70.6	
L 213+86	39	LT	0713		74.1			
			0713	0716		69.9	69.2	0.4
L 215+06	54	LT	0714		73.3			
			0714	0715		70.1	70.0	
L 215+32	53	LT	0715		73.3			
			0715	0716		70.0	70.0	
L 215+35	40	LT	0716		73.5			
			0716	0718		68.7	68.3	
L 216+86	53	LT	0717		72.8			
			0717	0718		70.5	69.5	
L 216+87	40	LT	0718		73.0			
			0718	0719		68.3	67.8	
			0719	0728		67.8	66.3	
L 217+72	40	LT	0719		72.3			
L 216+50	40	RT	0721		72.6			
			0721	0722		69.4	69.0	
			0722	0725		69.0	68.1	
L 217+72	39	RT	0722		72.3			
L 217+72	53	RT	0723		72.7			
			0723	0722		70.4	69.0	
			0729	0714		71.3	70.1	
L 220+10	40	RT	0730		72.9			
			0730	0725		69.6	68.1	
L 220+00	40	LT	0731		72.9			
			0731	0728		69.6	67.6	
L 209+95	66	RT	0732		83.8			
			0732	0705		78.4	78.3	0.5
L 209+00	21	LT	0736					

Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC)

FROM	TO	4	15	18	24	30	36	42	48	4 Irrigation Conduit	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
0662										44	X	X	X	X	
0704	0707		44									X	X		
0708	0709		16									X	X		
0710	0711		16								X	X	X		
0715	0716		16									X	X		
0717	0718		12									X	X		
0723	0722		12								X	X	X		
0729	0714		36									X	X		
0732	0705			28								X	X		
0736										44	X	X	X	X	
SHEET TOTALS			152	28						88					

FROM	TO	R.C. PIPE CLASS III 15	18	24	30	36	42	48	R.C. PIPE CLASS IV 15	18	24	30	36	42	48
0661	0656														80
0701	0704								72						
0702	0703								20						
0703	0704								100						
0705	0707									84					
0707	0709									276					
0709	0713										68				
0711	0713								76						
0713	0716										148				
0714	0715								24						
0716	0718											152			
0718	0719											84			
0719	0728											80			
0721	0722								120						
0722	0725								80						
0730	0725								156						
0731	0728								148						
SHEET TOTALS									796	360	216	316			80

FROM	TO	DUCTILE IRON PIPE TYPE 3 SEALED PIPE SYSTEM SEE SPECIAL PROVISIONS 30	36 CLASS 150	42 CLASS 150	48		QUANTITIES FOR SEALED DRAINAGE STRUCTURES NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B) 0' THRU 5'	A 5' THRU 10'	B 10' & ABOVE	BOOTS	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	
0701														1			1			1	
0702														1			1			1	
0703														1			1		1		
0704														1			1		1		
0705														1	0.3		1		1		
0707														1	0.3		1			1	
0708														1			1	1			
0709														1			1			1	
0710														1							
0711														1			1		1		
0713														1			1			1	
0714														1			1		1		
0715														1			1			1	
0716														1			1			1	
0717														1							
0718														1			1			1	
0719														1			1	1			
0721														1			1		1		
0722														1			1	1			
0723														1							
0730														1			1			1	
0731														1			1		1		
0732														1	0.4						
SHEET TOTALS														23	1.0		19	3	7	9	

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	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	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.	SLUICE GATE (DRY DETENTION BASIN)	ADJUST D.I.	15" DRAINAGE PIPE ELBOW		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
0662																																		4" PVC conduit for irrigation
0710					1	1																												
0717					1	1																												
0723					1	1																												
0732					1	1																												
0736																																		4" PVC conduit for irrigation
SHEET TOTALS					4	4																												

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