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-6

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	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) 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
L 223+18	40	LT	0801		72.8																	
			0801	0843		69.6	69.2															
L 224+99	51	RT	0802		72.0																	
			0802	0807		69.4	69.2															
Y28 17+75	34	RT	0804		74.0																	
			0804	0805		68.2	67.8															
Y28 16+35	34	RT	0805		73.4																	
			0805	0806		67.8	67.5								68				X	X		
L 228+05	51	RT	0806		72.7																	
			0806	0847		67.0	66.7															
			0807	0816		66.4	65.5															
L 225+90	51	RT	0807		71.9																	
Y28 19+05	34	LT	0808		75.1																	
			0808	0871		69.1	69.0															
Y28 17+08	34	LT	0810		73.9																	
			0810	0812		70.7	68.8															
Y28 16+35	26	LT	0812		74.4																	
			0812	0870		68.4	68.3															
L 230+03	64	RT	0813		74.4																	
			0813	0814		71.2	70.9			40									X	X		
L 229+65	52	RT	0814		74.2																	
			0814	0815		70.9	69.0	0.7		28									X	X		
Y28 16+04	51	LT	0815		74.8																	
			0815	0812		67.2	67.1															
L 225+91	6	LT	0816		73.1																	
			0816	0865		65.5	65.5															
L 233+63	60	RT	0818		79.8																	
			0818	0819		77.6	76.3			20									X	X		
L 233+64	40	RT	0819		79.6																	
			0819	0828		76.3	73.9															
L 233+13	65	LT	0824		74.8																	
			0824	0825		74.8	74.7				28								X	X		
L 233+07	40	LT	0825		78.8																	
			0825	0827		73.7	72.0	0.3														
L 232+30	64	LT	0826		75.6																	
			0826	0827		72.6	72.5					24							X	X		
L 232+30	39	LT	0827		77.9																	
			0827	0830		71.5	71.1															
L 231+71	39	RT	0828		77.1																	
			0828	0814		73.9	70.9															
			0829	0830		73.0	72.9			32									X	X		
L 231+69	64	LT	0829		76.3																	
L 231+46	39	LT	0830		76.8																	
			0830	0831		71.1	68.8															
L 230+42	39	LT	0831		75.5																	
			0831	0832		68.8	68.6															
L 229+64	40	LT	0832		74.5																	
			0832	0864		68.6	67.1							20					X	X		
Y28 13+89	27	LT	0833		73.8																	
			0833	0835		68.8	67.9															
								SHEET TOTALS		120	28	24		20	68							

(SIZE / THICKNESS OR GAUGE)

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	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
0801																							
0801	0843								108														
0802																							
0802	0807								92														
0804																							
0804	0805													140									
0805																							
0805	0806																						
0806																							
0806	0847														104								
0807	0816														56								
0807																							
0808																							
0808	0871													20									
0810																							
0810	0812								72														
0812																							
0812	0870												28										
0813																							
0813	0814																						
0814																							
0814	0815																						
0815																							
0815	0812												40										
0816																							
0816	0865														8								
0818																							
0818	0819																						
0819																							
0819	0828								192														
0824																							
0824	0825																						
0825																							
0825	0827											76											
0826																							
0826	0827																						
0827																							
0827	0830												84										
0828																							
0828	0814								208														
0829	0830																						
0829																							
0830																							
0830	0831												104										
0831																							
0831	0832												76										
0832																							
0832	0864																						
0833																							
0833	0835								48														
SHEET TOTALS									720			76	332	160	168								

FROM	TO	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	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05
0801					1			1			1			
0801	0843													
0802					1			1		1				
0802	0807													
0804					1	0.8		1			1			
0804	0805													
0805					1	0.7		1			1			
0805	0806													
0806					1	0.6		1			1			
0806	0847													
0807	0816													
0807					1	0.5		1	1					
0808					1	1.0		1		1				
0808	0871													
0810					1			1		1				
0810	0812													
0812					1	1.0								
0812	0870													
0813					1			1	1					
0813	0814													
0814					1			1			1			
0814	0815													
0815					1	2.6								
0815	0812													
0816					1	2.7								
0816	0865													
0818					1									
0818	0819													
0819					1			1			1			
0819	0828													
0824														
0824	0825													
0825					1	0.1		1		1				
0825	0827													
0826					1									
0826	0827													
0827					1	1.4		1		1				
0827	0830													
0828					1			1			1			
0828	0814													
0829	0830													
0829					1			1	1					
0830					1	0.7		1		1				
0830	0831													
0831					1	1.7		1		1				
0831	0832													
0832					1	0.9		1		1				
0832	0864													
0833					1			1			1			
0833	0835													
SHEET TOTALS					24	14.7		19	3	8	8			

FROM	TO	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
0801																														
0801	0843																													
0802																														
0802	0807																													
0804																														
0804	0805																													
0805																														
0805	0806																													
0806																														
0806	0847																													
0807	0816																													
0807																														
0808																														
0808	0871																												16	Remove 15" RCP
0810																														
0810	0812																													
0812																1			1											
0812	0870																													
0813																														
0813	0814																													
0814																														
0814	0815																													
0815															1				1											
0815	0812																													
0816																1			1											
0816	0865																													
0818		1	1																											
0818	0819																													
0819																														
0819	0828																													
0824																														
0824	0825																													
0825																														
0825	0827																													
0826		1	1																											
0826	0827																													
0827																														
0827	0830																													
0828																														
0828	0814																													
0829	0830																													
0829																														
0830																														
0830	0831																													
0831																														
0831	0832																													
0832																														
0832	0864																													
0833																														
0833	0835																													
SHEET TOTALS		2	2												1	2			3										16	

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