RKA-RAL-DES-14

COMPUTED BY:	Karen Hefner, PE	DATE:	06/20/2019
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-5827	3D-3

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	84		DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
Y6 203+51	22 LT	0805																
Y6 203+50	33 RT	0806		370.1														
		0806	0807		363.7	363.5												
Y6 203+50	40 RT	0807		370.2														
Y6 204+15	31 RT	0809							20									
Y6 203+65	33 RT	0810							20									
SHEET TOTALS									40									
PROJECT TOTALS									64									

LINE & STATION / SIZE / THICKNESS OR GAUGE	C. S. PIPE 12	15	18	24				R. C. PIPE CLASS III 12	15	18	24			R. C. PIPE CLASS IV 12	15	18	24	30		R. C. PIPE CLASS V 12	84		STRUCTURAL PLATE PIPE 60	66	72		
THICKNESS OR GAUGE	.064	.064	.064	.064																							
											16																
Y6 203+51																											
Y6 203+50																											
																	8										
Y6 203+50																											
Y6 204+15																											
Y6 203+65																											
SHEET TOTALS											16						8										
PROJECT TOTALS											16			88	1244	92	1908	1088									

LINE & STATION / SIZE / THICKNESS OR GAUGE	### R.C. PIPE CULVERTS, CONTRACTOR DESIGN		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. (SEE DETAIL SHEET 2C-5)	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	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	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	ADJUST C.B.	ADJUST D.I.	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
Y6 203+51																																																		0.5526			
Y6 203+50						1	1.4																																		1	1										REPLACE CB
Y6 203+50						1	1.7		1		1																																									
Y6 204+15																																																				23	
Y6 203+65																																																				21	
SHEET TOTALS						2	3.1		1		1																														1	1							0.5526		44	
PROJECT TOTALS						48	46.5		41	5	20	16			16	1			2	1				1		2			1	2	3		1						1.1052		123	
																																																		SAY 1.5		SAY 130	

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