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TICIVILWORK717

COMPUTED BY:	MSP	DATE:	6/30/2017
CHECKED BY:	EV	DATE:	6/30/2017

PROJECT NO.	SHEET NO.
U-4751	3D-25

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	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Side Drain Pipe (RCP, CSP, CAAP, HDPE, or PVC) 12	15	18	24	30	36	DO NOT USE CSP	DO NOT USE HDPE	DO NOT USE PVC	CAAP 12 .064	CAAP 15 .064	CAAP 18 .064
			2022	2023		69.0	68.4			192					X					
L 229+50	0	CL	2023		73.3															
			2023	2024		68.4	68.1													
Y8LPB 11+98	14	LT	2024		77.6															
			2024	2025		68.1	39.0	0.8											164	
Y8 95+03	0	CL	2026		42.5															
Y8RPDB 36+75	21	LT	2027		66.7															
			2027	2028		62.9	40.9	0.5											112	
Y8LPB 18+50	14	LT	2029		49.4															
			2029	2030		45.7	41.1													
Y8LPB 22+51	14	LT	2031		45.1															
			2031	2034		41.3	39.0			40					X					
Y8LPB 23+00	14	LT	2032		45.3															
			2032	2031		41.5	41.3													
Y8LPB 22+00	14	LT	2033		45.3															
			2033	2031		41.5	41.3													
L 220+26	9	LT	2035		58.8															
			2035	2011		55.2	48.5	0.8		228					X					
Y8 96+05	11	RT	2036		44.7															
			2036	2026		39.2	38.4			104					X					
L 224+42	201	LT	2038		37.3															
			2038	2037		37.3	36.7													
Y8RPC 21+50	62	RT	2039		42.5															
			2039	2039A		42.5	42.2													
Y8RPDB 50+63	236	LT	2040		37.9															
			2040	2040A		37.9	36.9	0.3												
Y8 94+44	88	RT	2044		37.0															
			2044	2045		37.0	36.9	0.3												
Y8 94+44	79	RT	2045		36.9															
Y8RPDB 22+50	55	LT	2046		42.7															
			2046	2046A		42.7	42.3													
Y8RPDB 24+93	89	RT	2047		42.1															
			2047	2047A		42.1	41.7													
Y8RPD 15+00	197	LT	2048		42.0															
			2048	2048A		42.0	42.0													
Y8RPC 32+00	25	LT	2101		54.8															
			2101	2102		51.1	49.2			96					X					
Y8RPC 32+93	25	LT	2102		52.9															
			2102	2103		49.2	41.7												40	
Y8RPCA 62+83	43	RT	2104		43.7															
			2104	2105		38.4	37.9						140		X					
Y8RPCA 51+00	62	RT	2108		42.6															
			2108	2108A		42.6	41.7													
Y8RPCA 53+50	64	RT	2109		41.4															
			2109	2109A		41.4	41.2													
Y8RPCA 56+00	61	RT	2110		41.4															
			2110	2110A		41.4	41.3													
Y8RPCA 58+50	61	RT	2111		41.3															
			2111	2111A		41.3	41.1													
Y8RPCA 63+37	36	LT	2112		38.1															
							SHEET TOTALS			660			140						316	

FROM	TO	R.C. PIPE CLASS III 12	15	18	24	30	36	42	48	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	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY
2022	2023																											
2023																												
2023	2024										84																	
2024																												
2024	2025																											
2026																												
2027																												
2027	2028																											
2029																												
2029	2030										72																	
2031																												
2031	2034																											
2032																												
2032	2031										48																	
2033																												
2033	2031										48																	
2035																												
2035	2011																											
2036																												
2036	2026																											
2038																										3.400		
2038	2037																							392				
2039																												
2039	2039A														116													
2040																												
2040	2040A													324														
2044																										4.500		
2044	2045															12												
2045																												
2046																												
2046	2046A														112													
2047																												
2047	2047A														168													
2048																												
2048	2048A														284													
2101																												
2101	2102																											
2102																												
2102	2103																											
2104																												
2104	2105																											
2108																												
2108	2108A														144													
2109																												
2109	2109A														124													
2110																												
2110	2110A														108													
2111																												
2111	2111A														104													
2112																												
SHEET TOTALS											252			324	1160	12								392		7.900		

FROM	TO	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	Pipe Clean Out	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 W/ 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/ 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	SPECIAL TBJB W/MH	ADJUST C.B.	ADJUST D.I.	15" CAAP ELBOW	18" CAAP ELBOW	8" SLUICE GATE	MODIFIED CONC. FLUME	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
2022	2023																																									
2023		1															1					1																				
2023	2024																																									
2024		1	4.5		1		1																																			
2024	2025																																	2								
2026		1	3.4														1					1																				
2027		1															1			1																						
2027	2028																																	2								
2029		1			1			1																																		
2029	2030																																									
2031		1			1	1																																				
2031	2034																																									
2032		1			1		1																																			
2032	2031																																									
2033		1			1			1																																		
2033	2031																																									
2035		1																								1				1												
2035	2011																																									
2036		1	0.5																							1				1												
2036	2026																																									
2038																																										
2038	2037																																									
2039																																										
2039	2039A																																									
2040																																										
2040	2040A																																									
2044																																										
2044	2045																																									
2045																																						0.8856			
2046																																										
2046	2046A																																									
2047																																										
2047	2047A																																									
2048																																										
2048	2048A																																									
2101		1															1			1																						
2101	2102																																									
2102		1															1			1																						
2102	2103																																	2								
2104		1	0.3													1						1																				
2104	2105																																									
2108																																										
2108	2108A																																									
2109																																										
2109	2109A																																									
2110																																										
2110	2110A																																									
2111																																										
2111	2111A																																									
2112																																										
SHEET TOTALS		13	8.7		5	1	2	2								1	5			3		3				2				2				6					0.8856			

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