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WEL-JPCKX43

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CHECKED BY: DATE:

PROJECT NO.	SHEET NO.
HB-0002	3D-1

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 %	Side Drain Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) SIZE 15	18	24	30	36	42	Side Drain Pipe THICKNESS OR GAUGE: DO NOT USE RCP	DO NOT USE CSP	DO NOT USE HDPE	DO NOT USE PVC	DO NOT USE PP PIPE
L 309+70	2	RT	0404		2670.8														
			0404	0416		2666.8	2662.4	0.3											
L 311+35	3	LT	0415		2666.3														
			0415	0416		2662.2	2662.1												
L 311+35	2	RT	0416		2668.3														
			0416	0418		2662.1	2661.3												
L 311+35	45	RT	0418		2667.5														
			0418	0420		2661.3	2661.0												
L 310+32	45	RT	0420		2669.4						20				X				
			0420	0424		2661.0	2658.0												
L 308+50	57	RT	0421		2672.6														
			0421	0424		2669.8	2658.0												
L 310+32	65	RT	0424		2661.0														
			0424	0425		2658.0	2654.2	0.4											
L 310+50	93	LT	0431		2671.9														
			0431	0432		2670.6	2662.9		24						X				
L 310+50	70	LT	0432		2665.9														
			0432	0433		2662.9	2661.8	0.3											
L 311+00	77	LT	0433		2664.8														
			0433	0435		2661.8	2647.7	0.3			84				X				
EBL 12+59	15	LT	0504		2663.6														
			0504	0506		2657.6	2654.0												
L 315+15	1	RT	0505		2660.2														
			0505	0506		2654.2	2654.0												
EBL 13+09	15	LT	0506		2662.8														
			0506	0509		2654.0	2653.7												
EBL 13+10	25	RT	0509		2660.9														
			0509	0510		2654.7	2636.6		56						X				
L 320+35	12	RT	0511		2654.3														
			0511	0512		2651.3	2651.0												
EBL 18+25	26	RT	0512		2654.2														
			0512	0513		2651.0	2627.2	0.4			64				X				
L 318+98	12	RT	0515		2654.8														
			0515	0516		2648.9	2648.8												
EBL 16+90	14	LT	0516		2657.4														
			0516	0518		2648.8	2648.3												
EBL 16+43	14	LT	0518		2657.8														
			0518	0519		2648.3	2647.3												
EBL 16+43	25	RT	0519		2655.7														
			0519	0520		2647.3	2626.6		68						X				
L 323+00	84	LT	0525		2642.3														
			0525	0552		2639.3	2639.2												
Y2 15+90	20	RT	0526		2641.6														
			0526	0527		2637.2	2637.1	0.4											
Y2 15+90	15	RT	0527		2641.5														
			0527	0528		2637.1	2632.0	0.4											
Y2 15+45	15	RT	0528		2640.5														
			0528	0530		2632.0	2631.5	0.4											
L 314+27	102	LT	0541		2656.1														
			0541	0542		2652.9	2641.4		36						x				
SHEET TOTALS									184	168									

LINE & STATION	C. S. PIPE SIZE 12	15	18	24	R. C. PIPE CLASS III SIZE 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV SIZE 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V SIZE 12	15	18	24	30	36	42	48
	THICKNESS OR GAUGE .064	.064	.064	.064																								
L 309+70																												
															164													
L 311+35																												
															8													
L 311+35																												
																40												
L 311+35																												
																100												
L 310+32																												
L 308+50																												
L 310+32																												
																44												
L 310+50																												
L 310+50																												
EBL 12+59																												
L 315+15																												
EBL 13+09																												
EBL 13+10																												
L 320+35																												
																48												
EBL 18+25																												
L 318+98																												
EBL 16+90																												
EBL 16+43																												
EBL 16+43																												
L 323+00																												
Y2 15+90																												
Y2 15+90																												
																44												
Y2 15+45																												
L 314+27																												
SHEET TOTALS															376	276							180					

LINE & STATION	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) A: 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	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.24	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 PLATE COVER MASONRY DRAINAGE	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING D.I. TO J.B.	ADJUST D.I.	15" SIDE DRAIN PIPE ELBOW	18" SIDE DRAIN PIPE ELBOW	15" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
L 309+70		1									1						1	1														
																														5		FLOWABLE FILL 68 LF of 18" CMP
L 311+35		1															1	1														
L 311+35		1	1.3															1	1													
L 311+35		1	1.3															1	1													
L 310+32		1	3.4															1	1													
																													2			
L 308+50		1									1						1															
L 310+32		1									1						1															
L 310+50																														1		
																													2			
L 310+50		1									1						1															
																													2			
L 311+00		1									1						1															
																													2		13	REMOVE 13 LF OF 8" CMP
EBL 12+59		1	1.0															1	1													
L 315+15		1	1.0															1	1													
EBL 13+09		1	3.8															1	1													
EBL 13+10		1	2.3															1	1													
																													2			
L 320+35		1															1	1														
EBL 18+25		1																1	1													
																													2			
L 318+98		1	1.0															1	1													
EBL 16+90		1	3.6															1	1													
EBL 16+43		1	4.5															1	1													
EBL 16+43		1	3.7															1	1													
																													2			
L 323+00		1									1						1															
Y2 15+90		1									1	1																				
Y2 15+90		1											1	1																		
Y2 15+45		1	3.5										1	1																		
																															84	REMOVE 84 LF OF 18" CMP
L 314+27		1									1	1																				
																													2			
SHEET TOTALS		24	30.2								8	2	1	4	3		2	14	14								8	6		1	5		97	

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