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R4L-WS077

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-4705	3D-1

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) 15	18	24	30	36	42	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
Y1 22+47	31 LT	0401						32							X	X		X
Y1 22+08	37 RT	0402						36							X	X		X
Y1 21+93		0403																
Y1 20+68	38 RT	0404						28							X	X		X
Y1 19+24	39 RT	0405						28							X	X		X
L 11+33	37 LT	0406							28						X	X		X
L 13+50	35 RT	0501						40							X	X		X
L 13+93	35 LT	0502							40						X	X		X
L 15+24		0503			30.9	30.5												
L 18+19	34 LT	0504							28						X	X		X
L 19+18	33 LT	0505						28							X	X		X
L 20+19	32 LT	0506						28							X	X		X
L 21+56		0507			27.8	27.3												
L 24+69	36 LT	0508								40					X	X		X
L 20+25	RT	0509						40							X	X		X
L 32+46		0601			32.1	31.5												
L 35+86	34 LT	0602							36						X	X		X
L 38+69	32 LT	0701						40							X	X		X
L 41+10	36 RT	0702						32							X	X		X
L 43+59	34 LT	0703							32						X	X		X
L 61+84	36 LT	0801						32							X	X		X
L 61+86	35 RT	0802						32							X	X		X
L 62+50		0803			27.6	27.4												
L 64+09		0901			27.2	26.7												
L 64+65	38 RT	0902						32							X	X		X
L 65+00	41 LT	0903								32					X	X		X
L 72+36	42 LT	0904						48							X	X		X
L 76+78		0905			26.9	26.7												
L 79+75		1001			28.9	27.8												
L 99+10	32 LT	1101						24							X	X		X
L 100+39	32 LT	1102						32							X	X		X
L 102+68	32 LT	1103						40							X	X		X
Y2 133+24	31 LT	1104						36							X	X		X
Y2 12+91	28 RT	1105						32							X	X		X
L 107+35	34 RT	1201								36					X	X		X
L 109+65		1202			32.2	32.1												
L 111+41	37 LT	1203						28							X	X		X
L 112+15	32 RT	1204						28							X	X		X
L 113+69	33 RT	1205							32						X	X		X
l 114+03		1206			32.1	31.9												
L 114+06		1207			32.1	31.9												
L 115+04		1208			32.0	31.7												
L 115+07		1209			32.0	31.7												
L 124+71		1301			34.6	34.5												
L 127+13	32 LT	1302						32							X	X		X
L 128+06	33 RT	1303						36							X	X		X
L 130+78	32 RT	1401						36							X	X		X
L 131+79	32 RT	1402						28							X	X		X
L 132+79	32 RT	1403						28							X	X		X
L 133+79	32 RT	1404						32							X	X		X
						SHEET TOTALS		888	196	108								

LINE & STATION	C. S. PIPE 15 .064	18 .064	24 .064	30 .079	36 .079	42 .109	48 .109		R. C. PIPE CLASS III 15	18	24	30	36	42	48		R. C. PIPE CLASS IV 15	18	24	30	36	42	48		R. C. PIPE CLASS V 15	18	24	30	36	42	48	
Y1 22+47																																	
Y1 22+08																																	
Y1 21+93														76																			
Y1 20+68																																	
Y1 19+24																																	
L 11+33																																	
L 13+50																																	
L 13+93																																	
L 15+24																		64															
L 18+19																																	
L 19+18																																	
L 20+19																																	
L 21+56																							84										
L 24+69																																	
L 20+25																																	
L 32+46																		60															
L 35+86																																	
L 38+69																																	
L 41+10																																	
L 43+59																																	
L 61+84																																	
L 61+86																																	
L 62+50																			60														
L 64+09																							56										
L 64+65																																	
L 65+00																																	
L 72+36																																	
L 76+78													76																				
L 79+75											64																						
L 99+10																																	
L 100+39																																	
L 102+68																																	
Y2 133+24																																	
Y2 12+91																																	
L 107+35																																	
L 109+65																		80															
L 111+41																																	
L 112+15																																	
L 113+69																																	
l 114+03																		64															
L 114+06																		64															
L 115+04																		68															
L 115+07																		68															
L 124+71																				56													
L 127+13																																	
L 128+06																																	
L 130+78																																	
L 131+79																																	
L 132+79																																	
L 133+79																																	
SHEET TOTALS											64	76		76				468	60	56		140											

LINE & STATION	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	18" WELDED STEEL PIPE 0.25" THICK, IN SOIL	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)) A: 0' THRU 5' EACH	A: 5' THRU 10' LIN. FT.	A: 10' AND ABOVE LIN. FT.	B: 0' THRU 5' EACH	B: 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	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/ 2 GRATES STD. 840.20	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	J.B. STD. 840.31 OR STD. 840.32	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	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
Y1 22+47																																26	
Y1 22+08																																30	
Y1 21+93					4.500																											32	
Y1 20+68																																20	
Y1 19+24																																28	
L 11+33																																23	
L 13+50																																24	
L 13+93																																96	
L 15+24																																	
L 18+19																																28	
L 19+18																																24	
L 20+19																																16	
L 21+56					6.000																											76	
L 24+69																																40	
L 20+25																																	
L 32+46																																44	
L 35+86																																40	
L 38+69																																48	
L 41+10																																40	
L 43+59																																44	
L 61+84																																20	
L 61+86																																20	
L 62+50																																	
L 64+09					6.000																											60	
L 64+65																																	
L 65+00																																	
L 72+36																																	
L 76+78																																	
L 79+75																																	
L 99+10																																24	
L 100+39																																36	
L 102+68																																60	
Y2 133+24																																24	
Y2 12+91																																	
L 107+35																																24	
L 109+65																																	
L 111+41																																20	
L 112+15																																20	
L 113+69																																60	
l 114+03																																42	
L 114+06																																	
L 115+04																																	
L 115+07																																	
L 124+71					3.400																											20	
L 127+13																																20	
L 128+06																																24	
L 130+78																																20	
L 131+79																																20	
L 132+79																																20	
L 133+79																																20	
SHEET TOTALS					19.900																											1233	

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