LCURTISH

COMPUTED BY:	D. SVISTUN	DATE:	1-27-20
CHECKED BY:	K. HIGGINS	DATE:	1-27-20

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
BR-0047	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) 12	15	18	24	C. S. PIPE 12 .064	15 .064	18 .064	24 .064	R. C. PIPE CLASS III 12	15	18	24	R. C. PIPE CLASS IV 12	15	18	R. C. PIPE CLASS V 12	15	18	WELDED STEEL PIPE 18 .25		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
L 16+60	23 LT	0403		1056.7																												1	5.0	2.3					
		0403	0404		1044.4	1030.4							68																										
L 19+45	23 LT	0405		1056.9																												1	1.4						
		0405	0406		1050.5	1044.5							28																										
Y2 15+31	63 LT	0407		1033.3																												1							
		0407	0404		1030.6	1030.4												36																					
Y2 11+50	86 RT	0408		1032.9																												1							
		0408	0409		1028.1	1028.0													24																				
Y2 11+50	62 RT	0409		1037.7																												1	4.7						
		0409	0412		1028.0	1027.6													92																				
Y2 12+50	86 LT	0410		1031.8																												1							
		0410	0411		1028.8	1028.5																				88													
Y2 12+45	0 CL	0411		1036.0																												1	2.5						
		0411	0412		1028.5	1028.1																				64													
Y2 12+43	63 RT	0412		1035.0																												1	2.3						
		0412	0413		1027.6	1027.2													120																				
Y2 13+65	63 RT	0413		1034.5																												1	2.3						
		0413	0414		1027.2	1026.8													88																				
L 25+65	48 RT	0504		1044.5																												1							
		0504	0505		1042.8	1042.8											4																						
L 18+71	45 LT																																						
L 24+30	20 LT																																						
L 25+40	20 LT																																						
L 25+82	26 RT																																						
L 24+30	40 LT	0506															28																						
Y2 13+26	LT																																						
Y2 13+44	RT																																						
L 25+47	30 LT	0507																				76																	
L 25+42	87 RT																																						
L 18+47	18 RT																																						
Y5 10+49	13 RT	0505		1044.5																																			
SHEET TOTALS													96				32	36	324			76				152						10	18.2	2.3		1			
PROJECT TOTALS													96				32	36	324			76				152						10	21.2			1			

LINE & STATION	D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	CONCRETE TRANSITIONAL SECTION	OPEN THROAT C.B. STDS. 840.04, 840.05, OR 840.45	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STDS. 840.17, 840.25, OR 840.45	G.D.I. TYPE "B" STDS. 840.18, 840.27, OR 840.45	G.D.I. TYPE "D" STDS. 840.19, 840.28, OR 840.45	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	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	J.B. STD. 840.31, STD. 840.32, OR STD. 840.45	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35 OR STD. 840.46	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	15" C.S. ELBOW	8" HDPE ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	MINIMUM DEPTH CONCRETE C.B. STD. 840D02	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
L 16+60																		1																							
L 19+45																		1																							
Y2 15+31										1		1																													
Y2 11+50				1																																					
Y2 11+50																				1																					
Y2 12+50									1				1																												
Y2 12+45									1				1																												
Y2 12+43								1			1																														
Y2 13+65								1			1																														
L 25+65																																						1			
L 18+71																																									215
L 24+30																																									31
L 25+40																																									86
L 25+82																																									44
L 24+30																																									
Y2 13+26																																							3		
Y2 13+44																																							4		
L 25+47																																									
L 25+42																																		3							5
L 18+47																																									
Y5 10+49																																								0.3990	
SHEET TOTALS				1				2	2	1		3	2				2		1			2				1	4	3				1		7	0.3990		381
PROJECT TOTALS				1				2	2	1		3	2				2		1			2				1	4	3				1		7	0.3990		381

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