COMPUTED BY:	DJS	DATE:	05/24/2023
CHECKED BY:	JGD	DATE:	05/24/2023

PROJECT NO.	SHEET NO.
U-5312	3D-13

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	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) 15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	DO NOT USE PP PIPE
LSBL 59+10	19 RT																			
Y4 11+63	31 LT																			
Y5 12+30	32 RT																			
Y5 12+62	40 LT																			
Y7 10+98	69 RT																			
Y10 11+16	47 LT																			
Y10 11+52	9 RT																			
Y10 20+08	85 LT																			
Y10 21+67	38 LT																			
Y10 25+70	38 LT																			
Y11 10+93	122 RT																			
Y11 10+95	8 LT																			
Y11 14+98	26 LT																			
Y11 17+16	62 RT																			
SHEET TOTALS																				
PROJECT TOTALS								188	176	276		12								

LINE & STATION	C. S. PIPE 15 .064	18 .064	24 .064	30 .079	36 .079	42 .109	48 .109	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
LSBL 59+10																									
Y4 11+63																									
Y5 12+30																									
Y5 12+62																									
Y7 10+98																									
Y10 11+16																									
Y10 11+52																									
Y10 20+08																									
Y10 21+67																									
Y10 25+70																									
Y11 10+93																									
Y11 10+95																									
Y11 14+98																									
Y11 17+16																									
SHEET TOTALS																									
PROJECT TOTALS	588	452	340	424	44				1332	1592	1600	488	2156		20		6204	1496	2568	2500	1940				

LINE & STATION	36" WELDED STEEL PIPE 0.532" THICK, GRADE B (50% IN SOIL, 50% NOT IN SOIL)	48" WELDED STEEL PIPE 0.688" THICK, GRADE B (50% IN SOIL, 50% NOT 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)) 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
LSBL 59+10															
Y4 11+63															
Y5 12+30															
Y5 12+62															
Y7 10+98															
Y10 11+16															
Y10 11+52															
Y10 20+08															
Y10 21+67															
Y10 25+70															
Y11 10+93															
Y11 10+95															
Y11 14+98															
Y11 17+16															
SHEET TOTALS															
PROJECT TOTALS	388	256	12.800			221	157.3		21	6	8	7		59	

LINE & STATION	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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. (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.D.I. STD. 840.35	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING D.I. TO J.B.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	42" C.S. ELBOW	BERM DRAINAGE OUTLET STD. 850.10(4" CONCRETE	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
LSBL 59+10																									184	Remove 15" RCP
Y4 11+63																									124	Remove 15" RCP
Y5 12+30																									20	Remove 20 LF 18" CMP
Y5 12+62																						9				Flow Fill 18" CMP
Y7 10+98																						15				Flow Fill 24" CMP
Y10 11+16																									59	Remove 15" CMP
Y10 11+52																						5				Flow Fill 15" CMP
Y10 20+08																									173	Remove 12" CMP
Y10 21+67																						10				Flow Fill 18" CMP
Y10 25+70																									75	Remove 15" CMP
Y11 10+93																									232	Remove 18" CMP
Y11 10+95																									24	Remove 18" RCP
Y11 14+98																									67	Remove 12" CMP
Y11 17+16																									81	Remove 18" CMP
SHEET TOTALS																						39			1039	
PROJECT TOTALS	1	56	56	67	62	3	92	40	11	3	14	4	14	14	8	6	2		22	2		304		0.065	9110	

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

JSTANOVICH