7S9M8H4

COMPUTED BY: Matthew Stratton, EI DATE: 6/25/2025

CHECKED BY: Richard Hinton, PE DATE: 6/25/2025

PROJECT NO.	SHEET NO.
R-5759	3D-12

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 %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 12	15	18	24	30	36	42	48	DO NOT USE PVC	C. S. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	48 (.109)
			1402	1401		995.0	994.3																		
L 143+50	44	LT	1403		1002.0																				
			1403	1402		997.0	995.5																		
L 143+27	139	LT	1404		1049.0																				
			1404	1403		1049.0	997.0															100				
L 142+40	30	RT	1405		1007.5																				
			1405	1406		1004.5	1001.5																		
L 143+52	30	RT	1406		1004.5																				
			1406	1407		994.0	993.5																		
L 144+85	2	RT	1408		1000.0																				
			1408	1401		997.0	996.5																		
L 147+80	30	LT	1409		991.5																				
			1409	1413		985.9	985.8																		
L 147+80	49	LT	1410		990.2																				
			1410	1409		986.0	985.9																		
L 149+90	83	LT	1411		984.4																				
			1411	1414		982.2	982.1																		
L 147+80	197	LT	1412		1059.8																				
			1412	1410		1059.8	986.0															148				
L 147+80	3	LT	1413		993.0																				
			1413	1415		985.8	985.1																		
L 149+82	71	LT	1414		985.3																				
			1414	1419		982.1	981.8																		
L 149+06	5	LT	1415		990.0																				
			1415	1416		985.1	984.9																		
L 149+06	30	RT	1416		991.2																				
			1416	1417		984.9	983.0																		
Y15 10+93	26	RT	1417		987.1																				
			1417	1418		983.0	981.5																		
L 150+35	29	LT	1419		985.6																				
			1419	1420		981.8	980.3																		
L 151+20	29	LT	1420		983.3																				
			1420	1424		980.3	978.9	0.4																	
L 151+20	4	RT	1421		984.9																				
			1421	1420		981.9	980.3																		
L 151+19	43	LT	1422		983.8																				
			1422	1420		981.5	980.3																		
L 154+50	29	LT	1423		974.0																				
			1423	1542		970.8	968.0	1.3																	
L 151+80	41	LT	1424		981.9																				
			1424	1425		978.9	977.9	0.6																	
L 152+00	29	LT	1425		980.9																				
			1425	1423		977.9	971.0	0.6																	
L 154+50	45	LT	1426		973.6																				
			1426	1423		971.4	971.0	0.3			16						X								
L 154+82	29	RT	1427		973.1																				
			1427	1502		970.1	963.5																		
DRW12 10+36	12	RT	1428		987.2																				
			1428	1417		984.2	983.0																		
L 156+25	29	LT	1501		969.1																				
SHEET TOTALS											16										248				

FROM	TO	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V 12	15	18	24	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
1402	1401					40																	
1403																	1						
1403	1402				16																		
1404																							
1404	1403																						
1405																	1			1		1	
1405	1406		116																				
1406																	1	5.0	0.5	1		1	
1406	1407					44																	
1408																	1						
1408	1401		132																				
1409																	1	0.6		1			1
1409	1413				28																		
1410																	1						
1410	1409				20																		
1411																	1						
1411	1414		16																				
1412																							
1412	1410																						
1413																	1	2.2					
1413	1415				124																		
1414																	1			1	1		
1414	1419		64																				
1415																	1						
1415	1416				36																		
1416																	1	1.3		1		1	
1416	1417				76																		
1417																	1			1		1	
1417	1418				32																		
1419																	1			1			1
1419	1420		80																				
1420																	1			1			1
1420	1424		56																				
1421																	1						
1421	1420		32																				
1422																	1						
1422	1420		16																				
1423																	1			1			1
1423	1542			68																			
1424																	1			1	1		
1424	1425		24																				
1425																	1			1			1
1425	1423		248																				
1426																	1						
1426	1423																						
1427																	1			1		1	
1427	1502		144																				
1428																	1			1		1	
1428	1417		60																				
1501																	1	1.2		1			1
SHEET TOTALS			988	68	332	84											23	10.3	0.5	14	2	6	6

FROM	TO	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	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. TYPE "D" STD. 840.19 OR STD. 840.28	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
1402	1401															
1403							1							1		
1403	1402															
1404																
1404	1403															
1405																
1405	1406															
1406																
1406	1407															
1408		1														
1408	1401															
1409																
1409	1413															
1410							1							1		
1410	1409															
1411							1							1		
1411	1414															
1412																
1412	1410															
1413		1														1
1413	1415															
1414																
1414	1419															
1415		1														1
1415	1416															
1416																
1416	1417															
1417																
1417	1418															
1419																
1419	1420															
1420																
1420	1424															
1421		1														1
1421	1420															
1422							1							1		
1422	1420															
1423																
1423	1542															
1424																
1424	1425															
1425																
1425	1423															
1426							1							1		
1426	1423															
1427																
1427	1502															
1428																
1428	1417															
1501																
SHEET TOTALS		4					5							5		3

FROM	TO	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	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 C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.	ADJUST M.H.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	FLOWABLE FILL CY	PIPE REMOVAL LIN. FT.	REMARKS
1402	1401																										
1403																											
1403	1402																										
1404																								1			4" Concrete Paved Ditch - 31 SY
1404	1403																			2							ROD & LUG W/ SLEEVE GASKETS
1405																											
1405	1406																										
1406																											
1406	1407																										
1408						1	1	1																			
1408	1401																										
1409																											
1409	1413																										
1410																											
1410	1409																										
1411																											
1411	1414																										
1412																								1			4" Concrete Paved Ditch - 31 SY
1412	1410																			2							ROD & LUG W/ SLEEVE GASKETS
1413					1			1																			
1413	1415																										
1414																											
1414	1419																										
1415					1			1																			
1415	1416																										
1416																											
1416	1417																										
1417																											
1417	1418																										
1419																											
1419	1420																										
1420																											
1420	1424																										
1421					1			1																			
1421	1420																										
1422																											
1422	1420																										
1423																											
1423	1542																										
1424																											
1424	1425																										
1425																											
1425	1423																										
1426																											
1426	1423																										
1427																											
1427	1502																										
1428																											
1428	1417																										
1501																											
SHEET TOTALS					3	1	1	4												4				2			

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