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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-3825B	3D-9

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
		1611	1620		180.6	180.3												
L 177+67	10 LT	1612		214.4														
		1612	1613		211.4	209.1												
L 177+68	55 RT	1613		211.8														
		1613	1614		208.8	200.0	3.9		188									
L 175+80	56 RT	1614		203.0														
		1614	1615		199.5	199.2												
L 175+80	11 RT	1615		204.5														
		1615	1616		199.2	193.6												
L 174+50	11 RT	1616		197.5														
		1616	1617		193.6	186.2												
L 173+02	11 RT	1617		190.2														
		1617	1618		186.2	183.8												
L 172+48	11 RT	1618		187.8														
		1618	1619		183.8	182.6												
L 172+17	11 RT	1619		186.5														
		1619	1620		182.6	182.0												
L 172+00	11 RT	1620		185.8														
		1620	1621		179.6	179.3	0.3											
L 172+00	42 LT	1621		184.8														
		1621	1622		179.3	167.2	1.4											
L 167+75	90 RT	1623		167.0														
		1623	1632		153.8	153.8												
Y11A 11+38	4 LT	1624		182.3														
		1624	1625		180.4	179.6												
Y11A 11+50	46 LT	1625		181.5														
		1625	1626		179.6	177.4												
Y11A 11+83	31 LT	1626		180.4														
Y11A 11+50	48 RT	1627		181.1														
		1627	1628		178.3	177.0												
Y11A 11+83	33 RT	1628		180.0														
Y11A 12+82	30 LT	1629		175.3														
Y11A 12+83	30 RT	1630		175.1														
L 179+66	10 LT	1701		225.4														
		1701	1612		222.4	211.4												
L 183+50	56 RT	1702		242.1														
		1702	1703		239.1	227.6	0.4											
L 181+50	63 RT	1703		230.6														
		1703	1613		227.6	208.8	1.8		376									
L 197+50	81 RT	1801		281.5														
		1801	1802		280.2	271.2	0.5	28						X			X	X
L 197+50	56 RT	1802		273.9														
		1802	1804		271.2	265.1	1.9	284										
L 194+65	75 RT	1803		273.3														
		1803	1804		271.3	265.1	1.0			20				X			X	X
L 194+65	56 RT	1804		269.1														
		1804	1805		263.8	261.7	0.7				112							
L 193+50	62 RT	1805		267.0														
		1805	1813		261.7	261.1												
Y11C 11+39	22 LT	1806		270.7														
						SHEET TOTALS		312	564	20	112							

STRUCTURE NUMBER FROM	TO	C. S. PIPE 15	18	24	30	R. C. PIPE CLASS IV 15	18	24	30	36	42	48	WELDED STEEL PIPE GRADE B 0.5" THICK 15	18	24	30	36	42	48	15	18	24	30	36	42	48	15	18	24	30	36	42	48
		.064	.064	.064	.079								IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	IN SOIL	NOT IN SOIL	NOT IN SOIL	NOT IN SOIL	NOT IN SOIL	NOT IN SOIL	NOT IN SOIL	NOT IN SOIL
1611	1620					56																											
1612																																	
1612	1613					64																											
1613																																	
1613	1614																																
1614																																	
1614	1615						44																										
1615																																	
1615	1616						128																										
1616																																	
1616	1617						148																										
1617																																	
1617	1618						52																										
1618																																	
1618	1619						28																										
1619																																	
1619	1620						16																										
1620																																	
1620	1621						52																										
1621																																	
1621	1622				56																												
1623																																	
1623	1632						28																										
1624																																	
1624	1625					44																											
1625																																	
1625	1626					36																											
1626																																	
1627																																	
1627	1628					36																											
1628																																	
1629																																	
1630																																	
1701																																	
1701	1612					196																											
1702																																	
1702	1703						196																										
1703																																	
1703	1613																																
1801																																	
1801	1802																																
1802																																	
1802	1804																																
1803																																	
1803	1804																																
1804																																	
1804	1805																																
1805																																	
1805	1813																																
1806																																	
SHEET TOTALS					56		432	196	496										100								100						

STRUCTURE NUMBER FROM	TO	15" TEMPORARY PIPE	18" TEMPORARY PIPE	24" TEMPORARY PIPE	ENDWALLS STD. 826.01 OR 826.11 (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. 852.06 OR STD. 852.05	OR DETAIL SHEET 2C-2 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. (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.J.B. STD. 840.34	T.B.D.I. STD. 840.35	TEMP STEEL PLATE COVER PSH 2C-8	M.H. FRAME AND COVER STD. 840.54	T.B.J.B. SPECIAL DETAIL PSH 2C-6	15" PIPE END SECTION	18" CROSS PIPE END SECTION	ADJUST C.B.	15" DRAINAGE PIPE ELBOW	18" DRAINAGE PIPE ELBOW	24" DRAINAGE PIPE ELBOW	15" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 (L CY	PIPE REMOVAL LIN. FT.	REMARKS
1611	1620																																
1612								1															1				1						
1612	1613																																
1613								1															1			1							
1613	1614																																
1614								1															1			1							
1614	1615																																
1615								1	0.3							1										1		1	1				Leave boxes low with steel plate and pave, then adjust height for final grade
1615	1616																																
1616								1								1										1		1	1				Leave boxes low with steel plate and pave, then adjust height for final grade
1616	1617																																
1617								1								1										1		1	1				Leave boxes low with steel plate and pave, then adjust height for final grade
1617	1618																																
1618								1								1										1		1	1				Leave boxes low with steel plate and pave, then adjust height for final grade
1618	1619																																
1619								1								1										1		1	1				Leave boxes low with steel plate and pave, then adjust height for final grade
1619	1620																																
1620								1	1.2							1										1		1	1				Leave boxes low with steel plate and pave, then adjust height for final grade
1620	1621																																
1621								1	0.5													1				1							
1621	1622																																
1623								1	5.0	3.2															1				1				
1623	1632																																
1624								1								1								1		1							
1624	1625																																
1625								1																1	1								
1625	1626																																
1626																															1		
1627								1														1			1								
1627	1628																																
1628																															1		
1629																															1		
1630																															1		
1701								1														1			1								
1701	1612																																
1702								1														1			1								
1702	1703																																
1703								1														1			1								
1703	1613																																
1801																																	
1801	1802																															1	
1802								1														1			1								
1802	1804																																
1803																																	1
1803	1804																															1	
1804								1	0.3												1				1								
1804	1805																																
1805								1	0.3												1				1								
1805	1813																																
1806								1			1		1																				
SHEET TOTALS								21	7.6	3.2	1		1			7				2	9	2		9	10	1		6	6	1			4	1		1		1	1			

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