MOORECO

COMPUTED BY:	C.MOORE	DATE:	9/1/2016
CHECKED BY:	S. BONDOR	DATE:	9/1/2016

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-3440	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	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
L 12+92	43 LT	0401		825.5																
		0401	0400		821.7	821.3			32											
L 14+50	43 LT	0402		826.8																
		0402	0401		822.6	821.7			160									X	X	
L 12+92	10 RT	0403		826.5																
		0403	0401		823.9	821.7														
L 14+51	71 LT	0404		829.2																
		0404	0402		824.9	822.6			32											
Y2 10+89	16 RT	0406		824.1																
		0406	0405		820.4	820.3			32											
Y2 10+89	16 LT	0407		823.9																
		0407	0406		820.5	820.4														
L 17+02	10 RT	0408		826.6																
		0408	0406		823.3	820.4														
L 20+00	63 LT	0409		819.5																
		0409	0410		813.5	811.7			24											
L 20+00	41 LT	0410		816.7																
		0410	0500		811.7	794.4	0.9		304								X	X		
L 23+00	41 LT	0500		798.9																
		0500	0514		793.6	768.2	0.3				436						X	X		
L 23+00	41 RT	0501		798.9																
		0501	0500		793.9	793.6					84						X	X	X	X
L 29+14	41 LT	0502		765.0																
		0502	0507		756.7	748.9	0.5						236				X	X		
L 29+13	41 RT	0503		765.0																
		0503	0508		760.8	758.6	0.6		52								X	X	X	X
L 32+22	51 RT	0504		751.2																
		0504	0505		746.9	744.8	0.3		56								X	X		
L 32+74	41 RT	0505		749.0																
		0505	0506		744.5	744.2				84							X	X	X	X
		0506	0604		742.7	723.2	0.6						424				X	X		
L 32+74	41 LT	0506		749.0																
L 31+49	41 LT	0507		754.9																
		0507	0506		748.9	742.7	0.5						128				X	X		
L 29+14	9 LT	0508		765.8																
		0508	0502		758.3	758.2				32							X	X	X	X
L 29+51	8 LT	0509		764.2																
		0509	0508		758.7	758.6			40								X	X	X	X
L 29+81	8 RT	0510		763.0																
		0510	0509		758.8	758.7			36								X	X	X	X
L 31+49	9 LT	0511		755.6																
		0511	0507		751.4	750.7			32								X	X	X	X
L 23+00	57 RT	0512		798.5																
		0512	0501		795.5	794.6	0.3		20											
L 27+32	64 RT	0513	0514		770.0	767.2							104				X	X	X	X
L 27+32	41 LT	0514		773.8																
		0514	0502		767.2	756.7	0.4						184				X	X		
Y3 11+22	17 RT	0516		760.2																
		0516	0515		757.2	757.0			24											
L 39+49	41 LT	0601		719.4																
SHEET TOTALS									844	116	520		1076							

FROM	TO	C. S. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	48 (.109)	R. C. PIPE CLASS III 12	15	18	24	30	R. C. PIPE CLASS IV 12	15	48	54	60	42" WELDED STEEL PIPE 0.1094" THICK GRADE B NOT IN SOIL	42" WELDED STEEL PIPE 0.1094" THICK GRADE B IN SOIL	36" WELDED STEEL PIPE 0.1094" THICK, GRADE B NOT IN SOIL	36" WELDED STEEL PIPE 0.1094" THICK, GRADE B IN SOIL	15" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	DRAINAGE STRUCTURE MASONRY FT	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. DETAIL 2C-10 OR 2C-14	C.B. STD. 852.05
0401																											1			1		1				
0401	0400																																			
0402																											1			1		1				
0402	0401																																			
0403																											1								1	
0403	0401															56																				
0404																											1									
0404	0402																																			
0406																											1			1		1				
0406	0405																																			
0407																											1			1			1			
0407	0406															32																				
0408																											1								1	
0408	0406															80																				
0409																											1	1.0								
0409	0410																																			
0410																											1			1			1			
0410	0500																																			
0500																											1	0.3		1			1			
0500	0514																																			
0501																											1			1		1				
0501	0500																																			
0502																											1	3.3		1			1			
0502	0507																																			
0503																											1			1		1				
0503	0508																																			
0504																											1			1		1				
0504	0505																																			
0505																											1			1		1				
0505	0506																																			
0506	0604																																			
0506																											1	1.3		1			1			
0507																											1	1.0		1			1			
0507	0506																																			
0508																											1	2.5							1	
0508	0502																																			
0509																											1								1	
0509	0508																																			
0510																											1								1	
0510	0509																																			
0511																											1								1	
0511	0507																																			
0512																											1									
0512	0501																																			
0513	0514																																			
0514																											1	1.6		1			1			
0514	0502																																			
0516																											1			1			1			
0516	0515																																			
0601																											1			1			1			
SHEET TOTALS																168											25	11.0		16		7	9		6	

FROM	TO	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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" 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/ 2 GRATES STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ GRATE 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	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	M.H. FRAME AND COVER STD. 840.54	ADJUST MH
0401																						
0401	0400																					
0402																						
0402	0401																					
0403										1										1		
0403	0401																					
0404				1	1																	
0404	0402																					
0406																						
0406	0405																					
0407																						
0407	0406																					
0408										1										1		
0408	0406																					
0409				1	1																	
0409	0410																					
0410																						
0410	0500																					
0500																						
0500	0514																					
0501																						
0501	0500																					
0502																						
0502	0507																					
0503																						
0503	0508																					
0504																						
0504	0505																					
0505																						
0505	0506																					
0506	0604																					
0506																						
0507																						
0507	0506																					
0508										1										1		
0508	0502																					
0509										1										1		
0509	0508																					
0510										1										1		
0510	0509																					
0511										1										1		
0511	0507																					
0512		1																				
0512	0501																					
0513	0514																					
0514																						
0514	0502																					
0516																						
0516	0515																					
0601																						
SHEET TOTALS		1		2	2					6										6		

FROM	TO	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	48" C.S. ELBOW	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
0401												
0401	0400											
0402												
0402	0401											
0403												
0403	0401											
0404												
0404	0402											
0406												
0406	0405											
0407												
0407	0406											
0408												
0408	0406											
0409												
0409	0410											
0410												
0410	0500											
0500												
0500	0514											
0501												
0501	0500											
0502												
0502	0507											
0503												
0503	0508											
0504												
0504	0505											
0505												
0505	0506											
0506	0604											
0506												
0507												
0507	0506											
0508												
0508	0502											
0509												
0509	0508											
0510												
0510	0509											
0511												
0511	0507											
0512												
0512	0501											
0513	0514											
0514												
0514	0502											
0516												
0516	0515											
0601												
SHEET TOTALS												

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