RD-299054

COMPUTED BY: ______________________ DATE: __________

CHECKED BY: ______________________ DATE: __________

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
BR-0017	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 17+08	15	RT	0401		37.0'	33.8'															
			0401	0402		33.8'	33.7'														
L 17+08	22	LT	0402		38.0'	33.7'															
			0402	0403		33.7'	26.0'			40							x	x			
L 19+28	15	RT	0404		36.9'	33.7'															
			0404	0405		33.7'	24.0'			36							x	x			
			0406	0407		28.9'	25.8'														
L 20+24	27	RT	0407		30.0'	25.8'															
			0407	0408		25.8'	25.0'														
L 19+83	29	RT	0408		33.5'	25.0'															
			0408	0405		25.0'	24.0'														
L 19+27	53	RT	0405		27.0'	24.0'															
			0405	0409		24.0'	21.8'														
			0410	0411		28.9'	28.7'														
L 20+88	32	LT	0411		30.4"	28.7'															
			0411	0412		28.7'	28.0'														
SHEET TOTALS										76											
PROJECT TOTALS										76											

LINE & STATION	FROM	TO	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	18	24	30	36	42	48
L 17+08	0401																									
	0401	0402										36														
L 17+08	0402																									
	0402	0403																								
L 19+28	0404																									
	0404	0405																								
	0406	0407											164													
L 20+24	0407																									
	0407	0408											40													
L 19+83	0408																									
	0408	0405											60													
L 19+27	0405																									
	0405	0409											44													
	0410	0411											48													
L 20+88	0411																									
	0411	0412											128													
SHEET TOTALS												36	484													
PROJECT TOTALS												36	484													

LINE & STATION	FROM	TO	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	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
L 17+08	0401					1									
	0401	0402													
L 17+08	0402					1									
	0402	0403													
L 19+28	0404					1									
	0404	0405													
	0406	0407													
L 20+24	0407					1									
	0407	0408													
L 19+83	0408					1	3.5								
	0408	0405													
L 19+27	0405					1									
	0405	0409													
	0410	0411													
L 20+88	0411					1									
	0411	0412													
SHEET TOTALS						7	3.5								
PROJECT TOTALS						7	3.5								

LINE & STATION	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/ 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 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
L 17+08	0401																1						1	
	0401	0402																						
L 17+08	0402																1						1	
	0402	0403																						
L 19+28	0404																1						1	
	0404	0405																						
	0406	0407																						
L 20+24	0407							1							1									
	0407	0408																						
L 19+83	0408							1							1									
	0408	0405																						
L 19+27	0405							1							1									
	0405	0409																						
	0410	0411																						
L 20+88	0411							1							1									
	0411	0412																						
SHEET TOTALS								4							4		3						3	
PROJECT TOTALS								4							4		3						3	

LINE & STATION	FROM	TO	##" DRAINAGE PIPE ELBOW	15" DRAINAGE PIPE ELBOW	##" DRAINAGE PIPE ELBOW	##" R.C. ELBOW	15"SIDE DRAIN PIPE ELBOWS	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	##" C.S. ELBOW	PIPE REMOVAL LIN. FT.	REMARKS
L 17+08	0401													REMOVE CRUSHED FUNNEL DRAIN
	0401	0402												
L 17+08	0402													REMOVE CRUSHED FUNNEL DRAIN
	0402	0403		2										
L 19+28	0404													
	0404	0405		2										
	0406	0407												
L 20+24	0407													
	0407	0408											109	REMOVE 15" RCP
L 19+83	0408													
	0408	0405												
L 19+27	0405													
	0405	0409												
	0410	0411												
L 20+88	0411													
	0411	0412												
SHEET TOTALS				4									109	
PROJECT TOTALS				4									109	

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