COMPUTED BY: FMY DATE: 7/12/04
CHECKED BY: PWR DATE: 7/26/04

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

METRIC

PROJECT REFERENCE NO.	SHEET NO.
R-2568B	3-G

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 1200 mm & UNDER)

STATION LOCATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) SIZE 300	375	450	600	750	900	1050	1200	THICKNESS OR GAUGE	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 300	400	450	600	800	900	1000	1200	THICKNESS OR GAUGE 1.63	1.63	1.63	1.63	2.01	2.01	2.77	2.77
	194	195		235.77	231.85													31.2												
-RTLN2- 76+68 RT.	194	196		235.77	236.37			26.4																						
-RTLN2- 76+80 RT.	196		236.93																											
-RTLN2- 76+80 RT.	196	197		236.37	237.00												4.8													
	194	198		235.77	236.12			80.4																						
-RTLN2- 77+39 LT.	198		236.68																											
-LTLN2- 77+60 LT.	199																													
-RTLN2- 77+78 LT.																														
-RTLN2- 78+28 RT.	200									8.4																				
-RTLN2- 78+30	200	201								■ 25.2																				
-LTLN2- 78+34 LT.	201									18.0																				
-RTLN2- 78+47 RT.																														
-RTLN2- 78+51 RT.	202																													
-Y12DET- 10+22	203							☆ 24.0																						
SHEET TOTALS								106.8	☆ 24.0	26.4 ■ 25.2							4.8	31.2												
PROJECT TOTALS								1798.4	☆ 320.4 24.0	536.4 ■ 25.2	319.2 • 88.8	79.2 ◀ 8.4	206.4 ◀	103.2	• 188.4		356.4	68.0	64.8		30.0										

STATION LOCATION	375mm SIDE DRAIN PIPE	450mm SIDE DRAIN PIPE	600mm SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) R.C.P.	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) C.S.P.	QUANTITIES: STRUCTURES PER EACH (0 THRU 1.50)	METERS 1.50 THRU 3.00 A	METERS 3.00 AND ABOVE B	FOR DRAINAGE "TOTAL M FOR PAY QUANTITY SHALL BE COL. 'A' + (1/3 X COL 'B')"	C.B. STD. 840.01 OR 840.02	FRAME, GRATES & HOOD STANDARD 840.03 TYPE GRATE E	F	G	D.I. STD.840.14 OR STD.840.15	D.I. GRATES & FRAMES STD.840.16	M.D.I. TYPE "A" STD. 840.17 OR 840.26	M.D.I. TYPE "B" STD. 840.18 OR 840.27	M.D.I. TYPE "D" STD. 840.19 OR 840.28	M.D.I. GRATES & FRAMES STD.840.22	BERM DRAIN OUTLET STD. 850.10	J.B. STD.840.31 OR STD. 840.32	CONVERT D.I. TO J.B. (SEE SHEET 2-H)	M.H. FRAME & COVER STD.840.54	CORR. STEEL ELBOW NO. & SIZE	CONC. COLLARS, CL. "B" m^3 STD.840.72	CONC. & BRICK PIPE PLUG m^3 STD.840.71	PIPE REMOVAL (meters)	REMARKS
																													OPEN ENDED 450 CSP
-RTLN2- 76+68 RT.																												18.7	375 PIPE REMOVE EXISTING 450 mm CONC. PIPE
-RTLN2- 76+80 RT.						1											1		1										2GI
-RTLN2- 76+80 RT.																				1					1 - 400				400 CSP W/ELBOW & BDO
																													375 PIPE
-RTLN2- 77+39 LT.						1											1		1										2GI
-LTLN2- 77+60 LT.	8.4																												375 PIPE
-RTLN2- 77+78 LT.																												6.6	REMOVE EXISTING 300 mm CONC. PIPE
-RTLN2- 78+28 RT.																										0.4			COLLAR & OPEN ENDED 600 PIPE
-RTLN2- 78+30																												24.5	BORE & JACK 600 PIPE REMOVE EXISTING 600 mm CLAY PIPE
-LTLN2- 78+34 LT.																										0.4			COLLAR & OPEN ENDED 600 PIPE
-RTLN2- 78+47 RT.																												9.1	REMOVE EXISTING 300 mm CONC. PIPE
-RTLN2- 78+51 RT.	8.4																												375 PIPE
-Y12DET- 10+22																												24.0	TEMPORARY 450 mm RCP FOR DETOUR
SHEET TOTALS	16.8					2											2		2						1 @ 400			82.9	
PROJECT TOTALS	261.6	13.2	8.4	17.8		99	12.56	7.225	9	2	4	3	3	3	7	78		85	11 @ 400	2	1	1			22 - 400 2 - 600	1.79		591.1	

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 1350 mm & OVER)

STATION LOCATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) ▲CLASS IV R.C. PIPE SIZE 1350	1500	1650	1800	1950	2100	THICKNESS OR GAUGE	BITUMINOUS COATED C.S. PIPE TYPE B 1400	1500	1650	1800	SHOP ELONGATED	THICKNESS OR GAUGE 2.77	3.51	4.27	2.77	3.51	STRUCTURAL PLATE PIPE 1500	1650	1800	THICKNESS OR GAUGE 2.77	3.51	4.27	2.77	3.51	4.27	2.77	3.51	4.27
-L- 43+74 LT.	72		231.60																															
-L- 43+74 LT.	71	72		230.30	229.00		25.2																											
-L- 44+26	72	76		229.00	227.70				▲ 81.6																										
PROJECT TOTALS							25.2		◀ 81.6																										

STATION LOCATION	REINFORCED ENDWALLS CLASS "A" CONC. WITH R.C. – cu. m.	WITH C.S. – cu. m.	MASONARY DRAINAGE STRUCTURES CUBIC METERS	C.B. STD. 840.01 OR 840.02	FRAME, GRATES & HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	J.B. STD. 840.31 OR STD. 840.32	REINF. CONC. FLARED END SECTION NO. & SIZE	CORR. STEEL FLARED END SECTIONS NO. & SIZE	REINF. CONC. ELBOWS NO. & SIZE	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS, CL. "B" m^3 STD. 840.72	PIPE REMOVAL (meters)	REMARKS
-L- 43+74 LT.			14.576					1							J.B.
-L- 43+74 LT.	3.8														1350 PIPE W/HEADWALL
-L- 44+26															OPEN ENDED 1650 CLASS IV PIPE
PROJECT TOTALS	3.8		15.000					1							

ABBREVIATIONS	
C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I. (N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

01-SEP-2004 10:04
RWDunn
R:\Hydraulics\Projects\2568b_dr-sheets.sum
AT: H01888856