COMPUTED BY: O. FARR DATE: DECEMBER 19, 2005
CHECKED BY: BCK DATE: JANUARY 10, 2006

PROJECT NO.	SHEET NO.
B-4224	3-A

RD223247

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

LINE	Station	Station	Uncl. Excav.	Undercut	Embank. + %	Borrow	Waste
-L-	13 + 50	16 + 98	56		1543	1487	
BRIDGE							
-L-	18 + 28	21 + 50	126		575	449	
PROJECT TOTALS:			182		2118	1936	
5% to Replace Topsoil on Borrow Pit						97	
GRAND TOTALS:			182		2118	2033	
SAY:			**200**			**2100**	
EST. UNDERCUT = 600 C.Y.							

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "GRADING".

SUMMARY OF EXISTING ASPHALT PAVEMENT REMOVAL

LINE	Station	Station	LOC LT/RT/CL	Length	Width	SY
-L-	14+00	16+97	CL	297	20	660
BRIDGE						
-L-	18+18	21+50	CL	332	20	738
					TOTAL:	1398
					SAY:	**1470**

PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)'	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS OTHERWISE NOTED) 12"	CLASS III R.C. PIPE (UNLESS OTHERWISE NOTED) 15"	BIT. COATED C.S. PIPE TYPE B (UNLESS NOTED) 12" .064	BIT. COATED C.S. PIPE TYPE B (UNLESS NOTED) 15" .064	BIT. COATED C.S. PIPE TYPE B (UNLESS NOTED) 18" .064	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS C.S.P.	QUANT. FOR DRAINAGE STRUCT. *TOTAL L.F. FOR PAY QUANT. SHALL BE COL. 'A' + (1.3 X COL.'B') PER EACH (0' THRU 5.0'	QUANT. FOR DRAINAGE STRUCT. *TOTAL L.F. FOR PAY QUANT. SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	QUANT. FOR DRAINAGE STRUCT. *TOTAL L.F. FOR PAY QUANT. SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 TYPE OF GRATE E	FRAME, GRATES, AND HOOD STD. 840.03 TYPE OF GRATE F	FRAME, GRATES, AND HOOD STD. 840.03 TYPE OF GRATE G	TRAFFIC BEARING DROP INLET STD. 840.35	FRAMES AND NARROW SLOT FLAT GRATES STD. 840.29	M.D.I. FRAME WITH GRATE STD. 840.20	BIT. COAT CS ELBOWS NO. & SIZE (INSTALLED WITH ROD & LUG W/SLEEVE GASKETS)	REMARKS
-L- 16+57	LT	1	OUT	40.78	38.03						28							1							1	1		2-15"	CAST IRON DOUBLE FRAME AND GRATES
-L- 16+57	RT	2	OUT	40.78	38.03						28							1							1	1		2-15"	CAST IRON DOUBLE FRAME AND GRATES
-L- 19+26	RT	3	OUT	41.03	38.28						16							1							1	1		2-15"	CAST IRON DOUBLE FRAME AND GRATES
-L- 20+13	LT	4	OUT	40.87	38.12						20							1							1	1		2-15"	CAST IRON DOUBLE FRAME AND GRATES
TOTAL											**92**							**4**							**4**	**4**		**8-15"**	

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

LINE	BEG. STA.	END STA.	LOC.	LENGTH STRAIGHT	LENGTH SHOP CURVED	LENGTH DOUBLE FACED	WARRANT POINT APPR. END	WARRANT POINT TRAIL. END	"N" DIST. FROM E.O.L.	TOTAL SHLDR WIDTH	FLAIR LENGTH APPR. END	FLAIR LENGTH TRAIL. END	W APPR. END	W TRAIL. END	ANCHORS GRAU 350	ANCHORS III	IMP. ATTEN. TYPE 350 EA	IMP. ATTEN. TYPE 350 G	IMP. ATTEN. TYPE 350 NG	REMOVE EXISTING GRDRAIL		REMARKS
-L-	15+40.00	16+90.00	LT	150.00			BRIDGE		4	7					1	1						
-L-	13+90.00	16+90.00	RT	300.00				BRIDGE	4	7					1	1						
-L-	18+35.00	21+35.00	LT	300.00				BRIDGE	4	7					1	1						
-L-	18+35.00	19+85.00	RT	150.00			BRIDGE		4	7					1	1						
SUBTOTALS				900.00											4	4						
	LESS ANCHOR DEDUCTIONS:																					
	GRAU 350	4@50 FT		200																		
	III	4@18.75 FT		75																		
GRAND TOTALS				625.00											4	4						
SAY				**637.5**											**4**	**4**						

ADDITIONAL GUARDRAIL POSTS = 5 EACH

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