COMPUTED BY: ____HLE_____ DATE: _8/24/15___
CHECKED BY: ____SKR_____ DATE: _2/18/16___

PROJECT NO.	SHEET NO.
B-4766	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT REMOVAL	ASPHALT BREAKUP	CONCRETE REMOVAL	CONCRETE BREAKUP
-L-	13+32.00	15+60.63	CL	514.32			
-L-	16+95.52	19+00.00	CL	468.83			
		TOTAL:		983.15			
		SAY:		990			

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Line	Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-L-	13+32.00	15+53.00	203	319	116	
		(BEGIN BRIDGE)				
SUBTOTAL: 1			203	319	116	
-L-	17+03.00	21+00.00	180	1,709	1,529	
	(END BRIDGE)					
SUBTOTAL: 2			180	1,709	1,529	
PROJECT SUBTOTAL			383	2,028	1,645	
PROJECT TOTAL			383	2,028	1,645	
EST. 5% TO REPLACE TOP SOIL BORROW PITS					82	
GRAND TOTAL:			383		1,727	
SAY:			400		1,800	

NOTE: EARTHWORK QUANTITIES ARE CALCULATED BY THE ROADWAY DESIGN UNIT. THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

EST. UNDERCUT EXCAVATION = 300 CUBIC YARDS
EST. SHALLOW UNDERCUT = 100 CUBIC YARDS
EST. SELECT GRANULAR MATERIAL = 100 CUBIC YARDS
EST. DRAINAGE DITCH EXCAVATION = 30 CUBIC YARDS

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

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION	LOCATION (LT, RT, OR CL)*	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE	C.S. PIPE SIZE	R.C. PIPE CLASS III SIZE	R.C. PIPE CLASS IV SIZE	** R.C. PIPE (CLASS V)	*** RC PIPE CULVERTS, CONTRACTOR DESIGN	**** RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	ENDWALLS CU. YARDS C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B') LIN. FT. A (5.0' THRU 10.0')	LIN. FT. B (10.0' AND ABOVE)	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME WITH TWO GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	T.B.D.I. STD. 840.35 OR STD. 840.46	G.D.I. FRAME WITH GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	J.B. STD. 840.31 OR 840.32	PREFORMED SCOUR HOLE (PER EA.)	M. H. FRAME AND COVER STD. 840.54	DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
								12" 15" 18" 24" 30" 36" 42" 48"	12" 15" 18" 24" 30" 36" 42" 48"	12" 15" 18" 24" 30" 36" 42" 48"	12" 15" 18" 24" 30" 36" 42" 48"																															
								DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	.064	.064	.064	.064	.079	.079	.109	.109																															
-L- 17+41.00	LT	0401		1014.40																1																								TB 2GI
		0401	0402		1011.60	1011.50											32																										
-L- 17+41.00	RT	0402		1014.40																1																								TB 2GI
-L- 17+41.00	RT	0402	0403		1011.50	1006.20		20																																		2 @ 15"	
								X																																		
-L- 20+79.00	RT	0404	0405		1021.00	1016.20																																				48	Remove Exist. 18" RCP
-L- 20+37.50	LT	0405		1021.20																1	5	2.7																					
-L- 20+37.50	LT	0405	0406		1008.50	1008.30			40																																		
								X																																		
-L- 20+06.00	RT	0407			1019.10	1018.50																																				29	Remove Exist. 18"CMP
-L- 13+88.00	RT	0408			1016.10	1015.30																																				28	Remove Exist. 12"RCP
								---	---	---	---						---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PROJECT TOTAL								20		40							32		72																								105	
SAY																				3	5	2.7																					
																					8.51																							
																					9																							

ABBREVIATIONS

C.B. CATCH BASIN
N.D.I. NARROW DROP INLET
D.I. DROP INLET
G.D.I. GRATED DROP INLET
G.D.I.(N.S.) (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

"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

GUARDRAIL SUMMARY

G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	LENGTH SHOP CURVED	LENGTH DOUBLE FACED	WARRANT POINT APPROACH END	WARRANT POINT TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH APPROACH END	FLARE LENGTH TRAILING END	W APPROACH END	W TRAILING END	ANCHORS XI MOD	ANCHORS B-77	ANCHORS GRAU 350 TL-3	ANCHORS M-350	ANCHORS TL-2	ANCHORS CAT-1	ANCHORS VI MOD	IMPACT ATTENUATOR TYPE 350 G	IMPACT ATTENUATOR TYPE 350 NG	SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
-L-	14+78.00	15+53.00	LT	75.00				BRIDGE	8	11		50.0		1.0		1	1								81		
-L-	14+78.00	15+53.00	RT	75.00			BRIDGE		8	11	50.0		1.0			1	1								81		
-L-	17+03.00	20+50.00	LT	347.00			BRIDGE		8	11	50.0		1.0			1	1								396		
-L-	17+03.00	19+00.00	RT	197.00				BRIDGE	8	11		50.0		1.0		1	1								80		
			-L- SUBTOTALS	694.00												4	4										
		DEDUCTIONS FOR GUARDRAIL ANCHORS		-275.00																							

															TYPE GRAU 350 TL-3	4	EA @	50.00	FT. =	200.00							
															B-77	4	EA @	18.75	FT. =	75.00							
			TOTAL	419.00																					638.00		
			SAY	425.00																					640.00		
		ADDITIONAL GUARDRAIL POSTS		5 EA											DEDUCTION FOR GUARDRAIL ANCHOR				FT. =	275.00							