6/21/00

COMPUTED BY: D. PETRY DATE: 2-4-04
CHECKED BY: M. COPPLE DATE: 3-1-04

SUMMARY OF PAVEMENT REMOVAL

LOCATION	STATION TO STATION	REMOVAL OF EXISTING ASPHALT	REMARKS
-L-	13+80 TO 22+50	2,128.48	
-L-	22+50 TO 23+03	131.12	
-L-	24+41 TO 30+53	1,420.76	
-L-	13+50 +/- TO 19+50 +/-	851.33	TEMP. PAVEMENT
	TOTAL	4,531.69	
	SAY	4,535	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

SUMMARY OF EARTHWORK

STATION TO STATION	UNCLASIFIED EXCAVATION (cu. yds)	ROADWAY EMBANKMENT +% (cu. yds)	BORROW (cu. yds)	WASTE (cu. yds)
PHASE 1 (TEMPORARY WIDENING)				
-L- STA. 13+50.00 -L- STA. 23+22.00 (BEGIN BRIDGE)	533	319	0	214
PHASE 2 (PROPOSED ROADWAY TO TEMP. SLOPES /SHORING)				
-L- STA. 12+50.00 -L- STA. 23+22.00 (BEGIN BRIDGE)	2,911	7,964	5,053	
-L- STA. 24+60.00 (END BRIDGE) -L- STA. 34+00.00	761	5,870	5,155	46
PHASE 3 (FINAL GRADING)				
-L- STA. 14+00.00 -L- STA. 23+22.00 (BEGIN BRIDGE)	672	713	41	
-L- STA. 24+60.00 (END BRIDGE) -L- STA. 30+00.00	160	912	752	
SUBTOTAL (PHASES 1-3)	5,037	15,778	11,001	260
EST. LOSS DUE TO CLEARING & GRUBBING	-650		650	
WASTE TO REPLACE BORROW			-214	-214
EST. 5% FOR REPLACING TOPSOIL			572	
GRAND TOTALS	4,387	15,778	12,009	46
SAY	4,390		12,010	

EST. UNDERCUT = 500 CY.
EST. DRAINAGE DITCH EXCAVATION = 540 CY.

PROJECT REFERENCE NO.	SHEET NO.
B-3899	3-A

"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

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350	SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GRAU 350	M-350	XIII	CAT-A	VI MOD	BIC	TYPE III				
-L-	20+00.00	23+00.00	RT.	300.00'			23+00.00		2'-11"	11'	231.25'		4.62				1						1				
-L-	19+19.25	23+19.25	LT.	400.00'				23+19.25	2'-11"	11'		331.25'		2.38			1						1				
-L-	24+62.44	25+99.94	RT.	137.50'				24+62.44	2'-11"	11'		68.75'		1.38			1						1				
-L-	24+81.10	27+81.10	LT.	300.00'			24+81.10		2'-11"	11'	231.25'		4.62				1						1				
																	4						4				
SUBTOTAL				1,137.50'			DEDUCTION FOR ANCHOR UNITS:						... 5 ADDITIONAL GUARDRAIL POSTS														
DEDUCTIONS FOR ANCHOR UNITS:				-275.00'			4 GRAU-350 @ 50.00' = 200.00'																				
							4 TYPE III @ 18.75' = 75.00'																				
								275.00'																			
TOTAL				862.50'																							
			SAY	862.50'																							

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

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) SIZE 12"	15"	18"	24"	30"	36"	42"	48"	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHRWISE) THICKNESS OR GAUGE 12"	15"	18"	24"	30"	36"	42"	48"	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	* TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B')	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	TRAFFIC BEARING DROP INLET STD. 840.35	NARROW SLOT FRAME AND GRATE STD. 840.29	PREFORMED SCOUR HOLE SEE DETAIL 2-B	CORR. STEEL ELBOWS NO. & SIZE (BITUMINOUS COATED)	PIPE REMOVAL (LF)	REMARKS
-L- 16+00	CL	1			743.00	742.00	X			60																														16	
-L- 21+20	LT.	2		732.38																								1				1	1							
-L- 21+20	LT.	2	3		729.63	721.90											32																					2-15"		
-L- 21+70	LT.	4			N/A	N/A																															1				
-L- 22+37	LT.	5		733.30																								1				1	1							
-L- 22+37	LT.	5	6		730.55	720.90											32																					2-15"		
-L- 25+40	LT.	7		736.92																								1				1	1							
-L- 25+40	LT.	7	8		734.17	721.90											32																					2-15"		
-L- 32+00	LT.	9			N/A	N/A																					20												20	
-L- 33+00	LT.	10			N/A	N/A																					20												20	
TOTALS										60							96										40				3							6-15"	56	

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 JUCTION BOX

Ramey Kemp & Associates, Inc.
Transportation Consulting Engineers
4928-A Windy Hill Drive Raleigh, North Carolina 27609
(919) 872-5115 fax (919) 878-5416

$$$$SYSTIME$$$$ $$$$DGN$$$$ $$$$FILE$$$$