COMPUTED BY: cadd and MFC DATE: 6/15/2004

CHECKED BY: GKA DATE: 6/16/2004

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
B-3182	3-A

BUCK ENGINEERING
8000 Regency Parkway
Suite 200
Cary, North Carolina 27511
Phone: 919.463.5488
Fax: 919.463.5490
www.buckengineering.com

PARCEL INDEX

PARCEL NO.	PLAN SHEET NO.	PROPERTY OWNERS NAME
1	4	ROBERT D. EDWARDS
2	4	B. D. LYNCH, HEIRS
3	4	LILLIE B. LYNCH
4	4	FRANK ALBANO

SUMMARY OF PAVEMENT REMOVAL

IN SQUARE YARDS

LINE	STATION TO STATION	LOCATION	ASPHALT REMOVAL	ASPHALT BREAK-UP	CONCRETE REMOVAL	CONCRETE BREAK-UP
L	14+46.00 to 14+85.00	LT & RT	85			
L	15+31.00 to 15+69.00	LT & RT	81			
	Total		166			
	SAY		175			

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LINE	STATION TO STATION		UNCLASS. EXCAVATION	UNDERCUT	EMBANKMENT %	BORROW	WASTE
-L-	11+00.00	14+73.00 BRIDGE	60		295	235	
	SUBTOTAL		60		295	235	
-L-	15+42.00 BRIDGE	19+00.00	77		215	138	
	SUBTOTAL		77		215	138	
TOTAL			137		510	373	
PROJECT TOTAL			137		510	373	
EST. 5% TO REPLACE TOPSOIL ON BORROW PITS						19	
GRAND TOTAL			137			392	
SAY			140			400	
UNDERCUT			200 CY				
FABRIC FOR SOIL STABILIZATION			100 SY				

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

STATION (SIZE / THICKNESS OR GAUGE)	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) 12"	15"	18"	24"	30"	36"	42"	48"	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109	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.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') PER EACH (0' THRU 5.0')	*LIN. FT. A 5.0' THRU 10.0'	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	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE 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. FRAME WITH GRATE STD. 840.20	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	J.B. STD. 840.31 OR 840.32	MANHOLE STD. 840.51	M.H. STD. 840.51 OR 840.53	M.H. FRAME AND COVER STD. 840.54	TBDI STD. 840.35	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD. 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN. FT.	REMARKS
14+18 -L-	RT	1	2	214.40	211.23	211.11			24																				1										1					1										
14+18 -L-	LT	2	OUT	214.40	211.11	210.00			12																				1										1					1										.12 EXTRA DEPTH
TOTAL																													2										2					2										
SAY																													2										2					2										

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

GUARDRAIL SUMMARY

LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	SHOP CURVED	DOUBLE FACED	WARRANT POINT APPROACH END	TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH APPROACH END	TRAILING END	W APPROACH END	TRAILING END	ANCHORS XI MOD	III	GRAU 350	M-350	CAT-1	AT-1	IMPACT ATTENUATOR TYPE 350 EA	G	NG	SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
-L-	13+20.50	14+58.00	LT	137.5				BRIDGE	7.5	11		118.75		9		1	1										
-L-	15+57.00	18+57.00	LT	300			BRIDGE		7.5	11	281.25		9			1	1										
-L-	11+58.00	14+58.00	RT	300			BRIDGE		7.5	11	281.25		9			1	1										
-L-	15+57.00	16+94.50	RT	137.5				BRIDGE	7.5	11		118.75		9		1	1										
		SUB-TOTAL		875.0												4	4										
	DEDUCT FOR ANCHOR UNITS:																										
		TYPE III 4.00	x 18.75	-75																							
		GRAU-350 4.00	x 50	-200																							
		TOTAL		600.0												4	4										
				5 additional posts																							

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAKPT.
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

FENCE SUMMARY

LINE	BEG. STA.	END STA.	LOCATION	LENGTH	TYPE (CL, WW, BW)	REMARKS

CL = CHAIN LINK
WW = WOVEN WIRE
BW = BARBED WIRE