COMPUTED BY: JCB DATE: December 14, 2014
CHECKED BY: HCN DATE: December 15, 2014

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
B-5124	3B-1

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
-L- 11+20.00	-L- 21+85.31	388	1354	966	
	(BEGIN BRIDGE)				
SUBTOTALS:		388	1354	966	
-L- 23+12.69	-L- 36+19.75	413	1305	892	
(END BRIDGE)	(BEGIN BRIDGE)				
SUBTOTALS:		413	1305	892	
-L- 37+57.25	-L- 54+11.75	534	1883	1349	
(END BRIDGE)	(BEGIN BRIDGE)				
SUBTOTALS:		534	1883	1349	
-L- 55+59.25	-L- 80+60.00	1665	4704	3039	
(END BRIDGE)					
SUBTOTALS:		1665	4704	3038	
TOTAL		3000	9246	6246	
PROJECT TOTAL		3000	9246	6246	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				312	
GRAND TOTALS:		3000	9246	6558	
SAY:		3000		6600	

ESTIMATE UNDERCUT: 1,000 CY CONTINGENCY (PER GEOTECH REC.)
ESTIMATE SELECT GRANULAR MATERIAL, CLASS III: 1,000 CY CONTINGENCY (PER GEOTECH REC.)
ESTIMATE DRAINAGE DITCH EXCAVATION: 240 CY

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.

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing and Grubbing, Removal of Existing Asphalt Pavement and Removal of Existing Concrete Pavement will be paid for at the contract lump sum price for "Grading."

SUMMARY OF ASPHALT PAVEMENT REMOVAL

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
-L-	11+20.00	16+96.53	LT	121.56
-L-	11+20.00	16+96.51	RT	138.01
-L-	16+96.53	20+68.47	LT	90.46
-L-	16+96.51	21+50.00	RT	104.56
-L-	20+68.47	21+50.00	LT	17.84
-L-	21+50.00	21+98.33	CL	132.01
-L-	22+98.00	23+45.00	CL	126.62
-L-	23+45.00	30+17.46	LT	166.50
-L-	23+55.55	35+80.00	RT	251.46
-L-	30+17.46	35+80.00	LT	135.29
-L-	35+80.00	36+28.42	CL	129.71
-L-	37+39.93	37+85.00	CL	123.15
-L-	37+85.00	53+75.00	LT	343.10
-L-	38+00.00	53+48.98	RT	359.30
-L-	53+75.00	54+20.38	CL	121.96
-L-	55+50.21	58+00.00	CL	697.16
-L-	58+00.00	74+00.00	LT	456.98
-L-	58+00.00	68+64.88	RT	357.21
-L-	74+00.00	80+60.00	LT	239.59
-L-	68+64.88	80+60.00	RT	447.62
-L- (SBG)	23+45.00	23+55.62	RT	3.82
-L- (SBG)	37+85.00	38+00.00	RT	5.49
-L- (SBG)	53+48.98	53+75.00	RT	8.30
PVMT. REM CONTINGENCY				1,000
APPROACHES				1,000
			TOTAL:	6,577.70
			SAY:	6600

SUMMARY OF SHOULDER BERM GUTTER

SURVEY LINE	STATION	STATION	LENGTH (feet)
-L- (LT)	23+36.69	23+55.50	18.81
-L- (RT)	23+36.69	23+55.50	18.81
-L- (LT)	37+81.25	38+00.00	18.75
-L- (RT)	37+81.25	38+00.00	18.75
-L- (RT)	53+49	53+87.75	38.75
		TOTAL:	113.87
		SAY:	114

"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

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH: STRAIGHT	LENGTH: SHOP CURVED	LENGTH: DOUBLE FACED	WARRANT POINT (RE = ROCK EMBANKMENT, BR = BRIDGE): 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: XI	ANCHORS: GRAU 350	ANCHORS: TYPE B-77	ANCHORS: XIII	ANCHORS: CAT-1	ANCHORS: VI MOD	ANCHORS: BIC	ANCHORS: AT-1	IMPACT ATTENUATOR TYPE 350: EA	IMPACT ATTENUATOR TYPE 350: G	IMPACT ATTENUATOR TYPE 350: NG	SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
-L-	14+29.06	21+85.31	LT	756.25'				15+65.00 (RE)	10.00'	13.00'		50'		1'			1	1										116.19'		
-L-	23+12.69	36+19.75	LT	1,306.25'			23+12.69 (BR)	36+19.75 (BR)	10.00'	13.00'								2										382.14'		
-L-	37+57.25	54+11.75	LT	1,656.25'			37+57.25 (BR)	54+11.75 (BR)	10.00'	13.00'				1'				2										382.17'		
-L-	55+59.25	58+78.00	LT	318.75'			55+59.25 (BR)		10.00'	13.00'	50'		1'				1	1										266.18'		
-L-	70+30.00	78+05.00	LT	775.00'			78+05.00 (RE)	70+30.00 (RE)	10.00'	13.00'	50'	50'	1'	1'			2													
-L-	15+66.56	21+85.31	RT	618.75'			16+96.13 (CULVERT)		10.00'	13.00'	50'		1'				1	1										265.95'		
-L-	23+12.69	24+56.44	RT	143.75'				23+12.69 (BR)	10.00'	13.00'		50'		1'			1	1										115.97'		
-L-	33+13.50	36+19.75	RT	306.25'			36+19.75 (BR)		10.00'	13.00'	50'		1'				1	1										266.29'		
-L-	37+57.25	39+01.00	RT	143.75'				37+57.25 (BR)	10.00'	13.00'		50'		1'			1	1										116.43'		
-L-	51+05.50	54+11.75	RT	306.25'			54+11.75 (BR)		10.00'	13.00'	50'		1'				1	1										260.00'		
-L-	55+59.25	57+03.00	RT	143.75'				55+59.25 (BR)	10.00'	13.00'		50'		1'			1	1										115.74'		
-L-	72+82.50	75+70.00	RT	287.50'			74+10.81 (CULVERT)	74+39.19 (CULVERT)	10.00'	13.00'	50'	50'	1'	1'			2													
			PROJECT SUBTOTAL	6,762.25'												TOTAL:	12	12									TOTAL:	2,287.06'		
		LESS ANCHOR DEDUCTIONS:		12 @ 50.00' = -600.00'																										
				12 @ 18.75' = -225.00'																										
			TOTAL	5,937.50'																										
															ADDITIONAL GUARDRAIL POST = 10 EACH															