COMPUTED BY: Patrick McPherson, El

CHECKED BY: Ed Edens, PE

PROJECT REFERENCE NO. SHEET NO.

8-5721 3R-1

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Station	Station	Uncl. Excav.	Undercut	Embank. +%	Borrow	Waste
-L- STA. 15+46.00	20+29 (BEGIN BRIDGE)	74	70	7815	7741	70
-L- STA. 22+99 (END BRIDGE)	30+40.00	1650		9720	8070	
-Y- STA. 10+12.07	-Y- STA. 11+35.00	822		0	0	822
-DW1- STA. 10+12.75	-DW1- STA. 11+75.00	8	500	672	664	500
PROJECT TOTALS:		2,554	570	18,207	16,475	1,392
MATERIAL FOR SHOULDER CONSTRUCTION		2,334	370	432	432	1,392
LOSS DUE TO CLEARING & GRUBBING				432	432	
ADDITIONAL UNDERCUT			550	660	660	550
EARTH WASTE TO REPLACE BORROW			330	000	-822	-822
PROJECT TOTALS:		2,554	1,120	19,299	16,744	1,120
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT	-	•		·	837	•
GRAND TOTALS:		2,554	1,120	19,299	17,582	1,120
SAY:		2,600	1,120	_	17,600	

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

NOTE: EARTHWORK QUANTITIES ARE CALCULATED BY THE ENGINEER. THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE

CONTINGENCY ITEMS PER B-5721 GEOTECHNICAL REPORT - DESIGN AND CONSTRUCTION RECOMMENDATIONS, DATED SEPTEMBER 30, 2021:

EST. SHALLOW UNDERCUT = 100 CUBIC YARDS

 $EST.\ UNCLASSIFIED\ EXCAVATION\ -\ ACCEPTABLE\ (NOT\ TO\ BE\ USED\ IN\ THE\ TOP\ 3\ FEET)\ -L-\ 26+40\ TO\ 28+25=1300\ CY,\ -Y-\ 10+40.00\ TO\ -Y-\ 11+35=300\ CY$

CLASS IV SUBGRADE STABILIZATION = 200 TONS

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station LOCATION LT/RT/CL		ASPHALT REMOVAL	ASPHALT BREAKUP	CONCRETE REMOVAL	CONCRETE BREAKUP	REMARKS
-L-	15+46	20+50	LT/RT	916.31	BILLAILOI	KEMOVAL	BILLAITOI	
-L-	22+85	28+63	LT/RT	1306.49				
-Y-	10+13	11+15	LT/RT	429.04				
		TOTAL:		2,651.84				
		TOTAL:		2,001.04				
		SAY:		2,660				

SHOULDER BERM GUTTER SUMMARY

IN LINEAR FEET

SURVEY	Station	Station	LOCATION	LENGTH		REMARKS
LINE			LT/RT/CL			
-L-	16+49	20+09	RT	356.00		
-L-	13+09	23+32	RT	23.00		
		TOTAL:		379.00		
		SAY:		380		

SUMMARY OF GUARDRAIL

"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.

NG = NON-GATING IMPACT ATTENUATION TYPE 350

BEG. STA.				LENGTH		WARRA	"N" DIST. TOTAL FLARE LENG				W		ANCHORS								IMP. ATTEN.			SINGLE FACE	REMOVE AND	REMARKS	
	END STA.	LOC.	STRAIGHT	SHOP	DOUBLE	APPR.	TRAIL.	FROM	SHLDR	APPR.	TRAIL.	APPR.	TRAIL.	III	B-77 G	REU GR	REU	CABLE	CAT-1	TES	1	MIA-2		EXISTING	CONCRETE	STOCKPILE	1
			(LF)	CURVED	FACED	END	END	E.O.L.	WIDTH	END	END	END	END		•	TL-2 TL	3	GUIDERAIL			EA	G	NG	GUARDRAIL	BARRIER	EXISTING	
17+00.57	20+34.85	LT	334.28			17+50.00	20+34.85	3	11		334.28		7		1	1	1										
23+02.52	25+99.48	LT	296.96			23+02.52	25+00.00	3	11	296.96		5			1	1	1										
15+99.00	20+21.85	RT	422.85			17+00.00	20+21.85	6	11	422.85		2			1	1	1										
22+94.70	23+82.87	RT	88.17				22+94.70	6	11		88.17		2		1	1	1										
		SUBTOTAL	1142.26												4	4	4										
ANCHOR UNIT DEDUCTIONS																											
	GREU TL-3 @ 50.00' EACH		-200.00																								
	GREU TL-2 @ 25.00' EACH		0.00																								
	B-77 @ 22.875' EACH		-91.50																								
	CAT-1 @ 6.25' EACH		0.00																								
ADDITIONAL GUARDRAIL POSTS = 5 EACH	1																										
		TOTAL	850.8							T T					4	4	4										
		SAY	862.5							† †					4	4	4										