COMPUTED BY: Z.LIU DATE: 4/20/2020
CHECKED BY: G. MODLIN DATE: 4/20/2020

PROJECT REFERENCE NO.	SHEET NO.
B-5737	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

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

STATION	STATION	UNCL. EXCAV.	UNDERCUT	EMBANK. +%	BORROW	WASTE
–L–						
17+00	20+32	12		1,831	1,819	
21+41	25+00	18		1,675	1,657	
SUBTOTALS:		30		3,506	3,476	
–RPA–						
10+00	12+25	14		655	641	
SUBTOTALS:		14		655	641	
–DET–						
17+68	20+05	369		254		115
21+85	24+18	0		398	398	
SUBTOTALS:		369		652	398	115
TOTAL:		413		4,813	4,515	115
MATERIAL FOR SHOULDER CONSTRUCTION				108	108	
LOSS DUE TO CLEARING AND GRUBBING		–50			50	
ADDITIONAL UNDERCUT						
WASTE IN LIEU OF BORROW					–115	–115
PROJECT TOTALS:		363		4,921	4,558	
EST 5% TO REPLACE TOP SOIL ON BORROW PIT					228	
–DET– DETOUR REMOVAL						
18+50	20+32	52		193	141	
21+41	22+50	142		0		142
WASTE IN LIEU OF BORROW					–142	–142
GRAND TOTALS:		557		5,114	4,785	
SAY:		600			5,000 *	

* THESE QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

SUMMARY OF BREAKING ASPHALT PAVEMENT

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SY
–L–	18+30	19+75	CL	807.68
–L–	22+00	22+70	CL	465.88
–RPA–	11+00	12+25	CL	293.00
			TOTAL:	1,566.56
			SAY:	1,570

SUMMARY OF REMOVAL ASPHALT PAVEMENT

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SY
–L–	19+75	20+07	CL	187.93
–L–	21+67	22+00	CL	219.57
–DET–	18+41	20+05	CL	416.20
–DET–	21+85	23+16	CL	337.53
–L–	17+82	18+30	LT	18.38
–L–	22+70	25+00	LT	32.14
–L–	17+54	18+30	RT	19.42
–L–	22+70	23+80	RT	27.37
			TOTAL:	1,258.54
			SAY:	1,260

"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			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	FACED	APPROACH BEGIN	TRAILING BEGIN			APPROACH BEGIN	TRAILING BEGIN	APPROACH BEGIN	TRAILING BEGIN		GREU TL–2	GREU TL–3	CAT–1	AT–1	TYPE III	TEMPORARY CRASH CUSHION			EA	G	NG				
–L–	19+27.19	20+08.44	LT	81.25′				20+08.44	7.5′			25′		0.5′		1				1										BRIDGE
–L–	21+67.44	22+03.50	LT	25.00′	50.00′		21+67.44		7.5′										1	1										BRIDGE
–L–	18+73.33	20+04.58	RT	131.25′			21+67.44		7.5′		25′		0.5′			1				1										BRIDGE
–L–	21+63.69	22+19.94	RT	56.25′				20+08.44	7.5′			25′		0.5′		1				1										BRIDGE
–Y3–	12+05.84	14+37.09	LT	231.25′					6′	9′	50′		1′				1	1										151.65′		
–Y3–	11+04.89	12+98.64	RT	193.75′					6′	9′	50′		1′				1	1										127.14′		
TOTAL				718.75′	50.00′											3	2	2	1	4								278.79′		
LESS ANCHOR DEDUCTIONS																														
GREU TL–3			2 @ 50.00′	–100.00′																										
GREU TL–2			3 @ 25.00′	–75.00′																										
TYPE III			4 @ 18.75′	–75.00′																										
AT–1			1 @ 6.25′	–6.25′																										
CAT–1			2 @ 6.25′	–12.50′																										
SUB TOTAL				450.00′	50.00′																									
SAY				450.00′	50.00′											3	2	2	1	4								300.00′		
ADDITIONAL GUARDRAIL POSTS			5																											

12/06/07
12/17/2021
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