COMPUTED BY:	TAK	DATE:	6/5/2025
CHECKED BY:	CKH	DATE:	6/5/2025

PROJECT NO.	SHEET NO.
R-3430B	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-DET_DRW1- Sta. 10+10.00	-DET_DRW1- Sta. 14+00.00	76	334	258	
SUBTOTALS:		76	334	258	
-L- Sta. 17+00.00	-L- Sta. 29+14.00 (Begin Bridge)	18,787	6,759		12,029
-Y1- Sta. 10+17.00	-Y1- Sta. 11+25.00	3	26	23	
SUBTOTALS:		18,790	6,785	23	12,029
-L- Sta. 39+91.00 (End Bridge)	-L- Sta. 48+00.00	3,226	9,086	5,860	
-DRW1- Sta. 10+17.00	-DRW1- Sta. 13+25.00	13	376	363	
-DRW1A- Sta. 10+12.00	-DRW1A- Sta. 10+90.00	6	2		4
-DRW2- Sta. 10+17.00	-DRW2- Sta. 10+92.05	133	15		118
SUBTOTALS:		3,379	9,479	6,223	122
-DET_DRW1- Removal		258			258
SUBTOTALS:		258			258
TOTALS:		22,503	16,598	6,504	12,409
MATERIAL FOR SHOULDER CONSTRUCTION			391	391	
LOSS DUE TO CLEARING & GRUBBING		-20		20	
WASTE IN LIEU OF BORROW				-6,266	-6,266
PROJECT TOTALS:		22,483	16,989	649	6,143
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				32	
GRAND TOTALS:		22,483		681	6,143
SAY:		**22,500**		**700**	
PAVEMENT STRUCTURE VOLUME = 1,800 CY					

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

Note: Earthwork quantities are calculated using the Roadway Design Unit guidelines. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

DDE = 440 CY
UNDERCUT EXCAVATION = 450 CY
SELECT GRANULAR MATERIAL = 400 CY
SHALLOW UNDERCUT = 100 CY
CLASS IV SUBGRADE STABILIZATION = 200 TONS

SUMMARY OF BREAKING OF EXISTING ASPHALT PAVEMENT

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	SY
-L-	22+00	29+00	RT	970
-L-	40+50	43+36	RT	428
-DRW1-	10+00	11+15	LT	260
		TOTAL:		**1,658**
		SAY:		**1,660**

SHOULDER BERM GUTTER SUMMARY

IN LINEAR FEET

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	LF
-L-	40+15	40+35	RT	20
		TOTAL:		**20**
		SAY:		**20**

SUMMARY OF REMOVAL OF EXISTING ASPHALT PAVEMENT

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	SY
-L-	25+00	29+19	RT	454
-L-	38+29	43+00	RT	1,319
-DRW1-	10+90	10+98	LT	70
-DRW1-	11+07	13+00	LT	258
-DET_DRW1-	10+10	11+75	CL	475
-DET_DRW1-	11+74	13+75	CL	296
		TOTAL:		**2,872**
		SAY:		**2,880**

"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 ATTENUATOR TYPE 350
G = GATING IMPACT ATTENUATOR TYPE 350

SUMMARY OF GUARDRAIL

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH		W		ANCHORS									IA TL-3		SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	Type III	B-77	GREU, TL-3	GREU, TL-2	CAT-1	AT-1	Type III SC	B-77 SC		G	NG				
-L-	23+50.00	29+14.00 (Bridge)	RT	564.00			29+14.00 (Bridge)		11	11	50		1		1		1										307.80		
-L-	39+91.00 (Bridge)	43+06.00	RT	315.00				39+91.00 (Bridge)	11	11		50		1	1		1										633.66		
-L-	16+50.00	22+15.00	LT	565.00	50			16+50.00 (Fill Slope)	11	11		250		5						1							50		Remove existing end unit and tie to existing guardrail
-L-	22+75.00	28+56.00 (Bridge)	LT	581.00				28+56.00 (Bridge)	7	7		50		1	1		1												
-L-	40+49.00 (Bridge)	43+19.30	LT	270.30			40+49.00 (Bridge)		7	7	50		1		1		1												
			SUBTOTAL	**2,295.30**	**50.00**										**4**		**4**			**1**							**991.46**		
	ANCHOR UNIT DEDUCTIONS																												
	GREU, TL-3	4 @ 50.00' EACH		-200.00																									
	Type III	4 @ 18.75' EACH		-75.00																									
	AT-1	1 @ 6.25' EACH		-6.25																									
	ADDITIONAL GUARDRAIL POSTS = 10 EACH																												
			TOTAL	**2,014.05**	**50.00**										**4**		**4**			**1**							**991.46**		
			SAY	**2,025**	**50**										**4**		**4**			**1**							**1,000**		