COMPUTED BY: G. Mwebaza DATE: 05/30/2023
CHECKED BY: M. Fallaha DATE: 10/16/2023

PROJECT NO.	SHEET NO.
B-3186	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Station	Station	Uncl. Excav.	Embank. + %	Borrow	Waste
-DET01_EB- 11+36.01	-DET01_EB- 22+20.00	1,175	11,053	9,878	0
-DET01_EB- 25+50.00	-DET01_EB- 28+05.94	2	2,561	2,559	
SUBTOTALS:		**1,177**	**13,614**	**12,437**	**0**
-DET01_WB- 13+50.00	-DET01_WB- 23+50.75	12	13,899	13,887	0
-DET01_WB- 25+89.25	-DET01_WB- 28+05.94	4	9,098	9,094	0
-L_LT- 6+89.01	-L_LT- 23+50.75	1,657	9,217	7,560	0
-L_LT- 25+89.25	-L_LT- 28+05.94	124	4,534	4,410	
SUBTOTALS:		**1,797**	**36,748**	**34,951**	**0**
Removal of -DET01_WB- & -DET01_EB- Included:					
-L_RT- 6+86.51	-L_RT- 23+38.51	11,809	1,714		10,096
-L_RT- 25+46.01	-L_RT- 28+06.26	7,725	210		7,515
SUBTOTALS:		**19,534**	**1,924**	**0**	**17,611**
TOTAL:		**22,508**	**52,286**	**47,388**	**17,611**
MATERIAL FOR SHOULDER CONSTRUCTION			1806	1806	
LOSS DUE TO CLEARING & GRUBBING		-350		350	
REDUCTION OF UNCLASS. EXC. -UNSUIT. WASTE			575	575	500
PROJECT TOTALS:		**22,158**	**54,667**	**50,119**	**18,111**
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				2,506	
GRAND TOTALS:		**22,158**		**52,625**	**18,111**
SAY:		**23,000**		**53,000**	

DDE = 150 CY
UNSUITABLE WASTE = 500 CY
UNDERCUT EXCAVATION = 625 CY
SELECT GRANULAR MATERIAL = 500 CY

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

Note: These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

SUMMARY OF ASPHALT PAVEMENT REMOVAL

IN SQUARE YARDS

SURVEY LINE	BEG. STA.	END STA.	LOCATION	AREA (SY)
-DET01_EB-	9+32.00	22+20.00	LT/RT	4,492.86
-DET01_EB-	25+50.00	28+05.94	LT/RT	1,178.85
-DET01_WB-	12+85.00	23+24.00		2,018.41
-DET01_WB-	26+32.00	28+05.94		218.49
			TOTAL	**7,909**
			SAY:	**7,910**

SHOULDER BERM GUTTER SUMMARY

IN LINEAR FEET

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH
-L_LT-	18+93.00	23+39.99	LT	444
-L_LT-	26+26.19	28+12.00	LT	187
-L_RT-	16+93.00	18+70.52	LT	176
-L_RT-	21+13.00	23+01.38	RT	188
			TOTAL	**995**
			SAY:	**1,000**

SUMMARY OF ASPHALT PAVEMENT BREAKING

IN SQUARE YARDS

SURVEY LINE	BEG. STA.	END STA.	LOCATION	AREA (SY)
-L_RT-	11+00.00	23+50.00	LT/RT	5,033
-L_RT-	25+50.00	28+05.94	LT/RT	969
-L_LT-	9+50.00	24+00.00	LT/RT	5,979
-L_LT-	25+75.00	28+05.94	LT/RT	816
			TOTAL	**12,797**
			SAY:	**12,800**

EXPRESSWAY GUTTER SUMMARY

IN LINEAR FEET

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH
-L_LT-	6+89.67	17+00.00	LT	998
			TOTAL	**998**
			SAY:	**1,000**

CHAIN LINK FENCE, 48" FABRIC

STATION TO STATION	FABRIC (LF)	LINE POSTS (EA)	TERMINAL POSTS (EA)
-L_LT- STA. 9+60.00 TO 11+60.00 LT	200	17	3
-L_LT- STA. 12+05.00 TO 16+49.00 LT	444	37	3
-DET01_EB- STA. 11+75.00 TO 16+70.00 RT	502	42	3
TOTAL	**1,146**	**96**	**9**
SAY:	**1,150**	**96**	**9**

"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 TL-3
G = GATING IMPACT ATTENUATOR TYPE TL-3

SUMMARY OF GUARDRAIL

SURVEYLINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE TL-3		SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	CONCRETE CAP FOR SINGLE FACED BARRIER FILL	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	TEMP THRIE-BEAM	G	NG				
-L_RT-	6+86.51	23+25.81 (BR)	RT	1660.375					12	15						1												
-L_RT-	6+86.51	19+06.54	LT	1218.75			6+86.51	18+70.54	6	9	100		8.41						1									
-L_LT-	6+89.01	18+77.39	RT	1210.375					6	9		100		10		1												
-L_LT-	18+92.02	23+64.45 (BR)	LT	479.125			19+20.00	23+41.57	12	15		100		10		1			1									
-L_RT-	18+70.52	22+23.22	LT																						349			
-L_RT-	26+79.02	27+22.00	LT																						43			
-L_RT-	6+86.51	10+76.00	RT																							395		
-L_RT-	6+86.51	23+51.00	LT																							1,647		
-L_RT-	16+53.00	23+46.00	RT																							696		
-L_RT-	25+26.00	28+08.00	RT																							279		
-L_LT-	6+89.01	23+87.00	RT/LT																							1,715		
-L_LT-	25+68.00	28+05.00	LT																							238		
-L_LT-	25+86.00	28+05.00	LT																							219		
-L_RT-	22+23.22	23+23.92	LT																								101	
-L_RT-	25+79.73	26+79.92	LT																								100	
-L_RT-	27+22.00	27+97.00	LT																								75	
-DET01_EB-																						4						
			SUBTOTAL	**4,568.625**																								
	ANCHOR UNIT DEDUCTIONS																											
	B-77	3 @ 22.875' EACH		-68.625																								
	CAT-1	2 @ 6.25' EACH		-12.50																								
	ADDITIONAL GUARDRAIL POSTS = 10 EACH																											
			TOTAL	**4,487.50**												**3**			**2**			**4**			**392**	**5,189**	**276**	
			SAY	**4,500**												**3**			**2**			**4**			**400**	**5,200**	**280**	