	DATE:	1/12/2024
-	DATE:	1/15/2024

COMPUTED BY: JAR

CHECKED BY: GSP

SUMMARY OF EARTHWORK

					UNCLASS	SIFIED	EMBANKMENT	BORROW	WASTE
					EXCAVA	TION	+%		
STAT	TION	S	TATION		(CY))	(CY)	(CY)	(CY)
-DET	Г- STA. 10+36.28	-	DET- STA. 16+62.00 (BEGIN BRIDGE)	66		12298	12232	
-DET	r- sta. 17+82.00 (end	BRIDGE) -	DET- STA. 24+30.47		114	ŀ	15544	15430	
SUB	TOTAL				180)	27842	27662	
-L- S	TA. 12+10.00	-	L- STA. 17+40.00 (BE	GIN BRIDGE)	34		2948	2914	
-L- S	TA. 18+75.00 (END BRI	IDGE) -	L- STA. 24+75.00		37		2450	2413	
SUB	TOTAL				71		5398	5327	
DETO	OUR REMOVAL								
-DET	r- sta. 10+36.28	-	DET- STA. 16+62.00 (BEGIN BRIDGE)	1024	8			10248
-DET	- STA. 17+82.00 (END	BRIDGE) -	DET- STA. 24+30.47		1295	53			12953
SUB	TOTAL				2320)1			23201
	JECT SUBTOTALS				2345	:2	33240	32989	23201
	FERIAL FOR SHOULDER					2	600	600	
	S DUE TO CLEARING &				-650	n	000	650	
	JECT SUBTOTALS	GROBBING			2280	_	33840	34239	23201
PRO.	JECT SOBIOTALS				2200	12	55040	34233	
	MATE 5% TO REPLACE	TOP SOIL ON BO	DRROW PIT		2280	12	33840	1712	23201
	MATE 5% TO REPLACE	TOP SOIL ON BO	DRROW PIT		2280)2	33840	1712 35951	23201
		TOP SOIL ON BO	DRROW PIT		2280 2290		33840		23201
GRA SAY PER C UNDE SELEC GEOT	GEOTECHNICAL RECOM ERCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABIL	MENDATIONS: 1,450 CY -, CLASS III = 3,4 LIZATION = 5,70	50 CY 20 SY		2290 uantities only. removal of exis	0 Unclas	33840 ssified excavation phalt pavement	35951 36000 n, fine gradi	ng, clearir
GRA SAY PER C UNDE SELEC GEOT GEOT SHALL CLASS	GEOTECHNICAL RECOM ERCUT EXCAVATION = CT GRANULAR MATERIAL	MENDATIONS: 1,450 CY -, CLASS III = 3,4 LIZATION = 5,70 STABILIZATION = 500 CY ZATION = 1,000	50 CY 20 SY = 1,500	grubbing, and price for "Grad	uantities only. removal of existing".	0 Unclas sting as	sified excavation	35951 36000 n, fine gradi will be paid	ng, clearir for at the l
GRA SAY PER C UNDE SELEC GEOT SHALL CLASS DRAIN LENGT TOTA GATI	GEOTECHNICAL RECOM RCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABII TEXTILE FOR SUBGRADE LOW UNDERCUT = 5 S IV SUBGRADE STABILI	MENDATIONS: 1,450 CY , CLASS III = 3,4 LIZATION = 5,70 STABILIZATION = 1,000 ON = 70 CY ANCE FROM EDG A LAST SECTION ROM BEGINNING OR TYPE 350	50 CY 50 SY 1,500 TON E OF TRAVEL LANE TO OF PARALLEL GUARDI OF TAPER TO END	grubbing, and price for "Grad NOTE: The prov SHOULDER BRE RAIL TO END OF	2290 uantities only. removal of exis ing". hwork quantiti se earthwork c ided by the Go	0 Unclas sting as	sified excavation phalt pavement	35951 36000 n, fine gradi will be paid	ng, clearir for at the l
GRA SAY PER C UNDE SELEC GEOT SHALL CLASS DRAIN	GEOTECHNICAL RECOM ERCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABIL TEXTILE FOR SUBGRADE LOW UNDERCUT = 5 S IV SUBGRADE STABIL NAGE DITCH EXCAVATION NAGE DITCH EXCAVATION AL WIDTH OF FLARE FR NG IMPACT ATTENUATO ON-GATING IMPACT AT	MENDATIONS: 1,450 CY -, CLASS III = 3,4 LIZATION = 5,77 STABILIZATION = 5,77 STABILIZATION = 1,000 ON = 70 CY ANCE FROM EDG A LAST SECTION ROM BEGINNING OR TYPE 350 TENUATOR TYPE 3	50 CY D0 SY 1,500 TON E OF TRAVEL LANE TO OF PARALLEL GUARD OF TAPER TO END 250	grubbing, and price for "Grad NOTE: The prov SHOULDER BRE RAIL TO END OF	2290 uantities only. removal of exis ing". hwork quantiti se earthwork c ided by the Go	0 Unclas sting as	sified excavation phalt pavement calculated by the es are based in nical Engineering	35951 36000 n, fine gradi will be paid	ng, clearir for at the li Engineer. surface da
GRA SAY PER C UNDE SELEC GEOT SHALL CLASS DRAIN SHOL LENGT TOT/ GATII = NO	GEOTECHNICAL RECOM RCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABIL TEXTILE FOR SUBGRADE LOW UNDERCUT = 5 S IV SUBGRADE STABIL NAGE DITCH EXCAVATION JLDER WIDTH = DISTANCE TH = DISTANCE FROM AL WIDTH OF FLARE FR NG IMPACT ATTENUATO	MENDATIONS: 1,450 CY , CLASS III = 3,4 LIZATION = 5,70 STABILIZATION = 1,000 ON = 70 CY ANCE FROM EDG A LAST SECTION ROM BEGINNING OR TYPE 350	50 CY 50 SY 1,500 TON E OF TRAVEL LANE TO OF PARALLEL GUARDI OF TAPER TO END	grubbing, and price for "Grad NOTE: The prov SHOULDER BRE RAIL TO END OF	AK POINT. GUARDRAIL.	0 Unclas sting as	sified excavation phalt pavement calculated by the es are based in hical Engineering	35951 36000 n, fine gradi will be paid e Roadway part on subs g Unit.	ng, clearir for at the l Engineer. surface da
GRA SAY PER C UNDE SELEC GEOT SHALL CLASS DRAIN SHOL LENGT TOT/ GATII = NO	GEOTECHNICAL RECOM ERCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABIL TEXTILE FOR SUBGRADE LOW UNDERCUT = 5 S IV SUBGRADE STABIL NAGE DITCH EXCAVATION NAGE DITCH EXCAVATION AL WIDTH OF FLARE FR NG IMPACT ATTENUATO ON-GATING IMPACT AT	MENDATIONS: 1,450 CY -, CLASS III = 3,4 LIZATION = 5,77 STABILIZATION = 5,77 STABILIZATION = 1,000 ON = 70 CY ANCE FROM EDG A LAST SECTION ROM BEGINNING OR TYPE 350 TENUATOR TYPE 3	50 CY D0 SY 1,500 TON E OF TRAVEL LANE TO OF PARALLEL GUARD OF TAPER TO END 250	grubbing, and price for "Grad NOTE: The prov O SHOULDER BRE RAIL TO END OF OF GUARDRAIL.	LENGTH	Unclas sting as ies are quantitie eotechr	sified excavation phalt pavement calculated by the es are based in nical Engineering	35951 36000 n, fine gradi will be paid e Roadway part on subs g Unit. WARRANT POII	ng, clearir for at the l Engineer. Surface da
GRA SAY PER C UNDEC GEOT SHALL CLASS DRAIN SHOL LENGT TOT/ GATII = NC	GEOTECHNICAL RECOM ERCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABIL TEXTILE FOR SUBGRADE LOW UNDERCUT = 5 S IV SUBGRADE STABIL NAGE DITCH EXCAVATION JLDER WIDTH = DISTA TH = DISTANCE FROM AL WIDTH OF FLARE FR NG IMPACT ATTENUATO ON-GATING IMPACT AT BEG. STA.	MENDATIONS: 1,450 CY , CLASS III = 3,4 LIZATION = 5,70 STABILIZATION = 5,70 STABILIZATION = 1,000 ON = 70 CY ANCE FROM EDG A LAST SECTION ROM BEGINNING OR TYPE 350 TENUATOR TYPE 3 END STA.	50 CY 20 SY 1,500 TON E OF TRAVEL LANE TO OF PARALLEL GUARD OF TAPER TO END 150 LOCATION	grubbing, and price for "Grad NOTE: The prov SHOULDER BRE RAIL TO END OF OF GUARDRAIL.	LENGTH	Unclas sting as ies are quantitie eotechr	sified excavation phalt pavement calculated by the es are based in nical Engineering	35951 36000 n, fine gradi will be paid e Roadway part on subs g Unit. WARRANT POIR	ng, clearir for at the l Engineer. Surface da
GRA SAY PER C UNDE SELEC GEOT SHALL CLASS DRAIN SHOL LENGT TOT/ GATII = NO	GEOTECHNICAL RECOM ERCUT EXCAVATION = CT GRANULAR MATERIAL TEXTILE FOR SOIL STABIL TEXTILE FOR SUBGRADE LOW UNDERCUT = 5 S IV SUBGRADE STABIL NAGE DITCH EXCAVATION NAGE DITCH EXCAVATION AL WIDTH OF FLARE FR NG IMPACT ATTENUATON-GATING IMPACT ATTENUATON N-GATING IMPACT ATTENUATON-GATING IMPACT ATTENUATON BEG. STA.	MENDATIONS: 1,450 CY ., CLASS III = 3,4 LIZATION = 5,7(STABILIZATION = 500 CY ZATION = 1,000 ON = 70 CY ANCE FROM EDG A LAST SECTION ROM BEGINNING OR TYPE 350 TENUATOR TYPE 3 END STA. 17 + 40.000	50 CY 20 SY 1,500 0 TON E OF TRAVEL LANE TO OF PARALLEL GUARD OF TAPER TO END 50 LOCATION LIT.	grubbing, and price for "Grad NOTE: The prov O SHOULDER BRE RAIL TO END OF OF GUARDRAIL. STRAIGHT 247.875'	LENGTH	Unclas sting as ies are quantitie eotechr	sified excavation phalt pavement calculated by the es are based in nical Engineering	35951 36000 n, fine gradi will be paid f e Roadway part on subs g Unit.	ng, clearir for at the l Engineer. Surface da

SURVEY				LENGTH		WARRA	ANT POINT	″N″ DIST.	TOTAL	FLARE	LENGTH		N			A	NCHORS			ļ	IMPACT ATTENUATOR TYPE 350	SINGLE	REMOVE	REMOVE AND		
LINE	BEG. STA.	END STA.	LOCATION	STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END	FROM E.O.L.	SHOUL. WIDTH	APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE B–77	TYPE MASH III TL-2	GREU TL–3	B-77 AT-1	VI MOD	BIC		TYPE 350	GUARDRAIL	REMOVE EXISTING GUARDRAIL	STOCKPILE EXISTING GUARDRAIL	REMARKS
-L-	14 + 92.125	17+40.000	LT.	247.875′				17 + 40.00	8′–0″	11′–0″		50′–0″		1′–0″	1		1									
-L-	14+29.625	17+40.000	RT.	310.375'			17+40.00		8′–0″	11′–0″	50′–0″		1′–0″		1		1									
-L-	18+75.000	21+85.375	LT.	310.375′				18+75.00	8′–0″	11′–0″		50′–0″		1′–0″	1		1									
-L-	18+75.000	20+22.875	RT.	147.875′			18+75.00		8′–0″	11′–0″	50′–0″		1′–0″		1		1									
			PROJECT SUBTOTAL	1,016.500′											4		4									
		LESS A	NCHOR DEDUCTIONS	(–)291.500′		ADDITIO	NAL GUARDRAIL POST	TS = 5 EACH																		
			GR PROJECT TOTAL	725.00′											4		4									
			GR SAY	725.00′														GUARDRAIL ANCH	HOR DEDUC	CTIONS						
																	TYPE	B-77 = 4 @ 2	22.875′ =	91.50′						
																	G	REU TL-3 = 4 @	<u>ک</u> 50′ = 2	200′						
		-																TOTAL DEDUCT	TIONS = 2	291.50′						

SURVEY	BEG. STA.		LOCATION		LENGTH		WARRA	NT POINT	"N" DIST.	TOTAL	FLARE L	ENGTH	٧	Ŵ				ANCH	ORS				IMPACT ATTENUATO TYPE 350	RSINGLE	REMOVE			
LINE	BEG. STA.	END STA.	LOCATION	STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END	FROM E.O.L.	SHOUL. WIDTH	APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE B–77	TYPE III	MASH G TL-2 T	REU L–3 B–1	77		VI BIC	AT-1	EA G N	GUARDRAIL	REMOVE EXISTING GUARDRAIL	STOCKPILE EXISTING GUARDRAIL		REMARKS
-DET-	15+43.25	16+62.00	 LT.	118.75′				16+62.00	4'-0"	6'-0"		50'-0"		1'-0"		1		1							118.75′		TEMP. GUARDRAIL	
-DET-	11+43.25	16+62.00	RT.	518.75'			16+62.00		4'-0"	6'-0"	50'-0"		1′–0″	1-0		1		1							518.75'		TEMP. GUARDRAIL	
–DET–	17 + 82.00	20+38.25	LT.	256.25′				17 + 82.00	4'-0"	6′–0″		50′–0″		1′–0″		1		1							256.25′		TEMP. GUARDRAIL	
–DET–	17 + 82.00	23+13.25	RT.	531.25′			17+82.00		4'-0"	6′–0″	50′–0″		1′–0″			1		1							531.25′		TEMP. GUARDRAIL	
			PROJECT SUBTOTAL	1,425.00′												4		4										
		LESS AN	CHOR DEDUCTIONS	()275.000′		ADDITIC	NAL GUARDRAIL POST	S = 5 EACH																				
			GR PROJECT TOTAL	1,150.00′												4		4							1,425′			
			GR SAY	1,150.00′																	EDUCTIONS							
																		TYPE	= 4	@ 18.75′	= 75'							
																								_				
																				4 @ 50'			\downarrow	_				
																		тс	OTAL DE	DUCTIONS	= 275.00'							

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

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ASPHALT PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD ²
-L-	15+72.00	17+46.09	CL	482
-L-	18+67.64	21+33.00	CL	740
–DET–	10+36.28	16+62.00	CL	1,484
–DET–	17 + 82.00	24+30.47	CL	1,583
			TOTAL:	4,289
			SAY:	4,300

	SHOUI GUTTEI	
SURVEY LINE	STATION	STAT
-L-	14 + 90.00	17+2
-L-	15+45.00	17+2
-L-	18+90.00	19+6
-L-	18+90.00	21+2
–DET–	16+30.00	16+6
–DET–	16+30.00	16+6
-DET-	17 + 82.00	18+6
-DET-	17 + 82.00	19 + 8

GUARDRAIL SUMMARY

TEMPORARY GUARDRAIL SUMMARY

		BRIDGE#	030014	PROJECT REFERENCE NO.	SHEET NO. 3B-1				
DER B	DER BERM			BR-0062					
SUM		IF		ETHERILL ENGINEERING	1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F–0377 Bus: 919 851 8077				
STATION	LOCATION LT/RT/CL	LF			Fax: 919 851 8107				
				TRANSPORTATION PLANNING/DESIGN - BR					
17+25.00	RT.	235.00′		CNIL/SITE DESIGN - GIS/GPS - CONS	TRUCTION OBSERVATION				
17+25.00	LT.	180.00′		DOCUMENT NOT CONSIDERED FINAL					
19+62.50	RT.	72.50′		UNLESS ALL SIGNATURES					
21+25.00	LT.	235.00′							
16+62.00	RT.	32.00′							
16+62.00	LT.	32.00′							
18+65.00	RT.	83.00′							
19+85.00	LT.	203.00							
	TOTAL:	1,072.50′							

SAY: 1.073'