COMPUTED BY: RLC DATE: 2-7-2023
CHECKED BY: CDA DATE: 9-12-2023

PROJECT REFERENCE NO.	SHEET NO.
U-5839	3B-1

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

NV5 ENGINEERS & CONSULTANTS, INC.
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NC License # F-1333
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SUMMARY OF EARTHWORK (IN CUBIC YARDS)

Station	Station	Uncl. Excav.	Embank. +15%	Borrow	Waste
-L- STA. 10+19.45 LT	-L- STA. 23+69.90 LT	170	182	15	15
-L- STA. 25+44.37 LT	-L- STA. 30+55.00 LT	936	139		797
-L- STA. 32+35.00 LT	-L- STA. 73+20.00 LT	3,105	1,147		1,958
SUBTOTALS:		4,211	1,467	15	2,770
-L- STA. 10+19.45 RT	-L- STA. 23+69.90 RT	333	113		288
-L- STA. 25+44.37 RT	-L- STA. 30+55.00 RT	128	6,937	6,809	
-L- STA. 32+35.00 RT	-L- STA. 73+20.00 RT	2,686	1,793		893
SUBTOTALS:		3,147	8,842	6,809	1,181
-Y2- STA. 10+12.04	-Y2- STA. 11+50.00	44			44
-Y2A- STA.14+00.00	-Y2A- STA.15+10.91	28	7		21
-Y3- STA. 15+00.00	-Y3- STA. 16+75.28	41	30		11
-Y4- STA. 10+14.04	-Y4- STA. 11+00.00	11	9		2
-Y5- STA. 10+45.25	-Y5- STA. 11+52.00	21	37	16	
-Y6- STA. 14+45.00	-Y6- STA. 16+95.00	7,761			7,761
-Y7- STA. 14+20.00	-Y7- STA. 16+00.87	341	20		321
-Y8- STA. 10+20.00	-Y8- STA. 10+75.00	28			28
-Y9- STA. 11+30.00	-Y9- STA. 16+36.62	225	294	69	
-Y10- STA. 10+37.92	-Y10- STA. 13+84.00	69	163	94	
-Y11- STA. 11+20.00	-Y11- STA. 11+78.42	12	3		9
-Y13- STA. 10+35.80	-Y13- STA. 12+00.00	54	17		37
-Y14- STA. 10+72.00	-Y14- STA. 13+66.02	109	131	22	
-Y14A- STA. 10+44.80	-Y14A- STA. 12+95.00	404	51		353
-Y15- STA. 10+54.05	-Y15- STA. 11+74.00	58	90	32	
-Y16- STA. 15+95.00	-Y16- STA. 17+62.40	19	54	35	
-Y17- STA. 10+35.77	-Y17- STA. 11+42.27	41	484	443	
-Y18- STA. 10+35.79	-Y18- STA. 11+86.00	114	6		108
-Y20- STA. 11+88.00	-Y20- STA. 12+16.44	21			21
-Y21RPA- STA. 13+04.00	-Y21RPA- STA. 14+66.26	69	325	95	
-Y21RPB- STA. 13+05.00	-Y21RPB- STA. 16+55.24	219	131	62	
-Y21LPB- STA. 16+50.00	-Y21LPB- STA. 19+60.81	230	378	159	
-Y21RPD- & -Y21LPD- STA. 13+75.00	-Y21RPD- & -Y21LPD- STA. 19+92.16	2,975	1,611		1,364
SUBTOTALS:		12,894	3,841	1,027	10,080
TOTALS:		20,252	14,152	7,852	14,032
Loss Due to Clearing & Grubbing		-1,850			-1,850
Waste in Lieu of Borrow				-7,852	-7,852
PROJECT TOTALS:		18,402	14,152	0	4,330
Est. 5% To Replace Top Soil on Borrow Pit					
GRAND TOTALS:		18,402			
SAY:		**18,500**			

Pavement Structure Volume = 10,500 CY
Class IV Subgrade Stabilization = 700 TON
Geotextile for Soil Stabilization = 500 SY
Geotextile for Subgrade Stabilization = 1,250 SY
Shallow Undercut = 350 CY
Shoulder Borrow = 500 CY
Undercut Excavation = 850 CY

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

72" CHAIN LINK FENCE

LINE	Station	Station	LOCATION LT/RT/CL	FABRIC LF	END BRACE	CORNER BRACE	LINE BRACE	LINE POSTS	TERMINAL POSTS
-L-	23+39.44	24+51.40	CL	210	2	2	22	21	26
-L-	24+79.38	25+66.98	CL	200	2	2	22	20	26
			TOTAL:	410				41.5	52
			SAY:	410				42	52

4 STRAND BARB WIRE FENCE RESET

LINE	Station	Station	LENGTH LF
-Y16-	14+46.75	15+25.33	78.58
		TOTAL:	78.58
		SAY:	80

REMOVE EXISTING GUARDRAIL

LINE	Station	Station	Location LT/RT/CL	LENGTH LF
-L-	66+50.26	67+07.72	LT	57.46
-L-	65+48.55	68+29.38	RT	280.83
-L-	65+02.41	67+41.59	CL	239.18
-Y17-	10+37.53	12+11.85	LT	174.32
-Y17-	10+39.10	12+09.87	RT	170.77
-Y21RPB-	13+05.00	14+81.54	LT	176.54
-Y21LPB-	16+50.00	19+22.66	LT	272.66
		TOTAL:		1,371.76
		SAY:		1400

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT REMOVAL
-L-	15+03.00	15+30.00	RT	4.33
-L-	33+92.00	34+69.00	LT	82.68
-Y21RPB-	15+11.00	16+27.00	LT	321.12
-Y21LPB-	19+27.00	19+45.00	RT	10.19
-L-	65+19.00	65+68.00	LT	7.70
-Y21LPD-	19+41.00	19+67.00	RT	7.24
-Y21RPD-	16+86.00	17+40.00	LT	129.07
		TOTAL:		562.34
		SAY:		570

SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT BREAKUP
-L-	12+97	16+83.00	LT&RT	244.21
-Y7-	14+71.00	16+27.00	RT	25.71
-Y21RPB-	14+08.00	16+40.00	LT	309.33
-L-	63+78.00	68+36.00	LT&RT	1250.26
-Y21RPD-	16+50.00	17+50.00	RT	255.21
-L-	71+29.00	72+62.00	LT	52.97
		TOTAL:		2,137.69
		SAY:		2,150

DIVISION OF HIGHWAYS
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GUARDRAIL SUMMARY

"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

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 TL-3		SINGLE FACED CONCRETE BARRIER	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-	25+33.92	26+11.34	LT	68.750				25+33.92 (Bridge)	12.5	14' Berm	25		1		1			1										
-L-	25+66.56	29+04.50	RT	351.100			25+66.56		17	14' Berm					1													
-L-	30+24.33	30+54.21	RT	29.870				30+54.21 (Bridge)	12.5	14' Berm					1													
-L-	32+35.79	33+22.40	LT	81.250				32+35.79 (Bridge)	12.5	14' Berm	25		1		1			1										
-L-	64+88.87	67+89.63	LT	306.250			66+40.28	65+28.58	7	10' Berm	25		1					1	1									
-L-	65+13.77	67+35.69	LT	70.750			66+88.00	65+70.00	5.33/4.83	MEDIAN	35.375	35.375		1.92		2									2	118.25		
-L-	65+13.77	67+35.69	RT	70.750			65+70.00	66+88.00	5.08/5.83	MEDIAN	35.375	35.375	3.17	6.43		2										117.79		
-L-	64+67.64	67+72.44	RT	293.750			66+20.60	67+41.14	7	10' Berm	25		1					1	1									
-Y5-	10+98.26	11+28.08	LT	6.250	31.25			10+98.26 (Bridge)	7.5	8.5' Berm	6.25		4							1	1							
-Y12-	11+51.50	12+38.30	LT	51.450	36.05			11+51.50	4.25	Exist. Berm	25		1					1										
-Y17-	10+41.63	11+44.50	LT	71.490	42.39			10+41.63	12.5	13' Berm	25		1					1										
-Y17-	10+49.65	11+40.08	RT	60.270	44.88		10+49.65		11.5	13' Berm		25		1				1										
-Y21RPB-	13+05.00	14+11.37	LT	112.500				13+05.00	12	15'Berm	25		1					1										
-Y21LPB-	16+50.00	19+13.79	LT	262.500			16+50.00		12	15' Berm		25		1				1										
-Y21RPD-	13+46.78	15+93.94	LT	250.000			15+93.94		12	15' Berm	25	25	1	1				2										
				2086.930	154.57	0									4	4	0	11	2	1	1	0	0	0	2	236.04		
		ANCHOR DEDUCTIONS																										
		(11) GREU TL-2 @ 25' EACH =		-275.000																								
		(4) TYPE III @ 18.75' EACH =		-75.000																								
		(1) TYPE III SC @ 18.75' EACH =		-18.750																								
		(1) AT-1 @ 6.25' EACH =		-6.250																								
		(4) B-77 @ 22.875' EACH =		-75.000																								
		(2) CAT-1 @ 6.25' EACH =		-12.500																								
		GRAND TOTALS		1624.430																								
		SAY		**1700**	**155**										**4**	**4**		**11**	**2**	**1**	**1**				**2**	**240**		
	ADDITIONAL GUARDRAIL POSTS			**10**																								

5/9/06
10/18/2023
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Chris Anderson