COMPUTED BY: KDA	DATE: 5/5/2016
CHECKED BY: AKW	DATE: 5/9/2016

PROJECT NO.	SHEET NO.
B-5123	3B-1

RD266404

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

CUBIC YARDS

Station to Station	Uncl. Exc. C.Y.	Embank. +% C.Y.	Borrow C.Y.	Waste C.Y.
SUMMARY NO. 1				
-DET2- 11+87.26 TO 14+33.00 (BB)	11	3,602	3,591	
-DET2- 17+23.00 (EB) TO 20+23.72	268	2,475	2,207	
SUMMARY NO. 1 TOTALS	279	6,077	5,798	
SUMMARY NO. 2				
-L- 13+00.00 LT TO 20+29.92 (BB) LT	308	3,697	3,389	
-L- 22+49.92 (EB) LT TO 30+00.00 LT	677	843	166	
-XOVER- 14+00.00 TO 28+41.67	16	822	806	
SUMMARY NO. 2 TOTALS	1,001	5,362	4,361	
SUMMARY NO. 3				
-L- 13+00.00 RT TO 20+38.29 (BB) RT	72	4,301	4,229	
-L- 22+58.29 (EB) RT TO 30+00.00 RT	26	2,806	2,780	
SUMMARY NO. 3 TOTALS	98	7,107	7,009	
SUMMARY NO. 4				
DETOUR REMOVAL & -L- SHLDR.				
CONSTRUCTION LEFT				
-L- 16+07.46 LT TO 19+28.54 (BB) LT	2,753	363		2,390
-L- 22+18.54 (EB) LT TO 26+36.01 LT	2,144	537		1,607
SUMMARY NO. 4 TOTALS	4,897	900		3,997
SUMMARY NO. 5				
-L- 13+00.00 MED TO 20+34.11 (BB) MED	41	1,827	1,786	
-L- 22+54.11 (EB) MED TO 30+00.00 MED	12	1,342	1,330	
-SRVRD- 11+14.00 TO 17+25.00	790	71		719
SUMMARY NO. 5 TOTALS	843	3,240	3,116	719
TOTALS	7,118		20,284	4,716
Estimated Shoulder Material			201	
PROJECT TOTALS	7,118		20,485	4,716
Est. 5% To Replace Topsoil at Borrow Pit			1,024	
GRAND TOTAL	7,118		21,509	
SAY	7,200		21,600	

ESTIMATED UNDERCUT = 1,000 CY
ESTIMATED SHALLOW UNDERCUT = 300 CY
ESTIMATED SELECT GRANULAR MATERIAL = 300 CY
ESTIMATED CLASS IV SUBGRADE STABILIZATION = 540 TONS
ESTIMATED DRAINAGE DITCH EXCAVATION = 300 CY

SUMMARY OF ASPHALT PAVEMENT REMOVAL

Station to Station	LOC LT/RT/CL	Asphalt Removal SQ. YDS.
-DET2- 11+07.53 TO 14+33.00	CL	826.20
-DET2- 17+23.00 TO 21+47.53	CL	1,058.77
-SRVRD- 13+32.00 TO 17+25.00	LT	221.19
-SRVRD- 11+14.00 TO 12+04.05	RT	6.11
-SRVRD- 12+78.62 TO 17+25.00	RT	300.33
TEMPORARY CROSS OVER		
-L- 14+00.00 TO 18+01.55	CL	1,566.73
-L- 24+06.16 TO 28+41.67	CL	1,848.93
EXIST. PAVED SHOULDERS		
-L- 13+00.00 TO 15+31.29	LT	179.26
-L- 17+25.00 TO 30+00.00	LT	164.51
-L- 13+00.00 TO 15+87.22	RT	236.25
-L- 27+50.61 TO 30+00.00	RT	70.71
PROJECT TOTAL		6,478.99
SAY		6,480

SUMMARY OF ASPHALT PAVEMENT BREAKING

Station to Station	LOC LT/RT/CL	Asphalt Breaking SQ. YDS.
-L- 16+00.00 TO 20+40.44	LT	2,004.26
-L- 16+00.00 TO 20+49.26	RT	2,060.71
-L- 22+47.71 TO 25+00.00	LT	720.94
-L- 22+55.39 TO 25+00.00	RT	792.73
PROJECT TOTAL		4,785.91
SAY		4,790

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

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, FINE GRADING, CLEARING AND GRUBBING AND REMOVAL AND BREAKING OF EXISTING PAVEMENT WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "GRADING".

CHAIN LINK FENCE 48" FABRIC

LINE	STATION TO STATION	LOCATION	FABRIC (Lin. Ft.)	LINE POSTS	TERMINA POSTS
-L-	17+05.45 TO 19+87.56	LT	282.15	23	3
-L-	22+56.64 TO 24+10.00	LT	153.68	13	3
-L-	18+15.44 TO 20+31.86	RT	216.45	18	3
-L-	23+01.33 TO 24+00.00	RT	134.46	11	3
PROJECT TOTAL			786.74		
SAY			790	65	12

GUARDRAIL SUMMARY

"N" = DISTANCE FROM EDGE OF TRAVEL 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

* THE PAYMENT FOR WOOD RUB RAIL IS INCIDENTAL TO STEEL BEAM GUARDRAIL.

LINE	BEG. STA.	END STA.	LOC.	LENGTH (FT.) STRAIGHT	SHOP CURVED	WOOD RUB RAIL	WARRANT POINT APPR. END	TRAIL. END	"N" DIST. FROM E.O.L.	TOTAL SHLDR WIDTH	FLARE LENGTH APPR. END	TRAIL. END	W APPR. END	TRAIL. END	ANCHORS GRAU 350 TL-3	TYPE B-77	GRAU 350 TL-2	TYPE B-77 SHOP CURVED		IMPACT ATTEN. TYPE 350 EA	G	NG	REMOVE EXISTING GUARDRAIL	REMARKS
-L-	16+71.98	19+90.73	LT	318.75		268.75		19+90.73	2.5'	14'		50'		1'	1	1							378'	
-L-	22+61.36	24+05.11	LT	143.75		93.75	22+61.36		2.5'	14'	50'		1'		1	1							71'	
-L-	18+87.64	20+31.39	MED LT	143.75				20+31.39								1							382'	
-L-	22+51.33	23+82.58	MED LT	131.25			22+51.33									1						1	385'	
-L-	18+93.11	20+36.86	MED RT	143.75			20+36.86									1						1		
-L-	22+56.89	23+88.14	MED RT	131.25				22+56.89								1								
-L-	17+83.33	20+27.08	RT	243.75		193.75	20+27.08		2.5'	14'	50'		1'		1	1							622'	
-SRVRD-	12+21.04	14+73.20	LT	252.16				14+73.20	3'	6'							1	1						
-SRVRD-	15+26.17	15+76.38	LT	56.25			15+26.17		8'	12'							1	1						
-SRVRD-	12+46.50	13+06.78	RT	60.28			13+06.78		6'	9'						1	1							
		SUB-TOTALS		1,624.94		556.25									3	8	3	2				2	1,838	
DEDUCTION FOR ANCHOR UNITS		(3 GRAU TL-3 @ 50')		-150.00																				
		(8 TYPE B-77 @ 18.75')		-150.00																				
		(3 GRAU TL-2 @ 25')		-75.00																				
		(2 B-77SC @ 18.75')		-37.50																				
		PROJECT TOTAL		1,212.44		556.25									3	8	3	2					1,838	
		SAY		1,225.00		* 560.00																	2,300	

ADDITIONAL GUARDRAIL POSTS = 5 EA

TEMPORARY GUARDRAIL SUMMARY

LINE	BEG. STA.	END STA.	LOC.	LENGTH (FT.) STRAIGHT	SHOP CURVED	DOUBLE FACED	WARRANT POINT APPR. END	TRAIL. END	"N" DIST. FROM E.O.L.	TOTAL SHLDR WIDTH	FLARE LENGTH APPR. END	TRAIL. END	W APPR. END	TRAIL. END	ANCHORS GRAU 350 TL-2	TYPE M 350	TYPE III			IMPACT ATTEN. TYPE 350 EA	G	NG	REMOVE EXISTING GUARDRAIL	REMARKS
-DET2-	12+43.09	14+24.34	LT	181.25				14+24.34	4'	8'		25'		1'	1		1							
-DET2-	17+14.34	17+70.59	LT	56.25			17+14.34		4'	8'	25'		1'		1		1							
-DET2-	13+22.91	14+41.66	RT	118.75				14+41.66	4'	8'		37.5'	1'			1	1							
-DET2-	17+31.66	18+25.41	RT	93.75			17+31.66		4'	8'	37.5'			1'		1	1							
		SUB-TOTALS		450.00											2	2	4							
DEDUCTION FOR ANCHOR UNITS		(2 GRAU TL-2 @ 25')		-50.00																				
		(2 M-350 @ 37.5')		-75.00																				
		(4 TYPE III @ 18.75')		-75.00																				
		PROJECT TOTAL		250.00											2	2	4							
		SAY		275.00																				