RKA-RAL-DES-21

COMPUTED BY:	GSS	DATE:	9/19/2018
CHECKED BY:	CMKR	DATE:	9/19/2018

PROJECT NO.	SHEET NO.
B-4833	3B-1

RAMEY KEMP & ASSOCIATES
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

LINE	Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
L	10+36.46	18+30.00	514	1844	1330	0
L	19+00.00	23+18.17	192	535	343	0
TOTAL			**706**	**2379**	**1673**	**0**
ADJUSTMENTS DUE TO						
Est. Loss Due To Clearing And Grubbing			-30		30	
Shoulder Material				600	600	
Rock Waste To Replace Borrow						
Adjust For Rock Swell That Replaces Borrow						
Eliminate Shrinkage For Mat'l That Is Now Rock						
Earth Waste to Replace Borrow					0	0
PROJECT TOTAL			**676**	**2979**	**2303**	**0**
Est. 5% to Replace Topsoil in Borrow Pits					115	
GRAND TOTAL			**676**	**2979**	**2418**	**0**
SAY			**700**		**2500**	
Est. Drainage Ditch Excav.		**10 CY**				
Select Granular Material		**400 CY**				
Geotextile For Soil Stab.		**700 SY**				
Estimate Undercut		**400 CY**				
Estimate Shallow Undercut		**200 CY**				
Class IV Subgrade Stab.		**200 TONS**				

SUMMARY OF EXISTING ASPHALT PAVEMENT REMOVAL

LINE	Station	Station	LOC LT/RT/CL	YD^2
L	15+00.00	18+40.00	CL	693
L	18+90.00	20+25.00	CL	265
L	13+25.00	15+00.00	CL	366
			TOTAL:	**1324**
			SAY:	**1350**

PARCEL INDEX

PARCEL NO.	PLAN SHEET NO.	PROPERTY OWNER NAME	R/W AREA TAKEN (SF)	PERM. UTIL. ESMT (SF)
1	4	EDWARD V. CURBIN	37,661.00	852.72
2	4	DARIN K. JONES AND WIFE JESSICA T. JONES	620.05	0.00
3	4	TIMOTHY CORCORAN AND TATIANNA CORCORAN	6,837.21	261.87
4	4	NOT USED	---	---
5	4	ELEON M. POPE, JR. AND WIFE TAMMY S. POPE	6,215.48	1,368.38
6	4	EFREN G. ROJAS AND WIFE ANA LIDIA C. MARTINEZ	12,101.88	103.75

Approximate quantities only. Unclassified excavation, borrow excavation, fine grading,clearing and grubbing, and removal of existing pavement will be paid for at the lump sum price for "Grading".

"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

GUARDRAIL SUMMARY

LINE	BEG. STA.	END STA.	LOC.	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHLDR WIDTH	FLARE LENGTH		W		ANCHORS							IMP. ATTEN. TYPE 350			RESET EXISTING GUARDRAIL	REINF. CONC. BARRIER	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPR. END	TRAIL. END			APPR. END	TRAIL. END	APPR. END	TRAIL. END	III	B-77	GREU TL-3	M-350	AT-1	CAT-1	TES	EA	G	NG			
L	13+71.73	18+27.88	LT	412.5	50			18+27.88	4.4167'	9'					1				1								
L	16+15.38	18+27.88	RT	212.5			18+27.88		4.4167'	9'	50		1'		1		1										
L	19+00.13	21+12.63	LT	212.5			19+00.13		4.4167'	9'	50		1'		1		1										
L	19+00.13	19+75.13	RT	75.00				19+00.13	4.4167'	7.5417'		56.25		1.125'	1		1										
			SUBTOTAL	**912.50**	**50**										**4**		**3**		**1**								
	DEDUCT ANCHORS:																										
	GREU, TL-3	3	50	-150.00																							
	TYPE-III	4	18.75	-75.00																							
	AT-1	1	6.25		-6.25																						
	ADDITIONAL POSTS =	5	**TOTAL**	**687.50**	**43.75**																						
			SAY	**750**	**50**																						