# DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

PROJECT REFERENCE NO.

SHEET NO.

8R-0/15

#### EARTHWORK SUMMARY (IN CUBIC YARDS)

CHAIN	FROM TO STATION STATION			UNCL. EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
-L-	11 + 50.00	15 + 05.06	LT & RT	177		704	527	
-L-	16 + 42.94	18 + 50.00	LT & RT	13		229	216	
-DR1-	10+13.43	11 + 20.00	LT & RT	2		255	253	
TOTAL				192		1,188	996	
LOSS DUE	TO CLEARING	AND GRUBBING						
WASTE IN	LIEU OF BORRO	OW						
PROJECT T	TOTAL			192		1,188	996	
ESTIMATE	5% FOR TOPSOI	IL ON BORROW	PITS				50	
GRAND T	OTAL			192		1,188	1,046	
SAY				200			1,100	

NOTE: Approximate quantities only. Unclassified Excavation, Borrow Excavation, 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."

CONTINGENCY UNDERCUT EXCAVATION: 450 CY CONTINGENCY SELECT GRANULAR MATERIAL: 400 CY

### PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SY
-L-	12 + 75.00	14+00.00	LT/RT	218.94
-L-	16 + 75.00	17 + 25.00	LT/RT	106.72
			TOTAL:	325.66
			SAY:	330

### PAVEMENT MARKING DETAIL

MARKING TYPE	CHAIN	FROM STATION	to station	LENGTH
P1	_L_ (LT)	11 + 50.00	18 + 50.00	1400
	_L_ (RT)	11 + 50.00	18 + 50.00	1400
P13	-L-	11 + 50.00	18 + 50.00	2800
			TOTAL:	5600
			SAY:	5600

P1: 4" White Edge Lines (Two Layers of Paint with Line Factor 1)
P13: 4" Yellow Double Center Lines (Two Layers of Paint with Line Factor 2)

### SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT

SY	LOCATION LT/RT/CL	STATION	STATION	SURVEY LINE					
220.23	LT/RT	15 + 05.00	14+00.00	-L-					
66.36	LT/RT	16 + 75.00	16 + 43.00	_Y_					
286.59	TOTAL:								
290	SAY:								

\* W MEASURED FROM "N" AT THE BEGINNING OF THE ANCHOR TO "N" AT THE END OF THE ANCHOR.
"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.

## GUARDRAIL SUMMARY

	G = GATING IMPACT ATTENUATOR TYPE 350 NG = NON-GATING IMPACT ATTENUATOR TYPE 350										GUARDRAIL SUMMARY																				
<u>_</u>	SURVEY	BEG. STA.								LENGTH (LF)		WARRANT	POINT	"N" DIST.	TOTAL	FLARE	LENGTH	v	<b>V</b> *				anchors (e	ĒA)			IMPACT ATTENUATOR	SINGLE	REMOVE	REMOVE AND	DEMARKS.
3B-1.40	LINE		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	XI MOD B-	-77 GRE	EU GREU 3 TL–2	U TYPE III	CAT_1	VI MOD BIC	AT_1	TYPE 350 EA G NG	- I		STOCKPILE EXISTING GUARDRAIL	REMARKS				
H03	-L-	14 + 47.60	14 + 97.02	LT	50.00				14 + 97.02	3.92-4.92	6.92–7.92		0.5					1	1												
S d -	-L-	14 + 82.68	15 + 13.09	RT	25.00	6.25		15 + 13.09		3.92	6.92	0.5							1			1					R = 20' FOR SHOP CURVED				
λp	-L-	16 + 34.91	16 + 91.15	LT	56.25			16 + 34.91		3.92	6.92	0.5						1	1												
	-L-	16 + 50.98	17 + 07.26	RT	56.25				16 + 50.98	3.89–3.92	6.89–6.92		0.5					1	1												
0-																															
.BR-																															
				TOTAL:	187.50	6.25																									
15/		AN	CHOR LENGTH	DEDUCTIONS:																											
			GREU TL-	2 (3 @ 25'):	75.00																										
			TYPE-III (	(4 @ 18.75'):	75.00																										
			AT-	·I (1 @ 6.25′):	6.25																										
050 ady		TOTAL ANC	HOR LENGTH (E	DEDUCTIONS):	156.25																										
3/2 3/2 aln			TOTAL GUARD	RAIL LENGTH:	31.25	6.25																									
7 				SAY:	31.25	6.25		5 ADDITIONA	L G/R POSTS									3	4			1									