COMPUTED BY: _____ EM 10/2/2017
CHECKED BY: _____ DATE: _____

PROJECT NO.	SHEET NO.
B-5601	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

STATION	STATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT +%	BORROW	WASTE
-L- 13+00.00	-L- 14+83.58	38		170	132	
-L- 17+86.42	-L-20+00.00	24		181	157	
	SUBTOTAL	62		351	289	
	SUBTOTAL	0		0	0	0
	SUBTOTAL	0		0	0	0
	TOTAL	62		351	289	0
MATERIAL FOR SHOULDER CONSTRUCTION						
LOSS DUE TO CLEARING & GRUBBING						
WASTE IN LIEU OF BORROW						
PROJECT TOTAL		62		351	289	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT					14	
GRAND TOTAL		62			303	
SAY		70			310	

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

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT REMOVAL
-L-	14+50	15+07.30	LT & RT	132.77
-L-	17+62.30	18+50	LT & RT	203.81
		TOTAL:		336.58
		SAY:		340

SHOULDER BERM GUTTER SUMMARY

LINE	Station	Station	LENGTH
-L-	14+56.00	14+68.65	12.65
-L-	17+82.33	18+06.00	23.67
-L-	14+65.00	14+76.83	11.83
-L-	18+01.35	18+15.00	13.65
		TOTAL:	61.8
		SAY:	62

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 15"	18"	24"	30"	36"	42"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B') LIN. FT. A (5.0' THRU 10.0')	B (10.0' AND ABOVE)	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	T.B.D.I. STD. 840.35	D.I. FRAME WITH TWO GRATES STD. 840.16	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	J.B. STD. 840.31 OR 840.32	DRAINAGE PIPE ELBOWS NO. & SIZE	PIPE REMOVAL LIN. FT.	REMARKS
-L- 14+68	LT	401																				1								1			1		1			
		401	402						24																													W/ ELBOWS
-L- 14+59	RT	403																				1								1			1		1			
		403	404						28																													W/ ELBOWS
-L- 18+00	LT	405																				1								1			1		1			
		405	406						28																													W/ ELBOWS
-L- 18+00	RT	407																				1								1			1		1			
		407	408						24																													W/ ELBOWS
SHEET TOTALS									104													4								4			4		4			

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT) JUNCTION BOX
J.B.	MANHOLE
M.H.	TRAFFIC BEARING
T.B.D.I.	DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

"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

GUARDRAIL SUMMARY

G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	LENGTH SHOP CURVED	LENGTH DOUBLE FACED	WARRANT POINT APPROACH END	WARRANT POINT TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH APPROACH END	FLARE LENGTH TRAILING END	W APPROACH END	W TRAILING END	ANCHORS XI MOD	XI	GREU TL-3	M-350	TYPE III	CAT-1		SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
L	12+85.74	14+79.49	RT	193.75			14+79.49		3.25	6	50		1						1				202.81		
L	17+82.33	21+26.08	RT	343.75				20+01.08	3.25	6		50		1			1		1				144.22		
L	12+18.92	14+87.67	LT	268.75				13+43.92	3.25	6		50		1			1		1				144.53		
L	17+90.51	20+09.26	LT	218.75			17+90.51		3.25	6	50		1						1				232.76		
SUBTOTAL				1025													2	0	4				724.32		
GREU TL-3	2 @ 50			-100																					
TYPE III	4 @ 18.75			-75																					
TOTAL				850			5 ADDITIONAL GUARDRAILS										2		4				724.32		