

12/06/07

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STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. SHEET NO.  
 B-5147 3B-1

**SUMMARY OF EARTHWORK**  
 IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
10+17.43	12+11.55	123	362	239	
10+66.00 LT	CULVERT INLET	96			96
10+66.00 RT	CULVERT OUTLET	100			100
10+45.00 RT	10+80.00 RT	49	81	81	49
(CHANNEL IMPROVEMENT)					
SUBTOTALS:		368	443	320	245
PROJECT TOTALS:		368	443	320	245
EST 5% TO REPL TOPSOIL ON BORR PIT				16	
GRAND TOTALS:		368	443	336	245
SAY:		400		375	

SELECT GRANULAR MATERIAL = 100 CY  
 GEOTEXTILE FOR SOIL STABILIZATION = 150 SY  
 UNDERCUT = 100 CY

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

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.

**PAVEMENT REMOVAL SUMMARY**

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD <sup>2</sup>
EL	10+18	10+56	CL	291.37
EL	10+82	11+18	CL	71.86
EL	11+71	12+17	CL	158.67
EL	12+41	12+53	CL	54.29
EL	12+77	13+12	CL	15.35
			TOTAL:	591.53
			SAY:	600

NOTE:  
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**PIPE REMOVAL SUMMARY**

SURVEY LINE	STATION	24" RCP	24" CMP
L	10+62.77 RT.	10'	
L	10+62.77 RT.		10'
TOTAL PIPE REMOVAL: 20'			

**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 (EA.)									IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS							
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	XI MOD	XI	GRAU 350 TL-3	GRAU 350 TL-2	XIII	CAT-1	VI MOD	BIC	AT-1	EA	G	NG													
-L-	10+00.32	11+09.00	RT	100'	54'				4'	7'	50'		1'																								
-L-	10+30.15	11+25.00	LT	100'	48'				4'	7'		50'		1'																							
TOTAL				200'	102'																																
DEDUCTIONS: GRAU 350 TL-3 - 2 @ 50' = 100'				LESS ANCHORS:			150'																														
GRAU 350 TL-2 - 2 @ 25' = 50'				TOTAL			50'																														
TOTAL = 150'																																					
5 ADDITIONAL GUARDRAIL POST																																					
SAY				50'	112.5'																																

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