

12/06/07

COMPUTED BY: JMB
CHECKED BY: DDM

DATE: 3/08/16
DATE: 3/17/16

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.
B-4950

SHEET NO.
3B-1

SUMMARY OF EARTHWORK

IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	EMBANK. + %	BORROW	WASTE
-L- 11+00.00	-L- 13+36.75 (BR)	20	155	135	
SUBTOTAL		20	155	135	
-L- 14+59.25 (BR)	-L- 17+33.69 (BR)	0	1,798	1,798	
SUBTOTAL		0	1,798	1,798	
-L- 19+21.31 (BR)	-L- 21+40.00	4	396	392	
SUBTOTAL		4	396	392	
PROJECT TOTALS:		24	2,349	2,325	
EST. 5% TO REPLACE SOIL IN BORROW PIT				116	
GRAND TOTALS:		24	2,349	2,441	
SAY:		30		2,500	

EST UNDERCUT EXCAVATION = 500 CY CONTINGENCY (FROM GEOTECH RECS. DATED 3-18-16)

EST SELECT GRANULAR MATERIAL = 500 CY CONTINGENCY (FROM GEOTECH RECS. DATED 3-18-16)

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 OF EXISTING PAVEMENT WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "GRADING".

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD ²
-L-	11+50.00	13+52.34	CL	449.64
-L-	14+42.22	17+49.53	CL	682.91
-L-	18+99.41	20+90.00	CL	423.53
			TOTAL:	1,556.09
			SAY:	1,560

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH	
-L- LT.	13+16.00	13+25.88	9.88'	
-L- LT.	19+32.19	19+42.06	9.87'	
-L- RT.	13+16.00	13+25.88	9.88'	
-L- RT.	19+32.19	19+42.06	9.87'	
			TOTAL:	39.5'
			SAY:	40'

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS								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	APPROACH END	TRAILING END	GRAU 350	CAT-1	TYPE III								EA					G
-L-	12+55.50	13+36.75	LT	81.25				BRIDGE	BRIDGE	5'-5"	8'-5"		50.00		1.00	1		1												GUARDRAIL CALCULATED USING SUBREGIONAL TIER GUIDELINES
-L-	14+59.25	17+33.69	LT	274.44				BRIDGE	BRIDGE	6'	9'	29.17	29.17	0.58	0.58			2												
-L-	19+21.31	20+02.56	LT	81.25				BRIDGE		5'-5"	8'-5"	50.00			1.00	1		1												GUARDRAIL CALCULATED USING SUBREGIONAL TIER GUIDELINES
-L-	12+55.50	13+36.75	RT	81.25				BRIDGE		5'-5"	8'-5"	50.00			1.00	1		1												GUARDRAIL CALCULATED USING SUBREGIONAL TIER GUIDELINES
-L-	14+59.25	17+33.69	RT	274.44				BRIDGE	BRIDGE	6'	9'	29.17	29.17	0.58	0.58			2												
-L-	19+21.31	20+02.56	RT	81.25					BRIDGE	5'-5"	8'-5"		50.00		1.00	1		1												GUARDRAIL CALCULATED USING SUBREGIONAL TIER GUIDELINES
			SUBTOTALS	873.88																										
			ANCHOR DEDUCTION	350.00																										
			TOTAL	523.88												4		8												
			SAY	575.00												4		8												

"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

ANCHOR DEDUCTION
GRAU 350: 4 @ 50' = 200'
TYPE III: 8 @ 18.75' = 150'
GRAND TOTAL = 350'
ADDITIONAL GUARDRAIL POSTS = 5