

COMPUTED BY: VML DATE: 03 SEPT 2025
CHECKED BY: DBE DATE: 04 SEPT 2025

SUMMARY OF EARTHWORK

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + %	BORROW	WASTE
PHASE 1					
--XOVR1-- STA 10+00.00 TO STA 28+31.73	765		179		586
--XOVR2-- STA 11+00.00 TO STA 33+95.77	965		71		894
SUBTOTAL	1730		251		1479
PHASE 2					
--L-- STA 20+05.52 TO STA 28+20.50 (BEG. BRIDGE)	12410		7495		4915
--L-- STA 36+35.50 (END BRIDGE) TO STA 39+65.20	3485		6		3479
--Y2-- STA 14+50.00 TO STA 20+00.00	2738		13		2725
SUBTOTAL	18633		7513		11120
PHASE 3					
--XOVR1-- STA 10+00.00 TO STA 28+31.73	156		880	724	
--XOVR2-- STA 11+00.00 TO STA 33+95.77	62		1110	1048	
SUBTOTAL	218		1990	1772	
TOTAL	20581		9754	1772	12599
MATERIAL FOR SHOULDER CONSTRUCTION			975	975	
LOSS DUE TO CLEARING & GRUBBING					
WASTE IN LIEU OF BORROW					
PROJECT TOTAL	20581		10729	2747	12599
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT					
GRAND TOTAL	20581		10729	2747	12599
SAY	22640			3030	

PER GEOTECHNICAL RECOMMENDATIONS DATED OCTOBER 7, 2020:
ESTIMATED UNDERCUT = 450 CY (CONTINGENCY, AS DIRECTED BY THE ENGINEER)
SELECT GRANULAR MATERIAL = 400 CY (CONTINGENCY, AS DIRECTED BY THE ENGINEER)
GEOTEXTILE FOR SOIL STABILIZATION = 400 SY (CONTINGENCY, AS DIRECTED BY THE ENGINEER)

DDE = 330 CY

Earthwork quantities are calculated using Roadway Design Unit Guidelines. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

Approximate quantities only. Borrow Excavation, Clearing and Grubbing, Removal of Existing Asphalt Pavement, and Fine Grading, will be paid for at the contract lump sum price for "Grading".

SHOULDER BERM GUTTER SUMMARY IN LINEAR FEET

SURVEY LINE	STATION	STATION	LOCATION	LENGTH (LF)
-L-	23 + 97.64	27 + 96.50	RT	398.9
-L-	27 + 75.00	27 + 96.50	LT	21.5
-L-	36 + 25.00	37 + 72.00	SBL	147.0
TOTAL:				567.4
SAY:				570

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**REMOVAL OF EXISTING
ASPHALT PAVEMENT SUMMARY**
IN SQUARE YARDS

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SY
-L-	20 + 05	28 + 32	CL	2216.44
-L-	36 + 14	39 + 65	CL	913.78
-XOVR1-	18 + 59	28 + 00	CL	2376.00
-XOVR2-	11 + 50	21 + 28	CL	2472.44
TOTAL:				7978.66
SAY:				7980

SUMMARY OF CABLE GUIDERAIL

LINE	BEGIN STATION	END STATION	LOC.	SINGLE FACED LENGTH (LF)	DOUBLE FACED LENGTH (LF)	INTERMEDIATE ANCHORS (EA)	TERMINAL ANCHORS (EA)	REMOVE EX-GUIDERAIL (LF)
-L-	11+15	25+99.0	MED.		TERMINATE EXIST GUIDERAIL		1 (TEMP)	1484.0'
-L-	38+08.9	54+07.5	MED.		TERMINATE EXIST GUIDERAIL		1 (TEMP)	1598.6'
-L-	11+15	25+48.5	MED.		1433.5		1	
-L-	38+08.9	54+07.5	MED.		1598.6'		1	
			TOTAL:		3032.1'		4	3082.6
			SAY:		3050'		4	3100'
ADDITIONAL GUIDERAIL POSTS				SAY 10 EA				

SUMMARY OF 4" SHOULDER DRAINS *IN LINEAR FEET AND EACH*

[illegible]

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										IMPACT ATTENUATOR TYPE 350			41" SINGLE FACED CONC BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE AND RESET EXISTING GUARDRAIL	REMARKS		
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE GREU, TL-3	CAT-1	AT-1	TYPE III	B-77	TYPE GREU, TL-2							EA					G	NG
-L-	23 + 47.63	28 + 20.50	RT	472.875'			25 + 00		12'	VAR. 12'-17'	450.00'		3'		1				1														
-L-	25 + 97.96	28 + 20.50	MED. LT	222.875'			28 + 20.50		12'	VAR. 12'-25'	200.00'		11'		1				1														
-L-	36 + 35.50	38 + 08.37	MED. LT	172.875'				36 + 35.50	12'	15'		50'		1'	1				1														
-L-	36 + 35.50	36 + 64.62	RT	29.125'				36 + 35.50	12'	17'						1			1														
-Y2-	15 + 01.20	15 + 89.00	LT	85.375'				15 + 89.00	6'	9'		50'		1'	1				1														
-Y2-	15 + 89.00	17 + 97.00	LT																						207'			41" SINGLE FACED CONC BARRIER					
-Y2-	17 + 97.00	19 + 44.87	LT	147.875'			17 + 97.00		6'	9'	50'		1'		1				1														
-L-	35 + 93.73	38 + 14.90	SBL																									221.17'					
-L-	23 + 60.45	28 + 32.08	RT																									471.63'					
-L-	26 + 23.13	28 + 32.04	LT																									208.91'					
-L-	36 + 13.54	37 + 86.23	LT																									172.75					
-L-	36 + 22.59	36 + 38.30	RT																									15.75'					
			SUBTOTAL (LF)	1131.00'									TOTAL ANCHORS OR ATTENUATORS (EA)		5	1			6							207'	869.04'	221.17'					
			LESS ANCHORS (LF)	393.50'																													
			TOTAL GUARDRAIL (LF)	737.50									ANCHOR UNIT LENGTH (LF)		50'	6.25'	6.25'	18.75'	22.875'	25'													
													DEDUCTION PER TYPE (LF)		250'	6.25			137.25														
			SAY GUARDRAIL (LF)	737.50'				ADDITIONAL GUARDRAIL POSTS: SAY 10 EA					TOTAL DEDUCTION (LF)					393.50'								207'	870'	222'					