12/06/07

COMPUTED BY: HEC DATE: 7/27/22
CHECKED BY: EDM DATE: 6/28/24

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
BR-0100	3B-1

PLANS PREPARED BY:

WSP USA
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
TEL: 1.919.836.4040
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LICENSE NO. F-0165

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD³
L	-L- 17+33.72	-L- 17+61.43		74.50
L	-L- 18+96.49	-L- 19+22.28		67.31
L	-L- 22+50.00	-L- 23+00.00		126.11
DET	-DET- 11+26.00	-DET- 14+42.00		449.86
DET	-DET- 14+83.00	-DET- 17+14.00		812.79
DET	-DET- 18+57.00	-DET- 25+31.00		1777.51
			TOTAL:	3308.09
			SAY:	3310

SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD³
L	-L- 19+22.28	-L- 22+50.00		818.83
			TOTAL:	818.83
			SAY:	820

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH
-L-LT	17+11.50	17+40.15	28.65
-L-RT	16+88.50	17+27.29	38.79
-L-LT	19+28.71	19+72.00	43.29
-L-RT	19+15.85	19+52.15	36.3
		TOTAL:	147.03
		SAY:	150

SUMMARY OF EARTHWORK
IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
-DET- 11+25.50	-DET- 17+14.43	1069	5412	4343	
-DET- 18+57.01	-DET- 25+30.99	80	12337	12257	
-Y1_DET- 10+10.51	-Y1_DET- 10+73.40		16	16	
SUBTOTALS:		1149	17765	16616	
-L- 13+65.00	-L- 17+47.83	5	1374	1369	
-L- 19+08.17	-L- 24+75.00	261	4469	4208	
-Y1- 10+12.07	-L- 11+43.00		36	36	
-DR1- 10+11.00	-DR1- 11+69.87		426	426	
SUBTOTALS:		266	6304	6038	
DETOUR REMOVAL		12465	746		11719
SUBTOTALS:		12465	746		11719
PROJECT TOTALS:		13880	24815	22654	11719
REPLACE SOIL ON BORROW PIT				1142	
MATERIAL FOR SHOULDER CONSTRUCTION			184	184	
GRAND TOTALS:		13880	24999	23980	11719
SAY:		14,000		24,900	

DRAINAGE DITCH EXCAVATION = 1080 CY.

CONTINGENCY: EST. UNDERCUT = 450 CY.
EST. GEOTEXTILE FOR SOIL STABILIZATION = 700 SY.
EST. SELECT GRANULAR MATERIAL = 400 CY.

Earthwork quantities are calculated by the Roadway Designer. 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, Breaking of Existing Pavement and Removal of Existing Pavement will be paid for at the Lump Sum Price for "GRADING."

"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

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	XI MOD	TYPE III	GREU TL-3	GREU TL-2	XIII	CAT-1	VI MOD	BIC	AT-1	EA	G	NG				
L	15+39.17	17+40.55	RT	206.25			-L- 17+40.55 (BRIDGE)		8'-0"	11'-0"	50'-0"		1'-0"			1	1												
L	15+20.09	17+55.11	LT	218.75	81.25			-L- 17+55.11 (BRIDGE)	8'-0"	11'-0"						1							1						
L	19+00.89	23+41.38	RT	443.75				-L- 19+00.89 (BRIDGE)	8'-0"	11'-0"		50'-0"		1'-0"		1	1												
L	19+15.45	23+80.94	LT	468.75			-L- 19+15.45 (BRIDGE)		8'-0"	11'-0"	50'-0"		1'-0"			1	1												
			SUBTOTAL	1337.5	81.25																								
			LESS DEDUCTIONS																										
			GREU TL-3 (3 x 50)=	150'																									
			AT-1 (1 x 6.25')=		6.25'																								
			TYPE III (4 x 18.75)=	75'																									
			SUBTOTAL	225'	6.25'		ADDITIONAL GUARDRAIL	POSTS = 10								4	3						1						
			TOTALS	1112.5'	75'											4	3						1						
			SAY	1112.5'	75'																								
										TEMPORARY GUARDRAIL SUMMARY																			
DET	14+88.61	17+14.44	LT	218.75	68.75			-DET- 17+14.44 (BRIDGE)	4'-0"	7'-0"						1							1					287.5		TEMPORARY GUARDRAIL
DET	15+42.42	17+14.44	RT	181.25			-DET- 17+14.44 (BRIDGE)		4'-0"	7'-0"	25'-0"		0'-6"			1		1										181.25		TEMPORARY GUARDRAIL
DET	18+57.01	22+53.99	RT	406.25				-DET- 18+57.01 (BRIDGE)	4'-0"	7'-0"		25'-0"		0'-6"		1		1										406.25		TEMPORARY GUARDRAIL
DET	18+57.01	23+41.52	LT	493.75			-DET- 18+57.01 (BRIDGE)		4'-0"	7'-0"	25'-0"		0'-6"			1		1										493.75		TEMPORARY GUARDRAIL
			SUBTOTAL	1300	68.75																								
			LESS DEDUCTIONS																										
			GREU TL-2 (3 x 25)=	75'																									
			AT-1 (1 x 6.25')=		6.25'																								
			TYPE III (4 x 18.75)=	75'																									
			SUBTOTAL	150'	6.25'		ADDITIONAL GUARDRAIL	POSTS = 10								4		3					1					1368.75		
			TOTALS	1150'	62.5'											4		3					1					1368.75		
			SAY	1150'	62.5'																								

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2/11/2024