COMPUTED BY: R. SHILLINGLAW DATE: 05-05-00
CHECKED BY: RAS DATE: REV 3-14-03

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
R-2610A	3-A

METRIC

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

GUARDRAIL SUMMARY

ANCHOR DEDUCTIONS

CAT-1	12 x1.905 =	22.860
III	8 x5.715 =	45.720
GRAU-350	11 x15.240 =	167.640
B-77	9 x5.715 =	51.435
M 350	8 x11.430 =	91.440
	TOTAL =	379.095m

(1) DO NOT INCLUDE THESE ANCHORS IN THE DEDUCTIONS

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 CAT-1	ANCHORS AT-1	ANCHORS III	ANCHORS GRAU 350	ANCHORS XI	ANCHORS B-77	ANCHORS M-350	IMPACT ATTENUATOR TYPE 350 NO.	PERMITTED G	PERMITTED NG	STD 857.01 PRECAST CONC BARRIER SINGLE FACED	W - TR SECTION EA	508mm TUBULAR TRIPLE CORR STL BM G/R M	TRIPLE CORR STL BM G/R M	REMARKS SEE SHEET 3-H FOR SUMMARY OF REMOVAL OF EXISTING GUARDRAIL
-Y1-/-L-	-Y1- 10+80 RT	-L- 17+82.095	OUT NBL	556.260	49.530		FILL	BRIDGE	3.6	4.6	N/A	120	N/A	2.4		(1)													NO DEDUCTIONS - ALREADY APPLIED TO STATIONS
-L-	17+82.095	18+24.905	OUT NBL																							2	48.260	5.132	RETROFIT NBL BRIDGE -- OVER -Y2-
-L-	18+24.905	20+02.070	OUT NBL	179.070			BRIDGE	FILL	3.6	4.6	120	N/A	2.4	N/A	1														
-L-	25+41.880	27+38.095	OUT NBL	198.120			FILL	BRIDGE	3.6	4.6	N/A	120	N/A	2.4				1											
-L-	27+38.095	27+99.905	OUT NBL																							2	69.700	5.132	RETROFIT NBL BRIDGE -- OVER -Y6-
-L-	27+99.905	30+22.790	OUT NBL	224.790			BRIDGE	FILL	3.6	4.6	120	N/A	2.4	N/A	1														
-L-	51+62.500	53+41.570	OUT NBL	179.070			FILL	FILL	3.6	4.6	N/A	N/A	N/A	N/A	1			1											
-L-	60+43.330	60+70.000	OUT NBL	26.670			N/A	FILL	3.6	4.6	N/A	N/A	N/A	N/A	1														ATTACH TO EXISTING GUARDRAIL
-L-	61+42.500	62+22.510	OUT NBL	80.010			FILL	FILL	3.6	4.6	N/A	N/A	N/A	N/A	1			1											
-L-	66+76.638	67+68.078	OUT NBL	91.440			BRIDGE FILL	FACES	3.6	4.6	N/A	N/A	N/A	N/A	1			1											@Y8 (SR2135) BRDG SLOPE PROTECTION
-L-	75+02.306	75+86.126	OUT NBL	83.820			BRIDGE FILL	FACES	3.6	4.6	N/A	N/A	N/A	N/A	1			1											@Y10 (SR1010) BRDG SLOPE PROTECTION
-Y1-/-L-	-Y1- 11+69.213	-L- 13+79.992	OUT SBL	133.350	53.340		13+80 FILL	12+60 FILL	3.6	4.6	N/A	N/A	N/A	N/A	(1)	(1)													NO DEDUCTIONS - ALREADY APPLIED TO STATIONS
-L-	14+98.736	17+84.486	OUT SBL	285.750			N/A	15+00 FILL	3.6	4.6	N/A	60	N/A	1.2	1		1												
-L-	18+30.512	19+06.712	OUT SBL	76.200			18+30 BRDG	N/A	3.505	4.6	55.245	N/A	1.105	N/A			1	1											
-L-	19+97.490	20+77.500	OUT SBL	80.010			20+40 FILL	20+00 FILL	3.6	4.6	N/A	N/A	N/A	N/A	1			1											BETWEEN -L- SBL AND -Y3REV-
-L-	25+78.882	27+69.382	OUT SBL	190.500			N/A	25+80 FILL	3.6	4.6	N/A	60	N/A	1.2	1		1												
-L-	28+44.579	30+99.849	OUT SBL	255.270			30+60 FILL	N/A	3.6	4.6	60	N/A	1.2	N/A			1	1											
-L-	52+56.530	53+97.500	OUT SBL	140.970			53+60 FILL	52+60 FILL	3.6	4.6	N/A	N/A	N/A	N/A	1			1											
-L-	67+47.625	68+39.065	OUT SBL	80.010			67+73 SLOPE	N/A	3.6	4.6	N/A	N/A	N/A	N/A	1			1											AT BRIDGE SLOPE PROTECTION AT -Y8-(SR2135)
-L-	75+80.000	78+58.130	OUT SBL	278.130			78+20 FILL	N/A	3.6	4.6	60	N/A	1.2	N/A				1		1					16.6 m				AT BRIDGE SLOPE PROTECTION AT -Y10- TIE TO SINGLE FACED CONC. BARRIER
-L-	17+26.850	17+82.095	MED NBL	57.150			17+84 BRDG				43.815		2.921								1								
-L-	17+82.095	18+24.905																								2	48.260	5.132	RETROFIT NBL BRIDGE -- OVER -Y2-
-L-	18+24.905	18+80.150	MED NBL	57.150					1.2												1								
-L-	17+32.966	17+82.496	MED SBL	49.530					1.2								1				1								
-L-	18+29.464	18+86.614	MED SBL	57.150							40.005		2.667				1				1								
-L-	26+92.850	27+48.095	MED NBL	57.150			27+50 BRDG				43.815		2.921								1								
-L-	27+48.095	28+10.518	MED NBL																							2	69.700	5.132	RETROFIT NBL BRIDGE -- OVER -Y6-
-L-	28+10.518	28+84.813	MED NBL	76.200					1.2												1								
-L-	27+00.232	27+57.382	MED SBL	57.150					1.2								1				1								
-L-	28+32.580	28+89.730	MED SBL	57.150							40.005		2.667				1				1								
-L-	67+20.927	67+50.332	MED	46.910			67+50.332 SFB		6.885	(SBL)	9.885		0.659							2		1	X	X	13.6 m				AT BRIDGE -Y8- BRIDGE MEDIAN PIERS
									5.337	(NBL)																			
-L-	67+63.932	67+93.337	MED	46.910			67+63.932 SFB		6.885	(SBL)	9.885		0.659							2		1	X	X	13.6 m				AT BRIDGE -Y8- BRIDGE MEDIAN PIERS
									5.337	(NBL)																			
-L-	75+36.060	75+65.465	MED	46.910			75+65.465 SFB		6.856	(SBL)	9.885		0.659							2		1	X	X	14.6 m				AT BRIDGE -Y10- BRIDGE MEDIAN PIERS
									5.366	(NBL)																			
-L-	75+80.065	76+09.470	MED	46.910			75+80.065 SFB		6.856	(SBL)	9.885		0.659							2		1	X	X	14.6 m				AT BRIDGE -Y10- BRIDGE MEDIAN PIERS
									5.366	(NBL)																			
		SUB-TOTAL		3795.710											13	2	8	11		9	8	4			73.0 m	8	235.920	20.528	
	LESS ANCHOR	DEDUCTIONS		-379.095																									
	PROJECT	TOTAL		3416.615	102.870																								
		SAY		3417.570	(10 ADDITIONAL GUARDRAIL POSTS)																								

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RSHillinglaw
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