004,R:\R513C\SUMMARY\R513c_guardrail_summary.xls

COMPUTED BY: SGM DATE: MARCH 2004
CHECKED BY: WCP DATE: MARCH 2004

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
GUARDRAIL SUMMARY

METRIC | PROJECT REFERENCE NO. R-513C | SHEET NO. 3-O

"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 BEGIN

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

SURVEY LINE	BEG. STA.	END STA.	LOC	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350			SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	350	CAT-1	III	XI MOD	B-77	M-350			NO	PERMITTED G	PERMITTED NG				
RPC	4+31.963	1+90.566 LPC	LT			102.87										2													GLARE SCREEN REQUIRED
RPD	0+37.06	7+11.43	LT	674.37			6+80	0+37	4.2	5.2	15.24		0.3		1	1													
RPD	4+53.865	3+74.741 LPD	RT			99.06										2													GLARE SCREEN REQUIRED
LPA	2+44.437	4+74.07 RPA	RT			92.25										2													GLARE SCREEN REQUIRED
-L-	285+27.095	285+82.34	MED LT	55.245			285+30		4.27	3.6	11.34		1.2			1				1									75
-L-	285+97.36	287+65	LT	167.64			287+20	286+00	4.2	5.2	15.24		0.3		1	1													
-Y8-	12+07.83	14+25	LT	217.17			12+40	13+95	2.4	3.4	15.24	15.24	0.3	0.3	2														
-Y8-	12+10	14+00.5	RT	190.5			12+40	13+75	2.4	3.4	15.24	15.24	0.3	0.3	2														
-Y8-	15+60.95	18+69.56	RT				16+22	18+38	2.4	3.4	15.24	15.24	0.3	0.3	2														
-L-	292+37.095	292+92.34	MED LT	55.245			292+40		4.27	3.6	11.34		1.2			1				1									SIGN SUPPORT (OH ASSEMBLY "G")
-L-	292+84.66	293+39.905	MED RT	55.245			293+37		4.27	3.6	11.34		1.2			1				1									SIGN SUPPORT (OH ASSEMBLY "H")
-L-	292+84.66	293+39.905	RT	55.245			293+37		4.27	4.2	11.34		1.2			1				1									SIGN SUPPORT (OH ASSEMBLY "H")
-Y3-	2+70 Y9	4+10 RPB	RT	152.4	57.15		3+00 Y9	4+10 RPB	2.4	3.4	15.24		0.3		1	1													
RPA	2+90	4+90 Y9	RT	483.87	57.15		3+20 RPA	4+60 Y9	4.2	5.2	15.24	15.24	0.3	0.3	2														
-Y3-	14+73.80	15+50	RT	76.2			15+50				15.24		0.3		1			1										61.7	TIE TO EXIST. BRIDGE
-Y3-	15+92	16+96.9	RT	104.97			16+96.6		1.2	2.4	15.24		0.3				1	1										61.3	TIE TO EXIST. BRIDGE
-Y3A-	13+21	13+81	RT	60.96					1.2	2.4	15.24		0.3		1			1										62	TIE TO EXIST. BRIDGE
-Y3A-	13+51	13+78	LT	26.67					1.2	2.4		15.24		0.3	1			1										35	TIE TO EXIST. BRIDGE
-Y3-	16+24.07	17+00.27	LT	76.2			17+00.27		1.2	2.4	15.24		0.3			1	1											84.8	
-Y3-	17+83.41	21+21.53	RT	338.12			21+25	17+83.41	2.4	3.4	15.24		0.3		1		1												
-Y3-	17+84.82	21+30.15	LT	346.74			17+84.82	21+30.15	2.4	3.4		15.24		0.3	1		1											62.2	
Y3/Y9	29+40 Y3	4+90 Y9	LT	209.55	19.05		4+60 Y9	29+40 Y3	2.4	3.4	15.24		0.3		1	1													
-Y9-	10+64	10+64	LT & RT						1.2	2.4																		14	
-Y3-	32+59.40	33+35.60	RT	76.2			33+35.6		1.8	2.4					1		1												
-Y3-	34+04.94	34+81.14	LT	76.2			34+09.94		1.8	2.4					1		1												
RPC	4+10	30+80 Y8	RT	255.27	68.58		4+40 RPC	36+60 Y3	4.2	5.2	15.24	15.24	0.3	0.3	2														
-Y3-	31+56 Y8	3+30.48 RPD	LT	296.47	61.96		36+60.Y3	3+00 RPD	2.4	3.4	15.24		0.3		1	1													
-L-	302+87.66	303+42.905	MED RT	55.245			303+40		4.27	3.6	11.34		1.2			1				1									SIGN SUPPORT (OH ASSEMBLY "I")
-L-	303+37.095	303+92.34	MED LT	55.245					4.27	3.6	11.34		1.2			1				1									SIGN SUPPORT (OH ASSEMBLY "I")
-Y8-	36+20	38+10.5	LT	190.5			36+50	38+30	2.4	3.4	15.24	15.24	0.3	0.3	2														
-L-	306+82.13	307+85	RT	102.87			307+80	307+80	4.2	5.2	15.24		0.3		1	1													
-Y8-	39+14	40+39.73	RT	125.73			39+85		2.4	3.4	15.24	15.24	0.3	0.3	2														
-Y8-	39+26	40+59.35	LT	133.35			39+83		2.4	3.4	15.24	15.24	0.3	0.3	2														
-L-	308+04	308+84.01	LT	80.01			308+10	308+10	4.2	5.2	15.24		0.3		1	1													
-Y4-	11+80.93	13+64.369	RT	183.44			12+10	13+64.369	2.4	3.4	15.24		0.3		1		1												
-Y4-	25+60 Y9	13+69.333	LT	227.66	10.46		13+69.333		2.4	3.4		15.24		0.3	1		1												
-Y4-	14+29.669	50+40 Y8	RT	183.07	36.11		14+29.669		2.4	3.4		15.24		0.3	1		1												
-Y4-	14+34.633	53+93 Y8	LT	457.29	9.13			14+34.633	2.4	3.4	15.24		0.3		1		1												
-Y8-	16+82 Y4	53+90.13	RT	290.86	32.4		51+20	53+70	2.4	3.4	15.24	15.24	0.3	0.3	2														
-L-	339+11.23	339+76	MED RT	64.77			339+76				11.43		1.2					1		1								62	TIE TO EXIST. BRIDGE
-L-	338+86.56	339+78	RT	91.44			339+78				15.24		0.3		1			1										92.4	TIE TO EXIST. BRIDGE
-L-	340+18	341+09.44	LT	91.44			340+18				15.24		0.3		1			1										92.2	TIE TO EXIST. BRIDGE
-L-	340+20	340+84.77	MED LT	64.77			340+20				11.43		1.2					1		1								61.7	TIE TO EXIST. BRIDGE
-L-	US 74 WB East OF NC 41		MED LT	66.675					4.27	Existing	11.43		1.2			1				1									SIGN SUPPORT (OH ASSEMBLY "DMS-2")
-L-	US 74 WB East OF NC 41		LT	55.245					6.8	Existing	15.24		0.3		1	1													SIGN SUPPORT (OH ASSEMBLY "DMS-2")
	SUB-TOTAL 2			6,570.09	351.99	294.18									39	22	10	8		9								689.3	
	SUB-TOTAL 1			5,978.37	87.63	87.63									25	21	12		16	14			6				223.4	2372	
	TOTAL			12,548.46	439.62	381.81									64	43	22	8	16	23			6				223.4	3,061.3	
DEDUCT FOR ANCHORS:																													
	350	64	@15.24	975.36																									
	CAT-1	43	@1.905	81.92																									
	TYPE III	22	@5.715	125.73																									
	B-77	16	@5.715	91.44																									
	XI-MOD	8	@7.62	60.96																									
	M-350	23	@11.43	262.89																									
			SUBTOTAL	1,598.30																									
	TOTAL			10,950.16	439.62	381.81									64	43	22	8	16	23			6				223.4	3,061.3	
	SAY			***10,957.56***	***441.96***	***384.81***									***64***	***43***	***22***	***8***	***16***	***23***			***6***				***225***	***3,061.3***	

10 ADDITIONAL GUARDRAIL POSTS