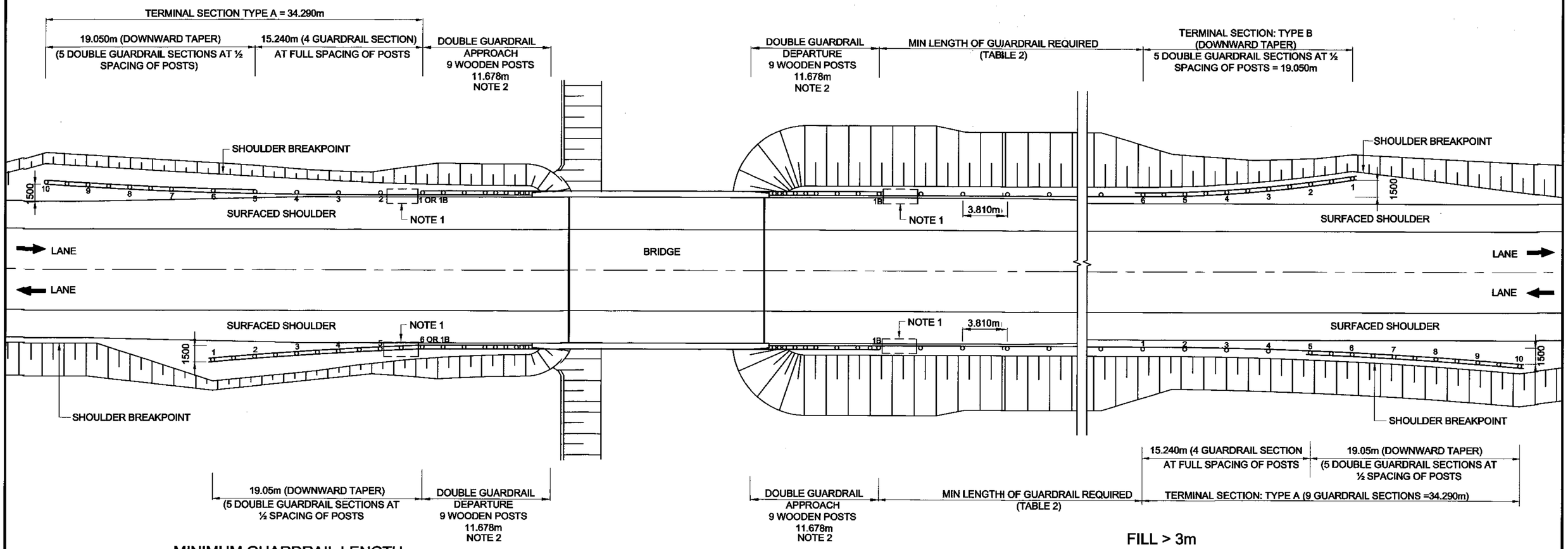
UNDER REVISION



MINIMUM GUARDRAIL LENGTH AT BRIDGES (FILL BELOW 3m)

BRIDGE APPROACH
SCALE 1 : 250

FILL > 3m

TABLE 1 : SETTING OUT POSITIONS OF GUARDRAIL POSTS

	TERMINAL SECTION: TYPE A : L=34.29m			TERMINAL SECTION: TYPE B : L=19.050m		
	POST No.	HORIZONTAL OFF-SET X(mm)	VERTICAL OFF-SET Y(mm)	POST No.	HORIZONTAL OFF-SET X(mm)	VERTICAL OFF-SET Y(mm)
APPROACH SIDE	1	0	0			
	2	19	0			
	3	74	0			
	4	167	0			
	5	296	0			
	6	463	36			
	7	667	144			
	8	907	324			
	9	1185	576			
	10	1500	900			
DEPARTING SIDE				6	0	0
				5	60	36
				4	240	144
				3	540	324
				2	960	576
				1	1500	900

TABLE 2

MIN LENGTH OF GUARDRAIL REQUIRED (EXCLUDING TERMINAL SECTIONS)	
DESIGN SPEED km/h	MIN LENGTH
60	12 SECTIONS (45.72m)
70	14 SECTIONS (53.34m)
80	16 SECTIONS (60.96m)
90	20 SECTIONS (76.20m)
100	23 SECTIONS (87.63m)
110	27 SECTIONS (102.87m)
120	29 SECTIONS (110.49m)
130	32 SECTIONS (121.92m)
140	35 SECTIONS (133.35m)

NOTES

1. CLOSEST PERMISSIBLE POSITION OF CATCHPIT TO ENDBLOCK ie. NO CATCHPIT PERMITTED BETWEEN POST No. 1B AND ENDBLOCK.
2. REFER TO SANRAL TYPICAL DRAWING TD-S-P-5003-1-V1 FOR DETAILS OF GUARDRAIL TO ENDBLOCK CONNECTION AND GUARDRAIL APPROACH AND DEPARTURE DETAILS. THE POSTS AS DETAILED MAY NOT BE REPLACED WITH STEEL POSTS.
3. GUARDRAIL SPACING = 3.810m.

FOR LATEST VERSION CHECK www.nra.co.za

No.	DATE	VERSION / REVISION	APPROVED
V1	SEPT 2014	ORIGINAL VERSION	

SANRAL TYPICAL DRAWINGS

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TYPICAL DRAWINGS - ROADWORKS

GUARDRAILS
PLACING DETAIL AT BRIDGE APPROACHES AND HIGH FILL (SINGLE CARRIAGEWAY)

SANRAL DOC. No. (PDF) 1693627

SANRAL DOC. No. (DWG) 1797473

SANRAL DRAWING No. TD-R-GR-1201-V1