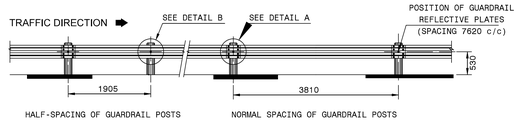


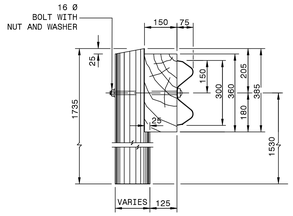
TYPICAL GUARDRAIL SECTION

1 : 10



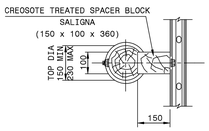
SPACING OF POSTS AND POSITION OF REFLECTIVE PLATES

1 : 50



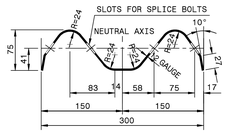
ELEVATION OF GUARDRAIL

1 : 10



PLAN

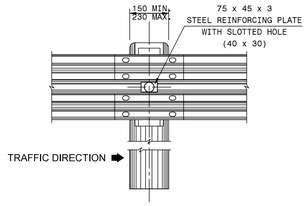
1 : 5



SECTION THROUGH GUARDRAIL

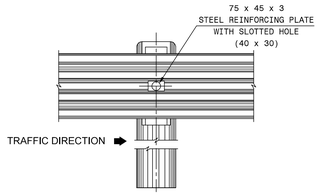
1 : 2

NOTE:
1. GUARDRAILS SHALL ONLY BE PLACED WHERE REQUIRED BY THE ENGINEER.
2. ALL GUARDRAILS MUST BE GALVANIZED AS SPECIFIED (NOT PAINTED).



DETAIL A : FRONT ELEVATION
NORMAL SPACING OF POSTS

1 : 10

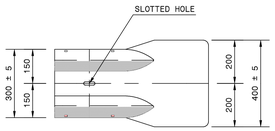


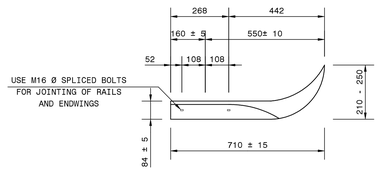
DETAIL B : FRONT ELEVATION
HALF SPACING OF POSTS

1 : 10

SPECIFICATIONS

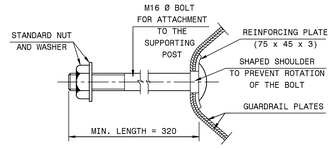
1.BOLT:
HIGH TENSILE STEEL 16 Ø
2.WASHERS:
3mm THICK
3.SPACER BLOCK:
PINE OR GUM, PRESSURE IMPREGNATED IN ACCORDANCE WITH SANS 100005 WITH CREOSOTE WHICH COMPLIES WITH SANS 538 OR 539
4.POSTS:
150 Ø MIN - 230 Ø MAX, SALIGNA (BLUEGUM), PRESSURE IMPREGNATED IN ACCORDANCE WITH SANS 100005 WITH CREOSOTE WHICH COMPLIES WITH SANS 538 OR SANS 539.
5.GALVANIZING:
GUARDRAILS:(SANS 121/ISO 1461):TYPE A1 ARTICLES.
BOLTS AND WASHERS: (SANS 121/ISO 1461) TYPE C1 ARTICLES.
6.TIMBER POSTS:
POSTS SHALL COMPLY WITH THE REQUIREMENTS OF SANS 457 AND SHALL CARRY THE SANS MARK.
7.REFLECTIVE PLATES:
THE OUTER SURFACES SHALL BE COATED WITH ENGINEERING GRADE RETRO-REFLECTIVE MATERIAL WHICH COMPLIES WITH THE PROVISIONS OF CKS 191 IN THE COLOURS SHOWN ON THIS DRAWING.

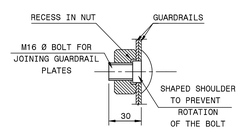




STANDARD FLARED ENDWING

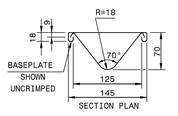
1 : 10

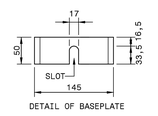


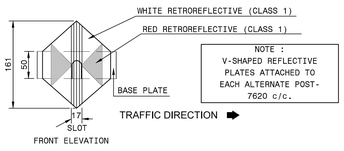


TYPICAL BOLTS

1 : 2







DETAIL OF GUARDRAIL REFLECTIVE PLATES

1 : 4

No.	DATE	REVISION	CONSULT. ENG.
V1		ORIGINAL VERSION	

CONSULTANT

TECHNICAL EXCELLENCE ACADEMY
(TEA)

DESIGNED BY	
NAME	N Ndinisa
Prof. Reg. No.	
CHECKED BY	
NAME	A Juba
Prof. Reg. No.	
DRAWN BY	
NAME	J Shaw

CONSULTANT APPROVAL

Name : A Van Gruting
Prof. Reg. No. :
Date :

HEAD OFFICE
48 Tambotie Avenue
Val de Grace
Pretoria
0184

PO Box 415
Pretoria 0001
South Africa

Tel: (012) 844 8000

SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

SOUTHERN REGION
20 Shoreward Drive
Bay West
PORT ELIZABETH
6025

P O Box 24210
Bay West
PORT ELIZABETH
6034

Tel: (041) 398 3205

ACCEPTANCE

THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING

for the SA NATIONAL ROADS AGENCY SOC LTD.
Date:

COMMUNITY AND SMALL CONTRACTOR TRAINING AND DEVELOPMENT ON MADIDI SERVICE ROADS

GUARDRAIL ELEMENT AND MOUNTING DETAILS

SCALE: NTS **SHEET 1 OF 1**

PROJECT NUMBER	S.002-003-2018/1	
DRAWING LOCATION DATA	START	END
ROUTE	MADIDI	MADIDI
SECTION		
DRAWING m DISTANCE	CHAINAGE -8	CHAINAGE 385
DRAWING TYPE		
BRIDGE/STRUCTURE No.		
CONSULTANT DRAWING No.	S.002-003-2018/1-008	VER
SANRAL DOCUMENT #	22004235	