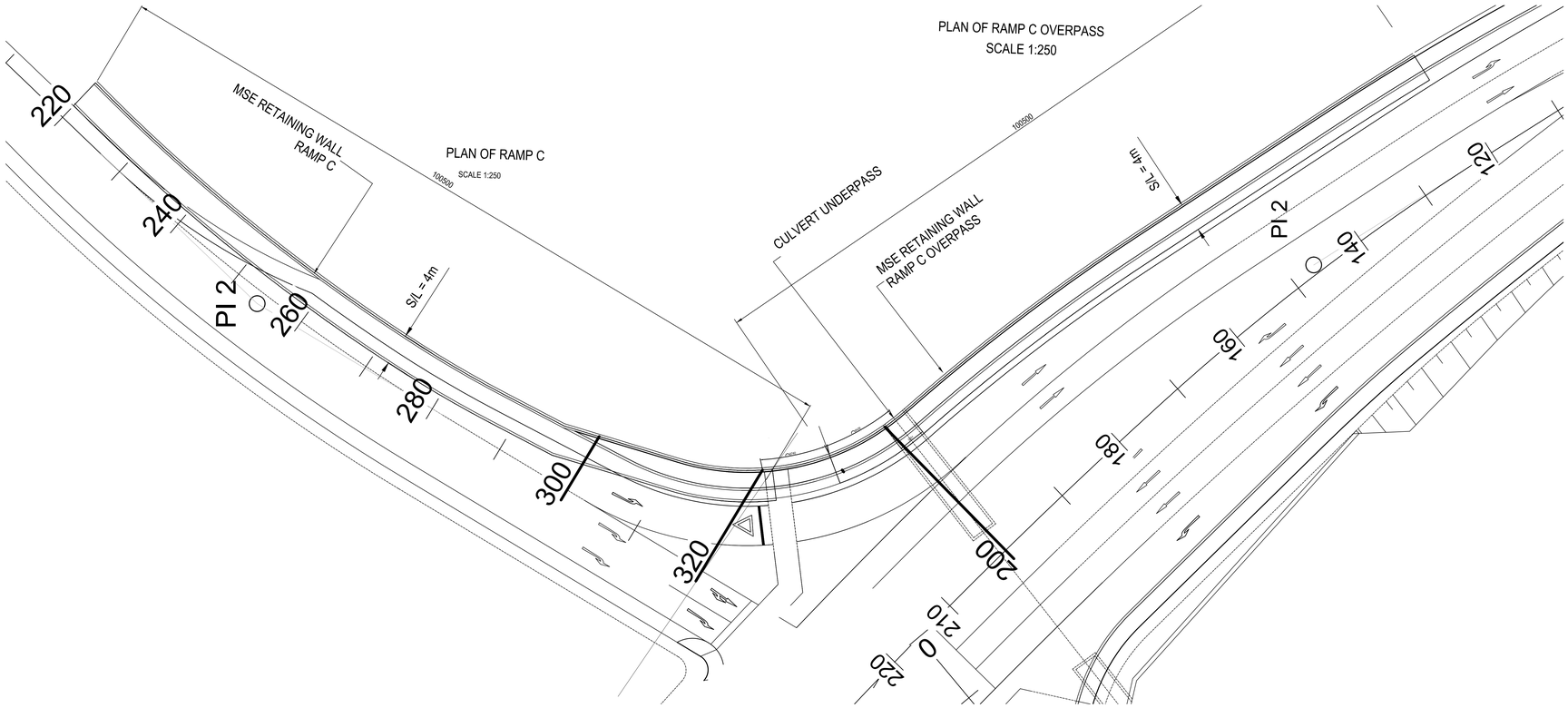
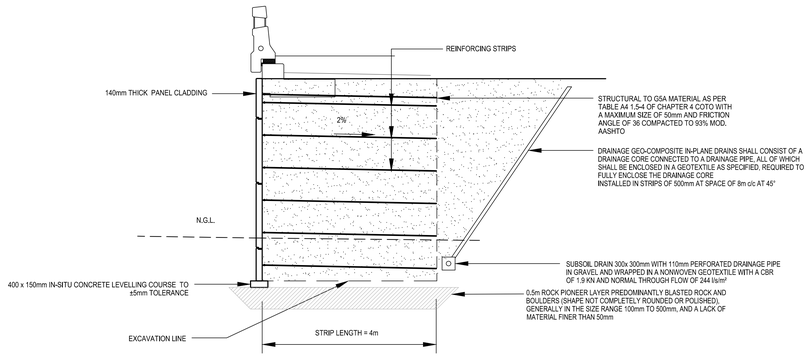




SECTION ON 280km

1:50

DESIGN NOTES (CONCRETE FACING)

1. STABILITY

1,1 DESIGNED IN ACCORDANCE WITH SANS 80006 "TERRE ARMEE" INTERNATIONAL (STANDARD SECURITY)

1,2 DESIGNED FOR A SERVICE LIFE OF 70 YEARS.

1,3 DESIGNED FOR 12 kN/m² APPLIED AT TOP OF WALL (RETAINING WALLS).

2. BACKFILL.

2,1 SELECTED FILL BEHIND MSE WALL FACINGS OVER THE LENGTH OF REINFORCEMENT SHALL COMPLY WITH REQUIREMENTS OF A G5A MATERIAL AS GIVEN IN TABLE A4.1.5-4 OF CHAPTER 4 WITH A MAXIMUM SIZE OF 50 mm AND BE FREE DRAINING.

2,2 BACKFILL MATERIAL TO BE TESTED FOR CHEMICAL AND MECHANICAL COMPLIANCE TO SPECIFICATIONS EVERY 500m³ MAX.

2,3 BACKFILL DESIGN SPECIFICATIONS.
DENSITY : MIN. 18 kN/m³ MAX. 20 kN/m³
COHESION = 0 kPa Ø = 36° (MINIMUM ANGLE OF INT FRICTION).

2,4 FILL ABOVE AND BEHIND THE REINFORCED EARTH MASS.
DENSITY : MIN 18 kN/m³ MAX. 20 kN/m³
COHESION = 0 kPa Ø = 36° (MINIMUM ANGLE OF INT FRICTION).

2,5 FOUNDATION DESIGN SPECIFICATIONS.
COHESION = 0 kPa Ø = 30° (MINIMUM ANGLE OF INT FRICTION).

2,6 GENERAL FILL.

2,6,1 TOE OF SPILL AROUND TO BE SET OUT BEFORE CONSTRUCTION.

2,6,2 SPILL AROUND TO BE COMPACTED LAYERS AS FOR COMMON FILL.

3. EXCAVATION.

3,1 EXCAVATION FOR MSEW IS TO BE TO THE SAME LEVEL AS TOP OF FOOTING AND EXTEND TO THE SAME LENGTH AS STRIPS.

4. REINFORCING STRIPS.

4,1 MEDIUM TENSILE TO S355JO - SANS 50025 : 2009 / EN 10025 : 2004 45 x 5mm HAR (HIGH ADHERENCE PADDED)

4.2 GALVANISING TO SANS 121 : 2011/ ISO 1461: 2009 (MIN 85$_{\mu M}$)

5. CONCRETE.

5,1 400 x 150mm DEEP 15MPa INSITU CONCRETE LEVELLING COURSE TO ±5mm TOLERANCE.

5,2 CONCRETE PANELS TO BE MANUFACTURED WITH CONCRETE CLASS 30/19.

6. JOINTS.

6,1 GEOTEXTILE NONWONVEN WITH A CBR NOT LESS THAN 3.5 KN AS PER SASN 12236 GLUED TO ALL VERTICAL AND HORIZONTAL JOINTS

GENERAL NOTES

1. TEST PANEL.

1,1 AN 'AS BUILT' DRAWING IS REQUIRED SHOWING THE POSITION AND MASS OF EACH TEST STRIP PLACED IN STRUCTURE.

No.	DATE	REVISION	
V1	08/03/2024	ORIGINAL VERSION	

HEAD OFFICE
46 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

WESTERN REGION
1 Havenga Street
Oakdale
Bellville
7530

Private Bag X19
Bellville
7535

Tel: (021) 957 4600

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:

PROJECT DESCRIPTION

THE CAPACITY IMPROVEMENT OF NATIONAL ROUTE 1 SECTION 1 FROM OLD OAK INTERCHANGE (KM 18.90) TO KOELENHOF INTERCHANGE (KM 33.00)

BRIGHTON ROAD RAMP C AND OVERPASS

PLAN, DETAILS AND SECTIONS

SCALE @ A0: AS SHOWN | SHEET 1 OF 2

PROJECT NUMBER	N001-010-2021/1	
DRAWING LOCATION DATA	START	END
ROUTE	N01	N01
SECTION	01	01
DRAWING km DISTANCE		
DRAWING TYPE		
BRIDGE/STRUCTURE No.	N/A	
CONSULTANT DRAWING No.		VER
SANRAL DOCUMENT #	XXXXXX	