

SCOPE PRESENTATION

CONTRACT SANRAL N.002-080-2024/1

FRIDAY, 10 APRIL 2026

SANRAL



**BUILDING SOUTH AFRICA
THROUGH BETTER ROADS**

CONTRACT SANRAL N.002-080-2024/1
THE SLOPE STABILISATION ON NATIONAL ROUTE 2 SECTION 8
FROM KM 65.50 TO KM 67.50: KEURBOOMSTRAND

DISCLAIMER:

IF ANY CONFLICT ARISES BETWEEN THE CONTENTS OF THIS PRESENTATION AND OTHER SECTIONS OF THE CONTRACT DOCUMENTS (VOLUME 3, VOLUME 4 AND THE PRICING SCHEDULE), THE LATTER SHALL TAKE PRECENDENCE

AGENDA

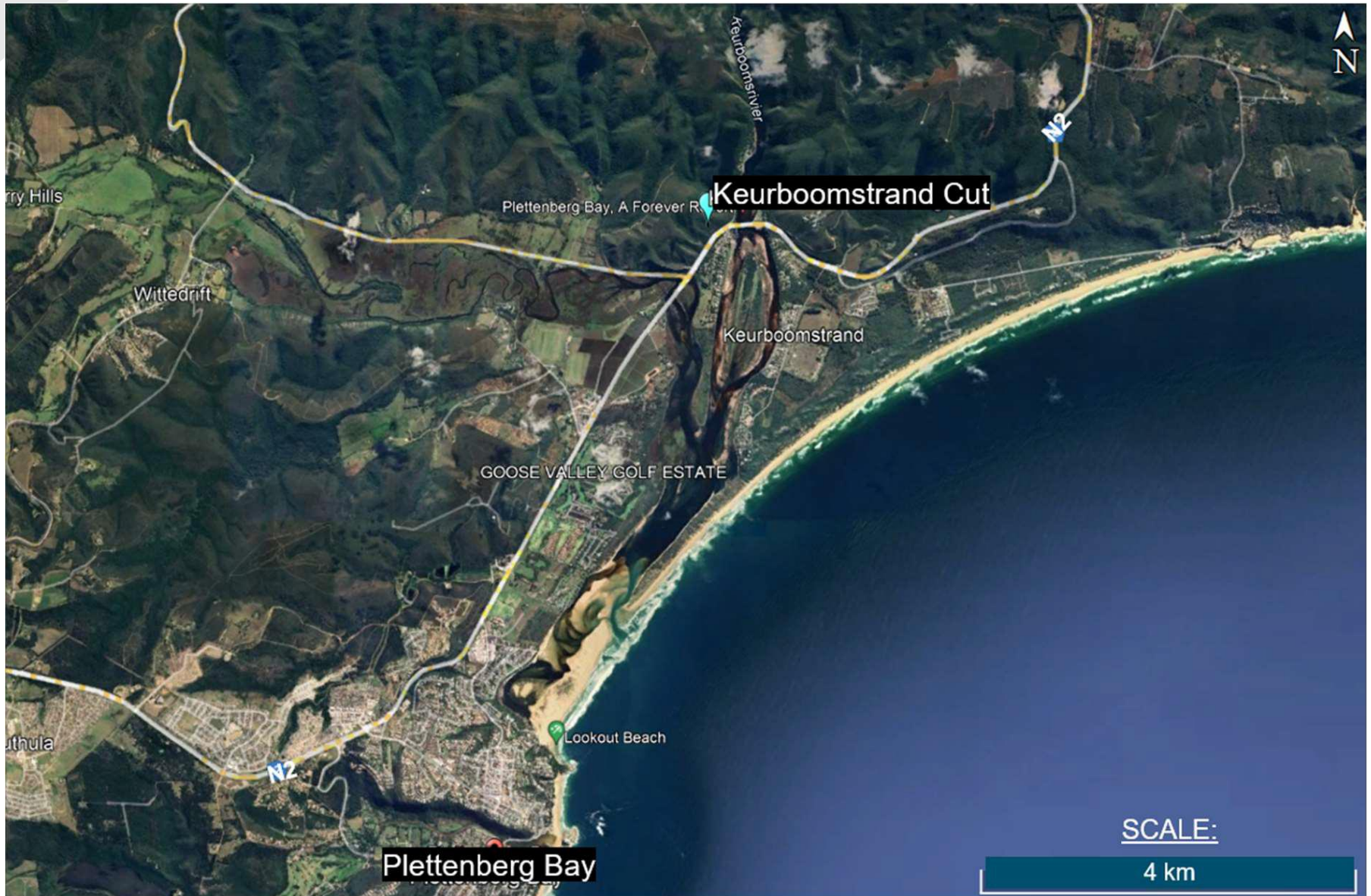
- 1 PROJECT OVERVIEW**
- 2 SCOPE OF WORK**
- 3 DOCUMENTATION (VOLUME 3)**
- 4 PROJECT SPECIFICATION**
- 5 QUESTIONS & ANSWERS**

PROJECT OVERVIEW

LOCATION OF THE PROJECT SITE:

- The project site is situated within the boundaries of the **Garden District Municipality**, and within the **Bitou Local Municipal area** in the **Western Cape Province**.
- The site is located adjacent to the eastbound carriageway on the north western side of National Route 2, Section 8, stretching between km 66.10 and km 66.40, which is immediately west of the Keurbooms River crossing, near Plettenberg Bay in the Western Cape. The contract site includes the road section required for traffic accommodation facilities and extends over an approximate 2 km length from km 65.50 to km 67.50.
- The affected length of the cutting is approximately 180 m long and a maximum of 55 m high, characterised by steep slopes that generally slope towards the south-east at angles ranging between 35° and 37°. The cut slope is vegetated with seasonal grasses, shrubs, and trees.

LOCALITY PLAN



SCOPE OF WORKS – SITE INFORMATION

PROJECT SITE FEATURES:

Location (km)	Description
66.18 – 66.36	A gabion wall structure is located at the toe of the slope.
	Several other gabion structures are present at different locations on the slope.
66.265 & 66.28	Two storm water pipes are located at roughly at km 66.265 and km 66.280. The pipes provide drainage at right angles to the slope from the highest gabion walls on the slope.
66.23 - 66.26	Slumping of the soil on the slope surface was observed at approximately a third of the height of the slope. The slumping extends down towards the south-west at km 66.230 to 66.260. A damaged drainage pipe has been exposed in the slump area. Other scattered zones of sloughing/slumping are also evident on the cut slope.

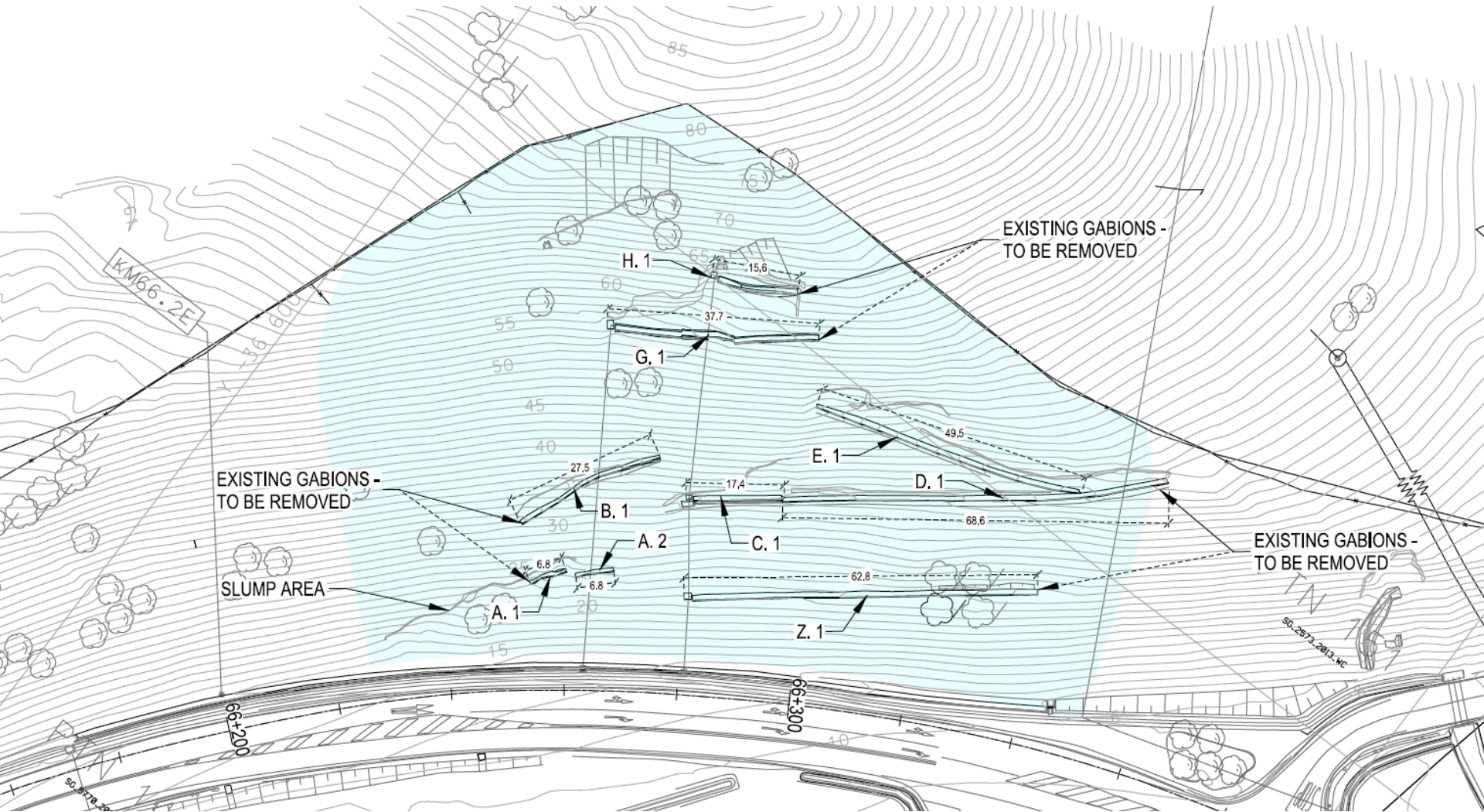
SCOPE OF WORKS – SITE INFORMATION



SCOPE OF WORKS – SITE INFORMATION

SLOPE STABILISATION/ GEOTECHNICAL WORKS:

- 10 no. localised failure scarp areas that will receive slope stabilisation measures



SCOPE OF WORKS – SITE INFORMATION

SLOPE STABILISATION / GEOTECHNICAL WORKS:

- Demolish and remove existing gabions at failure scarp locations. Access routes to be planned with least disturbance to the slope.
- Clear vegetation within the localised footprint of the areas that will receive slope stabilisation remedial measures.
- Supply and installation of mesh revetment system (rock fall netting) over localized failure areas.
- Before production work commences, set out and install 3 no. SDA's (T40/16) for pullout tests using planned construction techniques at three (3) different locations at the bottom third of the slope height.
- Supply and install slope monitoring instruments and/or equipment.

SCOPE OF WORKS – SITE INFORMATION

MAINTENANCE WORKS

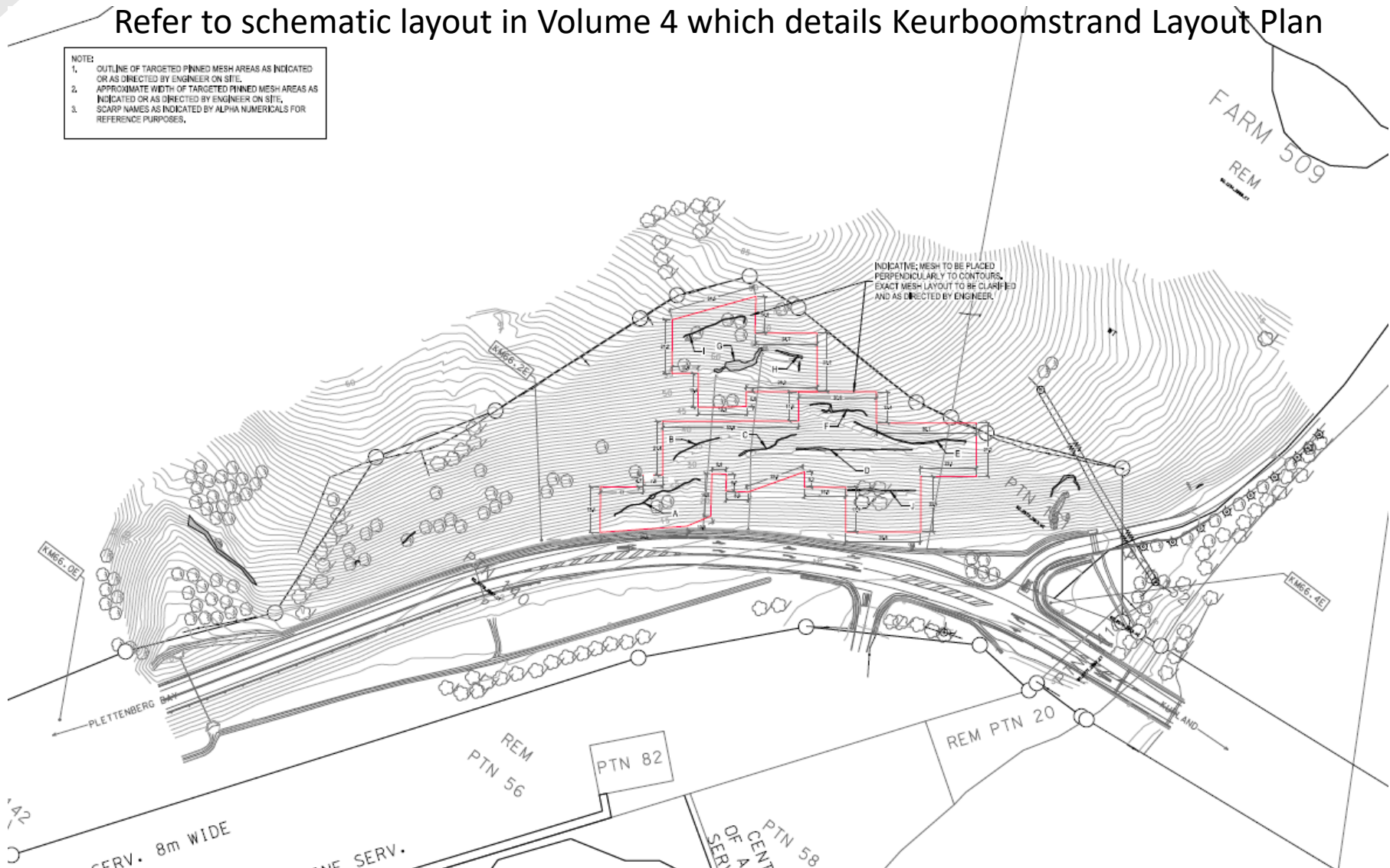
- The road reserve within the defined limits of the contract falls within the limits of another contract that has already been let to a routine maintenance contractor who is obliged to conduct regular maintenance on the route on which this contract is sited.
- The Routine Road Maintenance Contractor shall retain all routine maintenance responsibility, and Contractor shall be responsible for monthly liaison with the Routine Road Maintenance Contractor for the duration of the contract.

SCOPE OF WORKS – SITE INFORMATION

SLOPE STABILISATION – Keurboomstrand Layout

Refer to schematic layout in Volume 4 which details Keurboomstrand Layout Plan

- NOTE:
1. OUTLINE OF TARGETED PINNED MESH AREAS AS INDICATED OR AS DIRECTED BY ENGINEER ON SITE.
 2. APPROXIMATE WIDTH OF TARGETED PINNED MESH AREAS AS INDICATED OR AS DIRECTED BY ENGINEER ON SITE.
 3. SCARP NAMES AS INDICATED BY ALPHA NUMERICALS FOR REFERENCE PURPOSES.



DOCUMENTATION

CONTRACT DOCUMENTS:

- **VOLUME 1:** FIDIC Conditions of Contract (1999)
- **VOLUME 2:** COTO Standard Specifications (2020)
- **VOLUME 3:** Project Document
 - Book 1: Tendering Procedures and Returnable Schedules
 - Book 2: Agreements and Contract Data
 - Book 3: Pricing Data, Scope of Works, Project Information, Annexures
- **VOLUME 4:** Roadworks and Geotechnical Drawings

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Part C2: PRICING DATA**
- **Part C3: SCOPE OF WORKS**
 - **Section A1:** Standard Amendments issued by COTO
 - **Section A2:** Project Specification Amendments to COTO
 - **Section B:** Specification Data
 - **Section C:** Environmental Management Plan
 - **Section D:** Stakeholder and Community Liaison, Targeted Labour and Targeted Enterprises Utilisation and Development
 - **Section E:** Requirements of the OHS Act and Regulations
- **Part C4: SITE INFORMATION**

DOCUMENTATION

CONTRACT DOCUMENTS:

- Clause 1.1.3.3 Time for completion:
 - **11 months** (including December / January shut-down)
 - **3 months** Mobilisation period
 - **8 months** Execution period
- Clause 1.1.3.7 Defects Notification Period:
 - **12 calendar months**

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 1.5** Priority of Documents
- **Clause 2.1** Right of Access to the Site subject to:
 - Performance Security
 - Permit from Department of Labour in place
 - Requirements of the Mobilisation Period (D1005.01)
- **Clause 4.2** Performance Security
 - Submit at least 7 working days prior to Commencement
 - One Performance Security totaling 10% of the Accepted Contract Amount (excluding VAT) is required.

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 4.3** Contractors Representative :
 - Single point of accountability
 - Minimum requirement: Pr.CM/PrCPM with SACPCMP or Pr.Eng/Pr.Tech with ECSA
 - Where not employed on the Works full time, powers will be delegated to an approved Construction Manager.
 - Construction Manager, same professional registration and qualification requirements.

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 4.4 Sub-contractors and suppliers:**
 - The contractor shall disclose ALL subcontracting arrangements. If the contractor fails to disclose, he shall be given 14 days to make representation as to why:
 - the contract shall not be terminated,
 - the contractor shall not be penalised up to 10% of the value of the contract.
 - The percentage of the contract value that may be sublet is dependent on the Min. TE subletting targets and shall not exceed the Max. subcontracting allowed % as per the following table:

Minimum Targeted Enterprise (TE) subletting (%)	Maximum Subcontracting allowed (%)
≤30	50
>30 to <40	60
≥40 to <45	65
≥45 to <50	70
≥50	80

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 4.4** Sub-contractors and suppliers:
 - All subcontractors and suppliers shall be registered on the National Treasury's Central Supplier Database (CSD)
 - All Subcontractors shall be in good standing in terms of COIDA and shall be registered with the Bargaining Council for the Civil Engineering Industry or other relevant Bargaining Council, i.e. rates for wages and conditions of labour agreed by the Bargaining Council for the Civil Engineering Industry shall apply to the Contractor and all his Subcontractors except where a specific industry publishes its own wage rates and conditions of labour.
 - All Subcontractors shall be registered with the CIDB in the appropriate category for the class of work to be performed.

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 6.5** Special non-working days and times:
 - All designated public holidays;
 - Annual shut-down period between December and January;
 - Day before and after Easter weekend;
 - Day of school term closure and day prior to school term start;
 - Other non-working days and restricted working hours for night work:
 - Sundays
 - Between sunset and sunrise
- **Clause 6.9** Contractor's key Personnel:
 - Submission of proposed replacements shall be in the Employer's prescribed format as per Returnable Schedule B4.
 - Criteria to be used for evaluation shall be as per the original evaluation.
 - Each replacement Key Person required to meet the prescribed minimum points, and the Contractor required to achieve a minimum overall functionality score of 75 points out of 100.

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 8.7** Delay damages and other non-compliance charges:
 - Penalty for late completion – **R 35,000 / calendar day**
 - Non-compliance to requirements of clause A8.3(m) for Accommodation of traffic restrictions during the contractor's annual shutdown period between December and January, and during the Easter Weekend - **R50,000.00 /day**
 - Accommodation of Traffic – **R 20,000 per event and R 2,000 per hour** (Part C3 clause A1.5.3.7)
 - Non-compliance to requirements in Part C3 clause A1.7.7 for overloading of hauled material – **2 × Unit Rate of material hauled × overload factor × distance hauled**
 - Contract Participation Targets – Calculated as per D1003.05
 - Contract Skills Development Goal – Calculated as per D1010.02
 - Subcontracting without disclosure or non-compliance with subcontract agreement – **up to 10% of Contract Price**

DOCUMENTATION

CONTRACT DOCUMENTS:

- Clause A8.3(I) Embargo hours and days:
 - None
- Clause 13.8 Special Materials and CPA:
 - None (no special materials).
- Clause 14.3 Retention money :
 - Percentage: 10% of the value of work.
 - Limit: 5% of the Accepted Contract Amount (Including VAT).
 - Guarantee: Not applicable

DOCUMENTATION

CONTRACT DOCUMENTS:

- **Clause 14.6** Minimum amount of Interim Payment Certificates
 - R 1,150,000.00 excluding payments during the Mobilisation Period.
- **Clause 20.2** Appointment of DAB :
 - Appointment of DAB shall comprise of One (1) Member and its appointment to be no later than 30 days after after a dispute arises between the Parties” to allow for an ad-hoc DAB.
 - DAB Member (Roads & Bridges) to comply with the following minimum requirements:
 - Pr.Eng or Pr. Tech Eng (with civil engineering background) or be on the latest SAICE President’s list of alternative dispute resolution professionals; and
 - More than 20 years’ experience in the type of construction involved in the Works – Roads & Bridges; and
 - Formal qualification in adjudication, arbitration and/or experience in mediation; and
 - Experience in Dispute Resolution as per the FIDIC Conditions of Contract.

DOCUMENTATION

PROJECT SPECIFICATIONS - PRICING SCHEDULE

- A Microsoft Excel version of the schedule is provided to tenderers.
- No responsibility can be accepted for any possible errors in summation or calculations that may occur on the spreadsheet. Tenderers are required to satisfy themselves that calculations are correct.
- A printout of the entire completed pricing schedule must be signed and scanned and saved in .pdf format and an electronic copy of the priced pricing schedule must be saved in Microsoft Excel format.
- The signed pdf copy will be deemed to be the official schedule.

DOCUMENTATION

PROJECT SPECIFICATIONS - GENERAL

- The Standard Specifications for Road and Bridge Works for South African Road Authorities (Draft Standard October 2020 edition) prepared by the Committee of Transport Officials, (COTO), as amended, shall apply to this contract. The amendments are those issued by COTO and reproduced in Section A1, together with additional amendments as set out in Section A2 and Project specific Specification Data as set out in Section B.

READ THE FULL STANDARD SPECIFICATION FOR RELEVANT SECTIONS, AS WELL AS THE FULL AMENDMENTS TO THE STANDARD SPECIFICATION IN VOLUME 3, BOOK 3 (SECTION A AND B)

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 1 – GENERAL:

- **A1.2.3.4** Extension of Time for Delays caused by rainfall
 - Method 3 (Critical path method without consequential delays) is specified.
 - Consequential delays are expressly excluded from the measurement of “N” days.
 - On this Contract 22 working days is to be allowed for weather delays (8 months for the execution of the works).
- **A1.2.7.1** Programme of work
 - A scheme 2 programme shall apply.
 - The programme shall be drawn up or be compatible with Microsoft Project software. No additional schedules, other than required in terms of Conditions of Contract Clause 8.3, to be provided.

DOCUMENTATION

PROJECT SPECIFICATIONS – ACCOMMODATION OF TRAFFIC

- **A1.5.7.3** Accommodation of traffic where the road is constructed in half or partial widths
 - The approximate length of the partial width closure sections (excluding advance warning areas) shall not exceed the extent as indicated on the traffic accommodation drawings.
 - Two-way traffic shall be accommodated safely within the contract limits at all times for the full duration of the contract.
 - During the contractor's annual shutdown period between December and January, the contractor shall maintain two-way traffic within the contract limits. No partial lane closures shall be permitted during this period, and the Contractor shall ensure that all travel lanes are unobstructed and open to public traffic.

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.2.3** Ground Anchors
 - Excavation Targeted pinned mesh installations shall be anchored using steel hollow-stem self-drilling anchors (SDA's).
 - Steel for hollow-stem self-drilling anchors shall also comply with EN 10210 (Hot finished structural hollow sections of non-alloy and fine grain structural steels and SANS 920).
 - SDAs will be installed at different heights on the slope across the existing and currently identified failure scarps, as indicated on the tender drawings, making use of suitable methods, plant, equipment and techniques which may comprise drilling and installing using rope-access techniques, and/or the use of suitable equipment where possible such as crane(s) with drilling baskets, as deemed most efficient by the Contractor. The number and type of equipment should be clearly stated in a technical installation method statement by the Contractor, ensuring that the project timeline will be achieved, and submitted for review and approval by the Engineer within the timelines indicated in the standard specification.
 - A detailed drilling, installation and testing (pullout/trial and production/working SDAs) method statement shall be prepared by the Contractor and submitted to the Engineer for approval within the timelines indicated in the standard specification.

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.2.5.2** Materials for rockbolts, dowles and soil nails.
 - Self-drilling anchors used for pinning of the high-tensile steel wire mesh shall comply with the following:

Anchor Type	SDA's, T40/16
Diameter	40 mm (OD), 16 mm (ID)
Cross section area	min. 860 mm ²
Yield load	min. 520 kN capacity
Length	10 m
Spacing	±3 m c/c in staggered grid
Inclination	40° below horizontal
Anchor plate	min. 7 mm thick min. 2.5 kN.m bending resistance Size as per supplier's specification (diamond or square shapes to be considered)

- The exact location of anchors will be dependent on site topography and may vary from the approximate 3 m c/c, as directed by the Engineer
- The approved installation method shall be capable of producing a final grout body diameter of at least 115 mm.

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.2.5.2** Materials for rockbolts, dowles and soil nails (Continued).
 - Anchor head / bearing plates: These plates shall be at least 7mm thick and have a longitudinal bending resistance of at least 2.5 kNm. The corners shall be bent and at least 20 mm long to suitably interlock with and restrain the high-tensile steel wire mesh. This should be purposely manufactured by the mesh supplier, be galvanised and be fit-for-purpose.

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.2.8 Workmanship**
 - Pullout tests need to be undertaken on three sacrificial test SDAs of the same type, inclination and installation method as the production anchors. These test anchors should have a 2m bonded length from the distal end and 4m unbonded length to the slope surface. Provisional pullout test loads of 420kN shall be considered, and it shall be applied in at least 5 equal load increments according to BS EN 14490-2010, ISO 24477-6 or as directed by the Engineer.
 - Tensioning production anchors: Production anchors shall be tensioned to 20kN in soil/gravel conditions and 30kN in rock conditions, or as directed by the Engineer on site.
 - Working load of production SDAs is 205kN.

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.5 Shotcrete**
 - **A12.5.5.8 Reinforcement:** Shotcrete reinforcement shall be polypropylene fibres at 7 kg/m³.
 - **A12.5.5.9 Compressive strength, ultimate flexural strength and energy absorption capacity:** Shotcrete shall be of class SP25, with a characteristic cylinder strength of 25 MPa after 28 days.
 - **A12.5.5.10 Drainage systems, geopipe collectors and weepholes:** The location of geocomposite band drains and weepholes shall be as directed by the Engineer on site.
 - **A12.5.7.1 Mix design:** Shotcrete shall be of class SP25.

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.9** Slope Protection Measures
 - **A12.9.5.2 Rockfall netting:** Rockfall netting product(s) compliant with the following specification shall be applicable to this contract:
Active / Mesh revetment system at targeted location as indicated on the drawings or otherwise instructed by the Engineer on site:

Minimum tensile strength (wire)	1750 MPa
Wire diameter	Min 3.0 mm
Netting weave pattern	Rhomboid high-tensile steel wire
Min. / Max. dimension (mm)	100 mm / 180 mm
Minimum tensile strength (mesh)	120 kN/m
Corrosion protection	95% Zn / 5% Al – min. 150 g/m ²

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.9.7 Execution of Works**
 - **A12.9.7.1 General f) Access for inspections, mapping, setting out and testing:** Refer to A12.9.7.3 regarding the use of Adjacent Roadway for Construction Activities
 - **A12.9.7.2 Process d) Installation of anchored wire mesh rockfall netting revetments:** The following rockfall netting systems are required:

Keurboomstrand Cutting (several localised / targeted locations)	Mesh revetment / Active system
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The intended steel wire mesh (rockfall netting) shall be continuously attached and tied off to wire rope cabling as indicated on the drawings.

The wire rope cables shall comply with the following specification:

Minimum tensile strength (wire)	1770 MPa
Corrosion protection	Galvanised – Class A (EN 10244-2)
Diameter	12 mm

DOCUMENTATION

PROJECT SPECIFICATIONS

COTO CHAPTER 12 – GEOTECHNICAL APPLICATIONS:

- **A12.9.7** Execution of Works
 - **A12.9.7.2 Process f) Erosion control mat:** The following erosion control mat, or similar approved, is required beneath the rockfall netting system locations:

Type	three-dimensional structural mat
Fibers	extruded monofilaments
Material	Polypropylene (PP), bio-degradable
Structure	irregular loopy structure
Mat thickness	min. 18 mm
Specific mass	min. 600 g/m ²
Void ratio	>95%

DOCUMENTATION

PROJECT SPECIFICATIONS - SANRAL STANDARD SPECIFICATION SECTIONS

- **SECTION C: ENVIRONMENTAL MANAGEMENT PLAN**
 - C1004 (d) A Designated Environmental Officer is required on this contract.

DOCUMENTATION

PROJECT SPECIFICATIONS - SANRAL STANDARD SPECIFICATION SECTIONS

- D1003.04 Contract Participation Goal (CPG):
- **Targeted Labour**
 - Target area: Bitou Local Municipal area
 - Targeted labour: **6%** of final contract value
 - Target groups :
 - Youth - **30%** of targeted labour value
 - Women – **30%** of targeted labour value
 - Persons with disabilities – **0.5%** of targeted labour value
 - Military Veterans – **0.5%** of targeted labour value

DOCUMENTATION

PROJECT SPECIFICATIONS - SANRAL STANDARD SPECIFICATION SECTIONS

- D1003.04 Contract Participation Goal (CPG) (continued):
- **Targeted Enterprises**
 - Targeted enterprises: **30%** of final contract value
 - Target groups :
 - >51% Youth owned - **5%** of final contract value
 - >51% Women owned – **5%** of final contract value
 - >51% Military veterans owned – **0.5%** of final contract value
 - >51% Disabled persons owned – **0.5%** of final contract value
 - Public transport operators - **0.5%** of final contract value
 - CIDB 1 and 2 grading – **2%** of final contract value
 - CIDB 3 and 4 grading – **2%** of final contract value

DOCUMENTATION

PROJECT SPECIFICATIONS - SANRAL STANDARD SPECIFICATION SECTIONS

Section D1000 to be carefully examined with special attention to the following clauses:

- **D1001.01:** Employer's Fourteen Point Plan
- **D1003:** Target Group Participation (D1003.03 TE Database)
- **D1005:** Mobilisation Period
- **D1007:** Tender Process for Targeted Enterprises
- **D1008:** General Responsibilities of the Contractor towards Targeted Enterprises
- **D1009:** Work Suitable for Execution by Targeted Enterprises
- **D1010:** Training



QUESTIONS AND ANSWERS

THANK YOU

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