



CONTRACT NR. SANRAL C002-038-2022/1

**RELOCATION OF ST ANDREWS PRIMARY SCHOOL
TENDERER'S CLARIFICATION PRESENTATION**

7 OCTOBER 2022

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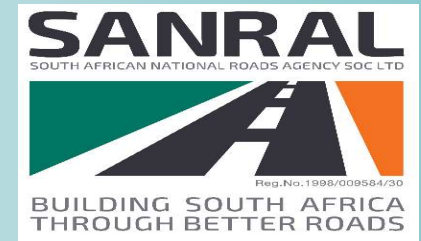
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Introduction



- **SANRAL**
- Mr Brian Mdziniso SANRAL Project Manager
- **Contractor's Representatives**
- Various

Background



- **Project location** : Mkhondo Local Municipality, Mpumalanga Province
- **Project description** : Relocation of St Andrews Primary School
- **Core strategies** :
 - ❖ Relocation of St Andrews Primary School.
 - ❖ Relocation the Motha Family home.
- **Construction duration** : 15 months (including 3 months mobilization period)
- **CIDB grading** : 7 GB

Locality Plan



Tender Notice



- **Tenderer's Clarification briefing**

- ❖ **Date:** 7 OCTOBER 2022
- ❖ **Available:** Link to briefing will be sent to tenderers who submit Form A1.1: Certificate of Intention to Submit a Tender

- **Closing of Tender**

- ❖ **Closing time:** 11h00 on 24 October 2022
- ❖ **Location of tender box:** Security Box
- ❖ **Physical Address:** The Regional Manager Northern Region, The South African National Roads Agency SOC LTD, 38 Ida Street, Menlo Park, Pretoria, 0081
- ❖ Telegraphic, telephonic, telex, e-mail, facsimile and late tenders will not be accepted.
- ❖ Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.
- ❖ Queries relating to the tender documents may be addressed to:
Procurement Office, SANRAL Northern Region
e-mail: ProcurementNR5@sanral.co.za

Contract Documents



- Volume 1: The FIDIC Conditions of Contract, 1999
- Volume 2: Volume 2A: The COTO Standard Specifications for Road and Bridge Works, October 2020

Volume 2B: SANS 1200: Standardised Specifications for Civil Engineering Construction (1990, including later editions and amendments).

Volume 2C: SANS 10142-1:2017: Standardized specifications the wiring of premises.

Volume 2D: SANS 10299: Standardized specifications for the Development, maintenance and management of groundwater resources.

Volume 2E: SANS 10098-1:2007: Standardized specifications for the lighting of public thoroughfares.

Contract Documents



- Volume 2: Volume 2F: SANS 10389-1:2003: Standardized specifications for Artificial lighting of exterior areas for work and safety. (See Note 6 below)

Volume 2G: Standard System of Measuring Building Work published by ASAQs - Association of South African Quantity Surveyors.

Volume 2H: Model Preambles for Trades published by ASAQs, 2008 – Association of South African Quantity Surveyors.
- Volume 3: The Project Document (3 Books)
Volume 3 is issued in electronic format and can be downloaded from the SANRAL website

Contract Documents



- Volume 7: Environmental Management Plan Report.
- Volume 8: St Andrews Primary School Drawings.
- Volume 9: The Motha Family Drawings.

Tender documents are available at no cost in electronic format downloaded from the SANRAL's website by the following link:
<https://www.nra.co.za/service-provider-zone/tenders/open-tenders/>

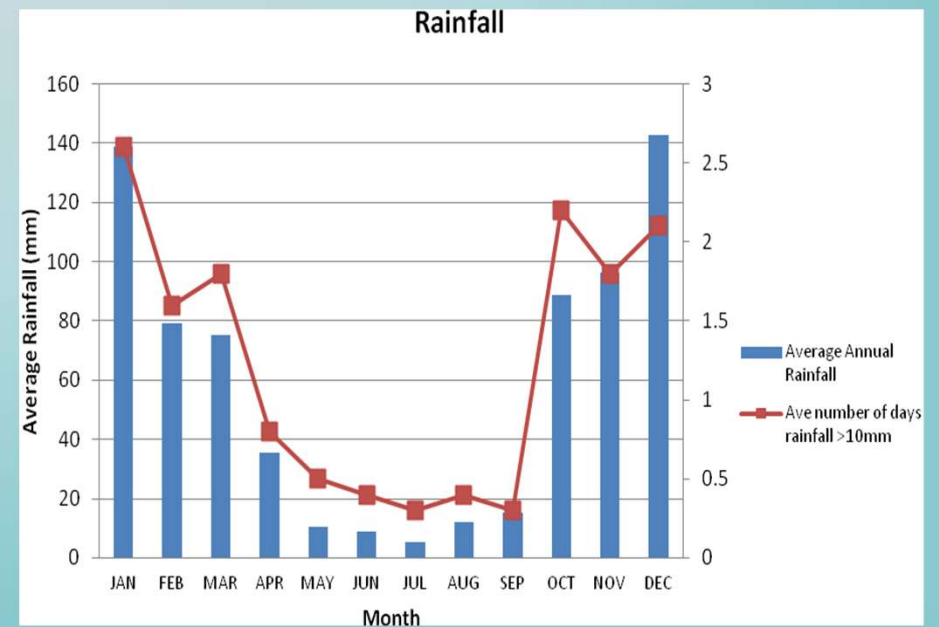
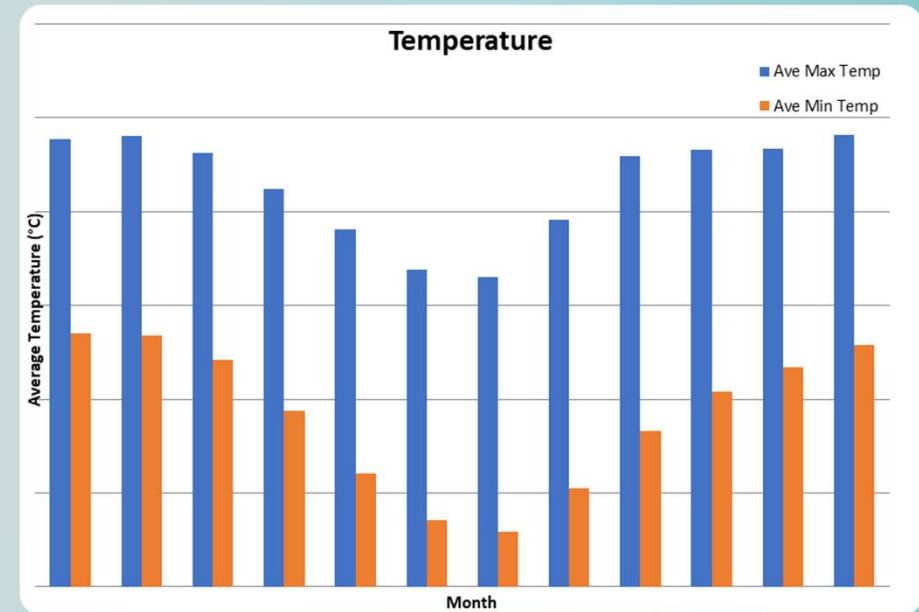
Site Information

- **Climate**

- ❖ Summer rainfall region
- ❖ Low temperatures from April to August may have an influence on construction activities.
- ❖ Rainfall and temperatures are for Ermelo.

- **Geology**

- ❖ The site falls within the Swazian Era, the materials typically consist of Potassic granite, gneiss
- ❖ Refer to Appendix 4 for Geological information



Site Information *(Cont.)*



- **Ground Water**

- ❖ No groundwater was encountered at the time of testing in any test positions. But it should be kept in mind that this level will change seasonally overtime.

- **Problem Soils**

- ❖ The material exhibited a pinhole grain structure, and it is expected that a degree of collapsibility may be expected, undisturbed samples were taken, and the results show collapse potentials of 3.4% (TP3 at 2.0m)
- ❖ Refer to Appendix 4

- **Traffic**

- ❖ Traffic data pertaining to the Sluis-Agri Village is not available.

Description of the Works



Construction of the new St Andrews Primary School which includes:

- 7 classrooms to be used for Grade R to Grade 6
- Multi-purpose hall / 3 Classrooms
- Administration Block
- Guard house
- Refuse yard
- Library / Computer Room
- Kitchen
- Male and Female ablution blocks
- Boundary fence and gate
- Soccer field
- Combined court - Netball
- Paved parking from access road for lighter vehicles
- Services connections such as water, sewer and electricity.
- Access road to the school.

Description of the Works



Construction of the new Motha Family home which includes:

- 11,5m x 9,5m Main house
- Rondavel with a radius of 2.72m

Construction Programme



In drawing up the programme the contractor shall make allowance for the following:

- All special non-working days defined in the Contract Data.
- The expected delays defined in COTO clause A1.2.3.4: Extension of time for delays caused by rainfall.
- The following embargo hours and days:
 - ❖ Thursday before Easter Weekend and Tuesday after Easter Weekend.
 - ❖ Last working day of the building industry prior to the December holiday, and Christmas / New-year shut down period.
 - ❖ Day of school term closure in the Mpumalanga Province.

Construction Programme *(Cont.)*

Restricted working conditions as defined in the Contract Data, including the following:

- ❖ The effect of low temperatures from April to August on construction activities such as stabilisation and pouring of concrete.
- ❖ The time needed for preparation and approval of the various mix designs specified in the relevant construction sections of the Scope of Works.
- ❖ Tender procedure and appointment of targeted enterprises (sub-contractors)
- ❖ The initial programme shall realistically account for the forecast cash flow within the defined contract period, and as provided on Form D7: Schedule of Estimated Monthly Expenditure.
- ❖ If an alternative contract period is offered, the contractor shall submit a separate programme with the alternative tender.
- ❖ Meeting the requirements of the Environmental Management Plan (EMPI)

CONSTRUCTION WORKS



- Clearing and grubbing.
- Accommodation of traffic.
- Trenching for services
- Construction of surface drainage channels and structures.
- Construction of ground platforms.
- Construction of mass earthworks.
- Construction of new pavement layers and paved surfacing.
- Installation of electric works.

CONSTRUCTION WORKS



- Installation of a borehole.
- Construction of a septic tank.
- Installation of a sewer system.
- Construction of paved parking.
- Erection of road signs, application of road markings and the installation of road studs.
- Installation of fencing
- Landscaping.
- Building works ...

CONSTRUCTION WORKS



St Andrews Primary School Building Works comprise of the following:

SCOPE	DESCRIPTION
Block A Administration Block	<ul style="list-style-type: none"> • All building works • Sanitary fittings • Fixed furniture (Bic & reception seating bench)
Block B & Block D 9 Classrooms (3 Blocks of 3 Classrooms)	<ul style="list-style-type: none"> • All building works • Storage shelving
Block C Combination of One (1) Classroom & Computer Centre	<ul style="list-style-type: none"> • All building works • All fixed furniture (control room counter, storeroom shelving & work room shelving)
Ablutions	<ul style="list-style-type: none"> • All building works • Sanitary fittings including paraplegic ablution facilities
Block H Kitchen Block	<ul style="list-style-type: none"> • All building works • Kitchen counters and fixed furniture • Sanitary fittings • Shelving and stainless-steel fixed tables • Gas stoves

CONSTRUCTION WORKS



Block I Refuse yard	<ul style="list-style-type: none"> • All building works
Block J Guard House	<ul style="list-style-type: none"> • All building works • Sanitary fittings • Fixed counter
Walkways	<ul style="list-style-type: none"> • All walkways to be minimum 2m wide • Linking walkways between Classroom, ablutions and administration block are to be covered. • Paved assemble area
Kitchen seating area	<ul style="list-style-type: none"> • Concrete and brick seating area to be provided
Fence	<ul style="list-style-type: none"> • 2m high clear view type fence (3 sides) • 2m high (sound barrier) Boundary wall on one side
Soccer Field	<ul style="list-style-type: none"> • Grassing to spec • Goal post framework excluding netting • Initial grass painted markings
Combi court	<ul style="list-style-type: none"> • Non-skid bitumen surfacing and markings • Rectangular backboard • Hoop and Basket

CONSTRUCTION WORKS



The Motha Family house comprise of the following:

- 4 Bedrooms
- Bathroom
- Lounge
- Kitchen
- Rondavel
- Electricity and Water connections
- Septic tank and soakaway
- Security fence and gate

Access Roads



Cross sections:

- 2 x 2.75m Lanes (1 in each direction).
- Figure 8c kerbs (Access roads)
- Figure 3 kerbs (Parking)

Pavement design:

- 60mm Interlocking paving blocks
- 150mm Base (C4) compacted to 97% MOD AASHTO
- 150mm Subbase (G6) compacted to 96% MOD AASHTO
- 150mm Selected (G7) compacted to 95% MOD AASHTO

Materials Investigation

- **Soil Investigation :**

- ❖ Soil profiling showed at test positions 1, 3, 5 and 6 there are slightly varying layers of gravelly silts (elastic silts at TP 1 and 5) with sands classifying as ML and MH under the USCS soilsclassification system. The gravelly silts with sands show plasticity indices ranging from 14 to19 (TP 5), and all exhibit low swell potential according to the Modified Van Der Merwe swell prediction. These materials occur from depths of 0 mm to a maximum of 3500 mm (TP5).. The low classification at TP 1 was characterized by the CBR of 12 at 93% mod AASHTO as well as the PI exceeding 12. The material exhibited a pinhole grain structure, and it is expected that a degree of collapsibility may be expected, undisturbed samples were taken, and the results show collapse potentials of 3.4% (TP3 at 2.0m). The gravelly silts with sands thus show moderate trouble per the table from *THE CIVIL ENGINEER in South Africa – July 1985*.

Materials Investigation

- **Soil Investigation :**

- ❖ At test positions 2, 4 and 7 from 1200mm to 3200mm and 3000mm respectively there are sandy lean clays classifying as CL under the USCS soils classification system. The sandy lean clays show plasticity indices ranging from 13 to 20 (TP 7) and exhibit low to borderline medium swell potential according to the Modified Van Der Merwe swell prediction. This potential was confirmed by consolidation testing showing 0.3% swell at test position 6 at a depth of 3000mm. The materials classify as G10 under the COLTO classification and are only suitable for use as fill material.
- ❖ No groundwater was encountered at any of the test positions however this may be a seasonal occurrence.

Water Reticulation



- Sluis-Agri Village already has a bulk water main and internal reticulation system. The Village is supplied with water via the 1ML reservoir.
- 90mm diameter water main required
- 75mm uPVC pipes used for internal reticulation

Sewer Reticulation



- Sewer system installed according to SANS 1200
- Septic tank installed according to standard details provided by Mpumalanga Department of Education.
- 110mm uPVC pipes used for internal reticulation
- Sewer will be drained into an underground septic tank and filtered through French drains.

Platform



- Area sectioned off according to the different school blocks, creating stepped platforms.
- Platforms created to avoid deep cuts or high fills to successfully balance cut and fill within the school's cadastral boundary.
- The platforms also aid in directing water away from the school buildings.

Structures



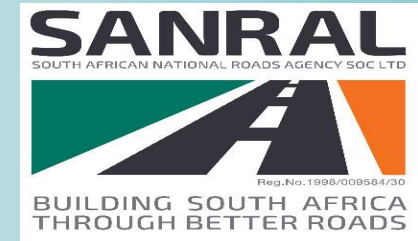
- **St Andrews Primary School Structural Works:**
 - ❖ Strip foundations will be used.
 - ❖ Slabs are to be constructed in compacted fill to enhance load carrying capacity.
 - ❖ Polythene layer provided under floor slab, acting as a slip membrane to reduce cracks and act as a vapor barrier.
 - ❖ All perimeter walls constructed with 14MPa solid masonry units.
 - ❖ Foundation wall contains brickforce in each course to enhance load carrying capacity and help to distribute vertical loads.
 - ❖ Roof trusses to be designed and supplied by registered & certified companies.

Electrical



- **St Andrews Primary School Electrical Works:**
- Application of 50kVA supply including all external electrical reticulation works to proposed site including Area Lighting of the sports field, combi-court, and car park.
- Internal electrical site reticulation of all buildings including lighting, small power, lightning protection and Air Conditioning installation.

Services



- **Eskom Connection :**

- ❖ The school will require an electrical connection from Eskom to the existing Sluis-Village. The cost of this connection would form part of the project budget.

- **Water Connection :**

- ❖ Water connections for the School will be made to the existing water infrastructure that is currently feeding the Sluis-Agri Village. This connection must be overseen by Mkhondo Local Municipality.

Contractor to acquaint himself with the position of all the services on the site before commencement of the Works. Contractor to liaise with the relevant service owners well in advance to acquire from them the lead times required to make the necessary arrangements for the protection, removal or relocation of services that may / will be affected by the Works.

Construction Management



- **Security**
 - ❖ Contractor to provide security for the duration of the contract.
- **Camp establishment, power supply and other services**
 - ❖ Contractor to make own arrangements for a suitable camp site.
 - ❖ Contractor to make his own arrangements supply of electrical power and all other services. No extra cost.
- **Management of the Environment**
 - ❖ The contractor will be responsible for construction according to an Environmental Management Plan in terms of the Contract Specifications.
- **Health and Safety Obligations**
 - ❖ The contractor will be responsible for conducting his work in accordance with the general OHS requirements stated in the Contract Specifications.

Construction Management *(Cont.)*



- **Construction in confined areas**
 - ❖ It will be necessary to work within confined areas.
 - ❖ Measurement and payment will be in accordance with the specified cross-sections and dimensions only.
 - ❖ No extra payment will be made nor will any claim for additional payment be considered in such cases.

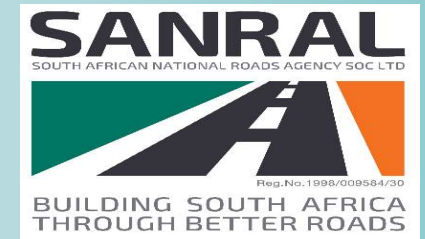
- **Accommodation of traffic**
 - ❖ Whilst the access road to the school is being constructed, residents will require access to their properties.

Stakeholder and Community liaison, and Targeted Labour and Targeted Enterprises Utilisation and Development



- SANRAL is committed to Government's objective to extend economic opportunities and entrepreneurial capacity to all localities by the optimum utilization of the resources existing in the vicinity of projects, the development of these resources in the execution of the projects, and by maximizing the amount of project funds retained within the community.
- Section D of Part C3 : Scope of Works, covers the contractor's obligations to meet these objectives in detail.

Important Information



- **Penalties : (See C1.2.2 – Appendix to Tender)**
 - ❖ **Delay damages** : R16 500 / day
 - ❖ **Intra-programme dates** : R1 000 / day
 - ❖ **Accommodation of traffic non-compliance :**
 - **Fixed penalty** : R20 000 / occurrence
 - **Time related** : R2 000 / hour
 - ❖ **Overloading (See A1.7.7)** : 2 x Unit Rate of material hauled x overload factor x distance hauled
 - ❖ **Contract Participation Targets** : See D1003.05 for CPP Penalties

Important Information *(Cont.)*



- **Form A3.2: Certificate of Independent Tender:**

- **See Part T2: Returnable Schedules**

- This certificate serves as declaration that the tender submitted is free from any collusion with a competitor.

- **Community Development Projects:**

- Community Development Projects shall not add towards the Contractor's CPG and shall be additional efforts towards the Employer's transformation and socio-economic development goals – See sub-clause D1012.02.

- **Consequential delays:**

- The contractor shall take note that consequential delays are excluded from the measurement of 'n' days as stated in sub-clause A1.2.3(c).

- **Project Specific Construction Requirements:**

- **See Part C4, Site Information:**

- Appendix 13: Baseline Risk Assessment

- Appendix 13: Site Specific Health & Safety Specification

Important Information *(Cont.)*



- **Contract Participation Goals :**

- ❖ **Target Area: Mkhondo Local Municipality**

- ❖ **Targeted Labour** (% of Final Contract Value) : 8%

Minimum contributions to targeted labour value:

- Black Women : 30%
- Black Youth : 30%
- Black people with disabilities : 0,5%

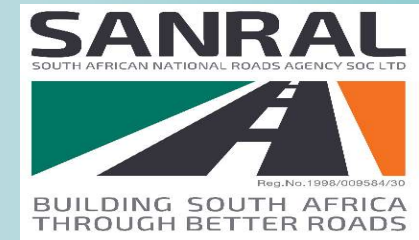
- ❖ **Targeted Enterprises** (% of Final Contract Value) : 30%

Minimum contributions to final contract value:

- ❖ **Ownership :**

- >/= 51% Woman : 5%
- >/= 51% Youth : 5%
- >/= 51% Military Veterans : 1%
- >/= 51% Disabled Persons : 0,5%
- CIDB 1 or 2 grading : 5%
- CIDB 3 or 4 grading : 5%

Submission of Tender



Of the contract documents, only the following elements of Volume 3 needs to be submitted; a printed and bound hard copy and electronically on a flash drive marked “Main Tender (followed by the Tenderer’s name)” in a sealed envelope, in the following order :

- Form of Offer (signed and scanned as .pdf and hard copy);
- All returnable schedules and attachments and certificates (signed and scanned as .pdf and hard copy);
- Completed pricing schedule (scanned copy in .pdf and copy in Excel and hard copy).

For more detailed information, refer to Book 1: List of Contract Documents – Notes to Tenderer.

Site Development Plan



THANK YOU