



**APPOINTMENT OF A
CONTRACTOR TO**

**CLEAR VEGETATION AND
GRADING OF ACCESS ROAD
AND BOUNDARY PERIMETER
OF SANSA MATJIESFONTEIN
SITE**

Document Change History

REVISION NO.	PUBLICATION DATE	AUTHOR	CHANGE DESCRIPTION
00	15-September 2023	Lee McQuire	Created Document
01	18 October 2023	Gladys Magagula Nontobeko Gumede	Updated Document
02			
03			

Document Software

	Package	Version	Filename
Word processor	MsWord	Word 365	

Organisation Details

Name	SANSA
Registered Address	
Contact Number	
Website	

Table Of Contents

1. INTRODUCTION.....	5
1.1 Purpose of the Document.....	5
1.2 Background	5
2. STATEMENT OF WORK (SOW)	6
2.1 Scope of Work.....	6
2.1.1 Information Issued for Tender Purposes.....	6
2.1.2 Description of Activities.....	6
2.2 Drawing	7
2.3 Standard Engineering Specifications and Applicable legislation.....	8
2.4 Project Specifications.....	8
2.4.1 Description of works.....	9
2.4.2 Description of Site and Access	9
2.4.3 Site Usage	9
2.4.4 Survey Control and Setting Out of the Works	10
2.4.5 Management	10
2.5 Preliminary Programme	12
2.6 Management of the Environment.....	12
2.6.1 Natural Vegetation	12
2.6.2 Fires	12
2.7 Applicable Documents.....	13
3 REFERENCE DOCUMENTS	13

List of Figures

Figure 1 The Proposed graded Road and Site Boarder in Matjiesfontein Town, Western Cape.....	5
Figure 2 Overall Site Plan Layout with Proposed Gravel Road and Site Boundary.....	7

List of Abbreviations

LEGS	- Lunar Exploration Ground Sites
OHSA	- Occupational Health and Safety Act
PFMA	- Public Financial Management Act
PPE	- Personal Protective Equipment
QA	- Quality Assurance
SANSA	- South African National Space Agency
SANS	- South African National Standards
SOW	- Scope of Work

1. INTRODUCTION

1.1 Purpose of the Document

This document serves to detail the Scope of Work for the vegetation clearing and grading of a +/- 3.5 km, 4m wide access road, along with a 4km, 6m wide fence border, located at the newly established SANSA Matjiesfontein site in the Western Cape.

1.2 Background

The South African National Space Agency (SANSA) is designated as a PFMA Schedule 3(A) public entity, established under the South African National Space Agency Act, 2008 (Act No 36 of 2008). SANSA's mandate encompasses the coordination and integration of national space science and technology programmes. Its scope also extends to the long-term strategizing and execution of space-related initiatives in South Africa, serving the broader interests of its citizens. Detailed information about SANSA is accessible at <http://www.sansa.org.za>

Matjiesfontein, a town situated in the Western Cape, has been earmarked as the venue for NASA's new Lunar communication facility and the Lunar Exploration Ground Sites (LEGS) antenna. A collaborative agreement has been forged between SANSA and the Matjiesfontein Trust. Additionally, the Department of Agriculture has granted SANSA the requisite authorization to develop the ground station on the identified land in Matjiesfontein see below:



Figure 1 The Proposed graded Road and Site Boarder in Matjiesfontein Town, Western Cape

2. STATEMENT OF WORK (SOW)

2.1 Scope of Work

The Contractor is responsible for delivering the project mentioned in this document. This should be done in strict accordance with the design drawings and specifications detailed in this document.

2.1.1 Information Issued for Tender Purposes

The Contractor is to refer to the following project information, included within the document, as listed below:

- a. Scope of Work for Construction
- b. Design Drawings
- c. Specifications

2.1.2 Description of Activities

The following section 2.4.1 Description of works outlines the process to be followed by the appointed contractor.

The contractor is expected to conduct an on-site inspection to familiarise themselves with the project's scope and associated documentation. This ensures that their pricing encompasses all necessary materials, equipment, and resources. A comprehensive survey of the proposed grading route is imperative before any construction initiation. The contractor must verify all existing services within the construction parameters before establishing the access road and fence line.

The construction of the project will be carried out in accordance with the design drawings provided in this document, as well as complying with all SANSA, national and international codes, and standards, while adhering to good engineering practices.

2.2 Drawing

Below **Error! Reference source not found.** is an Overall Site Plan Layout Showing Proposed New Boundary Line



Figure 2 Overall Site Plan Layout with Proposed Gravel Road and Site Boundary

Estimated the 4-meter-wide gravel road intersection points coordinates are as follow:

33°13'53.06"S, 20°34'40.84"E

33°13'57.13"S, 20°34'39.40"E

33°14'17.24"S, 20°34'23.79"E

33°14'32.65"S, 20°33'13.12"E

Estimated the 6-meter-wide fence boarder corner coordinates are as follow:

33°14'24.18"S, 20°32'30.05"E

33°14'20.96"S, 20°33'13.24"E

33°14'50.25"S, 20°33'12.95"E

33°14'53.71"S, 20°32'28.44"E

General Notes

- a. A registered Professional Land Surveyor must handle all setting out tasks, and contractor must use the surveyed pins and plan. Any deviation from surveyor pins and plan need to communicate to surveyor and SANSA.
- b. On-site verification is important for all dimensions.
- c. Execute all work in strict accordance with relevant and applicable legislation (SANS 1200, OSHA, NEMA, etc)
- d. Uneven terrains, particularly at river crossings, dongas, and ridges, should be identified. A clear strategy for levelling and compacting, without disrupting water flow, must be communicated. This strategy should be documented on the land surveyor's plans and effectively implemented by the contractor.
- e. The Contractor is to exclusively use the dimensions provided in on the Drawings for setting out the Works. Where necessary, levels need also be provided.

2.3 Standard Engineering Specifications and Applicable legislation

While not included or bundled within this document, the following SANS 1200 Standard Specifications for Civil Engineering Construction, are integral to the Contract Documents. The Contractor is expected to acquaint themselves with the SANS 0120 Code of Practice (latest edition), which holds equal relevance.

SANS 1200 A 1986 : General

SANS 1200 C 1980 : Site Clearance

SANS 1200 DA 1988 : Earthworks (Small Works)

TMH 11 : Standard Survey Methods

Occupational Health and Safety Act (OHSA), 1993 (Act No. 85 of 1993)

Municipal By-laws and Regulations

2.4 Project Specifications

In the event of any discrepancy between a part or parts of the Standard or Particular Specifications and the Project Specification, the Project Specification shall take precedence. If there is a discrepancy between

the Specifications and the drawings, the Engineer will resolve it and communicated this to SANSA before any work is undertaken for the relevant item.

2.4.1 Description of works

- a. Determine the type and extent of vegetation, assessing both topography and soil composition.
- b. Clear and Treat the specified 3.5 km x 4m access road and the 4km x 6m boundary fence.
- c. Grade the specified 3.5 km x 4m access road and the 4km x 6m boundary fence, ensuring the land is at the desired gradient for efficient drainage and prevention of water accumulation.
- d. Relocate the uprooted vegetation and rocks to sanctioned disposal sites, adhering strictly to environmental regulations.
- e. Remove topsoil along the defined path and replace with sand from reputable source and deploy effective erosion countermeasures.
- f. Follow rehabilitation plan of uprooted vegetation and topsoil.
- g. Regularly liaise with the Surveyor and SANSA representatives, ensuring the project aligns with the outlined requirements. Address feedback and concerns from stakeholders promptly.

2.4.2 Description of Site and Access

The SANSA Matjiesfontein site is situated in the Laingsburg Municipalities in the Western Cape Province. To gain access to the site contractor needs to contact SANSA representative to arrange access to the site. No access will be granted without prior permission.

2.4.3 Site Usage

The Contractor is mandated to consistently maintain a safe, clean, and organized site environment. Additionally, stringent measures should be in place to minimize disruptions, particularly in ecologically delicate areas within the site, ensuring no detrimental environmental outcomes arise.

Housing provisions are not provided by the project. Consequently, the Contractor is responsible for organizing accommodation for their workforce and managing their daily transportation to and from the site.

Contractors are prohibited from operating outside the designated working hours, which are weekdays from 8am to 5pm. Disruptions to residents should be minimized at all times.

2.4.4 Survey Control and Setting Out of the Works

Should any discrepancies arise, the Contractor is obliged to promptly inform the site survey engineer. Prior to the commencement of the Works or any phase, the Contractor must engage with stakeholders and relevant authority officials to determine any existing services on site. Securing necessary permissions to move forward is the Contractor's responsibility, and any delays in obtaining such permissions cannot be grounds for claims by the Contractor. The Survey engineer provides survey control points, plan and relevant setting out data. It is binding upon the Contractor to validate the accuracy of these survey control points and to utilise them.

2.4.5 Management

These specifications are applicable to the current contract, and the Contractor is obligated to adhere to all requirements that pertain to the project.

2.4.6 Local Labour Market Stimulation

The contractor is required to submit a detailed plan outlining how and where of local labour and resources will be used. It is imperative for the contractor to prioritize the engagement of local labour and resources to the greatest extent possible. The Tenderer must ensure all employee remunerations align with the stipulated sectorial determinations under the Basic Conditions of Employment Act, as mandated by the Department of Labour.

2.4.7 Quality Assurance (QA)

The Contractor will be solely responsible to produce work that complies with the Specifications to the satisfaction of SANSA and survey Engineer. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to

ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure. The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment, and tools are available to control the quality of his own workmanship in accordance with his QA-system.

Where necessary, the Contractor must arrange for the usual quality tests to be carried out on the works to ensure that all work is carried out according to and applying with the specifications. Final approval of the works, however, lies with the SANSA and Survey engineer.

2.4.8 Security

The Contractor is responsible for supplying security for the contract as they see fit, and this should not result in any additional costs for the Employer. The Contractor must ensure that all his employees as well as the employees of his subcontractors are able to identify themselves as members of the construction team. SANSA will not be held responsible for loss or damage for equipment or materials.

2.4.9 Occupational Health and Safety Measures

The Contractor shall fulfil all the requirements prescribed by Occupational Health and Safety Act 85 of 1993 for the duration of the project. All equipment used, installation, assembling and execution of tasks whether detailed in this specification or not shall comply with the requirements of the OSHA as well as local bylaws. All equipment shall be designed to be **fail safe**. At all times, the contractor will be responsible for safety of all their employees onsite as well as their assets.

2.4.9.1. Safety, Health and Environment (SHE Specification)

Prior to the commencement of the contract, the contractor shall be issued with a SHE (Safety, Health and Environmental) specification in order to compile a SHE File in line with SANSA contractor requirements for approval. (See attached SHE file Index and Specification)

Suitable barricading and danger tape must be put around all open trenches and excavations near buildings or where such a trench or excavation may pose a hazard for pedestrians, animals and/or vehicles. This Clause is to be

read in conjunction with the provisions and obligations as contained in SANS 1921-1 and SANS 1921-2. Contractor shall adhere to all health and safety standards prescribed by SANSA.

2.5 Preliminary Programme

The Contractor must include a preliminary program. This program should be presented, providing enough detail to clearly illustrate how the work will be completed within the specified contract completion time.

The Contractor is expected to account for potential delays caused by typical adverse weather conditions and special non-working days, as outlined in the Special Conditions of Contract, Project Specifications, and Contract Data, in both their rates/prices and their program.

It's crucial that the construction program is submitted within the timeframe mentioned in the Contract Data, and the preliminary program included with the tender will serve as the foundation for this program.

2.6 Management of the Environment

The Contractor shall fulfil all the requirements prescribed by National Environmental Management Act 108 of 1998 and its applicable sections for the duration of the project as well as local bylaws governing the jurisdiction of the project.

Prior to the commencement of the contract, the contractor shall submit an Environmental Management Plan to SANSA detailing how environmental aspects and impacts emanating from the project will be managed and minimised.

The Contractor shall pay special attention to the following:

2.6.1 Natural Vegetation

The Contractor shall confine his operation to as small an area of the site as may be practical for the purpose of constructing the works. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work.

2.6.2 Fires

The Contractor must adhere to both legislative and local fire regulations. They are also responsible for taking all essential measures to prevent fires. If a fire does occur, the Contractor must promptly take action to contain and extinguish it. Furthermore, the Contractor will be held fully accountable for

any damages or claims arising from fires that may have been caused by them or their employees.

2.7 Applicable Documents

The following documents are applicable to the extent stated herein. In the event of conflict between the contents of the applicable documents and this document, the applicable documents shall take precedence.

Document Number/ Description
SSO-IMS-Final EIA Report Matjiesfontein
SANSA Draft EMPr Cleint Review 21 October 2020
SANSA Ecological report – Client Review
She specification
SHE file index
Section 37 to agreement
Geo Tech report
Flood line report

3 REFERENCE DOCUMENTS

4 Document Approved

NAME	SIGNATURE	POSITION	APPROVAL DATE