PART T1: TENDERING PROCEDURE

T1.1: TENDER NOTICE AND INVITATION TO TENDER (SBD1)

YOU ARE HEREBY INVITED TO BID FOR THE FOLLOWING SPECIFIED SUPPLY REQUIREMENTS

BID NUMBER: NRF/HartRAO 01/2016-17 CLOSING DATE: 26 July 2016 CLOSING TIME: 11:00

BID DESCRIPTION

CONSTRUCTION OF FOUNDATIONS AND TOWER STRUCTURE FOR A NEW VGOS RADIO TELESCOPE AT THE HARTEBEESTHOEK RADIO ASTRONOMY OBSERVATORY


<table>
<thead>
<tr>
<th>Briefing Session / Site Visit</th>
<th>Date and Time:</th>
<th>Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory</td>
<td>29 June 2016 at 10h00</td>
<td>Hartebeesthoek Radio Astronomy Observatory, Farm 502JQ, Broederstroom road, Hartebeesthoek, Krugersdorp (<a href="http://www.hartrao.ac.za/where/raodirect.html">www.hartrao.ac.za/where/raodirect.html</a>)</td>
</tr>
</tbody>
</table>

Additional information:
Additional tender documents will be made available at the compulsory briefing session. Refer to Clause F.2.7 of the Tender Data

Validity period from date of closure: 90 Days

Tenderers must have a CIDB contractor grading designations of 4SJ and 4CE, or higher. Refer to Clause F.2.1 of the Tender Data

BID DOCUMENTS ARE TO BE DEPOSITED, EITHER PHYSICALLY OR BY COURIER, IN THE BID BOX SITUATED AT:

HartRAO, Farm 502JQ, Broederstroom Road, Hartebeesthoek, Krugersdorp, 1739

Directions: www.hartrao.ac.za/where/raodirect.html

(Telegraphic, telephonic, facsimile, email, electronic submissions and late tenders will not be accepted)
The tender documents are available under the tender name on the HartRAO tender website:

ANY BIDDING PROCEDURE ENQUIRIES DIRECTED TO:
Contact Person: Radzilani Rabuma
Tel: 012 301 3213
Email: radzilani@hartrao.ac.za

ANY TECHNICAL ENQUIRIES DIRECTED TO:
Contact Person: Philip Mey
Tel: 012 301 3225
Email: philip@hartrao.ac.za

Bidders should timeously deliver bids to the correct address. LATE BIDS ARE DISQUALIFIED and returned to bidders.

The bid box is open from 08:00 to 16:00 South African time, 5 days a week (Monday to Friday)

REQUIREMENTS FOR SEALING, ADDRESSING, DELIVERY, OPENING AND ASSESSMENT OF TENDERS ARE STATED IN THE TENDER DATA.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS IN THIS INVITATION (NOT TO BE RE-TYPED) WITH ADDITIONAL INFORMATION SUPPLIED ON ATTACHED SUPPORTING SCHEDULES.

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS – 2011; THE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS (SECOND EDITION) 2010, (GCC 2010), PUBLISHED BY THE SOUTH AFRICAN INSTITUTION OF CIVIL ENGINEERING (SAICE), AS APPLICABLE TO THIS CONTRACT AND SPECIAL CONDITIONS OF CONTRACT AS STIPULATED IN THIS INVITATION.

THE FOLLOWING PARTICULARS MUST BE FURNISHED AS LEAD PAGE OF THE BID RESPONSE

BID NUMBER: NRF/HartRAO 01/2016-17 CLOSING DATE: 26 July 2016 CLOSING TIME: 11:00

NAME OF BIDDER: ...........................................................................................................

REPRESENTED BY: .......................................................................................................... 

POSTAL ADDRESS: ........................................................................................................

PHYSICAL ADDRESS: ......................................................................................................

TELEPHONE NUMBER: CODE ........ NUMBER ..............................

CELLPHONE NUMBER: CODE ........ NUMBER ..............................

FACSIMILE NUMBER: CODE ........ NUMBER ..............................
1. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to the NATIONAL RESEARCH FOUNDATION in accordance with the requirements and specifications stipulated in this bid document at the price(s) quoted. My offer(s) remains binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.

2. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

3. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.

4. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

5. I certify that the information furnished in these declarations (SBD4, SBD6.1, SBD6.2 where applicable, SBD8, SBD9) is correct and I accept that the state including the NRF may reject the bid or act against me should these declarations prove to be false.

6. I confirm that I am duly authorised to sign this contract on behalf of the bidder.

NAME(PRINT): ........................................................................................................

CAPACITY UNDER WHICH THIS BID IS SIGNED: .................................................................

SIGNATURE: ........................................................................................................

DATE: ................................................................................................................

WITNESS 1 ........................................................................................................

WITNESS 2 ........................................................................................................
The Tenderer is to indicate in the checkboxes provided that they have completed the required section of the tender document. Completion of this check-list will assist the Tenderer in ensuring that he has attended to all the required items for submission with this tender.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tender – SBD1</strong></td>
<td>Fill and sign the procurement invitation (SBD1)</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td><strong>Bid Response Checklist</strong></td>
<td>Fill out this submission checklist (current page) as you proceed through the document.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Part T1</strong></td>
<td>Read the Tendering Procedure in full with all applicable Conditions of Tender stated in the Tender Data.</td>
<td>1-22</td>
<td></td>
</tr>
<tr>
<td><strong>Part T2</strong></td>
<td>Returnable Documents: The Tenderer must check that he has completed all the schedules and forms listed and attached all the required forms. Bidders are notified that without these documents, the Evaluation Committee is unfairly restricted in its evaluation and thus incomplete Returnable Documents is a MANDATORY DISQUALIFICATION</td>
<td>23-69</td>
<td></td>
</tr>
<tr>
<td><strong>Part C1</strong></td>
<td>Form of Offer has been signed. Form of Acceptance is to be signed by the Employer if the bidder is successful. Conditions of Contract has been read and understood including all supplementary conditions.</td>
<td>70-83</td>
<td></td>
</tr>
<tr>
<td><strong>Part C2</strong></td>
<td>Pricing Data has been read and understood and filled out in full with all necessary schedules attached.</td>
<td>84-89</td>
<td></td>
</tr>
<tr>
<td><strong>Part C3</strong></td>
<td>Scope of Work has been read in full and the tender has been prepared to achieve all requirements and specifications set out in the scope of work.</td>
<td>90-102</td>
<td></td>
</tr>
<tr>
<td><strong>Part C4</strong></td>
<td>Site information has been read and understood.</td>
<td>103-106</td>
<td></td>
</tr>
</tbody>
</table>

Documents above inserted into two separate envelopes as described in the conditions of tender. (One original; two copies. Split into Technical and Financial for evaluation purposes. **THIS IS A MANDATORY REQUIREMENT AND WILL LEAD TO DISQUALIFICATION OF THE TENDER IF NOT ADHERED TO**
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1 KEY ORGANISATIONS

1.1 National Research Foundation
The National Research Foundation ("NRF") is a juristic person established in terms of Section 2 of the National Research Foundation Act, Act 23 of 1998, and a Schedule 3A Public Entity in terms of the Public Finance Management Act. The NRF is the government's national agency responsible for promoting and supporting research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programs to the broader community in all fields of science and technology, including natural science, engineering, social science, and humanities.

1.2 Hartebeesthoek Radio Astronomy Observatory
The Hartebeesthoek Radio Astronomy Observatory (HartRAO) began as Deep Space Station 51, built in 1961 by the National Aeronautics and Space Administration (NASA) of the United States of America. The station was handed over to the South African Council for Scientific and Industrial Research (CSIR) in 1975 and was converted to a radio astronomy observatory. In 1988 the observatory became a National Facility operated by the Foundation for Research Development (FRD) which was restructured in 1999 as the National Research Foundation (NRF). Today the radio telescopes at HartRAO are used for both astronomy and space geodesy, and the observatory also has other dedicated space geodesy instrumentation.

2 PROJECT BACKGROUND
A new radio antenna is being manufactured for the Hartebeesthoek Radio Astronomy Observatory (HartRAO) by the German company MT Mechatronics. This antenna will need to be mounted on top of a tower structure with the structure foundations anchored to bedrock. The tower structure will be mostly based on the drawings from MT Mechatronics. The antenna is already being manufactured and the necessary construction works need to be completed before the antenna top structure arrives in South Africa.

3 LOCALITY
HartRAO is located on Farm 502JQ, Broederstroom road, Hartebeesthoek, 1739, just north of Krugersdorp in the Gauteng province – as indicated in Figure 1 below. Further site information is provided in Part C4: Site Information.
4 SCOPE OF WORK

Overview

The Hartebeesthoek Radio Astronomy Observatory has begun procurement of a new radio telescope. This radio telescope measures 13.2 m in diameter and is currently being manufactured by the German company MT Mechatronics GmbH. The radio telescope is to be mounted directly on a concrete structure as indicated in the scope of work. This civil works tender is for the site preparation, foundations and tower that need to be constructed. It can be summarised into the following categories:

1) Site compaction of a 70 x 45 m² area.
2) Rip, grade, and compact in situ of an existing 500m long dirt/gravel road.
3) Erection of a fence with two double-gates around the site.
4) The foundations for a site office
5) The foundations for a service pad.
6) The foundations for and construction of a concrete tower.
7) The gravelling and compaction of the remainder of the site.

Refer to Part C3: Scope of Work for further details.

5 SPECIFICATION OF SERVICES BEING PROCURED

As mentioned above, the specifications for the works are set out in the following sections of the document:

Part C3: Scope of Work – including all its subsections
6 LOCAL CONTENT REQUIREMENTS

Labour

The requirement for the bid is that, as far as possible, labour, including artisans and site administrative staff, should preferably be sourced from the nearby communities (Magaliesburg, Krugersdorp, Hartebeespoort).

Materials

From a civil perspective there is no designated sector material for this contract. The requirement for the bid is that as far as possible materials are to be sourced locally. Only in the event that it can be shown that a locally mined and manufactured material is not available will permission be granted for the use of an imported material.

Refer to the Construction section under Part C3: Scope of Work, specifically the Plant and Materials paragraph, for further details.

7 EVIDENCE OF SUPPLIER EXPERIENCE (TECHNICAL MERIT)

Bidders are required to provide references demonstrating their experience in delivering the work required and the quality of such previous work. Bidders are required to provide a profile of themselves for evaluation of their capacity to perform the work, which details the resources available. No more than 3 pages are required from each of the Main and, if applicable, Sub Contractors.

Bidders are required to provide references, these letters, including three for the sub-contractors, must address the suppliers ability to supply timeously, the quality of workmanship and equipment, and the customers overall experiences with the supplier. The template for these letters is included in Schedule T2.2J of this document.

8 PERFORMANCE LEVEL MANAGEMENT

All work is to conform to the specifications as stipulated in this document. The HartRAO project manager will sign off each item. HartRAO reserves the right to appoint a third party to verify that work has been carried out according to specification as well as the quality and workmanship.

Refer to the Management section under Part C3: Scope of Work, specifically the Quality Management and Controls paragraph, for further details.

9 CONTRACT MANAGER – HARTRAO

The appointed service provider reports to the specified HartRAO project manager.

Meetings, where needed, will be scheduled between both parties.

Refer to the Management section under Part C3: Scope of Work, specifically the Management Meetings paragraph, as well as Clause 1.1.1.16 of C1.2.2: Contract Specific Data for further details.

10 HEALTH AND SAFETY

The successful bidder must comply with all aspects of the OHSACT (Act 85 of 1993) while performing work on the HartRAO site. All bidders are to submit copies of the current status of their company’s registration with the Department of Labour for Workmen’s Compensation or a Letter of Good Standing from the Commissioner. The successful bidder will be required to sign an agreement in terms of Section 37(2) of the Occupational Health & Safety Act (Act 85 of 1993). A copy of this agreement is available on request from the tender contact person. Prior to commencement of
work, the successful tenderer will have to submit a site specific health and safety plan based on the Employer’s health and safety specifications.

Refer to the Management section under Part C3: Scope of Work, specifically the Health and Safety paragraph, for further details.

11 CONTRACT PERIOD

The contract will commence with immediate effect upon signing of the form of Offer and Acceptance by both parties and will continue until the delegated HartRAO Engineer signs the certificate of completion.

The bidder must provide an indication of the anticipated contract duration, appreciating that the Christmas Builders Break will straddle the construction period.

Refer to Part C1: Agreement and Contract Data and Clause 1.1.1.3 referred to in C1.2.1: Conditions of Contract for further details.

12 DELIVERY VALIDATION

The delivered works performance is measured against the levels specified in the Scope of Work section of this document. A HartRAO Engineer will sign a certificate of completion to indicate the acceptance of the work performed.

Refer to paragraph 8 – Performance Level Agreement on the previous page and Part C3: Scope of Work for further details.

13 PAYMENT INTERVALS

HartRAO undertakes to pay validated invoices within 30 days from the date of invoice. Invoices will only be validated by the validation certificate signed by the HartRAO Engineer and the contractor.

Invoices are submitted to the HartRAO Engineer who will validate that delivery of goods/works/services has been made and at the required quality and on time. No invoices for outstanding deliverables or for any unproductive or duplicated time spent by the service provider are validated for payment.

HartRAO does not accept predating of invoices. Invoices must be received and validated before the 24th of each month, or if the 24th falls on a weekend two workdays before this date, for it to be possible for payment to be effected within the same month.

Refer to the Management section under Part C3: Scope of Work, specifically the Payment Certificates paragraph, as well as Part C2: Pricing Data for further details.
T1.2: TENDER DATA

The Standard Conditions of Tender makes several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

The Conditions of Tender are the CIDB Standard Conditions of Tender (January 2009 edition) available separately from the CIDB website www.cidb.org.za following the Documents and Publications link and navigating through the Procurement Documents Templates and Guidelines section¹ (CIDB Tel. +27 12 482 7200 or +27 86 100 2432). It can also be found on the HartRAO tender website: http://geodesy.hartrao.ac.za/site/en/bids-and-tenders.html under the CONSTRUCTION OF FOUNDATIONS AND TOWER STRUCTURE FOR A NEW VGOS RADIO TELESCOPE AT THE HARTEBEESTHOEK RADIO ASTRONOMY OBSERVATORY tender.

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies. Clauses which are not referenced below have not been changed, but remains in effect unless explicitly stated otherwise.

F.1.1 The Employer is the Hartebeesthoek Radio Astronomy Observatory (HartRAO), a National Facility of the National Research Foundation (NRF).

F.1.2 The tender documents issued by the Employer comprise:

[This document]

PART T1: TENDERING PROCEDURES
   T1.1 Tender Notice and Invitation to Tender
   T1.2 Tender Data

PART T2: RETURNABLE DOCUMENTS
   T2.1 List of Returnable Documents
   T2.2 Returnable Schedules

PART C1: AGREEMENTS AND CONTRACT DATA
   C1.1 Form of Offer and Acceptance
   C1.2 Contract Data

PART C2: PRICING DATA
   C2.1 Pricing Instructions
   C2.2 Activity Schedule

PART C3: SCOPE OF WORK
   C3.1 Scope of Work

PART C4: SITE INFORMATION
   C4.1 Site Information

[Additional Documents available on HartRAO website²]
CIDB Conditions of Tender
Geological Report and Core Logs
MT Mechatronics Drawings and HartRAO Drawings³ (PDF versions)

¹ At time of writing, the direct link to the Conditions of Tender was http://www.cidb.org.za/publications/Documents/cidb%20Standard%20Conditions%20of%20Tender.pdf
² http://geodesy.hartrao.ac.za/site/en/bids-and-tenders.html under the applicable tender’s name.
³ The drawings are listed in the Scope of Work in Part C3.1
F.1.4 The employer’s agent is Mr Radzilani Rabuma, Tel No. 012 301 3213, Fax No. 012 301 3300, Email: radzilani@hartrao.ac.za

Contact with HartRAO personnel is not permitted during the RFP process other than as required through existing service arrangements and/or as requested by the HartRAO as part of the RFP process. Any form of canvassing by the Tenderer to any member of staff or supplier; for purposes of influencing the award of the contract, will automatically disqualify the Tenderer from the evaluation process. Tenderers shall not offer or give any consideration of any kind to any employee or representative of the HartRAO as an inducement or reward for doing, or refraining from doing, any act in relation to the obtaining or execution of this or any other contract with HartRAO.

F.2.1 CIDB registration and grading:

1) Only Tenderers who are registered with the CIDB or have a subcontractor registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE and 4SJ class of construction work, are eligible to submit tenders.

2) Joint ventures are eligible to submit tenders provided that:
   i. Every member of the Joint Venture is registered with the CIDB;
   ii. The lead partner has a contractor grading designation in the 4CE and 4SJ class of construction work;
   iii. The combined contractor grading designation calculated in accordance with the CIDB Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE and 4SJ class of construction work.

F.2.7 The arrangements for a compulsory clarification meeting are:

Location: HartRAO, Farm 502JQ, Broederstroom road, Hartebeesthoek, Krugersdorp, 1739
Date: 29 June 2016
Starting time: 10h00

Attendance is compulsory. Failure to attend will result in such tender being rejected. Tenderers are to report and wait in the reception area.

No more than two (2) representatives per company shall attend the briefing. Failure to attend the briefing will deem the proposal unresponsive. An opportunity will be provided to the prospective Tenderers to visit the site on the day of the briefing to acquaint themselves with the site and its conditions.

Confirmation of attendance to be notified at least one full working day in advance to:
Name: Radzilani Rabuma
Tel: +27(0)12 301 3213
Email: radzilani@hartrao.ac.za

Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will only be received from those tendering entities appearing on the attendance list. Tenderers will need to sign a non-disclosure agreement to receive sensitive details with regards to the foundation and tower design – including the load cases and CAD files.

F.2.13.3 Part of each tender offer communicated on paper shall be submitted as an original, plus two additional copies, three documents in total (i.e. three hard copies of the Technical Envelope and three hard copies of the Financial Envelope), plus one CD containing all technical information and another CD containing the financial information.

F.2.13.5 The Employer’s address for delivery of tender offers and identification details to be shown on the Tenderer’s offer package are:

Location of tender box: HartRAO Reception area
Physical address: Hartebeesthoek Radio Astronomy Observatory, Farm 502JQ, Broederstroom Rd, Hartebeesthoek, 1739

Identification details: Bid number, Title of Tender and the closing date and time of the tender
As well as the Tenderer’s name; his authorised representative’s name; postal address; and telephonic contact numbers.

F.2.13.6 A two-envelope procedure will be followed:

Envelope 1: Technical Proposal must contain the Tender Part of this document (pages 1 – 69).
Envelope 2: Financial Proposal must contain the Contract Part of the tender (pages 70 – 106).

F.2.15.1 The closing time for submission of tender offers is 11:00 on Tuesday, 26 July 2016. Where a tender offer is not received by HartRAO by the due date and time, it will be regarded as a late tender. Late tenders will not be considered. The location of the tender box is detailed in clause F.2.13.5 above.

F.2.16 The tender offer validity period is 90 calendar days from close of tender.

F.2.19 No access for tests and inspections is required during the tendering period.

F.2.23 The Tenderer is required to submit with his tender (as also mentioned in Part T2: the returnable documents list in this document):

1) Proof of registration on the Central Supplier Database (the tenderer also needs to have a valid Tax Clearance Certificate and VAT Registration certificate. The Employer will be able to obtain the tenderer’s valid Tax Clearance Certificate from the Central Supplier Database.);

2) A Certificate of Contractor Registration issued by the CIDB for class designations 4CE and 4SJ, or above;

3) Proof of company registration (Certified copies of Certificate of Incorporation);

4) Letter of Good standing from the Compensation Commissioner (Workmen’s Compensation Certificate – COID)

5) B-BBEE certificate (where applicable, Joint Venture companies must provide the Joint Venture B-BBEE certificate) verified by a SANAS accredited verification agency;

F.3.4 Tenders will not be opened immediately after the closing time for tender. Only Tenderers who achieve a minimum threshold score of 70% for the Technical proposal envelopes will progress to the second stage.

F.3.5 As mentioned in Clause F.2.13.6 a two-envelope procedure will be followed. Tenderers will not be part of the evaluation process, except for clarification of their offers. As such, Tenderer’s representatives may not be present during the evaluation. As mentioned in Clause F.3.4 only Tenderers who achieve the minimum threshold score of 70% for technical proposal will progress to the second stage.

F.3.11.1 All proposals will be evaluated by an evaluation team for Quality (Functionality), Price, and Preference. Based on the evaluation process, the HartRAO will approve the awarding of the contract to successful Tenderers.

A two-stage evaluation process will be followed:

Stage 1: The technical envelope will be opened and Tenderers will be scored based on Quality (Functionality).

---

4 For directions please refer to www.hartrao.ac.za/where/raodirect.html
5 These details are all visible on the front page of this tender
Bidder’s bid response/submission is evaluated against the bid invitation specifications as well as the bidder’s capacity and capability WITHIN ALL Engineering Disciplines.

Evaluation is made in accordance to the published evaluation criteria and the scoring set for each criterion - though the score obtained for the technical evaluation does not count towards the final evaluation points.

Only bidders who score a minimum of 70 out of 100 for the technical evaluation will qualify for stage 2 of the evaluations.

Stage 2: The Financial envelope will be opened and Tenderers will be scored based on Method 2: Financial Offer and Preference.

- Bidders are compared on a fair and equal basis taking into account all aspects of the proposals.
- The award criterion are:
  - Price – with the lowest priced bid on an equal and fair comparison basis receiving the highest price score as set out in the 2011 Preference Regulations. Materials described in the contract data as being subject to re-measurement will be normalised as necessary to obtain an equal and fair comparison basis.
  - Preference – preference points as claimed in the preference claim form, Schedule T2.2U of this document, are added to the price ranking scores and the highest combined score is nominated for the contract award.
- Administration – Contracts are awarded where bidders have supplied the relevant administrative documentation. Bidders Tax Clearance Certificate will be checked on the Central Supplier Database.
- Objective grounds – Awards may be made to bids other than the lowest bid (on the basis of price and preference) where the economical and quality grounds measured on an objective basis provides a most economical advantageous result to the NRF.

**F.3.11.3** The quality criteria, minimum and maximum scores in respect of each of the criteria shall be as follows:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Quality (Functional) Criteria</th>
<th>Sub-criterion</th>
<th>Minimum Required Score</th>
<th>Weighting of Quality Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qualifications and Experience of Proposed Key Staff</td>
<td>General Experience and Qualifications</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adequacy for the Assignment</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proposed Organisation and Staffing</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Previous Experience and Track Record</td>
<td>Tenderer’s Past Experience</td>
<td>60</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reference Letters from Similar Projects</td>
<td>60</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Management Plans and Technical Documents</td>
<td>Method Statement (based on the scope of work)</td>
<td>70</td>
<td>35</td>
</tr>
</tbody>
</table>
Each evaluation criteria will be assessed in terms of five indicators: no response, poor, satisfactory, good and very good. Scores of 0, 40, 70, 90 or 100 will be allocated to no response, poor, satisfactory, good and very good, respectively. The scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for quality.

The minimum number of evaluation points for quality is: 70 points. Furthermore the Tenderer is expected to meet the minimum stipulated points in each sub-criterion.

Submissions that do not meet these criteria shall not be considered in further evaluations.

Further details are available in the relevant evaluation schedules (Schedule T2.2G to Schedule T2.2L of this document).

### Qualifications and Experience of Proposed Key Staff

<table>
<thead>
<tr>
<th>Score</th>
<th>General Experience and Qualifications (Weighting 8)</th>
<th>Adequacy for the Assignment (Weighting 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>Key personnel have limited levels of general experience.</td>
<td>Key personnel have limited levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory</td>
<td>Key personnel have reasonable levels of general experience.</td>
<td>Key personnel have reasonable levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>Key personnel have extensive levels of general experience.</td>
<td>Key personnel have extensive levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td>Key personnel have outstanding levels of general experience.</td>
<td>Key personnel have outstanding levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above is an overview of the scoring for the Tenderer’s Proposed Key Staff. This scoring table is further divided as follows for the relevant key personnel (this will be used for scoring purposes).

### General Experience and Qualifications

<table>
<thead>
<tr>
<th>Score</th>
<th>Contract Manager (Weighting 3)</th>
<th>Site Agent/Foreman (Weighting 4)</th>
<th>Safety Officer (Weighting 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response (Score 0)</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Poor (Score 40)</td>
<td>Qualification given but below Diploma or Managerial certificate</td>
<td>Qualification given but below Diploma (Civil)</td>
<td>Other qualification.</td>
</tr>
<tr>
<td>Satisfactory (Score 70)</td>
<td>Qualification given equal to Diploma or Managerial Certificate</td>
<td>Qualification given equal to Diploma (Civil)</td>
<td>Accredited Safety Certificate.</td>
</tr>
<tr>
<td>Good (Score 90)</td>
<td>Qualification exceeds Diploma (Degree)</td>
<td>Qualification exceeds Diploma (Civil) (Degree)</td>
<td>More than one Accredited Qualification (Safety)</td>
</tr>
<tr>
<td>Very Good (Score 100)</td>
<td>Over and above the good score, the proposed contract manager is registered to a relevant professional body.</td>
<td>Over and above the good score, the proposed site agent/foreman is registered to a relevant professional body.</td>
<td>Over and above the good score, the proposed safety officer is registered to a relevant professional body.</td>
</tr>
</tbody>
</table>

### Adequacy for the Assignment

<table>
<thead>
<tr>
<th>Score</th>
<th>Contract Manager (Weighting 4)</th>
<th>Site Agent/Foreman (Weighting 4)</th>
<th>Safety Officer (Weighting 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response (Score 0)</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>Poor (Score 40)</td>
<td>3 years (All projects)</td>
<td>2 years (Construction of multi-purpose buildings)</td>
<td>3 years (All projects)</td>
</tr>
<tr>
<td>Satisfactory (Score 70)</td>
<td>5 years (All projects)</td>
<td>5 years (Construction of multi-purpose buildings). Bonus points for specialised foundations e.g. bridge building.</td>
<td>5 years (All projects)</td>
</tr>
<tr>
<td>Good (Score 90)</td>
<td>7 years (All projects)</td>
<td>8 years (Construction of multi-purpose buildings). Bonus points for specialised foundations e.g. bridge building.</td>
<td>7 years (All projects)</td>
</tr>
<tr>
<td>Very Good (Score 100)</td>
<td>10 years (All projects)</td>
<td>10 years (Construction of multi-purpose buildings). Bonus points for specialised foundations e.g. bridge building.</td>
<td>10 years (All projects)</td>
</tr>
</tbody>
</table>
### Proposed Organisation and Staffing

<table>
<thead>
<tr>
<th>Score</th>
<th>Proposed Organisation and Staffing (Weighting 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Response</strong></td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
</tr>
<tr>
<td><strong>Poor</strong></td>
<td>The organisation chart is vague and/or the staffing plan is weak in important areas. There is no clarity in allocation of tasks and responsibilities.</td>
</tr>
<tr>
<td>(Score 40)</td>
<td></td>
</tr>
<tr>
<td><strong>Satisfactory</strong></td>
<td>The organisation chart is complete and detailed, the technical level and composition of the staffing arrangements are adequate.</td>
</tr>
<tr>
<td>(Score 70)</td>
<td></td>
</tr>
<tr>
<td><strong>Good</strong></td>
<td>Besides meeting the “satisfactory” rating, staff are well balanced (i.e. they show good coordination, complimentary skills, clear and defined duties and responsibilities). Some members of the project team have worked together before on limited occasions.</td>
</tr>
<tr>
<td>(Score 90)</td>
<td></td>
</tr>
<tr>
<td><strong>Very Good</strong></td>
<td>Besides meeting the “good” rating, the proposed team is well integrated and several members have worked together extensively in the past.</td>
</tr>
<tr>
<td>(Score 100)</td>
<td></td>
</tr>
</tbody>
</table>

### Tenderer’s Past Experience

<table>
<thead>
<tr>
<th>Score</th>
<th>Tenderer's Past Experience (Weighting 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Response</strong></td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
</tr>
<tr>
<td><strong>Poor</strong></td>
<td>Tenderer has limited experience.</td>
</tr>
<tr>
<td>(Score 40)</td>
<td></td>
</tr>
<tr>
<td><strong>Satisfactory</strong></td>
<td>Tenderer has relevant experience (foundations, concrete structures, piling) but has not dealt with the critical issues specific to the assignment. The tenderer has experience with, and has used, Finite Element Method (FEM) Analysis in previous projects. The Tenderer has shown that he can easily source the required plant and equipment (Schedule T2.2F). Bonus marks will be obtained if the Tenderer has experience in projects with foundations anchored to bedrock or have very stable foundations e.g. bridges.</td>
</tr>
<tr>
<td>(Score 70)</td>
<td></td>
</tr>
<tr>
<td><strong>Good</strong></td>
<td>Tenderer meets and exceeds the “satisfactory” requirements. In addition, the Tenderer has extensive experience (foundations, concrete structures, piling) on various geotechnical conditions in relation to the project and has previously worked under similar conditions and circumstances. The Tenderer has completed projects that are anchored to bedrock or have very stable foundations e.g. bridges. The Tenderer has indicated that he has some of his own equipment available to be used during construction and can source required equipment easily (Schedule T2.2F).</td>
</tr>
<tr>
<td>(Score 90)</td>
<td></td>
</tr>
<tr>
<td><strong>Very Good</strong></td>
<td>Tenderer meets and exceeds the “good” requirements. In addition, the Tenderer has outstanding experience (foundations, concrete structures, piling) on various geotechnical conditions in projects of a similar nature. The Tenderer has indicated</td>
</tr>
<tr>
<td>(Score 100)</td>
<td></td>
</tr>
</tbody>
</table>
that he has his own equipment available to be used during construction (Schedule T2.2F).

Reference Letters from Similar Projects

<table>
<thead>
<tr>
<th>Score</th>
<th>Reference Letters from Similar Projects (Weighting 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>Less than 3 reference letters are provided. 1 of the</td>
</tr>
<tr>
<td>(Score 40)</td>
<td>letters has on average more than 50% “meets</td>
</tr>
<tr>
<td></td>
<td>requirements” scores and it has been indicated that</td>
</tr>
<tr>
<td></td>
<td>the employer would use them again.</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>3 reference letters are provided. 2 of the letters</td>
</tr>
<tr>
<td>(Score 70)</td>
<td>have on average more than 50% “meets requirements”</td>
</tr>
<tr>
<td></td>
<td>scores and it has been indicated that the employer</td>
</tr>
<tr>
<td></td>
<td>would use them again. Bonus points may be awarded</td>
</tr>
<tr>
<td></td>
<td>for the number of letters with project values</td>
</tr>
<tr>
<td></td>
<td>more than R2 million.</td>
</tr>
<tr>
<td>Good</td>
<td>3 reference letters are provided. 2 of the letters</td>
</tr>
<tr>
<td>(Score 90)</td>
<td>have on average more than 50% “exceed requirements”</td>
</tr>
<tr>
<td></td>
<td>scores and it has been indicated that the employer</td>
</tr>
<tr>
<td></td>
<td>would use them again. 1 letter has on average more</td>
</tr>
<tr>
<td></td>
<td>than 50% “meets requirements” scoring and it has</td>
</tr>
<tr>
<td></td>
<td>been indicated that the employer would use them</td>
</tr>
<tr>
<td>Very Good</td>
<td>3 reference letters are provided. 2 of the letters</td>
</tr>
<tr>
<td>(Score 100)</td>
<td>have on average more than 50% “exceed requirements”</td>
</tr>
<tr>
<td></td>
<td>scores and it has been indicated that the employer</td>
</tr>
<tr>
<td></td>
<td>would use them again. 1 letter has on average more</td>
</tr>
<tr>
<td></td>
<td>than 50% “exceed requirements and value adding”</td>
</tr>
<tr>
<td></td>
<td>scoring and it has been indicated that the employer</td>
</tr>
<tr>
<td></td>
<td>would use them again.</td>
</tr>
</tbody>
</table>

Method Statement

<table>
<thead>
<tr>
<th>Score</th>
<th>Method Statement (Weighting 35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>The technical approach and/or</td>
</tr>
<tr>
<td>(Score 40)</td>
<td>methodology is poor/is unlikely</td>
</tr>
<tr>
<td></td>
<td>to satisfy the project objectives</td>
</tr>
<tr>
<td></td>
<td>or requirements. The Tenderer</td>
</tr>
<tr>
<td></td>
<td>has misunderstood certain aspects</td>
</tr>
<tr>
<td></td>
<td>of the scope of work and does</td>
</tr>
<tr>
<td></td>
<td>not deal with the critical</td>
</tr>
<tr>
<td></td>
<td>aspects of the project.</td>
</tr>
<tr>
<td></td>
<td>Preliminary drawings are not</td>
</tr>
<tr>
<td></td>
<td>attached or do not include</td>
</tr>
<tr>
<td></td>
<td>changes/comments made by the</td>
</tr>
<tr>
<td></td>
<td>tenderer.</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>The approach is generic and not</td>
</tr>
<tr>
<td>(Score 70)</td>
<td>tailored to address the specific</td>
</tr>
<tr>
<td></td>
<td>project objectives and</td>
</tr>
<tr>
<td></td>
<td>requirements. The approach does</td>
</tr>
<tr>
<td></td>
<td>not adequately deal with the</td>
</tr>
<tr>
<td></td>
<td>critical characteristics of the</td>
</tr>
<tr>
<td></td>
<td>project. The quality plan is</td>
</tr>
<tr>
<td></td>
<td>too generic. The preliminary</td>
</tr>
<tr>
<td></td>
<td>drawings are attached and</td>
</tr>
<tr>
<td></td>
<td>includes changes and comments</td>
</tr>
<tr>
<td></td>
<td>made by the tenderer.</td>
</tr>
</tbody>
</table>
as to the dimensions and foundations.

| Good (Score 90) | The approach is specifically tailored to address the specific project objectives and requirements and is sufficiently flexible to accommodate changes that may occur during execution. The quality plan is specifically tailored to the critical characteristics of the project. The preliminary drawings are attached and includes changes and comments made by the tenderer as to the dimensions and foundations. |
| Very Good (Score 100) | Besides meeting the “good” rating, the important issues are approached in an innovative and efficient way, indicating that the Tenderer has outstanding knowledge of state-of-the-art approaches. The attached method statement/approach paper details ways to improve the project outcomes and the quality of the outputs. The preliminary drawings are attached and includes changes and comments made by the tenderer as to the dimensions and foundations. |

**Time to Practical Completion**

<table>
<thead>
<tr>
<th>Score</th>
<th>Time to Practical Completion (Weighting 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response (Score 0)</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>Poor (Score 40)</td>
<td>The project schedule omits important tasks or the timing of the activities and correlation among them are inconsistent with project deliverables. There is a lack of clarity and logic in the sequencing.</td>
</tr>
<tr>
<td>Satisfactory (Score 70)</td>
<td>All key activities are included in the project schedule, but are not detailed. There are minor inconsistencies between timing and project deliverables. The estimated completion time for foundations, structure and gravel is 5 working months from the start (i.e. December will not count as a working month). As a minimum the foundations for the service pad must be fully completed and cured by 15 January 2017.</td>
</tr>
<tr>
<td>Good (Score 90)</td>
<td>The work plan fits the project deliverables well; all important activities are indicated in the project schedule and their timing and sequencing is appropriate and consistent with the project objectives and requirements. There is a fair degree of detail that facilitates understanding of the proposed work plan. The estimated completion time for foundations, structure and gravel is 4 working months from the start (i.e. December will not count as a working month). As a minimum the foundations for the service pad must be fully completed and cured by 15 January 2017.</td>
</tr>
<tr>
<td>Very Good (Score 100)</td>
<td>The work plan fits the project deliverables well; all important activities are indicated in the project schedule and the sequencing and timing of activities are very well defined, indicating that the Tenderer has optimised the use of resources. The work plan permits flexibility to accommodate contingencies. The estimated completion time for foundations, structure and gravel is less than 4 working months from the start.</td>
</tr>
</tbody>
</table>

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start (i.e. December will not count as a working month). As a minimum the foundations for the service pad must be fully completed and cured by 15 January 2017.

Price and Preference scoring shall be performed on proposals that obtained the minimum of 70 points out of 100 points for the Quality Criteria. The evaluation criteria used for calculating the tender evaluation points, as per Method 2, is as follows:

**Evaluation Criteria**

\[
T_{EV} = N_{FO} + N_{P}
\]

Where \( T_{EV} \) is the total evaluation points; \( N_{FO} \) is the number of tender evaluation points awarded for the financial offer; and \( N_{P} \) is the number of tender evaluation points awarded for preferences claimed.

90 Points towards Price
10 Points for Preference

**Price**

100% of 90 points will count towards price. The Lowest Acceptable Bid will earn full marks and any higher Bids will proportionately earn fewer points.

The formula used in determining points for price will be:

\[
N_{FO} = 90 \left(1 - \frac{P_t - P_{\text{min}}}{P_{\text{min}}} \right)
\]

Where

\( N_{FO} \) is the number of tender evaluation points awarded for the financial offer;
\( P_t \) is the comparative offer of the tender offer under consideration
\( P_{\text{min}} \) is the comparative offer of the most favourable comparative offer.

**Preference Points**

Preference points will be awarded to bidders attaining their B-BBEE status level of contribution in accordance with the table below:

<table>
<thead>
<tr>
<th>B-BBEE Contribution Level</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Non-Compliant contributor</td>
<td>0</td>
</tr>
</tbody>
</table>

**Score**

90 Points
10 Points
**F.3.13** Tender offers will only be accepted if:

a) The Tenderer has a valid Tax Clearance Certificate which the Employer can verify on the Central Supplier Database or has made arrangements to meet outstanding tax obligations and the Tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation (4CE and 4SJ, or higher);

b) The Tenderer and all of its directors/shareholders are not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;

c) The Tenderer has not:
   i. Abused the Employer’s Supply Chain Management System; or
   ii. Failed to perform on any previous contract and been given a written notice to this effect;

d) The Tenderer has to register/be registered on the Central Supplier Database [https://secure.csd.gov.za/](https://secure.csd.gov.za/)

e) The Tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Tenderer’s ability to perform the contract in the best interests of the Employer or potentially compromise the tender process (and persons in the employ of the State are not permitted to submit tenders or participate in the contract);

f) The Tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer (proof must be submitted).

g) The Employer is reasonably satisfied that the Tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely; and

h) The Tenderer:
   i. Has sufficiently substantiated his experience in this type of work;
   ii. Has the required and experienced key personnel; and
   iii. Owns the primary equipment and resources to effectively and efficiently execute the work.

**F.3.17** The number of paper copies of the signed contract to be provided by the Employer is one (1).

**Additional Conditions of Tender**

a) Validation of submitted documentation
   The NRF may have any documentation submitted by the bidders inspected by another technical body or organisation.

b) Presentations and proof of functionality
   The NRF has the right to call interviews/presentations/pitching sessions as well as proof of concept sessions with short-listed service providers before the final selection is done.

c) Intellectual Property in the bid invitation
   All the information contained in this document is intended solely for the purposes of assisting bidders to prepare their bids. Any use of the information contained herein for other purposes other than those stated in this document is prohibited.
   The ownership and intellectual property rights of all designs, specifications, programming code, and all other documentation provided by the NRF to the bidder both successful and unsuccessful, remains the property of the NRF.
d) Intellectual Property in the bid deliverables
The ownership and intellectual property rights of all designs, specifications, programming code, and all other documentation required as part of the delivery to the NRF resides with the NRF.
PART T2: RETURNABLE DOCUMENTS

T2.1: LIST OF RETURNABLE DOCUMENTS

T2.2: RETURNABLE SCHEDULES

T2.2.1: RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2.2A</td>
<td>Certificate of Authority for Signatory</td>
</tr>
<tr>
<td>T2.2B</td>
<td>Certificate of Authority for Joint Venture (if applicable)</td>
</tr>
<tr>
<td>T2.2C</td>
<td>Record of Addenda to Tender Documents</td>
</tr>
<tr>
<td>T2.2D</td>
<td>Proposed Amendments and Qualifications by Tenderer</td>
</tr>
<tr>
<td>T2.2E</td>
<td>Schedule of Proposed Sub-contractors</td>
</tr>
<tr>
<td>T2.2F</td>
<td>Schedule of Plant and Equipment</td>
</tr>
<tr>
<td>T2.2G</td>
<td>Evaluation Schedule: Qualifications and Experience of Proposed Key Staff</td>
</tr>
<tr>
<td>T2.2H</td>
<td>Evaluation Schedule: Proposed Organisation and Staffing</td>
</tr>
<tr>
<td>T2.2I</td>
<td>Evaluation Schedule: Tenderer’s Past Experience</td>
</tr>
<tr>
<td>T2.2J</td>
<td>Evaluation Schedule: Reference Letters from Similar Projects</td>
</tr>
<tr>
<td>T2.2K</td>
<td>Evaluation Schedule: Method Statement</td>
</tr>
<tr>
<td>T2.2L</td>
<td>Evaluation Schedule: Time to Practical Completion</td>
</tr>
<tr>
<td>T2.2M</td>
<td>Proof of Central Supplier Database Registration</td>
</tr>
<tr>
<td>T2.2N</td>
<td>Tenderer’s Bank Details and Financial References</td>
</tr>
<tr>
<td>T2.2O</td>
<td>Confirmation of CIDB Contractor Grading Designation</td>
</tr>
<tr>
<td>T2.2P</td>
<td>Form Concerning Fulfilment of the Construction Regulations, 2014</td>
</tr>
<tr>
<td>T2.2Q</td>
<td>Questionnaire on Tender Procedures with respect to the Occupational Health and Safety Act (OHS ACT) and Construction Regulations 2014</td>
</tr>
<tr>
<td>T2.2R</td>
<td>Certificate of Tenderer’s Attendance at the Compulsory Clarification Meeting</td>
</tr>
<tr>
<td>T2.2S</td>
<td>Certificate of Insurance Cover</td>
</tr>
<tr>
<td>T2.2T</td>
<td>Compulsory Enterprise Questionnaire</td>
</tr>
<tr>
<td>T2.2U</td>
<td>Preference Points Claim in Terms of Preferential Procurement Regulations, 2011</td>
</tr>
<tr>
<td>T2.2V</td>
<td>Declaration of Interest</td>
</tr>
<tr>
<td>T2.2W</td>
<td>Declaration of Bidder’s Past Supply Chain Management Practices</td>
</tr>
<tr>
<td>T2.2X</td>
<td>Certificate of Independent Bid Determination</td>
</tr>
</tbody>
</table>
T2.1: LIST OF RETURNABLE DOCUMENTS

Below is a list of all the returnable documents the Tenderer must complete and submit. The table provides a checklist of the documents while the schedules themselves are in the next section – Part T2.2 Returnable Schedules. The other documents/sections in the table are referenced by name and page numbers.

<table>
<thead>
<tr>
<th>Name of Schedule/Document</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule T2.2A Certificate of Authority for Signatory</td>
<td>26</td>
</tr>
<tr>
<td>Schedule T2.2B Certificate of Authority for Joint Venture (if applicable)</td>
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</tr>
<tr>
<td>Schedule T2.2C Record of Addenda to Tender Documents</td>
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<td>35</td>
</tr>
<tr>
<td>Schedule T2.2I Evaluation Schedule: Tenderer’s Past Experience</td>
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<td>Schedule T2.2M Proof of Central Supplier Database Registration</td>
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<td>Schedule T2.2N Tenderer’s Bank Details and Financial References</td>
<td>48</td>
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<td>Schedule T2.2O Confirmation of CIDB Contractor Grading Designation</td>
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<td>51</td>
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<td>Schedule T2.2R Certificate of Tenderer’s Attendance at the Compulsory Clarification Meeting</td>
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</tr>
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<td>Schedule T2.2S Certificate of Insurance Cover</td>
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</tr>
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</tr>
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<tr>
<td>SBD1 Invitation to Bid</td>
<td>1</td>
</tr>
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<td>Certified copies of Certificate of Incorporation</td>
<td>13</td>
</tr>
<tr>
<td>Letter of Good Standing from Compensation Commissioner</td>
<td>13</td>
</tr>
<tr>
<td>C1.1: Form of Offer and Acceptance (Agreement)</td>
<td>73</td>
</tr>
<tr>
<td>C1.2: Contract Data</td>
<td>79</td>
</tr>
<tr>
<td>C2.2: Activity Schedule</td>
<td>86</td>
</tr>
</tbody>
</table>
T2.2: RETURNABLE SCHEDULES

T2.2.1: Returnable Schedules required for tender evaluation purposes

1 On pages that follow.
SCHEDULE T2.2A  Certificate of Authority for Signatory

Signatories for close corporations and companies shall confirm their authority by attaching to this form a duly signed and dated copy of the relevant resolution of their members or their board of directors, as the case may be.

Notes to Tenderer:

In the event that the Tenderer is a joint venture, a certificate is required from each member of the joint venture, clearly setting out:
- Authority for signatory,
- Undertaking to formally enter into a joint venture contract should an award be made to the joint venture,
- Name of designated lead member of the intended joint venture

An example for a company is shown below:

“By resolution of the board of directors passed on (date) .................................................................
Mr. ..........................................................................................................................................................
has been duly authorized to sign all documents in connection with the Tender for Contract No ......................
...............................................................................................................................................................
and any Contract which may arise there from on behalf of

(BLOCK CAPITALS) .............................................................................................................................
.............................................................................................................................................................
.............................................................................................................................................................
.............................................................................................................................................................
.............................................................................................................................................................

SIGNED ON BEHALF OF THE COMPANY: ..............................................................................................

IN HIS CAPACITY AS ............................................................................................................................

DATE:........................................................................

FULL NAMES OF SIGNATORY: ...............................................................................................................

AS WITNESSES: 1............................................................................................................................

2............................................................................................................................
SCHEDULE T2.2B  Certificate of Authority for Joint Venture (if applicable)

This Returnable Schedule is to be completed by joint ventures¹.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise .......................................................... (name), authorised signatory of the company, .......................................................... (company) acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

<table>
<thead>
<tr>
<th>NAME OF FIRM</th>
<th>ADDRESS</th>
<th>DULY AUTHORISED SIGNATORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead partner:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation: %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIDB Registration No. ............</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signature: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designation: ..................</td>
<td></td>
</tr>
<tr>
<td>Partner 2:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation: %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIDB Registration No. ............</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signature: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designation: ..................</td>
<td></td>
</tr>
<tr>
<td>Partner 3:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation: %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIDB Registration No. ............</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signature: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designation: ..................</td>
<td></td>
</tr>
<tr>
<td>Partner 4:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation: %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIDB Registration No. ............</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signature: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name: ..........................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designation: ..................</td>
<td></td>
</tr>
</tbody>
</table>

¹ Note: A consolidated joint venture BBBEE certificate must be submitted with the tender.
### SCHEDULE T2.2C  Record of Addenda to Tender Documents

We confirm that the following communications issued by the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer (this includes any documents issued at the compulsory site briefing):

<table>
<thead>
<tr>
<th>Addendum No</th>
<th>Date Issued</th>
<th>Title/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Attach additional pages if more space is required.

Signed  ............................................................................  Date  ............................................................................

Name  ............................................................................  Position  ............................................................................

Tenderer  ............................................................................
SCHEDULE T2.2D  Proposed Amendments and Qualifications by Tenderer

The Tenderer shall record any deviations or qualifications he may wish to make to the tender documents in this returnable schedule. In addition, a Tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer’s attention is drawn to clause 2.11 of the Tender Data regarding the submission of material deviations and qualifications.

Tenderers must not include deviations or qualifications relating to the scope of works in this schedule where they are required to submit an approach paper.

<table>
<thead>
<tr>
<th>PAGE</th>
<th>CLAUSE OR ITEM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signed .......................................................... Date ..........................................................
Name .......................................................... Position ..........................................................
Tenderer ...........................................................................................................................................

Page 29 of 106
SCHEDULE T2.2E Schedule of Proposed Sub-contractors

The Tenderer shall, in accordance with the provisions of condition of tender, list below the sub-consultants (or sub-contractors) he proposes to employ for part(s) of the work.

Acceptance of this tender shall not be construed as approval of any, or all, of the listed sub-contractors. Should any of the sub-contractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate the contract, and the tendered unit rates for the various items making up the work activities shall remain final and binding.

If no sub-contractors are proposed, the schedule hereunder is to be marked NIL and signed by the Tenderer.

<table>
<thead>
<tr>
<th>Sub-contractors name</th>
<th>Work activities to be undertaken by sub-contractor</th>
<th>Estimated value of work (Rand)</th>
<th>Previous work undertaken by sub-contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signed ........................................... Date ................................................
Name ........................................... Position ...........................................
Tenderer ..........................................................................................................................
### SCHEDULE T2.2F   Schedule of Plant and Equipment

The following are lists of Plant Equipment that I/We presently own or lease and will have available for this contract if my/our tender is accepted.

(a) Details of Equipment that is owned by me/us and immediately available for this contract.

<table>
<thead>
<tr>
<th>DESCRIPTION (type, size, capacity, etc.)</th>
<th>QUANTITY</th>
<th>HOW ACQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HIRE/BUY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOURCE</td>
</tr>
</tbody>
</table>

Attach additional pages if more space is required

(b) Details of Plant & Equipment that will be hired, or acquired for this contract if my/our tender is accepted

<table>
<thead>
<tr>
<th>DESCRIPTION (type, size, capacity, etc.)</th>
<th>QUANTITY</th>
<th>HOW ACQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HIRE/BUY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOURCE</td>
</tr>
</tbody>
</table>

Attach additional pages if more space is required

Signed ........................................ Date ......................................................
Name .......................................... Position ...........................................
Tenderer ...........................................................................................................
SCHEDULE T2.2G  Evaluation Schedule: Qualifications and Experience of Proposed Key Staff

The experience of the assigned staff members in relation to the scope of work will be evaluated from two different points of view:

1) General experience (total duration of professional activity); level of education and training; and positions held of each discipline specific team leader.

2) Adequacy of assignment (i.e. the education, training, skills, and experience of the assigned staff in the specific sector, field, subject, etc. which is directly linked to the scope of work).

A CV of the project director/contract manager, general foreman (construction manager/site manager), and SHE representative, of not more than two (2) pages should be attached to this schedule.

Each CV should be structured under the following headings:

1) Personal particulars:
   - Name.
   - Date of birth and nationality.
   - Place(s) of tertiary education and dates associated therewith.
   - Professional awards.

2) Qualifications (degrees, diplomas, grades of membership of professional societies, and professional registrations).

3) Skills.

4) Name of current employer and position in enterprise.

5) Overview of post graduate/diploma experience (year, organisation, and position).

6) Outline of recent assignments/experience that has a bearing on the scope of work.

The scoring of the Tenderer’s Qualifications and Experience of Proposed Key Staff will be as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>General Experience and Qualifications (Weighting 8)</th>
<th>Adequacy for the Assignment (Weighting 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>Key personnel have limited levels of general experience.</td>
<td>Key personnel have limited levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory</td>
<td>Key personnel have reasonable levels of general experience.</td>
<td>Key personnel have reasonable levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>Key personnel have extensive levels of general experience.</td>
<td>Key personnel have extensive levels of project specific education, skills, training and experience.</td>
</tr>
<tr>
<td>(Score 90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td>Key personnel have outstanding levels of general experience.</td>
<td>Key personnel have outstanding levels of project specific education, skills, training</td>
</tr>
<tr>
<td>(Score 100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table above is an overview of the scoring for the Tenderer’s Proposed Key Staff. The scoring table is further divided as follows for the relevant key personnel (this will be used for scoring purposes).

### General Experience and Qualifications

<table>
<thead>
<tr>
<th>Score</th>
<th>Contract Manager (Weighting 3)</th>
<th>Site Agent/Foreman (Weighting 4)</th>
<th>Safety Officer (Weighting 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Response</strong> (Score 0)</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td><strong>Poor</strong> (Score 40)</td>
<td>Qualification given but below Diploma or Managerial certificate</td>
<td>Qualification given but below Diploma (Civil)</td>
<td>Other qualification.</td>
</tr>
<tr>
<td><strong>Satisfactory</strong> (Score 70)</td>
<td>Qualification given equal to Diploma or Managerial Certificate</td>
<td>Qualification given equal to Diploma (Civil)</td>
<td>Accredited Safety Certificate.</td>
</tr>
<tr>
<td><strong>Good</strong> (Score 90)</td>
<td>Qualification exceeds Diploma (Degree)</td>
<td>Qualification exceeds Diploma (Civil) (Degree)</td>
<td>More than one Accredited Qualification (Safety)</td>
</tr>
<tr>
<td><strong>Very Good</strong> (Score 100)</td>
<td>Over and above the good score, the proposed contract manager is registered to a relevant professional body.</td>
<td>Over and above the good score, the proposed site agent/foreman is registered to a relevant professional body.</td>
<td>Over and above the good score, the proposed safety officer is registered to a relevant professional body.</td>
</tr>
</tbody>
</table>

### Adequacy for the Assignment

<table>
<thead>
<tr>
<th>Score</th>
<th>Contract Manager (Weighting 4)</th>
<th>Site Agent/Foreman (Weighting 4)</th>
<th>Safety Officer (Weighting 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Response</strong> (Score 0)</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td><strong>Poor</strong> (Score 40)</td>
<td>3 years (All projects)</td>
<td>2 years (Construction of multi-purpose buildings)</td>
<td>3 years (All projects)</td>
</tr>
<tr>
<td><strong>Satisfactory</strong> (Score 70)</td>
<td>5 years (All projects)</td>
<td>5 years (Construction of multi-purpose buildings). Bonus points for specialised foundations e.g. bridge building.</td>
<td>5 years (All projects)</td>
</tr>
</tbody>
</table>
| Good  
<table>
<thead>
<tr>
<th>(Score 90)</th>
<th>7 years (All projects)</th>
<th>8 years (Construction of multi-purpose buildings). Bonus points for specialised foundations e.g. bridge building.</th>
<th>7 years (All projects)</th>
</tr>
</thead>
</table>
| Very Good  
| (Score 100) | 10 years (All projects) | 10 years (Construction of multi-purpose buildings). Bonus points for specialised foundations e.g. bridge building. | 10 years (All projects) |
| Signed | .......................................................... | Date .......................................................... | .......................................................... |
| Name | .......................................................... | Position .......................................................... | .......................................................... |
| Tenderer | .................................................................. | .................................................................. | .................................................................. |
**SCHEDULE T2.2H Evaluation Schedule: Proposed Organisation and Staffing**

The Tenderer must provide a project organisation chart identifying all resources indicated in response to this tender and all support staff required to ensure successful delivery of the project (i.e. the main disciplines involved, the key staff member/expert for each discipline, and the proposed technical and support staff and site staff. The roles and responsibilities of each key staff member/expert should be set out as job descriptions. In the case of an Association/Joint Venture/Consortium, it should indicate how the duties and responsibilities are to be shared.

The project organisation chart must include reporting lines and interfaces to HartRAO and external stakeholders.

The Tenderer must attach his/her organisation and staffing proposals to this page.

The scoring of the Tenderer’s Proposed Organisation and Staffing will be as follows.

<table>
<thead>
<tr>
<th>Score</th>
<th>Proposed Organisation and Staffing (Weighting 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Response</strong></td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
</tr>
<tr>
<td><strong>Poor</strong></td>
<td>The organisation chart is vague and/or the staffing plan is weak in important areas. There is no clarity in allocation of tasks and responsibilities.</td>
</tr>
<tr>
<td>(Score 40)</td>
<td></td>
</tr>
<tr>
<td><strong>Satisfactory</strong></td>
<td>The organisation chart is complete and detailed, the technical level and composition of the staffing arrangements are adequate.</td>
</tr>
<tr>
<td>(Score 70)</td>
<td></td>
</tr>
<tr>
<td><strong>Good</strong></td>
<td>Besides meeting the “satisfactory” rating, staff are well balanced (i.e. they show good coordination, complimentary skills, clear and defined duties and responsibilities). Some members of the project team have worked together before on limited occasions.</td>
</tr>
<tr>
<td>(Score 90)</td>
<td></td>
</tr>
<tr>
<td><strong>Very Good</strong></td>
<td>Besides meeting the “good” rating, the proposed team is well integrated and several members have worked together extensively in the past.</td>
</tr>
<tr>
<td>(Score 100)</td>
<td></td>
</tr>
</tbody>
</table>

Signed ................................................................. Date ............................................................
Name ................................................................. Position ............................................................
Tenderer ........................................................................................................................................
SCHEDULE T2.2I Evaluation Schedule: Tenderer’s Past Experience

The experience of the Tenderer or Joint Venture partners in the case of an unincorporated Joint Venture or Consortium as opposed to the key staff members/experts in similar projects or similar areas and conditions in relation to the scope of work over the last five (5) years will be evaluated.

Tenderers should very briefly describe his or her experience in this regard and attach it to this schedule.

<table>
<thead>
<tr>
<th>PROJECT/EMPLOYER (Name, contact person, telephone no)</th>
<th>DESCRIPTION OF WORK</th>
<th>VALUE OF WORK (i.e. the service provided) inclusive of VAT (Rand)</th>
<th>START DATE AND DATE OF COMPLETION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Start:</td>
<td>Finish:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start:</td>
<td>Finish:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start:</td>
<td>Finish:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start:</td>
<td>Finish:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start:</td>
<td>Finish:</td>
</tr>
</tbody>
</table>

The scoring of the Tenderer’s Past Experience will be as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Tenderer’s Past Experience (Weighting 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response (Score 0)</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>Poor (Score 40)</td>
<td>Tenderer has limited experience.</td>
</tr>
<tr>
<td>Satisfactory (Score 70)</td>
<td>Tenderer has relevant experience (foundations, concrete structures, piling) but has not dealt with the critical issues specific to the assignment. The tenderer has experience with, and has used, Finite Element Method (FEM) Analysis in previous projects. The Tenderer has shown that he can easily source the required plant and equipment (Schedule T2.2F). Bonus marks will be obtained if the Tenderer has experience in projects with foundations anchored to bedrock or have very stable foundations e.g. bridges, dams.</td>
</tr>
<tr>
<td>Good (Score 90)</td>
<td>Tenderer meets and exceeds the “satisfactory” requirements. In addition, the Tenderer has extensive experience (foundations, concrete structures, piling) on various geotechnical conditions in relation to the project and has previously worked under similar conditions and circumstances. The Tenderer has completed projects that are anchored to bedrock or have very stable foundations e.g. bridges, dams. The Tenderer has indicated that he has some of his own equipment available to be used during construction and can source required equipment easily (Schedule T2.2F).</td>
</tr>
<tr>
<td><strong>Tenderer</strong></td>
<td><strong>Score 100</strong></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Very Good</strong></td>
<td>Tenderer meets and exceeds the “good” requirements. In addition, the Tenderer has outstanding experience (foundations, concrete structures, piling) on various geotechnical conditions in projects of a similar nature. The Tenderer has indicated that he has his own equipment available to be used during construction (Schedule T2.2F).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signed</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>..................................................</td>
<td>..................................................</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>..................................................</td>
<td>..................................................</td>
</tr>
</tbody>
</table>

| Tenderer | |
|----------| |
SCHEDULE T2.2J  Evaluation Schedule: Reference Letters from Similar Projects

The Tenderer must demonstrate their track record and experience with projects of a similar nature by providing three (3) Reference Letters, which contain the following information:

- All Reference Letters to be on relevant Employer’s letterheads;
- Reference to the specific project;
- Project value;
- Tenderer’s involvement in project;
- Value portion of Tenderer’s involvement;
- Clear indication of Employer’s impression of Tenderer.

The template to be used is on the following pages.

As part of the due diligence, HartRAO may undertake a site visit on one of the Tenderer’s completed or current projects. HartRAO may also contact the Tenderer’s past employers for verification or clarification to their references.

The scoring of the Tenderer’s Reference Letters from Similar Projects will be as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Reference Letters from Similar Projects (Weighting 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response (Score 0)</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>Poor (Score 40)</td>
<td>Less than 3 reference letters are provided. 1 of the letters has on average more than 50% “meets requirements” scores and it has been indicated that the employer would use them again.</td>
</tr>
<tr>
<td>Satisfactory (Score 70)</td>
<td>3 reference letters are provided. 2 of the letters have on average more than 50% “meets requirements” scores and it has been indicated that the employer would use them again. Bonus points may be awarded for the number of letters with project values more than R2 million.</td>
</tr>
<tr>
<td>Good (Score 90)</td>
<td>3 reference letters are provided. 2 of the letters have on average more than 50% “exceed requirements” scores and it has been indicated that the employer would use them again. 1 letter has on average more than 50% “meets requirements” scoring and it has been indicated that the employer would use them again.</td>
</tr>
<tr>
<td>Very Good (Score 100)</td>
<td>3 reference letters are provided. 2 of the letters have on average more than 50% “exceed requirements” scores and it has been indicated that the employer would use them again. 1 letter has on average more than 50% “exceed requirements and value adding” scoring and it has been indicated that the employer would use them again.</td>
</tr>
</tbody>
</table>

Signed .................................................  Date ..............................................................
Name ......................................................  Position ......................................................
Tenderer ........................................................................................................................................
The Hartebeesthoek Radio Astronomy Observatory is searching for a service provider to perform civil works including foundation works for a new radio telescope and would appreciate your effort in completing the reference below based on your experience with:

Name of Supplier: ..............................................................................................................................................

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor</th>
<th>Average</th>
<th>Meets Requirements</th>
<th>Exceeds Requirements</th>
<th>Exceeds Requirements and value adding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn around / completion times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with the work done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability of contractor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Did they finish in time? | YES | NO |
If not, were any actions taken to remedy the situation and how many days delay was there? |
Would you use them again? | YES | NO |

Overall Impression

Service Performed: ..............................................................................................................................................

Value of Project: ..............................................................................................................................................

Value Portion of Supplier’s Involvement: ...........................................................................................................

Completed by: .......................................................................................................................................................

Company Name: ...................................................................................................................................................

Contact Number: ...................................................................................................................................................
The Hartebeesthoek Radio Astronomy Observatory is searching for a service provider to perform civil works including foundation works for a new radio telescope and would appreciate your effort in completing the reference below based on your experience with:

Name of Supplier: ................................................................. ................................................................. ................................................................. ................................................................. .................................................................

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor</th>
<th>Average</th>
<th>Meets Requirements</th>
<th>Exceeds Requirements</th>
<th>Exceeds Requirements and value adding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn around / completion times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with the work done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability of contractor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Did they finish in time? YES NO

If not, were any actions taken to remedy the situation and how many days delay was there?

Would you use them again? YES NO

Overall Impression

Service Performed: .................................................................................................................................

Value of Project: ...........................................................................................................................................

Value Portion of Supplier’s Involvement: ....................................................................................................

Completed by: ..............................................................................................................................................

Company Name: ..........................................................................................................................................

Contact Number: .........................................................................................................................................

Company Stamp
The Hartebeesthoek Radio Astronomy Observatory is searching for a service provider to perform civil works including foundation works for a new radio telescope and would appreciate your effort in completing the reference below based on your experience with:

Name of Supplier: .................................................................

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor</th>
<th>Average</th>
<th>Meets Requirements</th>
<th>Exceeds Requirements</th>
<th>Exceeds Requirements and value adding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn around / completion times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with the work done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability of contractor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Did they finish in time?                      | YES  | NO      |

If not, were any actions taken to remedy the situation and how many days delay was there?

Would you use them again?                     | YES  | NO      |

Overall Impression                            |      |         |

Service Performed: ...........................................................

Value of Project: ..............................................................

Value Portion of Supplier's Involvement: ..............................................

Completed by: .................................................................

Company Name: .................................................................

Contact Number: ..............................................................
**SCHEDULE T2.2K  Evaluation Schedule: Method Statement**

The Tenderer must provide a detailed Method Statement, which must be based on the scope of work defined in the tender document.

The method statement must as a minimum address the following:

- detail the sequence of activities;
- updating of drawings and approvals (including FEM analysis); *preliminary drawings are required for tender evaluation purposes and must be attached to this document – final drawings to be submitted 14 calendar days after the contract has been awarded.*
- construction process (including all testing);
- safety, health, environmental and quality compliance during the construction (including managing project risks such as cold/warm weather concrete curing procedures);
- quality control procedures (including concrete sampling method; methods for ensuring a smooth finish; etc.)
- testing and verification;
- completion and handover of the project.

The scoring of the Tenderer’s Method Statement will be as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Method Statement (Weighting 35)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Response</strong>&lt;br&gt; (Score 0)</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td><strong>Poor</strong>&lt;br&gt; (Score 40)</td>
<td>The technical approach and/or methodology is poor/is unlikely to satisfy the project objectives or requirements. The Tenderer has misunderstood certain aspects of the scope of work and does not deal with the critical aspects of the project. Preliminary drawings are not attached or do not include changes/comments made by the tenderer.</td>
</tr>
<tr>
<td><strong>Satisfactory</strong>&lt;br&gt; (Score 70)</td>
<td>The approach is generic and not tailored to address the specific project objectives and requirements. The approach does not adequately deal with the critical characteristics of the project. The quality plan is too generic. The preliminary drawings are attached and includes changes and comments made by the tenderer as to the dimensions and foundations.</td>
</tr>
<tr>
<td><strong>Good</strong>&lt;br&gt; (Score 90)</td>
<td>The approach is specifically tailored to address the specific project objectives and requirements and is sufficiently flexible to accommodate changes that may occur during execution. The quality plan is specifically tailored to the critical characteristics of the project. The preliminary drawings are attached and includes changes and comments made by the tenderer as to the dimensions and foundations.</td>
</tr>
<tr>
<td><strong>Very Good</strong>&lt;br&gt; (Score 100)</td>
<td>Besides meeting the &quot;good&quot; rating, the important issues are approached in an innovative and efficient way, indicating that the Tenderer has outstanding knowledge of state-of-the-art approaches. The attached method statement/approach paper details ways to improve the</td>
</tr>
</tbody>
</table>
project outcomes and the quality of the outputs. The preliminary drawings are attached and includes changes and comments made by the tenderer as to the dimensions and foundations.

Signed ..........................................................  Date ..........................................................
Name ..........................................................  Position ...................................................
Tenderer .................................................................................................................................
SCHEDULE T2.2L Evaluation Schedule: Time to Practical Completion

The Tenderer must provide a preliminary project schedule for activities to be undertaken.

The project schedule must be in the form of a bar chart (Gantt chart) or similar acceptable time/activity form reflecting the proposed sequence and tempo of the various activities and the quantities that will be carried out every week under each of the elements comprising the work for this contract. The schedule must as a minimum address the following aspects:

- Appointment and Commencement of Contract (this is to be confirmed, but should for the purposes of planning be taken as 1 September 2016);
- Changes to drawings and FEM analysis;
- Approval of drawings;
- Start of excavations;
- Start of construction;
- Start of the activities as listed in the scope of work;
- Testing and Verification;
- Installation of the anchorage ring (supplied by HartRAO);
- Completion and handover of site.

The scoring of the Tenderer’s Time to Practical Completion will be as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Time to Practical Completion (Weighting 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
<td>Failed to provide information.</td>
</tr>
<tr>
<td>(Score 0)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>The project schedule omits important tasks or the timing of the activities and correlation among them are inconsistent with project deliverables. There is a lack of clarity and logic in the sequencing.</td>
</tr>
<tr>
<td>(Score 40)</td>
<td></td>
</tr>
<tr>
<td>Satisfactory</td>
<td>All key activities are included in the project schedule, but are not detailed. There are minor inconsistencies between timing and project deliverables. The estimated completion time for foundations, structure and gravel is 5 working months from the start (i.e. December will not count as a working month). As a minimum the foundations for the service pad must be fully completed and cured by 15 January 2017.</td>
</tr>
<tr>
<td>(Score 70)</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>The work plan fits the project deliverables well; all important activities are indicated in the project schedule and their timing and sequencing is appropriate and consistent with the project objectives and requirements. There is a fair degree of detail that facilitates understanding of the proposed work plan. The estimated completion time for foundations, structure and gravel is 4 working months from the start (i.e. December will not count as a working month). As a minimum the foundations for the service pad must be fully completed and cured by 15 January 2017.</td>
</tr>
<tr>
<td>(Score 90)</td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td>The work plan fits the project deliverables well; all important activities are indicated in the project schedule and the sequencing and timing of activities are very well defined, indicating</td>
</tr>
<tr>
<td>(Score 100)</td>
<td></td>
</tr>
</tbody>
</table>
that the Tenderer has optimised the use of resources. The work plan permits flexibility to accommodate contingencies. The estimated completion time for foundations, structure and gravel is less than 4 working months from the start (i.e. December will not count as a working month). As a minimum the foundations for the service pad must be fully completed and cured by 15 January 2017.

Signed ..................................................  Date ...........................................................
Name ....................................................  Position .......................................................
Tenderer ...........................................................................................................................
T2.2.2: Other documents required for tender evaluation purposes

1 On pages that follow.
SCHEDULE T2.2M  Proof of Central Supplier Database Registration

It is a requirement of this tender for the tenderer to be registered on the Central Supplier Database (CSD).

The tenderer must attach proof of their registration on the Central Supplier Database, https://secure.csd.gov.za to this schedule.

The tenderer will still need a valid Tax Clearance certificate, but by being registered the Employer will be able to obtain the Tax Clearance Certificate from the CSD.

In addition, if:

SBD 4 – Declaration of Interest
SBD 8 – Declaration of bidder’s past Supply Chain Management practices
SBD 9 – Certificate of independent bid determination
B-BBEE Certificate

have been electronically verified, without any problems, by the CSD they do not have to be submitted.

Note: It is still necessary to submit proof of the verification, or the actual SBD documents, in the relevant schedules in order to ensure that all bids comply with the necessary requirements.

The successful Tenderer will need to submit an updated SBD4 document before the tender can be awarded.

Signed ................................................................. Date ...........................................................................
Name ................................................................. Position ........................................................................
Tenderer ..............................................................................................................................
SCHEDULE T2.2N  Tenderer’s Bank Details and Financial References

Notes to Tenderer:

1. The Tenderer shall attach to this form a letter from the bank at which he declares he conducts his account. The contents of the bank’s letter must state the credit rating that it, in addition to the information required below, accords to the Tenderer for the business envisaged by this tender. Failure to provide the required letter with the tender submission may render the Tenderer’s offer unresponsive.

2. The Tenderer’s banking details, as they appear below, shall be completed.

3. In the event that the Tenderer is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form.

The Tenderer shall provide the following:

(i) Name of Account Holder: ..........................................................................................................................

(ii) Account Number: ...........................................................................................................................................

(iii) Bank name: ..................................................................................................................................................

(iv) Branch number: ..........................................................................................................................................

(v) Bank and branch contact details: ..................................................................................................................

Signed ........................................................................................................................................ Date .............................................................

Name ........................................................................................................................................ Position ..........................................................
SCHEDULE T2.2O  Confirmation of CIDB Contractor Grading Designation

I/We hereby confirm that I/we are registered and verified on the Construction Industry Development Board (CIDB) Contractor Database:

Name of Tenderer: ...........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................
CIDB contractor designation: ...........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................
CRS registration number: ...........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................

In the case of a Joint Venture, list each party/member of the Joint Venture.

...........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................
...........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................

I/We append documentary evidence/proof in the form of an original or certified copy of a valid Certificate of Contractor Registration issued by the Construction Industry Development Board, if not available, a printed copy of the Active Contractor’s Listing off the CIDB website (www.cidb.org.za). In the case of a Joint Venture, an original or certified copy of the valid Certificate of Contractor Registration or printed copy of the Active Contractor’s CIDB Listing must be provided for each party/member of the Joint Venture.

Failure to affix such documentation as proof of CIDB Contractor Registration as prescribed to this Schedule may result in this tender not being further considered for the award of the Contract (refer to conditions of tender clause F.3.13a of the Tender Data).

Number of sheets appended by the Tenderer to this Schedule: (if nil, enter NIL) .........................

Signed  ..................................................................................................................  Date  .................................................................................................................................
Name  ..................................................................................................................  Position  .................................................................................................................................
Tenderer  ..........................................................................................................................
SCHEDULE T2.2P  Form Concerning Fulfilment of the Construction Regulations, 2014

In terms of Clause 5(1)(h) of the Occupational Health and Safety Act 1993 (OHSA 1993) Construction Regulations 2014 (hereinafter referred to as “the Regulations”), the Contractor may only be appointed if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act 85 of 1993 and the OHSA 1993 Construction Regulations 2014.

To that effect a person duly authorised by the tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

1 I, the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.

2 I hereby declare that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully carry out the construction work under this contract in compliance with the Construction Regulations 2014 and the Employer’s Health and Safety Specifications.

3 I hereby confirm that adequate provision has been made in my tendered rates and prices as appropriate OHSA payment items within the detailed activity schedules mentioned in Part C2: Pricing Data to cover the cost of all resources, actions, training, health and safety measures and any other costs required for the due fulfilment of the OHSA 1993 Construction Regulations 2014 for the duration of the construction and defects liability period.

4 I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Clause 7(1)(a) of the OHSA 1993 Construction Regulations 2014, which shall be subject to approval by the Employer.

5 I hereby confirm that copies of my company’s approved Health and Safety Plan, the Employer’s Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor’s personnel, the Employer’s personnel, the Engineer and his Agents, visitors, and officials and inspectors of the Department of Labour.

6 I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the OHSA 1993 Construction Regulations 2014 (Clause 33) for failure on the Contractor’s part to comply with the provisions of the OHSA 1993 and the OHSA 1993 Construction Regulations 2014.

7 I hereby agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.

Signed .............................................. Date ..............................................
Name ............................................... Position .............................................
Tenderer ……………………………………………………………………………………………...
### SCHEDULE T2.2Q Questionnaire on Tender Procedures with respect to the Occupational Health and Safety Act (OHS ACT) and Construction Regulations 2014

1. Name of the employee to be appointed as Construction Manager [Construction Regulation 8(1)]

2. Names of the competent employees to assist the Construction Manager [Construction Regulation 8(2)]

3. Name of the person to be appointed to conduct baseline and ongoing risk assessments [Construction Regulation 9(1)]

4. Name of person to be appointed as construction health and safety officer [Construction Regulation 8(5)]

5. Will the employees to be appointed on the project be in possession of proof of health and safety induction training [Construction Regulation 7(5)]?
   - YES ☐
   - NO ☐

   If no, what are the Tenderer’s proposals to ensure that his/her employees have received the health and safety induction training related to the site?

6. Are the Tenderer’s tools, plant and equipment tested and inspected regularly in terms of safety compliance?

   - YES ☐
   - NO ☐

   If no, what are the Tenderer’s proposals for such testing?

7. Will a dedicated supervisor be designated to manage the process to test and inspect all tools, plant and equipment?

   - YES ☐
   - NO ☐

   If no, what are the Tenderer’s proposals for such designation?

8. What other measures will the Tenderer take to comply with the OHSACT and the Construction Regulations?

9. Is the Tenderer registered and in good standing with the Compensation Commissioner or duly approved compensation insurer? [Construction Regulation 5(1)(jj)]

   - YES ☐
   - NO ☐

---

Signed ..............................................................  Date ..............................................................
Name ..............................................................  Position ..............................................................
Tenderer .................................................................................................................................
SCHEDULE T2.2R  Certificate of Tenderer’s Attendance at the Compulsory Clarification Meeting

Note to Tenderer:
The attendance register at the compulsory clarification meeting will be used as proof of the Tenderer’s attendance. It is however necessary that the Tenderer also fill out this schedule which will be verified against said register.

Unless the name, details, and signature of the Tenderer’s representative also appear on the Clarification Meeting attendance register this Certificate of Attendance shall not be accepted and the Tenderer’s offer shall be deemed non-responsive.

This is to certify that I (the representative), .......................................................... representing (the Tenderer) ..........................................................

of (address) ...........................................................................................................

Telephone number ..............................................................................................
Fax number ..........................................................................................................

attended the compulsory tender briefing session.

Signed by representative: ..........................................................

Date ..............................................................
T2.2.3: Returnable Schedules that will be incorporated into the contract\(^1\)

---

\(^1\) On pages that follow.
SCHEDULE T2.2S  Certificate of Insurance Cover

Note to Tenderer:
In the event of the Tenderer being a joint venture/consortium the details of the individual members must also be provided.

Proof of insurance should be attached.

Refer to the Conditions of Contract Clause 8.6.

The Tenderer shall provide the following details of insurance cover:

(i) Name of Tenderer: ..............................................................
(ii) Period of Validity: ..............................................................
(iii) Value of Insurance:
   - Professional Indemnity Insurance: ..............................................................
     Company: ..............................................................
     Value: ..............................................................
   - Insurance for Works and Tenderer's Equipment:
     Company: ..............................................................
     Value: ..............................................................
   - Insurance for Tenderer’s Personnel: ..............................................................
     Company: ..............................................................
     Value: ..............................................................
   - Motor Vehicles liability: ..............................................................
     Company: ..............................................................
     Value: ..............................................................
   - Third Party liability: ..............................................................
     Company: ..............................................................
     Value: ..............................................................

Signed ..............................................................  Date ..............................................................
Name ..............................................................  Position ..............................................................
Tenderer  ..............................................................
SCHEDULE T2.2T Compulsory Enterprise Questionnaire

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1 Name of enterprise: ..............................................................................................................................

Section 2 VAT registration number, if any: ............................................................................................................

Section 3 Association membership, if any: ............................................................................................................

Section 4 Particulars of sole proprietors and partners in partnerships

<table>
<thead>
<tr>
<th>Name*</th>
<th>Identity number*</th>
<th>Personal income tax number*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Complete only if sole proprietor or partnership and attach separate page if more than 3 partners.

Section 5 Particulars of companies and close corporations

Company registration number: ..............................................................................................................................

Close corporation number: ................................................................................................................................

Tax Reference number: ........................................................................................................................................

Section 6 Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently, or has been within the last 12 months, in the service of, or are themselves, any of the following:

☐ a member of any municipal council
☐ a member of any provincial legislature
☐ a member of the National Assembly or the National Council of Province
☐ a member of the board of directors of any municipal entity
☐ an official of any municipality or municipal entity
☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
☐ a member of an accounting authority of any national or provincial public entity
☐ an employee of Parliament or a provincial legislature

If any of the above boxes are marked, disclose the following*:

<table>
<thead>
<tr>
<th>Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder</th>
<th>Name of institution, public office, board or organ of state and position held</th>
<th>Status of service (tick appropriate column)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Current</td>
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</tr>
</tbody>
</table>

*Insert separate page if necessary

Section 7 Record of spouses, children and parents in the service of the state
Indicate by marking the relevant boxes with a cross, if any spouse, child or parent or a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently, or has been within the last 12 months, in the service of, or are themselves, any of the following:

<table>
<thead>
<tr>
<th>Box</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>a member of any municipal council</td>
</tr>
<tr>
<td>☐</td>
<td>a member of any provincial legislature</td>
</tr>
<tr>
<td>☐</td>
<td>a member of the National Assembly or the National Council of Province</td>
</tr>
<tr>
<td>☐</td>
<td>a member of the board of directors of any municipal entity</td>
</tr>
<tr>
<td>☐</td>
<td>an official of any municipality or municipal entity</td>
</tr>
<tr>
<td>☐</td>
<td>an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)</td>
</tr>
<tr>
<td>☐</td>
<td>a member of an accounting authority of any national or provincial public entity</td>
</tr>
<tr>
<td>☐</td>
<td>an employee of Parliament or a provincial legislature</td>
</tr>
</tbody>
</table>

If any of the above boxes are marked, disclose the following*:

<table>
<thead>
<tr>
<th>Name of spouse, child or parent</th>
<th>Name of institution, public office, board or organ of state and position held</th>
<th>Status of service (tick appropriate column)</th>
</tr>
</thead>
<tbody>
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<td>Current</td>
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</tr>
</tbody>
</table>

*Insert separate page if necessary

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:

a) To obtain a tax clearance certificate from the South African Revenue Services that my/our tax matters are in order;

b) Confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;

c) Confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise, has within the last five years been convicted of fraud or corruption;

d) Confirms that I/we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and

e) Confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed ............................................. Date .............................................
Name ............................................. Position .............................................
Tenderer ..................................................................................................................
SCHEDULE T2.2U Preference Points Claim in Terms of Preferential Procurement Regulations, 2011

PREFERENCE POINTS CLAIM IN TERMS OF PREFERENTIAL PROCUREMENT REGULATIONS, 2011

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution.

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011

1 GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- The 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included)

1.2 The value of this bid is estimated to exceed R1 000 000 (all applicable taxes included) and therefore the 90/10 system shall be applicable.

1.3 Preference points for this bid shall be awarded for:

a) Price; and

b) B-BBEE Status Level of Contribution

1.3.1 The maximum points for this bid are allocated as follows:

<table>
<thead>
<tr>
<th>POINTS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>PRICE</td>
</tr>
<tr>
<td>10</td>
<td>B-BBEE STATUS LEVEL OF CONTRIBUTION</td>
</tr>
</tbody>
</table>

Total points for Price and B-BBEE must not exceed 100

1.4 Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate a claim in regard to preferences, in any manner required by the purchaser.

2 DEFINITIONS

2.1 “all applicable taxes” includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;

2.2 “B-BBEE” means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

2.3 “B-BBEE status level of contributor” means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
2.4 “bid” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;

2.5 “Broad-Based Black Economic Empowerment Act” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

2.6 “comparative price” means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;

2.7 “consortium or joint venture” means an association of persons for the purpose of combining their expertise, property, capital, effort, skill and knowledge in an activity for the execution of a contract;

2.8 “contract” means the agreement that results from the acceptance of a bid by an organ of state;

2.9 “EME” means any enterprise with an annual total revenue of R5 million or less;

2.10 “Firm price” means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any, supplies, or the rendering costs of any service, for the execution of the contract;

2.11 “functionality” means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability, and durability of a service and the technical capacity and ability of a bidder;

2.12 “non-firm prices” means all prices other than “firm” prices;

2.13 “person” includes a juristic person;

2.14 “rand value” means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;

2.15 “sub-contract” means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;

2.16 “total revenue” bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the Government Gazette on 9 February 2007;

2.17 “trust” means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and

2.18 “trustee” means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3 ADJUDICATION USING A POINT SYSTEM

3.1 The bidder obtaining the highest number of total points will be awarded the contract.

3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.

3.3 Points scored must be rounded off to the nearest 2 decimal places.

3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
3.5 However, when functionality is part of the valuation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.

3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4 POINTS AWARDED FOR PRICE
4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

\[ P_s = 80 \left( 1 - \frac{P_t - P_{\text{min}}}{P_{\text{min}}} \right) \quad \text{or} \quad P_s = 90 \left( 1 - \frac{P_t - P_{\text{min}}}{P_{\text{min}}} \right) \]

Where

- \( P_s \) = Points scored for price of bid under consideration
- \( P_t \) = Comparative price of bid under consideration
- \( P_{\text{min}} \) = Comparative price of lowest acceptable bid submitted

5 POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION
5.1 In terms of Regulation 5(2) and 6(2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

<table>
<thead>
<tr>
<th>B-BBEE Status Level of Contribution</th>
<th>Number of points (90/10 system)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
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<tr>
<td>4</td>
<td>5</td>
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<td>5</td>
<td>4</td>
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<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Non-compliant contributor</td>
<td>0</td>
</tr>
</tbody>
</table>

5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA’s approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.

5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.

5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.

5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.

5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.

5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6 BID DECLARATION

6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

7 B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1

7.1 B-BBEE Status Level of Contribution: ........ = ........ (maximum of 10 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

8 SUB-CONTRACTING

8.1 Will any portion of the contract be sub-contracted?

8.1.1 If yes, indicate:

(i) What percentage of the contract will be sub-contracted? ........ %

(ii) The name of the sub-contractor: ...........................................................

(iii) The B-BBEE status level of the sub-contractor: .......................................

(iv) Whether the sub-contractor is an EME?

8.1.2 [YES ☐ NO ☐]

9 DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm: ...........................................................................

9.2 VAT registration number: ...........................................................................

9.3 Company registration number: .................................................................
9.4 TYPE OF COMPANY/FIRM
☐ Partnership/Joint Venture/Consortium
☐ One person business/Sole propriety
☐ Close corporation
☐ Company
☐ (Pty) Limited

[Tick applicable box]

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES
...........................................................................................................................................................................
...........................................................................................................................................................................
...........................................................................................................................................................................

9.6 COMPANY CLASSIFICATION
☐ Manufacturer
☐ Supplier
☐ Professional service provider
☐ Other service providers, e.g. transporter, etc.

[Tick applicable box]

9.7 Total number of years the company/firm has been in business? .................................................................

9.8 I/We, the undersigned, who is/are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBEE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/firm for the preference(s) shown and I/we acknowledge that:

(i) The information furnished is true and correct;
(ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
(iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
(iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have:
   (a) Disqualify the person from the bidding process;
   (b) Recover costs, losses or damages it has incurred or suffered as a result of that person’s conduct;
   (c) Cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
   (d) Restrict the bidder or contractor, its shareholders and directors, or only the Bidder

[Signature]

Bidder Initial
shareholders and directors who acted on a fraudulent basis, from obtaining business from any
organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other
side) rule has been applied; and

(e) Forward the matter for criminal prosecution.

WITNESSES:

1. ..........................................................

........................................................

SIGNATURE(S) OF BIDDER(S)

2. ..........................................................

DATE: ...................................................

ADDRESS: ...........................................

........................................................

........................................................
SCHEDULE T2.2V  Declaration of Interest

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where:

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

2.1 Full Name of bidder or his or her representative: .................................................................

2.2 Identity Number: ..............................................................................................................

2.3 Position occupied in the Company (director, trustee, shareholder²): ...........................................

2.4 Company Registration Number: ........................................................................................

2.5 Tax Reference Number: ...................................................................................................

2.6 VAT Registration Number: ................................................................................................

2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.

2.7 Are you or any person connected with the bidder presently employed by the state?

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member: ............................................................

Name of state institution at which you or the person connected to the bidder is employed: ............................................................

---

¹ “State” means –
(a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
(b) any municipality or municipal entity;
(c) provincial legislature;
(d) national Assembly or the national Council of provinces; or
(e) Parliament.

² “Shareholder” means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.
Position occupied in the state institution: .................................................................

Any other particulars: ..............................................................................................

...........................................................................................................................

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?

[ ] YES  [ ] NO

2.7.2.1 If yes, did you attach proof of such authority to the bid document?

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.)

[ ] YES  [ ] NO

2.7.2.2 If no, furnish reasons for non-submission of such proof: .................................................................

...........................................................................................................................

2.8 Did you or your spouse, or any of the company’s directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months?

[ ] YES  [ ] NO

2.8.1 If so, furnish particulars: .................................................................................................

...........................................................................................................................

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?

[ ] YES  [ ] NO

2.9.1 If so, furnish particulars: .................................................................................................

...........................................................................................................................

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?

[ ] YES  [ ] NO

2.10.1 If so, furnish particulars: .................................................................................................

...........................................................................................................................

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract?

[ ] YES  [ ] NO

2.11.1 If so, furnish particulars: .................................................................................................

...........................................................................................................................
3 Full details of directors / trustees / members / shareholders.

<table>
<thead>
<tr>
<th>Full Name</th>
<th>Identity Number</th>
<th>Personal Tax Reference Number</th>
<th>State Employee Number / Persal Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

4 DECLARATION

I, THE UNDERSIGNED (NAME) .........................................................................................................................

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 AND 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 23 OF
THE GENERAL CONDITIONS OF CONTRACT SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signed ................................................................. Date .................................................................

Name ................................................................. Position .............................................................

Tenderer ...........................................................................................................
DECLARATION OF BIDDER’S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Standard Bidding Document must form part of all bids invited.

2. It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3. The bid of any bidder may be disregarded if that bidder, or any of its directors have:
   a. Abused the institution’s supply chain management system;
   b. Committed fraud or any other improper conduct in relation to such system; or
   c. Failed to perform on any previous contract.

4. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Is the Bidder or any of its directors listed on the National Treasury’s Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <em>audi alteram partem</em> rule was applied).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.1</td>
<td>If so, furnish particulars*:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2 Is the Bidder or any of its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? To access this Register enter the National Treasury’s website, [www.treasury.gov.za](http://www.treasury.gov.za), click on the icon “Register for Tender Defaulters” or submit your written request for a hard copy of the Register to facsimile number (012) 3265445.

4.2.1 If so, furnish particulars*:

4.3 Was the Bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?

4.3.1 If so, furnish particulars*:

4.4 Was any contract between the Bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?

4.4.1 If so, furnish particulars*:

*Attach schedule if more space is required

5. CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) .................................................................  CERTIFY THAT THE INFORMATION FURNISHED IN THIS DECLARATION FORM IS TRUE AND CORRECT. I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signed .................................................................  Date .................................................................

Name .................................................................  Position .................................................................

Tenderer  .................................................................................................................................
SCHEDULE T2.2X  Certificate of Independent Bid Determination

CERTIFICATE OF INDEPENDENT BID DETERMINATION  

1 This Standard Bidding Document must form part of all bids¹ invited.

2 Section 4(1)(b)(iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
   a. Disregard the bid of any bidder if that bidder or any of its directors have abused the institution’s supply chain management system and or committed fraud or any other improper conduct in relation to such system.
   b. Cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.

4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

5 In order to give effect to the above, the attached³ Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid.

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and/or services for purchasers who wish to acquire goods and/or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

³ On the following pages.
CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

.................................................................................................................................................................
(Bid Number and Description)

in response to the invitation for the bid made by:
.................................................................................................................................................................
(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: ........................................................................................................................................ that:

.................................................................................................................................................................
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word “competitor” shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
   (a) has been requested to submit a bid in response to this bid invitation;
   (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience;
   (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium;
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
   (a) prices;
   (b) geographical area where the product or service will be rendered (market allocation);
   (c) methods, factors or formulas used to calculate prices;
   (d) the intention or decision to submit or not to submit, a bid;
   (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
   (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

4. Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
10 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signed ................................................................. Date .................................................................
Name ................................................................. Position ............................................................
Tenderer ...........................................................................................................................................

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C1.1: FORM OF OFFER AND ACCEPTANCE (AGREEMENT)

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

CONSTRUCTION OF FOUNDATIONS AND TOWER STRUCTURE FOR A NEW VGOS RADIO TELESCOPE AT THE HARTEBEESTHOEK RADIO ASTRONOMY OBSERVATORY

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS

..................................................................................................................................................................................

............................................................................................................................... Rand (in words): R............................................................. (in figures),

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

For the Tenderer: ........................................................................................................................................

..............................................................

Signature

..............................................................

Name

..............................................................

Capacity

Name and address of organisation: ............................................................................................................................

..............................................................................................................................................................................

..............................................................................................................................................................................

Signature and name of witness: ..............................................................................................................................

..............................................................

Signature

..............................................................

Name

Date: .................................................................................................................................................................
ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer’s Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer’s Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in:

- PART C1 Agreements and Contract Data (which includes this Agreement)
- PART C2 Pricing Data
- PART C3 Scope of Work
- PART C4 Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall within two weeks (14 calendar days) after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer’s agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

The Commencement Date of the Contract shall be that on which the contract hand-over meeting is held which shall be no later than 28 calendar days after the date of this form or earlier if circumstances demand and as agreed between Tenderer/Employer. The preliminary date chosen as the Commencement Date is 1 September 2016 (to be confirmed).

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

For the Employer:

.................................................................
Signature

.................................................................
Name

.................................................................
Capacity
Name and address of organisation: ........................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
Signature and name of witness: .........................................................................................................................
Signature
..................................................................................................................................................
Name
Date: ............................................................................................................................................................
### SCHEDULE OF DEVIATIONS

**Notes:**

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.

2. A Tenderer’s covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract and shall also be recorded here.

4. Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the Contract.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.
It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the Contract between the parties arising from this Agreement.

<table>
<thead>
<tr>
<th>For the Tenderer:</th>
<th>For the Employer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Signature</td>
</tr>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Capacity</td>
<td>Capacity</td>
</tr>
</tbody>
</table>

Name and address of the organisation:

<table>
<thead>
<tr>
<th>Name and address of the organisation:</th>
</tr>
</thead>
</table>

Witness Signature

Witness Name

Date
CONFIRMATION OF RECEIPT

The Tenderer (now Contractor), identified in the Offer part of this Agreement, hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the .......... (day)
of .............................................................. (month)
20 ................... (year)
at .............................................................. (place)

For the Contractor: ..............................................................

..............................................................

..............................................................

Signature

Name

Capacity

Signature and name of witness: ..............................................................

..............................................................

..............................................................

Signature

Name
C1.2: CONTRACT DATA

CONTRACT DATA FOR CONSTRUCTION OF FOUNDATIONS AND TOWER STRUCTURE FOR A NEW VGOS RADIO TELESCOPE AT THE HARTEBEESTHOEK RADIO ASTRONOMY OBSERVATORY

PART 1: DATA PROVIDED BY THE EMPLOYER

C1.2.1: Conditions of Contract


The General Conditions of Contract shall be read in conjunction with the variations, amendments, and additions set out in the Contract Specific Data below. Each item of data given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

The Contract Data and General Conditions of Contract shall have precedence over the Drawings, Scope of Works, and Standardised Specifications in the interpretation of any ambiguity or inconsistency between these documents.
C1.2.2: Contract Specific Data

The following Contract Specific Data and amendments, additions, or omissions to the GCC 2010 are applicable to this Contract. The clause numbers below refer to the corresponding clause numbers in the GCC 2010.

Clause 1.1.13 – Defects Liability Period
The “Defects Liability Period” is twelve (12) months.

Clause 1.1.15 – Employer
The Employer is the Hartebeesthoek Radio Astronomy Observatory (HartRAO).

Clause 1.1.16 – Engineer
The “Engineer” is Philip Mey, the project manager and agent appointed to act as Engineer by HartRAO.

Clause 1.1.26 – Pricing Strategy
The “Pricing Strategy” used is a fixed price contract based on an Activity Schedule with re-measurement of only certain materials as listed in clause 6.7.1.

Clause 1.2.1.2 – Delivery of Notices
The postal address of the Employer as well as the Engineer is:

PO Box 443
Krugersdorp
1740

The physical address of the Employer as well as the Engineer is:

Hartebeesthoek Radio Astronomy Observatory
Farm 502JQ
Broederstroom road
Hartebeesthoek
1739

Clause 3.1.4 – Employer’s agent for health and safety
The Engineer will also act as the Safety, Health and Environmental representative of the Employer.

Clause 5.3.1 – Commencement of the Works
The documentation required before commencement with Works execution is:

1) Health and Safety Plan (Refer to Clause 4.3).
2) Initial Programme (Refer to Clause 5.6).
3) Method Statement.
4) Security (Refer to Clause 6.2).
5) Insurance (Refer to Clause 8.6).
6) Occupational Health and Safety Agreement.
7) Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer)
8) Proof of payments required in terms of the Compensation for Occupational Injuries and Diseases Act, 1993.

Clause 5.3.2 – Unacceptable documentation
The time to submit the documentation required before commencement with Works execution is fourteen (14)
Clause 5.8.1 – Non-working times

The Contractor shall be permitted to work 7 days a week but shall not be permitted to work between 17h30 in the evening and 06h30 in the morning. The special non-working days are:

1) All gazetted public holidays.
2) All statutory required non-working days including the year-end break.

Clause 5.9.7 – Engineer to approve Contractor’s designs and drawings

The Contractor is provided with drawings for the foundations and tower construction. He needs to verify and update these drawings as necessary and submit his final drawings for approval based on the load cases and requirements of this tender. The load cases and CAD files will only be provided at the compulsory site briefing.

Clause 5.12.2.2 – Some reasons for extension of time

No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal climatic conditions shall be deemed to include:

1) Rainfall up to and including 10 mm/day.
2) Wind speeds below 60 km/hour.

Claims for delays for abnormal climatic conditions shall not be granted automatically but shall be motivated by substantiating facts and evidence of actual weather conditions and the impact these conditions had on the execution of the Works.

It shall be further noted that where the critical path is not affected, no extension of time for abnormal climatic conditions or for any other reason will be entertained.

Clause 5.12.2.4 – Some reasons for extension of time

Any strike or disruption of the Contractor’s labour over wages or working conditions shall not be deemed to be beyond the Contractor’s control. Extensions of time shall therefore not be granted for these reasons.

Clause 5.13.1 – Penalty for delay

The penalty for failing to complete the whole of the Works shall be calculated at the rate of five per cent (5%) of the contract price per 30 day period and shall apply pro-rata to every day that the Works are completed late.

Clause 5.16.3 – Latent defect liability

The latent defect liability period shall be 10 years.

Clause 6.2.1 – Delivery of security

The security to be provided by the Contractor shall be a performance guarantee of ten per cent (10%) of the Contract Sum.

Clause 6.2.2 – Contractor failing to select or provide security

Delete this sub-clause in its entirety.

Clause 6.2.3 – Validity of performance guarantee

Delete this sub-clause in its entirety and replace with the following:

The Contractor shall ensure that the performance guarantee remains valid and enforceable until the Certificate of Completion of the Works is issued.

Clause 6.3.3 – Changes in quantities
The quantities for the concrete, steel and gravel to be used during construction are subject to re-measurement.

Clause 6.7.1 – Quantities

The quantities for the concrete, steel and gravel to be used during construction are subject to re-measurement.

Clause 6.8.2 – Application of Contract Price Adjustment Factor

The Contract Price shall not be subject to any Contract price adjustment and the rates and prices tendered in the Activity Schedule shall be final and binding throughout the period of the Contract. Only the materials listed in clause 6.7.1 which are subject to re-measurement may affect the Contract Price. Price variations due to re-measurement are limited to a variation of 15%, and any re-measurement value above 15% will be for the account of the contractor.

Clause 6.10.1.5 – Interim payments

The percentage advance on materials not yet built into the Permanent Works is eighty per cent (80%).

Interim payments for materials on site will be made with each payment certificate. The amount of the interim payment will be adjusted with each payment certificate. Materials incorporated into the works will be deducted and additional materials on site will be added to the amount certified for interim payment.

Clause 6.10.3 – Retention money

Payments to the Contractor shall be subject to a retention amount of ten per cent (10%) for the duration of the contract, i.e. from the Commencement Date to the date of the Certificate of Completion. This amount will be reduced to five per cent (5%) for the defects liability period, i.e. starting from the date of the Certificate of Completion and continuing for the period stated in Clause 1.1.1.13.

Clause 8.6 – Insurances to be effected

The Contractor shall, at his own cost, effect and maintain the insurances as listed in Clause 8.6.1 of the Conditions of Contract and provide proof of these insurances as listed in Schedule T2.2S.

Clause 10.5.2 – Dispute resolution by ad-hoc adjudication

Dispute resolution shall be by ad-hoc adjudication.

Clause 10.5.3 – Rules for adjudication

The number of ad-hoc Adjudication Board Members to be appointed is one (1). The appointment shall only take place if and when adjudication is required.
PART 2: DATA PROVIDED BY THE CONTRACTOR

The clause numbers below refer to the corresponding clause numbers in the GCC 2010.

Clause 1.1.1.9
The name of the Contractor is:

Clause 1.1.1.14
The time for achieving Practical Completion is

Clause 1.2.1.2
The address of the Contractor is
Physical address:
Postal address:
Email:
PART C2: PRICING DATA

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C2.1: PRICING INSTRUCTIONS

1. The contractor must plan the work in this contract as a set of activities. These should be the same activities as he shows on his programme.

2. Information in the Activity Schedule is not the Scope of Work. This confirms that instructions to do work or how it is to be done are not included in the Pricing Schedule but in the Scope of Work. The Contractor shall therefore provide the Services in accordance with the Scope of Work. The Pricing Schedule is only a pricing document.

3. The activities are described as indicated below and a lump sum price for each activity is entered in the Price column.

4. The contractor is to take note that payment is made for each activity only when it is complete.

5. Changes (if any) to the prices are made for each activity only when the work for that activity. The revised invoice for that activity must then be submitted to the Engineer for approval before payment can be made.

6. It will be assumed that prices included in Pricing Schedules are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards)

7. The prices tendered by the Tenderer in the Pricing Schedule are inclusive of everything necessary and incidental to providing the Services in accordance with the Scope, as it was at the time of tender, as well as to correct any defects except those for which he is not liable. However, the Tenderer does not have to allow in his prices for matters that may arise as a result of a variation.

8. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered for the associated activities.

9. The prices in the activity schedule (on the next page) must include all costs associated with the activity as no separate payments will be made for such items (i.e. from concept to completion including items such as site establishment, plant hire, OHS act payment items, etc.)

10. The only change to the cost for each activity will be the materials listed in the “Non-Firm prices subject to re-measurement of materials” paragraph on the following pages. The contractor at the end of each activity will need to update the price for the activity with the re-measured amount and type of materials used. The quantities of concrete, steel, and gravel as measured, accepted and certified for payment in accordance with the Conditions of Contract, Clause 6.3.3 and 6.7.1, and not the preliminary quantities stated in the activity schedules, will be used to determine the payments to the successful Tenderer. The variations of these preliminary quantities are limited to 15% (up or down) and any variation above 15% will be for the cost of the contractor. The validity of the Contract shall in no way be affected by differences between the quantities in the Activity Schedule and the quantities certified for payment.

11. The PRICING SCHEDULE FOR THE DURATION OF THE CONTRACT – NON-FIRM PRICES (SBD3.2) listed below must be filled out completely and correspond to the detailed activity schedules that the tenderer submits. This Pricing Schedule will be used for scoring and is the bid price in South African currency, inclusive of all applicable taxes, that will be valid for the duration of the contract. The Firm prices listed in the detailed activity schedules will remain firm for the duration of the contract. Variations (limited to 15%) will only be allowed on the non-firm price associated with the re-measurable materials mentioned in point 10 above.
## C2.2: ACTIVITY SCHEDULE

**PRICING SCHEDULE FOR THE DURATION OF THE CONTRACT – NON-FIRM PRICES (SBD3.2)**

### NOTE

Price adjustments will be allowed at the periods and times specified in the bidding documents.

The only price adjustments allowed will be for the re-measurable materials as mentioned in the Conditions of Contract, Clause 6.3.3. Variations in the preliminary quantities, and hence price adjustments, for these materials are limited to 15%. Under no circumstances shall the tendered rates be adjusted. As such, a portion of the price in each activity will remain firm.

In cases where different delivery points influence the pricing, a separate pricing schedule must be submitted for each delivery point.

The prices quoted below shall be fully inclusive of all costs including delivery to the specified NRF Business Unit’s geographical address and includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

No changes or extensions or additional ad hoc costs are accepted once the contract has been awarded.

**Name of Bidder:** .................................................................

**Bid Number:** NRF/HartRAO 01/2016-17

**Closing Date:** 26 July 2016

**Closing time:** 11:00

**OFFER TO BE VALID FOR 90 days FROM THE CLOSING DATE OF BID.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Activity</th>
<th>Description</th>
<th>Price (in Rand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Site Compaction of a 70 x 45 m² area</td>
<td>This should include all costs associated with item 1 &quot;Site Compaction of a 70 x 45 m² area&quot; in the Scope of Work.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rip, grade, and compact in situ of an existing 500m long dirt/gravel road</td>
<td>This should include all costs associated with item 2 &quot;Rip, grade, and compact in situ of an existing 500m long dirt/gravel road&quot; in the Scope of Work.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Erection of a fence around the site with two double gates</td>
<td>This should include all costs associated with item 3 &quot;Erection of a fence around the site with two double gates&quot; in the Scope of Work.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Foundations for a site office</td>
<td>This should include all costs associated with item 4 &quot;Foundations for a site office&quot; in the Scope of Work.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Service Pad and Foundations</td>
<td>This should include all costs associated with item 5 &quot;Foundations for and construction of a service pad&quot; in the Scope of Work.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Concrete Tower and Foundations</td>
<td>This should include all costs associated with item 6 &quot;Foundations for and construction of a concrete tower&quot; in the Scope of Work.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Gravel</td>
<td>This should include all costs associated with item 7 &quot;Gravel and compacting&quot; in the Scope of Work.</td>
<td></td>
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</tbody>
</table>

Optional gravel road pricing.

As an option, the tenderer should provide the price for graveling part of the road as stated in item 7 "Gravel and compacting" in the Scope of Work. This price should remain valid for the duration of the contract, but should not be included in the bid price below.

### Sub-total (excluding VAT):

### VAT at 14%:

Bid Price for the entire works in RSA Currency (all applicable taxes included):
<table>
<thead>
<tr>
<th>Detailed activity schedules attached (see description below)</th>
<th>Yes ☐</th>
<th>No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the offer comply with the specification(s)?</td>
<td>*Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>If not to specification, indicate deviation(s) in a separate attached schedule and the reasons why</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period required for delivery: .................................................................</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Delivery: Firm / Not Firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery basis: Delivered at site and meeting the minimum test results as specified. Signed Certificate of Completion will be issued upon completion of the whole of the works.</td>
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</tbody>
</table>

**Detailed activity schedules**

The Tenderer must also attach a detailed activity schedule that corresponds to his programme of the works.

The detailed activity schedule must list the activities in the PRICING SCHEDULE FOR THE DURATION OF THE CONTRACT – NON-FIRM PRICES (SBD3.2) table above and for each activity it must at least detail the Firm price and Non-Firm price:

- **Non-Firm price:** This is the price associated with the re-measurable materials. The Tenderer must include the preliminary quantity estimates and specifications of the concrete, steel and gravel to be used in each activity. Price adjustments will only be allowed for the re-measurable materials and is limited to a variation of 15% (up or down) per activity.

- **Firm price:** This is the remainder of the price for the respective activities. This price will remain fixed for the duration of the contract. No changes or extensions or additional ad hoc costs are accepted once the contract has been awarded.

**Note:** The payment items associated with the OHS Act and Construction Regulations, which forms part of the firm price, must also be indicated separately.

The total of the Non-Firm and Firm prices for each activity should correspond to the price filled in the PRICING SCHEDULE FOR THE DURATION OF THE CONTRACT – NON-FIRM PRICES (SBD3.2) table above.
**PRICE ADJUSTMENTS**

The only price adjustments allowed will be for the re-measurable materials as mentioned in the Conditions of Contract, Clause 6.3.3.

Once an activity has been completed, the concrete, steel, and gravel used for the activity are to be re-measured and the price quoted for these materials as well as the price for the associated activity will be updated before payment.

**Non-Firm prices subject to re-measurement of specific materials**

The following table should be completed with the specifications for the concrete, steel, and gravel to be used and prices. The prices in this table will be fixed for the duration of the contract and be used for re-measurement of the material used. Note that the cost of these items should already be included in the activity schedules. These items will have to be measured by the contractor and payment will be made in accordance to the material used. If the item is not applicable NIL, must be entered and zero Rand (R0).

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>Strength in MPa; Aggregate in mm; Price per m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Class 50MPa with .......... mm aggregate</td>
<td>R......... per m³</td>
</tr>
<tr>
<td></td>
<td>ii) Class 30MPa with .......... mm aggregate</td>
<td>R......... per m³</td>
</tr>
<tr>
<td></td>
<td>iii) Class ..........MPa with .......... mm aggregate</td>
<td>R......... per m³</td>
</tr>
<tr>
<td></td>
<td>iv) Class ..........MPa with .......... mm aggregate</td>
<td>R......... per m³</td>
</tr>
<tr>
<td></td>
<td><strong>Attach additional schedules if necessary</strong></td>
<td></td>
</tr>
<tr>
<td>Steel bars</td>
<td>Type (high-tensile steel, mild-steel, etc.); Diameter in mm; Price per metric ton</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Mild-steel bars .......... mm diameter</td>
<td>R......... per t</td>
</tr>
<tr>
<td></td>
<td>ii) Mild-steel bars .......... mm diameter</td>
<td>R......... per t</td>
</tr>
<tr>
<td></td>
<td>iii) High-tensile steel bars .......... mm diameter</td>
<td>R......... per t</td>
</tr>
<tr>
<td></td>
<td>iv) High-tensile steel bars .......... mm diameter</td>
<td>R......... per t</td>
</tr>
<tr>
<td></td>
<td>v) High-tensile steel bars .......... mm diameter</td>
<td>R......... per t</td>
</tr>
<tr>
<td></td>
<td><strong>Attach additional schedules if necessary</strong></td>
<td></td>
</tr>
<tr>
<td>Gravel</td>
<td>Gravel type/name; Size in mm; Price per m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gravel name/type ..................................................................................</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Size ................ mm</td>
<td>R......... per m³</td>
</tr>
<tr>
<td></td>
<td>ii) Size ................ mm</td>
<td>R......... per m³</td>
</tr>
<tr>
<td></td>
<td><strong>Attach additional schedules if necessary</strong></td>
<td></td>
</tr>
</tbody>
</table>

Signed ................................................................. Date .................................................................
Name ................................................................. Position .................................................................
Tenderer ..........................................................................................................................................

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## VARIATIONS

The rates indicated below shall be for all the resources that will have an input into the project for which the employer will be charged. This will specifically be for pricing of variations in the contract and fixed for the duration of the contract.

### Staff Rates

<table>
<thead>
<tr>
<th>No.</th>
<th>Designation and name of staff member</th>
<th>Rate per hour, excluding VAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Plant/Equipment Rates

<table>
<thead>
<tr>
<th>No.</th>
<th>Equipment or Plant</th>
<th>Rate per hour, excluding VAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
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### Other Expenses

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Rate, excluding VAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Travelling</td>
<td></td>
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</tr>
<tr>
<td>1.1</td>
<td>Car</td>
<td>km</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Standard accommodation</td>
<td>Night</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Accommodation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Printing/Copying (indicate if prices differ)</td>
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</tr>
<tr>
<td>3.1</td>
<td>Colour</td>
<td></td>
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<td></td>
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<tr>
<td>3.1.2</td>
<td>A3</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>3.1.3</td>
<td>A2</td>
<td>Page</td>
<td></td>
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<tr>
<td>3.1.4</td>
<td>A1</td>
<td>Page</td>
<td></td>
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<tr>
<td>3.1.5</td>
<td>A0</td>
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<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Black and White</td>
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<td>3.2.1</td>
<td>A4</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>3.2.2</td>
<td>A3</td>
<td>Page</td>
<td></td>
</tr>
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<td>A2</td>
<td>Page</td>
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</tr>
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<td>3.2.4</td>
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<td>3.2.5</td>
<td>A0</td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>Binding</td>
<td>Doc</td>
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## PART C3: SCOPE OF WORK

### C3.1: SCOPE OF WORK

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<th>Page</th>
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<td>Overview of the works</td>
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<td>Extent of the works</td>
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<td>Site Establishment</td>
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<td>Site Usage</td>
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<td>MANAGEMENT</td>
<td>99</td>
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<tr>
<td>Management of the Works</td>
<td>99</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>101</td>
</tr>
</tbody>
</table>
C3.1: SCOPE OF WORK

GENERAL

This section specifies and describes services and Engineering and construction works which are to be provided and any other requirements and constraints relating to the manner in which the contract work is to be performed. The Engineer mentioned in this section refers to the project manager appointed by the Employer.

DESCRIPTION OF THE WORKS

Overview of the works

The Hartebeesthoek Radio Astronomy Observatory has begun procurement of a new radio telescope. This radio telescope measures 13.2 m in diameter and is currently being manufactured by the German company MT Mechatronics GmbH. The radio telescope is to be mounted directly on a concrete structure as indicated in the tower drawings. This civil works tender is for the site preparation, foundations and tower that need to be constructed. It can be summarised into the following categories:

1) Site compaction of a 70 x 45 m² area.
2) Rip, grade, and compact in situ of an existing 500m long dirt/gravel road.
3) Erection of a fence with two double-gates around the site.
4) The foundations for a site office
5) The foundations for a service pad.
6) The foundations for and construction of a concrete tower.
7) The gravelling and compaction of the remainder of the site.

Extent of the works

The scope of works for this project is outlined below (with reference to Figures 2 and 3 below). At the compulsory site briefing, additional information will be provided that will need to be used to successfully respond to this tender.

The items mentioned below are not listed chronologically. The contractor can schedule the activities as he sees fit, but for the foundations he needs to prioritise the works that item 5 “Foundations for and construction of a service pad” is completed first and at the same time item 4 “Foundations for a site office” can also be completed.
Figure 2: Site layout for the scope of work

Figure 3: Full view of the access road (item 2)
1 Site Compaction of a 70 x 45 m² area

The works for the site compaction comprise the following:

- Measure out the marked site and define the boundaries – to be approved by the Engineer before work proceeds.
- Ensure that the site has a slight (1%) slope down towards the West to assist water flow.
- The ground must be compacted to 93% MOD AASHTO maximum density. The contractor must review this requirement in order to assure support for a 150 ton crane with ground bearing pressure of at least 20 ton/m².
- Compaction tests must be specified by the contractor and performed.
- The slope around the boundary of the site must be assessed and stabilised if/where needed. The necessity of a drainage ditch will need to be discussed.

2 Rip, grade, and compact in situ of an existing 500m long dirt/gravel road

The works for the road comprise the following:

- Rip, grade, and compact to at least 93% MOD AASHTO maximum density a 500m long, 5m wide, existing dirt/gravel road.
- Earth drifts should be made where necessary to assist with water drainage. Location of the earth drifts to be approved by the Engineer.

3 Erection of a fence around the site with two double gates

The works for the fence comprise the following:

- A fence must be erected around the entire 70 x 45 m² site area.
- The fence must be a chain-link fence measuring at least 2.5 m high (measured from the ground). The fence must be embedded into the ground at a depth of at least 200 mm. The cavity where the fence is in should be filled with concrete so that there is a concrete barrier all around the bottom part of the fence measuring 100mm wide; 250mm deep (i.e. 50mm will be above ground).
- Fence posts must have an angled top and have at least three (3) lines of barbed wire installed. The length of the angled section should be at least 400 mm.
- The fence must have two double-gates. One to be located at the North-West corner; and one at the South-East corner. The contractor must specify the gates to be used and obtain approval from the engineer before proceeding with procurement and installation. The concrete barrier must also continue underneath the gate openings, but must be level with the ground on the outside and the gravel on the inside.

4 Foundations for a site office

The works for the foundations of the site office comprise the following:

- Construction of a concrete slab measuring 12 x 3 m² with a depth of 200 mm. The concrete slab must be 50 mm above the gravel layer. The concrete slab must be level to the horizontal plane.
- 15 MPa concrete can be used for the site office foundations. The concrete must have a smooth finish.
• The Employer will arrange that their site office be moved to the slab once the concrete has been cured and the contractor has approved the move. A third party will move the mobile site office under the control of the contractor.

5 Foundations for and construction of a service pad

<table>
<thead>
<tr>
<th>Title of drawing</th>
<th>Drawing number</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLBI Auxiliary Foundation</td>
<td>VLBI-C-DWG-1400-000</td>
</tr>
</tbody>
</table>

A 7m x 7m service pad is required for the radio telescope. The dish will be assembled on this pad and therefore it needs four tie-down points (as indicated in the drawing). It will also have to support the azimuth cabin (as indicated by the four support areas in the drawing). These areas must be visibly marked on the concrete as well as indicated on the final drawings.

The works for the service pad comprise the following:

• The detail design of the service pad based on the supplied drawing. This includes specifying the foundation dimensions, strength of the concrete, and reinforcement to be used. CAD drawings of the existing design will be released for use by the contractor at the compulsory site briefing after they have signed a non-disclosure agreement.

• The updated drawing must be submitted for approval to the Engineer before construction can commence.

• The construction of the service pad as detailed in the approved drawing – including the excavation for the foundation.

• The service pad must have a smooth finish.

• Test and ensure that the pad is horizontally level (< 2 mm/m to the horizontal plane) as required from the specifications.

• Tests and certifications, where applicable, for the concrete used and the tie-down rings that are used. Concrete samples (measuring at least 150 x 150 x 150 mm) must be cast for each concrete batch delivered and will be stored by the Employer for any future tests. These concrete samples must be marked and referenced to the drawings.

6 Foundations for and construction of a concrete tower

<table>
<thead>
<tr>
<th>Title of drawing</th>
<th>Drawing number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>VLBI-D-DWG-1100-000</td>
</tr>
<tr>
<td>Tower and Foundation with Servo Cabinets</td>
<td>VLBI-D-DWG-1000-000</td>
</tr>
<tr>
<td>Telescope Tower</td>
<td>VLBI-D-DWG-1200-000</td>
</tr>
<tr>
<td>Concrete Steel Structure</td>
<td>VLBI-D-DWG-1210-100</td>
</tr>
<tr>
<td>Staircase</td>
<td>VLBI-B-DWG-1220-000</td>
</tr>
<tr>
<td>General arrangement drawing</td>
<td>HRAO-004</td>
</tr>
</tbody>
</table>

The radio telescope is to be mounted on a concrete tower with foundations that are ideally anchored to bedrock. Core
drilling has been performed and the cores are currently at HartRAO – the geological report can be found on the HartRAO website\(^1\) under the tender name.

The works for the radio telescope tower comprise the following:

- Check if the existing soil investigation is sufficient to perform the engineering analysis and construction. Ideally the foundations need to be anchored to bedrock though the contractor’s civil engineer for the foundations will have to determine the feasibility hereof.

- The contractor shall provide a detailed concrete tower and foundation design including a general arrangement drawing which replaces the drawings mentioned above. The architecture drawings (VLBI-D-DWG-1100-000 and VLBI-D-DWG-1200-000) fix the general layout only. Dimensions indicated by (X) are fixed, whereas all other dimensions are free for optimisation and to be fixed by the contractor (e.g. wall thickness, floor thickness, foundation type, etc.). CAD drawings of the existing design will be released for use by the contractor at the compulsory site briefing after they have signed a non-disclosure agreement.

- The contractor shall perform a detailed FEM engineering analysis.

- The contractor shall provide and install an entrance door, a trap door to the first floor as well as a steel stair case including grids; all hoist hook points; and a full set of grid covers for the floor ducts. These items will need to be approved by the Engineer before they are procured and installed.

- A manhole must be provided and installed measuring 1 m in diameter; 1.5 m deep; with a cast iron lid; in close proximity to the cable duct entry point. Three 150 mm conduits must be provided connecting the pedestal cable trench with the manhole. Final placement to be confirmed prior to construction. The proposed manhole must be approved by the Engineer before it is procured and installed.

- The contractor shall provide and install a grounding system as per the requirements in the additional document provided at the compulsory site briefing.

- The contractor shall provide and install a lightning protection system as per the requirements in the additional document provided at the compulsory site briefing.

- Installation of an anchorage ring (Concrete Steel Structure drawing: VLBI-D-DWG-1210-100) supplied by the Employer. Test and ensure that the anchorage ring is horizontally level (< 0.1° to the horizontal plane) as required by the specifications. This test will be discussed in more detail with the representative from MT Mechatronics. The inspection and verification thereof will be performed by MT Mechatronics’ representative before concrete is cast.

- The entire tower, inside and outside, must have a smooth concrete finish.

- Industrial epoxy coating must be applied on the inside: grey for all floors; white for walls and ceilings.

- Complete construction of the telescope tower based on the approved drawings – including excavation for the foundation as well as the entrance pad and concrete base for the air conditioning unit as indicated on the

drawings; and adequate moisture protection and drainage around the foundations.

- As built drawings, result of tests, analysis and quality documentation must be provided.

- Concrete samples (measuring at least 150 x 150 x 150 mm) must be cast for each concrete batch delivered and will be stored by the Employer for any future tests. These concrete samples must be marked and referenced to the drawings.

- After the work has been completed, MT Mechatronics will assemble the radio telescope and connect it to the tower. At this stage, a representative civil engineer from the contractor must attend the telescope lift and verification tests (date to be confirmed).

- The external cladding that is mentioned in the documents to be released at the compulsory site briefing, and also indicated in the drawings, does not form part of this contract.

7 Gravelling and compacting

The works for the gravelling comprise the following:

- The remaining site area of ~3026 m² must be gravelled. Final area to be confirmed.

- The gravel layer must retain the slope of the compacted site (1% downwards toward the West) as specified in the site compaction specifications.

- The contractor and Employer must discuss the requirements of the gravel layer before construction starts but the preliminary requirements, in terms of pricing, is a 150 mm gravel layer which must be compacted to 93% MOD AASHTO maximum density. As the site will not see a lot of traffic, a 50 mm gravel layer might also be acceptable. The contractor must review this requirement in order to assure support for a 150 ton crane with ground bearing pressure of at least 20 ton/m². The contractor must also specify the size and type of the gravel to be used to satisfy the requirements.

- Before laying the gravel, the compacted area must receive herbicide treatment to prevent any weed/plant growth through the gravel.

- Regardless of the width of the gravel layer, it should be taken into account that, after compaction, it is level with the service pad; level with the manhole; and approximately 50 mm below the level of the entrance pad of the tower. The gravel must be level with the fence’s concrete barrier.

- As an option, include pricing for the gravelling of ~350 m of the existing dirt road; 5 m wide; 150 mm gravel layer (including compaction).

Location of the works

The site of the works is approximately 30 km north of the town of Krugersdorp in Gauteng. This is shown in the locality plan HRAO-001 and on the site location plan HRAO-002.

Temporary works

The contractor shall be required to erect signage and safety barricades to direct traffic away from the area of the works. If the contractor proposes to erect the fence specified in the scope of work first, this fence can be used, but
signage would still be required.

The contractor shall be responsible for designing, supplying and erecting all propping and scaffolding that may be required to execute the works.

**ENGINEERING**

**Design services and activity matrix**

The initial designs of the works have been prepared by the radio telescope manufacturer MT Mechatronics. The contractor is required to update their drawings and submit it for approval before construction works can commence.

The contractor shall design any temporary works that may be required.

**Drawings and documentation**

The PDF versions of the full drawings and documentation with regards to the scope of work can be found under the tender name on the HartRAO website\(^2\). Note that additional information with regards to the load cases will be made available during the compulsory site briefing. In addition, the CAD files of these drawings will also be released to the contractor after they sign a non-disclosure agreement at the compulsory site briefing.

<table>
<thead>
<tr>
<th>Title of drawing/document</th>
<th>Drawing number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locality plan</td>
<td>HRAO-001</td>
</tr>
<tr>
<td>Site location plan</td>
<td>HRAO-002</td>
</tr>
<tr>
<td>Geological report</td>
<td>HRAO-003</td>
</tr>
<tr>
<td>General arrangement drawing</td>
<td>HRAO-004</td>
</tr>
<tr>
<td>HartRAO’s Health and Safety Specifications</td>
<td>HRAO-005</td>
</tr>
<tr>
<td>VLBI Auxiliary Foundation</td>
<td>VLBI-C-DWG-1400-000</td>
</tr>
<tr>
<td>Concrete Steel Structure</td>
<td>VLBI-D-DWG-1210-100</td>
</tr>
<tr>
<td>Staircase</td>
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</tr>
<tr>
<td>Tower and Foundation with Servo Cabinets</td>
<td>VLBI-D-DWG-1000-000</td>
</tr>
<tr>
<td>Telescope Tower</td>
<td>VLBI-D-DWG-1200-000</td>
</tr>
</tbody>
</table>

These drawings may be amended, deleted, or added to as required during the construction of the works. The Employer will not supply the contractor with printed versions of the drawings. The contractor has to print these drawings at his own cost.

**PROCUREMENT**

**Subcontracting of the Works**

The contractor may in terms of the General Conditions of Contract 2010 Clause 4.4., subcontract portions of the works. The contractor may not subcontract the whole of the works. The contractor cannot subcontract more than a

total of 25% to other contractors that do not have the same or higher B-BBEE status as the supplier’s B-BBEE status, unless the contractors are Emerging Micro Enterprises that have the capacity and capability to do the job.

CONSTRUCTION

Works Specifications

The Standardised Specifications for Works of Civil Engineering Construction, SANS 1200, shall be applicable to this contract. In particular, but not limited to, the following sections of said document shall apply: SANS 1200A (General); SANS 1200 AB (Engineer’s Office); SANS 1200 C (Site Clearance); SANS 1200 G (Concrete Structural); SANS 1200 H (Structural Steelwork); SANS 1200 HA (Structural Steelwork – Sundry Items); SANS 1200 HC (Corrosion protection of Structural Steelwork).

International standards that apply are: EUROCODE 2 (EC2); IEC 62305-1 to -4 (Lightning protection); DIN 4149 (Seismic acceleration)

The Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the Construction Regulations of 2014 are applicable to this contract.

Plant and Materials

The contractor shall supply all plant and procure all materials required for the execution of the works. The requirement for the contract is that as far as possible materials should be sourced locally. Only in the event that it can be shown that a locally mined or manufactured material is not available will permission be granted for the use of an imported material.

The contractor shall provide proof that all materials obtained comply with the specifications where applicable. This proof can be in the form of markings on the materials and products or certificates from the supplier verifying that the materials adhere to the relevant South African National Standard (SANS) codes.

Batch certificates are required for all concrete delivered. If concrete is to be made on site it must be in the assigned area – to be discussed with the Engineer. The contractor will ensure that the concrete is only mixed in the specified area and take precautions to keep the concrete contained (e.g. by making a temporary brick wall). After concrete mixing is complete the contractor must ensure that the area is restored to its previous state (i.e. before concrete has been mixed).

Construction Equipment

The contractor shall supply all construction equipment for the execution of the works.

Existing Services

The contractor’s attention is drawn to the existence of electrical and telecommunication cables as well as water reticulation and sewer pipes in the area of the site. The contractor will be guided by the Employer as to where these services are positioned but it is the contractor’s responsibility to locate and protect these services from damage.

Site Establishment

The Employer shall provide at no cost to the contractor water for use in the construction of the works. The contractor is advised that the water on the site is from a borehole and though there is a holding tank, water restrictions may apply.
to the amount of water used within a day. This should not have any effect on general works.

However if large batches of concrete are to be made on site additional water may need to be carted in. This additional water and cartage thereof will be for the account of the contractor. The contractor shall make the necessary connection to the water distribution network at a point as indicated to him by the employer. The cost of making this connection, including any materials required, shall be for the account of the contractor.

The Employer shall provide at no cost to the contractor electrical power for use in the construction of the works. The contractor shall make the necessary connection to the electricity distribution network at a point as indicated to him by the Employer. The connection and all temporary electrical connections shall be made by a certified electrician who shall issue a compliance certificate for the installation. The cost of making this connection, including any materials required, shall be for the account of the contractor.

The contractor shall make his own arrangements for the provision of telecommunications services required. Be advised that it is a radio silent area and approval must be obtained from the Employer before using any radio frequency equipment (e.g. handheld radios). The use of Wi-Fi is not allowed.

It shall be a requirement of this contract that the site is at all times kept clean and tidy. The contractor shall on a daily basis collect all waste material and dispose of it off-site.

The contractor shall, for use by his employees, provide chemical toilets throughout the site. The contractor shall ensure that his employees make use of these facilities and that they are maintained for the duration of the works.

The contractor’s staff and labour shall wear clothing that clearly identifies them as being in the employment of the contractor. Any person not dressed accordingly may be removed from the site and will only be permitted to return once dressed with the requisite clothing. Prior to the deployment of any staff and labour on the site the contractor shall submit the design/example of the proposed clothing to the engineer for approval.

The contractor shall not be permitted to place any advertisement of any form whatsoever that makes reference to the works unless written permission has been granted by the employer.

There is enough space available in and around the site to serve as the contractor’s site camp. The site camp may be in the form of a shed or container and will act as storage for all supplies required by the contractor.

Site Usage

Neither the contractor nor any of his subcontractors shall be permitted to use the site camp for overnight accommodation purposes.

MANAGEMENT

Management of the Works

Programme

Within ten (10) working days of being given possession of the site the Contractor shall submit to the engineer (appointed by the Employer) for his review and acceptance a programme for the whole of the works showing the order in which the contractor proposes to execute the works. The baseline programme shall be in the form of a Gantt (bar) chart and shall show in sufficient detail all the work activities and the sequencing of the work and have regard to the contract completion dates, any other milestones and any restraints set out in the contract. It shall also clearly indicate the critical path activities and the “information required” dates.
The contractor’s programme must allow additional time for any cold/warm weather concreting procedures necessary to be undertaken in order to protect the concrete and ensure the required strength gains are achieved.

This programme becomes the baseline programme upon acceptance by the engineer. Thereafter, if the actual progress does not conform to the baseline programme, the Engineer is entitled to require the Contractor to submit a revised programme showing the order of activities necessary to ensure completion of the works by the contract completion dates.

The Contractor shall supply the engineer with an electronic copy of each programme, together with a printout bar chart or tabular report in a pre-agreed format.

Within ten (10) working days of the Contractor submitting a programme complete with all the information required by this clause to the engineer for acceptance, the engineer will accept the programme or state reasons for not accepting the programme. If such reasons are given the Contractor shall take account of the reasons and resubmit the programme within five (5) working days.

If the Engineer fails to act the programme is deemed to be rejected.

The contractor shall present to the engineer every fortnight the programme on which has been marked the progress with the works.

In the event that the contractor falls behind on the programme the engineer will call for a programme briefing session during which the execution of the works will be analysed in detail and guidance will be given in the preparation of a revised programme.

The costs of the engineer for the holding of the briefing sessions will be for the contractor’s account.

Notwithstanding any assistance the engineer may provide in preparing the programme, the responsibility in preparing the programme and in executing the work in accordance with the programme remains with the contractor.

Methods and Procedures

The contractor shall prepare method statements for the execution of the works. The method statements shall be presented to the engineer for written acceptance prior to the commencement of the works.

Quality Plans and Controls

The contractor shall prepare a quality management plan. The quality management plan shall be presented to the engineer for written acceptance prior to the commencement of the works.

The results of acceptance and quality control testing shall be presented to the engineer within twenty four (24) hours of the results becoming available.

Concrete samples (measuring at least 150 x 150 x 150 mm) must be cast for each concrete batch delivered and will be stored by the Employer for any future tests. These concrete samples must be marked and referenced to the drawings.

The onus rests on the contractor to produce work which conforms in quality and accuracy of detail to the requirements of the specifications and drawings and the contractor must at his own expense institute a quality control system to the satisfaction of the engineer and provide experienced engineers, foremen, surveyors, materials technicians, technicians, and other technical staff, together with all transport, instruments, and equipment to ensure adequate supervision and positive control of the works at all times.

The cost of all supervision and process control, including testing in accordance with the specifications, carried out by the contractor shall be deemed to be included in the rates tendered for the relevant items of work.

Environment

The contractor shall at all times comply with any environmental control instructions or management plans for the area of the works. Under no circumstances will indiscriminate damage to the landscapes in the area of the works be permitted.
Accommodation of Traffic

The contractor shall be required to erect signage and safety barricades to direct traffic away from the area of the works. If the contractor proposes to erect the fence specified in the scope of work first, this fence can be used, but signage would still be required.

Other Contractors on Site

It is not anticipated that other contractors directly employed by the employer will interfere with the progress of the works.

Management Meetings

Management meetings shall be held on site every fortnight and shall be attended by at least the engineer and site agent.

Ad-hoc meetings shall be held on site as needed and shall be attended by at least the engineer and the site agent.

Daily Records

The contractor shall keep daily records of plant and labour on site. These records shall be presented daily to the engineer for approval.

There shall be no dayworks carried out during this contract.

Bonds and Guarantees

Any bonds, guarantees, or sureties required in terms of the contract shall be lodged with the engineer who will forward them to the employer for safekeeping.

Payment Certificates

Claims for payment certificates shall be in the form of an activity schedule on which is indicated all the payment items, the tendered rates and quantities, the total quantity of work claimed for each item, and the quantity of work claimed for in the particular month. Where applicable, these quantities must be the re-measured quantity of the work completed. Invoices are submitted to HartRAO representatives who validate that delivery of goods/works/services has been made and at the required quality and on time. No invoices for outstanding deliverables or for any unproductive or duplicated time spent by the service provider are validated for payment.

Claims for payment shall be submitted before the 24th of every month. If the 24th falls on a weekend, then claims are to be submitted two working days before the 24th. HartRAO undertakes to pay validated invoices within 30 days from the date of invoice. Invoices will only be validated by the validation certificate signed by the HartRAO representative and the contractor.

Health and Safety

Health and Safety Requirements and Procedures

The contractor shall be responsible for compliance with all the requirements of the Occupational Health and Safety Act (Act 85 of 1993) and Construction Regulations 2014 as published in terms of the Act. Prior to the commencement with any work on site the contractor shall present to the employer or his designated representative the safety file for approval and signature.

Prior to commencement of work, as per Clause 7(1)(a) of the Construction Regulations 2014, the contractor must provide and demonstrate to the Employer a suitable, sufficiently documented and coherent site specific health and safety plan, based on the Employer’s Health and Safety Specifications (document HRAO-005 available under the tender name on the HartRAO website3).
The contractor shall take such steps as are necessary to ensure the safety of the employer, his staff, and the general public. In particular the contractor shall erect temporary barricades around the perimeter of areas where work is being carried out and where a fence is not already usable. The proposed designs for these barricades shall be presented to the engineer for approval prior to their erection.

The contractor shall on a daily basis inspect the barricades and carry out any repairs as are necessary to return the barricades to their original condition.

Around general work areas the barricades are to consist of a rope or similar strung between supports and with signs attached indicating that people must keep clear as construction work is in progress.

Signage shall at the minimum be in English.
PART C4: SITE INFORMATION

C4.1: SITE INFORMATION

- GENERAL
- SITE LOCATION
- ACCESS TO THE SITE, RESTRICTIONS AND SECURITY
- CURRENT SITE STATUS
- EXISTING SERVICES, SERVITUDES AND WAY LEAVES
C4.1: SITE INFORMATION

GENERAL

This section describes the site at the time of tender to enable the Tenderer to price his tender and to decide upon his method of working, programming and risks. It will also discuss the work that will be undertaken and is expected to be completed prior to the award of this contract.

SITE LOCATION

HartRAO is located on Farm 502JQ, Broederstroom road, Hartebeesthoek, 1739, just north of Krugersdorp in the Gauteng province – as indicated in Figure 4 below.

![Figure 4: Location of HartRAO](image)

The site is located approximately 300 metres from the entrance gate of the HartRAO premises and will be shown during the compulsory site briefing.

ACCESS TO THE SITE, RESTRICTIONS AND SECURITY

Access to HartRAO is via tar roads. The access to the site itself is via approximately 300 metres of secondary, dirt/gravel road (which forms part of the road to be ripped, graded and compacted), see Figure 5 below.

As mentioned in the scope of work, part of the work to be done is to fence in the site area. The two gates will be locked with one set of keys remaining with the Contractor for the duration of the Contract, and the other set of keys remaining with the Employer. During construction no unauthorised personnel are allowed – permission to be gained from the Employer or Contractor. The site office that will be located on site will be occupied by the Employer’s project...
manager and is not for use by the Contractor.

The Contractor shall be responsible for the security of his personnel, materials, and construction plant on and around the site of the works and for the security of his camp, and the Employer in this regard will consider no claims.

Figure 5: Road to site

CURRENT SITE STATUS

As at the time of this tender, the site has mostly been cleared, but there is no infrastructure yet. It is planned to put in a water connection and electricity connection point and do some trenching in the time leading up to the Commencement Date. Further trenching may need to be scheduled during the construction phase to connect power to the site office. This is still to be confirmed and will be discussed with the contractor to fit into the schedule. This trenching will be done by the Employer.

The Contractor will be restricted to the allocated site and access routes in order not to interfere with the health, safety and operations of persons not involved with the construction. The work space, lay down area and restrictions will be discussed at the compulsory site inspection.

Before works commence, it is envisaged that the site will have electricity and water available on site.

The contractor will have to supply his own ablution facilities.

EXISTING SERVICES, SERVITUDES AND WAY LEAVES

Approximate positions of existing underground services are indicated in Figure 6 below. Power lines are in red; water and network lines in blue.
Figure 6: Indication of existing services

This is just a rough indication of the services and will be shown before construction works begin. The services must be located by hand and any deviation of the positions of such services must be reported to the Engineer immediately. Should the contractor find underground services, which are not as shown before construction works begin, the Engineer must be notified immediately. In both cases the Engineer shall assess the situation and instruct the Contractor on an appropriate course of action to be taken.

Should the contractor damage an existing service he shall immediately contact the Engineer who will investigate the matter and determine liability for the damage.

No permits or way leaves will be required by the contractor. The Employer will administer this as and when required. The Contractor is responsible for his own signage and to cordon off as necessary. This shall be negotiated and agreed with the Employer after the acceptance of the tender.