



TENDER DESCRIPTION:

APPOINTMENT OF A MULTIDISCIPLINARY TEAM (LED BY AN ARCHITECTURAL CONSULTANT) TO PROVIDE PROFESSIONAL SERVICES, FOR THE DESIGN AND CONSTRUCTION OF THE SKA SCIENCE OPERATIONS CENTRE (SOC); SKA SCIENCE PROCESSING CENTRE (SPC), SKA SCIENCE REGIONAL CENTRE (SRC) AND SARAO HQ, WHICH FORM PART THE NEW CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN

BID NO: NRF/SARAO SHAO/43/2023-24

Closing date: Tuesday, 16 January 2024

NAME OF BIDDER: _____

CSD NUMBER: _____

BIDDER'S REPRESENTATIVE CONTACT INFORMATION:

NAME OF BIDDER:

CONTACT PERSON:

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

CELL PHONE NUMBER.....

E MAIL ADDRESS:

SOUTH AFRICAN RADIO ASTRONOMY OBSERVATORY

BID NO: NRF/SARAO SHAO/43/2023-24

APPOINTMENT OF A MULTIDISCIPLINARY TEAM (LED BY AN ARCHITECTURAL CONSULTANT) TO PROVIDE PROFESSIONAL SERVICES, FOR THE DESIGN AND CONSTRUCTION OF THE SKA SCIENCE OPERATIONS CENTRE (SOC); SKA SCIENCE PROCESSING CENTRE (SPC), SKA SCIENCE REGIONAL CENTRE (SRC) AND SARAO HQ, WHICH FORM PART OF THE NEW CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN

Contents		
Number	Heading	Page
The Tender		
T1: Tendering Procedures		
T1.1	Tender Notice and Invitation to Tender	6
T1.2	Tender Data	9
T2: Returnable Documents		
T2.1	Schedule of Returnable Documents	17
T2.2	Returnable Documents	20
The Contract		
D1: Scope of Works		
D1.1	Background to the National Research Foundation and the South African Radio Astronomy Observatory (SARAO)	69
D1.2	Scope of Works	70
D2: Agreements and Contract Data		
D2.1	Form of Offer and Acceptance	84
D2.2	Contract Data	91
D3: Pricing Data		
D3.1	Pricing Instructions	102
D3.2	Pricing Schedule	103
D3.3	Personnel Rates for Variations	108
Annexures:		101
Annexure A	The Statement of Work document [F2700-0000-004 CTHIS PSC Statement of Work Issue 01]	110
Annexure B	High Level CTHIS requirements [F270-0000-000 CTHIS – Req Spec Issue 01_Final]	
Annexure C	High Level CTOC requirements [F2700-0002-000 CTOC Requirements Specifications]	
Annexure D	High Level HPCB requirement [F2700-0003-00 Requirements Specification Rev 01]	
Annexure E	CTHIS Development Plan [F2700-0000-003 CTHIS Development Plan Issue 01]	
Annexure F	CTOC Compliance and Verification Matrix [F2700-0002-001 CTOC Compliance Matrix Issue 01]	
Annexure G	F2700-0003-001 HPCB Compliance Matrix Issue 01	

Annexure H	NRF/iThemba LABS Health and Safety Specification & OHS 37(2) Agreement [SHE Specification and 37.2 Agreement Tender Doc version]	
Annexure I	SAPOA Grading Definitions	
Annexure J	iThemba LABS Site Survey_SARAO PROJECT R1	

T1: Tendering Procedures

Number	Heading	Pages
T1.1	Tender Notice and Invitation to Tender	6
T1.1.1	Locality Plan: Site Visit	7
T1.2	Tender Data	9
T1.2.1	Standard Conditions of Tender	9
T1.2.2	Variations to The Standard Conditions of Tender	9
T1.2.3	Additional Conditions of Tender	15

T1.1 TENDER NOTICE AND INVITATION TO TENDER

SOUTH AFRICAN RADIO ASTRONOMY OBSERVATORY

BID NO: NRF/SARAO SHAO/43/2023-24

BID NOTICE

BID INVITATION

Suitably experienced and qualified Contractors are invited to respond to this bid invitation for the South African Radio Astronomy Observatory (SARAO), a business unit of the National Research Foundation (NRF) -

Bid Number	Bid Description	Bid Closing Date and Time
NRF / SARAO SHAO/43/2023-24	APPOINTMENT OF A MULTIDISCIPLINARY TEAM (LED BY AN ARCHITECTURAL CONSULTANT) TO PROVIDE PROFESSIONAL SERVICES, FOR THE DESIGN AND CONSTRUCTION OF THE SKA SCIENCE OPERATIONS CENTRE (SOC); SKA SCIENCE PROCESSING CENTRE (SPC), SKA SCIENCE REGIONAL CENTRE (SRC) AND SARAO HQ, WHICH FORM PART OF THE NEW CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN	Tuesday, 16 January 2024 at 12.00PM

COMPULSORY BID CLARIFICATION MEETING AND SITE VISIT

A Compulsory Bid Clarification Meeting and Site Visit will take place as follows –

Date: Wednesday, 29 November 2023

Time: 10.00AM

Venue: iThemba LABS Precinct (located on the Old Faure Road, which runs parallel to the N2, between the M32 and R310, in Cape Town). GPS coordinates: Latitude: 34°1'27.96"S; Longitude: 18°43'1.32"E

After registering, bidders will receive a signed confirmation of attendance certificate, to be returned with their Bid.

The site visit will be held directly after the clarification meeting.

Persons attending the clarification meeting must be duly authorised to represent the bidder. Any bid submitted by a bidder not represented at the clarification meeting will be rejected.

PREFERENTIAL PROCUREMENT SYSTEM:

The 90/10 price and preference points system, as prescribed by the Preferential Procurement Regulations, 2022 issued under the Preferential Procurement Policy Framework Act, (Act No 5 of 2000) (PPPFA) will be applied to evaluate this bid.

EVALUATION CRITERIA

Functionality/Eligibility will be evaluated in two stages – Stage 2.1 and Stage 2.2. Bidders must score a minimum of 75% for each stage, and an overall minimum score of 75% for functionality. Failure to achieve these minimum scores will result in a bid being held to be non-responsive and therefore disqualified

TENDER PUBLICATION:

The tender document will be available from Wednesday, 15 November 2023, and may be accessed on the following websites: www.sarao.ac.za/tenders and www.etenders.gov.za

TENDER SUBMISSION:

Electronic bid submissions must be sent to tenders@sarao.ac.za

Tenders must be submitted in two separate electronic folders, one with the compliance and technical response, and the second with the financial response. Technical submissions should ideally be in searchable PDF format.

Folders must be titled with the bidder's company name and folder title. Attachments are limited to 25 MB per email.

BID CONDITIONS:

SARAO does not bind itself to accept the lowest bid or any tender that qualifies against all criteria for entrance to the PPPFA price competition; and reserves the right to accept any tender or portion of a tender.

BID ENQUIRIES:

No telephonic enquiries relating to this tender will be permitted. All enquiries regarding this tender must be in writing and directed to:

Technical Queries:

Mr. Thulani Fihlani,

Project Manager

Email: tfihlani@sarao.ac.za

Procedural Queries:

Ms. Anwuli Okecha,

SCM Specialist

Email: anwuli@sarao.ac.za

T1.1.1 LOCALITY PLAN

The site is located within the iThemba LABS NRF facility precinct on Old Faure Road, City of Cape Town municipal region near the suburb of Blue Downs and is accessible via Old Faure Road to the North, the N2 to the South and R310 to the East.

GPS Coordinates: Latitude: 34°1'27.96"S; Longitude: 18°43'1.32"E



T1.2 TENDER DATA

T1.2.1 Standard Conditions of Tender

The conditions of tender are the Standard Conditions of Tender as contained in of Board Notice 423 of 2019 in Government Gazette No 42622 of 8 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (see www.cidb.org.za).

T1.2.2 Variations to the Standard Conditions of Tender

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The specific Tender Data shall take precedence in the interpretation of any ambiguity or inconsistency between it and the CIDB standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

The following variations, amendments and additions to the Standard Conditions of Tender shall apply to this tender.

Clause Variation, Amendment or Addition

No.

C.1 General

C.1.1 Actions

*Add the following to the end of **Clause C.1.1.1**:*

The Employer (interchangeably, "the Client") is the legal entity National Research Foundation (NRF) managed by its business unit South African Radio Astronomy Observatory (SARAO) represented by Thulani Fihlani.

C.1.2 Tender Documents

*Add the following to the end of **Clause C.1.2**:*

"The Tender Document for this Contract comprises the following:

Not issued to Tenderers, but available from the S.A. Federation of Civil Engineering Contractors, the S.A. Institution of Civil Engineering, the S.A. Bureau of Standards, the Government printers, the Construction Industry Development Board, and the Employer, as applicable:

1. CIDB "Standard for Uniformity in Construction Procurement Annex C, Standard Conditions of Tender", Board Notice 423 of 2019 of Government Gazette No. 42622 of 9 August 2019.
2. The General Conditions of Contract for this project is the Fifth Edition 2017 of FIDIC (International Federation of Consulting Engineers) **White Book, Client/Consultant of Model Services Agreement**.
3. The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations, 2022. Published in Government Gazette 47452 on 4 November 2022.
4. The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).

C.2 Bidder's Obligations

C.2.1 Eligibility

*Add the following to the end of **Clause C.2.1.1**:*

A. Attendance of Compulsory Bid Clarification Meeting

Only Bidders who have attended the compulsory bid clarification meeting and site visit, and have form A2 "Clarification Meeting Certificate and Proof of Attendance" signed by the Employer's agent or his

representative will be eligible to submit a tender offer.

B. Bidder's Tax Clearance Certificate

Bidders must be resident in South Africa and therefore registered with the South African Revenue Services (SARS). Bidders must submit/append documentary evidence/proof in the form of a CSD registration number and/or valid Tax Clearance PIN Number issued by SARS and/or valid tax certificate printed from the SARS system.

At the point of award of the tender, the recommended bidder must be in good standing with SARS, failing which the bidder must be in good standing within such extended period as may be granted at the discretion of SARAO, failing which the bidder will be disqualified from further consideration.

Each party to a Consortium/Joint Venture shall submit a separate CSD registration number and/or Tax Clearance PIN Number.

C. Further Compulsory Documents to be submitted with Tender

In addition to all the documents relating to A and B above and all other documents requested in Section T2.2 (Returnable Documents), it is further required that copies of the following certificates be provided (they must be current and valid):

1. Letter of Good Standing from Compensation Commissioner (COID) or Compensation Insurer;
2. Letter of Good Standing from Department of Labour (UIF).

The above shall be provided for each JV Partner in the case of Joint Ventures.

D. Minimum Eligibility Score to be Achieved

Any tender which scores less than the minimum threshold value stated in the functionality evaluation criteria, will be held to be non-responsive and disqualified.

C.2.7 Clarification Meeting

*Add the following to the end of **Clause C.2.7**:*

"The arrangements for a compulsory bid clarification meeting and site visit are as stated in the Tender Notice and Invitation to Tender.

Bidders should be represented by a person or persons who are suitably qualified and experienced to comprehend the aspects of the work involved."

C.2.13 Submitting a Tender Offer

C.2.13.2 Add the following to the end of **Clause C.2.13.2**:

"Bid submissions must be in electronic format.

Bid submissions shall comprise two separate electronic folders or subfolders as follows:

- **"Technical" (T¹) submission** (Technical submissions should preferably be in searchable PDF format), and
- **"Financial" (F²) submission** (Folders must be titled with the bidder's company name and folder title. Attachments are limited to 25 MB per email)

Failure to comply with these requirements may result in the tender being deemed non-responsive."

C.2.13.3 *Delete the contents of Clause C.2.13.3 and replace with the following:*

"Only electronic bid submissions will be accepted. Electronic bid submissions must be sent to tenders@sarao.ac.za."

C.2.13.4 *Add the following after the first sentence of Clause C.2.13.4:*

"The tender shall be signed by a person duly authorised to do so."

C.2.13.5 *Delete the contents of **Clause C.2.13.5**.*

C.2.13.6 *Delete the contents of **Clause C.2.13.6** and replace with the following:*

“A two-envelope procedure as described in **Clause C.3.5** will be followed.

Bids must be submitted in two separate electronic folders, one with the Technical response (T1), and the second with the Financial response (F2). Each main folder may have sub-folders, and if this is the case, each sub-folder must be clearly indicated as such.”

C.2.13.7 *Delete the contents of **Clause C.2.13.7**.*

C.2.13.8 *Substitute the contents of **Clause C.2.13.8** with the following:*

“Accept that the employer will not assume any responsibility for any technical difficulties which might affect its bid submission being received on time.”

C.2.13.9 *Substitute the contents of **Clause C.2.13.9** with the following:*

“Only tender offers submitted in electronic format to tenders@sarao.ac.za will be accepted by the Employer.”

C.2.15 Closing Time

C.2.15.1 *Add the following to the end of **Clause C.2.15.1**:*

“Ensure that the employer receives the tender offer via email submitted to the email address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of the sent email shall not be accepted as proof of delivery. The tenderer is to ensure that an automatic delivery notice is received via return email as proof of submission to the employer. The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.”

C.2.16 Tender Offer Validity

C.2.16.1 *Add the following to the end of **Clause C.2.16.1**:*

“The tender offer validity period is 120 days.”

C.2.16.2 *Add the following to the end of **Clause C.2.16.2**:*

“The maximum extension on the tender offer validity period is 120 days.”

C.2.17 Clarification of Tender Offer after Submission

*Add the following to the end of **Clause C.2.17**:*

“A tender may be rejected as non-responsive if the Bidder fails to provide any clarification requested by the Employer within such time as is granted by the Employer to provide such clarification. A tender may be rejected if the unit rates or lump sums for some of the items in the bills of quantities are, in the opinion of the Employer, unreasonable, and the Bidder fails, within such time as is granted by the Employer, to justify any specific rates or lump sums (i.e. to provide a financial breakdown of how such rates or sums were obtained) or to adjust the unit rates or lump sums for such items while retaining the total of the prices unchanged.”

C.3 The Employer’s Undertakings

C.3.1 Respond to Requests from the Bidder

C.3.1.1 *Substitute the contents of **Clause C.3.1.1** with the following:*

“The Employer will respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and circulate responses to all bidders who attended the compulsory tender briefing meeting.”

C.3.5 Two-envelope System

C.3.5.1 *Substitute the contents of **Clause C.3.5.1** with the following:*

“Where it is stated in the Tender Data that a two-envelope process is to be followed, open only the technical proposal of valid bids for evaluation by the Employer’s evaluation committee. Technical proposals will not be opened in the presence of bidders’ representatives, however a list of bids received on the closing date will be published on the Employer’s website within 7 days of the tender closing date.”

C.3.5.2 *Delete the contents of **Clause C.3.5.2** and replace with the following:*

“Evaluate functionality of the technical proposals offered by bidders. Only those financial proposals of bidders who score the minimum number of functionality points or higher will be opened.”

C.3.7 **Grounds for rejection and disqualification**

*Add the following to the end of **Clause C.3.7**:*

“Bidders will be disqualified if -

- (a) They do not meet the stipulated functionality threshold requirements.
- (b) There is no evidence that they were represented at the compulsory bid clarification meeting and site visit.
- (c) Any of the Bidder’s directors or shareholders are listed on the National Treasury Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004, as a person prohibited from doing business in the public sector.
- (d) If, from information given in the completed Compulsory Enterprise Questionnaire or SBD forms, the Employer considers that there is a potential conflict of interest concerning the bidder which may potentially compromise the tender process.
- (e) They have been restricted from doing business with the Employer.
- (f) In a two-envelope system, the bidder fails to submit both a technical proposal and a financial proposal.

C.3.8 **Test for Responsiveness**

C.3.8.2 *Add the following to the end of **Clause C.3.8.2**:*

“Tenders will also be considered non-responsive and/or disqualified if:

- (a) Subject to clause C.3.11.1 below, the Tender offer does not meet any one of the eligibility criteria indicated as mandatory in Part T2.
- (b) The Bidder has not fully and correctly completed the Offer portion of D2.1 Form of Offer and Acceptance i.e. the price has not been completed in words and numbers, the Bidder’s details are not completed fully and correctly, and the Bidder has failed to sign the Offer portion of D2.1.
- (c) The Bidder fails to respond, within such time frame granted by the Employer, to any written request for clarification, and such failure renders it impossible for the Employer to clarify any ambiguities in the bid submission, and therefore renders it impossible to evaluate the bid submission any further.
- (d) There are any other material deficiencies in the bid submission which cannot be cured by clarification.

C.3.11 **Evaluation of Tender Offers**

C.3.11.1 **General**

*Add the following clauses after **Clause C.3.11.1**:*

C.3.11.2 **The Evaluation Method**

Bids will be evaluated in a three-stage process, as follows –

STAGE 1: Compliance with administrative requirements in Part T2 (namely, completion of Schedules A1-A7, the Standard Bidding Documents, and submission of the returnable documents in Schedules B1-B4).

In this stage, discretion may be applied to allow bidders to complete and/or sign returnable schedules not completed and/or signed in the first instance or to submit returnable documents not submitted in the first instance, provided that such returnable schedules or documents are of a purely administrative nature and

do not pertain to the substance of the bid such as to affect the competitive position of bidders, by giving one or more bidders a second and unfair opportunity to augment the quality (substantive) aspects of their bid. Only compliant bids will proceed to Stage 2.

STAGE 2: Bids will be evaluated on the eligibility criteria summarised in Clause C.3.11.2.1. This Stage will consist of two sub-stages, namely Stage 2.1 and Stage 2.2. Only bids which –

- (a) meet the minimum score of 135 points (75%) out of a possible 180 points in Stage 2.1 Capability & Capacity; and
- (b) meet the minimum score of 75 points (75%) out of a possible 100 points in Stage 2.2, Experience & Planning

will be evaluated further in Stage 3.

STAGE 3: Bids will be scored on the 90/10 price and preference points system.

The lowest priced bid will not necessarily be accepted and the Employer reserves the right to accept the whole or part of any tender, or not to consider any tender at all.

The Employer reserves the right to conduct due diligence on shortlisted bidders' ability to undertake the project."

SARAO reserves the right to reject overpriced or under-priced bids outside the identified price range for the bid.

C.3.11.2.1 Score Functionality

The Functionality/Eligibility sub-criteria and maximum score of each of the sub-criteria are listed in Schedule B5-B13:

Stage 2.1 - Capability & Capacity

Functionality Criteria	Maximum Points (W2)	Schedule
Capability – Qualifications, Experience and Professional Registration of Design and Construction Management Teams Project Organisational Chart for Key Design and Construction Personnel	180	Schedules B5-B9
Total	180	

Note: Bidders must achieve a minimum of 75%, or 135 points out of 180 in Stage 2.1 to qualify to Stage 2.2

Stage 2.2 - Experience & Planning

Functionality Sub-criteria	Maximum Points (W2)	Schedule
Previous Experience and Track Record	40	Schedule B10
Method Statement	40	Schedule B11
Project Execution Plan	10	Schedule B12
Quality management System	10	Schedule B13
Total	100	

Bidders must achieve a minimum of 75% or 75 points out of 100 points during this stage to qualify to Stage 3.

STAGE 3: Bids will be scored on the 90/10 price and preference points system

The total number of tender evaluation points for functionality will be the sum of the points scored for each of the sub-criteria. The points for each sub-criterion will be calculated using the following equation:

$$NQ = \frac{S_0}{M} \times W_2$$

Where:

NQ = Bidder's functionality points (per sub-criteria)

W2 = the maximum possible number of tender evaluation points awarded for the functionality as stated in the tender data

S0 = the score for functionality allocated to the submission under consideration

M = the maximum possible score for functionality in respect of a submission

Functionality will be scored by not less than three evaluators. Each evaluator will assess each bid on the mandatory functionality criteria. With regard to the scored functionality criteria, the scores of all evaluators will be totalled and averaged to obtain the final score for Functionality.

Bidders must score a minimum of 75% in Stage 2.1 and 2.2 respectively, as well as an overall minimum score of 75% for functionality. Failure to achieve these minimum scores will result in a bid being held to be non-responsive and therefore disqualified.

B-BBEE status level of contributor	Number of points
1	10
2	9
3	6
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

C.3.17 Provide Copies of the Contracts

Add the following to the end of **Clause C.3.17**:

“The number of paper copies of the signed contract to be provided by the Employer is ONE.”

T1.2.3 Additional Conditions of Tender

The additional conditions of tender are:

C.4.1 Compliance with Occupational Health and Safety Act 1993 and Construction Regulations (as amended 2014)

Bidders are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the latest amended Construction Regulations (2014) issued in terms of Section 43 of the Act. Bidders are not required to submit a Health and Safety plan. However, The Bidder shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

C.4.2 Claims Arising after Submission of Tender

No claim whatsoever as to the true intent and meaning of anything contained in the Conditions of Contract, Scope of Work and Pricing Data, will be accepted by the Employer after the submission of any tender and the Bidder shall be deemed to have:

- (1) Read and fully understand the Conditions of Contract.
- (2) Read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- (3) Visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials and plant to and from the site and made the necessary provisions for any additional costs involved thereby.
- (4) Requested the Employer to make clear the actual requirements of anything contained in this bid document, the exact meaning or interpretation of which is not clearly intelligible to the Bidder.

C.4.3 Imbalance in Tendered Rates

In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high or not in proper balance with other rates or lump sums, the Bidder may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the Bidder to amend these rates and lump sums along the lines indicated by it.

The Bidder will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the Contract Price.

Should the Bidder fail to amend the Tender in a manner acceptable to the Employer, the Employer may reject the Tender.

T2: Returnable Documents

Number	Heading	Pages
T2.1	Schedule of Returnable Documents	17
T2.2	Returnable Documents	20

T2.1 SCHEDULE OF RETURNABLE DOCUMENTS

T2.1.1. General

The Tender Document must be submitted as a whole. All schedules and forms must be properly completed as instructed, and the document shall not be taken apart or altered in any way whatsoever.

Bidders are required to complete each and every schedule and form listed below to the best of their ability, as the evaluation of tenders and the eventual contract will be based on the information provided by the Bidder.

Completion of the returnable schedules and submission of the returnable documents is mandatory. Failure to do so will result in a bid being held to be non-responsive, except in limited circumstances, namely, the Employer will allow bidders to complete returnable schedules not completed in the first instance or to submit returnable documents not submitted in the first instance where these are purely of an administrative nature (specifically, Schedules A1-A7, the Standard Bidding Documents, and Schedules B1-B5), and do not pertain to the substance of the bid such as to affect the competitive position of bidders, by giving one or more bidders a second and unfair opportunity to augment the quality (substantive) aspects of their bid.

T2.1.2. List of Returnable Schedules, Forms and Certificates

SCHEDULE	DESCRIPTION	PAGE NO.
Company Specific Schedules		
A1	Authority to Sign Documents	21
A2	Certificate of attendance at Bid Clarification Meeting	22
A3	Certificate of Authority for Joint Ventures or Consortia	23
A4	Compulsory Enterprise Questionnaire	24
A5	Bidder's Bank Account Details and Financial References	26
A6	Certificate of Insurance Cover (Professional Indemnity)	27
A7	Form concerning the fulfilment of the Construction Regulations, 2014	28
Standard Bidding Documents (SBD) for Compliance Assessment		
SBD 4	Declaration of Interest	29
SBD 6.1	Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022	31
Returnable Documents for Compliance Assessment		
B1	Tax Clearance	35
B2	Proof of registration on National Treasury Central Supplier Database	36
B3	BBBEE Certificate or Sworn Affidavit	37
B4	Schedule of Proposed Sub Consultants	38
Returnable Documents for Functionality Assessment		
B5	Schedule of Key Design, and Construction Management Personnel	39
B6	Certified copies of Professional Qualification of Key Design, and Construction Management Personnel	53
B7	Certified copies of Professional Registration of Key Design, Content Development and Construction Management Personnel	54
B8	Curriculum Vitae of Key Design, and Construction Management Personnel	55
B9	Project Organisational Chart for Key Design, and Construction Management Personnel	57
B10	Bidding Entity past experience in delivering projects undertaken to the nature of the SARAO site and building requirements (lists of current and completed projects to be submitted). Must include all Consultants and Sub-consultants	60
B11	Method Statement based on the scope of work specific to this project	62
B12	Project Execution Plan (PEP) Specific to this Project	64
B13	Quality Management Plan Specific to the Project	65
Returnable Documents pertaining to the Contract		
B14	Amendments/ Alternatives and Qualifications by Bidder	65
B15	Record of Addenda to Tender Documents	66
B16	Joint Venture Agreement	67

D2.1	Form of Offer and Acceptance	84
D2.2	Contract Data	91
D3.1	Pricing Instructions	102
D3.2	Pricing Schedule	103
D3.3	Hourly Rates to be applied to Variations	108

T2.2 RETURNABLE DOCUMENTS

NB: BIDDERS MUST COMPLETE THESE DOCUMENTS / FORMS IN BLACK TYPE OR BLACK INK

A1. AUTHORITY TO SIGN DOCUMENTS

I/We*, the undersigned, am/are* duly authorised to sign the form of tender on behalf of

by virtue of the Articles of Association/Resolution of the Board of Directors*, of which a copy is attached, or

*Delete whichever is inapplicable

1.				
	NAME		SIGNATURE	DATE

2.				
	NAME		SIGNATURE	DATE

WITNESSES:

1.				
	NAME		SIGNATURE	DATE

2.				
	NAME		SIGNATURE	DATE

A2. CERTIFICATE OF ATTENDANCE AT BID CLARIFICATION MEETING

This is to Certify that I/We*

of (Bidder)

of (address)

Telephone number

Mobile number

E-mail

on (date)

have attended the clarification meeting and examined the Site of the Works and its surroundings for which I/we* am/are* submitting this Tender and have, so far as is practicable, familiarised myself/ourselves* with all information, risks, contingencies and other circumstances which may influence or affect my/our* tender.

**Delete whichever is inapplicable*

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

SIGNED ON BEHALF OF THE EMPLOYER:

NAME

SIGNATURE

A3. CERTIFICATE OF AUTHORITY FOR JOINT VENTURES / CONSORTIA

This Returnable Schedule is to be completed only if the bidder is a joint venture or consortium.

We, the undersigned, are submitting this tender offer as a joint venture / consortium, and hereby authorise

Mr/Ms _____, authorised signatory of _____ company, close corporation or partnership, 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.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature : Name : Designation :

Note:

A copy of the Joint Venture / Consortium Agreement showing clearly the percentage contribution of each partner to the Joint Venture / Consortium must be included in the bid submission.

A4. COMPULSORY ENTERPRISE QUESTIONNAIRE

<p>The following particulars must be furnished. In the case of a joint venture / consortium, separate enterprise questionnaires in respect of each partner must be completed and submitted.</p>																	
<p>Section 1: Name of enterprise</p>																	
<p>Section 2: VAT registration number, if any</p>																	
<p>Section 3: CIDB registration number, if any</p>																	
<p>Section 4: Particulars of sole proprietors and partners in partnerships</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 33%;">Name*</th> <th style="width: 33%;">Identity number*</th> <th style="width: 33%;">Personal income tax number*</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Name*	Identity number*	Personal income tax number*												
Name*	Identity number*	Personal income tax number*															
<p>* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners</p>																	
<p>Section 5: Particulars of companies and close corporations</p> <p>Company registration number:</p> <p>Close corporation number:</p> <p>Tax reference number:</p>																	
<p>Section 6: The attached SBD 4 must be completed for each attender and be attached as a tender requirement</p>																	
<p>Section 7: The attached SBD 6.1 must be completed for each attender and be attached as a tender requirement</p>																	
<p>The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:</p> <ul style="list-style-type: none"> i) authorises the Employer to obtain a tax Clearance certificate from the South African Revenue Services that my / our tax matters are in order; ii) confirms that neither the name of the enterprise nor 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; iii) 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; iv) 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 bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; v) 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:

ENTERPRISE NAME

DATE

NAME

POSITION

SIGNATURE

A5. BIDDER’S BANK ACCOUNT DETAILS AND FINANCIAL REFERENCES

Notes to Bidder:

- 1. The Bidder 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 bidder for the business envisaged by this tender. Failure to provide the required letter with the tender submission may render the Bidder’s offer unresponsive.
- 2. The Bidder’s banking details as they appear below shall be completed.
- 3. In the event that the bidder is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form.

The bidder shall provide the following information:

(i)	Name of Account Holder:	
(ii)	Account Number:	
(iii)	Bank Name:	
(iv)	Branch Number:	
(v)	Bank and Branch Contact Details:	

SIGNED BY/ON BEHALF OF BIDDER:

NAME	

SIGNATURE	

A6. CERTIFICATE OF INSURANCE COVER (PROFESSIONAL INDEMNITY)

Note to Bidder:

In the event that the Bidder is a joint venture or consortium, the details of each partner must also be provided.

Professional Indemnity Insurance must be a minimum of double the contract value for this contract.

Bidders shall provide the following details of this insurance cover:

- (i) Name of Bidder:
- (ii) Period of Validity:
- (iii) Value of Insurance:

- Insurance for Works and Bidder's Equipment:

Company:

Value:

- Insurance for Bidder's Personnel:

Company:

Value:

- Motor Vehicles liability:

Company:

Value:

- Third Party liability:

Company:

Value:

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

A7. FORM CONCERNING THE FULFILLMENT OF THE CONSTRUCTION REGULATIONS, 2014

In terms of regulation 4(3) of the Construction Regulations, 2014, as amended (hereinafter referred to as the Regulations), promulgated on 18 July 2003 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

1. I confirm that I am fully conversant with the Regulations and that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations.

YES	
NO	

2. Proposed approach to achieve compliance with the Regulations (Tick)

Own resources, competent in terms of the Regulations (refer to 3 below)	
Own resources, still to be hired and/or trained (until competency is achieved)	
Specialist subcontract resources (competent) – specify:	

3. Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the team as specified in the Regulations (CVs to be attached):

4. Provide details of proposed training (if any) that will be undergone:

5. Potential key risks identified and measures for addressing risks:

I have fully included in my tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period.

YES	
NO	

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

SBD 4 BIDDER’S DISCLOSURE

1. PURPOSE OF THE FORM

1.1 Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.
Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. BIDDER’S DECLARATION

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise, employed by the state? **YES / NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in the table below –

Full Name	Identity Number	Name of State Institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person employed by the procuring entity? **YES / NO**

2.2.1 If so, furnish particulars
.....
.....

2.3 Does the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES / NO**

2.3.1 If so, furnish particulars
.....
.....

1 The power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

3. DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect –

- 3.1 I have read and understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 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 consortium² will not be construed as collusive bidding;
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 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.

CERTIFICATION

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 AND 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT MY BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Date

.....
Signature

.....
Position

.....
Name of bidder

² 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.

SBD 6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for specific goals.

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, 2022.

1. GENERAL CONDITIONS

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

- a) the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- b) the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

The value of this bid is estimated to **exceed** R50 000 000 (all applicable taxes included) and therefore the 90/10 preference point system shall be applicable.

1.2 To be completed by the organ of state:

- a) The applicable preference point system for this tender is the **90/10** preference point system.

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) Specific Goals (namely, B-BBEE Status Level of Contributor)

1.4 To be completed by the organ of state:

The maximum points for this bid are allocated as follows:

	POINTS
PRICE	90
SPECIFIC GOALS	10
Total points for Price and Specific Goals	100

1.5 Failure on the part of a bidder to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

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

2. DEFINITIONS

2.1 “**tender**” means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

2.2 “**price**” means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

2.3 “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

2.4 “**tender for income-generating contracts**” means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession

contracts, excluding direct sales and disposal of assets through public auctions; and

(a) “the Act” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1 POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

$$P_s = 80 \left(1 - \frac{P_t - P}{P} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P}{P_{max}} \right)$$

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{min} = Price of lowest acceptable tender

3.2 FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1 POINTS AWARDED FOR PRICE

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

$$P_s = 80 \left(1 + \frac{P_t - P}{P} \right) \quad \text{or} \quad P_s = 90 \left(1 + \frac{P_t - P}{P_{max}} \right)$$

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

- a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)
BBBEE status level of contributor (Note: Bidders are required to submit their BBBEE certificates or sworn affidavits (in the case of EMEs/QSEs) in order to be eligible to claim points)	10	

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system).

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3 Name of company/firm.....

4.4 Company registration number.....

4.5 TYPE OF COMPANY / FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole proprietor
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited
- Non-Profit Company
- State Owned Company

[Tick APPLICABLE BOX]

4.6 I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I 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 paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv. If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - a) disqualify the person from the tendering 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) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted 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, if deemed necessary.

SIGNATURE(S) OF TENDERER(S)	
SURNAME AND NAME:
DATE:
ADDRESS:

B1. TAX CLEARANCE

Tenderers must be registered and in good standing with the South African Revenue Services (SARS), and as evidence of this, must append their CSD registration number and valid SARS Tax Clearance PIN Number to this Schedule (see Clause C.2.1.1 of T1.2.2: Variations to the Standard Conditions of Tender).

Bidders who are not registered with, or in good standing with SARS are not precluded from submitting bids, but must be registered and in good standing prior to Contract Award.

Each party to a Consortium/Joint Venture shall submit a separate Tax Clearance PIN Number and CSD Supplier Number.

PIN NUMBER

CSD SUPPLIER NUMBER

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B2. PROOF OF REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE

Bidders shall be registered with the National Treasury Central Supplier Data Base (CSD) and must submit documentary evidence/proof in the form of a valid CSD Registration Number issued by National Treasury as per the requirements of Clause C.2.1.1 of T1.2.2: Variations to the Standard Conditions of Tender.

Bidders who are not registered are not precluded from submitting bids, but must be registered prior to Contract Award.

Each party to a Consortium/Joint Venture must submit a separate CSD Registration Number.

CSD REGISTRATION NUMBER

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B3. B-BBEE CERTIFICATE OR SWORN AFFIDAVIT

In order to claim points for 'specific goals' in terms of the Preferential Procurement Regulations (2022), bidders must submit a Valid BBBEE certificate issued by a Verification Agency accredited by SANAS; or in the case of Exempted Micro Enterprises (EMEs), a sworn affidavit confirming annual total revenue and level of black ownership or a BBBEE certificate issued by the Companies and Intellectual Property Commission; and in the case of Qualifying Small Enterprises (QSEs), a sworn affidavit confirming annual total revenue and level of black ownership.

Unincorporated joint ventures and consortia must submit a consolidated B-BBEE certificate.

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B5. SCHEDULE OF KEY PERSONNEL

The tender offer shall include an organogram clearly showing the team of key design and construction management personnel the Bidder proposes to assign to the Contract and how responsibilities for the various disciplines or work and components of the Works will be assigned.

The appointed bidder may not replace the key design and construction management personnel provided in this schedule without the prior written approval of the Employer. The Personnel identified in Schedule B5 will be deemed a material part of the Bidder's offer, with this Form to be incorporated into the Contract as the "Consultant's Representative" (Clause 3.6) and "Key Personnel" (Clause 3.5).

In the case of a Joint Venture or where major subcontractors are made use of, the organogram must show how respective responsibilities are to be allocated.

Note: Bidders must score a minimum of 135 points (75%) out of a possible 180 points in the Stage 2.1 Functionality Assessment detailed in Schedules B5-B9, in order to be evaluated further in Stage 2.2.

The successful contractor must ensure that all key personnel have active registrations with relevant professional bodies and must remain active for the entire duration of the contract

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
1.	Architect (Lead) Role includes Project Management duties		20
1.1	Registration with Professional Bodies		5
1.1.1	Professional registration with SACAP (South African Council for the Architectural Profession) (Active registration)	5	
1.1.2	Candidate registration with SACAP (Active registration)	3	
1.1.3	Registration with any other recognized and legislated professional body in the Built Environment	2.5	
1.1.4	Not registered with any professional body as described above	0	
1.2	Qualifications		5
1.2.1	Master of Architecture (Professional) or Bachelor of Architectural Studies (Honours)	5	
1.2.2	Bachelor of Architectural Studies (BAS)/B-Tech Degree in Architecture, or Bachelors / B-Tech Degree in the Built Environment	3.75	
1.2.3	None of the above qualifications	0	
1.3	Professional Experience		10
1.3.1	10 or more years' experience with at least 5 years post-date of professional registration, in planning, designing and overseeing the construction of offices, boardrooms, meeting rooms, laboratories, workshops, auditoriums and or, commercial buildings with a value of at least R200 million. Experience in project	10	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
	management of similar projects, where duties include conducting site meetings, drafting and submitting project management documents, recordal of meetings, issuing site instructions, variation orders, and ensuring integration of various built environments with specialist disciplines during the design & construction period		
1.3.2	5-9 years' experience with at least 5 years post-date of professional registration, in planning, designing and overseeing the construction of, offices, boardrooms, meeting rooms, laboratories, workshops, auditoriums and or, commercial buildings with a value of at least R200 million. Experience in project management of similar projects, where duties include conducting site meetings, drafting and submitting project management documents, recordal of meetings, issuing site instructions, variation orders, and ensuring integration of various built environments with specialist disciplines during the design & construction period	7,5	
1.3.3	1 to 4 years' experience with at least 4 years post-date of candidate registration, in planning, designing and overseeing the construction of offices, boardrooms, meeting rooms, laboratories, workshops, auditoriums and/or, commercial buildings with a value of at least R50 million. Experience in project management of similar projects, where duties include conducting site meetings, drafting and submitting project management documents, recordal of meetings, issuing site instructions, variation orders, and ensuring integration of various built environments with specialist disciplines during the design & construction period	5	
1.3.4	Less than 1 year or no experience in planning, designing and overseeing the construction of, offices, boardrooms, meeting rooms, laboratories, workshops, auditoriums and or, commercial buildings with a value of at least R50 million. Experience in project management of similar projects, where duties include conducting site meetings, drafting and submitting project management documents, recordal of meetings, issuing site instructions, variation orders, and ensuring integration of various built environments with specialist disciplines during the design & construction period	0	
2	Bulk Services Electrical Engineer		20
2.1	Qualifications		5
2.1.1	MSc Degree (or higher) or BEng/BSc Degree in Electrical Engineering	5	
2.1.2	M-Tech Degree in Electrical Engineering or B-Tech Degree in Electrical Engineering	3.75	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
2.1.3	Bachelor's Degree or M-Tech Degree in the Built Environment	2.5	
2.1.4	None of the above qualifications	0	
2.2	Registration with Professional Bodies		5
2.2.1	Pr-Eng. ECSA registration (Active registration)	5	
2.2.2	Pr-Tech-Eng. ECSA registration (Active registration)	3.75	
2.2.3	Registration with any other recognized and legislated professional body in the Built Environment (Active registration)	2.5	
2.2.4	Not registered with a professional body	0	
2.3	Professional Experience Post Registration		10
2.3.1	15 or more years' experience with at least 5 years post-date of professional registration, in designing, installation, testing and commissioning of HV/MV electrical infrastructure (including Power Lines, Transformers, Generators, Substations, Protection Systems, et cetera), and oversight during construction	10	
2.3.2	10-14 years' experience with at least 5 years post-date of professional registration, in designing, installation, testing and commissioning of HV/MV electrical infrastructure (including Power Lines, Transformers, Generators, Substations, Protection Systems, et cetera.), and oversight during construction	7.5	
2.3.3	5-9 years' experience with at least 5 years post-date of professional registration, in designing, installation, testing and commissioning of HV/MV electrical infrastructure (including Power Lines, Transformers, Generators, Substations, Protection Systems, et cetera), and oversight during construction	5	
2.3.4	1- 4 years' experience, years post-date of professional registration, in designing, installation, testing and commissioning of HV/MV electrical infrastructure (including Power Lines, Transformers, Generators, Substations, Protection Systems, et cetera), and oversight during construction	3	
2.3.5	No experience designing, installation, testing and commissioning of HV/MV electrical infrastructure (including Power Lines, Transformers, Generators, Substations, Protection Systems, et cetera), and oversight during construction	0	
3	Civil Engineer		20
3.1	Qualifications		5

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
3.1.1	MSc Degree or higher in Civil Engineering	5	
3.1.2	BEng/BSc Degree in Civil Engineering	3.75	
3.1.3	M-Tech Degree in Civil Engineering	2.5	
3.1.4	B-Tech Degree in Civil Engineering	2	
3.1.5	None of the above qualifications	0	
3.2	Registration with Professional Bodies		5
3.2.1	Pr-Eng. ECSA registration (Active registration)	5	
3.2.2	Pr-Tech-Eng. ECSA registration (Active registration)	3.75	
3.2.3	Registration with any other recognized and legislated professional body in the Built Environment (Active Registration)	2.5	
3.2.4	Not registered with a professional body	0	
3.3	Professional Experience (Post Registration)		10
3.3.1	15 or more years' experience with at least 5 years post-date of professional registration, in designing bulk civil infrastructure to sites which include water, sewerage, stormwater and oversight during construction	10	
3.3.2	10-14 years' experience with at least 5 years post-date of professional registration, in designing bulk civil infrastructure to sites which include water, sewerage, stormwater and oversight during construction	7.5	
3.3.3	5-9 years' experience with at least 5 years post-date of professional registration in designing bulk civil infrastructure to sites which include water, sewerage, stormwater and oversight during construction	5	
3.3.4	1- 4 years' experience, post-date of professional registration in designing bulk civil infrastructure to sites which include water, sewerage, stormwater and oversight during construction	3	
3.3.5	No experience in designing bulk civil infrastructure to sites which include water, sewerage, stormwater and oversight during construction	0	
4	Structural Engineer		20
4.1	Qualifications		5
4.1.1	MSc Degree in Structural Engineering	5	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
4.1.2	BEng/BSc or M-Tech Degree in Structural Engineering	3.75	
4.1.3	Bachelor's or M-Tech Degree in any other field related to the Built Environment	2.5	
4.1.4	Diploma in Structural Engineering or in any other field related to the Built Environment	1	
4.1.5	None of the above qualifications	0	
4.2	Registration with Professional Bodies		5
4.2.1	Pr-Eng registration with ECSA (Engineering Council of South Africa) (Active registration)	5	
4.2.2	Pr-Tech-Eng registration with ECSA or Professional registration with IStructE SA (The Institute of Structural Engineers) (Active registration)	3.75	
4.2.3	Registration with any other recognized and legislated professional body in the Built Environment (Active Registration)	2.5	
4.2.4	Not registered with a professional body	0	
4.3	Professional Experience Post Registration		10
4.3.1	15 or more years' experience with at least 5 years post-date of professional registration, in designing concrete and steel structures, and oversight during construction	10	
4.3.2	10-14 years' experience with at least 5 years post-date of professional registration in designing concrete and steel structures and oversight during construction	7.5	
4.3.3	1-9 years' experience with at least 5 years post-date of professional registration in designing concrete and steel structures and oversight during construction	5	
4.3.4	No experience, and less than 5 years' post-date of professional registration, in designing concrete and steel structures and oversight during construction	0	
5	Environmental Specialist		15
5.1	Qualifications		5
5.1.1	BSc Degree in Environmental Management or BA/B-Tech Degree in Environmental Management	5	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
5.1.2	Postgraduate Diploma in Environmental Management	3.75	
5.1.3	BSc Degree or Diploma in Science	2.5	
5.1.4	None of the above qualifications	0	
5.2	Registration with Professional Bodies		5
5.2.1	Registered with EAPASA (Environmental Assessment Practitioner Association of South Africa) (Active registration)	5	
5.2.2	Candidate registration with EAPASA (Active registration)	3.75	
5.2.3	Registration with any other recognized and legislated professional body in the environmental sciences	2.5	
5.2.4	Not registered with any professional body as detailed above	0	
5.3	Professional Experience		5
5.3.1	5 or more years' experience drafting environmental management plans, method statements, implementation of environmental management plans and method statements, including undertaking environmental inspections/audits	5	
5.3.2	1-4 years' experience drafting environmental management plans, method statements, implementation of environmental management plans and method statements, including undertaking environmental inspections/audits	3.75	
5.3.3	No experience drafting environmental management plans, method statements, implementation of environmental management plans and method statements, including undertaking environmental inspections/audits	0	
6	Data Centre Design Specialist		20
6.1	Qualifications		5
6.1.1	MSc Degree (or higher) in Computer Science/IT/Electronics	5	
6.1.2	BSc/M-Tech Degree in Computer Science/IT/Electronics	3.75	
6.1.3	B-Tech Degree in Computer Science/IT/Electronics	2.5	
6.1.4	National Diploma in Computer Technology/IT/Electronics	2	
6.1.5	None of the above qualifications	0	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
6.2	Registration with Professional Bodies		5
6.2.1	Eng registration with ECSA (Engineering Council of South Africa) (Active registration)	5	
6.2.2	Pr-Tech-Eng registration with ECSA (Active registration)	3.75	
6.2.3	Not registered with a professional body	0	
6.3	Professional Experience (Post Registration)		10
6.3.1	15 or more years' experience with at least 5 years post-date of professional registration, in designing data centres, monitor server centres and other centralized repositories of computer systems for the cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks are functioning uninterrupted, users access to data, speed of processing and power maintenance are efficient.	10	
6.3.2	10-14 years' experience with at least 5 years post-date of professional registration, in designing data centres, monitor server centres and other centralized repositories of computer systems for the cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks are functioning uninterrupted, users access to data, speed of processing and power maintenance are efficient.	7.5	
6.3.3	5-9 years' experience with at least 5 years post-date of professional registration, in designing data centres, monitor server centres and other centralized repositories of computer systems for the cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks are functioning uninterrupted, users access to data, speed of processing and power maintenance are efficient.	5	
6.3.4	1- 4 years' experience, years post-date of professional registration, in designing data centres, monitor server centres and other centralized repositories of computer systems for the cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks are functioning uninterrupted, users access to data, speed of processing and power maintenance are efficient.	0	
7	Contract Specialist/Manager		15
7.1	Qualifications		5
7.1.1	Master's Degree in Contract Management or Bachelor's Degree in Law or	5	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
	Relevant field		
7.1.2	Contracts Management Certification	3.75	
7.1.3	None of the above qualifications	0	
7.2	Professional Experience (Post Registration)		10
7.2.1	10 or more years' experience with at least 5 years post-date of professional registration, in contract management, extensive experience in FIDIC White Book and FIDIC Yellow Book (Design and Construct), exposure to CEMAR, supervisory, monetary and quality control expertise, negotiation of contracts, procurement and/or bidding, construction, delivery and post-delivery construction, including managing all of these aspects as well as timelines, budgets, resources, and the expertise needed for various project requirements.	10	
7.2.2	5-9 years' experience with at least 5 years post-date of professional registration, in contract management, extensive experience in FIDIC White Book and FIDIC Yellow Book (Design and Construct), exposure to CEMAR, supervisory, monetary and quality control expertise, negotiation of contracts, procurement and/or bidding, construction, delivery and post-delivery construction, including managing all of these aspects as well as timelines, budgets, resources, and the expertise needed for various project requirements.	7.5	
7.2.3	1-4 years' experience with at least 5 years post-date of professional registration, in contract management, extensive experience in FIDIC White Book and FIDIC Yellow Book (Design and Construct), exposure to CEMAR, supervisory, monetary and quality control expertise, negotiation of contracts, procurement and/or bidding, construction, delivery and post-delivery construction, including managing all of these aspects as well as timelines, budgets, resources, and the expertise needed for various project requirements.	5	
7.2.4	No experience in contracts management	0	
8	MV Electrical Engineer / Power Engineer		15
8.1	Qualifications		5
8.1.1	MSc or M-Tech or BEng/B-Tech Degree in Electrical Engineering Heavy Current (HC)	5	
8.1.2	National Diploma in Electrical Engineering (HC)	3.75	
8.1.3	MSc or M-Tech or BEng/B-Tech Degree in Electrical Engineering or any other field in the Built Environment	2.5	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
8.1.4	None of the above qualifications	0	
8.2	Registration with Professional Bodies		5
8.2.1	Pr-Eng. ECSA registration (Active registration)	5	
8.2.2	Pr-Tech-Eng. ECSA registration (Active registration)	3.75	
8.2.3	Registration with any other recognized and legislated professional body related to the built environment	2.5	
8.2.4	Not registered with a professional body	0	
8.3	Professional Experience Post Registration		5
8.3.1	15 or more years' experience with at least 5 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site / building & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	5	
8.3.2	10-14 or more years' experience with at least 5 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site / building & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	3.75	
8.3.3	5-9 or more years' experience with at least 5 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site / building & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	2.5	
8.3.4	1-4 or more years' experience with at least 5 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site / building & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	1	
9	Fire Engineer		15
9.1	Qualifications		5
9.1.1	MSc Degree in Mechanical Engineering or any other field in the Built Environment	5	
9.1.2	BEng/M-Tech Degree in Mechanical Engineering or any other field in the Built Environment	3.75	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
9.1.3	B-Tech Degree in Mechanical Engineering or any other field in the Built Environment	2.5	
9.1.4	National Diploma in Mechanical Engineering or the Built Environment field	1	
9.1.5	None of the above qualifications	0	
9.2	Registration with Professional Bodies		5
9.2.1	Pr-Eng. ECSA registration as a Fire Protection Systems Practitioner (Active registration)/ Chartered Engineer with The Institute of Fire Engineers (IFE) (Active registration)	5	
9.2.2	Pr-Tech-Eng. ECSA registration as a Fire Protection Systems Practitioners (Active registration)/ Incorporated Engineer with The Institute of Fire Engineers (IFE) (Active registration)	3.75	
9.2.3	Engineering Technician Engineer with The Institute of Fire Engineers (IFE) (Active registration)	2.5	
9.2.4	Not registered with a professional body	0	
9.3	Professional Experience Post Registration		5
9.3.1	15 or more years' experience with at least 5 years post-date of professional registration, in designing fire detection & gas suppression services for typical data centre applications & oversight during construction	5	
9.3.2	10-14 or more years' experience with at least 5 years post-date of professional registration, in designing fire detection & gas suppression services for typical data centre applications & oversight during construction	3.75	
9.3.3	5-9 or more years' experience with at least 5 years post-date of professional registration, in designing fire detection & gas suppression services for typical data centre applications & oversight during construction	2.5	
9.3.4	1-4 or more years' experience with at least 5 years post-date of professional registration, in designing fire detection & gas suppression services for typical data centre applications & oversight during construction	1	
10	Contract/Procurement Specialist		15
10.1	Qualifications		5
10.1.1	BCom Degree in International Supply Chain Management	5	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
10.1.2	BCom Degree in Supply Chain Management	3.75	
10.1.3	Supply Chain Management Certification	2.5	
10.1.4	None of the above qualifications	0	
10.2	Registration with Professional Bodies		5
10.2.1	Certified Supply Chain Manager (CSCM) certification / Chartered Professional registration with CIPS	5	
10.2.2	Professionals registration with MCIPS	3.75	
10.2.3	Not registered with professional body	0	
10.3	Professional Experience Post Registration		5
10.3.1	10 or more years' experience in a procurement position, with extensive knowledge and experience with SCM regulations, CSD and PFMA requirements and reporting, procurement management and contract, ERP systems, implementation of departmental policies and procedures, ensuring that an effective bid/quotation process is implemented and maintained in accordance with departmental policies and procedures and compliant with applicable legislative Requirements	5	
10.3.2	5-9 years' experience in a procurement position, with extensive knowledge and experience with SCM regulations, CSD and PFMA requirements and reporting, procurement management and contract, ERP systems, implementation of departmental policies and procedures, ensuring that an effective bid/quotation process is implemented and maintained in accordance with departmental policies and procedures and compliant with applicable legislative Requirements	3.75	
10.3.3	3-4 years' experience in a procurement position, with extensive knowledge and experience with SCM regulations, CSD and PFMA requirements and reporting, procurement management and contract, ERP systems, implementation of departmental policies and procedures, ensuring that an effective bid/quotation process is implemented and maintained in accordance with departmental policies and procedures and compliant with applicable legislative Requirements	2.5	
10.3.4	0-2 years' experience in a procurement position, with extensive knowledge and experience with SCM regulations, CSD and PFMA requirements and reporting, procurement management and contract, ERP systems, implementation of	1	

2.1 CAPABILITY AND CAPACITY CRITERIA (KEY DESIGN AND CONSTRUCTION MANAGEMENT PERSONNEL) (All Key Personnel will be required during the Design and Construction Phase of the Project)			
No.	Criteria	Score Allocation	Maximum Score
	departmental policies and procedures, ensuring that an effective bid/quotation process is implemented and maintained in accordance with departmental		
11	Organogram		5
11.1	Project Organisational Chart for Key Design and Construction Management Personnel. The names of all personnel in the above table should clearly appear in the organogram with clearly defined positions and hierarchy.		5
11.1.1	The organogram and supplementary documentation meet the requirements of this bid, showing the hierarchy of all the key design and construction management roles on the project team, and reporting lines and confirms the Bidder's capacity to undertake this project	3.75	
11.1.2	The organogram and supplementary documentation demonstrate minimal compliance to the requirements of this bid, showing unclear hierarchy of all the key design and construction management roles on the project team, and reporting lines and limited demonstration of Bidder's capacity to undertake this project	2.5	
11.1.3	The organogram and supplementary documentation do not meet the requirements of this bid, do not show the hierarchy of all the key design and construction management roles on the project team, and reporting lines and do not confirm the Bidder's capacity to undertake this project	0	
	Sub-total		180

Table 1: Schedule of Key Personnel

Note: In addition to Table 1, Bidders must submit a Project Organisational Chart identifying all resources indicated above and all support staff required to ensure successful delivery of the project, including interfaces with SARAO

Key Design Personnel	Name	Qualifications	Registration Number	No of years' experience in terms of required skills	Company Name & Physical address and contact details of local office
Design & Construction Team:					
Architect (Lead)					
Bulk Services Electrical Engineer					
Civil Engineer					
Structural Engineer					
Environmental Specialist					
Data Centre Design Specialist					
Contract Specialist/Manager					
MV Electrical Engineer / Power Engineer					

Fire Engineer					
Contract/Procurement Specialist					

B6. COPIES OF PROFESSIONAL QUALIFICATIONS OF KEY PERSONNEL

Copies of the professional qualifications of each Team Member listed in Schedule B6: Table 1, above, must be attached to this Schedule.

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B7. COPIES OF PROFESSIONAL REGISTRATION OF KEY PERSONNEL

Copies of professional registration certificates of each individual Team Member listed in Schedule B6: Table 1, must be attached to this Schedule 1.

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B8. CURRICULUM VITAE OF KEY PERSONNEL

CVs must be submitted in the required format.

Only include CVs for the required personnel as listed in the above table and in the format of the CV template provided in this schedule. Attach CVs in the order that the Key Design, Content Development & Construction Management Personnel are listed in Schedule B6.

Please note that if any changes are made to any personnel from the initial approved lists at the time of the tender award, written communication of all changes should be submitted to SARAO for approval to minimise any unforeseen risks.

Do NOT include CVs for support staff.

Please Note:

The Bidder should respond to the requirements listed in Table 1 and insert the details of the required personnel in the Schedule of Key Design, Content Development & Construction Management Personnel and attach the supporting documentation and sub-consulting agreements (where applicable);

The Bidder must clearly indicate in the Table where one person can fulfil various roles;

The names listed in Table 1 for the Key Design, Content Development & Construction Management Personnel will be those personnel that carry design responsibility, content development and construction management for the respective design engineering discipline;

Do not include support staff in the Schedule of Key Design Personnel. Only key personnel will be assessed. Support staff will therefore not be assessed. It is however the responsibility of the Bidder to ensure that the project is provide with adequate support capacity;

Where there are no names next to the suggested Key Design, Content Development & Construction Management Personnel, it will be assumed that the Bidder does not have the personnel included in the professional team;

In order to qualify, the team must include all the Key Personnel (or indicate where one person fulfils other roles) and each Team Member must meet the minimum requirements in relation to qualification, registration and number of years' experience as stated in Table 1.

The Key Design and construction management personnel must be registered with their respective related regulatory bodies and have recognised qualifications. Registration with Councils, for those professions where Councils exist, and with Associations or Institutes for those professions where only Associations and / or Institutes exist is required.

Curriculum Vitae Template of Key Design, Content Development & Construction Management Personnel Listed in Schedule

NAME OF COMPANY

1. Surname (and maiden name in brackets where applicable):
2. First name/s:
3. Date of birth:
4. Nationality:
5. Education and Specialist training:

Qualification	Institution	Date Obtained

6. Membership of Professional Bodies:

Registration Number:

7. Key Qualifications relevant to this project:

8. Key skills and expertise relevant to this project:

9. High-level overview of professional experience directly related to the role of the team member in this project:

Date (From – To):	
Client:	
Location:	
Position in firm or project role:	
High-level description of duties or responsibilities in position or project team:	
Date (From – To):	
Client:	
Location:	
Position in firm or project role:	
Date (From – To):	
Client:	
Location:	
Position in firm or project role:	
High-level description of duties or responsibilities in position or project team:	
References: Name: Position: Tel: Email:	

B9. PROJECT ORGANISATIONAL CHART FOR KEY PERSONNEL

Bidders must append an organisational chart for the Key Design, Content Development & Construction Management Personnel to this Schedule.

Additional Key Design resources (NOT FOR TENDER EVALUATION PURPOSES)

The appointed contractor shall provide the below listed resources with required levels of experience and registration before execution of works. SARAO shall require curriculum vitae, and proof of professional registration be submitted for approval.

Design Personnel			
Resource	Experience	Qualification	Registration
Acoustic Engineer/ Specialist	Not Applicable	7 years' experience in undertaking acoustic designs for offices, boardrooms, meeting rooms, laboratories, workshops and auditoriums	Not Applicable
Lighting Specialist	Not Applicable	Minimum of 7 years' experience in the design of lighting solutions for offices, boardrooms, meeting rooms, laboratories, workshops and auditoriums	Not Applicable
Quality Officer for Construction works (Full Time onsite)	A /B-Tech/National Higher Diploma in Construction/ Building or the Built Environment or Recognized Built Environment qualifications	25 or more years' in construction projects ensuring that construction activities meet the required quality standards, codes and specifications. Maintaining the integrity, safety and compliance of the construction works.	Professional Construction Manager with registration with SACPCMP
Building Electrical Engineer	B-Tech Degree in Electrical Engineering	10 or more years' experience, with at least 5 years post-date of professional registration, in designing MV/LV electrical infrastructure including design, installation, testing and commissioning of internal building electrical reticulation and oversight during construction	Pr-Eng. registration (Active registration) ECSA (Active registration)
Construction Manager	BEng/BSc Degree in Civil Engineering or related built environment field e.g. Construction Management/Property Development	10 or more years' experience in similar Construction Manager role combined with Project Management experience for similar projects with a value of at least R200m, and should be able to ensure integration of various built environment with specialist disciplines during design and construction	Professional Construction Manager with registration with SACPCMP (Active registration)

Construction Health & Safety Manager (CHSM)	B-Tech Degree in Safety Management or B.Com Operational Risk Management	10 or more years' experience in drafting health and safety specifications, implementation plans and undertaking health, safety & environmental audits.	CHSM Professional registration with SACPCMP (Active registration)
Quantity Surveyor	BSc/B-Tech in Quantity Surveying or related qualification in the Built Environment	5 or more years' experience from date of professional registration, in preparing detailed bills of quantities in coordination with other built environment disciplines and undertaking financial evaluation of bids to ensure correctness and compiling payment certificates	Professional registration with SACQSP (South African Council for the Quantity Surveying Profession) (Active registration)
Town Planner (Master Planning, DA)	Bachelor's Degree in Town-planning or related Built Environment field	15 or more years' experience with at least 5 years post-date of professional registration, in undertaking town-planning schemes and rezoning applications	Professional Registration with the South African Council for Planners (SACPLAN) (Active registration)
Geohydrologist	BSc Degree Specialising in Engineering Geology and Hydrogeology	15 or more years' experience with at least 5 years post-date of professional registration, in the study of water on Earth's surface, including its distribution and movement across the land, work on construction projects, help with the safe disposal of hazardous materials and assist with aquifer protection, the study of groundwater and its movement through the Earth, knowledge of engineering science and technology including knowledge of geography and knowledge of chemistry for analysing water samples.	Professional Natural Scientist registration with South African Council for Natural Scientific Professions (SACNSP) (Active registration)
Information Technology Engineer	B-Tech Degree in IT or related field (Local Area Networks, AV equipment etc.)	5-9 or more years' experience with at least 5 years post-date of professional registration, in designing building internal local area networks (cabling, routing, Wi-Fi, AV, Fibre reticulation) & oversight during construction	Pr-Tech-Eng registration with ECSA (Active registration)
Geotechnical Engineer	BSc/M-Tech Degree in Built Environment specialising in Geology / Geotechnical	10-14 or more years' experience with at least 5 years post-date of professional registration, in undertaking geotechnical investigations and providing recommendations in structural civil / building design	Pr-Eng. ECSA registration (Active registration)

<p>Mechanical Engineer (Mech. Services)</p>	<p>BEng/BSc Degree in Mechanical Engineering</p>	<p>10 or more years' experience with at least 5 years post-date of professional registration, in designing and commissioning HVAC systems, fire detection & gas suppression services for typical data centre applications and other mechanical services, such as lifts</p>	<p>Pr-Eng. ECSA registration (Active registration)</p>
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B10. BIDDING ENTITY PAST EXPERIENCE IN DELIVERING PROJECTS UNDERTAKEN TO THE NATURE OF THE SARAO SITE AND BUILDING REQUIREMENTS OR SIMILAR PROJECTS

Bidders must familiarise themselves with the evaluation criteria listed below and submit a list of current and completed projects and references to support the allocation of points.

Criteria	Indicators	Sub-criteria	Scoring Allocation
Previous experience and Track Record	Past experience in delivering design projects undertaken to the nature of or similar /same to the Engineering, Science and Operations facility project	The bidding entity, and key design and construction management personnel collectively has <u>extensive</u> experience in designing and delivering diverse portfolio of building projects such as offices, boardrooms, meeting rooms, laboratories, workshops, data centres and auditoriums, commercial buildings etc. (i.e. More than 3 design contracts with a value of at least R50 million)	40
		The bidding entity, and key design and construction management personnel collectively has <u>adequate</u> experience in designing and delivering diverse portfolio of building projects such as offices, boardrooms, meeting rooms, laboratories, workshops, data centres, auditoriums and or commercial buildings etc. (i.e. 2 design contracts with a value of at least R50 million)	30
		The bidding entity, and key design and construction management personnel collectively has <u>limited</u> experience in designing and delivering diverse portfolio of building projects such as offices, boardrooms, meeting rooms, laboratories, workshops, data centres, auditoriums and or commercial buildings etc. (i.e. 1 design contract with a value of at least R50 million)	15
		The bidding entity, and key design and construction management personnel collectively has no experience in designing and delivering diverse portfolio of building projects such as offices, boardrooms, meeting rooms, laboratories, workshops, data centres, auditoriums and or commercial buildings	0
		Sub-total	40

Table 2: List of Previous and Completed Projects

NAME OF COMPANY

PROJECT/EMPLOYER (Name, Tel. No and Fax No.)	NATURE OF WORK	VALUE OF WORK	YEAR OF COMPLETION

B11. METHOD STATEMENT BASED ON THE SCOPE OF WORK SPECIFIC TO THIS PROJECT

Bidders must familiarise themselves with the evaluation criteria listed below and submit a list of current and completed projects and references to support the allocation of points.

Criteria	Indicators	Sub-criteria	Scoring Allocation
Method Statement	<p>The Building Design Works method statement must as a minimum address the following Project Specific aspects:</p> <ul style="list-style-type: none"> ● Detailed Plan to meet project outcomes & design time to completion; ● Resource Management Plan; ● Risk Management Plan; ● Detailed Design process and approvals; ● Environmental & Quality considerations throughout the design phase; ● Submission of the final designs, reports, including all supporting documents related to the CTHIS building requirements 	The building design works method statement is specifically tailored to This Specific Project and projects to the value of R 200mil at minimum and details ways to improve the project outcomes and the quality of the outputs which address the specific project objectives and requirements. The approach is sufficiently flexible to accommodate changes that may occur during execution	30
		The building design works method statement is generic and not tailored to This Specific Project or similar R 200mil projects and does not address the specific project objectives and requirements. The approach does not adequately deal with the critical characteristics of the project	22.5
		The building design works method statement does not address the minimum objectives and requirements of the project and is of poor quality. It is unlikely to satisfy the project objectives or requirements as stated in previous fields	15
		The building design works method statement was not submitted.	0
Sub-total			30

B12. PROJECT EXECUTION PLAN (PEP) SPECIFIC TO THIS PROJECT

Bidders must familiarise themselves with the evaluation criteria listed below and submit a list of current and completed projects and references to support the allocation of points.

The minimum threshold for this schedule is 7.5 out of a possible 10 points allocated for the Project Execution Plan. Failure to achieve the minimum score for this section will result in disqualification.

Criteria	Indicators	Sub-criteria	Scoring Allocation
Project Execution Plan (PEP) specific to this project	Provide a detailed Project Execution Plan (PEP) for the duration of this contract for both building design and content development. Refer to the High-Level Programme. The PEP must as a minimum address the following aspects:	The Project Execution Plan addresses all the indicators in that it clearly defines how the contract will be successfully managed and leaves no doubt that the Bidder understands the requirements in terms of project management and proposes clear processes & procedures in terms of managing the schedule and project execution	10
	<ul style="list-style-type: none"> ● Project Scope for building design and content development. ● A proposed Project Schedule which includes a list of activities for building design and construction management. <i>(Including Appointment and Commencement of contract, Design Activities, Reviews and Approvals)</i>	The Project Execution Plan addressed a minimum of 3 indicators that meet the requirements and SARA0 is satisfied that the Bidder is capable of managing the execution of the contract	7.5
	<ul style="list-style-type: none"> ● Sub-consultant's management ● Information & document management ● Communication and reporting ● Continuously Identify ways to optimize the project schedule time without compromising on quality 	The Project Execution Plan addresses one indicator and does not address all the requirements for this criterion to be deemed sufficient for the project	3
		The Project Execution Plan (PEP) is generic and does not meet any of the requirements	1
		The Project Execution Plan was not submitted	0
Sub-total			10

B13. QUALITY MANAGEMENT PLAN SPECIFIC TO THIS PROJECT

Bidders must familiarise themselves with the evaluation criteria listed below and submit a list of current and completed projects and references to support the allocation of points.

Criteria	Indicators	Sub-criteria	Scoring Allocation
Quality Management System or Equivalent, based on Quality Management principals, Certification and Compliance Standard	Quality Management System or Equivalent, based on the following principals - <ul style="list-style-type: none"> • Customer focus; • Leadership; • Involvement of people; • Process approach; • System approach; • Continual improvement; • Fact-based decision making, and • Mutually beneficial supplier 	Quality Management System or Equivalent exceeds the requirements where innovative options (through technology/options/processes) are considered to manage Quality during the design phase for both building design and content development	10
		Quality Management System or Equivalent meets all the aspects and requirements of Quality Management principles for both building design and content development	7.5
		Quality Management System or Equivalent is generic and does not address Quality Management principles for both building design and content development	3
		The System was not submitted	0
Sub-total			10

B14. AMENDMENTS/ ALTERNATIVES AND QUALIFICATIONS BY BIDDER

The schedules below are not an invitation for amendments, deviations or alternatives but should the Bidder desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder.

I / We herewith propose the amendments, alternatives and discounts as set out in the tables below:

(1) AMENDMENTS

PAGE, CLAUSE OR ITEM NO	PROPOSED AMENDMENT

- (a) *Amendments to the General and Special Conditions of Contract are not acceptable;*
 (b) *The Bidder must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.*

(2) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

- (a) *Individual alternative items that do not justify an alternative tender and an alternative offer for time for completion should be listed here.*
 (b) *In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.*
 (c) *Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.*

(3) QUALIFICATIONS

ITEM ON WHICH QUALIFICATION IS MADE	DESCRIPTION OF QUALIFICATION

- (a) *The Bidder must give full details of the discounts offered in a covering letter attached to his tender, failing which, the offer will be prejudiced.*

If there is insufficient space above, the Bidder may append additional sheets.

Number of additional sheets appended by the Bidder to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B15. RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been considered in this tender offer:		
No.	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

If there is insufficient space above, the Bidder may include the additional sheets in the Supporting Documentation file, to be submitted in accordance with Clause C.2.13.3 of T1.2.2 Variations to the Standard Conditions of Tender.

Number of additional sheets submitted by the Bidder in respect of this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

B16. JOINT VENTURE AGREEMENT

If the Tendering entity is a Joint Venture, a certified copy of the signed Joint Venture Agreement is to be included in the bid submission as per the requirements of Clause C.2.1.1 of the T1.2: Variations to the Standard Conditions of Tender.

SIGNED BY/ON BEHALF OF BIDDER:

NAME

SIGNATURE

DATE

D1: Scope of Services

Number	Heading	Pages
D1.1	Background to the National Research Foundation and the South African Radio Astronomy Observatory (SARAO)	69
D1.2	Scope of Services	70

D1.1 BACKGROUND TO THE NATIONAL RESEARCH FOUNDATION AND THE SOUTH AFRICAN RADIO ASTRONOMY OBSERVATORY

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. The NRF supports and promotes 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. The NRF is a Schedule 3A entity in terms of the Public Finance Management Act of 1999 (Act 1 of 1999 as amended by Act 29 of 2000).

The South African Radio Astronomy Observatory (SARAO), a facility of the National Research Foundation, is responsible for managing all radio astronomy initiatives and facilities in South Africa, including the MeerKAT Radio Telescope in the Karoo, and the Geodesy and VLBI activities at the HartRAO facility. SARAO also coordinates the African Very Long Baseline Interferometry Network (AVN) for the eight SKA partner countries in Africa, as well as South Africa’s contribution to the infrastructure and engineering planning for the Square Kilometre Array (SKA) Radio Telescope. To maximise the return on South Africa’s investment in radio astronomy, SARAO is managing programs to create capacity in radio astronomy science and engineering research, and the technical capacity required to support site operations. In the reference documentation, SKA SA is understood to mean SARAO.

South Africa and its 8 African partner countries were jointly awarded the SKA together with Australia. The SKA will be Africa’s largest science project which will be a hub for both local and international collaboration. The SKA Organisation has been established with its headquarters at Jodrell Bank in Manchester, United Kingdom. The five key science projects that will be undertaken by the SKA include:

- Probing the Dark Ages
- Galaxy Evolution
- The Origin and Evolution of Cosmic Magnetism
- Strong Field Tests of Gravity using Pulsars and Black Holes
- The Cradle of Life.

The first phase of the SKA1-MID project includes the addition of 133 antennas to the 64-dish MeerKAT radio telescope and the second phase of the project and will include up to 2000 antennas distributed across South Africa and its eight African partner countries.

SARAO has offices based in Johannesburg and Cape Town, as well as the HartRAO facility at Hartebeesthoek and radio-quiet SKA host site in the Karoo, 90km from Carnarvon in the Northern Cape, which hosts the Square Kilometre Array mid-frequency telescopes, MeerKAT, and KAT-7 radio telescope installations, as well as a number of guest instruments, including the HERA telescope.

Further information about SARAO can be found on www.ska.ac.za and the international SKA on www.skatelescope.org.za

D1.2 SUMMARY OF THE SCOPE OF SERVICES

OVERVIEW

The Square Kilometre Array Observatory (SKAO) is conducting the SKA project which is aimed at building the world's largest and most sensitive radio telescope with a collecting area of one square kilometre. This Telescope will be one of the largest scientific endeavours in history and will be located in South Africa and Australia. South Africa has signed a Hosting Agreement to host the mid-frequency component of the SKA telescope, known as SKA_MID, at the SARAO operated site in the Karoo. The Hosting of the SKA Agreement between the Republic of South Africa represented by the Department of Science and Innovation ('South Africa') and the Square Kilometre Array Observatory ('SKAO'), was signed on 14 October 2021. South Africa has agreed to provide the Site, infrastructure and assets, and undertake its other obligations as host country, as set out in the Agreement.

The Hosting Agreement requires South Africa to make available assets and infrastructure to the SKAO, subject to appropriate terms and conditions, which include a SKA Operations Centre (SOC) and Science Processing Centre (SPC) in the Western Cape. These include all the facilities required to house the computing hardware for the SKA Science Data Processing (SDP), which forms part of the SKA_MID telescope. South Africa is also responsible for establishing a SKA Science Regional Centre (SRC) to enable the South African scientific community to receive and process the data that is produced by the SKA telescopes.

SARAO is proposing to co-locate the SPC and SRC in one facility. Co-location will reduce the cost of data transfer between SPC and SRC. The SPC_SRC project is thus aimed at building a facility that will co-host these two world-class high-performance computing facilities in one location. The objective of this project is to establish a Data Centre facility, the SKA Science Processing Centre (SPC), which shall include the SKA Regional Centre (SKA-SRC) and associated data infrastructure platforms, and the SKA Operations Centre (SOC), inclusive of SARAO's Headquarters. The SKA SOC and new SARAO Headquarters will collectively be referred to as the Cape Town Operations Centre (CTOC). The SKA SPC and SKA-SRC will collectively be referred to as the High-Performance Computing Building (HPCB).

The Cape Town Operations Centre (CTOC) and High-Performance Computing Building (HPCB) will form part of the Cape Town Hosting Infrastructure System (CTHIS) facilities. The HPCB will be constructed using a modular data centre approach, designed to be flexible and scalable, and to mitigate a possible technical risk in a late delivery of the facility impacting the SKA Antenna Array (AA2) deployment, the project will also need to make provisions to mitigate that risk with the deployment of an Interim SPC (iSPC) Modular Data Centre (MDC) unit, including all the related infrastructure works as part of the SPC deployment (Phase1_SPC), which will be required in Q4 2025. This iSPC will need to be incorporated into the final HPCB as the last module.

An In-principle agreement has been reached between the Managing Directors of SARAO and iThemba LABS regarding co-location of the Cape Town Host Infrastructure System, at the iThemba LABS precinct in Faure, Western Cape. This In-principle agreement has been supported by the NRF Board. The aim of this Internal Agreement is to enable the establishment, utilization and operation of buildings, power facility, and access to shared services and infrastructure by SARAO at the iThemba LABS site, and for SARAO to provide access to such buildings, power facility, shared services and infrastructure to the SKAO, subject to appropriate terms and conditions.

VISION

The CTHIS facility is envisaged to be a global centre of excellence and world class research facility that combines Science Operation Centre with modern office space (CTOC), Science Processing Centre with high performance computing capabilities (HPCB), and sustainable power consumption that consists of a renewable energy mix. The CTOC building will embrace modern technologies, aiming to minimize its environmental impact (including smart building systems, sustainable design principles and practices). It is envisaged to utilize energy-efficient sources, green building materials and water conservation measures. The facility may also incorporate green spaces, such as rooftop gardens or landscaped areas, promoting a connection with nature. The building will provide flexible spaces for hosting scientific conferences, hosting symposiums and networking events. The facility encourages sustainable transportation options, such as bike racks, electric vehicle charging stations and incorporates accessible design features to ensure ease of movement and inclusivity for individuals with disabilities.

The new facility that will connect and process the power on the precinct will be referred to as The CTHIS Power Generation and Distribution System (PG&DS). The PG&DS will be built with the capacity to handle 20MVA of Eskom supply from the 132kV supply. The facility will also require the capacity to handle 20 MVA back-up power. The PG&DS will also house the Energy Centre for essential and back-up power. The back-up power will consist of Genset and RUPS, future on-site PV (Not Part of the project scope) and future Off-Site IPP (Not Part of the project scope). The PG&DS will supply TLABS with 6 MVA non-essential power from the intake substation and 5MVA essential power with 100% back-up from the Energy Centre. The Energy Centre will supply the CTHIS with 5 MVA [4.5MVA for HPCB + 500kVA for CTOC] essential power with 100% back-up. The Energy Centre will house the MV/LV Transformers; Switchgear; RUPS; Gensets and Diesel tanks.

We see the HPCB as a modular Data Centre facility that is flexible and scalable. The facility is designed using a modular approach, consisting of prefabricated components that can be easily assembled, disassembled and reconfigured. Each container is self-contained, with integrated security and environmental controls. The MDC is designed to be stackable allowing for vertical expansion and maximizing use of available space. The containers house the necessary components

and racks for data storage, servers etc., which will be the responsibility of the end-user. The HPCB will also include a combination of liquid cooling and air-cooling facilities, to be determined by the end-user at concept design stage, for which this contract and project is required to provide interfaces.

THE SITE

iThemba LABS: The South African Laboratories for Accelerator Based Sciences, is a multidisciplinary research facility that is based on the development, operation and use of particle accelerators and related research equipment. iThemba LABS operates the only cyclotron facilities in the African continent and the separated sector cyclotron is the largest accelerator facility in the Southern Hemisphere. iThemba LABS is situated 33 km away from the Cape Town City Centre, on Old Faure Road, Eerste River, and falls under the Cape Town Metropolitan Municipality.

1. iThemba LABS (TLABS) currently has a power facility with a power budget of 8 MVA Notified Maximum Demand (NMD) connected to the Cyclotron substation. Future growth for TLABS power budget is 11MVA. The CTHIS will require a power budget of 9 MVA. The existing power facilities to the iThemba LABS precinct will be upgraded to connect to the newly commissioned Magnetic Substation, as part of this project. The total combined power budget for the precinct will be 20MVA [11MVA for TLABS and 9 MVA for CTHIS] of new self-build. The new facility that will connect and process the power on the precinct will be referred to as The CTHIS Power Generation and Distribution System (PG&DS).
2. The CTOC will house the in-country headquarters of the SKAO (SKA SOC), SARAO Headquarters, Laboratories and Workshops, with a combined staff complement of 500 in an A Grade Office Building. Grade A buildings are High quality properties providing good access and are professionally managed with continued above average maintenance. They have incorporated high quality modern finishes, air conditioning, adequate on-site parking, clearly articulated entrance, lobby with clear circulation, high ceiling heights, and flexible floor plates as some of the defining features.
3. The SKA SPC and SKA-SRC project is aimed at building a facility that will co-host these two world-class high-performance computing facilities in one location. The SKA SPC and SKA-SRC will collectively be referred to as the High-Performance Computing Building (HPCB).

Therefore, SARAO will require the services of a multi-disciplinary team led by an Architectural Consultant to provide Professional Services 1 – 6.

The PSC scope of service will include:

1. Conduct full Site Studies i.e. (*Bulk Services Report; Traffic Impact Assessment; Site Development Plan; Storm Water Management Plan; Basic Assessment or Full Scoping and Environmental Impact Assessment (S&EIA); Waste Management License; Water Use License; Heritage Impact Assessment; Flora Harvesting Permits*)
2. Refine User Requirements
3. Produce Conceptual Designs (incl. Conceptual Master Plan) with detailed costings
4. Acquire Developmental Approval
5. Prepare Tender and Evaluation Criteria for the Design Construction Contract (Detailed Designs and Building Works)
6. Rezoning for rest of iThemba LABS (without impacting CTHIS schedule)
7. Differential cost option between SKAO-SARAO only, and integrating iThemba LABS into power solution
8. Trade-off study on Bulk sewerage connection option (onsite or bulk, evaporation pond)
9. Project Management Services for the full duration of the design and construction
10. Trade-off study for cooling and power solutions (consumption, costs)
11. Develop Contract Participation Goals for the Design and Construction Tender
12. Provide estimated building costs for the Design and Build (D&B) Tender

for the New Cape Town Host Infrastructure System (CTHIS) facility at iThemba LABS, as contemplated by the Architectural Profession Act, the National Building Regulations and Building Standards Act 103 of 1977 as amended and South African National Standards SANS 10 400 and other applicable statutory legislation. The successful tenderer will also be expected to conduct the necessary site studies and environmental authorizations including obtaining the required developmental approvals & permits from the Local Authorities.

The Professional Services Consultant (PSC) including their design team will follow the SARAO design process i.e. Requirements Review (RR), Preliminary Design Review (PDR), Concept Design Review (CDR), Detail Design Review (DDR) and Verification Test Procedures. This will give SARAO the opportunity to address any outstanding or changes in the issued user requirements, including the late adoption for certain technologies. The PSC will receive Electrical Reference Designs and All Current Requirements from SARAO; engage Modular Data Centre (MDC) Specialist and Cooling Specialist to Refine Requirements; Produce Concept Baseline for the CTHIS; Initiate Site Studies; Prepare Tender for Design and Construction of CTHIS and act as the design authority for the employer, including Project Management services during the

entire execution phase of the CTHIS facility.

SARAO will have an oversight role through the PSC to ensure compliance to the employer's requirements are adhered to. The various SARAO/TLABS/SKAO co-location working group leads will fulfil the oversight roles over the PSC. SARAO will also have the opportunity to strengthen internal experience and capability, whereby resources will be made available to the PSC and Contractor (Successful Design and Construct Bidder) to assist on specific activities. The required experiences will be provided in various disciplines, i.e. Environmental studies, Electrical, Mechanical and Civil Engineering, etc., the specific activities will be agreed with the appropriate functional managers.

For detailed scope and user requirements please refer to:

1. Annexure A: The Statement of Work document [[F2700-0000-004 CTHIS PSC Statement of Work_Issue 01](#)]
2. The Requirements Documents:
 - a. Annexure B: High [High Level CTHIS requirements \[F270-0000-000 CTHIS – Req Spec_Issue 01_Final\]](#)
 - b. Annexure C: High Level CTOC requirements [[F2700-0002-000 CTOC Requirements Specifications](#)]
 - c. Annexure D: High Level HPCB requirement [[F2700-0003-000 Requirements Specification – HPCB](#)]
3. Annexure E: Development Document and Compliance Document [[F2700-0000-003 CTHIS Development Plan_Issue 01](#)]

LOCALITY

The site is located within the iThemba LABS NRF facility precinct on Old Faure Road, City of Cape Town municipal region near the suburb of Blue Downs and is accessible via Old Faure Road to the North, the N2 to the South and R310 to the East. iThemba LABS has approved and allocated a 45798m² (GB1) portion of the land, (Green polygon indicated in Figure 1), in the TLABS Precinct for the construction of the CTHIS.

GPS Coordinates: Latitude: 34°1'27.96"S; Longitude: 18°43'1.32"E



Figure 1: High-level overview of land made available by NRF iThemba LABS National Facility

- iThemba LABS is 33km away from the Cape Town City Centre and falls under the Cape Town Metropolitan Municipality
- The surrounding suburbs immediately close to the precinct are Eerste River; Blue Downs; Khayelitsha
- Other outlying suburbs include Macassar; Mitchells Plain; Delft Gugulethu and Philippi
- The towns closer to the site, outside the CPT Metro include Stellenbosch and Somerset West
- The major access routes to Faure Rd are N2 via the R310 and the N1 via R40 & R310
- The new Magnetic Substation (constructed by Amazon) is situated to the East of TLABS and closest to the CTHIS portion of land
- The Cape Town Film Studios and Amazon Data Centre are situated to the South and directly behind the TLABS precinct
- The suburb of Blue Downs is situated to the North and directly across the road to TLABS precinct

D1.2.1. DESIGN PROCESS (229 DAYS)

The consultant shall perform the duties and obligations of the contract as the Client’s Engineer. The consultant shall provide the following:

- Conceptual design work and obtain approvals for the full design, drawings and detailed bills of quantities.
- Provide sufficient resources for the design phase, procurement phase and construction management services

SARAO will follow a System Engineering (SE) process to realise the design of the works. Based on the design requirements specification and supporting documentation issued by SARAO (refer to Annexure A, B, C, D) the Bidder is expected to prepare a concept design and manage the DC contractor to produced detailed design for the stated scope of works including regulatory compliance and approval.

The SE process shall be managed internally within SARAO, with technical input and assistance from the successful Bidder as and when required. Bidders must also note that SARAO has specific configuration management for projects. All documentation, including drawings, shall be compiled on specific templates which shall be issued to the successful Bidder. There shall be a specific numbering system which shall be provided to the successful Bidder.

Bi-weekly progress meetings will be held between the design team and the SARAO team using a combination of in-person meetings and via video conferencing.

The Design Lead shall be responsible for keeping minutes for each meeting, including Requests for Information from SARAO. The design reviews and approval meetings shall be held via video conferencing.

SARAO shall deem each activity / phase as complete upon formal acceptance before the consultant commences to the next stage of works.

High Level Programme for Completion

Time for Completion – Design and Build Phase (1689 Calendar Days)										
Section 1: Detailed Design and Municipal Submission & Approvals (579 Calendar days)							Section 2-4: Construction/Execution (1110 Calendar days)			
PSC: CTHIS Professional Services Contract (TO1) [350 Calendar days]			PSC: CTHIS Design Management Services (TO2) [229 Calendar days]				PSC: CTHIS Construction Management Services (TO3) [1110 Calendar days]			
Requirements Refinement (70 Calendar days)	Site Studies (350 Calendar days) Trade-off Studies (120 Calendar days)	Conceptual Design (28 Calendar days) & Prepare Tender for Design and Construct (14 Calendar days)	Manage D&B Contract: Design Scope Review (21 Calendar days)	Manage D&B Contract: Preliminary Designs, On-site assessment & Review Meeting (47 Calendar days)	Manage D&B Contract: Detail Designs & Review Meetings (72 Calendar days)	SARAO Review & Approval (CDR) prior to the start of Construction/ Municipal submission (89 Calendar days)	Development Authorisation & Construction Permits (120 Calendar days)	Construction of CTHIS (915 Calendar days) <i>NB: MID_1 Phase 1 MDC required in Q4 2025</i>	Manage Commissioning, Defects Correction, Handover (90 Calendar days) <i>NB! This work is spread over a period 565 days starting at end of each Work Package. When each of the 3 facility buildings are handed over.</i>	Manage Project Handover & Closeout (60 Calendar days)

Figure 3: SARAO Project Execution Process

D1.2.2. CLIENT BRIEF / WORKSHOP

The design team led by the architect shall undertake a detailed review of the building requirements listed in the Annexures A, B, C & D for Cape Town Host Infrastructure System facility. A client brief / workshop shall be held seven (30) days after tender award as a kick off meeting and a Requirements Review (RR) to explain the reference design and conceptual master development requirements which maybe unclear / require further discussion and where requirements can be further defined, optimised and refined.

Client Brief Interpretation Meeting:

Once the Requirements Review meeting has been held. The Consultant team led by the Architect shall be required to provide a presentation within ten (10) working days (2 weeks), of their understanding and interpretation of the client's brief / scope of work for the building design and development. The consultant led by the Architect shall be required to present a high-level implementation plan of the scope of works (buildings & development).

The client shall arrange for a panel to be present for the presentation.

Upon formal acceptance of the client's brief interpretation presentation and high-level implementation plan the design team led by the architect shall be expected to visit the site and familiarize themselves with the Cape Town Municipal approval process. The design team shall be required to undertake Topographical and Geotechnical studies of the land at ERF 41967.

SARAO requires fifteen (15) working days (3 weeks) to review all documents received from the consultant.

All surveys, detailed design, drawings, detailed bill of quantities and all other ad hoc project management documents / reports shall be formally accepted by SARAO before commencement of the next project execution phase.

The design team shall be responsible for submitting a Notification of Intention to Develop / Build on behalf of SARAO and any other documentation in compliance with the Cape Town Municipality prior to the commencement of the Concept Design Phase including completing the Engineers' appointment form and certificate in terms of SANS 10400). The topographical survey will include establishing both vertical and horizontal ground control points, generation of the topographic maps and verification of ERF 41967 site and its features both natural and artificial. The survey shall yield a Topographic Map for the ERF 41967 site.

The survey shall, as a minimum include, but is not limited to the following:

- Determine boundary conditions (site property boundary, temporary and permanent servitude widths and rights-of-way-widths);
- Drawing provided at a scale of 1:500 and clearly define each contour at a 0.2m contour interval, identifying all even contours;
- Establish elevations. Spot elevations affecting the design and construction of the building shall be provided, such as ground
- Elevations, elevations on existing utilities, and all visible surface features within the area to be surveyed. Breakpoints or changes in grades or terrain shall be provided. Ground elevations shall be to the closest 0.01 m as well as all other elevations (paved roads, railroads, finished floors, utility lines, drainage structures, monitoring wells, etc.);

The bidder shall perform a field survey clearly showing all existing surface features within the project limits. Surface features shall include but not limited to:

- Tree type and trunk diameter, drainage channels (including invert and water surface elevations, water bodies
- (ditches, streams, creeks, rivers, ponds, etc.)) including invert and water surface elevations, structures, telephone boxes, fences, gates, and all other surface features. The size and type of all surface features shall be shown;
- Establish elevations. Spot elevations affecting the design and construction of the building shall be provided, such as ground elevations, elevations on existing utilities, and all visible surface features within the area to be surveyed. Breakpoints or changes in grades or terrain shall be provided. Ground elevations shall be to the closest 0.01 m as well as all other elevations (paved roads, railroads, finished floors, utility lines, drainage structures, monitoring wells, etc.);
- The type, size, alignment, depth, and top and invert elevations of the underground features shall be noted.
- Slopes and flow lines shall be noted for existing sewer lines. Materials of construction of underground utilities shall be provided where available.

The geotechnical investigation shall as a minimum include the following (but not limited to):

- Confirm the soil types and underlying rock on the ERF 41967 site;
- Identify the characteristics and properties of the underlying strata, through visual assessment, profiling and laboratory testing;
- Determine further investigation to be undertaken as part of the building design; and

- Compile an interpretative report on the findings of the investigation.
- The on-site activities shall include a field investigation which comprises test pitting, in-situ profiling, rotary core drilling, sampling and visual assessment of the material, slope stability determination and visual assessment of ground water seepage.
- A total of ten (10) test pits shall be excavated using a light backhoe (TLB) or excavator shall be undertaken.
- The locations of the test pits and rotary core drilling positions shall be confirmed in consultation with SARAO. The test pits should be excavated either at the maximum depth of 5m, or to refusal. The sides of the pits shall be sloped or shored where required. The pit shall not be entered until it has been declared safe.
- Laboratory Tests are required on material recovered at each of the (10) locations and at every 1m depth interval or where there are changes in the profile horizon.

D1.2.3. CONCEPTUAL DESIGN PHASE

The PSC Contractor will be responsible for the Conceptual design.

The Conceptual Design will include the submission of documents/ drawings for the CTHIS Buildings listed in the scope of work. The Conceptual Design will include the submission of the following for review by a SARAO / SKAO Panel:

- Written Conceptual Design report in Word and PDF format
- Conceptual Design Drawings in AutoCAD format and PDF Format
- Any cost changes with justifications for SARAO / SKAO team responses
- Project specific Safety, Health, Environmental and Quality management plan for approval, based on the SARAO EMP and OHS specification.
- Preliminary verification plan
- Results / Outcomes of any on-site investigations required as input to the design.
- Updated Schedule

The conceptual design will include the submission of the following documents/drawings to the SARAO three weeks prior to the Conceptual Design Review being held (CoDR). The full project scope for the site will be designed. The implementation and construction work packages will be reviewed and agreed by SARAO and may be amended, subject to good Project Management methodologies and funding constraints.

During the Concept Design Phase, the design team will be responsible for liaising with the Cape Town Metro Municipality to ensure that all design/building/application requirements are met as and when required.

The conceptual design for the building will include but not limited to:

Site Analysis which includes the following:

- Location
- The site masterplan
- Site constraints

Concept Design

- All building facilities to be designed i.e. Cape Town Operations Centre (CTOC), High Performance Computing Building (HPCB), Power Generation and Distribution Centre (PG&DC) etc
- Building concepts & principles
- Building zoning options (principles, concepts, zoning plan)
- Building look and feel (including proposed finishes options)
- Floor plans, Elevations, Sections, 3D models
- Solar study (External courtyards, Rooftop, natural sunlight etc.)
- Gardens
- Extended workplace (patios)
- Design ideas (Roof & access, facades, finishes)
- Site approach (existing conditions, proposed route)
- Landscape design summary (access road, parking, lighting, courtyards, gardens)

- Engineering Design

Structural & Civil Strategy & conceptual drawings

- Review of geotechnical conditions,
- Bulk civil, electrical, sewerage supply to the site,
- Foundation general arrangement including parking,
- Floor slab general arrangements,
- Roof plan general arrangement,
- 3D views,
- Existing access road with passing points and lighting,
- Drainage strategy,
- Footpaths & kerbs,
- Constraints

Building Services Strategy & conceptual drawings

- ICT & AV equipment
- Incoming Supplies to site
- Electricity
- Water
- Sewerage

Mechanical Service Systems

- Ventilation (active & passive, server room, toilets etc.)
- Domestic hot & cold water & drainage
- Cooling (active & passive cooling and server room cooling)
- Building Management System (including fire detection, gas suppression, CCTV, access control)

Electrical Service Systems

- MV/HV/LV distribution (single/redundant)
- Bulk power connection design work
- Lighting and controls
- Emergency lighting
- Back-up power supply
- Access & maintenance strategy

Sustainability Strategy (including renewable energy strategy/options)

The development aims to minimise energy consumption and reduce carbon emissions where possible. A Thermal / Energy Model should be produced by the Mechanical and Electrical teams to identify specific targets in relation to the following:

- The building designs must adhere to the Green Building Standards of South Africa;
- Energy Consumption & Performance Targets which will be established: kWh/m²/yr electrical / kWh/m²/yr fossil fuel.
- An absolute carbon emission target for the CTHIS Facility Building will be established: kgCO₂e/m². The model will be updated in line with the iterative design process.
- Low Carbon and Renewable Energy Technologies – feasibility analysis to determine the suitability of different low and zero carbon/renewable technologies. The appropriate technology for consideration must be documented for review. A report must be compiled which indicates how the building complies to different Green Building Star Statuses and what the cost implications will be between the different

ratings. The following must be considered:

- Resource Consumption: Prioritisation of natural daylight and where possible, natural ventilation to improve the internal environment of the building/s and minimise reliance on fossil fuels. However, this can have inherent trade-offs in relation to issues such as thermal efficiency and noise attenuation. This must therefore be continually evaluated as part of the initial building thermal model to inform the design proposals.
- Water: The design should aim for a target of 40% reduction in water consumption if possible.
- Climate Change: The aim is for the design to enhance the building's internal environment through a strategy prioritising natural ventilation (where possible) and improving natural daylight. The initial building thermal model once complete will inform the project's initial energy and carbon reduction strategy. This will include a preliminary check of solar gains and potential overheating.
- The geohydrological assessment (flood risk) must address global climate change to ensure the building/s drainage is resilient to future climate change and does not adversely impact on flooding risk at the site.

Health and Safety/Fire Prevention Strategy & drawings

- RSHEQ Department: Radiation, Safety, Health, Environmental and Quality Management Department. It is the responsibility of RSHEQ to periodically review the system and the procedure at iThemba LABS
- All Mandatories working within the premises of iThemba LABS, shall comply with the Regulations of the Occupational Health and Safety Act, No. 85 of 1993 and all other iThemba LABS requirements
- All Mandatories shall have adequate Fire Fighting equipment in their possession with an up-to-date service record and personnel trained in basic firefighting and the use of such equipment.
- Obtain Hot Work Permit from the NRF/iThemba LABS Project Manager or RSHEQ Department before any naked flame or grinder is used anywhere. All fires shall immediately be reported to the NRF/iThemba LABS Project Manager and the RSHEQ Department. Refer to Annexure H: [NRF/iThemba LABS Health and Safety Specification & OHS 37\(2\) Agreement \[SHE Specification and 37.2 Agreement Tender Doc version\]](#)
- The Fire Strategy and design should comprehensively define, amongst other things, the following:
 - Fire Safety Plan
 - Risk Assessment
 - Code compliance
 - Fires and Hazardous Substance Management
 - Material Safety Data Sheets
 - Hazardous Materials / Substances Controller
 - Zoning and compartmentalisation
 - Early warning and evacuation
 - Means of Escape and evacuation plans
 - Fire Alarm & Detection system drawings
 - Sprinklers system plans
 - Suppression systems diagrams
 - Smoke control and ventilation plans
 - Fire Door and Fire Wall plans
 - Emergency Lighting and Exit sign plans
 - External fire spread

Acoustic Strategy & drawings

- Environmental Noise Levels
- Acoustic Design strategy
- Facades & natural ventilation
- Roofing systems
- Partitions
- Doors
- Glazed screens
- Sound absorbing treatment
- Sound masking systems

Key Design Principles

The conceptualisation, design, and construction of the building, as well as the site more generally, should be informed by the following key principles:

- The CTHIS facility site and buildings must be maximally accessible within the iThemba LABS precinct.
- Also, outside the building, the navigation of the spaces should be designed so as to enable meaningful interaction and engagement between employees, the wildlife, iThemba LABS co-habitants and visitors to the precinct.
- The universally accepted design principle of form follows function must underpin the design of the Visitor Centre building. The primary design imperative is to create a building that accommodates, complements and enhances the employees/visitor experience and activities that will take place there.
- The building design must also express an organic and tangible relationship with the environment and landscape in which it is situated.
- At the same time, the design should not be overly parochial but should rather reflect the global nature of the SKA project and the international efforts behind its conceptualisation and realisation. The building should be forward-

looking and present and embody a vision for the future; an inspirational building that reflects the science and vision behind the SKA project and that fosters a culture of collaboration and communication.

- The design of the building should be emblematic of the daring, inquisitive human impulse associated with space exploration as well as being reflective of a global mega-science project which is leading the development of cutting-edge engineering, technology, science and innovation in an effort to realise the MeerKAT and SKA science goals. The building should aim to achieve its own distinctive identity and unique architectural expression that is emblematic of the SKA and the science behind the project.
- The building design must utilise the appropriate green technologies to demonstrate a commitment to renewable energies and environmental sustainability.

No.	Phase	Responsibility	Comment
1.	Review and Analysis of Requirements	PSC Contractor / SARAO / SKAO	Review and Analysis of the CTHIS, CTOC and HPCB Requirements
2.	Conceptual Design	PSC Contractor / SARAO /SKAO	PSC contractor responsible for the design.
3.	Preliminary Design	Main Contractor / PSC Contractor / SARAO /SKAO	Main contractor responsible for the design and PSC contractor oversight function responsibility.
4.	Detail Design	PSC Contractor	Main contractor responsible for the design and PSC contractor oversight function responsibility.
5.	Execution Phase	PSC Contractor	Main contractor responsible for the execution and PSC contractor oversight function responsibility.
6.	Defects Liability Period	PSC Contractor	Main contractor responsible for the execution and PSC contractor oversight function responsibility.

All design work undertaken by the PSC and Main Contractor will strictly comply with the specified procedures, relevant requirements documents as well as the relevant Technical Specifications. The Conceptual, Preliminary and Detailed Design and Construction Works will comply with all relevant health and safety requirements as well as all applicable environmental requirements. The PSC Contractor will carry out all necessary engineering site investigations for the design of the project

. If the PSC Contractor wishes to deviate from any requirement stipulated herein, the PSC Contractor will submit a change proposal, with justifications, to the SARAO / SKAO team for assessment and approval.

Construction cannot start until the detailed design is approved by the SARAO / SKAO team and municipal approvals have been obtained. The PSC Contractor's schedule for completion of the works will be updated to reflect outcomes, if any, resulting from the detailed design and submitted for approval as part of the required documentation.

D1.2.5. PRELIMINARY DESIGN PHASE

The Main contractor will be responsible for the Preliminary Design, with the PSC contractor fulfilling an oversight function role.

The Preliminary Design will include the submission of documents/ drawings for the CTHIS Buildings listed in the scope of work. The Preliminary Design will include the submission of the following for review by a SARAO / SKAO Panel:

- Written Preliminary Design report in Word and PDF format
- Preliminary Design Drawings in AutoCAD format and PDF Format
- Any cost changes with justifications for SARAO / SKAO team responses
- Updated Project specific Safety, Health, Environmental and Quality management plan for approval, based on the SARAO EMP and OHS specification.
- Updated Preliminary verification plan
- Results / Outcomes of any on-site investigations required as input to the design.
- Updated Schedule

D1.2.6. DETAIL DESIGN PHASE

The Main contractor will be responsible for the Detail Design, with the PSC contractor fulfilling an oversight function role.

The detail design will include the submission of the following documents/drawings to the SARAO / SKAO team for review:

- Written Detail Design report in Word and PDF format. The report shall include the following:
- A list of all applicable standards used
- Operator procedures
- Final project specific Safety, Health, Environmental and Quality management plan for Construction, based on the SARAO EMP and OHS specification
- Construction Schedule and Deployment Strategy (including integration plan between sub elements and components)
- Complete requirements compliance matrix, linking each requirement to its related test procedure
- Risk and Opportunity Register
- Any cost changes with justifications for SARAO / SKAO team responses
- Updated Schedule
- Construction working drawings in AutoCAD format DWG, DXF and PDF Format (including detailed specifications, etc.)
- Detailed Bill of Quantities (un/priced) for construction in PDF, Excel and WinQS/QSPPlus or other measuring software format.
- Commissioning and Verification procedures (Installation, Commissioning and Handover)

The SARAO project team will review all documentation through an Observation Action Register (OAR) where it shall raise questions/comments/clarifications which will be submitted to the design team one week prior to the CDR. The design team will present their responses to the OAR at the CDR in an effort to close-out these comments. SARAO shall publish a report within one week on whether the detailed design can be submitted for planning approval and the commencement of the procurement phase.

Bi-weekly progress meetings will be held between the design team and SARAO virtually or physically at an agreed location convenient to all parties. The Project Manager for the design team will be responsible for minuting the actions from each meeting including Requests for Information from the SARAO as and when required.

D1.2.6. SUBMISSION TO LOCAL MUNICIPALITY FOR APPROVAL

- The professional design team shall be responsible for notifying the Municipality / Western Cape Government of the intention to commence building work timeously and coordinate any inspections required by the Municipality.
- The professional design team shall be responsible for submitting all final building design plans to the Local/Metropolitan Municipality for approval prior to construction and obtaining the necessary construction permits/licenses required for construction.

D1.2.7. PREPARATION OF TENDER DOCUMENTATION FOR CONSTRUCTION

The professional design team shall be responsible for the preparation of all the tender documentation required to appoint a design and construction contractor for the project. This shall include the following:

- Developing tender specifications in compliance with the National Treasury Regulations and Preferential Procurement Policy Framework Act, 2000 and the Construction Industry Development Board (CIDB) Conditions of Tender;
- Conduct a Market Analysis of potential bidders meeting the required CIDB grading scale;
- Define the health, safety & environmental, quality assurance specifications in the tender documentation;
- Define the Contract Participation Goals for the contract and socio-economic upliftment requirements;

D1.2.8. PROCUREMENT

- The National Research Foundation procurement process shall apply

- The construction phase shall follow the FIDIC Yellow or Red book. SARAO and the consultant shall evaluate the best option post the concept design phase.

D1.2.9. CONSTRUCTION MANAGEMENT SERVICES

Undertake the Resident Engineer role during construction.

The design professional team shall perform the duties stated in the FIDIC D&B Build contract 2017 (Yellow or Silver Book) and shall be responsible for executing the following construction management administration role:

- Input into content of contractor appointment letter; insurances; performance guarantee requirements; health, safety and environmental management plan review and approval prior to construction; quality assurance plan review and approval prior to construction;
- Provide Project Management Plans, Statement of Works, Risk Register, Updated Stakeholder Register
- Undertaking any environmental walk-throughs required prior to and during construction (e.g. heritage, archaeological);
- Review and approval of the construction programme including project float, critical path items, holding points and items identified critical for integration;
- Convening weekly face to face site coordination meetings with the contractor and appointed sub-contractors to ensure proper coordination and integration;
- Undertake the Engineer role on behalf of the SARAO to ensure that construction, testing, verification, commissioning and handover is done within budget, to the required quality and within the approved construction timeline. (Level 3 construction monitoring in terms of the Engineering Council of South Africa Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), Government Gazette 39480, Board Notice 138 of 2015;1) Regardless of what contract will be utilised for the construction contractor, the Principal Agent/Resident Engineer will be required to obtain written approval from the SKA SA prior to any site instructions or variation orders are issued and providing the SARAO with any early-warnings of potential delays in the schedule which has an impact on cost;
- Project Implementation Plan or Project Programme must be provided in Excel Format / Microsoft Projects or Primavera. Schedules must be updated and maintained on a monthly basis
- Lead monthly face to face progress meetings including the recording of minutes, action items, review of the construction schedule, progress on implementing contract participation goals and socio-economic requirements as defined in the contract;
- Assessment, approval and submission of monthly payment certificates to SARAO for payment;
- Undertaking health, safety, environmental, quality assurance audits in conjunction with SARAO team;
- Ensuring that the required design disciplines are involved in inspections as applicable to their work during construction
- The following Levels of involvement in terms of the Engineering Council of South Africa Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), Government Gazette 39480, Board Notice 138 of 2015 are expected from key design and engineering disciplines during construction which must be included in Pricing Schedule 1:

D1.2.10. TEST, VERIFICATION, COMMISSIONING & HANDOVER PHASE

The design professional team shall be responsible for executing the following during this phase:

- Coordinate and supply of operations and maintenance manuals by all suppliers and contractors as per SARAO defined requirements. This shall include the coordination and compilation of the final hand-over package.
- Liaise with the Municipality to coordinate the required inspections and issuing of the Certificate of Occupancy;
- Format both in hard copy and in soft copy. The hard copy must be signed off by the Consultant and Client.
- Lead the commissioning/integration plan of major equipment in conjunction with the Contractor and the SARAO;

- Taking overall responsibility for coordinating the compilation of the following as-built documentation between the design team (appointed bidder) and the Construction Contractor two months prior to completion of construction in preparation for achieving an as-built baseline (ABBL):
- Coordinate and undertake test and verification events between the contractor, the professional team and the SARAO (as defined in the construction schedule) in compliance with the test, verification and commissioning plan defined during the design phase;
- Lead all site acceptance tests that need to be undertaken by the contractor while being witnessed by the professional team and SARAO;
- Compile snag lists, ensure the contractor addresses the snags and issuing completion certificates (interim, practical, final);
- Engineer/design team and submitted to the SARAO;
- All test, verification and commissioning reports must be reviewed and signed by the relevant design engineering discipline/Architect and submitted to the SARAO;
- The final hand-over package must be submitted in hard and soft copy (PDF, word, dwg, dxf, excel etc.).
- Coordination of the training of operational staff for all equipment as per SARAO requirements;
- All finishing schedules etc.
- All Certificates of Compliance which are signed off by the design engineers and the contractor;
- Manage the defect-liability period by conducting an inspection on a quarterly basis for the period and prior to final handover certificates are signed to identify defects which must be addressed by the contractor.

The bidder is required to comply to the following regulations but not limited to:

- SANS 1200 building specifications for all the civil works around the building,
- SANS 10400 – 1990 (latest update is 2022) – Building Regulations South Africa
- National Building Regulations and Building Standards Act No.103 of 1977 and SANS 10128 and T
- National Building Regulations (Part A, T and W)
- Occupational Health & Safety Act Regulations
- National Veld and Forest Fire Act (Act 101 of 1998)
- Local Authority By-Laws
- The Functions of SANS Codes and Standards
- The Fire Brigade Services Act as amended
- Fire Detection under SANS 10400 – Section T

SARAO Shall be responsible for executing the following during this phase:

- Accept As-built drawings (workshop, construction, other) in PDF, dwg, dxf, Visio & BIM Models in 3D
- Conduct Site inspection in the presence of the consultant and construction manager
- Compile snag lists, ensure the consultant and contractor addresses the snags and issuing completion certificates (interim, practical, final);
- Receive all Certificates of Compliance which are signed off by the design engineers and the contractor;
- All test, verification and commissioning reports shall be reviewed and signed by the relevant design engineering discipline/Architect and submitted to the SARAO.

D2: Agreements and Contract Data

Number	Heading	Pages
D2.1	Form of Offer and Acceptance	84
D2.2	Contract Data	91

D2.1 Form of Offer and Acceptance Offer

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

APPOINTMENT OF A MULTIDISCIPLINARY TEAM (LED BY AN ARCHITECTURAL CONSULTANT) TO PROVIDE PROFESSIONAL SERVICES, FOR THE DESIGN AND CONSTRUCTION OF THE SKA SCIENCE OPERATIONS CENTRE (SOC); SKA SCIENCE PROCESSING CENTRE (SPC), SKA SCIENCE REGIONAL CENTRE (SRC) AND SARAO HQ, WHICH FORM PART OF THE NEW CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN

The bidder, identified in the offer signature block below, has examined all the documents listed and included by reference in the tender data and addenda thereto as listed in the Schedule of Returnable, Contract Documents and all documents defining the Employer' Requirements, and by submitting this offer has accepted the conditions of tender and the Contract.

By the representative of the bidder, 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 consultant 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, within the Contract Period stated below.

A) THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

R (in figures) RAND (in words);

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 Consultant in the Conditions of Contract identified in the Contract Data.

SIGNED ON BEHALF OF/BY THE BIDDER:

NAME	SIGNATURE
CAPACITY	DATE

Name and Address of Organisation:

SIGNED BY WITNESS:

NAME

SIGNATURE

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 and for the contract period offered. Acceptance of the tenderer's offer shall form an Agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in:

- a) FIDIC Conditions of the Client/Consultant Model Services Agreement (General Conditions)
- b) The Particular Conditions of Contract
 - i. Part A References from Clauses in the General Conditions
 - ii. Part B: Amendments to and insertion of additional Clauses
- c) Appendices 1-5
 - i. Appendix 1 (Typical Scope of Services and Professional Services Variation Order(s) (Part D1)
 - ii. Appendix 2 (Personnel, Equipment, Facilities and Services of Others to be provided by the Client)
 - iii. Appendix 3 (Remuneration and Payment Schedule) – Part D3 Pricing Data
 - iv. Appendix 4 (Program)
 - v. Appendix 5 (Rules of Adjudication)

and drawings and documents or parts thereof, which may be incorporated by reference into Parts D1 to D3 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the Returnable Documents 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 of signing this Agreement, including the Schedule of Deviations (if any), or when or just after this Agreement comes into effect, contact the employer's implementing 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 FIDIC Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date of signature of this document, including the Schedule of Deviations (if any). Unless the tenderer (now Consultant) 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.

SIGNED ON BEHALF OF/BY THE EMPLOYER:

NAME	SIGNATURE
CAPACITY	DATE

Name and Address of Organisation

SIGNED BY WITNESS:

NAME

SIGNATURE

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 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.

1. Subject

Details

2. Subject

Details

3. Subject

Details

4. Subject

Details

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 Returnable Documents, as well as any confirmation, clarification or changes 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.

Schedule of Deviations (continued)

SIGNED ON BEHALF OF/BY THE TENDERER *(only on award of Contract)*:

NAME	SIGNATURE
CAPACITY	DATE

SIGNED BY WITNESS *(only on award of Contract)*:

NAME	SIGNATURE	DATE

SIGNED ON BEHALF OF/BY THE EMPLOYER:

NAME	SIGNATURE
CAPACITY	DATE

SIGNED BY WITNESS:

NAME	SIGNATURE	DATE

CONFIRMATION OF RECEIPT

The Bidder, (now Consultant), 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)(year)
at			(place)

SIGNED ON BEHALF OF/BY THE CONTRACTOR (only on award of Contract):

NAME	SIGNATURE	CAPACITY

SIGNED BY WITNESS (only on award of Contract):

NAME	SIGNATURE

D2.2 Contract Data

Part 1: Contract Data Provided by the Client

CONDITIONS OF CONTRACT

The Conditions of Contract comprise the “General Conditions”, which form part of the “Client/Consultant Model Services Agreement (5th Edition 2017) issued by the Fédération Internationale des Ingénieurs-Conseils (FIDIC), and the “Particular Conditions”, which include amendments and additions to such General Conditions.

These General Conditions are adopted as the General Conditions of Contract for this Contract and are available from: -

Fédération Internationale des Ingénieurs-Conseils (FIDIC)

Web address: - <http://www.fidic.org>, or Copies of these General Conditions (White Book) may be obtained from the South African Institution of Civil Engineering (SAICE) (tel. 011 805 5947) or Consulting Engineers South Africa (CESA) (tel. 011 463 2022).

The General Conditions refer to the Appendix to Tender and Particular Conditions (contained in the Contract Data) which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

The General Conditions shall be read in conjunction with the variations, amendments and additions set out in the Appendix to Tender and Particular Conditions below. Each item of data given below is cross-referenced to the Clause or Sub-Clause in the General Conditions to which it mainly applies.

PARTICULAR CONDITIONS

These Particular Conditions supplement the General Conditions. Wherever there is a conflict the provisions herein shall prevail over those in the General Conditions.

These Particular Conditions amend the General Conditions as follows:

- i) Part A is the References from Clauses in the General Conditions;**
- ii) Part B amends and inserts additional clauses in the General Conditions**

C2.2.2 PARTICULAR CONDITIONS PART A

Part A: References from Clauses in the General Conditions:

Sub-Clause

1.1	Definitions																	
1.1.4	Client Representative	Thulani Fihlani Email: tfihlani@sarao.ac.za																
1.1.5	Commencement Date	The Effective Date																
1.1.8	Consultant's Representative	As per Tender Returnable B5																
1.1.9	Country	South Africa																
1.1.24	Time for Completion Professional Services	350 days from the Commencement Date																
	Time for Completion Design Management Stage	<table border="1"> <tr><td>Client Brief</td><td>4 days</td></tr> <tr><td>Requirements Refinement</td><td>70 days</td></tr> <tr><td>Preliminary Concept Design & Update</td><td>28 days</td></tr> <tr><td>Concept Design</td><td>28 days</td></tr> <tr><td>Site Studies</td><td>350 days (Parallel)</td></tr> <tr><td>Prepare Tender for Design and Construction</td><td>14 days</td></tr> <tr><td>Contract Award</td><td>1 day</td></tr> </table>	Client Brief	4 days	Requirements Refinement	70 days	Preliminary Concept Design & Update	28 days	Concept Design	28 days	Site Studies	350 days (Parallel)	Prepare Tender for Design and Construction	14 days	Contract Award	1 day		
Client Brief	4 days																	
Requirements Refinement	70 days																	
Preliminary Concept Design & Update	28 days																	
Concept Design	28 days																	
Site Studies	350 days (Parallel)																	
Prepare Tender for Design and Construction	14 days																	
Contract Award	1 day																	
	Time for Completion Construction Management Stage	<p>229 days from the Time for Completion of the Concept Design Stage</p> <table border="1"> <tr><td>Design Management Services</td><td></td></tr> <tr><td>Design Scope Review</td><td>21 days</td></tr> <tr><td>Preliminary Designs, On-site assessment & Review Meeting</td><td>47 days</td></tr> <tr><td>Detail Designs & Review Meetings</td><td>72 days</td></tr> <tr><td>SARAO Review & Approval (CDR) prior to the start of Construction/ Municipal submission</td><td>89 days</td></tr> </table> <p>1230 days from the Time for Completion of the Design Management Stag</p> <table border="1"> <tr><td>Construction Management Services</td><td></td></tr> <tr><td>Municipal Submission & Approval</td><td>120 days</td></tr> <tr><td>Construction Management</td><td>1110 days</td></tr> </table> <p><i>Note:</i></p> <ul style="list-style-type: none"> - Duration for the construction period shall be confirmed upon completion of the detailed design phase. - SARAO shall provide formal acceptance and approval of each Milestone outputs - NRF procurement process shall be followed. 	Design Management Services		Design Scope Review	21 days	Preliminary Designs, On-site assessment & Review Meeting	47 days	Detail Designs & Review Meetings	72 days	SARAO Review & Approval (CDR) prior to the start of Construction/ Municipal submission	89 days	Construction Management Services		Municipal Submission & Approval	120 days	Construction Management	1110 days
Design Management Services																		
Design Scope Review	21 days																	
Preliminary Designs, On-site assessment & Review Meeting	47 days																	
Detail Designs & Review Meetings	72 days																	
SARAO Review & Approval (CDR) prior to the start of Construction/ Municipal submission	89 days																	
Construction Management Services																		
Municipal Submission & Approval	120 days																	
Construction Management	1110 days																	
1.3.1(c)	Communication	Notices to be served under the Contract may be in non-electronic or electronic forms and will take effect from the date of receipt at the addresses stated in this Agreement. Delivery may be in electronic forms by e-mail. If delivered by e-mail, the e-mail delivery will only be deemed to have been made against a written or electronic confirmation of receipt																
1.3.1(d)	Address of Communication (Client's address)	2 Fir Street Black River Park Observatory Cape Town 7925																

	Telephone number	+27(0)21 506 7300
	email address	tfihlani@sarao.ac.za
	Consultant's address	
	Email Address	
1.4	Law and Language	English
1.4.1	Law Governing Agreement	Law of South Africa
1.4.2	Ruling Language of Agreement	English
1.4.3	Language for communication	English
1.6	Assignments and Sub -Contracts	"The Consultant shall ensure that the requirements imposed on the Consultant by Sub-Clause 1.8[Confidential Details] apply equally to each Subcontractor."
1.8	Confidentiality	"Any disclosure of information that form part of the contract shall not be disclosed without prior consent of the other Party."
1.8.3	Period for expiry of confidentiality	5 Years
3.9	Construction Administration	Clause 3.9 is applicable
4	Delays	
4.3.1	Programme	Accepted programmes shall be Primavera P6, Excel, MS Projects
5.2.	Agreement of Variation Value and Impact	
5.2.2	Rates used shall be	D3.3 Rates for Variations
7.2.1	Time for Payment	28 days after Submission of Invoice
7.2.2	Interest payable by the Client if payment is not made to the Consultant within the contractual period.	0%
7.4	Third Party Charges on Consultant	N/A as all Consultant personnel shall be South African Residents
8.2	Duration of Liability	
8.2.1	Period of Liability	Save to the extent that the Consultant or the Client has an entitlement to indemnity under and in respect of any of the Project Policies the maximum duration of liability in respect of any claims by the Consultant or the Client against each other, shall be 10 years from the date of completion of the Services
8.3	Limit of Liability	
8.3.1	Limit of Liability	The maximum amount of compensation payable by the Consultant to the Client in respect of liability under this Agreement shall be equal to two times the estimated professional fees (excluding disbursements, VAT and other taxes) payable in terms of this agreement. The limitation of liability will be applicable to all delays or costs incurred from design errors, incorrect bills of materials, site conditions and incorrect cost estimation.
9	Insurance	
9.1.1	Insurance to be taken out by Consultant	
		The Consultant shall take out Professional Indemnity insurance cover with a limit of twice the Contract Value in respect of each claim and in the aggregate. The Party

	Professional Indemnity Insurance	<p>responsible for the matter giving rise to a claim, to the extent responsible therefore, shall be responsible and liable for the payment of deductibles under any policy of insurance under which it is an insured party or under any policy of insurance is required to maintain under this contract. In the event that responsibility for the matter giving rise to the claim is indeterminable, the First Named Insured under the policy of insurance is responsible and liable for the payment of deductibles.</p> <p>The minimum amount of cover under the Professional Indemnity Insurance Policy is not less than R3 million.</p>
	Public Liability Insurance	The minimum amount of cover under the Professional Indemnity Insurance Policy is not less than R3 million.
10	Disputes and Arbitration	
10.4.1	Arbitration Rules	<p>The arbitration shall be in Johannesburg, the Republic of South Africa before a single arbitrator who shall be selected by agreement between the Parties, or, failing such agreement, nominated on the application of either Party by the Arbitration Foundation of Southern Africa (AFSA). In all respects the arbitration shall be conducted in accordance with the Rules for the Conduct of Arbitration published by the Arbitration Foundation of Southern Africa that is applicable at the time the arbitrator is appointed. The award of the arbitrator shall be binding on the Parties and not subject to appeal by either Party.</p> <p>The law of the arbitration shall be the laws of South Africa</p>
	Language of Arbitration	English

Part B: Amendments to and insertion of additional Clauses

1 General Provisions

i) Definitions

Clause 1.1.1 is amended to read:

“Agreement” means the Conditions of the Client/Consultant Model Services Agreement (General Conditions and Particular Conditions) together with Appendix 1 (Typical Scope of Services and Professional Services Variation Order(s)), Appendix 2 (Personnel, Equipment, Facilities and Services of Others to be provided by the Client), Appendix 3 (Remuneration and Payment Schedule), Appendix 4 (Time Schedule for Services) and Appendix 5 (Rules of Adjudication).”

Deleted and replace 1.1.15 with:

“**Contract Agreement**” means the Form of Offer and Acceptance.

Deleted and replace 1.1.18 with:

“No Clause”.

A new Clause 1.1.29 is added as follows:

“1.1.29 “Working Day” means a day that is not a Saturday, Sunday or statutory holiday in the Republic of South Africa.”

ii) Clause 1.7 Intellectual Property

Clause 1.7 is deleted in its entirety and replaced with new clauses 1.7.1, 1.7.2, 1.7.3, 1.7.4 and 1.7.5 as follows:

“1.7.1 Each Party retains title to all intellectual property (including all patents, trademarks, copyright, trade secrets and know-how) owned or possessed by it or any of its affiliates and used by it in fulfilling its obligations under this Agreement, including any modifications or improvements made thereto (“Background IP”). All new and original intellectual property created by the Consultant during the course of performing the Services (“Project IP”) is warranted to be the property of the Consultant. The Consultant grants the Client a non-exclusive, non-transferable, perpetual and, unless otherwise agreed, royalty-free license to use:

- a. any of the Consultant’s Background IP used in the performance of the Services but only to the extent required to use any deliverables provided by Consultant for the purpose for which they have been provided (excluding any software source code); and
- b. Project IP for any purpose whatsoever.

1.7.2 The Client shall be entitled to use the documents prepared by the Consultant or copy them for the Project and the purpose for which they are intended and need not obtain the Consultant’s permission to copy for such use, provided that the Client shall only have a right of use of the documents that it has paid the Consultant for the Services.

1.7.3 The Consultant warrants to the Client that the use by the Consultant or the Client of any of the Consultant’s Background IP or the Project IP in accordance with the terms of this Clause 1.7 will not infringe any third party’s intellectual property rights.

1.7.4 The Consultant indemnifies the Client against all costs, expenses and liabilities arising out of or in connection with any claim by a third person that any document, design or materials provided by the Consultant to the Client or to a Contractor or any use of such document, design or materials in accordance with the terms of the license granted in this Agreement infringes any third person’s intellectual property rights.

1.7.5 The Consultant shall not be liable in any way for the use of any of the information other than as originally intended for the Project and the Client hereby indemnifies the Consultant against any claim which may be made against him by any party arising from the use of such documentation for other purposes.”

iii) Clause 1.8 Confidentiality

Clauses 1.8.1 and 1.8.2 are deleted and substituted as follows:

“1.8.1 The Consultant shall not in any way whatsoever, publish any material relating to the, Services or the Project without the prior written approval of the Client. The Consultant shall:

- 1.8.1.1 not, without the prior written consent of the Client, disclose any Confidential Information, for any reason or purpose whatsoever, to any person, other than the directors, employees or agents of the Consultant who

are required to become aware thereof by reason of their involvement in the Project, or to a person who is designated by the Client as being entitled to receive such information;

- 1.8.1.2 do all things necessary to keep the Confidential Information secret and to prevent the unauthorised disclosure of the Confidential Information to unauthorised third parties;
- 1.8.1.3 not use or, exploit in any manner whatsoever the Confidential Information for any purpose other than that for which it is disclosed and in accordance with the provisions of this Agreement; and
- 1.8.1.4 protect the Confidential Information disclosed to it pursuant to the provisions of this Agreement using the highest standards of care, and in any event not less than the same standard of care that it applies to safeguard its own proprietary, secret or confidential information, and that the Confidential Information will be stored and handled in such a way as to prevent any unauthorised disclosure thereof.”

“1.8.2 For the purpose of this Clause 1.8 “Confidential Information” shall include but not be limited to:

- 1.8.2.1 all matters arising out of this Agreement and any other agreement which may be concluded between the Parties pursuant to or as a result of the discussions between the Parties relating to the Project;
- 1.8.2.2 all information whatsoever disclosed by the Client to the Consultant, which is not available to the general public, including without limitation, all technical, commercial and scientific information, know-how, trade secrets, processes, designs, drawings, specifications, analyses, studies, copyright, information regarding products and contracts,
- 1.8.2.3 and generally all data and information in any other information which is communicated by or on behalf of the Client to the Consultant, and which is designated at the time of the disclosure as being, or which by its nature constitutes Confidential Information;
- 1.8.2.4 all drawings, specifications, technical data, studies, analyses, and generally all works and information prepared and/or created by the Consultant or other consultants or contractors for and on behalf of the Client in respect of the Project;

and shall not include:

- 1.8.2.5 information which was in the possession of the Consultant prior to the Commencement Date;
- 1.8.2.6 information which becomes available to the Consultant from a source other than the Client; or
- 1.8.2.7 information which the Consultant is required by law to disclose; or
- 1.8.2.8 Information which was independently developed without the Confidential Information being disclosed by the Client.”

Clause 1.8.4 is added as a new clause after clause 1.8.3 as follows:

“1.8.4 Notwithstanding anything to the contrary expressed or implied, the Consultant has the right to use the material or information provided by the Client only to provide the Services and the Consultant shall not be entitled to use any material prepared for this Agreement by the Consultant, except for the Client’s purposes.”

iv) Clause 1.9 Publication

Clauses 1.9.1 and 1.9.2 are deleted and substituted with the following Clause 1.9.1:

“The Consultant shall treat the details of the Services as private and confidential and shall not publish or disclose material relating to the Services without the prior written consent of the Client’s Representative.”

v) Clause 1.17 Undertakings

A new Clause 1.17 is added as follows:

“1.17 The Consultant undertakes that no secret or undisclosed profit from a third party shall be derived by the Consultant in the performance of its obligation under this Agreement.”

vi) Clause 2.2 Decisions

Clause 2.2.1 is deleted in its entirety and substituted as follows:

“2.2.1 On all matters properly referred to the Client in writing by the Consultant the Client shall give its decision, approval, consent, instruction or Variation, as the case may be in writing within 5 (five) Working Days alternatively within a reasonable time and with regard to the Programme so as not to delay the Services.”

vii) Clause 2.4 Client’s Financial Arrangements

Clause 2.4 is deleted in its entirety.

viii) Clause 3.3 Duty of Care and Exercise of Authority

The following clauses 3.3.4 to 3.3.12 is added after clause 3.3.3:

“3.3.4 The Consultant must ensure that it operates an acceptable quality management system when providing the Services. The Consultant shall provide to the Client a quality policy statement in a format acceptable to the Client.

3.3.5 The Consultant must comply with, and must ensure that its personnel comply with, all health and safety laws of the Country, and any security and other regulations and procedures of the Client that have been notified to the Consultant.

3.3.6 The Consultant must ensure that any Services performed by the Consultant for and on behalf of the Client under or in connection with the Project prior to the Commencement Date of Construction work, must be checked for accuracy.

3.3.7 The Consultant must notify the Client in writing by attaching a schedule to its reports of any data, information and opinions provided by the Client or any third party that it intends relying upon, including the specific information that it intends relying upon.

3.3.8 The acceptance by the Client of any of the Services shall not in any way relieve the Consultant of any of its obligations to provide the Services in accordance with the terms of this Agreement.

3.3.9 The Consultant undertakes to use reasonable endeavours to procure the continuity of key persons, as listed in Tender Returnable Form A4, employed by it in respect of the Project. Notwithstanding the foregoing, in the event the Consultant wishes to replace a Key Person, the Consultant shall submit the name, relevant qualification and experience of the proposed replacement person to the Client for acceptance, which acceptance will not be unreasonably withheld. A reason for not accepting the replacement person is that his relevant qualifications and experience are not as good as those of the key person to be replaced.

3.3.10 If the Consultant subcontracts performance of all or any part of the Services including any of the Services performed by sub-consultants, the Consultant is responsible for providing the Services as if it had not subcontracted any portion thereof and this Agreement applies as if a sub-consultant’s employees were the Consultant’s. The Consultant shall not be required to appoint a nominated sub-consultant against whom the Consultant makes a reasonable objection.

3.3.11 The Consultant shall give an early warning by notifying the Client as soon as it becomes aware of any matter that could delay completion, change the Program or affect the Services.

3.3.12 To the extent that the Services provided by the Consultant are deficient, in that the Services are not in accordance with the Scope of Services and/or the reporting obligations contained therein, the Consultant shall attend to all necessary remedial action.”

ix) Clause 3.5 Consultants Personnel

Clause 3.5.1 is deleted in its entirety and substituted as follows amended to read as follows:

“3.5.1 “The key personnel included in the Consultant’s offer/proposal at tender returnable B5 shall be deemed to be accepted by the Client on entering into the Agreement.

3.5.2 If the Consultant is obliged to replace the key person for any reason whatsoever, the Consultant shall give written notice to the Client together with a copy of the proposed replacement key person’s CV. The Consultant shall not employ any replacement key person without the written acceptance by the Client, which acceptance shall not be unreasonably withheld.

x) Clause 3.7 Changes in Consultants Personnel

Delete the full stop at the end of clause 3.7.1 and add the following to the end of clause 3.7.1

“upon written acceptance by the Client in accordance with clause 3.5.2. “

xi) CLAUSE 5 VARIATIONS TO SERVICE

Clause 5.2.2 is amended to read as follows

The value of any Variation shall be determined in accordance with or based upon the rates and/or prices in Appendix 3 [Remuneration and Payment], and on the proven/forecast impact on the programme, in respect of the proposed resources used. Where the rates and/or prices are not applicable to the Variation then new rates shall be agreed by the Parties.

xii) Clause 6.6 Rights and Liabilities of the parties

New Clauses 6.6.2, 6.6.3 and 6.6.4 are to be added as follows:

6.6.2 Upon request by, the Client, the Consultant shall meet with the Client to discuss a de-mobilisation plan and agree what further Services the Client expects from the Consultant to the date of handing over the Services. Any such agreement must be completed in writing. In such event, the Consultant shall be entitled to charge for such Services at the same rates provided for in this Agreement.

xiii) Clause 7.2 Time for Payment

Sub-clause 7.2.1 is amended by deleting “twenty-eight (28) days” and replacing it with “thirty (30) days”

Sub-Clause 7.2 is amended by inserting a new Clause 7.2.4 as follows:

“7.2.4 In relation to Services provided, the Client reserves the right to refuse payment for charges arising from:

- a. the use of unauthorised personnel;
- b. unauthorised activities;
- c. activities in contravention of an instruction from the Client;
- d. activities relating to errors or re-work due to the fault of the Consultant; or
- e. activities performed in an incompetent manner.”

xiv) CLAUSE 9 INSURANCE

9.1.1 Insurances to be Taken out by the Consultant

Insert the following at the end of the last sentence of the first paragraph The Consultant, at their own cost, effect and maintain the insurances listed below in the joint names of the Parties.

xv) CLAUSE 10 DISPUTES AND ARBITRATION

Sub-Clause 10.2 Adjudication

Insert the following as a new penultimate paragraph:

‘If the decision of the adjudicator requires a payment by one Party to the other Party, the adjudicator may require the payee to provide an appropriate security in respect of such payment’

xvi) Clause 12 Non-Solicitation

A new clause 12 is added as follows:

“12. **Neither Party will, during the term of this Agreement or for a period of 12 (twelve) months thereafter, either directly or indirectly on its own behalf or jointly with or on behalf of any other person, solicit, engage or employ any employee, independent contractor or other representative of the other Party (or any of its affiliates) that has been involved in the provision of Services, unless such engagement or employment was arranged prior to the date of this Agreement, or has been agreed to by the Parties in writing.”**

xvii) Clause 13 Delay Damages

A new clause 13 is as follows:

13.1 The Consultant accepts that time is off the essence in this Agreement Where the Consultant fails to perform the Services within the Time for Completion, the Consultant shall be liable to the Client for the following delay damages:

From Day 1-15: 0.067% of the Contract Value per day

From Day 16-25, 0.133% of the Contract Value per day

From Day 26-35, 0.267% of the Contract Value per day

From Day 36-40, 0.43% of the Contract Value per day

From Day 41-45, 0.60% of the Contract Value per day

13.2 The total amount of delay damages shall be limited to 10% of the total of the Contract Amount at the Take Over Date in the currencies and proportions in which the Contract Amount is payable.

Part 2: Data Provided by the Consultant

Clause 1.2.1: Delivery of Notices

The name of the Consultant is

The address of the Consultant is

Physical Address	Postal Address
Telephone:	Fax:
Email:	

SIGNED ON BEHALF OF/BY THE BIDDER:

NAME	SIGNATURE
CAPACITY	DATE

D3: Pricing Data and Pricing Schedule

Number	Heading	Pages
D3.1	Pricing Instructions	102
D3.2	Pricing Schedule	103
D3.3	People Rates for Variations	108

D3.1 Pricing Instructions

1. **Only fixed and firm price will be accepted.** Non-fixed and firm prices (including prices subject to rates of exchange variations) will not be considered.
2. Price quotes is **fully inclusive** of all costs including delivery to the specified NRF site; Value Added Tax (VAT) and other taxes (this includes all disbursement and travel costs) and Consumer Price Adjustment (CPA) per annum.
3. A full breakdown of costs, including the detailed pricing schedules (Annexure A), contingencies, professional fees, travel and disbursements must be in format as set out below and, where applicable, in supporting schedules and provided.
4. The completed detailed pricing schedule Annexure A shall form part of this tender submission and will be completed in **black type or black ink only.**
5. The Conditions of Contract, the Contract Data and the Scope of Work shall be read in conjunction with the Pricing Schedule.
6. Bid price in South African currency, foreign exchange risk is for the account of the bidder.
7. It will be assumed that prices included in the Pricing Schedules are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date of bids (refer to www.stanza.org.za or www.iso.org for information on standards).
8. All costs associated with compliance to the Occupational Health and Safety Act, the National Environmental Management Act and the Water Act must be included in the bidding price where applicable.

D3.2 Pricing Schedule

NOTE: SERVICE PROVIDER SHALL PROVIDE A COMPLETED DETAILED PRICING SCHEDULE AND IT SHALL FORM PART OF THIS TENDER SUBMISSION AND WILL BE COMPLETED IN BLACK INK ONLY.

Item	Description	Unit	Quantity	Rate	Amount
1	TO1 – Professional Services Contract				
1.1	Requirements Refinement	Item			
1.2	Site Investigation/Studies	Item			
1.2.1	Geotechnical Investigation & submission of report (including P&Gs, health and safety obligations, test drills, testing etc.)	Item	1		R
1.2.3	Topographical Survey & submission of report & drawings (including any P&Gs, equipment establishment costs)	Item	1		R
1.2.4	Bulk Services Report; Traffic Impact Assessment; Site Development Plan; Storm Water Management Plan; Basic Assessment or Full Scoping and Environmental Impact Assessment (S&EIA);	Item	1		R
1.2.5	Waste Management License; Water Use License; Heritage Impact Assessment; Flora Harvesting Permits	Item	1		R
1.2.6	Trade-off Studies (bulk sewage connection options, evaporation pond)	Item	1		R
1.3	Conceptual Design				R
1.3.1	Client Brief Review/ Workshop	Item	1		R

1.3.2	Preliminary Concept Design	Item	1		R
1.3.3	Review & Update of Preliminary Concept Design	Item	1		R
1.3.4	Concept Design	Item	1		R
1.3.5	Review & Update of Detail Concept Design Review	Item	1		R
1.3.6	Detail Design	Item	1		R
1.3.7	Trade-off Studies for Cooling and power solutions, estimated building costs	Item	1		R
1.3.8	Prepare Tender for Design and Construct (including contract participation goals)	Item	1		R
1.4	Sub-Total				
2	TO2 - Management Services for Detail - Design Phase				
2.1	Manage D&B Contract: Design Scope Review	Item	1		R
2.2	Manage D&B Contract: Preliminary Designs, On-site assessment & Review Meeting	Item	1		R
2.3	Manage D&B Contract: Detail Designs & Review Meetings	Item	1		R
2.4	SARAO Review & Approval (CDR) prior to the start of Construction/ Municipal submission	Item	1		R

2.5	Update & Acceptance of Detail Concept Design Review	Item	1		R
2.6	Detail Design	Item	1		R
2.7	Update & Acceptance of Detail Design Review	Item	1		R
2.8	Submission & approval of plans to Municipal for approval	Item	1		R
2.9	<i>Sub-Total</i>				
3	TO3 – Construction Management Services				
3.1	Development Authorisation	Item	1		R
3.2	Construction Permits	Item	1		R
3.3	Deployment of iSPC for MID_1 Phase 1 SPC MDC required in Q4 2025	Item	1		R
3.4	Construction of CTHIS	Item	1		R
3.5	Manage Commissioning, Defects Correction, Handover	Item	1		R
3.6	Manage Project Handover & Closeout	Item	1		R
3.8	<i>Sub-Total</i>				
4	Procurement Phase as per NRF Process				

4.1	Procurement strategy document	Item	1		R
4.2	Preparation of tender documentation for the appointment of a Design and Construct Contractor	Item	1		R
4.3	Participating in the tender Briefing and Clarifications	Item	1		R
4.4	Participate in NRF tender evaluation process and give input for recommendation report	Item	1		R
4.5	Sub-Total				
5	Construction Management Phase				
5.1	As stated in the Scope of work - CONSTRUCTION MANAGEMENT SERVICES (<i>Payments to be claimed monthly</i>)	Item	1		R
6	Test, Verification, Commissioning & Handover Phase				
6.1	As stated in the Scope of work (Pages)	Item	1		R
7	Additional (Ad-Hoc) professional Lead Architecture services as instructed by SARAO Representative.	Hrs	200		R
8	Provisional Sum for further Site Studies as instructed by SARAO Representative	Sum	1	R500 000.00	R500 000.00
9	<u>Disbursement</u> (All-inclusive travel cost, travel time, accommodation, printing, copying,) – <i>Costs are for the design, construction management, test, commissioning, verification and handover phase.</i> Detail list to be provided as part of the submission and be paid on actuals / proof provided.	Item	1		R

10	SUB-TOTAL 1.3, 2.9, 3.8, 4.5, 5.1, 6.1, 7, 8 & 9 (EXCLUDING VAT)			R
11	VALUE ADDED TAX (15%)			R
12	TOTAL (INCLUDING VAT) CARRIED TO FORM C1.1 OFFER AND ACCEPTANCE AGREEMENT			R

SUMMARY FOR BID OPENING PURPOSES

NAME OF BIDDER:

OFFERED TOTAL: R.....
(Amount brought forward from
The Form of Offer) *

* Should any discrepancy occur between this figure and that stated in the Form of Offer and Acceptance, the latter shall apply.

SIGNED BY/ON BEHALF OF BIDDER

NAME

SIGNATURE

DATE

COMPANY STAMP

D3.3 Personnel Rates for Variations

The bidder must submit a proposal of detailed table of rates for variations for additional key design personnel to be used as and when such personnel is engaged in the course of the contract.

Declaration

(In respect of completeness of Tender)

I/we, the undersigned, do hereby declare that these are the properly priced Bill of Quantities forming Part D2 of this Contract Document in consecutive order upon which my/our tender for the **BID NO: NRF/SARAO SHAO/43/2023-24**

APPOINTMENT OF A MULTIDISCIPLINARY TEAM (LED BY AN ARCHITECTURAL CONSULTANT) TO PROVIDE PROFESSIONAL SERVICES, FOR THE DESIGN AND CONSTRUCTION OF THE SKA SCIENCE OPERATIONS CENTRE (SOC); SKA SCIENCE PROCESSING CENTRE (SPC), SKA SCIENCE REGIONAL CENTRE (SRC) AND SARAO HQ, WHICH FORM PART THE NEW CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN has been based.

SIGNED BY/ON BEHALF OF BIDDER

NAME

SIGNATURE

DATE

Annexures

Annexure No.	Annexure Title
Annexure A	The Statement of Work document [F2700-0000-004 CTHIS PSC Statement of Work_Issue 01]
Annexure B	High Level CTHIS requirements [F270-0000-000 CTHIS – Req Spec_Issue 01_Final]
Annexure B01 – [AD]	CTHIS Open Items [004-050000-074]
Annexure B02 – [AD]	CTHIS Interface Control Document SKA1-MID CTHIS IPP to CTHIS [004-050000-080]
Annexure B03 – [AD]	CTHIS Microgrid Functional User Requirements [004-050000-081]
Annexure B04 – [AD]	CTHIS Scope Of Works For Electrical & Electronic Services And Their Statement of Works [004-050000-085]
Annexure B05 – [AD]	CTHIS Project Abbreviations, Acronyms, Initialisms [004-050000-086]
Annexure B06 – [AD]	CTHIS Electrical and Electronic Services Deliverable List [004-050000-087]
Annexure B07 – [AD]	CTHIS Electrical and Electronic Services Project Specification [004-050000-088]
Annexure B08 – [AD]	CTHIS: Overall Communication Cable Block Diagram [004-05000-CTL-089]
Annexure B09 – [AD]	CTHIS: 123-11kV Substation Scada Architecture [004-05000-CTL-090]
Annexure B10 – [AD]	CTHIS: Contract Battery Limit Block Diagram [004-050000-ELE-083]
Annexure B11 – [AD]	CTHIS: Proposed 132 kV / 11 kV Station Electric Diagram (Self Build and handover to Eskom) [004-050000-ELE-092]
Annexure B12 – [AD]	CTHIS: Energy Centre SLD [004-050000-ELE-093]
Annexure B13 – [AD]	CTHIS: Cable Corridors (Typical) [004-050000-ELE-094]
Annexure B14 – [AD]	CTHIS: HV and MV Metering Schematic – Sheet 1 [004-050000-ELE-095-01]
Annexure B15 – [AD]	CTHIS: HV and MV Metering Schematic – Sheet 2 [004-050000-ELE-095-02]
Annexure B16 – [AD]	F2700-0000-002 CTHIS Compliance Matrix_Issue 01
Annexure C	High Level CTOC requirements [F2700-0002-000 CTOC Requirements Specifications]
Annexure C01 – [AD]	SKA Science Operations Centre Building Requirements, Issue 02 [SKA-TEL-SKO-0001015]
Annexure C02 – [AD]	SKAO ITF Infrastructure Requirement Specification, Issue 02 [SKA-TEL-SKO-0001661]
Annexure C03 – [AD]	Requirements for SKA SA and SKA Science Operations Centre, Cape Town, Issue 01 [SKA-TEL-INSA-0005035]
Annexure D	High Level HPCB Requirement [F2700-0003-00 Requirements Specification – HPCB]
Annexure D01 – [AD]	SKAO Requirements for the SKA1-MID Science Processing Centre, Issue 03 [SKAO-TEL-0001067]

Annexure D02 – [AD]	Science Processing Centre (SPC) Requirements Specification, Issue 02 [SSA4003-0005-012]
Annexure D03 – [AD]	SKA1 Power Quality Standard, Rev 3, K. Barriere, C. Smith and J. Massoud, 18 November 2018 [SKA-TEL-SKO-00000293]
Annexure E	CTHIS Development Plan [F2700-0000-003 CTHIS Development Plan_Issue 01]
Annexure F	CTOC Compliance and Verification Matrix [F2700-0002-001 CTOC Compliance Matrix_Issue 01]
Annexure G	F2700-0003-001 HPCB Compliance Matrix_Issue 01
Annexure H	NRF/iThemba LABS Health and Safety Specification & OHSA 37(2) Agreement [SHE Specification and 37.2 Agreement Tender Doc version]
Annexure I	SAPOA Grading Definitions
Annexure J	iThemba LABS Site Survey_SARAO PROJECT R1

APPENDIX 2 PERSONNEL, EQUIPMENT, FACILITIES AND SERVICES OF OTHERS TO BE PROVIDED BY THE CLIENT

NONE PROVIDE

APPENDIX 3 REMUNERATION AND PAYMENT

REMUNERATION AND PAYMENT CONDITIONS

3.1 Normal Services

Remuneration payable to the Consultant on a Lump Sum basis as set out in its proposal and per D3.2 Pricing Schedule, is agreed as full compensation for all services as described in Appendix 1 – Scope of Services.

3.2 Time for Payment

Except for the payment with order (if any), amounts payable to the Consultant shall be paid by the Client within

28 days of date of the monthly progress invoices into the following account:

Bank:

Swift Code:

Account Name:

Account No.:

Interest (Agreed Compensation) on late payments will be Interest will accrue at 0%

3.3 Variations

Variations including all costs incurred by the Consultant in connection with Variations will be charged to the Client in accordance with the rates set out in the detailed price schedule submitted at tender, on a proven basis with detailed signed of time sheets, or agreed lump sums.

3.4 Expenses and Disbursements applicable for any additional work or scope changes

Any expenses and disbursements for additional work instructed by the Client will be approved by the Client before such costs are incurred and will be charged by the Consultant on a proven cost basis.

APPENDIX 4 PROGRAMME

1) Commencement Date: The Effective Date

2) Completion date for the Services:

Client Brief	4 days	After the Commencement Date
Requirements Refinement	70 days	
Preliminary Concept Design & Update	28 days	
Concept Design	28 days	
Site Studies	350 days (Parallel)	
Prepare Tender for Design and Construction	14 days	
Contract Award	1 day	
Design Management Services		
Design Scope Review	21 days	
Preliminary Designs, On-site assessment & Review Meeting	47 days	
Detail Designs & Review Meetings	72 days	
SARAO Review & Approval (CDR) prior to the start of Construction/ Municipal submission	89 days	
Construction Management Services		
Municipal Submission & Approval	120 days	
Construction Management	1110	

Note: The provisions of Additional Clause 13 shall apply if these dates and the requirements to meet same is not achieved

3) Key dates for receipt or delivery of information between the Parties. TBC

4) Interface obligations with others: TBC.

5) Requirements of the Client on the order or sequence of activities: TBC

6) Client review and approval periods for the Services. 10 Working Days, per deliverable and cycle

7) Specific programme software to be used to produce the Programme: MS Project/P6

8) Specific Detail to be shown on the Consultant Programme

- a. The Consultant shows on each programme which he submits for acceptance
- b. the starting date, access dates, Key Dates and Completion Date,
- c. planned Completion,
- d. the order and timing of the operations which the Consultant plans to do in order to Provide the Services,
- e. the order and timing of the work of the Client and Others as last agreed with them by the Consultant or,

if not so agreed, as stated in the Scope,

f. the dates when the Consultant plans to meet each Condition stated for the Completion Milestone

Dates and

to complete other work needed to allow the Client and Others to do their work,

g. provisions for

i. float,

ii. time risk allowances,

iii. health and safety requirements and

iv. the procedures set out in this contract,

h. the dates when, in order to Provide the Services in accordance with his programme, the Consultant will

need

i. access to a person, place or thing if later than its access date,

j. information and things to be provided by the Client and

k. information and approval from Others,

l. for each operation, a statement of how the Consultant plans to do the work identifying the resources which

he plans to use

9) Information to be supplied by the Consultant to the Client on a monthly basis to report on progress against the Programme: TBC

APPENDIX 5 RULES OF ADJUDICATION

Resolving Disputes

1.1

(1) A dispute arising under or in connection with the contract is referred to the *Senior Representatives*;

For the *Client* :,

For the *Consultant*.,

in accordance with the Dispute Reference Table. If the dispute is not resolved by the *Senior Representatives*, it is referred to and decided by the *Adjudicator*.

(2) The Party referring to a dispute notifies the Senior Representatives, the other Party and the Client's Representative of the nature of the dispute it wishes to resolve. Each Party submits to the other their statement of case within one week of the notification. Each statement of case is limited to no more than ten sides of A4 paper together with supporting evidence, unless otherwise agreed by the Parties.

(3) The Senior Representatives attend as many meetings and use any procedure they consider necessary to try to resolve the dispute over a period of no more than three weeks. At the end of this period the Senior Representatives produce a list of the issues agreed and issues not agreed. The Client's Representative and the Consultant put into effect the issues agreed.

(4) No evidence of the statement of case or discussions is disclosed, used or referred to in any subsequent proceedings before the Adjudicator or the tribunal.

DISPUTE REFERENCE TABLE		
DISPUTE ABOUT	WHICH PARTY MAY REFER IT TO THE SENIOR REPRESENTATIVES?	WHEN MAY IT BE REFERRED TO THE SENIOR REPRESENTATIVES?
An action or inaction of the <i>Client's Representative</i>	Either party	Not more than four weeks after the Party becomes aware of the action or inaction
A communication which is treated as having been accepted	The <i>Client</i>	Not more than four weeks after it was treated as accepted
Any other matter	Either Party	When the dispute arises

The Adjudicator 1.2

(1) The Parties appoint the *Adjudicator* under the FIDIC Dispute Resolution Service Contract current at the Commencement Date.

(2) The *Adjudicator* acts impartially and decides the dispute as an independent adjudicator and not as an arbitrator.

(3) If the *Adjudicator* is not identified in the Contract Data or if the *Adjudicator* resigns or is unable to act, the Parties choose a new adjudicator jointly. If the Parties have not chosen an adjudicator, either Party may ask the *Adjudicator nominating body* to choose one. The *Adjudicator nominating body* chooses an adjudicator within seven days of the request. The chosen adjudicator becomes the *Adjudicator*.

(4) A replacement *Adjudicator* has the power to decide a dispute referred to a predecessor but not decided at the time when the predecessor resigned or became unable to act. The *Adjudicator* deals with an undecided dispute as if it had been referred on the date of appointment as replacement *Adjudicator*.

(5) The *Adjudication* and the *Adjudicator's* employees and agents are not liable to the Parties for any action or failure to take action in an adjudication unless the action or failure to take action was in bad faith.

The Adjudication 1.3

(1) A Party disputing any issue not agreed by the *Senior Representatives* issues a notice of adjudication to the other Party and the *Client's Representative* within two weeks of the production of the list of agreed and not agreed issues, or when it should have been produced. The dispute is referred to the *Adjudicator* within one week of the notice of adjudication.

(2) The times for notifying and referring a dispute may be extended by the *Client's Representative* if the *Consultant* and the *Client's Representative* agree to the extension before the notice or referral is due. The *Client's Representative* informs the *Consultant* of the extension that has been agreed. If a disputed matter is not notified and referred within the times set out in the contract, neither Party may subsequently refer it to the *Adjudicator* or the *tribunal*.

(3) The Party referring the dispute to the *Adjudicator* includes with its referral information to be considered by the *Adjudicator*. Any more information from a Party to be considered by the *Adjudicator* is provided within four weeks of the referral. This period may be extended if the *Adjudicator* and the Parties agree.

(4) If a matter disputed by the *Consultant* under or in connection with a subcontract is also a matter disputed under or in connection with the contract and if the subcontract allows, the *Consultant* may refer the subcontract dispute to the *Adjudicator* at the same time as the main contract referral. The *Adjudicator* then decides the disputes together and references to the Parties for the purposes of the dispute are interpreted as including the Subcontractor.

(5) The *Adjudicator* may

- review and revise any action or inaction of the *Client's Representative* related to the dispute and alter a matter which has been treated as accepted or correct
- take the initiative in ascertaining the facts and the law related to the dispute,
- instruct a Party to provide further information related to the dispute within a stated time and
- instruct a Party to take any other action which is considered necessary for the *Adjudicator* to reach a decision and to do so within a stated time.

(6) A communication between a Party and the *Adjudicator* is communicated to the other Party at the same time.

(7) If the *Adjudicator's* decision includes assessment of additional cost or delay caused to the *Consultant*, the assessment is made in the same way as a Variation is assessed.

(8) The *Adjudicator* decides the dispute and informs the Parties and the *Client's Representative* of the decision and reasons within four weeks of the end of the period for receiving information. This four-week period may be extended if the Parties agree.

(9) Unless and until the *Adjudicator* has informed the Parties of the decision, the Parties and the *Client's Representative* proceed as if the matter disputed was not disputed.

(10) The *Adjudicator's* decision is binding on the Parties unless and until revised by the *tribunal* and is enforceable as a matter of contractual obligation between the Parties and not as an arbitral award. The *Adjudicator's* decision is final and binding if neither Party has notified the other within the times required by the contract that it is dissatisfied with a decision of the *Adjudicator* and intends to refer the matter to the *tribunal*. A

Party does not refer a dispute to the *Adjudicator* that is the same or substantially the same as one that has already been referred to the *Adjudicator*.

(11) The *Adjudicator* may, within two weeks of giving the decision to the Parties, correct any clerical mistake or ambiguity.

The *tribunal* -Arbitration

1.4

(1) A Party does not refer any dispute under or in connection with the contract to the *tribunal* unless it has first been referred to the *Adjudicator* in accordance with the contract.

(2) If, after being informed of the *Adjudicator's* decision, a Party is dissatisfied, that Party may notify the other Party of the matter which is disputed and state that it intends to refer the matter to the *tribunal*. The dispute is not referred to the *tribunal* unless this notification is given within four weeks of being informed of the *Adjudicator's* decision.

(3) If the *Adjudicator* does not inform the Parties of the decision within the time provided by the contract, a Party may notify the other Party that it intends to refer the dispute to the *tribunal*. A Party does not refer a dispute to the *tribunal* unless this notification is given within four weeks of the date by which the *Adjudicator* should have informed the Parties of the decision.

(4) The *tribunal* settles the dispute referred to it. The *tribunal* has the powers to reconsider any decision of the *Adjudicator* and review and revise any action or inaction of the *Service Manager* related to the dispute. A Party is not limited in the *tribunal* proceedings to the information, evidence or arguments put to the *Adjudicator*.

(5) If the *tribunal* is arbitration, the *arbitration procedure*, the place where the arbitration is to be held and the method of choosing the arbitrator are those stated in the Contract Data.

(6) A Party does not call the *Adjudicator* as a witness in *tribunal* proceedings

DISPUTE ADJUDICATION AGREEMENT

[for a one-person DAB]

Name and details of Contract
Name and address of Client
Name and address of Consultant
Name and address of Member

Whereas the Client and the Consultant have entered into the Contract and desire jointly to appoint the Member to act as sole adjudicator who is also called the "DAB" to adjudicate a dispute which has arisen in relation to

*

The Client, Consultant and Member jointly agree as follows:

1. The conditions of this Dispute Adjudication Agreement comprise the "Rules for Adjudication", which is appended as Appendix 6 to the General Conditions of the "Client/Consultant Model Services Agreement Fifth Edition published by the Fédération Internationale des Ingénieurs-Conseils (FIDIC), and the following provisions. In these provisions, which include amendments and additions to the General Conditions of Dispute Adjudication Agreement, words and expressions shall have the same meanings as are assigned to them in the General Conditions of Dispute Adjudication Agreement.
2. *[Details of amendments to the General Conditions of Dispute Adjudication Agreement, if any.]*
3. In accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement, the Member shall be paid a daily fee of _____ per day.
4. In consideration of these fees and other payments to be made by the Client and the Consultant in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement, the Member undertakes to act as the DAB (as adjudicator) in accordance with this Dispute Adjudication Agreement.
5. The Client and the Consultant jointly and severally undertake to pay the Member, in consideration of the carrying out of these services, in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement.
6. This Dispute Adjudication Agreement shall be governed by the laws of South Africa

SIGNED by: _____

SIGNED by: _____

SIGNED by: _____

for and on behalf of the
Client in the presence of

for and on behalf of the
Consultant in the presence of

the Member
in the presence of

Witness: _____

Witness: _____

Witness: _____

Name: _____

Name: _____

Name: _____

Address: _____

Address: _____

Address: _____

Date: _____

Date: _____

Date: _____

*[*A brief description or name of dispute to be added.]*