

Request for Proposals (RFP)

The Provision of Built Environment Professional Services for a Multi-purpose Centre in the Ndlambe Local Municipality in the Eastern Cape for the Department of Science and Innovation

RFP No. 3325/06/09/2019

Date of Issue:	Friday, 23 August 2019	
Compulsory Briefing Session	Friday, 30 August 2019 Time: 11:00 -12:00 Venue: 13 Causeway street, Port Alfred, 6170 Boardroom: Main Boardroom Place: Ndlambe Municipal Offices	
Closing Date:	Friday, 06 September 2019	
Place:	Tender box, CSIR Main Reception, Gate 3 (North Gate)	
Enquiries	Strategic Procurement Unit	E-mail: tender@csir.co.za
CSIR business hours	08:00 – 16:30	
Sector	Professional Services	

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1 INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria while it is represented in other provinces of South Africa through regional offices.

2 BACKGROUND

CSIR has been appointed by the Department of Science and Innovation (DSI) as its Implementing Agent for the design and construction of a new Multipurpose Centre in the Ndlambe Local Municipality (NLM), Kenton-on-Sea in the Eastern Cape.

A Project Brief (Annexure "A"1) has been developed in consultation with the DSI and NLM. The Brief captures the requirements of the Ndlambe Local Municipality in the Eastern Cape and the Department of Science and Technology.

The estimated cost of the works is R4 025 000.00 (inc VAT).

3 INVITATION FOR PROPOSAL

The invitation for proposal relates to the Provision to CSIR of Built Environment Professional Services for a Green Village in Ndlambe Local Municipality in the Eastern Cape for the Department of Science and Technology. The following professional services are required

- Mechanical Engineering
- Electrical Engineering
- Quantity Surveying
- Civil Engineering
- Structural Engineering
- Architecture
- Occupational Health and Safety
- Fire Engineering

4 PROPOSAL SPECIFICATION

All proposals are to be submitted in a format specified in this enquiry. However, tenderers are welcome to submit additional / alternative proposals over and above the originally specified format. Tenderers are permitted to tender for various disciplines.

Tenders must clearly indicate the discipline for which they are tendering and provide detailed methodologies per discipline.

4.1 Scope of Services:

The consultants shall in broad terms provide the services related to the scope of work as described in the following Annexures:

- Annexure B: Mechanical and Electrical Engineers
- Annexure C: Quantity Surveyor
- Annexure D: Civil and Structural Engineers
- Annexure E: Architect
- Annexure F: Fire Engineer
- Annexure G: Occupational Health and Safety

4.2 Methodology

- 4.2.1 The tenderer must describe the methodology in detail, including a schedule of personnel which lists each item in the Work Stages and for each item provide the name, function and responsibilities of personnel to work on that particular item. This must be done for every discipline.

4.3 Pricing Schedule

- 4.3.1 The pricing schedule must include a summary table listing the cost of each work stage including VAT.

4.4 Credentials

The tenderer must submit the following (Important: Refer to the Evaluation Criteria Section and be sure to provide the applicable information, with relevant reference to Themes):

- 4.4.1 Proof of registration with the relevant professional council. This provision does not apply to the Occupational Health and Safety consultant.
- 4.4.2 A company profile of the tenderer which concisely summarises the tenderer's relevant experience, including a list of relevant current/recent work, each with a contactable reference. Cross-references to applicable Work Stages are required.
- 4.4.3 A Key Personnel Summary Table 1 containing the name, function and number of hours for each team member in the project to accompany PART 1 (NB: Do NOT include hourly tariffs in this table).
- 4.4.4 For key team members, submit an abbreviated CV which clearly illustrates the member's relevant credentials. Cross-reference to applicable Work Stages is required.

5 FUNCTIONAL EVALUATION CRITERIA

5.1 The evaluation of the functional / technical detail of the proposal will be based on the following criteria:

The functionality evaluation criteria will be based on the following:

Functional Factors	Weight
a. Methodology	10%
b. Relevant company/practice experience	25%
c. Relevant key personnel experience	20%
d. Local presence	20%
e. Management skills	25%

5.2 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of **70%** and less than **50%** on any of the individual criteria will be eliminated from further evaluation.

5.3 Refer to **Annexure A** for the scoring sheet that will be used to evaluate functionality.

6 ELIMINATION CRITERIA

Proposals will be eliminated under the following conditions:

- Submission after the deadline;
- Proposals submitted at incorrect location;
- Failure to submit proof of registration with the relevant professional council
- Non-attendance of the compulsory briefing session / site inspection.

7 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE REGISTRATION

Before any negotiations will start with the winning bidder, it will be required from the winning bidder to:

- be registered on National Treasury's Central Supplier Database (CSD). Registrations can be completed online at: www.csd.gov.za;
- provide the CSIR of their CSD registration number; and
- provide the CSIR with a certified copy of their B-BBEE certificate. If no certificate can be provided, no points will be scored during the evaluation process. (RSA suppliers only)

SECTION B – TERMS AND CONDITIONS

8 VENUE FOR PROPOSAL SUBMISSION

All proposals must be couriered to:

- **CSIR GATE 03 - Main Reception Area** (in the **Tender box**) at the following address
Council for Scientific and Industrial Research (CSIR)
Meiring Naudé Road
Brummeria
Pretoria

9 TENDER PROGRAMME

The tender program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents: Friday, 23 August 2019
- Compulsory briefing session / site inspection etc: Friday, 30 August 2019
 - Time: 11:00 -12:00
 - Venue: 13 Causeway Street, Port Alfred, 6170
 - Venue for the meeting: Main Boardroom
 - Place: Ndlambe Municipal Offices
- Closing / submission Date: Friday, 06 September 22019

10 SUBMISSION OF PROPOSALS

10.1 All proposals are to be sealed. No open proposals will be accepted.

10.2 All proposals are to be clearly marked with the RFP number and the name of the tenderer on the outside of the main package. Proposals must consist of two parts, each of which is placed in a separate sealed package clearly marked:

PART 1: Technical Proposal: RFP No.: 3325/06/09/2019.

PART 2: Pricing Proposal, B-BBEE and other Mandatory Documentation:
RFP No.: 3325/06/09/2019.

10.3 Proposals submitted by companies must be signed by a person or persons duly authorised.

10.4 The CSIR will award the contract to qualified tenderer(s)' whose proposal is determined to be the most advantageous to the CSIR, taking into consideration the technical (functional) solution, price and B-BBEE.

11 DEADLINE FOR SUBMISSION

11.1 Proposals shall be submitted in the tender box at the address mentioned above no later than **Friday, 06/09/2019**. The CSIR business hours are between 08:00 – 16:30.

11.2 Proposals received by the CSIR later than the due date and at incorrect location will be regarded as a late tender. Late tenders will not be considered.

12 AWARDING OF TENDERS

12.1 Awarding of tenders will be published on the National Treasury e-tender portal or the CSIR's tender website. No regret letters will be sent out.

13 EVALUATION PROCESS

13.1 Evaluation of proposals

All proposals will be evaluated by an evaluation team for functionality, price and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, the CSIR will approve the awarding of the contract to successful tenderers.

A two-phase evaluation process will be followed.

- The first phase includes evaluation of **elimination** and **functionality criteria**,
- The second phase includes the evaluation of **price** and **B-BBEE** status.

Pricing Proposals will only be considered after functionality phase has been adjudicated and accepted. Only proposals that achieved the specified minimum qualification scores for functionality will be evaluated further using the preference points system.

13.2 Preference points system

The **80/20** preference point system will be used where **80** points will be dedicated to price and **20** points to B-BBEE status.

The tenderer shall prepare for a possible presentation should CSIR require such and the tenderer shall be notified timeously.

14 PRICING PROPOSAL

14.1 Pricing proposal must be based on the schedule of standard services as indicated in the relevant Annexure. Any options offered must be clearly labelled. The CSIR will not entertain any pricing proposal which exceeds the recommended tariff of fees as published

in the Government Gazette by relevant professional councils. The pricing proposal shall state the Primary Fee in South African Rand plus the secondary fee as a percentage for value over.

- 14.2 Price needs to be provided in South African Rand (incl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations, if any, clearly indicated.
- 14.3 Only firm prices* will be accepted during the tender validity period. Non-firm prices** (including prices subject to rates of exchange variations) will not be considered.

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

***Non-firm price is all prices other than "firm" prices.*

- 14.4 Payment will be according to the CSIR Payment Terms and Conditions.

15 VALIDITY PERIOD OF PROPOSAL

Each **proposal** shall be valid for a minimum period of three (3) months calculated from the closing date.

16 APPOINTMENT OF SERVICE PROVIDER

- 16.1 The contract will be awarded to the tenderer who scores the highest total number of points during the evaluation process, except where the law permits otherwise.
- 16.2 Appointment as a successful service provider shall be subject to the parties agreeing to mutually acceptable contractual terms and conditions. In the event of the parties failing to reach such agreement within a mutually agreed date after provisional appointment date, CSIR reserves the right to appoint an alternative supplier.

17 ENQUIRIES AND CONTACT WITH THE CSIR

Any enquiry regarding this RFP shall be submitted in writing to CSIR at tender@csir.co.za with **"RFP No – 3325/06/09/2019 The Provision of Built Environment Professional Services for a Multi-purpose Centre in the Ndlambe Local Municipality in the Eastern Cape"** as the subject.

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

18 MEDIUM OF COMMUNICATION

All documentation submitted in response to this RFP must be in English, unless otherwise indicated under technical specification.

19 COST OF PROPOSAL

Tenderers are expected to fully acquaint themselves with the conditions, requirements and specifications of this RFP before submitting proposals. Each tenderer assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFP process. The CSIR is not responsible directly or indirectly for any costs incurred by tenderers.

20 CORRECTNESS OF RESPONSES

- 20.1 The tenderer furthermore confirms satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFP, and that prices and rates quoted cover all obligations under any resulting contract.
- 20.2 The tenderer accepts that any mistakes regarding prices and calculations will be at their own risk.

21 VERIFICATION OF DOCUMENTS

- 21.1 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising from the fact that pages are missing or duplicated.
- 21.2 One hard copy and one electronic copy (CD or USB memory key) of each proposal must be submitted. In the event of a contradiction between the submitted copies, the hard copy shall take precedence.

- 21.3 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising from the fact that pages are missing or duplicated.
- 21.4 One hard copy and one electronic copy (CD or USB memory key) of each proposal must be submitted. In the event of a contradiction between the submitted copies, the hard copy shall take precedence.
- 21.5 Telegraphic and telefax proposals will not be accepted.
- 21.6 Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate document and no such information should be available in the technical proposal.
- 21.7 If a courier service company is being used for delivery of the proposal document, the RFP description must be endorsed on the delivery note/courier packaging to ensure that documents are delivered to the tender box, by the date and time as mentioned above.
- 21.8 Proposals can be submitted to the tender box as stipulated in this document.

22 SUB-CONTRACTING

- 22.1 A tenderer will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an exempted micro enterprise that has the capability and ability to execute the sub-contract.
- 22.2 A tenderer awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

23 ENGAGEMENT OF CONSULTANTS

The appointment consultants that will provide professional services will only be remunerated at the rates not exceeding those set out in the relevant councils' pricing guideline.

24 TRAVEL EXPENSES

- 24.1 All travel expenses for the CSIR's account, be it directly via the CSIR's travel agent or indirectly via re-imbursements, must be in line with the CSIR's travel policy. The following will apply:
- 24.2 Only economy class tickets will be used.
- 24.3 A maximum of R1300 per night for accommodation, dinner, breakfast and parking will be allowed.

24.4 No car rentals of more than a Group B will be accommodated.

25 ADDITIONAL TERMS AND CONDITIONS

25.1 A tenderer shall not assume that information and/or documents supplied to CSIR, at any time prior to this request, are still available to CSIR, and shall consequently not make any reference to such information document in its response to this request.

25.2 A copy/s of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.

25.3 In case of proposal from a joint venture, the following must be submitted together with the proposal:

- Joint venture Agreement including split of work signed by both parties;
- Each party's B-BBEE and Tax Clearance Certificate;
- Proof of ownership/shareholder certificates/copies of Identity document; and
- Company registration certificates.

25.4 An omission to disclose material information, a factual inaccuracy, and/ or a misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.

25.5 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any of the CSIR employees or its representatives. **Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.**

25.6 CSIR's decision on tenders received shall be final and binding.

25.7 Failure to comply with any of the terms and conditions as set out in this document will invalidate the Proposal.

26 CSIR RESERVES THE RIGHT TO

26.1 Extend the closing date;

26.2 Request documentary evidence regarding any tendering issue;

26.3 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal);

26.4 Award this RFP as a whole or in part; and

26.5 Cancel or withdraw this RFP as a whole or in part.

27 DISCLAIMERS

This RFP is a request for proposals only and not an offer document; answers to it must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, tenderers shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFP. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to tenderer concerning the RFP, whether with regard to its accuracy, completeness or otherwise and the CSIR shall have no liability towards the tenderer or any other party in connection therewith.

28 DECLARATION BY THE TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFP No: 3325/06/09/2019.

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in RFP No. **3325/06/09/2019** at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

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

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

29 CHECKLIST FOR PROPOSAL COMPLIANCE

**Note that the Proposal must be submitted in two Parts as per page 7
(SUBMISSION OF PROPOSALS)**

PART 1	TECHNICAL PROPOSAL	Ref
	Technical proposal (Methodology)	6.2.1
	Company profile	6.4.1
	Key personnel summary Table 1	6.4.2
	Key personnel CVs	6.4.3
PART 2	PRICING PROPOSAL	Ref
	Pricing schedule (Annexure 3)	6.3.1
	Itemised running costs per item if relevant	6.3.2
	Key personnel summary Table 2	6.3.3
	Completed CSIR Supplier Registration Form (Downloadable from csir.co.za under Tenders)	
	Original valid Tax Clearance Certificate or SARS Letter of Good Standing	
	Proof of company registration (CK2 form)	
	B-BBEE certification	
Hard copy	Hard Copy of PART 1 and PART 2	
Electronic	Electronic Copy (CD or USB drive) of PART 1 and PART 2	

30 ANNEXURE “A” SCORE SHEET TO EVALUATE FUNCTIONALITY

Scores will be allocated as follows:

Competence Criterion	Key Aspects of Criterion	Points Allocation		Total Points
Methodology (10%)	Proper work plan	No submission	0	10
		Poor – inadequate information	1	
		Satisfactory – sufficient details	5	
		Good – well laid out and detailed work plan	7	
		Excellent – exceptionally laid out and thoroughly detailed work plan	10	
Relevant company experience (25%)	Five years minimum experience	No submission	0	10
		One to two years	1	
		Three to five years	5	
		Six to nine years	7	
		Ten years and more	10	
	Registration with relevant professional voluntary association (company/practice)	No submission	0	10
		Proof of registration	10	
	Capacity (organogram)	No submission	0	10
		One staff complement	1	
		Two to three staff complement	5	
		Four to five staff complement	7	
		Six and more staff complement	10	
	Facilities (office and resources)	No submission	0	10
		Infrastructure support for one staff complement	1	
		Infrastructure support for two to three staff complement	5	
		Infrastructure support for four to five staff	7	
		Infrastructure support for six and more staff	10	
Relevant key personnel experience (20%)	Five years minimum experience	No submission	0	10
		One to two years	1	
		Three to five years	5	
		Six to nine years	7	
		Ten years and more	10	
	Registration with the relevant statutory council	No submission	0	20
		Proof of registration	10	

	Registration with the relevant voluntary association	No submission	0	
		Proof of membership (individual)	10	
Local presence (20%)	Has a fully operational practice in the area	No submission	0	10
		Has an arrangement with an associate professional practice in the area	1	
		Has a fully operational practice in the Eastern Cape	5	
		Has a fully operational practice within 100 kilometers of Ekuphumleni (Kenton on Sea)	10	
Management skills (25%)	List of past managed projects (indicating cost and duration and contact details)	No submission	0	10
		Listed but no details	1	
		Less than five projects, about R15m worth in total	5	
		Six or more projects, more than R15m worth in total, and includes components of green building and innovative technologies	10	
TOTAL				100

31 ANNEXURE A1: CLIENT BRIEF

The following assumptions were used in the development of this plan:

1) Type of building

The multipurpose centre will be a 'green' building in terms of its design, the materials used in its construction, and the technologies used.

2) Space usage

On a piece of land measuring about 1 hectare, a multi-purpose community centre of about 300 m² (usable area) will be established comprising the following:

- a. Gym and yoga spaces - two storeys (61.05 m²)
 - Gym (32.72 m²)
 - Yoga room (28.33 m²)
- b. Multifunctional spaces (106.45 m²)
 - Meeting room (28.33 m²)
 - Central Hall with cafe (88.12 m²)
 - Chill area
- c. Administration spaces (22.28 m²)
 - Reception and general office/ shop (13.66 m²)

- Storage – 8.62 m²
- d. Support spaces (71.14 m²)
 - Ablution/ Toilet (22.28 m²)
 - Greywater Technical rooms - 2 storeys (48.86 m²)

32 ANNEXURE B: SCOPE OF SERVICES FOR ELECTRICAL AND MECHANICAL ENGINEERS

The consultant shall in broad terms provide the services related to the scope of work as described below:

Work Stage 1: Appraisal and Definition of the Project

- Advise on the brief
- Advise on rights, constraints, legal requirements, consents and approvals
- Advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for Work Stage 2 including the availability and location of infrastructure and services
- Determine availability of data drawings and plans relating to the project
- Provide necessary information on electrical and mechanical requirements within agreed scope of the project to other consultants

Work Stage 2: Concept and Viability

- Agree the development programme with the principal agent and other consultants
- Attend design meetings
- Establish concept design specifications
- Prepare initial concept design and related documentation for electrical and mechanical works
- Advise the client regarding further surveys, analyses, tests and investigations which may be required
- Refine and assess concept design to ensure conformance with all regulatory requirements and consents
- Establish regulatory authorities requirements and incorporate into the design
- Establish utilities, services and connections required for the design
- Coordinate design interfaces with the other consultants
- Prepare preliminary designs and related documentation for approval by authorities and client suitable for costing
- Liaise, cooperate and provide necessary information to the client, principal agent and other consultants
- Provide cost estimates to the quantity surveyor
- Prepare alternative design solutions where the project cost estimate exceeds the project budget

Work Stage 3: Design Development

- Review the documentation programme with the principal agent and other consultants
- Attend design and consultants meetings
- Incorporate the client's and authorities requirements into the design
- Incorporate the other consultants designs and requirements into the design
- Prepare design development drawings including draft technical details and outline specifications
- Liaise, cooperate and provide necessary information to the client, principal agent and other consultants
- Submit necessary design documentation to local authorities for approval

- Provide cost estimates to the quantity surveyor
- Prepare alternative design solutions where the project cost estimate exceeds the project budget

Work Stage 4: Documentation and Procurement

- Attend design and consultants meetings
- Prepare specifications for the installations and agree quality standards with other consultants
- Prepare specification and preambles for the installations
- Prepare design for procurement purposes
- Check cost estimate and adjust the design if necessary to remain within the budget
- Review working drawings for compliance with the approved budget
- Liaise, cooperate and provide necessary information to the principal agent, and other consultants
- Assess samples and products for compliance and design
- Prepare and submit all necessary documentation as may be required by the local authority for construction approval purposes
- Provide cost estimates to the quantity surveyor
- Prepare alternative design solutions where the project cost estimate exceeds the project budget

Work Stage 5: Construction

- Attend the site handover meeting
- Issue construction documentation in accordance with the documentation programme
- Attend regular site, technical and progress meetings
- Inspect the works for conformity to contract documentation
- Assist in the resolution of contractual claims by subcontractors
- Clarify details and descriptions during installation as required
- Manage, witness and review all test and mock-ups carried out both on and off site
- Check and approve subcontract shop drawings for design intent
- Issue contract instructions as and when required
- Review and comment on operation and maintenance manuals, guarantees, certificates and warranties
- Inspect the installations and issue practical completion and defects lists
- Assist in obtaining statutory certificates

Work Stage 6: Close-out

- Inspect and verify rectification of defects
- Prepare and procure operations and maintenance manuals, guarantees and warranties
- Prepare and submit as-built drawings and documentation to the Implementing Agent

33 ANNEXURE C: SCOPE OF SERVICES FOR QUANTITY SURVEYING

The consultant shall in broad terms provide the services related to the scope of work as described below:

Work Stage 1: Appraisal and Definition of the Project

- Advise on economic factors affecting the project
- Advise on the appropriate financial design criteria
- Identify potential areas for reappraisal and value management
- Establish firm but flexible cost reporting regime which will:
 - Set the principles for the entire contract
 - Set approved budgets for cost planning
 - Encourage ownership of the project costs and risks
 - Adjudicate over design
 - Target areas where cost/ benefit analyses exercises can be carried out
 - Identify life costs of particular elements so that value judgments can be made on specification
 - Optimise use of client resources
- Liaise with the design team and be responsible for timely notification to the Consultants of all design related information required for financial control of the project
- Attend design team meetings and liaise with the project manager and architect with respect to the results thereof and any decisions, instructions or information required.

Work Stage 2: Concept and Viability

- Prepare preliminary and elemental estimates of construction costs
- Assist the Implementing Agent in preparing a financial viability report
- Ensure that the budget is comprehensive and includes:
 - appreciation of the Clients exact requirements
 - that the appropriate specification is observed
 - that the appropriate procurement route is followed
 - that all site constraints are observed
- Offer alternatives if the budget is under pressure
- Ensure expenditure on the critical elements
- Provide financial cost control and monitoring during design and construction stage in order to keep budgets relevant, including regular issue of cost reports and cash flow projections
- Prepare preliminary bills of quantities and schedules of rates
- Submit a full and comprehensive project cost estimate based on Work Stage 2 designs to the Implementing Agent

Work Stage 3: Design Development

- Prepare detailed estimates of construction costs by reviewing and evaluating the design and outlined specifications
- Exercise value engineering in conjunction with the approved budgets
- Submit a full and comprehensive updated project cost estimate to the Implementing Agent

based on Work Stage 3 designs

- Advise on alternative design approaches where the project estimate exceeds the project budget
- Identify work packages for local participants (including labour, suppliers and sub-contractors) in compliance with PPPFA and BBEE legislation.

Work Stage 4: Documentation and Procurement

- Prepare the procurement documentation including contract preliminaries and general and specifications for both principal contract and subcontracts
- Prepare a comprehensive and full updated project estimate based on Work Stage 4 designs
- Advise on alternative design approaches where the project estimate exceeds the project budget
- Evaluate the tenders received and advise on the successful tenderer to be appointed
- Describe the contractor's obligations in sufficient detail to enable certification of their compliance with the project requirements and the need to co-ordinate with the design team and others
- Provide multi-procurement and contractual advice to suit particular circumstances
- Undertake contract administration including continuous valuation of work for progress payments, determining contract instruction values, estimating final costs throughout a project and settlement of final account
- Surveying, measuring and recording site information
- The quantity surveyor will ensure that the tender documentation prepared by CSIR accurately reflects:
 - Proper control of main and subcontractors
 - Design responsibilities for subcontract design elements
 - Responsibility for risk
 - The anticipated budget
 - The clients own quality requirements
 - Programme requirements
- Advise on guarantees, bonds , contractor warranties, and other financial safeguards
- During the tender evaluation done by the CSIR procurement department the quantity surveyor will:
 - Assist in selecting the most appropriate tenders by pre-qualification
 - Assist in establishing relevant experience
 - Assist in reviewing financial status
 - Assist in establish availability for project
- Advise on the need for any works to be carried out under separate direct contract and assist with the preparation of contract documentation.

Work Stage 5: Construction

- Prepare schedules of predicted construction cash flow
- Prepare pro-active estimates for proposed variations for client decision-making
- Adjudicate and resolve financial claims by the contractors
- Assist in the resolution of contractual claims by the contractors
- Establish and maintain a financial control system
- Prepare valuations for payment certificates to be issued by the principal agent

- Prepare final accounts for the works on a progressive basis

Work Stage 6: Close-out

- Prepare and issue the final payment certificate
- Finalize all final accounts including the final accounts for the consultants, principal contractor as well as all the subcontractors

34 ANNEXURE C: SCOPE OF SERVICES FOR CIVIL AND STRUCTURAL ENGINEERS

The consultant shall in broad terms provide the services related to the scope of work as described below:

Work Stage 1: Appraisal and Definition of the Project

- Advise on developmental rights, consents and approvals required by law
- Advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for Work Stage 2 including the availability and location of infrastructure and services
- Determine availability of data drawings and plans relating to the project
- Provide necessary information within agreed scope of the project to other consultants

Work Stage 2: Concept and Viability

- Agree the documentation programme with the principal agent and other consultants
- Attend design meetings
- Establish concept design specifications
- Prepare initial concept design and related documentation
- Advise the client regarding further surveys, analyses, tests and investigations which may be required
- Refine and assess concept design to ensure conformance with all regulatory requirements and consents
- Establish regulatory authorities requirements and incorporate into the design
- Establish access utilities, services and connections required for the design
- Coordinate design interfaces with the other consultants
- Prepare preliminary designs and related documentation for approval by authorities and client suitable for costing
- Liaise, cooperate and provide necessary information to the client, principal agent and other consultants
- Provide cost estimates to the quantity surveyor
- Prepare alternative designs where the project cost estimates exceed the project budget

Work Stage 3: Design Development

- Review the documentation programme with the principal agent and other consultants
- Attend design and consultants meetings
- Incorporate the client's and authorities requirements into the design
- Incorporate the other consultants designs and requirements into the design
- Prepare design development drawings including draft technical details and outline specifications
- Liaise, cooperate and provide necessary information to the client, principal agent and other consultants
- Provide updated cost estimates to the quantity surveyor
- Prepare alternative designs where the project estimate exceeds the project budget
- Submit necessary design documentation to local authorities for approval

Work Stage 4: Documentation and Procurement

- Attend design and consultants meetings
- Prepare specifications for the installations and agree quality standards with other consultants
- Prepare specification and preambles for the installations
- Prepare design for procurement purposes
- Check cost estimate and adjust the design if necessary to remain within the budget
- Review working drawings for compliance with the approved budget
- Liaise, cooperate and provide necessary information to the principal agent and other consultants
- Assess samples and products for compliance and design intent specifically with view to IBT license holders and licensees
-

Work Stage 5: Construction

- Attend the site handover meeting
- Issue construction documentation in accordance with the documentation programme
- Attend regular site, technical and progress meetings
- Inspect the works for conformity to contract documentation
- Assist in the resolution of contractual claims by subcontractors
- Clarify details and descriptions during construction as required
- Witness and review of all tests and mock-ups carried out both on and off site
- Check and approve subcontract shop drawings for design intent
- Issue contract instructions as and when required
- Review and comment on guarantees, certificates and warranties
- Inspect the works and issue practical completion and defects lists
- Assist in obtaining statutory certificates

Work Stage 6: Close-out

- Inspect and verify rectification of defects
- Prepare and procure guarantees and warranties
- Prepare and/or procure as-built drawings and documentation and submit to the Principal Agent

35 ANNEXURE D: SCOPE OF SERVICES FOR ARCHITECTS

The consultant shall assume the role and responsibilities of the principal agent/ project manager and in broad terms provide the services related to the scope of work as described below:

Work Stage 1: Appraisal and Definition of the Project

- Receive, appraise and report on client's requirements with regards to the conceptual idea developed by CSIR

Work Stage 2: Concept and Viability

- Establish concept design specifications
- Establish technical and functional characteristics of the concept design developed by client
- Confirm the proposed materials and intended building services specifically with a view to the incorporation of IBT building systems

Work Stage 3: Design Development

- Review the documentation programme with the consultants by confirming the scope and complexity of the design
- Review the design and consult with local and statutory authorities
- Develop the design from a technical point of view and manage to full integration of the facility with the existing services and proposed IBT systems
- Attend design and consultants meetings
- Liaise, cooperate and provide necessary information to the client principal agent and other consultants
- Assist in the preparation of a project cost estimate
- Provide alternative design solutions where the project cost exceeds the project budget (refine the design according to cost estimate)
- Submit necessary design documentation to local authorities for approval

Work Stage 4: Documentation and Procurement

- Assume the role of project manager reporting directly to the CSIR
- Attend design and consultants meetings
- Prepare specifications for the works including schedules
- Prepare design for procurement purposes
- Check cost estimate and adjust the design if necessary to remain within the budget (refine the design according to cost estimate)
- Liaise, cooperate and provide necessary information to other consultants
- Assess samples and products for compliance and design intent specifically with view to IBT licensees
- In conjunction with the QS, ensure early involvement of local participants (including labour suppliers and sub-contractors) in compliance with PPPFA and BBBEE legislation.

Work Stage 5: Construction

- Assume the role of project manager reporting directly to the CSIR
- Attend the site handover meeting
- Attend regular site, technical and progress meetings
- Inspect the works for conformity to contract documentation and acceptable quality in terms of industry standards
- Assist in the resolution of contractual claims by subcontractors
- Clarify details and descriptions during construction as required
- Issue contract instructions as and when required
- Inspect the works and issue practical completion and defects lists
- Assist in obtaining occupation certificate and other required statutory certificates

Work Stage 6: Close-out

- Inspect and verify rectification of defects
- Prepare and/or procure as-built drawings and documentation to facilitate effective completion, handover and operation of the project, and submit these to the Implementing Agent
- Working with the QS, issue the completion certificate to the contractor

36 ANNEXURE E: SCOPE OF SERVICES FOR FIRE ENGINEERS

The consultant shall in broad terms provide the services related to the scope of work as described below:

Work Stage 1: Appraisal and Definition of the Project

- Advise on the rights, constraints, consents and approvals specifically required in terms of relevant fire regulations
- Advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for Stage 2 including the availability and location of infrastructure and services
- Determine availability of data drawings and plans relating to the project
- Provide necessary information within agreed scope of the project to other consultants specifically on fire wall construction, water supply for sprinklers, hydrants and hose reels, fire escape doors, fire suppression system and rational fire design

Work Stage 2: Concept and Viability

- Agree the documentation programme with the principal agent and other consultants
- Attend design meetings
- Establish concept design specifications
- Prepare rational fire design for concept design developed by client and architect
- Advise the client regarding further surveys, analyses, tests and investigations which may be required
- Refine and assess concept design to ensure conformance with all regulatory requirements and consents with regard to Fire Regulation
- Establish regulatory authorities requirements and incorporate into the design specifically on fire wall construction, water supply for sprinklers, hydrants and hose reels, fire escape doors, fire suppression system and rational fire design
- Establish access utilities, services and connections required for the design specifically on fire wall construction, water supply for sprinklers, hydrants and hose reels, fire escape doors, fire suppression system and rational fire design
- Coordinate design interfaces with the other consultants
- Prepare preliminary designs and related documentation for approval by authorities and client suitable for costing
- Prepare cost estimates and submit to the quantity surveyor
- Prepare alternative design solutions where the project estimate exceeds the project budget
- Liaise, cooperate and provide necessary information to the client, principal agent and other consultants

Work Stage 3: Design Development

- Review the rational fire design with the principal agent and other consultants to ensure sufficient protection as well as compliance to building regulations
- Attend design and consultants meetings

- Incorporate the client's and authorities requirements into the design
- Incorporate the other consultants designs and requirements into the design
- Prepare design development drawings including draft technical details and outline specifications specifically on fire wall construction, water supply for sprinklers, hydrants and hose reels, fire escape doors, fire suppression system and rational fire design
- Finalise details on fire signage specifications
- Prepare cost estimates and submit to the quantity surveyor
- Prepare alternative designs solutions where the project estimate exceeds the project budget
- Incorporate natural / mechanical smoke ventilation where required into the design
- Liaise, cooperate and provide necessary information to the client, principal agent and other consultants

Work Stage 4: Documentation and Procurement

- Attend design and consultants meetings
- Prepare specifications for the installations and agree quality standards with other consultants
- Prepare specification and preambles for the fire design
- Prepare design for procurement purposes
- Check cost estimate and adjust the design if necessary to remain within the budget
- Review working drawings for compliance with the approved budget
- Liaise, cooperate and provide necessary information to the principal agent, principal agent and other consultants
- Assess samples and products for compliance and design intent in terms of sprinklers, hydrants and fire hose reels
- Fire plans submission to local Fire Department

Stage 5: Construction

- Attend the site handover meeting
- Issue construction documentation in accordance with the documentation programme
- Attend regular site, technical and progress meetings
- Inspect the works for conformity to contract documentation
- Assist in the resolution of contractual claims by subcontractors
- Clarify details and descriptions during installation as required
- Manage, witness and review all test and mock-ups carried out both on and off site
- Check and approve subcontract shop drawings for design intent
- Issue contract instructions as and when required
- Review and comment on operation and maintenance manuals, guarantees, certificates and warranties
- Inspect the installations and issue practical completion and defects lists
- Assist in obtaining statutory certificates

Stage 6: Close-out

- Inspect and verify rectification of defects
- Prepare and procure operations and maintenance manuals, guarantees and warranties
- Prepare and/or procure as-built drawings and documentation

37 ANNEXURE F: SCOPE OF SERVICES FOR OCCUPATIONAL HEALTH AND SAFETY CONSULTANTS

The consultant shall in broad terms provide the services related to the scope of work as described below:

Work Stage 1 and 2: Inception, Concept and Viability

- Developing a clear construction project health and safety brief.
- Attend the construction project initiation meetings.
- Advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for the next stage of the project.
- Identify construction project health and safety risk profile.
- Attend design and consultants meetings.
- Review and evaluate design concepts and advise on construction project health and safety in conjunction with the other consultants.
- Prepare draft construction project baseline risk assessment.
- Prepare the draft construction project health and safety specification.
- Review, update and agree the construction project health and safety risk profile and prepare the construction health and safety policy for the construction project

Work Stage 3: Design Development

- Attend design and consultants meetings.
- Finalise the construction project health and safety risk profile
- Advise designers of their health and safety legal liabilities and responsibilities for constructability, maintainability and operationability of the structure.
- Agree on a format for the health and safety file.

Work Stage 4: Documentation and Procurement

- Assist in developing a clear construction project health and safety procurement process.
- Finalise construction project tender health and safety specifications and integrate with procurement documentation.
- Prepare construction project health and safety documentation for submission to authorities
- Participate in construction project tender clarification meetings
- Prepare construction project health and safety mobilisation and access plans for the construction work

Work Stage 5: Construction

- Assess, discuss, negotiate and approve the contractor(s) construction project health and safety plans
- Submit necessary construction health and safety documentation to authorities and facilitate permits that may be required to commence the construction work

- Attend site handover meetings and lead construction project health and safety mobilisation and access plans
- Attend regular site, technical and progress meetings
- Perform incident and accident investigations where necessary
- Audit compliance with the construction project health and safety plans and brief the project management team and contractor(s) following site audits
- Prepare and maintain the consolidated health and safety file

Work Stage 6: Close-out

- Review, discuss and approve the health and safety file with the contractor(s) and manage the construction project health and safety during the defects liability period.
- Cancel all construction project health and safety legal appointments
- Prepare the consolidated construction project health and safety close - out report