LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

LDPWRI-PROF/20529: FRAMEWORK AGREEMENT FOR CIVIL ENGINEERING CONSULTANCY SERVICES FOR THE LIMPOPO DEPARTMENT OF PUBLIC WORKS ROADS AND INFRASTRUCTURE

Issued by:

Limpopo Department of Public Works, Roads and Infrastructure
Works Towers Building
43 Church Street
Polokwane
0700

Contact Person: General Queries

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Name of the Bidder :.....

CONTENTS

PART T1: TENDERING PROCEDURE

T1.1 Tender Notice and Invitation to Tender

The Limpopo Department of Public Works, Roads and Infrastructure invites tenders for professional Civil Engineering Consultancy Services over a three (3) year term ***without a guarantee of the quantum of work***.

The contracts will be based on the NEC3 Professional Service Contract.

Limpopo Department of Public Works, Roads and Infrastructure will enter into a contract with the successful tenderer. Organs of state including Municipalities and State Owned Entities may make use of these framework agreements and issue Task Orders for work falling within the scope of the contracts that are entered into.

Only tenderers who have suitable experience and suitably qualified personnel in providing similar services to those that are required in this tender are eligible to submit tenders.

This tender will be subjected to the Standard for skills development through infrastructure contracts as per regulation 22B as part of the CIDB BUILD programme. This will only be applicable at the time of issuing of the task orders only on applicable projects where the value of professionals fees is or in excess of R 5 million and project duration is 12 months or higher on all class of works construction works or as the CIDB regulations are amended.

Tender Description	Framework Agreement for Civil Engineering Consultancy Services for the Limpopo Department of Public Works Roads and Infrastructure
Tender Number	**LDPWRI-PROF/20529**
Tender documents availability	Tender documents available on www.etenders.gov.za, CIDB website and www.dpw.limpopo.gov.za
Address for submission of tenders	DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.
Closing date of the tender	As per Tender Notice
Closing time of the tender	11:00 am
Price of the tender document	Tender documents available on online
Enquiries	**General:** Name : Mr Motsopye NJ Tel No. : 015 284 7219 / 015 284 7421 Email : motsopyenj@dpw.limpopo.gov.za **Technical:** Name : Ms Mhangwane V Tel No. : 015 284 7173 Email : MhangwaneV@dpw.limpopo.gov.za
	Telegraphic, telephonic, scanned documents, facsimile, e-mail and late tenders will not be accepted.

T1.2 Tender Data

The conditions of tender are the latest edition of SANS 10845-3: Standard Conditions of Tender as contained in Annexure C of the CIDB Standard for Uniformity in Construction Procurement (August 2019) as published in Government Gazette No. 42622, Department of Public Works Notice 423 & SANS 10845. (See www.cidb.org.za), to which tenderers are referred to for their information purposes in relation to this Tender Data. SANS 10845-3 makes several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the provisions of SANS 10845-3.

Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

All references to the terms: "Tender", "Tenders", "bidders", "bid", and/or "Tenderer" and "Tenderers" in these documents and the Conditions of Tender shall have the same meaning as each other and shall be of equal force.

The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender.

Clause number	Tender Data
C1.1	The Employer is the Department of Public Works, Roads and Infrastructure
C1.2	The Tender Documents issued by the Employer comprise the following documents: **THE TENDER** **Part T1: Tendering procedures** T1.1 Tender notice and invitation to tender T1.2 Tender data **Part T2: Returnable documents** T2.1 List of returnable documents T2.2 Returnable schedules **THE CONTRACT** **Part C1: Agreements and contract data** C1.1 Form of offer and acceptance C1.2 Contract data **Part C2: Pricing data** C2.1 Pricing assumptions C2.2 Staff rates C2.3 Adjustment factors **Part C3: Scope of work** C3 Scope of work **ANNEXURES**

	Annexure 1: Pro forma Task Order Annexure 2: Standard scope of professional services associated with the delivery of a package Annexure 3: Framework for the determination of professional fees associated with the delivery of a package Annexure 4: Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts
C1.4	The employer's representatives are : **General:** Name : Mr Motsopye NJ Tel No. : 015 284 7219 / 015 284 7421 Email : motsopyenj@dpw.limpopo.gov.za **Technical:** Name : Ms Mhangwane V Tel No. : 015 284 7173 Email : MhangwaneV@dpw.limpopo.gov.za Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. Only information issued formally by the Employer in writing to Tenderers will be regarded as amending the Tender Documents.
C1.5.	The employer reserves the right to cancel the tender prior to the award of the tender.
C2.1.	**Eligibility Criteria (Mandatory Requirements)** Only those tenderers who satisfy the following eligibility criteria **and** who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated: 1. The tenderer: a) is not an unincorporated joint venture (i.e. the JV must be registered with CSD, CIPC and SARS as a JV, and all supporting documents must be submitted); and b) is registered in terms of the Companies Act, 2008 (Act 71 of 2008) or Close Corporation Act, 1984, (Act No. 69 of 1984) or, if a partnership, has in place a partnership agreement that enables the partnership to automatically continue to function in the event of a death or withdrawal of one of the partners; **Attach** company registration documents. 2. The tenderer is registered on the National Treasury Central Supplier Data Base (https://secure.csd.gov.za).
C2.7	**Compulsory briefing session** There will be no briefing session for this tender.

C2.8	**Seeking clarification** Bidders are welcome to submit questions, which will be answered and uploaded to the department of Public Works, Roads and Infrastructure website as and when queries are received. All communications should be channelled through the contacts provided in this bid document.
C2.11	**Alterations to the documents** Bidders are required to not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All such alterations shall be initialled by all signatories to the tender. Corrections may not be made using correction fluid, correction tape or the like. Failure to comply with this condition will lead to disqualification.
C2.12	**Alternative tender offer** No alternative tender offer is permitted in this tender.
C2.13.4	The tender shall be signed by a person duly authorized to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.
C2.13.5	The sealed original tender must be submitted to the employer by no later than the closing date and time. **Location of tender box: DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.** **Physical address: CORNER RIVER AND BLAAUWBERG STREETS, LADANNA, 0699** **Identification details:** Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.
C2.13.9	The employer will not accept telephonic, telegraphic, telex, facsimile or e-mailed tender offers. Failure to meet this requirement will lead to disqualification during the evaluation for compliance with administration of the tender. The tender document should be returned in printed and original form. It may not be re-typed or altered in any way. The documents must be completed in black ink (non-erasable) – in an eligible handwriting. Mistakes are to be corrected by drawing a line though it and writing the correct information above it. Tenderer should sign next to the correction. **Use of correction fluid is prohibited and bidders shall automatically be disqualified. In addition, submission of copy of copy is prohibited and will lead to disqualification.**
C2.15	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

C2.16	The tender offer validity period is **120 days.** The employer may, in exceptional circumstances, request the Bidder for an extension of the validity period, prior to the expiry of the original proposal validity period. The request and the response thereto shall be made in writing. A Bidder agreeing to the request will not be permitted to modify its Proposal.
C3.2	Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.
C3.11	The tenderers will be evaluated in two (2) stages a) Stage 1: Mandatory and Administrative Compliance (Responsiveness) b) Stage 2: Functionality (or Quality) The financial offer will be evaluated at the time of issuing the specific task orders.
	Stage 1: Responsiveness Evaluation The Tenderer shall provide all the relevant information required in this tender which will include the information detailed below. Tenderers who do not adhere to the criteria listed below will be disqualified: 1. The tendering entity must satisfy all the requirements stated in 4.1 above. 2. Fully returnable documents detailed under list of returnable documents as outlined in Section T2.
	Stage 2: Functionality The quality criteria and maximum score in respect of each of the criteria are as follows:

Quality Criteria	Sub Criteria	Maximum Number of Points
At least 51 % of its shareholders, directors, members or partners are professionally registered as Professional Engineer or Professional Engineering Technologist in terms of the Engineering Profession Act, 2000 (Act no 46 of 2000). (Schedule 1)		20
Experience of Personnel (Schedule 2)	Principal Consultant (*key person*)	10
	Additional technical skills	15
Value add (Schedule 3)	Bidder's past experience in professional built environment services to client in Civil engineering	35
	Professional Indemnity not less than R3.0 Million	10
	Bidder's ISO 9001 Certificate	10
Maximum possible score for quality (M_s).		**100**

The minimum number of evaluation points to qualify is **70.**

C3.13	Tender offers will only be accepted if: a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) unless it is a foreign supplier with no local registered entity b) the tenderer provides written proof from SARS that the tenderer either has no tax obligations or has made arrangements to meet outstanding tax obligations; c) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; d) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) had a previous government contract cancelled due to the consultants poor performance; and e) the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process; f) The tenderer is not appearing on the list of blacklisted service providers; g) Meet all the requirements as stated in this tender document.
	The additional conditions of tender are: The department will enter into a Framework Agreements with all the service providers who meet the requirements of this tender, without any guarantee of quantum of works during the 3 years. Post the appointment on the framework agreement, the department will call all qualifying service providers and issues request for task orders as necessary. The request for task orders will be based on Option A: Priced Contract with Activity Schedule and Option G: Term contract. Option A will also entail the employer appointing the service providers based on the percentage fee of the actual value of construction works as per Annexure 3: Framework for the determination of professional fees associated with the delivery of a package of this bid. Preference and scoring for the award of the task order will be done as per Preferential Procurement Regulations of 2022 – or as amended, at the time of the issuing of the request for task order and will be included on the request for task order proposal. Generally, the Appointment from list of approved service providers will be based on Method 2 (Financial offer and preferences), unless otherwise stated on the request for proposal.
	The process of inviting service providers during the issuing of request for task orders will be based on the nature (either complex or simple) and size of the project (estimated total value of the project). a) Bidders who quality to be in the framework shall then be placed under the following categories:

Size Of Enterprise to be Invited	Turnover During Preceding Year	Professionals Required
Large Practice in Civil Engineering Services	More than R5 Million Rand	A minimum of 3 Fulltime Pr. Eng. or/and Pr. Eng. Tech (Civil)

Medium Practice in Civil Engineering Services	Above R3 Million and less than R5 Million Rand	A minimum 2 Fulltime Pr. Eng. or/and Pr. . Eng. Tech (Civil)
Small Practice in Civil Engineering Services	Above R0.5 Million and less than R3 Million Rand	A minimum of 1 Fulltime Pr. Eng. or/and Pr. Eng. Tech (Civil)

b) The estimated value of the Civil works applicable to the project will be used to determine the size of enterprises (small, medium or large) to be invited as follows:
   (i) Where the estimated costs of Civil works of the project is less than R 5 million, **all the bidders** within the framework agreement will be invited.
   (ii) Where the estimated costs of Civil works of the project is above R 5 million and less than R 10 million, **only medium and large enterprises** will be invited.
   (iii) Where the estimated costs of Civil works of the project is above R 10 million, **only large enterprises** will be invited.

Size of enterprise versus estimated value of Civil works

Estimated Value of Civil Works	**Size Of Enterprise to be Invited**	**Professionals Required**
R10 Million Rand and above for Civil Engineering Services Only	Large Practice in Civil Engineering Services	A minimum of 3 Fulltime Pr. Eng. or/and Pr. Eng. Tech (Civil)
Above R5 Million and less than R10 Million Rand for Civil Engineering Services Only	Medium Practice in Civil Engineering Services	A minimum 2 Fulltime Pr. Eng. or/and Pr. Eng. Tech (Civil)
Less than R5 Million Rand for Civil Engineering Services Only	Small Practice in Civil Engineering Services	A minimum of 1 Fulltime Pr. Eng. or/and Pr. Eng. Tech (Civil)

The Department reserves the right to review these limits as and when necessary.

However, for complex projects, the department may also consider additional information during the evaluation of the proposals. This may include amongst others, the following during the assessments of the proposals:

- Current performance of the service provider in relation to similar works allocated by the department.
- Experience of the consultants (Consultant's general experience and record in the field covered by the ToR) – only professional engineers will be considered.
- Submission of a proposed project approach/methodology that best represents the ToR.
- Submission of proposed project schedule, or work plan that best represents the ToR.

Special Conditions

The following conditions forms part of this tender:

- LDPWR&I reserve the right to call interviews with short-listed bidders before final selection. This may be done during this tender and/or during implementation of the framework agreement.
- LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the implementation of the framework agreements.
- LDPWR&I reserve the right to appoint the bidder that proves to be fully capable and qualified to handle and execute the job.
- At the issuing of the RFQ, the proposals from the consultants should be in line with the detailed specification stated on the RFQ.
- LDPWR&I reserve the right to cancel or withdraw this bid if:
    - Due to changed circumstances, there is no longer a need for this services; or
    - Funds are no longer available to cover the total envisaged expenditure; or
    - No acceptable bids are received; or
    - There is a material irregularity in the Bid process.
- Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.
- Any completion of the bid document in pencil or erasable ink or typed will not be acceptable and will automatically disqualify the submitted bid.
- Bids received after the closing date and time will not be accepted for consideration.
- No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of LDPWR&I.
- Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.
- Submission of a proposed project approach/methodology that best represents the ToR.
- Submission of proposed project schedule, or work plan that best represents the ToR.

PART T2: RETURNABLE DOCUMENTS

T2.1 : LIST OF RETURNABLE DOCUMENTS

1. The following forms, certificates and schedule are required for evaluation of tender responsiveness.

1.1. Practice Declaration - must be fully completed and signed, including all the associated supporting documentation listed in such the declaration.

1.2. Record of Addenda to tender documents (if applicable) - must be fully completed and signed

1.3. Compulsory Declaration - must be fully completed and signed

1.4. Proposed amendments and qualifications - must be fully completed and signed

1.5. SBD1: Invitation to tender - must be fully completed and signed

1.6. SBD 4: Bidders' Disclosure- must be fully completed and signed

1.7. Certificate of Authority - must be fully completed and signed

1.8. Submit valid CSD Report printed within the last 3 months

1.9. Form of Offer - must be fully completed and signed

Failure to comply with 1.1, 1.3 1.5, 1.6, 1.8, 1.9 and 1.10 will be considered non-responsive, and the bidder will automatically be disqualified.

The tender document should be returned in printed and original form. It may not be re-typed or altered in any way. The documents must be completed in black ink (non-erasable) – in an eligible handwriting. Mistakes are to be corrected by drawing a line though it and writing the correct information above it. Tenderer to initial next to the correction. **Use of correction fluid is prohibited and bidders shall automatically be disqualified. In addition, submission of copy of copy is prohibited and will lead to disqualification.**

2. The following returnable documents are **required for tender evaluation purposes (i.e. awarding of scoring functionality points – but not for disqualification)**
   a. Referral letters for previous work conducted by the service provider – duly signed off by client. A template is attached herein for the bidders to use. The letters must detail the scope of work undertaken, project value undertaken, date of award, location where work was carried out and whether the projects reached Practical and Final Completion.
   b. Curriculum Vitae (not longer than 4 pages) of all key staff allocated to this project, indicating their experience and qualifications and professional registration with various councils. Use of key personnel not employed by the service provider may lead to disqualification during award of the tender as the department reserve the right to confirm this before awarding of the tender.
   c. Certified copies (not older than 6 months) of all qualifications, professional registrations and training.
   d. ISO 9001 Certificate
   e. Professional Indemnity of R3 million or more
   f. Annual Financial Statements for preceding financial year
   g. Company Registration Documents

h. Certified copy of the company's directors' identity documents (not older than 6 months). No copy of a certified copy will be accepted.
i. Proof of company office address (must reflect the company's name)

3. The following returnable documents are **will be incorporated as part of the contract after entering into the framework agreement with the department**

a. Annexure 2: Standard scope of professional services associated with the delivery of a package
b. Annexure 3: Framework for the determination of professional fees associated with the delivery of a package
c. Annexure 4: Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts
d. Part C1.2: Contract Data

T 2.2 : RETURNABLE SCHEDULE

Number	Heading	Page No.	Compulsory (automatic disqualification)	Bidder's Schedule
T.2.2.1	Practice Declaration	15	☒Yes ☐ No	☐Yes ☐ No
T.2.2.2	Record of Addenda to tender documents (if applicable)	17	☐Yes ☒ No	☐Yes ☐ No
T.2.2.3	Compulsory Declaration	18	☒Yes ☐ No	☐Yes ☐ No
T.2.2.4	Proposed amendments and qualifications	22	☐Yes ☒ No	☐Yes ☐ No
T.2.2.5	SBD1: Invitation to tender	23	☒Yes ☐ No	☐Yes ☐ No
T.2.2.6	SBD 4: Bidders' Disclosure	26	☒Yes ☐ No	☐Yes ☐ No
T.2.2.8	Certificate of Authority	35	☒Yes ☐ No	☐Yes ☐ No
T.2.2.9	CSD Report			
T.2.2.10	Annual Financial Statement for preceding financial year	37	☐Yes ☒ No	☐Yes ☐ No
T.2.2.11	Proof of at least 51% of the bidder's shareholders, directors, members or partners being professionally registered as Professional Engineer or Professional Engineering Technologist in terms of the Engineering Profession Act, 2000 (Act no 46 of 2000).	37	☐Yes ☒ No	☐Yes ☐ No
T.2.2.12	CV's & Qualifications of Principal Consultant Registered with ECSA as Pr. Eng. or Pr. Eng. Tech	38	☐Yes ☒ No	☐Yes ☐ No
T.2.2.13	CV's & Qualifications of Additional Technical Staff	37	☐Yes ☒ No	☐Yes ☐ No
T.2.2.14	Proof of Bidder's Past Experience	39	☐Yes ☒ No	☐Yes ☐ No
T.2.2.15	Professional Indemnity of R3mil. or more	42	☐Yes ☒ No	☐Yes ☐ No
T.2.2.16	Bidder's ISO 9009 Certificate	37	☐Yes ☒ No	☐Yes ☐ No
C.1.1	Form of Offer	44	☒Yes ☐ No	☐Yes ☐ No

T2.2.1: Practice Declaration

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

1) The tenderer is not an unincorporated joint venture and is (tick appropriate box):

- □ a close corporation – ck no . . . . . .
- □ a company – company no . . . . . .
- □ a partnership

(**Attach** Proof of company registration in terms of the Companies Act, 2008 (Act 71 of 2008) or Close Corporation Act, 1984, (Act No. 69 of 1984) or partnership agreement as applicable)

2) The tenderer has in his full time employ the following Principal Consultant (or *key person*) whose name is stated as such in Part 2 of the Contract Data) i.e. **the person who will provide the service or under whose active and personal direction, control and supervision the service is to be provided and who has experience in providing similar services to those described in the scope of work.**

Name of Proposed Principal Consultant: *(Only one person to be named - The same person as identified in Contract Data Part 2.)*	
ID Number or Passport number:	
Type of Professional registration: ***(tick relevant box)***	□ Professional Engineer (Pr.Eng.) □ Professional Engineering Technologist (Pr.Eng Tech.)
Professional registration Number: *(insert registration number and tick relevant registration council)*	
Location of office base of Principal Consultant (i.e.: location where this person normally operates from):	
Physical Address:	X co-ordinate e.g. 26° 7'36.13"S . . . . . . Y co-ordinate e.g. 28° 10'37.84"E . . . . . . Post Code: .....

3) The tenderer has professional indemnity cover is in place in an amount of not less than R 3 million without a limit to the number of claims

Professional Indemnity Cover held by the tenderer: R 3 million

(**Attach** an active certified copy of the professional indemnity professional cover and provide an active certified copy of the latest Annual Financial Statements)

4) The tenderer's turnover over the preceding financial year is more than R5 million for large firms, less than R5 million but more than R3million for medium firms, and less R3 million but more than R 0.5 million small firms respectively.

(**Attach** Annual Financial Statement of the preceding year)

5) The tenderer's primary business is to provide professional built environment services to clients for a fee as evidenced by the tenderer having at least 51% of its Shareholders, directors, members or partners who are professionally registered as Professional Engineer or Professional Engineering Technologists with ECSA.

(**Attach** Director's CV and Qualifications)

6) The tendering entity can demonstrate to the satisfaction of the Employer as evidenced by having in its **full time employ** the following professionals who shall be deployed to projects pertaining to this framework agreement (in line with Schedule 2) :

Role	Name (ECSA Registered professionals)	Identity number	Professional registration type and number (e.g. PrEng, No. xxxxxxx)
Principal Consultant			
Additional Supporting Technical Staff			
Additional Supporting Technical Staff			
Additional Supporting Technical Staff			

3. The tenderer can provide at least three contactable client references for the provision of Civil Engineering Services to such clients which generated a fee income of at least R 0.5 million rand (in total for all projects provided) including VAT, and which have been satisfactorily completed during the last five years.

I hereby declare that the contents of this Declaration are within my personal knowledge, and save where stated otherwise are to the best of my belief both true and correct.

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

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

Tenderer .....

T2.2.2. 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 taken into account in this tender offer:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

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

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

Tenderer .....

T2.2.3 Compulsory Declaration

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

Section 1: Enterprise Details

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no:	
Physical address:	
Postal address:	

Section 2: Particulars of companies and close corporations

Company / Close Corporation registration number	

Section 3: SARS Information

Tax reference number	
VAT registration number:	

Section 4: CIDB registration number : N/A

Section 5: National Treasury Central Supplier Database

Supplier number / Unique registration reference number	

Section 6: Particulars of Principals

Principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).

Full name of principal	Identity number	Personal tax reference number

**Attach separate page if necessary*

Section 7: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ an employee of Parliament or a provincial legislature

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

Name of principal	Name of institution, public office, board or organ of state and position held	Status of service *(tick appropriate column)*	
		Current	**Within last 12 months**

*Insert separate page if necessary

Section 8: Record of family member in the service of the state

family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been in the service of any of the following:

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

Name of family member	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

**insert separate page if necessary*

Section 9: Record of termination of previous contracts with an organ of state

Was any contract between the tendering entity including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer failing to make payment in terms of the contract.

☐ **Yes** ☐ **No (Tick appropriate box – failure to tick renders form incomplete)**

If yes, provide particulars (interest separate page if necessary)

Section 10: Declaration

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my personal knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

i) neither the name of the tendering entity or any of its principals appears on:
   a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004)
   b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)

ii) neither the tendering entity of any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);

iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);

iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers

v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract etc) or intention to not win a tender;

vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;

vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;

viii) SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by the National Treasury, for SARS to do likewise.

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

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

Enterprise

.....

T2.2.4 Proposed amendments and qualifications

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

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

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

Tenderer .....

T2.2.5 SBD 1 - PART A: Invitation to Bid

YOU ARE HEREBY INVITED TO TENDER FOR REQUIREMENTS OF THE LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE					
TENDER NUMBER:	*LDPWRI-PROF/20529*	**CLOSING DATE**	**19/08/2025**	**CLOSING TIME:**	**11:00am**
DESCRIPTION	**FRAMEWORK AGREEMENT FOR CIVIL ENGINEERING CONSULTANCY SERVICES FOR THE LIMPOPO DEPARTMENT OF PUBLIC WORKS ROADS AND INFRASTRUCTURE**				
TENDER RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE TENDER BOX SITUATED AT (STREET ADDRESS):					
DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.					
Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.					
TENDERING PROCEDURE ENQUIRIES MAY BE DIRECTED TO					
CONTACT PERSON	Mr. NJ Motsopye				
TELEPHONE NUMBER	015 284 7126	E-MAIL ADDRESS	motsopyen@dpw.limpopo.gov.za		
CONTACT PERSON (TECHNICAL)	Ms. V Mhangwane				
TELEPHONE NUMBER	015 284 7173	E-MAIL ADDRESS	MhangwaneV@dpw.limpopo.gov.za		
SUPPLIER INFORMATION					
NAME OF TENDERER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		**OR**	CENTRAL SUPPLIER DATABASE No:	MAAA

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐Yes ☐No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR **THE GOODS /SERVICES /WORKS OFFERED?**	☐Yes. ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]

QUESTIONNAIRE TO TENDERING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES	☐ NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES	☐ NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES	☐ NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES	☐ NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES	☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

PART B: TERMS AND CONDITIONS FOR BIDDING

1. TENDER SUBMISSION:

1.1. TENDERS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE TENDERS WILL NOT BE ACCEPTED FOR CONSIDERATION.

1.2. **ALL TENDERS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE TENDER DOCUMENT.**

1.3. THIS TENDER IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

1.4. **THE SUCCESSFUL TENDERER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

2. TAX COMPLIANCE REQUIREMENTS

2.1 TENDERERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.

2.2 TENDERERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.

2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.

2.4 TENDERERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE TENDER.

2.5 IN TENDERS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.

2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE TENDERER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

2.7 NO TENDERS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE TENDER INVALID.

SIGNATURE OF TENDERER: .....

CAPACITY UNDER WHICH THIS TENDER IS SIGNED: .....
(Proof of authority must be submitted e.g. company resolution)

DATE: .....

T2.2.6 SBD 4: Bidder's Disclosure

1. PURPOSE OF THE FORM

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[1] 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 table below.

Full Name	Identity Number	Name of State institution

[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.

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **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:

.....

.....

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:

1.1 I have read and I 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 consortium[2] 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.

[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.

3.5 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

3.6 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.

3.7 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE 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.

....
Signature Date

....
Position Name of bidder

T2.2.8 Certificate of Authority

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer **must** complete the certificate set out below for the relevant category **(do not write "SEE ATTACHED").**

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation

(Tick applicable box)

A. CERTIFICATE FOR COMPANY

I,....., chairperson of the board of directors of ....., hereby confirm that by resolution of the board (copy attached) taken on .....20...., Mr/Mrs.....acting in the capacity of.....,was authorised to sign all documents in connection with this tender and any contract resulting from it on behalf of the company.

As witness:

1..... .....

. Chairman

2..... .....

Date

B. CERTIFICATE OF PARTNERSHIP

We, the undersigned, being the key partners in the business trading as .....

hereby authorise Mr/Mrs....., acting in the capacity of.....to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NAME	ADDRESS	SIGNATURE	DATE

NOTE: *This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole (**do not write "SEE ATTACHED").***

C. CERTIFICATE FOR JOINT VENTURE

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

This authorisation is evidenced by the attached power of attorney signed by legally authorised signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY

Do not write "SEE ATTACHED".

D. CERTIFICATE FOR SOLE PROPRIETOR

I, ..., hereby confirm that I am the sole owner of the business trading as.....

As Witness:

1..... .....
Signature: Sole owner

2..... .....
Date

E. CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as.....hereby authorise Mr/Mrs.....acting in the capacity of....., to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be completed and signed by all the key members upon whom rests the direction of the affairs of the Close Corporation as a whole. **Do not write "SEE ATTACHED".**

T2.2.10 Annual Financial Statement

Annual financial statements complying with applicable legislation for the preceding financial year within 12 months of the year end.

Turnover for Preceding Year	Tick one
More than R5 Million Rand	
Above R3 Million and less than R5 Million Rand	
Above R0.5 Million and less than R3 Million Rand	
Less than R0.5 Million	

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

T2.2.11: Evaluation Schedule 1: 51% Ownership by ESCA registered Professionals [20 points]

Attach certified ECSA Certificate as proof of at least 51% of the bidder's shareholders, directors, members or partners being professionally registered as Professional Engineer or Professional Engineering Technologist in terms of the Engineering Profession Act, 2000 (Act no 46 of 2000).

Shareholder / Directors / Members / Partners	Professional Registration with ECSA	% Ownership

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

T2.2.12: Evaluation Schedule 2: Experience of Project Personnel

CV's of **not** more than 4 pages must be attached to this schedule. Each CV should be structured under the following headings:

1. Personal particulars
2. Qualifications (degrees, diplomas, grades of membership of professional societies and professional registrations)
3. Name of current employer and position in enterprise
4. Overview of post graduate experience (year, organization and position / responsibilities)
5. Outline of assignments / experience that has a bearing on the required services giving dates, nature and scope of similar services that have been undertaken including the level of responsibility. Indicate projects completed during the course of the career and role played in the project.
6. Professional activities which have a bearing on the service

Certificates / suitable proof of membership must be attached to this schedule

1. Principal Consultant (*Key Person*) [10 points]

The experience of the Principal Consultant (Key Person) whose name is stated as such in Part 2 of the Contract Data) will be evaluated i.e. the person who will provide the service or under whose active and personal direction, control and supervision the service is to be provided (see scope of work).

This will be undertaken in relation to:

a) Professional profile: professional qualifications, professional experience (total duration of professional activity), level of education and training and positions held which have a bearing on the services which may be required.
b) Experience in relation to the services which may be required in terms of the scope of work
c) Professional registration as a Pr. Eng. or Pr. Eng. Tech with ECSA

The scoring will be as follows:

Rating / score	**General experience and qualifications in relation to the service**	**Post professional registration relevant experience in relation to the service**
0 Points	Tenderer has submitted no information or inadequate information to determine scoring level or does not have an appropriate professional profile or experience.	
Poor (4 Points)	Principal Consultant has a limited professional profile	The consultant has less than 3 years of experience post registration [<3years].
Satisfactory (6 Points)	Principal Consultant has reasonable professional profile	The consultant has more than 3 years but less than or equal to 6 years of experience post registration [> 3 years but ≤ 6 years]
Good (8 Points)	Principal Consultant has an extensive professional profile	The consultant has more than 6 years but less than or equal to 10 years of experience post registration [> 6 years but ≤ 10 years]
Very good (10 Points)	Principal Consultant has outstanding professional profile	The consultant has more than 10 years of experience post registration [> 10 years]

2. Additional Technical Resources [15 Points]

The scoring for additional technical staff will be as follows:

Additional staff	Points allocation
1 x additional technical staff registered with ECSA as Pr. Eng. or Pr. Tech.	5
2 x additional technical staff registered with ECSA as Pr. Eng. or Pr. Tech.	10
1 x Pr. Technician with ECSA	5

Points for Evaluation Schedule 2 will only be awarded for the personnel indicated in the table below (*No points will be awarded if this is not completed*):

Role	Name	Professional registration type and number (e.g. PrEng, No. xxxxx)	Years of Experience Post-Registration
Principal Consultant			
Additional Supporting Technical Staff 1			
Additional Supporting Technical Staff 2			
Additional Supporting Technical Staff 3			

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

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

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

Tenderer .....

T2.2.13 Evaluation Schedule 3: Value add by Tenderer

The value added by the tenderer in delivering the service will be evaluated i.e. the answer to the question as to why the Employer will derive better value for money by contracting with the tenderer and making use of the Principal Consultant that is offered for the proposed service rather than with any other tenderer and their offered Principal Consultant.

The tenderer should specifically outline the value add with respect to the entity's portfolio of work and past experience in the field of **Civil Engineering.**

The scoring of the tenderer's value added will be as follows:

1. Reference Letters for Completed Projects [35 Points]

Instruction	Description	Points allocated for referral letters showing that project reached Practical Completion	Additional Points allocated for where projects attained Final Completion
Bidder's previous experience in providing Civil engineering services. **Bidder MUST submit referral letters from the Client – as per template attached in this tender (page 48) with corresponding appointment letters and completion certificates.**	No Reference letter	0	0
	1 x Reference letter	5	2
	2 x Reference letter	10	4
	3 x Reference letter	15	6
	4 x Reference letter	20	8
	5 x Reference letter	25	10

NB: Where the contract was administered using the NEC contract, full points for PC& FC will be awarded.

The referral letters MUST be fully completed by the client to enable award of the points.

Summary of Completed Projects

No	Project Name	Brief Scope of Works by Tenderer	Contract Value
1			
2			
3			

No	Project Name	Brief Scope of Works by Tenderer	Contract Value
4			
5			

2. Professional Indemnity - [10 Points]

The tendering entity has professional indemnity insurance cover issued by a reputable insurer in an amount of not less than R3 Million Rand in respect of a claim without limit to the number of claims.

Certificate Submitted	Points	Tick Applicable Below
P.I. Of R3 million or more	10	
No P.I. submitted	0	

3. ISO 9001 CERTIFICATE - [10 Points]

Certificate Submitted	Points	Tick Applicable Below
Bidder submitted ISO 9001 certificate	10	
Bidder did not submit ISO 9001 certificate	0	

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

The following template MUST be used by consultants as REFERRAL LETTER for completed projects in order for points to be awarded.

Name of Client : _____

Client's Address : _____

Consultant Name : _____

Project Name : _____

Project Scope : _____

_____

_____

Project Site Location : _____

Services Rendered : _____

Value of works : _____(VAT Included)

Project Status (Indicate Yes/No)	**Yes**	**No**
The Project reached **Practical Completion**?		
Project reached **Final Completion**?		

I certify that the above information is true:

_____ _____

Client's Representative Signature

_____ _____

Tel: Date

_____

Email Address

Client's Stamp

PART C1: AGREEMENTS AND CONTRACT DATA

PART C1: AGREEMENT AND CONTRACT DATA

C1.1. 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:

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

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Consultant* under the contract including compliance with all its terms and conditions for an amount to be determined in accordance with the conditions of contract identified in the Contract Data without any guarantee of a quantum of work.

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 including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Consultant* in the conditions of contract identified in the Contract Data.

Signature(s) ---------- ----------

Name(s) ---------- ----------

Capacity ---------- ----------

For the Tenderer: ----------

Name & signature of witness. ---------- Date ----------

Acceptance (To be completed by the employer – not the bidder)

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 Consultant the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the *Employer* and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1 Acceptance)	Agreements and Contract Data, (which includes this Form of Offer and
Part C2	Pricing Data
Part C3	Scope of Work

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the *Employer* during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the *Employer's* agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *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 when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now *Consultant*) within five working days of the date of such receipt notifies the *Employer* in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

For the Employer

Signature .....
Name .....
Capacity .....

Name and address of organization

Signature and Name of Witness

Signature .....
Name .....
Capacity .....

Part C1.2 Contract Data

The Conditions of Contract are the NEC3 Professional Services Contract (Third edition with amendments of June 2006 and April 2013), copies of which may be obtained from Engineering Contract Strategies (telephone 011-803 3008). (Amendments made since the publication of the Third Edition of June 2005 may be downloaded from https://www.neccontract.com/getmedia/a3043061-189e-4fce-a7c3-f28caf62cace/PSC.pdf.aspx)

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Services Contract which requires it.

Part one - Data provided by the *Employer*

1	General

The *conditions of contract* are the core clauses and the clauses for main Option:

G: Term contract

dispute resolution Option W1: Dispute resolution procedure

and secondary Options

X1: Price adjustment for inflation

X2: Changes in the law

X7: Delay Damages

X9: Transfer of rights

X10: *Employer's Agent*

X11: Termination by the *Employer*

Z: *Additional conditions of contract*

of the NEC3 Professional Services Contract

10.1	The *Employer* is Limpopo Department of Public Works Roads and Infrastructure Address: 43 Church Street Polokwane, 0699 Telephone: (015) 284-7001 Email: or the LDPWR&I as represented by the person or unit that is notified by such LDPWR&I
11.2(9)	The *services* relate to the provision of Civil Engineering Consultancy services within the Limpopo Province, over a three year term without any commitment to a quantum of work.
11.2(11)	The Scope is in the document called Part 3: Scope of Work
12.2	The *law of the contract* is the law of the Republic of South Africa

13.1	The *language of this contract* is English
13.3	The *period for reply* is 2 weeks
13.6	The *period for retention* is 5 years following Completion or earlier termination
2	**The Parties' main responsibilities**
25.2	The *Employer* provides access to the following persons, places and things as stated in the Task Order
3	**Time**
30.1	The *starting date* is *"two weeks after the Consultant receives one fully completed original copy of this contract, including the schedule of deviations (if any) as contained in the Form of Offer and Acceptance", as appropriate*
11.2(3)	The *completion date* for the whole of the *services* is *3 Years after the starting date*
11.2(6)	The Key Dates and the *conditions* to be met are as stated in the Task Order
31.1	The *Consultant* is to submit a first programme for acceptance within the time stated in the Task Order
32.2	The *Consultant* submits revised programmes at intervals no longer than the period stated in the Task Oder
4	**Quality**
40.2	The quality policy statement and quality plan are provided within the time stated in the Task Order
41.1	The *defects date* is 26 weeks after Completion of the whole of the *services*.
5	**Payment**
50.1	The *assessment interval* is a calendar month
50.3	The *expenses* stated by the *Employer* are

Item	**Amount**
• printing or reproduction of documents issued to the *Employer* or, where instructed by the *Employer*, to Others, other than general correspondence and minor reports • covers and binding of documents issued to the *Employer* or, where instructed by the *Employer*, to Others other than general correspondence and minor reports • maps, models and presentation materials required by the *Employer*	market related cost or in accordance with the latest Rates for Reimbursable expenses published on www.publicworks.gov.za/consultants

	• airfares, train fare, taxi, hired car, parking charges and toll fees for travel outside of the 500km from the home base (Polokwane Head Office) of the Consultant identified in Part 2 of the Contract Data to perform the services where authorised by the *Employer* • accommodation where the services necessitates that staff need to travel outside of the 500km from the home base (Limpopo) of the Consultant identified in Part 2 of the Contract Data to perform the services where authorised by the *Employer*	cost
	• vehicle travel outside of the 100km from the Company's registered address within Limpopo Province identified in Part 2 of the Contract Data to perform the services where authorised by the *Employer* • subsistence allowance where the services necessitates that staff need to travel outside of the 250km from the home base (Limpopo) of the Company identified in Part 2 of the Contract Data to perform the services where authorised by the *Employer* • In the case of a company with the registered address outside of Limpopo, the home base will be Polokwane for the purposes of expense claims.	in accordance with the latest Rates for Reimbursable expenses published on http://www.publicworks.gov.za/consultantsguidelines.html
	• specialist studies, design services, inputs, advice and tests where instructed by the *Employer*	cost plus 10 %
	• special equipment such as such as Dual Frequency GPS with RTK, Laser Scanner, Specialist Software, and any equipment required to conduct aerial surveys • casual labour	Open market or competitively tendered prices with all deductions for all discounts, rebates and taxes which can be recovered plus 10%
51.1	The period within which payments are made is 30 days from submission of approved deliverable and invoice.	
51.2	The *currency of this contract* is the South African Rand.	
51.5	The *interest rate* is the Prime lending rate of the *Employer's* Bank	
6	**Compensation events** The response period to notification of compensation events is 30 days. The compensation event must be submitted and approved by the Accounting Officer or delegated official in terms of the SCM policy.	
7	**Rights to material** No data required for this section of the *conditions of contract*.	
8	**Indemnity, insurance and liability**	
81.1	**The amounts of insurance and the periods for which the Consultant maintains insurance are**	

	Event	Cover	Period following Completion of the whole of the services or earlier termination
	failure by the *Consultant* to use the skill and care normally used by professionals providing services similar to the *services*	R 2 million in respect of each claim, without limit to the number of claims	For as long as the Consultant remains in business
	death of or bodily injury to a person (not an employee of the *Consultant*) or loss of or damage to property resulting from an action or failure to take action by the *Consultant*	R 2 million in respect of each claim, without limit to the number of claims	0
	death of or bodily injury to employees of the *Consultant* arising out of and in the course of their employment in connection with this contract	That which is prescribed by the Compensation injuries and Diseases Act No. 130 of 1993 as amended and whatever the Consultant deems desirable in addition	0

81.1	The *Employer* provides the following insurances : None
82.1	The *Consultant's* total liability to the *Employer* for all matters arising under or in connection with this contract, other than the excluded matters, is limited to the amount of the *Consultant's* insurance cover
9	**Termination** No data required for this section of the *conditions of contract.*
10	**Data for main Option clause**
G	**Term contract**
21.4	The *Consultant* prepares forecasts of the total Time Charge and *expenses* at intervals no longer than 5 weeks.
11	**Data for Option W1**
W1.1	The *Adjudicator* is the person selected by the Parties from the Panel of NEC Adjudicators set up by ICE-SA, a joint division of the Institution of Civil Engineers and the South African Institution of Civil Engineering (see www.ice-sa.org.za),
W1.2(3)	The *Adjudicator* is the person selected by the Parties from the Panel of NEC Adjudicators set up by ICE-SA, a joint division of the Institution of Civil Engineers and the South African Institution of Civil Engineering (see www.ice-sa.org.za), in accordance with the procedure set out in Clause Z2
W1.4(2)	The *tribunal* is reference to a South African Court of Law
12	**Data for secondary Option clauses**

X1	**Price adjustment for inflation**
X1.1	The index is the *index* published in "Consumer Price Index: index numbers and year on year rates " as published in the Statistical News Release, P0141 Table B of Statistics South Africa.
	The *staff rates* are • Fixed at the Contract Date and are not variable with changes in salary are those that are based on fixed rate. • Variable with changes in salary paid to individuals are those derived from the total annual cost of employment.
X2	**Changes in the law**
X2.1	The *law of the project* is the law of the Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
X7	**Delay Damages**
X7.1	Delay damages for late Completion of the Whole of the services are as stated in the Task Order.
X10	**The *Employer's Agent***
X10.1	The *Employer's Agent* is as stated in the Task Order The authority of the *Employer's Agent* is to carry out all actions of the Employer in this contract with respect to all matters except those required by clauses 51.1, 55.1, 81.1, 90 and 92.
Z	***Additional conditions of contract***

The *additional conditions of contract* are

Z1 **Tax invoices**

The *Consultant*'s invoice.

Delete the first sentence of core clause 50.2 and replace with:

Invoices submitted by the *Consultant* to the *Employer* include:

- the details stated in the Scope to show how the amount due has been assessed, and
- the details required by the *Employer* for a valid tax invoice.
- Approved deliverables.

Delete the first sentence of core clause 51.1 and replace by:

Each payment is made by the *Employer* within 30 days of receiving the *Consultant*'s invoice showing the details which this contract requires or, if a different period is stated in the Contract Data, within the period stated.

Z2 **Selection and appointment of the *Adjudicator***

Add the following paragraph to clause W.1.2(1)

Within 2 weeks after declaring a dispute and if the *Adjudicator* was not yet appointed with a previous dispute, the notifying Party notifies the other Party of the names of two persons he has chosen from the Panel of NEC Adjudicators set up by ICE-SA, a joint division of the Institution of Civil Engineers and the South African Institution of Civil Engineering (see www.ice-sa.org.za), whose availability to act as the *Adjudicator* the notifying Party has confirmed. The other Party selects one of the two persons chosen to be the *Adjudicator* within four days of receiving the notice, failing which the person chosen by the notifying Party will be the *Adjudicator* for the Contract. The Parties appoint the selected *Adjudicator* under the NEC3 Adjudicator's Contract, April 2013.

Z3 **Acts or omissions by mandatories**

In terms of Section 37(2) of the Occupational health and Safety Act of 1993 (Act 85 of 1993), the *Consultant* hereby agrees that the *Employer* is relieved of any and all of its liabilities in terms of Section 37(1) of this Act in respect of any acts or omissions of the *Consultant* and his employees to the extent permitted by this Act, and that this contract comprises the written agreement between the *Employer* and the *Consultant* contemplated in section 37(2).

Z4 ***Expenses***

If the Parties agree, estimates of *expenses* may be included in the lump sum prices in the Task Schedule which are assessed as compensation events.

Z5 **Alternative basis for assessing compensation events**

If the *Employer* and the *Consultant* agree, assessments for changed Prices for compensation events relating to services may be based on a percentage of the construction cost determined in accordance with the provisions of the *Framework for the Determination of Professional Fees for Consulting Services* (see Annexure 3) where:

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment as stated in the C2.2 Pricing Data / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc. as stated in C2.3 of the Pricing Data

The fees based on a percentage of the project cost includes all travelling time and travel costs associated with the provision of the service within *travel more than 50 km from the home base of the Consultant identified in Part 2 of the Contract Data to provide Civil Engineering Services.*

The total fee for each stage required in terms of the scope of work in Rands, determined in accordance with the provisions of the *Framework for the determination of professional fees for consulting services,* is entered as a lump sum amount in the Task Order. Such amounts may be further broken down should the *Consultant* so require.

Z6 **Vendor registration**

The *Consultant* registers on the *Employer's* vendor database by completing the relevant Vendor Registration Form and providing all the required information.

One hundred percent of the Prices for Services Provided to Date is retained in assessments of the amount due until the *Consultant* has registered on the *Employer's* database.

Z7 **Contract Date**

In these *conditions of contract* each reference to the Contract Date is the date when the Task Order came into existence.

Z8 **Price adjustment for inflation**

Notwithstanding the provisions of X1

(1) The provisions of X1.4 and X1.5 do not apply.

(2) The *Consultant* calculates the *staff rates* at the Contract Date for all rates which are fixed and are not variable with changes in salary paid to individuals, by multiplying the *staff rates* contained in the Pricing Data by 1 + (L – B) / B, where B is the last value of the *index* published before the *starting date* and L is the last published value of the *index* published before the Contract Date.

Z9 ***Key persons* in Task Orders**

1) *Key persons* to undertake specific jobs for the *Consultant* in respect of a particular Task may be included in a Task Order.

2) The *key person* named in Part 2 of the Contract Data whose responsibilities include the provision or the service or provision of active and personal direction, control and supervision of the *service* that is provided is the point of contact between the *Consultant* and the *Employer*. Such a person attends at least 80 percent of the regular progress meetings which may be convened during the execution of a Task.

3) The *Consultant*, in the event that the *key person* identified in 2) above is replaced, effects the replacement in a manner which minimizes the adverse effect of such replacement on the Employer and Others and provides continuity of the *services*.

Z10 **Confining the services to one or more provinces**

Notwithstanding the provisions of 11.2(9), the Consultant shall only Provide the Services in the Limpopo province.

Z11 Low performance damages for failing to adhere to the Accepted Programme

If the *Consultant* fails to adhere to the Accepted Programme and as a consequence is the primary reason for a delay in the finalization of an end-of-stage deliverable required in terms of the National Treasury Framework for Infrastructure Delivery and Procurement Management, the *Consultant* pays low performance damages in the following amounts:

Delay in finalizing the deliverable	**Amount**
Up to 7 days	5% of the total of the Prices for the stage that is delayed
More than 7 days but less than 14 days	10% of the total of the Prices for the stage that is delayed
More than 14 days but less than 21 days	15% of the total of the Prices for the stage that is delayed
More than 21 days but less than 28 days	20% of the total of the Prices for the stage that is delayed
More than 28 days	25% of the total of the Prices for the stage that is delayed

Part C1.2 Contract Data

The *Consultant* is advised to read the NEC3 Professional Service Contract (Third edition with amendments of June 2006 and April 2013) and the relevant Guidance Notes and Flow Charts, in order to understand the implications of this Data which is required. Copies of these documents may be obtained from the Engineering Contract Strategies (telephone (27) 011 803 3008).

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Service Contract to which it mainly applies.

Part two - Data provided by the *Consultant*

Clause	Statement
10.1	The *Consultant* is (Name): Address Postal address: Tel No. Mobile No. Email:
22.1	The *Consultant's key person* is: Name: **Job:** Responsibilities: provide the service or provide active and personal direction, control and supervision of the *service* that is provided Qualifications and experience: see CV attached to the tender Home base (office from which the key person works from): Physical address: . . . . . . Co-ordinates of home base of Principal Consultant : X co-ordinate. . . . . Y co-ordinate . . . . .
11.2(13)	The *staff rates* are as stated in the Pricing Data:
50.3	The *expenses* stated by the *Consultant* are none
G	**Term contract**
11.2(25)	The *task schedule* is in the Pricing Data

C1.3 JOINT VENTURE AGREEMENT

TO BE COMPLETED ONLY IF TENDER IS SUBMITTED IN A JOINT VENTURE OR CONSORTIUM

GENERAL

a) All the information requested must be filled in the spaces provided. If additional space is required, additional sheets may be used and attached to the original documents.
b) A copy of the joint venture agreement must be attached to this form, in order to demonstrate the Affirmable, Joint Venture Partner's share in the ownership, control, management responsibilities, risks and profits of the joint venture, the proposed joint venture agreement must include specific details relating to:
   i. the contributions of capital and equipment
   ii. work items to be performed by the Affirmable Joint Venture Partner's own forces
   iii. work items to be performed under the supervision of the Affirmable Joint Venture Partner.
c) Copies of all written agreements between joint venture partners concerning the contract must be attached to this form including those, which relate to ownership options and to restrictions/limits regarding ownership and control.
d) Affirmable Business Enterprise (ABE) partners must complete ABE Declaration Affidavits.
e) The joint venture must be formalised. All pages of the joint venture agreement must be signed by all the parties concerned. A letter/ notice of intention to formalise a joint venture once the contract has been awarded will not be considered.
f) Should any of the above not be complied with, the joint venture tenderer will be deemed null and void and will be considered non-responsive.

1. JOINT VENTURE PARTICULARS

a) Name .....

b) Postal address.....

.....

c) Physical address .....

.....

d) Telephone .....

e) Fax .....

2. IDENTITY OF EACH NON-AFFIRMABLE JOINT VENTURE PARTNER

2.1. Name of Firm .....

Postal Address .....

Physical Address .....

Telephone .....

Fax .....

Contact person for matters pertaining to Joint Venture Participation Goal requirements.....

2.2. Name of Firm .....

Postal Address .....

Physical Address .....

Telephone .....

Fax .....

Contact person for matters pertaining to Joint Venture Participation Goal requirements.....

3. IDENTITY OF EACH AFFIRMABLE JOINT VENTURE PARTNER

3.1. Name of Firm .....

Postal Address .....

Physical Address .....

Telephone .....

Fax .....

Contact person for matters pertaining to Joint Venture Participation Goal requirements.....

3.2. Name of Firm .....

Postal Address .....

Physical Address .....

Telephone .....

Fax .....

Contact person for matters pertaining to Joint Venture Participation Goal requirements.....

4. BRIEF DESCRIPTION OF THE ROLES OF THE AFFIRMABLE JOINT VENTURE PARTNERS IN THE JOINT VENTURE

.....

.....

.....

5. OWNERSHIP OF THE JOINT VENTURE

a) Affirmable Joint Venture Partner ownership percentage(s) ..... %

b) Non-Affirmable Joint Venture Partner ownership percentage(s)..... %

c) Affirmable Joint Venture Partner percentages in respect of: *

(i) Profit and loss sharing.....

(ii) Initial capital contribution in Rands.....

.....

.....

(*Brief descriptions and further particulars should be provided to clarify percentages).

(iii) Anticipated on-going capital contributions in Rands .....

.....

.....

(iv) Contributions of equipment (specify types, quality, and quantities of equipment) to be provided by each partner.

.....

.....

.....

6. RECENT CONTRACTS EXECUTED BY PARTNERS IN THEIR OWN RIGHT AS PRIME CONTRACTORS OR AS PARTNERS IN OTHER JOINT VENTURES

No.	Joint Venture Partner	PARTNER NAME
1.		
2.		
3.		
4.		
5.		
6.		
7.		

7. CONTROL AND PARTICIPATION IN THE JOINT VENTURE

(Identify by name and firm those individuals who are, or will be, responsible for, and have authority to engage in the relevant management functions and policy and decision making, indicating any limitations in their authority e.g. co-signature requirements and Rand limits).

(a) Joint Venture payment approvals

.....

.....

.....

(b) Authority to enter into contracts on behalf of the Joint Venture

.....

.....

.....

(c) Signing, co-signing and/or collateralising of loans

.....

.....

.....

(d) Acquisition of lines of credit

.....

.....

.....

(e) Acquisition of performance guarantees

.....

.....

.....

(f) Negotiating and signing labour agreements

.....

.....

.....

8. MANAGEMENT OF CONTRACT PERFORMANCE

(Fill in the name and firm of the responsible person).

(a) Supervision of field operations

.....

(b) Major purchasing

.....

(c) Estimating

.....

(d) Technical management

.....

9. MANAGEMENT AND CONTROL OF JOINT VENTURE

(a) Identify the "managing partner", if any,

.....

.....

.....

(b) What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, subcontractors and/or other parties participating in the execution of the contemplated works?

.....

.....

.....

(c) Describe the management structure for the Joint Venture's work under the Contract

MANAGEMENT FUNCTION / DESIGNATION	NAME	PARTNER

* Fill in "ex Affirmable Joint Venture Partner" or "ex non-Affirmable Joint Venture Partner".

10. PERSONNEL

(a) State the approximate number of operative personnel (by trade/function/discipline) needed to perform the Joint Venture work under the Contract.

TRADE/FUNCTION/ DISCIPLINE	NUMBER EX AFFIRMABLE JOINT VENTURE PARTNERS	NUMBER EX NON-AFFIRMABLE JOINT VENTURE PARTNERS

(Fill in "ex Affirmable Joint Venture Partner" or "ex non-Affirmable Joint Venture Partner").

(b) Number of operative personnel to be employed on the Contract who are currently in the employ of partners.

(i) Number currently employed by Affirmable Joint Venture Partners

.....

(ii) Number currently employed by the Joint Venture

.....

(c) Number of operative personnel who are not currently in the employ of the respective partner and will be engaged on the project by the Joint Venture

.....

(d) Name of individual(s) who will be responsible for hiring Joint Venture employees

.....

.....

(e) Name of partner who will be responsible for the preparation of Joint Venture payrolls

.....

.....

11. CONTROL AND STRUCTURE OF THE JOINT VENTURE

Briefly describe the manner in which the Joint Venture is structured and controlled.

.....

.....

The undersigned warrants that he/she is duly authorised to sign this Joint Venture Disclosure Form and affirms that the foregoing statements are true and correct and include all material information necessary to identify and explain the terms and operations of the Joint Venture and the intended participation of each partner in the undertaking.

The undersigned further covenants and agrees to provide the Employer with complete and accurate information regarding actual Joint Venture work and the payment therefore, and any proposed changes in any provisions of the Joint Venture agreement, and to permit the audit and examination of the books, records and files of the Joint Venture, or those of each partner relevant to the Joint Venture, by duly authorised representatives of the Employer.

Signature .....
Duly authorised to sign on behalf of.....
Name .....
Address .....
Telephone .....
Date .....

Signature .....
Duly authorised to sign on behalf of.....
Name .....
Address .....
Telephone .....
Date .....

Signature .....
Duly authorised to sign on behalf of.....
Name .....
Address .....
Telephone .....
Date .....

PART C2: PRICING DATA

C2: Pricing Data

The actual pricing will be done when the department or any organ of state issues an RFQ after the service providers have entered into an agreement with the department. This section details the conditions that will apply at that time.

C2.1 Pricing assumptions

C.2.1.1 General

C.2.1.1.1 The *Consultant* will be paid under Option G (Term Contract) i.e. on a combination of Time Charges (sum of the products for each of the *staff rate* multiplied by the time appropriate to that *rate* properly spent on work in the contract) and Option B: Priced Contract with Activity Schedule.

C.2.1.1.2 *Expenses* as provided for in the contract are paid in addition to the total of the Time Charges and lump sum prices.

C.2.1.1.3 There is no adjustment to the lump sums for items in the Task Schedule if the amount, or quantity, of work within that activity later turns out to be different to that which the *Consultant* estimated at the time that the Task Schedule was accepted by the *Employer.* The only basis for a change to the lump sum prices is as a result of a compensation event (See Clause 60.1).

C.2.1.2 Staff rates

Where option G is used:
C.2.1.2.1 The *staff rates* are the prices charged for staff, excluding VAT, but including:

a) all the costs to the *Consultant* including total annual cost of employment, overhead charges incurred as part of normal business operations including the cost of management, as well as payments to administrative, clerical, IT support and secretarial staff used to support professional and technical staff in general and not on a specific project only;

b) the time and costs expended in travelling to and from a site, meetings or any other activity associated with the provision of the service, *within 50 km from the key person's home base identified in Part 2 of the Contract Data;*

c) non-recoverable expenses;

d) all protective clothing and all standard equipment such as office furniture, copiers, plotters, computers and software used to perform the services; and

e) profit.

C.2.1.2.2 The total annual cost of employment is the total amount borne by the *Consultant* in respect of the employment of a staff member per year comprising basic salary and fringe benefits not reflected in the basic salary, including:

a) normal annual bonus,

b) *Consultant's* contribution to medical aid, unemployment insurance fund, pension or provident fund,

c) group life insurance premiums borne by the *Consultant*; and

d) all other benefits or allowances payable in terms of a letter of appointment excluding any share of profit and payment for overtime.

C.2.1.2.3 The *staff rates* for staff whose hourly or monthly rate is based on the total annual cost of employment shall not exceed the staff rate for Rate 1 or Rate 3, respectively.

C.2.1.2.4 The *staff rates* exclude VAT.

C.2.1.3 Percentage fee based on the total value of construction works

Where option A is used, the professional service provider will provide a percentage (%) fee the provider will charge in relation to the total value of construction works. The fees will therefore be paid in accordance with the total value of works – including any adjustments, at given point in time.

C.2.1.4 Expenses

C.2.1.4.1 The *expenses* that may be paid to the *Consultant* are as stated in the Contract Data. All other cost to the Consultant associated with Providing the Services is included within the staff rates.

C.2.1.4.2 All air travel shall be in economy class on a scheduled airline.

C.2.1.4.3 Accommodation means a

a) a bed and breakfast;
b) a guest house;
c) self catering; or
d) hotel having a star rating of 1, 2 or 3 as defined by the Tourism Grading Council of South Africa (see www.tourismgrading.co.za).

Note: A lodge, country house or 4 star or higher star rated hotel is not accommodation. Any stay in such a facility cannot be claimed as an expense.

C.2.1.4.4 A hired car means a motor vehicle having an engine capacity of not more than 2500 cc.

Note: A hired car having an engine capacity greater than 1800cc is not a hired car and cannot be claimed as an expense

C3: SCOPE OF WORK

C3: Scope of work

1 Background

The Limpopo Department Public Works, Roads and Infrastructure (LDPWR&I) is the Implementing Agent (IA) of choice for all provincial departments within the Limpopo Province. Currently all planning and implementing activities are implemented through LDPWR&I.

2 Employer's objectives

The objective of this contract is to obtain the services of Civil Engineering Providers for the Limpopo Department of Public Works, Roads and Infrastructure. Any organ of state may participate on this framework agreement and issue task orders as necessary.

3 Framework agreements

Previously, the National Treasury issued a *Standard for Infrastructure Procurement and Delivery Management* (SIPDM) through PFMA Treasury Instruction No 4 of 2015 2016 that made provision for framework agreements. In addition, the CIDB practice Note # 15 of 2008 make provision for framework agreements. In this respect, "framework agreements are agreements between two parties that establish the terms for the supply of goods, construction works or services over a period of time, but which do not set out the precise quantities that are required, and where tasks are undertaken on an ad-hoc basis".

The employer may issue task orders on the scope of works covered by such agreements, thus the parties from having to procure from the open market every time work is required.

4 Description of the services

The services over the term of the contract include, but not limited:

a) planning, designing, reviewing and certification of the construction of buildings and structures or any element or component thereof to ensure Structural safety and serviceability performance during their working life in accordance with legislative requirements and in the environment in which they are located when subject to their intended use in terms of one or more of the following:
   1) external and internal environmental agents;
   2) maintenance schedule and specified component design life; or
   3) changes in form or properties;
b) performing duties in terms of a contract with a contractor who constructs, repairs or maintains a Civil systems;
c) undertaking of condition assessments of structures;
d) providing advice and specifying procedures relating to the maintenance and repair of Civil systems and components thereof;
e) the procuring as necessary of the services of others to provide specialists studies, design advice or services in support of the services which the consultant provides; and
f) Assistance in the evaluation of tender offers.

Annexure 2 Standard scope of professional services associated with the delivery of a package

5 Requirements

5.1 General

5.1.1 The Consultant shall in the provision of the services observe all relevant statutes, by-laws and associated regulations, the provisions of National Treasury's Framework for Infrastructure Delivery and Procurement Management, standards of professional conduct and industry norms established in relevant South African national standards published in terms of the Standards Act of 2008 or standards recommended by professional associations.

5.1.2 The Consultant shall provide the services in accordance with the relevant provisions of:

a) The Standard Scope of Professional Services associated with the delivery of a Package (see Annexure 2) as a Designer and Supervising agent; and
b) The Engineering Council of South Africa (ECSA) Guideline for Services and Processes for estimating fees for Persons registered in terms of Engineering Act, 2000 (Act 46 of 2000), as amended;
a) South African Institution of Civil Engineering (SAICE) Standard for Civil Engineering services;
b) Framework for Infrastructure Delivery and Procurement Management;

5.2 Production information requirements

5.2.1 Construction requirements shall be described in terms of South African national standards published by the South African Bureau of Standards (SABS) where such standards exist and their scope covers such requirements.

5.2.2 Construction requirements shall not be described in terms of a part of SANS 1200, *standardised specification for civil engineering construction*, if such requirements fall within the scope of a part of SANS 2001, *construction works*.

5.2.3 Construction requirements for buildings and structures which are required to comply with the requirements of National Building Regulations shall be described in terms of a part of SANS 2001, *construction works*, where such standards exist.

5.2.4 A bill of quantities shall not be used as a substitute for production information.

Note: The National Treasury Framework for Infrastructure Delivery and Procurement Management defines production information as *information which provides the detailing, performance definition, specification, sizing and positioning of all systems and components enabling either construction (where the constructor is able to build directly from the information prepared) or the production of manufacturing and installation information for construction.*

5.3 Standard systems of measurements

5.3.1 Bills of quantities shall be prepared as per scope of works, drawings, site plans and in alignment with the other disciplines (Mechanical, Civil and Architectural) in order to bring the facility into working condition.

5.3.2 Where applicable, the bills of quantities shall be prepared in accordance with the provisions of the Standard System of Measuring Builders Work – Edition 7 (2015) published by the Association of South African Quantity Surveyors.

5.3.3 Space Guidelines – Professional Service Providers instruction for Quantity Surveyors and Architects.

5.4 Reporting and attendance at meetings

5.4.1 The Consultant shall prepare in a format acceptable to the Employer progress reports for tabling at fortnightly project meetings and to accompany invoices for payment.

5.4.2 The Consultant shall attend regular design and / or site co-ordination meetings with the Employer's project management team as well as ad hoc meetings convened to deal with specific issues that may arise.

5.4.3 The Consultant shall promptly provide information required for the reports which the Employer and / or the project management team are required to prepare e.g. quarterly Presidential Infrastructure Co-ordinating Committee reports on key performance indicators.

6 Facilities and equipment to be provided by the Employer

No facilities or equipment are provided by the Employer.

7 Skills development requirements

The Consultant shall achieve in the execution of a Task Order whose value exceeds R2 million and which has a duration in excess of 12 months the contract skills development goal established in the *Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts* (Annexure 4).

8 Procurement of specialist studies, inputs, advice and tests

The Consultant shall:

a) obtain the Employer's prior permission to procure specialist studies, inputs, advice and tests; and

b) either obtain three quotes for studies, inputs and tests and award a contract to the service provider offering the best value for money or engage a sole provider at open market rates.

c) Compile terms of reference thereof.

9 Facilities and equipment to be provided by the Consultant

The Consultant shall provide all equipment and facilities required to provide the services relating to required service.

10 Communications

All communications with the Employer which are made in terms of the contract should be made using the standard templates provided by the Employer. Reference to the Framework Agreement description shall at all times precede any project related communication.

11 Issuing of Task Orders

Post the appointment of the service provider on the framework agreement, the department will call all qualifying service providers and issue request for task orders as necessary. The request for task orders will be based on Option A: Priced Contract with Activity Schedule and Option G: Term contract.

The process of inviting service providers during the issuing of request for task orders will be based on the nature or classification of works (either complex or simple) and size of the project (estimated total value of the project).

For complex projects, only service providers who their principal consultants are registered as professional engineers (Pr.Eng) with the ECSA will be considered and considered for award.

The estimated value of the Civil works applicable to the project will be used to determine the size of enterprises (small, medium or large) to be invited as follows:

(i) Where the estimated costs of Civil works of the project is less than R 5 million, **all the bidders** within the framework agreement will be invited.

(ii) Where the estimated costs of Civil works of the project is above R 5 million and less than R 10 million, **only medium and large enterprises** will be invited.

(iii) Where the estimated costs of Civil works of the project is above R 10 million, **only large enterprises** will be invited.

SIZE OF ENTERPRISE TO BE INVITED	ESTIMATED VALUE OF CIVILWORKS	PROFESSIONALS REQUIRED
Large Practice in Civil Engineering Services	R10 Million Rand and above for Civil Engineering Services Only	A minimum of 3 Fulltime Pr Eng (Structural) or/and Pr Technologist Eng. (Civil)
Medium Practice in Civil Engineering Services	Above R5 Million and less than R10 Million Rand for Civil Engineering Services Only	A minimum 2 Fulltime Pr Eng and/or Pr Technologist Eng (Civil)
Small Practice in Civil Engineering Services	Less than R5,0 Million Rand for Civil Engineering Services Only	A minimum of 1 Fulltime Pr Eng and/or Pr Technologist Eng (Civil)

The evaluation of task order request will be evaluated in terms of Method 2: Financial Offer and Preference. The points for preference will be done in terms of the Department of Public Works, Roads and Infrastructure Preferential Procurement Regulations of 2022 – or as amended, at the time of the issuing of the request for task order. This information will be included on the request for Task order.

The number of points awarded for financial offer will be calculated using this equation.

$$P = 80 * \left(1 - \frac{(P_o - P_m)}{P_m}\right) \text{ or } P = 90 * \left(1 - \frac{(P_o - P_m)}{P_m}\right)$$

Where:

P is the points awarded to the bid under consideration

P_m is the lowest acceptable bid price

P_o is the comparative price under consideration

POINTS AWARDED FOR SPECIFIC GOALS

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:

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.

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

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 allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Enterprises owned by People with Disabilities **(Submit: Disability certificate issued by health professionals)**	-	2	-	
Enterprises owned by Women **(Submit: Central Supplier Database (CSD).**	-	7	-	
Small, Medium and Micro Enterprises (SMMEs). **(Submit: Central Supplier Database (CSD).**	-	2	-	
Enterprises owned by Youth. **(Central Supplier Database (CSD).**		4	-	
Enterprises located in Limpopo Province **(Central Supplier Database (CSD).**	-	5	-	

For complex projects, the department may also consider additional information during the evaluation of the proposals. This may include amongst others, the following during the assessments of the proposals:

- Current performance of the service provider in relation to similar works allocated by the department.
- Experience of the consultants (Consultant's general experience and record in the field covered by the ToR) – only professional engineers will be considered.
- Submission of a proposed project approach/methodology that best represents the ToR.
- Submission of proposed project schedule, or work plan that best represents the ToR.

12 Invoices

Invoices submitted shall be a Tax invoice inclusive of VAT. The invoice shall comply with requirements, if any, established by the Employer. A copy of the task order shall accompany the Tax Invoice, together with a CD of approved deliverables.

13 Vendor registration

The Consultant shall complete vendor registration forms before the first assessment date. Such forms and the submission requirements shall be obtained from the Employer.

Annexure 1: Proforma Task Order [for information only]
NB: This section if for information only. DO NOT COMPLETE. The department will issue task orders as and when projects arise responsive bidders within the relevant category as per section 11 under C3:Scope of Works above. The task orders will be tailored to suits the needs of the project, and the fees may be determined as time related or value based. This section therefore is only for information.

Task Order (PSC-G) **for use with Framework agreement based on the NEC3 PSC**			LIMPOPO PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTU
***Employer*:**			
Unit / department:			
***Consultant* :**			
Framework contract details:			
No:		**Title:**	
Task Order No:			
Detailed description of the work in the Task			
Contract Data associated with the performance of the Task			
Part 1: Data provided by the Employer			
1	**General**		
	The Contract Data as provided for in the *Consultant*'s framework contract applies together with the additional *contract data* in this Task Order		
11.2(10)	The following matters will be included in the Risk Register		
11.2(6)	The Key Dates and the conditions to be met are:		
		***Condition* to be met**	***key date***
	1		
	2		
	3		
2	**The Parties' main responsibilities**		
22.1	The *Consultant's key person* is: 1 Name: Responsibilities:		

Bidder's initial

	Qualifications & Experience:
	22.2 Other professional(s) 1 Name: Responsibilities: Qualifications: Experience:
25.2	The *Employer* provides access to the following persons, places and things

	access to	***access date***
1		
2		
3		

3	**Time**
31.1	The *Consultant* is to submit a first programme for acceptance within. . . . . weeks of the issue of the Task Order.
32.2	The *Consultant* submits revised programmes at intervals no longer than . . . . . weeks
4	**Quality**
40.2	The quality policy statement and quality plan are provided within . . . . . weeks of the receipt of the Task Order.
G	**Term contract**
55.1	The starting date for the Task is
55.1	The Task Completion Date is
55.1	The delay damages are R . . . . . per day
X10	**The *Employer's Agent***

	The *Employer's Agent* is Name: Address: Tel. No.: Fax No.: email:
Part 2: Data provided by the *Consultant*	
	Consultant's representative is (Name): Address Tel No.: Fax No. Email.
11.2(10)	The following matters (if any) will be included in the Risk Register
25.2	The *Employer* provides access to the following persons, places and things

	access to	***access date***
1		
2		
3		

31.1	The programme identified in the Contract Data is attached to this Task Order
Task Schedule for work in the Task	
11.2 Time Charges or Activity Based[3]	

Item number	**Description of item or activity schedule to be carried**	**Expected output**	**Initial forecast**
1	Condition assessment of the facility and/or Project initiation	Status Quo Report or Initiation report	R
2	Concept design	Concept design report	R

[3] Delete whichever is no applicable

3	Detailed design	Detailed design report	R
4	Design documentation	Bills of Quantities, Specifications and Tender documentations	R
5	Works	Practical Completion, Works Completion and Final Completion	R
6	Closeout	Closeout report	R
Total of the Prices for this Task Order (VAT Excl.)			**R**
% Discount			**%**
A. Total Forecast of charges – after discount (VAT Excl.)			**R**

B. Total Disbursement

Disbursements (as per the latest rate of Reimbursable Expenses published by NDPW

Item Number	Description	Quantity	Rate	Amount
1	Travelling Distance (maximum 2 x Trips per month based on office located in Limpopo)			
2	Printing			
3	Duplicating			
4	Additional travelling (contingency)[4]			
5	Additional time charges related to meetings by client and special circumstances[5]			

C. Specialist sub-contracting or management fee

[4] To be used as contingency and is the prerogative of the employer. Prior approval is required by the service provider
[5] To be used as contingency and is the prerogative of the employer. Prior approval is required by the service provider

A. Total Forecast of Time or Activity Charges excluding VAT	R
B. Disbursements	R
C. Specialist sub-contracting / Management Fee	R

Total of the Prices for this Task Order (A+B+C) excluding VAT	R
VAT	R
Total of the Prices for this Task Order including VAT	R
Total of the Prices for this Task Order including VAT (in words):	

The above prices are valid for . . . . days from the date of the *Consultant's* signature below

***Consultant's* representative**	**Acceptance by *Employer***
Signature: Name: Date:	The above pricing and other details in this Task Order are accepted and the *Consultant* may now commence work on the Task in terms of Clause 55.3. Signature: Name: (Print) Date:

Annexure 2: Standard scope of professional services associated with the delivery of a package

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

Standard scope of professional services associated with the delivery of a package

March 2023

Issued by:

Department of Public Works, Roads and Infrastructure

Standard scope of professional services associated with the delivery of a package

Contents

Introduction

The delivery of construction works needs to be managed and controlled in a logical, methodical and auditable manner. The starting point in the development of any delivery management system is to identify the information which needs to be developed and accepted by the client at a particular point in the delivery process to enable a project to be advanced i.e. at a gate (control point). The stages in the delivery of construction works can then be defined as the activities that need to take place between such points. These stages enable the work flow (sequence of connected activities) toward the attainment of an end of stage deliverable to be developed and culminate in gates (control points) which can be used to provide assurance that the proposed works:

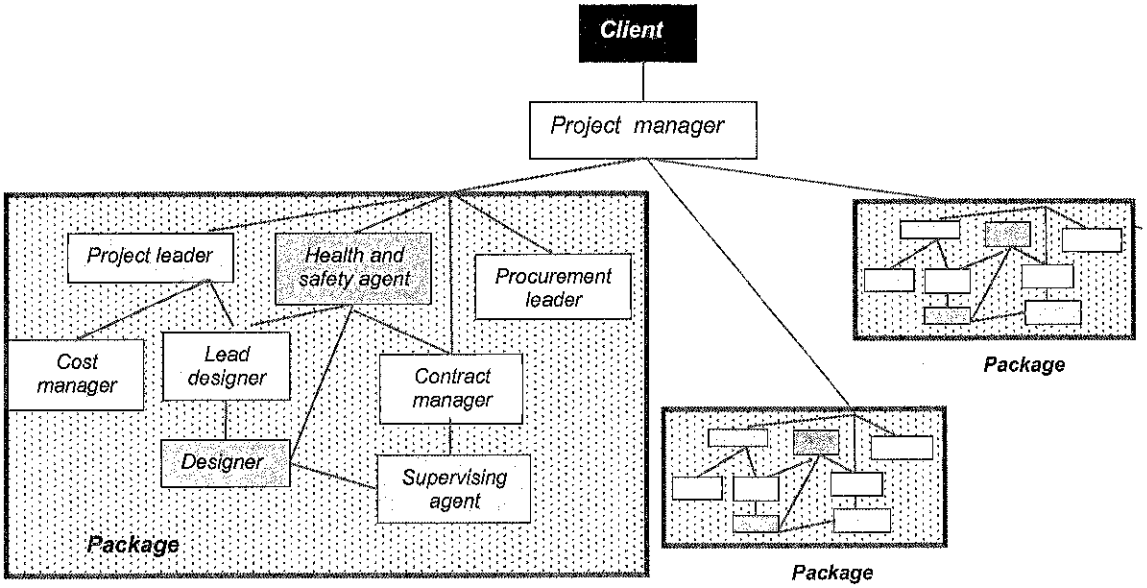
- remains within agreed mandates;
- aligns with the purpose for which it was conceived, and
- can progress successfully from one stage to the next.

The control framework for the planning, designing and execution of infrastructure projects as set out in the National Treasury Standard for Infrastructure Procurement and Delivery Management establishes processes, procedures and methods for the implementation of infrastructure projects in a staged, systematic, disciplined, uniform, integrated and auditable manner. It describes the stages within which new infrastructure or the refurbishment, rehabilitation or alteration of existing infrastructure is carried out and provides a comprehensive control framework which requires decisions to be made at control points. Professional services need to be provided within this control framework.

This document establishes requirements for those persons providing professional services in the implementation of one or more of the stages decribed in the National Treasury Standard for Infrastructure Procurement and Delivery Management, namely to do whatever is necessary to develop an end of stage deliverable. Such services may be applied to a single project comprising one or more packages (works which have been grouped together for delivery under a single contract or a package order) or a programme of projects. This document as such provides a scope of work for the following functional roles:

- project manager;
- procurement leader;
- project leader;
- contract manager;
- lead designer;
- designer;
- cost manager;
- supervising agent; and
- health and safety agent

The basic lines of reporting and assigned responsibilities for each of these functional roles for each package associated with an infrastructure project are as follows:



Designation	Primary actions
Client	Initiates, commissions and pays for the project, owns the business case and leads the project
Project manager	Manages the development and implementation of an infrastructure project and administers professional service contracts on behalf of the client
Project leader	Leads and directs the design team in a non-technical role including the monitoring and integration of the activities, development and maintenance of a schedule, monitoring of progress and facilitation of the client acceptance of an end of stage deliverable
Lead designer	Establishes and refines the design approach or solution so that it achieves the brief as it is progressively developed and is co-ordinated within the project team
Designer	Provide design or conditional assessment services
Cost manager	Provides independent and impartial estimation of cost, value management, budget, control and validation of cost of constructing, rehabilitating refurbishing and altering infrastructure
Procurement leader	Oversees the development of the procurement documents and manages the procurement process
Contract manager	Administers a package on behalf of the client in accordance with the provisions of the contract
Supervising agent	Confirm that the works are proceeding in accordance with the provisions of the contract
Health and safety agent	Assumes statutory responsibilities imposed by the Construction Regulations and other pieces of health and safety legislation and leads health and safety risk compliance processes

NOTE: The environmental compliance monitoring agent is excluded from the above. Where such a person is required their primary action is to independently monitor environmental requirements during construction in accordance with legislative requirements and to monitor, review and audit the on-site implementation of a contractor's environmental management plan.

There are many options available to a client in assigning functional responsibilities to particular persons (own staff or consultant and within professions which overlap). This ensures flexibility. For example, in some projects different persons will be assigned functional responsibilities for each of the identified roles. In other projects it may be desirable to combine functional roles and responsibilities e.g. the project leader can also be the procurement leader or the same person can be appointed to function as project leader, lead designer, designer and cost manager or the contract manager and supervising agent.

This document can be referenced in the scope of work of professional service contracts and engineering and construction works contracts where contractors have design responsibilities for the works (see Annexure A).

Standard scope of professional services associated with the delivery of a package

1 Scope

1.1 This document establishes a generic scope of work for professional services required to implement the Standard for Infrastructure Procurement and Delivery Management in the provision of new infrastructure and the rehabilitation, refurbishment and alteration of existing infrastructure. It establishes the standard scope of services associated with stages 3 to 9 identified in Table 1 in respect of the following functional roles:

a) project manager;

b) procurement leader;

c) project leader;

d) contract manager;

e) lead designer;

f) designer;

g) cost manager;

h) supervising agent; and

i) health and safety agent.

Table 1 – Key deliverables and activities associated with the control framework for the planning, design and execution of infrastructure projects

Activities	**Stage** (see Framework for Infrastructure Delivery and Procurement Management for the full description of the stage)		**Key deliverable**
	No	**Description**	
Project initiation	1	Project initiation	Client accepted initiation report
Planning at a project level	2	a) Prefeasibility	Client accepted prefeasibility report (for projects above the defined value)
	2	b) Feasibility	Client accepted feasibility report (for projects above the defined value)
		c) Gateway review	Client accepted Gateway review report (for projects above the defined value) on applicable projects
Detailed design	3	Design development	Client accepted design development report
Design Documentation	4	a) Design documentation (Production information)	Completed and client accepted production information
		b) Design documentation (Manufacture, fabrication and construction information)	Client accepted manufacture, fabrication and construction information
Works	5	Works	Completed works which are capable of being occupied or used and accepted by the client.
Handover	6	Hand over	Works which have been taken over by the user complete with record information
Close out	7	Package completion	Completed contract or package order

NOTE The control framework for the planning, design and execution of infrastructure projects contained in the Natioanal Treasury Standard for Infrastructure Procurement and Delivery Management establishes the work flow and services for the

delivery of infrastructure projects (see Anenxure E). It identifies the location of the gates, key deliverables and principal actions associated with the various stages of this system. This document establishes general requirements for professional services and identifies the typical tasks for the execution of the stages associated with a package.

1.2 This document does not differentiate between the client and the implementer functions and responsibilities.

NOTE: The National Treasury Standard for Infrastructure Procurement and Delivery Management requires that where an organ of state is delegated or assigned responsibilities for implementation by another organ of state, an agency agreement needs to be entered into between such organs of state

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced standard (including any amendments) applies.

Construction Industry Development Board, Code of Conduct for all Parties engaged in Construction Procurement, Board Notice 127 of 2003, Government Gazette No 25656 of 31 October 2003

National Treasury, Framework for Infrastructure Procurement and Delivery Management

Department of Public Works, Roads and Infrastructure, Occupational Health and Safety Specification for Construction Works Contracts.

SANS 10400-T, The Application of the National Building Regulations – Part T: Fire Protection

3 Terms and definitions

For the purposes of this document, the definitions and terms given in the Standard for Infrastructure Procurement and Delivery Management and the following apply:

baseline risk assessment: a risk assessment which results in a broad risk profile or set of risk profiles for a package, a series of interrelated packages or a project which indicates the types and size of potential sources of or exposure to anything which may cause injury or damage to persons or property on a proposed site

client: person who initiates, commissions and ultimately pays for infrastructure projects

commissioning: a quality-oriented process for achieving, verifying, and documenting that the performance of facilities, systems, and assemblies meets defined objectives and criteria

concept report: a document which establishes the detailed brief, scope, scale, form and control budget and sets out the integrated concept for one or more packages

construction monitoring: the provision of independent verification consistent with the level of monitoring nominated by the client, that the works are being completed in accordance with the requirements of the construction contract, that appropriate construction techniques are being utilised, and designs are being correctly interpreted

constructor: person contracted to provide new infrastructure or rehabilitate, refurbish or alter existing infrastructure

contract manager: person responsible for applying the terms and conditions of the contract, including the agreed procedures for the administration thereof

cost manager: person who provides independent and impartial estimation of cost, value management, budget, control and validation of cost of constructing, rehabilitating refurbishing and altering infrastructure

contracting strategy: strategy that governs the nature of the relationship which the client wishes to foster with the constructor, which in turn determines the risks and responsibilities between the parties to the contract and the methodology by which the constructor is to be paid

cost plan: the document progressively developed by estimating the total cost of the package including any construction, refurbishment, extension and professional service costs, service and planning charges and applicable taxes

definition services: services which develop the deliverable associated with an end of a stage

design development report: a document which develops in detail the approved concept to finalise the design and definition criteria, sets out the integrated developed design and contains the cost plan and schedule for one or more packages

designer: person who is responsible for providing design or conditional assessment services

framework agreement: an agreement, the purpose of which is to establish the terms governing orders to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged

health and safety agent: person responsible for assuming the responsibilities imposed upon the client as the "client" in terms of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993, performing specific duties in terms of established procedures and leading health and safety risk management compliance processes

infrastructure plan: a plan which identifies long term needs and links prioritised needs to a forecasted budget for the next few years

implementer: person, or division within a client, responsible for implementing infrastructure projects on behalf of the client

NOTE: A client may elect to implement infrastructure projects in which case the client is also an implementer. Alternatively, a client may elect to appoint another person or an internal division on an agency basis to implement infrastructure projects in which case it functions as a sponsor or owner..

lead designer: person who is responsible for establishing and refining the design approach or solution so that the design or solution achieves the required quality, health and safety and other required standards and is co-ordinated within the project team

manufacture, fabrication and construction information: information produced by or on behalf of the contractor, based on the production information provided for a package which enables manufacture, fabrication or construction to take place

order: an instruction to provide goods, services or any combination thereof under a framework agreement

package: work which is grouped together for delivery under a single contract or an order

package information: information at a point in time, following the identification of a package which is contained in one or more of the following documents:

a) the brief which is progressively developed from time to time;

b) the design documentation including specifications, data schedules and drawings;

c) the schedule which identifies key dates and time periods for the performance of the works and services associated with the package, and

d) cost plan

packaging strategy: organization of work packages into contracts

pricing strategy: strategy which is adopted to secure financial offers and to remunerate a party to a contract in terms of the contract

procurement: process which creates, manages and fulfils contracts relating to the provision of goods, services and engineering and construction works or disposals, or any combination thereof

procurement leader: person who is responsible for overseeing the development of the procurement documents and managing the procurement process from the advertisement of tenders to the award of the contract as a single point of responsibility including the conducting of clarification meetings

procurement strategy: selected packaging, contracting, pricing and targeting strategy, and procurement procedure for a particular procurement

procurement procedure: selected procedure for a specific procurement

production information: the detailing, performance definition, specification, sizing and positioning of all systems and components enabling either construction (where the contractor is able to build directly from the information prepared) or the production of manufacturing and installation information for construction

project manager: person responsible for managing the development and implementation of an identified project or group of infrastructure projects in accordance with client requirements

project leader: person who has a non-design role to lead and direct the project team and whose basic responsibilities with respect of a stage for which services are required include:

a) the establishment of the overall strategy for the development and delivery of the deliverable;

b) the monitoring and integration of the activities of the project team;

c) the development and maintenance of a schedule and the monitoring of progress towards the attainment of the deliverable; and

d) the briefing of, the reporting to and the obtaining of decisions and acceptance of a deliverable from the client

record information: information that:

a) accurately documents the condition of the completed works associated with a package;

b) accurately documents the works as constructed or completed;

c) contains information on the care and servicing requirements for the works or a portion thereof;

d) contain information or instructions on the use of plant and equipment;

e) confirms the performance requirements of the design development report and production information;

f) contains certificates confirming compliance with legislation, statutory permissions and the like; and

g) contains guarantees for products or components that extend beyond the defects liability period provided for in the package.

NOTE Record information includes drawings, specifications, design and service life parameters and maintenance and operation manuals

review services: services which review the definition service of a stage undertaken by others for general conformity with the scope of work selected for a particular contracting strategy

risk: effect of uncertainty on objectives

risk assessment: the process of risk identification, risk analysis and risk evaluation

risk report: report intended to inform particular internal or external stakeholders by providing information regarding the current state of risks and its management

scope of work: document that specifies and describes the goods, services, or engineering and construction works which are to be provided, and any other requirements and constraints relating to the manner in which the contract work is to be performed

schedule: the planned dates for performing activities and the planned dates for achieving major milestone

specification: document that prescribes requirements to be fulfilled by a product, process or service

stakeholder: person, group or organization that has interests in, or can affect, be affected by, or perceive itself to be affected by, any aspect of the project

strategic brief: a document defining project objectives, needs, acceptance criteria and client priorities and aspirations and setting out the basis for the development of the concept definition for one or more packages

NOTE The strategic brief is the client's specification of requirements for a project. It confirms key requirements and constraints.

supervising agent: person appointed by the client to confirm that the works are proceeding in accordance with the provisions of the contract and to notify the contract manager of any non-conformance on the part of a contractor to requirements

targeting strategy: strategy that enables secondary procurement policy objectives to be promoted

user requirements: statement of need to be fulfilled

utility: a company, municipality or municipal entity which provides services such as water or electricity

works: all temporary works of every kind required on site for the execution and completion of the temporary works, the permanent works and the remedying of any defects

4 General requirements

4.1 Persons providing services shall:

a) observe all relevant statutes, by-laws and associated regulations, standards of professional conduct and industry norms established in relevant South African national standards published in terms of the Standards Act of 2008 or standards recommended by relevant professional associations;

b) do so using the skill and care normally used by professionals providing services similar to the required services; and

a) do so in accordance with the relevant provisions of the Standard for Infrastructure Procurement and Delivery Management; and

b) adhere to the provisions of the CIDB Code of Conduct for all Parties engaged in Construction Procurement and the ethical standards established in the client's Supply Chain Management policy for infrastructure procurement and delivery management.

4.2 Persons providing services relating to the performance of the functional role shall do so in accordance with the relevant provisions of 5, 6, 7, 8, 9 or 10.

5 Services provided by the project manager

Project managers shall as required:

a) manage the planning and implementation of packages and projects in a manner that enables the client to achieve their objectives and in such a manner that:

   1) all projects are developed and managed in terms of a common procedural approach and integrated with the client's administrative processes;

   2) the various elements of the projects are properly co-ordinated;

   3) the projects include all the work required, and only the work required, to complete the project successfully;

   4) the timely completion of the projects is facilitated;

   5) projects are completed within the control budget that is agreed from time to time with the client for each package and, if applicable, the control budget associated with expenditure on all projects for which the project manager is responsible for within a financial year;

   6) the project satisfies the needs for which it was undertaken;

   7) effective use of the people and resources involved with projects is made;

   8) timely and appropriate generation, collection, dissemination, storage, and ultimate disposition of project and package information occurs; and

   9) the systematic identification, analysis, and response to project risk occurs.

b) develop and regularly update implementation plans which comply with the provisions of the Standard for Infrastructure Procurement and Delivery Management for all projects for which they are responsible for and issue the client with copies of each revision;

c) assist the client in the procurement of the necessary and appropriate consultants to perform functional responsibilities;

d) act as the client's agent in all professional service contracts with consultants;

e) manage the assigned project leaders, procurement leaders and contract managers;

f) interface as necessary with and facilitate the client's inputs into the development and finalisation of end of stage deliverables and the acceptance thereof;

g) obtain the client's requirements for commissioning and handover, if any, and communicate them to those responsible for compiling procurement documents and the contract managers;

h) implement any requirements regarding social facilitation and establish the necessary project steering committees, appoint the community liaison officers, recruit and select local labour, manage community related risks, deal with issues related to labour unrest or disputes during the execution of the works, etc;

i) brief the contract manager of the client's monitoring and reporting requirements for stage 7 (Works);

j) communicate to the client the contractual provisions for the taking over of the works and make the necessary hand over arrangements;

k) establish requirements for close out reports, communicate such requirements to contract managers and receive reports;

l) receive Prohibition Notices issued by the health and safety agent;

p) establish and maintain risk registers and issue regular risk reports to the client; and

o) give appropriate understanding and attention to stakeholders' needs and expectations, resolve stakeholder issues, and where necessary to escalate the issues to the client.

6 Services provided by the procurement leader

The procurement leader shall:

a) manage the development of the procurement documents and the procurement process from the advertisement of tenders to the award of the contract as a single point of responsibility including the conducting of clarification meetings in accordance with the provisions of the Standard for Infrastructure Procurement and Delivery Management and the client's SCM Policy for Infrastructure Procurement and Delivery Management;

b) develop a procurement programme and co-ordinate and monitor the preparation of procurement documentation;

c) ensure that the necessary persons have been appointed to perform procurement documentation reviews, to evaluate quality in tender offers and to prepare procurement documents as required by the Standard for Infrastructure Procurement and Delivery Management and the client's SCM Policy for Infrastructure Procurement and Delivery Management;

d) ensure that the necessary health and safety and environmental management information is issued to those responsible for the compiling of procurement documents so that such information is included in the documentation that is prepared;

e) notify the health and safety agent of the award of a contract to a consultant who provides construction related services for a package and each principal contractor appointed to execute a package; and

f) provide those responsible for developing procurement documents with the relevant templates.

7 Services provided by the project leader, lead designer, designer and cost manager

7.1 General

7.1.1 Professional services associated with the roles of project leader, lead designer, designer and cost manager shall as necessary be provided in support of the activities identified for stages 3 to 9 in the control framework for the planning, design and execution of infrastructure projects contained in the Standard for Infrastructure Procurement and Delivery Management in accordance with the requirements of 7.3.

NOTE 1 Professional services are required as inputs into most of the activities associated with a stage in order to produce a deliverable. Such services can be provided by suitably qualified employees, contracted individuals or professional service providers appointed by either the client or a contractor.

NOTE 2 Annexure E outlines the typical activities associated with the production of an end of stage deliverables.

7.1.2 Persons providing services shall as necessary:

a) plan, design and review the works, installation or system, as relevant, taking into account pragmatic elements such as cost, construction limitations and technology and adjust their designs where the cost of the package or project exceeds the control budget, unless the client agrees to an increase in the control budget;

b) develop the deliverables associated with the end of a stage in sufficient detail so that it can be used to form the basis of the scope of work for taking the package or project forward in terms of the selected contracting strategy as shown in Table 2;

c) maintain in full force and effect all relevant consents and approvals and implement all required actions;

d) provide advice relating to the works or portions thereof for which they are responsible for during the evaluation of tender offers;

e) provide the necessary inputs into the client's occupational health and safety specification for incorporation into the scope of works associated with a construction works contract; and

f) provide copies of all certifications associated with the provision of services relating to the project required in terms of legislation.

Table 2 – Key deliverables associated with the scope of work of a contracting strategy

Contracting strategy		**Key deliverable which forms the basis of the scope of work associated with a contract**	
Strategy	**Description**	**Stage associated with the deliverable**	**Deliverable**
Design and construct	The client assigns design responsibility to the contractor in which case the contractor designs the works based on a brief provided by the client and constructs it	Concept and viability	Client accepted concept report
Develop and construct	The client assigns design responsibility to the contractor in which case the contractor completes the production information based on a scheme design provided by the client and constructs it	Design development	Client accepted design development report
Design by client	A client retains design responsibility in which case the contractor undertakes construction on the basis of production information issued by the client	Design documentation (Production information)	Completed and client accepted key production information

NOTE The client can in respect of a package, separately appoint a project leader, a lead designer, designers and a cost manager. Alternatively, the client may appoint a person to perform more than one role or all the roles. Where works involve a single discipline, e.g. civil engineering works, a single person is usually appointed to perform all the roles.

7.1.3 Where the client appoints a designer to perform a discipline specific service (e.g. according to those described in Table 3 for building works), the designer, shall provide the service in relation to the identified discipline, subject to the person appointed as the designer for architectural design services relating to a building ensuring that the planning and design of buildings, spaces and structures and associated site works:

a) is properly co-ordinated between the different design disciplines as relevant; and

b) satisfies the relevant prescriptive and functional requirements of the National Building Regulations published in terms of the National Building Regulations and Standards Act of 1977 (Act 103 of 1977) in relation to structural design, dimensions, public safety, site operations, excavations, foundations, floors, walls, roofs, stairways, glazing, lighting and ventilation, drainage, non-water-borne means of sanitary disposal, stormwater disposal, facilities for disabled persons, fire protection, space heating, fire installation and energy usage.

NOTE Regulation A2(1)(g) of the National Building Regulations requires that the plans and particulars that are submitted to the local authority include a declaration by a person registered in a professional category of registration in terms of the one of the councils for the professions identified in the Council for the Built Environment Act, 2000 as to how the applicable functional regulations shall be satisfied. 7.1.3b) is aligned with this requirement.

7.1.4 The responsibilities for definition services (i.e. develop the deliverable associated with a stage) and review services (i.e. confirm that the deliverable satisfies the package information) for each stage in terms of different contracting strategies are as stated in Table 4.

7.1.5 Persons providing services shall establish the need for specialist advice, studies, tests and surveys relevant to design input, including the necessity of appointing a specialist to design a component of the fire protection component of buildings described in Table 5 and advise the Implementer accordingly. They shall thereafter, as necessary, brief the specialist, co-ordinate the advice, studies, tests and surveys, advise the client on payments due, collate outputs of specialist study surveys, advise on implications of findings, report to the client and obtain further instructions.

Table 3 – Design services relating to buildings

Service	Principal activities
Architectural design	Plan, design and review the construction, extension or refurbishment of buildings, spaces, structures and associated site works for the use of people by the creative organization of materials and components with consideration to mass, space, form, volume, texture, structure, light, shadow, materials and the project brief.
Civil engineering	Plan, design and review the construction of site works comprising a structure such as a road, pipeline or sewerage system or the results of operations such as earthworks.
Electrical engineering	Plan, design and review the installation of the electrical and electronic systems for and in a building or structure
Fire engineering	Plan, design and review the fire protection system to protect people and their environments from the destructive effects of fire and smoke.
Landscape architectural design	Plan, design and review the construction of outdoor and public spaces to achieve environmental, socio-behavioural, or aesthetic outcomes or any combination thereof
Mechanical engineering	Plan, design and review the construction, as relevant, of the gas installation, compressed air installations, thermal and environmental control systems, materials handling systems or mechanical equipment for and in a building
Structural engineering	Plan, design and review the construction of buildings and structures or any component thereof to ensure structural safety and structural serviceability performance during their working life in the environment in which they are located when subject to their intended use in terms of one or more of the following: i) external and internal environmental agents; ii) maintenance schedule and specified component design life; or iii) changes in form or properties
Wet services	Plan, design and review the construction, within buildings or from a point of drainage installations intended for the reception, conveyance, storage or treatment of sewage, water installations which conveys water for the purpose of fire-fighting or consumption and roof drainage arrangements within a building.
Geotechnical engineering	Plan, design and review the construction of site works comprising a structure such as a road, pipeline or sewerage system or the results of operations such as earthworks.

Table 4– Allocation of responsibilities for review and definition services in the different contracting strategies

Contracting strategy (see Table 3)	Stage (See Table 1)	Client's responsibilities	Contractor's responsibilities
Design and construct*	4	Definition services	None
	5 and 6A	Review services	Definition services
Develop and construct	4 and 5	Definition services	None
	6A	Review services	Definition services
Design by client	4, 5 and 6A	Definition services	None

*In some projects, the contractor may assume Stage 4 responsibilities, in which case the client will be responsible for review services and the contractor for definition services for this stage..

7.1.6 Persons providing services after stage 4, relating to buildings shall prepare documentation as soon as possible which is sufficient for local authority approval in terms of the National Building Regulations and Standards Act of 1977. They shall also provide all the necessary documentation to enable an occupancy certificate to be issued by the local authority.

Table 5 -- Specialist fire design services

Description of design services
Design, install and maintain automatic sprinkler system in accordance with the requirements of SANS 10400-T
Design and install a lightening protection system in accordance with the requirements of SANS 10400-T
Design, install, test and maintain the pressurization of emergency routes and components in accordance with the requirements of SANS 10400-T
Design, install and maintain a fire detection and alarm system in accordance with the requirements of SANS 10400-T
Design, install and maintain a fixed automatic fire-fighting system that is in accordance with the requirements of SANS 10400-T
Perform a rational assessment of building materials and components to determine their fire resistance in accordance with the requirements of SANS 10400-T.

NOTE Some of the specialist fire design services can be undertaken by specialist subcontractors of the contractor

7.1.7 The project leader shall:

a) until such time that a contractor is appointed to implement the package or project, promptly provide package information to the project manager whenever a stage is completed;

b) maintain a risk register for each package or project for which they are responsible for; and

c) oversee the development of a maintenance plan if required.

NOTE A contract manager is only appointed when a package is awarded. This can take place between the end of stage 3 (package planning) and when most of the production information (design documentation) is completed, depending upon the contracting strategy that is adopted. The role of the project leader also diminishes where the contractor takes on management and design responsibilities.

7.1.8 Designers shall, when called upon to do so:

a) engage with the health and safety agent; and

b) provide inputs into procurement documents to enable the scope of work and other documents to be finalised.

7.1.9 Designers shall prompt notify the health and safety agent of any significant changes to the design that are made after the acceptance of the design development report and take into account any advice provided by the health and safety agent in effecting such changes.

7.2 Drawings

7.2.1 Those providing services shall:

a) maintain a register of all drawings and other production information issued for construction purposes.

b) provide record drawings indicating all deviations from the construction drawings.

7.2.2 The drawings shall, unless otherwise specified, clearly indicate the following:

a) the project title;

b) the drawing title;

c) the drawing number and date;

d) the revision number and date; and

e) the drawing status i.e. for acceptance, for tender / pricing, for construction or for fabrication/manufacture.

7.2.3 The structural drawings shall contain the following information:

a) the design standards;

b) the loads which the structure is designed to withstand;

c) the key geotechnical parameters used in the design;

d) the basic engineering properties of the construction materials; and

e) the construction standards.

7.3 Services provided in respect of a stage

7.3.1 Stage 1 – initiation stage

The project leader, lead designer, designer and cost manager shall provide as necessary, the services set out in Table 6, to develop the end of stage deliverable in accordance with the relevant provisions of the Standard for Infrastructure Procurement and Delivery Management.

7.3.2 Stage 2 (Concept and viability) services

7.3.2.1 The project leader, lead designer, designer and cost manager shall provide, as necessary, the services set out in Table 7 to develop the end of stage deliverable in accordance with the relevant provisions of the Standard for Infrastructure Procurement and Delivery Management.

7.3.2.2 Where others develop the concept report (e.g. in terms of a design and construct contracting strategy), professionals appointed by the client shall review the concept report for general conformity with the scope of work in their respective areas of expertise.

7.3.3 Stage 3 (Design development) services

7.3.3.1 The project leader, lead designer, designer and cost manager shall provide, as necessary, the services set out in Table 8 to develop the end of stage deliverable in accordance with the relevant provisions of the Standard for Infrastructure Procurement and Delivery Management.

7.3.3.2 Where others develop the design development report (e.g. in terms of a design and construct contracting strategy), professionals appointed by the client shall review the design development report for general conformity with the scope of work in their respective areas of expertise.

7.3.3.3 Designers shall sign the declaration contained in Annexure B before the conclusion of the design development stage. The Project Leader shall ensure that this declaration is attached to the design development report.

7.3.4 Stage 4 (Design documentation) services

The project leader, lead designer, designer and cost manager shall provide, as necessary, the services set out in Table 9 and 10 to develop the end of stage deliverable in accordance with the relevant provisions of the Standard for Infrastructure Procurement and Delivery Management.

Table 6 – Stage 1: Project initiation

Project leader	Lead designer	Designer and cost manager	Health and safety agent
1) Obtain outline statement from the client setting out the client's requirements and objectives including cost and schedule for the package. 2) Prepare, co-ordinate and monitor a project initiation programme. 3) Establish the need for specialist advice and studies and procure or facilitate the procurement of such advice and studies. 4) Assist the client with the procurement of the services of suitable qualified persons to provide discipline specific services. 5) Identify and document constraints to the development of design proposals or solutions. 6) Identify stakeholders and facilitate the necessary consultations in consultation with the client. 7) Facilitate the development and finalization of the strategic brief. 8) Document findings, assumptions and recommendations on studies and work undertaken in developing the strategic brief in a brief report. 9) Obtain the client's acceptance of the strategic brief. 10) Prepare baseline risk assessment for the package	In addition to providing services as set out for the designer, co-ordinate the advice and input of designers and cost managers	1) Provide discipline specific advice, data or input into the need for specialist advice and studies, liaison with stakeholders and the development of the strategic brief. 2) Carry out, where instructed by the project leader, discipline specific preliminary studies and information gathering to assist in establishing the strategic brief. 3) Advise on the need for surveys, analyses, tests or investigations which will be required in stage 4 to refine the production information and assumptions made during stage 3 and the availability and location of related infrastructure and services. 4) Collaborate and assist with the preparation and finalisation of the strategic brief. 5) Assist with the assessment of the risks, value, cost planning and the like.	1) Provide health and safety input into strategic brief as necessary 2) Advise on health and safety matters, regulations or guidelines with which the project must comply and comment on implications for the project

Table 7 – Stage 2 (Concept and viability) services

Project leader	Lead designer	Designer	Cost manager	Health and safety agent
1) Obtain instructions from client on allocation of design responsibilities within project team. 2) Brief the client and the project team on procedures to complete stage 4 to meet project objectives. 3) Assist the client with the procurement of the services of suitable qualified persons to provide discipline specific services. 4) Initiate, obtain agreement and direct implementation of management and reporting procedures for stage 4. 5) Receive advice on constraints that may affect the accepted strategic brief including environmental constraints, obtain instructions on how the client wishes to proceed and incorporate any agreed amendments and adjustments in the concept report or revised procurement strategy. 6) Prepare and co-ordinate an indicative project documentation and delivery programme. 7) Receive and consider inputs from the project team and take any necessary actions. 8) Facilitate the development and finalization of the concept report including the obtaining of any approvals or in principle acceptances of elements within the concept report. 9) Obtain the client's acceptance of the concept report	In addition to providing services as set out for the designer: 1) Establish the design approach or solution so that the design or solution achieves the required quality, health and safety and other required standards and is co-ordinated within the project team. 2) Advise on allocation of responsibilities within the project team and resolve potential ambiguities. 3) Co-ordinate: a) the designers' and cost manager's activities, inputs and outputs. b) the establishment of the primary design, rehabilitation or maintenance criteria including durability, projected maintenance, design or service life and environmental policy. c) the carrying out of specialist studies and surveys relevant to design input or solutions. d) the periodic reviews of the development of the design concept or solution for conformity with the strategic brief and the control budget. e) the scope of consultations with statutory authorities, funders and utilities. 4) Give design direction to the preparation of design options or solutions and inputs into the concept report and the establishment of preferred design option or solution.	1) Implement the established management and reporting procedures to complete the concept report in response to the strategic brief. 2) Visit the site, carry out initial appraisal and advise on physical restrictions that might affect the package information and the control budget. 3) Collaborate with the project team and provide discipline specific advice, data or input into the need for specialist advice and studies, liaison with stakeholders, consultations with and documents required by statutory bodies, funders and utility providers and the development and finalisation of the concept report. 4) Collaborate with the health and safety agent in the development of the site health and safety specification and take account of such specification in their design proposals. 5) Advise on further surveys, analyses, tests and investigations which may be required and advise on payments due to specialists for specialist investigations, tests and studies. 5) Establish regulatory authority's requirements and incorporate into the design. 6) Develop the design or maintenance approach with the project team so that the design achieves the required quality, health and safety and environmental standards, satisfies all regulatory requirements and consents and is integrated within the project team and with the requirements of utility providers and interfaces with related projects of existing infrastructure. 7) Advise and comment on matters, regulations or guidelines with which the project must comply and comment on implications on package information. 8) Establish design options or solutions and motivate preferred options or solutions. 9) Provide information for or establish cost and life cycle cost estimates of components or elements of the package. 10) Establish access, utilities, services and connections required for the design. 11) Prepare preliminary or process design information or repair and maintenance information in the form of sketches, design notes, drawings or any combination thereof and outline performance specifications sufficient to describe the scope, scale, form and character of works for concept report and to develop a realistic cost plan. 12) Assemble concept design information and narrative describing developed brief and evolving design or maintenance intent for inclusion in concept report.	5) Provide cost advice to support the development of design approach or solutions so that the selected design or solution achieves the required quality and health and safety standards within the control budget and values 6) Receive details of options and preliminary design information or solutions and prepare cost plan for the concept report based on preliminary and elemental or equivalent cost estimates. 7) Advise on the effect of market conditions on cost plan and, when required, options based on life cycle costing. 8) Perform value management exercise with stakeholders / client 9) Assemble the cost plan and related reports for inclusion in the concept report and motivate or propose cost reduction measures where the cost plan exceeds the control budget.	1) Prepare a baseline risk assessment for the package. 2) Review and evaluate design concepts and advise on health and safety impacts on the delivery and maintenance of the proposed package. 3) Advise designers of their health and safety legal liabilities and responsibilities for constructability, maintainability and operationability of structures. 4) Comment on health and safety matters affecting design options 5) Prepare and finalise a suitable, sufficiently documented and coherent site health and safety specification. 6) Prepare health and safety information for the concept report.

Table 8 – Stage 3 (Design development) services

Project leader	Lead designer	Designer	Cost manager	Health and safety agent
1) Direct a) project team considerations and investigations of alternative design solutions that comply with the package information. b) risk management process, allocate to project team risk mitigation actions, and assess impact on package information. c) value management process, allocate to project team proposals for value management, and assess impact on package information. 2) Receive reports/proposals and obtain instructions from client. 3) Prepare and co-ordinate a detailed design and documentation programme, based on the indicative programme for delivery. 4) Monitor the cost control measures put in place by the cost manager to verify that the progressive design compliance with the control budget including design reviews to achieve budget compliance. 5) Monitor a) progress of consultations with utility providers. b) finalization of design criteria. c) provision of principal elements to assist in establishing cost plan. 6) Refine, obtain agreement and direct implementation of management procedures and reporting procedures. 7) Receive inputs from project team, assess impact on package information and, as necessary, submit to client and obtain instructions or agreement. 8) Manage and monitor liaison and consultations with statutory authorities to agree submission requirements, report to client and arrange payment of fees. 9) Prepare and assemble design development report and submit to client for acceptance.	1) Refine design approach so that the design achieves the required quality, is co-ordinated within the project team and is in conformity with package information. 2) Co-ordinate work of discipline specific design consultants and cost manager. 3) Give design direction to consideration of design options. 4) Give design direction and co-ordinate a) provision of briefing information to specialists, and suppliers. b) integration of the design and requirements of project team. c) integration of the design and requirements of specialists and suppliers. 5) Lead and co-ordinate liaison and consultations with statutory authorities to agree submission requirements. 6) Integrate cost advice into the design process	1) Advise on updating design schedule. 2) As the design develops, review compliance with client and authorities' requirements and advise on any implications. 3) Collaborate and assist in preparing the design development report. 4) Collaborate with the health and safety agent in the implementation of the site health and safety specification. 5) Receive and with project team discuss client comments on or amendments to design development report, advise on impact of any amendments or additional requirements and changes. 6) With project team, develop design approach and periodically review so that the design achieves required quality, is co-ordinated and is in conformity with package information. 7) Prepare design options for elements of works and test options with project team against package information and agree preferred option. 8) Develop strategy for use, cleaning, maintenance and subsequent deconstruction. 9) Advise where elements of works are most appropriately designed (wholly or in part) by specialists/suppliers, provide briefing information. 10) Receive and advise on outputs of specialist studies and surveys and incorporate into the design. 11) Liaise with utility providers as necessary and incorporate into the design their requirements. 12) Prepare calculations in sufficient detail to facilitate and verify design development. 13) Finalise design criteria for works. 14) Develop actions for risk mitigation and assess with project team impact on package information. 15) Contribute to value management process and assess impact on package information.	6) Provide cost advice for development of design approach so that the design achieves required quality, is co-ordinated within project team and in conformity with package information. 7) Contribute to periodic reviews of development of the design for conformity with project team, assess need for changes, advise on impact on package information and incorporate agreed changes. 8) Update cost plan and advise on budget. 9) Prepare cash flow forecasts and monitor expenditure against cost plan and report. 10) Advise on effect of market conditions including forecast of construction cost. 11) Prepare cost studies to assist project team in testing options, including where required, life cycle costing. 12) Consider cost aspect of strategy for use, cleaning and maintenance and subsequent construction. 13) Receive and advise on outputs of specialist studies and surveys and incorporate into the cost plan. 14) Provide cost information for liaison with utility providers. 15) Support development of actions for risk mitigation and assess impact on package information with project team.	1) Issue the site health and safety specification to the project leader, lead designer, designer, procurement leader, cost manager, contract manager, supervising agent and contract, as relevant and appropriate. 2) Provide health and safety briefing to designers and cost manager. 3) Advise on health and safety impact of compliance with regulations. 4) Collaborate in finalising implications of health and safety requirements on the design. 5) Receive and review designer's design proposals for general conformance with relevant health and safety regulations. 6) Support designer's integration of health and safety requirements into the design development report. 7) Review design development report before it is finalised for compliance with the requirements of the site health and safety specification.

Table 8 (concluded)

Project leader	Lead designer	Designer	Cost manager	Health and safety agent
10) Obtain client comments on or amendments to design development report, discuss with project team, advise on impact of any amendments or additional requirements, agree changes and resubmit design development report to the client for acceptance. 11) Manage and monitor the timeous submission by the designers of documentation to obtain the necessary approvals. 12) Obtain statutory permissions that are required. 13) Obtain the client's acceptance of the design development report.		16) Provide information on principal elements to assist in establishing cost plan. 17) Establish critical construction details, tolerances, performance tolerances and anticipated movements, defining critical co-ordination clearances. 18) Advise on scope of performance and prescriptive specifications, and procurement implications. 19) Liaise with project team and contribute to consultations with statutory authorities to agree submission requirements. 20) Prepare design development drawings defining detailed form, function and character of works with the primary components being defined in terms of overall size and typical detail, including general arrangement plans, sections, elevations and details in sufficient detail to show design intent. 21) Prepare outline specifications for components of works defining performance and quality. 22) Assemble design development drawings, outline specifications and agreed visualizations for inclusion in design development report.	16) Contribute to value management process and assess impact on package information with the project team. 17) Receive information on principal elements to establish approximate quantities. and define specifications 18) Receive details of design development and prepare cost details for inclusion in the design development report. 19) Assemble cost plan and reports for inclusion in design development report.	

Table 9 – Stage 4A (Production information) services

<table>
<tr><th>Project leader</th><th>Lead designer</th><th>Designer</th><th>Cost manager</th><th>Health and safety agent</th></tr>
<tr><td rowspan="2">1) Refine or initiate, obtain agreement and direct implementation of refined management procedures and reporting procedures.
2) Receive:
a) project team advice on scope, content, assembly, packaging and sequencing of production information, and updating of design schedule and report to client and obtain instructions.
b) results of periodic review of the development of the design for conformity with package information and advise on need for change, advise on impact, submit to client and obtain instructions.
3) Monitor and manage development of production information in conformity with package information.
4) Direct work of project team, allocate actions, assess impact on package information, report to client and obtain instructions.
5) Contribute to strategy for construction, use, cleaning and subsequent maintenance, and report to client and obtain agreement.
6) Manage and monitor project team liaison and submissions to statutory authorities and report to client.
7) Receive production information drawings and schedules of work sufficient for construction and assemble works information and undertake package review.
8) Obtain any outstanding statutory permissions.</td><td rowspan="2">1) Co-ordinate work of discipline specific design consultants and cost manager.
2) Co-ordinate advice on scope, content, assembly, packaging and sequencing of production information and implementation of clients instructions.
3) Give direction to development of production information in conformity with package information.
4) Give design direction and co-ordinate integration of the design requirements of project team and specialist and suppliers into package information.
5) Lead and co-ordinate project team liaison and making of submissions to statutory authorities.</td><td colspan="2">1) Advise on scope, content, assembly, packaging and sequencing of production information and implement instructions.
2) Advise on updating design schedule.
3) Take into account the requirements of the site health and safety specification
4) Collaborate with the health and safety agent in the implementation of the site health and safety specification</td><td rowspan="2">1) Identify portions of production information that need to be reviewed for compliance with the requirements of site health and safety specification and request such information from the designers, as relevant.
2) Receive and review health and safety aspects of production information for designer's compliance with health and safety duties.
3) Receive reports on health and safety from designers so that pertinent information can be included in the scope of work of the contractor's contract.</td></tr>
<tr><td>5) Prepare a report which satisfies the provisions of Regulation 6(1)(c) of the Construction Regulations 2014
6) Develop production information in conformity with package information.
7) Periodically review development of the design for conformity with package information, assess with project team need for changes and advise on impact on package information.
8) Incorporate non-material changes to the design.
9) Confirm strategy for construction, use, cleaning and subsequent maintenance.
10) Develop actions for risk mitigation and assess with project team impact on package information.
11) Contribute to value management process, develop proposals for value management and assess with project team impact on package information.
12) Integrate the design and requirements of project team into package information.
13) Integrate the design and requirements of specialists and suppliers into package information.
14) Prepare drawings and integrate information from specialists and suppliers.
15) Liaise with project team and contribute to submissions to statutory authorities.
16) Prepare production information drawings and schedules of works sufficient for construction or preparation of manufacturing and installation drawings and production information by other project team members.
17) Receive confirmation of setting out information and dimension drawings.
18) Prepare detailed specifications for components of works for inclusion in scope of work, defining performance, quality, operating and maintenance requirements.
19) Incorporate appropriate facilities for commissioning within the system design.</td><td>5) Support development of production information in conformity with the package information.
6) Contribute to the periodic review of the development of the design for conformity with package information, advise on conformity with the package information, assess with project team need for changes and advise on impact on package information.
7) Contribute to confirmation of strategy for use, cleaning and maintenance and subsequent construction.
8) Advise on effect of market conditions including forecast of construction cost.
9) Support development of proposals for risk mitigation and assess with project team impact on package information.
10) Contribute to value management process, support development of proposals for value management and assess with project team impact on package information.
11) Review integration of the design and requirements of specialists and suppliers into package information for conformity with cost plan.
12) Receive production information drawings and schedules of work sufficient for construction or preparation of manufacturing and installation drawings and undertake cost check exercise, monitor cost and update cash flow projections.</td></tr>
</table>

Table 10 – Stage 4B (Manufacture, fabrication and construction information) services

Design lead	Discipline specific designer	Health and safety agent
Professionals appointed by client (review service)		
Coordinate work of discipline specific design consultants:	1) Advise on need for instructions relating to manufacture, fabrication and construction information (MF&C) information. 2) Review schedule for submission of MF&C information to meet needs of procurement pre-installation testing, and construction schedule. 3) Provide information required to clarify production information drawings and specifications. 4) Receive and review MF&C information for general conformity with scope of work and consider need for amendments and resubmissions for further review and issue comments. 5) Advise on need to amend production information or design included in scope of work and assess impact on changes on package information with project team. 6) Advise on contractor's proposals relating to elements of the works to be designed by contractor. 7) Receive and review samples of materials, components and assemblies for general conformity with scope of work and consider the need for amendments and resubmission for further review and issue comments. 8) Comment on contractor's method statements in so far as they reflect on design intent of the works. 9) Monitor progress with completion of MF&C information. 10) Review operation and maintenance manuals for components and systems, record drawings and schedules of design criteria of works as constructed, for general conformity with scope of work information and completeness. 11) Update production information, general arrangement drawings and schedules, incorporating changes instructed during construction.	1) Receive and review health and safety of aspects of manufacture, fabrication and construction information for designer's compliance with health and safety duties. 2) Advise on need for designers to consider further health and safety aspects of the design included in production information.
Professional appointed by the contractor		
Coordinate work of discipline specific design consultants:	1) Consider production information and advise on issues requiring supplementary information or clarification. 2) Advise on design schedule that meets needs of procurement, pre-installation testing, construction works contract and construction schedule. 3) Regularly review design schedule for receipt and issue of information, submissions for approval, and testing and commissioning during construction. Issue schedule of drawings and other information to be provided. 4) Develop actions for risk mitigation and assess impact with construction contract team/project team. 5) Contribute to value management process. Develop proposals for value management. With Construction Contract team/project team assess impact on construction works contract. 6) Request and obtain information required to clarify production information drawings and specifications. 7) Prepare co-ordinated manufacture and installation drawings of elements and/or components and relevant testing and commissioning information, based on production information. Integrate with construction, manufacture and installation drawings. 8) Periodically review development of the design for conformity with production information. With construction contract team/project team assess need for changes and advise on impact on construction works contract. 9) Obtain reviews and approvals for MF&C information. Provide, for review and approval, technical submissions detailing quality and performance of materials and equipment to demonstrate compliance with production information. 10) Provide clarification of MF&C information as required. 11) Update drawings and schedules to reflect changes in components and installations as construction progresses. 12) Assess impact of variations on production information and advise. 13) Define quality control and testing procedures to demonstrate compliance with construction works contract. Receive results of performance demonstration tests, adjust MF&C information as required and re-test. Obtain reviews for results of tests. 14) Advise on need for special inspections or tests during construction. 15) Assist with preparation of maintenance manuals for components and systems, record drawings and schedules of design criteria of works as constructed.	

7.3.5 Stage 5 (Works), Stage 6 (Handover) and Stage 7 (Close out) services

The project leader, lead designer, designer and cost manager shall provide, as necessary, the services set out in Table 11 to develop the end of stage deliverables in accordance with the relevant provisions of the Standard for Infrastructure Procurement and Delivery Management.

Table 11 – Stage 7 (Works), Stage 8 (Handover) and Stage 9 (close out) services

<table>
<tr><th>Project leader</th><th>Lead designer</th><th>Designer</th><th>Cost manager</th><th>Health and safety agent</th></tr>
<tr><td rowspan="2">1) Deal with any outstanding issues.
2) Monitor
- review of record information and issue to client.
- liaise with project users in use of systems.
- respond to queries about use, cleaning, maintenance and subsequent operation
- obtain outstanding statutory permissions.
3) Lead post-project review.
4) Assemble records and archive originals and copies as appropriate.</td><td rowspan="2">In addition to performing discipline specific Design Consultant tasks co-ordinate
- review of record information.
- liaison with project users in use of systems.
- assistance with queries about use, cleaning, maintenance and subsequent operation.
- the obtaining of any outstanding statutory permissions.</td><td colspan="2">1) Deal with any outstanding issues.
2) Contribute to post-project review.
3) Assemble records and archive originals and copies as appropriate.</td><td rowspan="2">1) Monitor health and safety risks and compliance with health and safety requirements.
2) Submit to authorities and facilitate permits.
3) Liaise with project users of the systems.
4) Assist with queries about use, cleaning, maintenance and subsequent construction.</td></tr>
<tr><td>4) Complete inputs into record information.
5) Liaise with Project users in use of systems.
6) Assist with queries about use, cleaning, maintenance and subsequent construction.
7) Assist with obtaining of any outstanding statutory permissions.</td><td>4) If required to do so, measure the works for payment purposes, compile payment certificates, deal with all events which impact upon cost
5) If required to do so, provide cash flow projections and cash reports clearly indicating actual to planned progress</td></tr>
</table>

NOTE: Designers are invariably appointed to act as supervising agents to ensure that design intent is met / verify that the construction is being carried out in accordance with the design in order to fulfil requirements of the National Building Regulations and the Construction Regulations 2014.

7.4 Procurement services

The project leader, lead designer, designer and cost manager shall, where required by the project manager or the procurement leader:

a) develop procurement documents (calls for expressions of interest, tender documents and contracts) in accordance with the provisions of the Standard for Infrastructure Procurement and Delivery Management; and

b) evaluate, where required by the client, calls for expressions of interest and tenders in accordance with the provisions of the Standard for Infrastructure Procurement and Delivery Management and develop evaluation reports.

8 Services provided by the contract manager

8.1 The contract manager shall provide the services in accordance with the provisions of the Standard for Infrastructure Procurement and Delivery Management and the provisions of the client's SCM policy for infrastructure procurement and delivery management.

8.2 The contract manager shall act as stated in the contract as the employer's agent, the employer's delegate, the employer's representative, the engineer, the principal agent, project manager, services manager or supply manager, depending upon the form of contract that is specified by the client, subject to any constraints that may be imposed by the client.

NOTE: The contract manager may delegate duties imposed by the contract to a cost manager.

8.3 The contract manager shall:

a) ensure that the client's requirements for monitoring, reporting and record keeping are adhered to;

b) immediately notify the client and, if appointed, the project manager, upon receipt of a Prohibition Notice issued by a health and safety agent;

c) promptly report to the client and, if appointed, the project manager, all insurance claims made within one week of the claim being lodged;

d) promptly report to the client and, if appointed, the project manager, any dispute for referral to an adjudicator that is notified by a contractor;

e) prepare a motivation setting out any dissatisfaction with an adjudicator's decision for consideration by client, and, if appointed, the project manager, for referral to a tribunal.

f) provide the client, and, if appointed, the project manager, with adequate notice of the anticipated date of completion of a part or the whole of the works so that the necessary handover arrangements with the client or end user may be made; and

g) prepare the close out report.

8.4 The contract manager shall in terms of a target contract adjust the total of prices for inflation in accordance with the requirements of the contract at the specified intervals and submit a monthly report to the client, and, if appointed, the project manager, which contains the following information:

a) the contractor's latest forecast of total defined cost together with an explanation of any changes made since the last forecast;

b) the amount due before the deduction of any retention monies;

c) the total of prices with and without any adjustments for inflation, if relevant;

d) the forecasted total adjustment to the total of prices for inflation;

e) the total forecasted defined cost plus the fees for the payment due;

f) the actual defined cost plus the fees covering the previous payment certificate;

g) interest due to the contractor or client for corrections between forecasted and actual defined cost plus the fee for the previous month;

h) the contractor's planned value, based on the estimated amount that should have been earned at the assessment date in terms of the programme for completed and partially completed activities, where the prices in the activity schedule for partially completed activities are calculated on a pro rata basis; and

i) the contractor's earned value based on the estimated amount that would have been earned at the assessment date for completed and partially completed activities, where the prices in the activity schedule for partially completed activities are calculated on a pro rata basis.

8.5 The contract manager shall report on a monthly basis specific key performance indicators required:

a) by a client or funder; and

b) in terms of legislation including the Construction Industry Development Board Act of 2000 (Act No. 38 of 2000) and the National Treasury Standard for Infrastructure Procurement and Delivery Management.

8.6 Key performance indicators relating to cost norms shall be compiled by the contract manager in terms of requirements established by the client and, if appointed, by the project manager, and included in the close out report.

NOTE Key performance indicators such as the cost of a road per km or a certain type of building per square metre can provide useful planning information and enable comparisons with other projects of a similar nature to be made.

9 Services provided by the supervising agent

9.1 The supervising agent shall:

a) act in accordance with the provisions of the contract entered into with the contractor;

b) perform level 2 construction monitoring services as described in Table 12, unless otherwise instructed; and

c) satisfy the requirements of the .

9.2 The supervising agent shall notify the contract manager of any non-conformance on the part of a contractor to the scope of work or instructions issued (defects) prior to completion or any other matter which is likely to significantly increase the costs, delay completion or impair the performance of the works in use.

Table 12 – Levels of construction monitoring (stage 5)

Level	Description
1	• Monitor the outputs from another party's quality assurance schedule against the requirements of the plans and specifications. • Visit the works at least once every two weeks on average over the duration of the works to review important materials, critical work procedures and/or completed elements or components. • Review random samples of materials and work procedures that coincide with normal frequency visits for conformity to requirements of the contract. • Be available to advise the contractor on the technical interpretation of the plans and specifications.
2	• Review, preferably at the earliest opportunity, a sample of each important: a) work procedure; and b) construction material for compliance with the requirements of the contract and review representative samples of important completed work prior to enclosure at a higher frequency than that required for level 1. • Regularly visit the site works at frequency which may vary over the duration of the works from daily to weekly to review important materials, critical work procedures and/or completed elements or components for conformity to requirements of the contract. • Be available to advise the contractor on the technical interpretation of the plans and specifications
3	• Maintain a part-time presence on site to review random samples and review important completed work prior to enclosure, or on completion, as appropriate. • Be available to advise the contractor on the technical interpretation of the plans and specifications
4	• Maintain a full time presence on site to constantly review : a) work procedures b) construction materials for compliance with the requirements of the contract and review completed work prior to enclosure or on completion as appropriate. Be available to advise the contractor on the technical interpretation of the plans and specifications

NOTE 1 The Contractor is responsible for providing the works in accordance with the provisions of the contract. Construction monitoring provides an independent verification, to the level required by the client, that the works are being completed in accordance with the requirements of the contract, that the designs are being correctly interpreted and that appropriate techniques

are being utilised. Construction monitoring creates no contractual relationship between those providing the monitoring services and the contractor outside the contract that is entered into between the client and the contractor.

NOTE 2 The level enables requirements for site staff to be determined.

9.3 The supervising agent shall record in a book which shall be kept on site in the same place as the health and safety file required in terms of the Occupational Health and Safety Specification for Construction Works Contracts, all site visits and any notifications or instructions to the contractor regarding defects and the rectification thereof which occur prior to completion of the works.

9.4 The supervising agent shall complete the relevant certificate in Annexure D for inclusion in the record information prior to the completion of the handover stage. Copies of such certifications shall be issued to the contractor.

10 Services provided by the health and safety agent

10.1 The health and safety agent shall:

a) assume the responsibilities imposed upon the client as a "client" in terms of Regulation 4(5) of the Construction Regulations 2014 issued in terms of the Occupational Health and Safety Act of 1993 in respect of each and every package;

b) provide services in relation to each of the stages as set out in Tables 6 to 11;

c) obtain all the necessary documentation to support an application for a construction work permit required in terms of the Construction Regulations 2014 issued in terms of the Occupational Health and Safety Act of 1993

d) ensure that an application for a construction work permit to perform construction work required in terms of the Construction Regulations 2014 is completed on the prescribed form and submitted to the provincial director at least 30 days before the construction work is carried out together with:

   1) the baseline risk assessment;

   2) the health and safety specification;

   3) a copy of the health and safety agent's contract with the client;

   4) documented proof of the contractor's registration and good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);

   5) a fully completed designer's occupational health and safety declaration (see Annexure B)

   6) a fully completed health and safety agent's declaration (see Annexure C)

   7) the principal contractor's health and safety plan.

e) ensure that a contractor who carries out construction work for which a construction work permit is not required, but which in terms of the Construction Regulations 2014 requires that the provincial director be notified, does so at least before the that work is carried out;

f) issue the contractor with the site specific number for the required work permit

g) provide the necessary health and safety inputs into the procurement documents

h) act as the contract manager's or supervising agent's representative, depending upon the NEC3 form of contract that is used, in terms of contracts falling within the scope of the Construction Regulations 2014;

i) provide services which are consistent with duties assigned to a health and safety agent as set out in the Occupational Health and Safety Specification for Construction Works Contracts;

a) conduct initial site safety inductions for each professional service provider contracted by the client to provide construction related services for a package and each principal contractor appointed to execute a package;

k) handover to the contract manager upon completion of a package a copy of the principal contractor's health and safety file together with a brief report on the health and safety performance of the contractor;

l) attend site meetings when specifically requested to do so by the contract manager; and

m) appoint a suitably qualified safety practitioner to visit the sites at suitable intervals to conduct site inspections for compliance with the requirements of the Occupational Health and Safety Specification for Construction Works Contracts and submit management reports, detailing inspection results and any remedial action required by the principal and / or subcontractors.

NOTE 1 The Occupational Health and Safety Specification for Construction Works Contracts provides the generic overarching framework within which the contractor is required to demonstrate compliance with certain requirements for occupation health and safety established by the Occupational Health and Safety Act of 1993, establishes the manner in which the contractor is to manage the risk of health and safety incidents in the execution of the contract and establishes the manner in which the client's health and safety agent will interact with the contractor. The contractor is required to develop, implement and maintain package specific health and safety plans i.e. a documented plan which addresses identified hazards and includes safe work procedures to mitigate, reduce or control the hazards identified. The client is required to provide certain package specific information to the contractor to enable such plans to be formulated. Accordingly, this generic specification on its own cannot ensure compliance with requirements of the aforementioned Act.

NOTE 2 The health and safety agent may in terms of the Occupational Health and Safety Specification for Construction Works Contracts issue Improvement Notifications, Contravention Notices and Prohibition Notices, to the contractor concerned and forwarded copies to the contract manager. Such notices require corrective remedial action by the contractor. In the event that a "life threatening" situation develops on the site, due to negligence, or the lack of preparations, the contractor is required to terminate the activity with immediate effect.

NOTE 3 It is a requirement of the client for all contractors to execute construction works in accordance with the provisions of the Occupational Health and Safety Specification for Construction Works Contracts

NOTE 4 Following the initial induction, it is responsibility of the principal contractor to conduct all other on-site inductions.

Annexure A
(informative) .

Incorporating the provisions of this standard in the scope of work of contracts

A.1 General

SANS 10845-2, *Formatting and compilation of procurement documentation*, provide informative annexes which list a number of items which are recommended for inclusion in the scope of work of engineering and construction works contracts and service contracts. These standards state that *"Some of the topics might not be required where use is made of standards for construction and management requirements, or a generic management specification issued by a particular employer, as these documents might adequately cover these topics. Likewise, the use of certain forms of contract and the adoption of some contracting strategies might obviate the necessity for some of the headings."*

A.2 Engineering and construction works contracts

A.2.1 SANS 10845-2 recommend that the following topics which relate to design are dealt within the scope of work of engineering and construction works contracts:

- "Employer's Objectives" which describe the employer's objectives for the delivered end product or the project.
- "Design services and activity matrix" be addressed to identify responsibilities for design and related documentation
- "Employer's design" which describes the extent of the employer's design, if any
- "Design brief" which provide the design brief where the contractor is required to provide the works
- "Drawings" which state requirements for drawings to be prepared by the contractor and list all drawings prepared by the employer
- "Design procedures" which establish design procedures where the contractor is responsible for the design

NOTE 1 It is important to clearly state the employer's objective for the works and for the overall project should such works form part of a project.

NOTE 2 Where the design by employer contracting strategy is used with, or without a management contractor, use should be made of SANS 1921-1, *Construction and management requirements for works contracts Part 1: General engineering and construction works*, and if relevant SANS 1921-3, *Construction and management requirements for works contracts Part 3: Structural Steelwork*, to develop the scope of work. These standards require the contractor to design the temporary works and, in the case of structural steel work, to provide the design of simple connections that are not intended to transfer bending moment, fabrication drawings and erection mark drawings, if so required in terms of the specification data.

NOTE 3 Where the management contractor is responsible for the design of the works, the client's strategic brief needs to be incorporated in the scope of work

A.2.2 The manner in which the provisions of this standard can be incorporated by reference into the scope of work of an engineering and construction works contract where the contractor is responsible for design activities other than those associated with a specialist subcontractor is illustrated in Example 1.

EXAMPLE 1 Incorporating the standard in an engineering and construction works contract which allocates design responsibilities to the contractor

Design and planning services

1 The Contractor shall perform the activities and develop the end of stage deliverables associated with the following stages in the Standard Scope of Professional Services associated with the delivery of a Package :

*.....**

*Insert stages, depending upon which contracting strategy is selected

Stage	Contracting strategy	
	Design and construct	Develop and construct
Stage 2: Concept and viability	employer	employer
Stage 3: Design development	contractor	employer
Stage 4A: Production information	contractor	contractor

2 The contractor is required to design all temporary works

Employer's design

*The employer's design is contained in annexure .....**

*Insert one of the following documents in the annexure, depending upon the selected contracting strategy

Contracting strategy	
Design and construct	Develop and construct
Concept report	Design development report

Design procedures

1 The Contractor shall prepare the end of stage deliverable(s) for acceptance by the Employer.

2 The Contractor shall engage with the Employer's professional services providers appointed to undertake review services in accordance with the requirements of the Standard Scope of Professional Services associated with the Delivery of a Package in the finalisation of the deliverables. The Contractor shall respond to issues of clarity raised by the Employer's professionals and provide additional information that they may require to enable the Employer to take a decision on the deliverable.

A.3 Services contract

A.3.1 SANS 10845-2 recommend that topics such as the following are included in services contracts:

- "Client's or employer's objectives" which describes the client's or employer's overarching objectives for the project, including, if necessary, the time frames for completion and expected outcomes.

- "Background" which contextualizes the project and provides sufficient background information and available data to enable a response to stated and perceived requirements to be made or provides the necessary background to enable a better understanding of the client's objectives, e.g. the background could include the rationale of the project, the project history (what has been done so far and by whom), a list of relevant studies and basic data, the need for the services and an outline of the issues which needs to be resolved.

- "Description of the services" which provides a short description or outline of the extent of the services and outlines what the key deliverables are.

- "Requirements" which should state that the service shall satisfy the stated objectives of the employer in relation to the services identified in the description of services and establish minimum requirements, i.e. what is expected in relation to specific tasks, or functions in relation to the services that are to be provided to achieve the expected results.

- "Reference data" which states the reports, surveys, agreements, etc. upon which the contractor is to base the service, if any, e.g. past studies, aerial photographs, maps, or records of surveys carried out in the assignment area.

- Particular/generic specifications which should be drafted such that they:

  - contain acceptance procedures to enable compliance to be determined;
  - specify requirements uniquely and unambiguously;
  - preferably state what is to be provided and not how it is to be provided.

NOTE Many of the aforementioned topics or aspects thereof are addressed in this standard.

A.3.2 The manner in which the provisions of this standard can be incorporated by reference into the scope of work of a professional service contract is illustrated in Example 2.

EXAMPLE 2 Incorporating the standard in a professional services contract

Description of the services

*1 The Consultant is required to provide services for .....**

* Describe the project, the site and particular elements of the construction for which the consultant provides services.

2 The procurement strategy for the packages associated with the service is ...... The contractor is to be contracted to provide the works under the . . . . . ***

*Describe strategy (i.e. packaging, contracting, pricing and targeting strategy) so that the Consultants understand the level of detail and the precise services that are required.
** State which standard form of engineering and construction works contract is to be applied

*3 The Consultant shall provide the services in accordance with the relevant requirements of the Standard scope of professional services associated with the delivery of a package in respect of the following stages**

*List the applicable stages or state stages, e.g. 4 to 9

*4 The Consultant shall only provide review services in relation to stages .....as the contracting strategy adopted by the Employer for the works is the ..... strategy**

*Delete 4 if not applicable or describe the stages and the adopted contracting strategy – see Tables 1 and 2.

*5 The Consultant shall provide ..... services and perform the role of ..... in relation to such services.**

*Identify the required services e.g. from Table 3 in the case of services relating to buildings e.g. Fire safety . State the role to be performed i.e. project leader, lead designer, designer or cost manager or any combination thereof.

*6 The Consultant shall perform the role of ..... in terms of the .....**

*State the role from Table 12 and the form of contract that is to be used e.g. the principal agent in terms of the JBCC Principal Building Agreement.

7 The required level of construction monitoring is level ..... as described in Table 13

*State the level i.e. 1, 2, 3 or 4

9 The following services are not required.....

*Delete if all design and planning services are required or state what is not required where other perform such services e.g. the Employer obtains certain statutory permissions.

10 The following additional services are required:

*Delete if there are none or state what they are.

Note: If a health and safety agent is not appointed as such an appointment is not required by law, some of the basis the duties of the health and safety needs to be allocated to say the project leader.

Annexure B Designer's occupational health and safety declaration in terms of the Construction Regulations 2014

Description of the works *(briefly describe the works)*: . . . . . .

I, having the design responsibility as stated below, hereby declare with respect to the abovementioned works that:

a) I have received a copy of the health and safety specification from the client;

b) I have taken the prepared health and safety specification into consideration in my designs; and

c) I have complied with the requirements of regulation 6 in the execution of my duties as a designer in relation to the development and documentation of the my designs;

Name of designer and professional registration number	Design responsibility	Company	Postal address and telephone number	Signature
	Architectural design			
	Acoustic design			
	Civil engineering			
	Electrical engineering			
	Facade engineering			
	Fire safety			
	Landscape architectural design			
	Mechanical engineering			
	Structural engineering			
	Wet services			

(delete what is not applicable / amend as necessary)

Annexure C: Health and safety agent's declaration

Name of client: . . . . . .

Postal address: . . . . . .

Telephone number: . . . . . .

Description of the works *(briefly describe the works)*: . . . . . .

Contract no: . . . . . .

Physical address of the construction site and office: . . . . . .

Nature of construction work: . . . . . .

Expected commencement date: . . . . . .

Expected completion date: . . . . . .

Estimated maximum number of persons on the construction site; . . . . . .

Name of health and safety agent: . . . . . .

Identity number / passport number: . . . . . .

SACPMP registration number: . . . . . .

Telephone no: . . . . . .

Cell No: . . . . . .

Postal address: . . . . . .

Name of principal contractor: . . . . . .

Postal address: . . . . . .

Telephone number: . . . . . .

Name of construction manager:

Postal address: . . . . . .

Telephone number: . . . . . .

Name of construction health and safety manager: . . . . . .

Postal address: . . . . . .

Telephone number: . . . . . .

Name of health and safety officer: . . . . . .

Postal address: . . . . . .

Telephone number: . . . . . .

Contractors accountable to the principal contractor

Planned number: . . . . . .

Names of contractors appointed:

. . . . . .

I . . . . . (name). . . . . (postal address),. . . . . (telephone no) being the appointed health and safety agent hereby confirm that:

1) confirm that:

   a) the health and safety specification was included in the procurement documents issued to tenderers / contractor (delete that which does not apply);

   b) the principal contractor has been appointed in terms of a written contract:

   c) the principal contractor is registered and in good standing with the compensation fund / with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993) (delete that which does not apply);

   d) principal contractor's health and safety plan is approved for implementation;

   e) am appointed to:

      - ensure that during construction the principal contractor makes copies of the health and safety plan available on request to employees, inspectors or contractors,
      - take reasonable steps to ensure that each principal contractor's and each contractors' health and safety plan is implemented and maintained;
      - conduct periodic health and safety audits and document verification at intervals not exceeding one month and provide copies of an audit report to the principal contractor within 7 days of such audit;
      - stop any contractor executing a construction activity which is not in accordance with the health and safety specification and the principal contractor's health and safety plan;
      - ensure that the scope of work is amended to reflect additional health and safety information arising from a change to the design or construction work; and
      - ensure that the principal contractor keeps and maintains a health and safety file.

2) am reasonably satisfied that:

   a) the designers took into account the health and safety specification in their designs; and

   b) the principal contractor has made adequate provision for the cost of health and safety measures in his tender and has the necessary competencies and resources to carry out the construction works safely.

3) I confirm that.

Signed _____ Date _____

Name _____

Annexure D: Completion certificates

Certificate	Title	Service
D1	Means by which Regulation AZ.4 of the National Building Regulations has been satisfied In respect of the Permanent Works	Architectural design
D2	Civil engineering works	Civil engineering
D3	Electrical works	Electrical engineering
D4	Fire protection system	Fire safety
D5	Landscaping architectural works	Landscape architectural design
D6A	Energy usage in buildings	Mechanical engineering
	Mechanical works	
	Ventilation system	
D7A	Structural system subject to the National Building Regulations	Structural engineering
D7B	Structural system not subject to the National building regulations	
D8A	Fire installation	Wet services
D8B	Drainage installation / non-water borne sanitation disposal system / stormwater disposal system certificate	
DBC	Water installation	

Certificate D1

Means by which Regulation AZ.4 of the National Building Regulations has been satisfied in respect of the Permanent Works

Project title

Project number

Buildings and associated siteworks covered by certificate

Occupancy / Building classification(s) (see Regulation A20)

Part 1: General requirements

1			2	3
Applicability to application (tick column 2 or 3)			**Means of satisfying requirements of functional regulations** (tick relevant boxes in columns 4 or 5)	
Regulation	**yes**	**no**	**Deemed to satisfy provisions contained in relevant parts of SANS 10400**	**Regulation AZ4(1)(b)(ii)**
B: Structural Design			The structural system of the building: □ complies with the requirements of parts H, J, K, L, M or N of SANS 10400 or in the case of timber buildings with the provisions of SANS 10082; □ is the subject of a rational design or a rational assessment □ is the subject of an Agrément certificate; or The following competent persons were appointed: □ competent person (structures) to design and inspect the structures □ competent person (civil engineering) to design and inspect the services in dolomite land □ competent person (dolomite land) to categorise dolomite land	□
C: Dimensions			□ The dimensions of any room or space are in accordance with the detailed requirements of SANS 10400-C	□
D: Public safety			□ A change in level, the design of ramps and driveways, or access to swimming pools and swimming baths is in accordance with the detailed requirements of SANS 10400-D	□
F: Site operations			□ The protection against subterranean termites is in accordance with the detailed requirements of SANS 10400-F	□
H: Foundations			A geotechnical investigation was carried out	-
			The foundations for the building are in accordance with: □ the requirements of SANS 10400-B □ the detailed requirements of SANS 10400-H	□
			□ The foundations to the extension / addition to an existing building are the same as the existing which have performed satisfactorily	□
			A competent persons undertook responsibility for □ deep footings, soil rafts, compaction of in-situ soil or sub-surface drainage □ geotechnical solutions or soil improvement that were required	□
J: Floors			□ Floors in any laundry, kitchen, shower-room, bathroom or room containing a WC pan or urinal are in accordance with the detailed requirements of SANS 10400-J	□
			Suspended floors are in accordance with: □ the requirements of SANS 10400-B and SANS 10400-T □ the requirements of SANS 10082 □ the detailed requirements of SANS 10400-J	□
			Slabs supported on the ground are in accordance with: □ SANS 10400-B □ SANS 10400-H □ the detailed requirements of SANS 10400-J	□
K: Walls			The structural strength and stability of a wall is in accordance with: □ SANS 10400-B and SANS 10400-T □ the detailed requirements of SANS 10400-K	□
			The roof fixing is in accordance with: □ SANS 10400-B □ the detailed requirements of SANS 10400-K	□
			□ The water penetration through a wall is in accordance with the detailed requirements of SANS 10400-K	□

1			2	3
Regulation	**yes**	**no**	**Deemed to satisfy provisions contained in relevant parts of SANS 10400**	**Regulation AZ4(1)(b)(ii)**
L: Roofs			□ Roof coverings and waterproofing systems are in accordance with the detailed requirements of SANS 10400-L	□
			Flat roofs or related gutters are: □ in accordance with the detailed requirements of SANS 10400-L; or □ the subject of a rational design or rational assessment (or both)	□
			The roof assembly and any ceiling assembly, in addition to complying with the requirements of SANS 10400-C, are: □ in accordance with the requirements of the detailed requirements of SANS 10400-L and the roof assembly is supported on walls that comply with the requirements of SANS 10400-K □ SANS 10400-B and SANS 10400-L	□
			□ gutters and downpipes, if any, are sized in accordance with the requirements of SANS 10400-R	□
			The fire resistance and combustibility of the roof assembly or any ceiling assembly are in accordance with: □ the detailed requirements of SANS 10400-L □ SANS 10400-T	□
M: Stairways			Stairways are in accordance with □ SANS 10400-B and SANS 10400-T □ the detailed requirements of SANS 10400-M	□
			Walls, screens, railings or balustrades to such stairway are in accordance with the provisions of: □ SANS 10400-B and SANS 10400-T □ SANS 10400-K and SANS 10400-T.	□
N: Glazing			The type and fixing of glazing is in accordance with: □ SANS 10400-B □ the detailed requirements of SANS 10400-N	□
			□ The selection of the glazing is in accordance with the detailed requirements of SANS 10400-N	□
O: Lighting and ventilation			□ The lighting in a habitable room, bathroom, shower room and room containing a toilet pan complies with the requirements of SANS 10400-T and the detailed requirements of SANS 10400-O.	□
			The ventilation is in accordance with the requirements of SANS 0400-T and: □ is in accordance with the detailed provisions of SANS 10400-O □ is the subject of a rational design	□
P: Drainage			The design of the drainage system is □ in accordance with the detailed provisions of SANS 10400-P; □ the subject of a rational design or rational assessment □ the subject of an Agrément certificate	□
Q: Non-waterborne means of sanitary disposal			The means of sewage disposal where water borne sewerage disposal is not available: □ is in accordance with the detailed provisions of SANS 10400-Q; □ is the subject of a rational design or rational assessment □ is the subject of an Agrément certificate	□
R: Storm water disposal			The means for the control and disposal of stormwater is □ in accordance with the detailed provisions of SANS 10400-R □ is the subject of a rational design	□
			□ The means for the control and disposal of stormwater interconnected complexes is the subject of a rational design	□
S: People with disabilities			The means for providing facilities for people with disabilities is □ in accordance with the detailed requirements of SANS 10400-S □ is the subject of a rational design	□
T: Fire protection			The fire protection measures provided are: □ in accordance with the detailed requirements of SANS 10400-T □ the subject of a rational design or rational assessment	□
V: Space heating			□ The provision of space heating is in accordance with the detailed requirements of SANS 10400-V	□
W: Fire installation			The fire installations comply with the detailed requirements of SANS 10400-W	□
			The supply of water is: □ in accordance with the detailed requirements of SANS 10400-W □ the subject of a rational design	□

1			2	3
Regulation	**yes**	**no**	**Deemed to satisfy provisions contained in relevant parts of SANS 10400**	**Regulation AZ4(1)(b)(ii)**
XA: Energy Usage			The building: □ has an orientation, shading, services and building envelope in accordance with SANS 10400 Part XA □ is the subject of a rational design which demonstrates acceptable energy usage □ is the subject of an assessment which demonstrates acceptable theoretical energy usage performance	□

Part 2: Engineering appointments

1		2	3	4
Applicability		**Duties**	**Name of registered engineering professional**	**Professional registration number**
Yes	**No**			
		Design and inspection of services in dolomite land in terms of SANS 10400-B		
		Specify and inspect, as relevant, deep footings, soil rafts, compaction of in-situ soil or sub-surface drains in terms of SANS 10400-H		
		Design and inspect slabs and fills in terms of SANS 10400-J		
		Rational design of control and disposal of stormwater in terms of SANS 10400-R or **Reg R(3)**		
		Rational design of control and disposal of stormwater in interconnected complexes in terms of SANS 10400-R.		
		Rational design or rational assessment of fire protection system in terms of SANS 10400-T or **Reg T1(2)**		
		Design and inspect geotechnical solutions or soil improvement in terms of SANS 10400-H		
		Rational design of ventilation system in terms of SANS 10400-O and **Reg O4**		
		Rational design or rational assessment of drainage system in terms of SANS 10400-P or **Reg P2(2)**		
		Rational design or rational assessment of sewage disposal in terms of SANS 10400-Q or **Reg Q3**		
		Rational design or rational assessment of structural system in terms of SANS 10400-B taking account of parts H, J, K, L, M, N of SANS 10400 or **Regs A(1)(3), A23(4)**		
		Rational design of roof in terms of parts B and L SANS 10400 where the foundations, floors and walls are in accordance with the rules provided in parts H, J and K of SANS 10400.		
		Rational design of supply of water to fire installations in terms of SANS 10400-W or **Reg W4**.		
		Rational design or assessment taking account of the provisions of SANS 10400-XA which demonstrates compliance with the requirements of **Reg XA1**		
		Other (describe)		

Part 3: Fire protection – competent persons

Note: These appointments are in addition to those for Rational design or rational assessment of fire protection system in terms of SANS 10400-T or Reg T1(2)

Applicability		Clause	Responsibility	Name of registered engineering professional	Professional registration number
Yes	No				
		4.2.7, 4.4, 4.8.2, 4.16.4, 4.26.1, 4.36.1 and 4.48.6	Design, install and maintain automatic sprinkler system in accordance with the requirements of SANS 10287 (2000)		
		4.12.2.4	Design and install a lightening protection system in accordance with the requirements of SANS 10313:2008 and SANS 62305-3:2007		
		4.25	Design, install, test and maintain the pressurization of emergency routes and components in accordance with the requirements of EN 12101.		
		4.31.1, 4.31.2, 4.31.3, 4.43.2 4.48.3 and 4.48.6	Design, install and maintain a fire detection and alarm system in accordance with the requirements of SANS 10139		
		4.36.1	Design, install and maintain a fixed automatic fire-fighting system that is in accordance with the requirements of SANS 306-4 or SANS 14520-1		
		4.37.3	Install, maintain and service portable fire extinguishers in accordance with the requirements of SANS 1475-1 and SANS 10105-1.		
		4.52.4	Direct the construction and installation of a tank in accordance with the requirements of SANS 10089-3.		
		4.53.1.1	The design, erection and protection of liquid petroleum gas storage in accordance with the requirements of SANS 10087-3.		
		4.52.4 and 4.53.1.3	Direct the installation of diesel fuel installation in accordance with the requirements of SANS 10131.		
		4.55.1	Perform a rational assessment of building materials and components to determine their fire resistance.		

I hereby certify that all the above information is to the best of my knowledge and belief, true and correct and the architectural works is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I furthermore declare the building to be safe for use in terms of Regulation 6(1)(j) of the Construction Regulations 2014

Signature of professional responsible for the design of the building **Date:**

Name: **SACAP registration number**

Certificate D2:

Civil engineering works

Project title

Project number

Works covered by certificate ***(describe)***

I hereby certify that the works for which I am responsible has, to the best of my knowledge been designed and constructed in accordance with all statutory requirements and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I confirm that the design and construction of such work were in accordance with the following:

Design standard applied	
Critical design parameters	
Basic engineering properties of materials / type of materials	
Construction standards applied	
Tests (state type, frequency, range of results and comment on implications of non-compliances)	
Critical assumptions, if any	

I furthermore declare the works to be safe for use

Signature of professional responsible for the design of the works **Date:** . . . . . .

Name . . . . . .

Professional registration number: . . . . . **Registration council: ECSA**
(Insert number)

Certificate D3:

Electrical works

Project title

Project number

Works covered by certificate *(describe)*

I hereby certify that the works for which I am responsible has, to the best of my knowledge been designed and constructed / erected / installed in accordance with all statutory requirements and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I furthermore declare the works to be safe for use

Signature of professional responsible for the design of the works **Date:** . . . . . .

Name: . . . . . .

Professional registration number: . . . . . **Registration council: ECSA**
(Insert number)

Certificate D4

Fire Protection System

(Provide if a rational design is required in terms of Regulation T1(2) or Part T of the National Building Regulations is satisfied by means of a rational design or rational assessment i.e. not solely in terms of the rules contained in SANS 10400-T)

Project title

Project number

Buildings covered by certificate *(describe)*

Occupancy / Building classification(s) (see Regulation A20)

I hereby certify as required by Section 14(2)(a) of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977) that the fire protection system for which I am responsible has, to the best of my knowledge been designed and constructed / erected / installed in accordance with the requirements of the National Building Regulations and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

.

My rational design / rational assessment is based on the following *(outline)*:

Attach the report developed in terms of B.2.5 of Annex B (Rational Designs) if applicable

I confirm that the design of the following elements of the fire protection system were carried out under my direction by the following other competent persons in terms of Regulation A19(8):

(Complete if parts of the system were designed by others)

Element	Name	Professional registration no

I furthermore declare the system to be safe for use in terms of Regulation 6(1)(j) of the Construction Regulations 2014

I furthermore declare the system to be safe for use

Signature of Approved Competent Person responsible for the fire protection system (Regulation A19(7) and A19(8)

Date .....

Name .....

Professional registration number: ..... **Registration council: ECSA**
(Insert number)

Certificate D5:

Landscape architectural works

Project title

Project number

Works covered by certificate ***(describe)***

I hereby certify that the works for which I am responsible has, to the best of my knowledge been designed and constructed in accordance with all statutory requirements and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I furthermore declare the works to be safe for use

Signature of professional responsible for the design of the landscape architectural works **Date:** . . . . . .

Name . . . . . .

Professional registration number: . . . . . **Registration council: SACLAP**
(Insert number)

Certificate D6A

Energy usage in buildings

(Provide if Regulation XA1 is satisfied by preparing a rational design which demonstrates acceptable energy usage or performing an assessment which demonstrates acceptable theoretical energy usage performance)

Project title

Project number

Buildings covered by certificate *(describe)*

I hereby certify that I have in accordance with the requirements of Regulation XA3 the National Building Regulations to (tick the appropriate box):

□ prepared a rational design which demonstrates acceptable energy usage

□ performed an assessment which demonstrates acceptable theoretical energy usage performance

My rational design / assessment is based on the following methodology and key assumptions:

I hereby further certify as required by Regulation A19(12)(c) of the National Building Regulations that the energy usage measures for the above project for which I am responsible has, to the best of my knowledge, been designed and constructed / erected / installed in accordance with the requirements of the National Building Regulations and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

Signature of Approved Competent Person responsible for ensuring that Energy Usage Regulations are satisfied **Date** .....

Name .....

Professional registration number: ..... **Registration council:** .....
(Insert number)

Certificate D6B

Mechanical works

Project title

Project number

Works covered by certificate *(describe)*

I hereby certify that the works for which I am responsible has, to the best of my knowledge been designed and constructed / erected / installed in accordance with all statutory requirements and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I confirm that the design and construction of such work were in accordance with the following:

Design standard applied	
Critical design parameters	
Basic engineering properties of materials / type of materials	
Construction standards applied	
Tests (state type, frequency, range of results and comment on implications of non-compliances)	
Critical assumptions, if any	

I furthermore declare the works to be safe for use

Signature of professional responsible for the design of the works **Date:** . . . . . .

Name . . . . . .

Professional registration number: . . . . . **Registration council: ECSA**
(Insert number)

Certificate D6C

Artificial ventilation system

Project title

Project number

Buildings covered by certificate *(describe)*

Occupancy / Building classification(s) **(see Regulation A20)**

I hereby certify that the artificial ventilation system for which I am responsible has, to the best of my knowledge been designed and installed in accordance with the requirements of the National Building Regulations and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

My rational design / rational assessment is based on the following *(outline if not in accordance with the requirements of the relevant part of SANS 10400)*:

I confirm that the design of the following elements of the artificial ventilation system were carried out under my direction by the following other competent persons in terms of Regulation A19(8):

(Complete if parts of the system were designed by others)

Element	Name	Professional registration no

I furthermore declare the system to be safe for use in terms of Regulation 6(1)(j) of the Construction Regulations 2014

Signature of Approved Competent Person responsible for the fire protection system (Regulation A19(7) and A19(8)

Date .....

Name .....

Professional registration number: ..... **Registration council: ECSA**
(Insert number)

Certificate D7A

Structural system subject to the National Building Regulations

(Provide if a rational design or rational assessment of the structure is required in terms of Regulations A(1)(3), A23(4) or the structural aspects of Parts J, H, K, L , M or N of the National Building Regulations is satisfied by is satisfied by means of a rational design or rational assessment i.e. not solely in terms of the rules contained in Parts J, H, K, L or M of SANS 10400)

Project title

Project number

Buildings and associated siteworks covered by certificate *(describe)*

Occupancy / Building classification(s) (see Regulation A20)

I hereby certify as required by Section 14(2)(a) of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977) that the structural system for which I am responsible has, to the best of my knowledge, been designed and constructed / erected / installed satisfies the requirements of the National Building Regulations and is in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I confirm the following:

1 Key geotechnical parameters used in the design

(State)

2 Design and construction of structural elements

(Delete elements which do not apply, provide separate tabulations for each element)

Roof / Walls / Floors / Staircases / Foundations / Facades

Design standard applied	
Loads (outline)	
Basic engineering properties of structural materials	
Construction standards applied	
Tests (state type, frequency, range of results and comment on implications of non-compliances)	
Critical assumptions, if any	

3 Design carried out by other competent persons in terms of Regulation A19(8)

I confirm that the design of the following elements of the structural system were carried out under my direction by the following other competent persons in terms of Regulation A19(8):

(Complete if parts of the system were designed by others)

Element	Name	Professional registration no

I furthermore declare the structure to be safe for use in terms of Regulation 6(1)(j) of the Construction Regulations 2014

Signature of Approved Competent Person responsible for the structural system in its entirety (Regulation A19(7) and A19(8)

Date .....

Name .....

Professional registration number: ..... Registration council: ECSA
(Insert number)

Certificate D7B

Structural system not subject to the National Building Regulations

(delete that which does not apply and complete where such works are not covered by National Building Regulations)

Project title

Project number

Works covered by certificate *(describe)*

I hereby certify that the works for which I am responsible has, to the best of my knowledge been designed and constructed / erected / installed in accordance with all statutory requirements and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

I confirm that the design and construction of such work were in accordance with the following:

Design standard applied	
Critical design parameters	
Basic engineering properties of materials / type of materials	
Construction standards applied	
Tests (state type, frequency, range of results and comment on implications of non-compliances)	
Critical assumptions, if any	

I furthermore declare the structure to be safe for use in terms of Regulation 6(1)(j) of the Construction Regulations 2014

Signature of professional responsible for the design of the structure **Date:** .....

Name .....

Professional registration number: ..... **Registration council: ECSA**
(Insert number)

Certificate D8A

Fire Installation Certificate

(Provide if a rational design is required in terms of Regulation W4 or if Part W of the National Building Regulations is satisfied by means of a rational design or rational assessment i.e. not solely in terms of the rules contained in SANS 10400-W)

Project title

Project number

Buildings covered by certificate *(describe)*

Occupancy / Building classification(s) (see Regulation A20)

I hereby certify as required by Section 14(2)(a) of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977) that the fire installation system for which I am responsible has, to the best of my knowledge been designed and constructed / erected / installed in accordance with the requirements of the National Building Regulations and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

My rational design / rational assessment is based on the following *(outline if not in accordance with the requirements of SANS 10252-1, and if relevant, SANS 10287)*:

I confirm that the design of the following elements of the fire installation system were carried out under my direction by the following other competent persons in terms of Regulation A19(8):

(Complete if parts of the system were designed by others)

Element	Name	Professional registration no

I furthermore declare the system to be safe for use

Signature of Approved Competent Person responsible for the fire protection system (Regulation A19(7) and A19(8)

Date .....

Name .....

Professional registration number: ..... **Registration council: ECSA**
(Insert number)

Certificate D8B

Drainage installation / non-water borne sanitation disposal system / stormwater disposal system *(delete that which does not apply)*

(Provide where regulations O(4), P(2), Q(3) or R(3) require an approved competent person to provide a rational design or where the artificial ventilation, non-water borne sanitation or stormwater disposal system of drainage installation is satisfied by means of a rational design or rational assessment i.e. not solely in terms of the rules contained in Parts O, Q, R or P, respectively.)

Project title

Project number

Buildings covered by certificate *(describe)*

Occupancy / Building classification(s) (see Regulation A20)

I hereby certify that the artificial ventilation system / drainage installation / non-water borne sanitation system / stormwater disposal system (delete that which does not apply) for which I am responsible has, to the best of my knowledge been designed and constructed / erected / installed in accordance with the requirements of the National Building Regulations and is generally in accordance with the production information that was issued to the contractor to enable construction or the production of manufacturing and installation information for construction.

My rational design / rational assessment is based on the following *(outline if not in accordance with the requirements of the relevant part of SANS 10400)*:

I confirm that the design of the following elements of the artificial ventilation system / drainage installation / non-water borne sanitation system / stormwater disposal system *(delete that which does not apply)* were carried out under my direction by the following other competent persons in terms of Regulation A19(8):

(Complete if parts of the system were designed by others)

Element	Name	Professional registration no

I furthermore declare the installation to be safe for use in terms of Regulation 6(1)(j) of the Construction Regulations 2014

Signature of Approved Competent Person responsible for the fire protection system (Regulation A19(7) and A19(8)

Date: . . . . . .

Name . . . . . .

Professional registration number: . . . . . **Registration council: ECSA**
(Insert number)

Annexure D8C

Certificate for water installation in buildings

Project title

Project number

Buildings covered by certificate *(describe)*

Occupancy / Building classification(s) (see Regulation A20)

I hereby certify that the water installation to the best of my knowledge satisfies the requirements of Regulation 14 of the Water Services Act of 1997 (Act 108 of 1997) in that the water installation complies with the provisions of SANS 10252, *Water Supply and Drainage for Buildings,* and, where relevant, SANS 10254, *The installation of fixed electric Storage Water Heating Systems.*

I furthermore declare the installation to be safe for use

Signature **Date** . . . . . .

Name . . . . . .

Professional registration number: . . . . . **Registration council**: . . . . . .
(Insert number and council if applicable)

Annexure E: Typical activities associated with the development of end of stage deliverables

E.1 General

E1.1 Projects involving the construction, rehabilitation, refurbishment or alteration of infrastructure are delivered through a number of phases or work stages which may be broadly described as planning at a portfolio level, planning at a project level, detailed design, site and close out. These project life cycle stages are structured in such a manner that the viability of a project may be tested and monitored and controlled as it progresses. They are crafted around the work breakdown structure required to plan, design and implement such projects and as such present the work flow to deliver projects and to make decisions as to whether or not to proceed from one stage to the next.

E1.2 The National Treasury Framework for Infrastructure Delivery and Procurement Management provides a work breakdown structure for infrastructure planning, packaging and delivery. Figue E1 shows the various control points and end of stage deliverables and gates established in the control framework for the planning, design and execution of infrastructure projects. This control framework includes portfolio planning, programme planning, project stages as well as maintenance and operations. The project stages consist of initiation stage, concept design (or feasibility), detailed design, works and close out processes for the delivery of infrastructure but excludes procurement and management processes. It facilitates the tracking of projects and the monitoring of performance which enables risks to be proactively managed and is capable of being audited.

E1.3 The control framework shown in Figure E1 deals with the generic work flow associated with the planning, design and execution of infrastructure projects i.e. the project life cycle for the delivery of infrastructure projects. It generates information which informs decisions at particular points in the process. It is not aligned to any particular funding or procurement procedure. The framework is independent of the procurement strategy (i.e. design by employer, design and construct or develop and construct) that is pursued to appoint engineering and construction works contractors.

E1.4 Prefeasibility and feasibility reports are required on major capital projects and on non-building or non-processed based, somewhat repetitive or relatively standardised project where the risks of failing to achieve time, cost and quality objectives are relatively low.

E.2 Stages and gates

E2.1 The level of detail contained in a deliverable associated with the end of each stage needs to be:

a) sufficient to enable informed decisions to be made to proceed to the next stage; and

b) such that it can be used to form the basis of the scope of work for taking the package (work which is grouped together for delivery under a single contract or an order issued in terms of a framework agreement) forward in terms of the selected contracting strategy.

E2.2 The level of information increases with each successive stage. Different types of infrastructure, contracting strategies as well as the scale and location of projects present different risks. As a result, the level of detail at each stage necessary to make an informed decision at a gate is a matter of professional judgement and varies between different types of projects and contracting strategies.

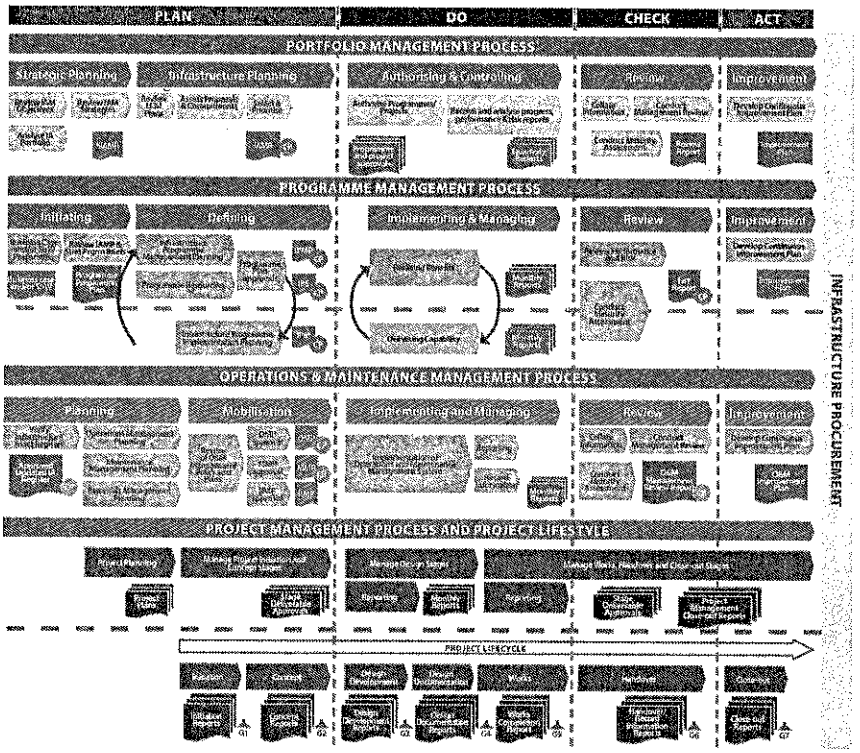


Figure E1 National Treasury's control framework for the planning, design and execution of infrastructure projects

The portfolio and programme management processes as defined in FIPDM are the responsibility of the client and in some cases, the implementing agent. It is less likely that the professional service providers appointed under this framework will conduct work in this regard. However, where required, the service providers will perfrom the works as indicted in Figure E1. Reference is also made to National Treasury Note 3 of 2019 -20 Framework for Infrastructure Delivery and Procurement Management for more details.

Accordingly, the professional service providers will generally be involved in project processes and operations and maintenance as required.

E2.3 Stage 1: Project initiation

The following activities, as necessary, need to be undertaken during stage 1:

a) confirm the scope of the package and identify any constraints, including those relating to occupational health and safety;

b) establish the project criteria, including the performance and reliability requirements, design life, service life of components, function, maintenance and replacement requirements, mix of uses, scale, location, quality, value, time, safety, health, environment and sustainability;

c) identify procedures, organisational structure, key constraints, statutory permissions (e.g. environmental, heritage, social, planning, building control), and utility approvals, policies (e.g. environmental, developmental, social, maintenance or facilities management) and strategies to take the package forward;

d) identify risks that need to be mitigated;

e) identify interfaces between packages as necessary; and

f) establish the control budget for the package, ownership costs and schedule for the package or series of packages.

E.2.3 Stage 2: Concept and viability

The deliverable for stage 2 (concept and viability) which requires acceptance at gate 2 is a concept report.

The following activities, as necessary, need to be undertaken during stage 2 (concept and viability) to develop a concept report:

a) document the initial design criteria and design options or the methods and procedures required to maintain the condition of infrastructure for the package;

b) establish the detailed brief, scope, scale, form and cost plan for the package;

c) develop an indicative schedule for documentation and construction or maintenance services associated with the package;

d) develop a site development plan or other suitable schematic layouts of the works;

e) identify the statutory permissions, funding approvals or utility approvals required to proceed with the works associated with the package;

f) develop a baseline risk assessment for the package, and a health and safety plan which is required in terms of the requirements of the Construction Regulations issued in terms of the Occupational Health and Safety Act;

g) develop a risk report linked to the need for further surveys, tests, other investigations and consents and approvals, if any, during subsequent stages and identified health, safety and environmental risk;

h) develop an operations and maintenance support plan which establishes the organisational structure required for the operation and maintenance of the works resulting from the package or series of packages over its service life, and the office, stores, furniture, equipment, Information and Communications Technology (ICT), engineering infrastructure and staff training requirements;

i) confirm the financial sustainability of the project; and

j) establish the feasibility of satisfying the strategic brief for the package or series of packages within the control budget established during stage 3 and, if not, motivate a revised control budget.

k) The Client will conduct a gateway review on all applicable projects at end of Stage 2 on all the major infrastructure projects.

NOTE 1 The Concept and viability stage is the last stage of the planning activities. It brings to a close the information required to make informed decisions concerning the implementation of the project. This stage as such needs to resolve any outstanding project related risks and gather sufficient information to enable such decisions to be made.

NOTE 2 Site studies can include site evaluations, topographical surveys, surveys of existing structures, geotechnical investigations and environmental, social or heritage assessments.

NOTE 3 Resolution of details that do not impact upon the key elements are generally left to stage 3.

NOTE 4 Stage 4 is where sufficient design concepts or solutions are developed for the client to establish the feasibility of the works associated with the package or project or to select a particular conceptual approach to pursue.

NOTE 5 The design or solution at the end of stage 2 is "frozen". The concept report as such contains as relevant, the preliminary analysis, key assumptions, the evaluation of alternatives, preliminary sizes of primary or key elements, a description or outline of secondary elements, the preliminary review of the utility supply capacity, indicative specifications or schedules of finishes and preliminary layout drawings.

The following activities should, where required, be undertaken to produce the operations and maintenance support plan:

a) **Client:** identify additional organisational structure required for operation and maintenance over life span, and office, stores, furniture, equipment, information technology and staff training requirements to run operation and maintenance facilities as well as engineering infrastructure

b) **Professional:** 1) establish logistic requirements in respect of facilities and/or engineering infrastructure;

2) specify requirements, if any, for the contractor to provide a servicing and maintenance plan for all facilities and engineering infrastructure

NOTE 1 An operations and maintenance support plan is a plan which establishes the organisational structure required for operation and maintenance of the asset resulting from the package over life span, and office, stores, furniture, equipment, ICT and staff training requirements to run operation and maintenance facilities as well as engineering infrastructure

NOTE 2 Support requirements typically relate:

a) in engineering infrastructure to the strategic management of the operation and maintenance of water supply, sanitation, telecommunication, electricity supply, electronic, transportation, and stormwater drainage systems, taking full cognizance of their design or forecasted behaviour under specific operating conditions in a manner that does not compromise their intended functioning or the health and safety of workers and users or harm property or the environment
b) in buildings and related site works to facilities management i.e., an interdisciplinary field primarily devoted to the day to day operations, maintenance and care of buildings e.g. the care of air conditioning, electric power, plumbing and lighting systems, cleaning, decoration, grounds keeping and security.

E.2.4 Detailed design stage

The deliverable for stage 3 (design development) which requires acceptance at gate 3 is a design development report.

The following activities, as necessary, need to be undertaken during stage 3 (design development) to develop the design development report:

a) develop in detail the accepted concept to finalise the design and definition criteria;

b) establish the detailed form, character, function and costings;

c) define all components in terms of overall size, typical detail, performance and outline specification;

d) describe how infrastructure, or elements or components thereof, are to function, how they are to be safely constructed, how they are to be maintained and how they are to be commissioned; and

e) confirm that the package or series of packages can be completed within the control budget or propose a revision to the control budget.

NOTE 1 Detailed design includes the selection of materials and components. At this stage there will frequently be an iterative process of proposing a component, checking its predicted performance against the brief, and amending selections if required.

NOTE 2 The design development report translates the concept report into a document which paints a picture of what is to be delivered in terms of the package. The report needs as such to describe how structures, services or buildings and related site works, systems, subsystems, assemblies and components are to function, how they are to be safely constructed, how they are to be maintained and, if relevant, how they are to be commissioned. (The design development report relates to what is to be delivered. Record information relates to what has been delivered. Accordingly, the record information is an updated version of the design development report).

NOTE 3 Outline specifications should be in sufficient detail to enable a view to be taken on the operation and maintenance implications of the design and the compatibility with existing plant and equipment. Reference to applicable specifications and key data associated therewith may be sufficient e.g. reference to applicable SANS 2001 *Construction standards* and critical specification data.

NOTE 4 As part of service life planning, components should be assessed for compliance with performance requirements. Performance will deteriorate at a rate depending on the local environment, including the reactions at interfaces between materials and/or components, the design of the works, the component and installation detailing, the materials, the skill and quality of site work, maintenance and usage.

NOTE 5 The design should reflect the constraints of the budget for the overall project. To meet the brief, adjustment of either the budget or the service life requirements may be necessary. Where a specification is adjusted to meet cost constraints, the maintenance and operation implications should also be considered.

NOTE 6 Commissioning is often misinterpreted to focus solely on testing during the end of the construction phase. Commissioning is actually a collaborative process for planning, delivering, and operating works that function as intended. Commissioning is a holistic process that spans from pre-design planning to post-construction operation and can be thought of as a checks-and-balances system.

E2.5 Stage 4: Design documentation

The deliverables for stage 4 (design documentation) are the production information which is issued to contractors and the manufacturing, fabrication and construction information which is produced by the contractor in response to the production information. The activities during this stage revolve around the development of this information.

NOTE 1 The scope of work for a package specifies not only the works that are left behind but also the constraints in performing the works. The production information focusses on what is left behind.

NOTE 2 Quality in contracts is frequently considered to be "conformance to stated requirements." Defects on the other hand are parts of the works which are not in accordance with stated requirements. This necessitates that requirements are objectively and comprehensively expressed in the scope of work in such a manner that compliance is capable of objective assessment i.e. the contractor can verify compliance without reference to the designer or representative of the employer.

NOTE 3 Those responsible for drafting or providing inputs to the scope of work need to:

a) consider the inclusion of requirements for a quality management system or a quality management plan;

b) state, as necessary, the nature of the tests and inspections that are to be conducted, the timing of specified tests/ inspections, where and when the tests are to be performed, who is responsible for performing the tests, requirements for witnessing of tests, who is responsible for providing materials, facilities and samples for tests/inspections, the objectives of the tests/inspections, the testing procedures to be applied and the standards to be satisfied; and

c) express quality standards in such a manner that compliance is capable of being objectively assessed.

NOTE 4 This stage includes selecting appropriate component specifications and installation details, and may extend into selecting the optimum specifications, using techniques such as value engineering or life cycle costing.

NOTE 5 Commissioning procedures need to be scheduled in relation to other services or construction activities. Since the commissioning process is dependent on the progress of systems, structures and building fabric, the scheduling of commissioning activities needs to be carefully planned in relation to those activities. Accordingly, the interdependency problems need to be identified and considered as early in the project as possible as they need to be included in the designer's specification.

NOTE 6 Standard forms of contract contain generic requirements which facilitate the acceptance of manufacture, fabrication and construction information. Contract specific requirements should be included in the scope of work.

E.2.6 Stage 5: Works stage

The following activities, as necessary, need to be undertaken during stage 5 (works) in relation to the works:

a) provide temporary works;

b) provide permanent works in accordance with the contract;

c) manage risks associated with health, safety and the environment on the site;

d) confirm that design intent is met; and

e) correct notified defects which prevented the client or end user from using the works and others from doing their work

NOTE 1 Contract data in a contract identifies the applicable conditions of contract which contain terms that collectively describe the rights and obligations of contracting parties and the agreed procedures for the administration of their contract.

NOTE 2 High level procedures relating to the completion and correction of defects are contained in the conditions of contract. A well formulated contract should contain, where relevant, comprehensive commissioning requirements in the scope of work.

E.2.7 Stage 6: Handover stage

The following activities, as necessary, need to be undertaken during stage 6 (handover):

a) finalise and assemble record information which accurately reflects the infrastructure that is acquired, rehabilitated, refurbished or maintained; and

b) hand over the works and record information to the user and, if necessary, train end user staff in the operation of the works.

NOTE 1 There is a difference between achieving completion of the works in accordance with the provisions of the contract and the handing over of the works to the owner, end user or those responsible for the operation and maintenance of the works. A well formulated contract should contain, where relevant, testing and commissioning requirements ahead of completion to facilitate a smooth hand over.

NOTE 2 A handover needs to be planned. Prior warning of the expected handover dates needs to be given to those who are going to use, operate or maintain works. The successful completion of packages which incorporate plant (machinery and heavy equipment installed for the operation of a servicer) is usually dependent on there being a properly conducted commissioning procedure prior to or integrated with the hand over.

NOTE 3 The primary objective of the record information is to provide those tasked with the operation and maintenance of a building and associated site works with the necessary information to:

a) understand how the designers intended the works, systems, subsystems, assemblies and components to function;

b) effectively operate, care for and maintain the works, systems, subsystems, assemblies and components to function;

c) check, test or replace systems, subsystems, assemblies or components to ensure the satisfactory performance of works, systems, subsystems, assemblies and components over time;

d) develop maintenance plans;

e) determine stock levels for components and assemblies that need to be regularly replaced; and
f) budget for the operation and maintenance of the works, systems, subsystems and components over time

The secondary objective of the record information is to provide information pertaining to the planning and design of a works to inform refurbishments, alterations, modifications, renovations and additions that may be required from time to time.

E.9 Stage 7: Close out stage

The following activities, as necessary, need to be undertaken during stage 7 (close out) in relation to the works:

a) correct all defects that are detected during the defects liability period;

b) complete the contract by finalising all outstanding contractual obligations including the finalisation and payment of amounts due after the expiry of the defects correction period

c) evaluate package outcomes; and

d) compile a completion report for the package outlining what was achieved in at least the following:

   1) the performance parameters outlined in section 12 of the Standard for Infrastructure Procurement and Delivery Management;

   2) unit costs of completed work or major components thereof; and

   3) key performance indicators relating to developmental objectives

NOTE The standard forms of contract that form the basis of the contract between the client and a contractor establish requirements for bringing a contract to conclusion.

Annexure 3: Framework for the determination of professional fees for consulting services

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

Framework for the determination of professional fees associated with the delivery of a package

March 2023

Issued by:

Department of Public Works, Roads and Infrastructure

Framework for the determination of professional fees for the delivery of a package

Contents

Introduction

Methods of payment for professional services

Consultants providing standard professional services associated with building or engineering works can be paid for their services on the basis of one or more of the following:

- **Priced contract with activity schedule:** lump sums for completed activities or tasks;
- **Time based contract:** time properly spent on the work multiplied by an agreed staff rate;
- **Target contract**: time properly spent on the work multiplied by an agreed staff rate plus the difference between an agreed lump sum price (target) and the total time charge at the completion of the service; or
- **Percentage fee contract:** a percentage of the construction cost based on the budget for the works or the value of the contract at the time that the contract with the contractor is concluded or upon the value of the contract upon completion.

Expenses such as printing, modeling, travelling and accommodation costs may either be included in the time charges, lump sums or fee percentages or paid for separately as an expense.

NOTE 1 The National Treasury Framework for Infrastructure Delivery and Procurement Management permits the use of the following standard forms of contract:

Standard forms of contract	**Intended usage**	**Pricing strategies provided for**
CIDB Standard Professional Service Contract	Professional services	No fixed pricing strategy. Requires that pricing data be formulated i.e. data that establishes the criteria and assumptions that were taken into account when developing the Contract Price and the record of the components that make up the Contract Price
NEC3 Professional Services Contract (PSC)	Professional services, such as engineering, design or consultancy advice.	The following Main Options are provided for A: Priced contract with Activity Schedule C: Target contract E: Time based contract G: Term contract (Time based and lump sum prices)
NEC3 Professional Services Short Contract (PSSC)	Professional services which do not require sophisticated management techniques, comprise straightforward work and impose only low risks on both the client and consultant	Priced contract with Price List

NOTE 2: The NEC3 Professional Service Contract does not make provision for a percentage fee contract. The NEC3 Guidance Notes and Flow Charts for this standard form of contract states the following in this regard:

> *The ad valorem or percentage fee type of contract has not been included as an option. Under this arrangement, payments to the Consultant are an agreed percentage of the works construction cost. This implies that the cost of the Consultant's services is proportional to the cost of constructing the works. Its merits were carefully considered, but rejected for the following reasons.*
>
> - *The Consultant has no incentive to produce an economical design or other service.*
> - *The cost of construction is largely a function of the market and bears no relation to the cost of professional services.*
> - *The final cost of construction (and therefore the final fee) is not established until after construction is complete, whilst most professional costs are expended much earlier and even before construction starts.*
> - *The effect of variations to the Scope on the payments due to the Consultant are difficult to assess.*

NOTE 3: The NEC3 Professional Service Contract makes provision for the following pricing options:

Main Option	Definition		Typical usage
	Prices	**Price for Services Provided to Date**	
Option A Priced contract with activity schedule	The lump sum prices for each of the activities on the Activity Schedule	The total of the Prices for the activities which have been completed	Option A is normally used when the scope of services is well known and capable of being priced with a high degree of accuracy. Once the Consultant has priced the service described he carries the full risk for doing the work for that price.
Option C Target contract*	The lump sum prices for each of the activities on the Activity Schedule	The Time Charge for the work which has been completed	Option C is normally used when the Employer wishes to incentivise the Consultant to perform better during the life of the contract by receiving a share of the savings if he does the work for less than the agreed sum (the target). Equally if the payments to the Consultant exceed the original agreed sum he pays the Employer towards the cost overrun. This type of contract is generally used when the original price (the target) can be determined with a fairly good degree of certainty and the parties are prepared to work closely together to better the target.
Option E Time based contract	The Time Charge	The Time Charge for the work which has been completed	Option E is normally used when the scope of work is not well known at time of award and therefore cannot be priced accurately, or is likely to change considerably during the life of the contract. The Consultant is paid for the time his staff spends properly on the services, plus expenses itemised in the contract. The parties are required to continuously forecast the final outcome to avoid end of contract surprises, but in effect the Employer carries most of the risk of the Consultant's productivity and this form of contract needs to be well managed by the Employer.
Option G Term contract*	The Time Charge for items described as time based on the Task Schedule and. the lump sum price in the Task Schedule for each other item	For each Task, the total of the Time Charge for work which has been completed on time based items on the Task Schedule and a proportion of the lump sum price for each other item on the Task Schedule which is the proportion of work completed on that item.	Option G is a term contract in which various items of work are priced or stated to be on a time basis. Thus the risk of being able to perform the instructed Tasks at the agreed prices or staff rates is largely borne by the Consultant, whilst the Employer retains control over the individual Tasks to be carried out.

NOTE 4: The amount due in terms of the NEC3 Professional Service Contract and the NEC3 Professional Services Short Contract also includes the expenses incurred by the consultant in providing the services. The items of expenses are defined in the Contract Data. Only expenses stated in the Contract Data are payable in addition to the price for services provided to date in all payment options.

NOTE 5: The percentage of the construction costs can be used to estimate lump sum prices, based either on the budget for the works or the agreed amount for the construction of the works when the instruction to proceed with construction is issued.

Staff rates

There are three main drivers underpinning staff rates, namely expenses, billable hours and profit. Staff rates vary considerably depending upon factors such as location, experience, the supply of skills, overhead structures and profit expectations. The expenses of a built environment consulting company which undertakes all professional work with its own staff typically comprises:

a) the cost of employment of fee earning staff (i.e. professional and technical staff);

b) the cost of employment of non-fee earning staff (i.e. administrative staff); and

c) company overheads which may include:

- telephones, cell phones and internet connectivity;

- rental of premises including water, electricity and rates;
- transport not directly covered by projects;
- paper, stationary and consumables;
- audit, bank charges, interest, insurance;
- marketing;
- office equipment;
- training and development;
- project direct expenses not recoverable;
- head office expenses; and
- insurances.

Billable hours relates to staff utilisation which can vary considerably between different companies. A staff member can typically only work for 1760 hours per annum if the number of days in a year after weekends and public holidays and allowances for leave and sick leave are taken into account. However staff members cannot be fully employed for all these hours as time needs to be allowed for non-productive activities relating to staff mentoring and training, continuing professional development, management of the practice, marketing and promotion, capacity building, etc. The staff utilization rate usually reduces with increasing seniority in a practice and is also dependent upon the continuity of the work load.

The staff rates may include unrecoverable time e.g. all or some of the time expended in travelling to and from a site, meetings or any other activity associated with the provision of the service. In such cases, the rates need to be adjusted to accommodate unrecoverable time spent in connection with a project.

Example:

If the total cost of employment is R 400 000 per annum and the cents per R 100 or part thereof of total employment is 16 c, the hourly staff rate is 16 / 100 /100 x 400 000 = R 640 per hour.

If on the other hand, the multiplier is 2.815 times the total cost of employment and a staff member on average works 1760 hours in a year, then the hourly staff rate = 2.815 x 400 000 / 1760 = R 640 per hour

Estimating the quantum of professional fees

The total professional fee for an engineering and construction project can be estimated either on the basis of:

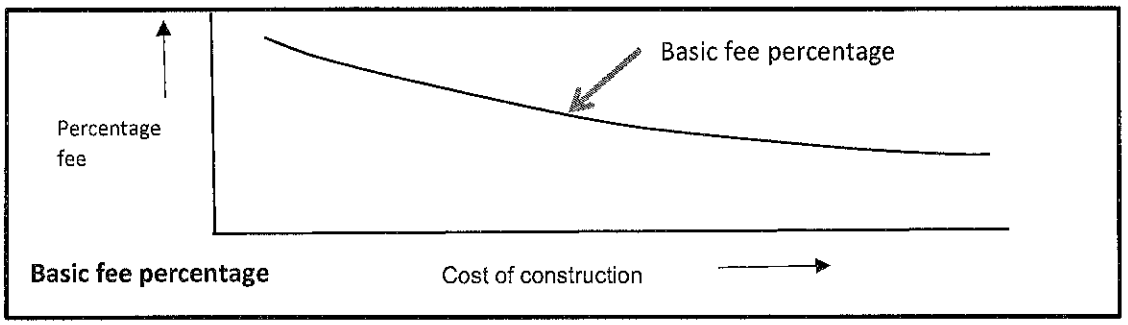
- the staff rates and the estimated number of hours or days to perform the tasks associated with a work plan; or

- a methodology which is based on a percentage of the construction cost.

Fixed fees can only be established at the outset of a project if the scope of the project, schedule for design approvals, the construction schedule and other variables can be determined with reasonable accuracy. Such information is most often not available at the outset of a project.

Time charges vary considerably between different geographical regions, levels of experience and seniority of staff. They can also be affected by requirements for staff to work overtime to meet employer demands.

A fee relating to a percentage of the cost of construction which reduces as the cost of construction increases allows a price to be established in the absence of the detailed information required to prepare a comprehensive estimate of the hours involved in a project and overhead costs to arrive at a fixed fee. This can then be converted into a lump sum.



Payment can be made on a time charge basis in the initial stages of a project until such time that there is sufficient information for the cost of construction to be determined. e.g. for stage 3 (preparation and briefing) and stage 4 (concept and viability). At the end of stage 4 when the control budget is established, a lump sum fee based on the construction portion of the control budget can be arrived at. The time charges can then be deducted from this lump sum for the remainder of the service.

The basic fee derived from a standard curve needs to be adjusted to reflect:

- level of effort required in a particular project,
- the consultant's profit and overheads; and
- the consultant's adjustment factor for the project

in terms of the following formula:

Fee percentage applicable to a project = BPF x F_{LE} x F_{PO} x F_{CON}

where:

BPF is the basic percentage fee derived from a suitable curve or a mathematical expression of a curve

F_{LE} is an adjustment factor that reflects the level of effort that is required which is made up by applying standard adjustments for different demands upon the required services and project specific factors that are finalized with the employer when the full scope of work is understood.

F_{PO} is an adjustment factor which takes into account the difference between the consultant's overheads and profit structure and the standardized value for overheads and profit upon which the basic fee percentage curve is assumed to be based

F_{CON} is an adjustment factor made by the consultant to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, expenses that are not recoverable etc.

The fee payable in terms of the above formula allows a fee to be established after the award of a contract or the issuing of an order on a single or multi-discipline basis when the full scope is known on the basis of level of effort, based on commercial risk and efficiency considerations.

The basic fee percentage and the standard level of effort factors are different for different built environment professions. The non-standard level of effort factors need to be negotiated between the parties to a contract on a case by case basis against a standard checklist.

A consultant's staff falls into two categories of staff, namely professional and technical staff (fee earning) and support staff (non-fee earning staff such as those fulfilling administrative, clerical, accounting, IT support and secretarial functions). Support staff costs are recovered through overheads applied to professional and technical staff costs in the buildup of the time charges for technical staff. The average hourly time charges for professional and technical staff may be calculated by multiplying the average

total annual cost of employment of technical staff by a factor which includes overheads and profit divided by the number of available hours in a year (typically 1760 hours). Alternatively, the hourly rate can simply be determined by multiplying the annual cost of employment by a number of cents / hundred Rand of the annual cost of employment. This latter approach removes the need for determining the number of hours a person works in a year and enables support staff costs to be readily compared.

An assumption can be made that the average multiplier for overheads and profit used in the derivation of the basic fee percentage curve is 16 c per hundred Rand of total annual cost of employment (or 2,816 times the total annual cost of employment). Accordingly, the adjustment factor F_{PO} can be quantified as follows:

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

The fee payable accordingly comprises the BPF and F_{LE} which are derived from this document. The F_{PO} and the F_{CON} are derived from tendered parameters and can result in an increase or decrease in the fee percentage applicable to a project.

Example:

If the BPF is 6.5%, the F_{LE} is agreed to be 1.15, the tendered cents / R 100 or part thereof of total cost of employment is 14.5 cents and the tendered F_{CON} is 0.9, the fee percentage applicable to the project = 6.5 x 1.15 x 14.5 / 16 x 0.9 = 6.10%

Framework agreements

The NEC3 Professional Service Contract (PSC) has a Main Option for a term contract (Option G) which makes provision for the issuing of task orders. These standard provisions for Task Orders enable "call offs" to be made as Option G requires such orders to include:

- a detailed description of the work required;
- either a priced list of items and the total of Prices or a forecast of the total of Prices for the order based on the provisions of the contract;
- the starting and completion dates for a task order; and
- the amount of delay damages for late completion.

A Consultant is not permitted to start the task until a Task Order is received and is required to complete the Task before the completion date. The Employer is not permitted to issue a task order after the end of the term of the contract.

It is possible to issue a Task Order for one or more stages in the delivery cycle. This can be done either on a time charge basis or on a lump sum basis whereby the lump sum is based on a percentage of the cost of construction or the estimated times required for the services multiplied by the staff rates.

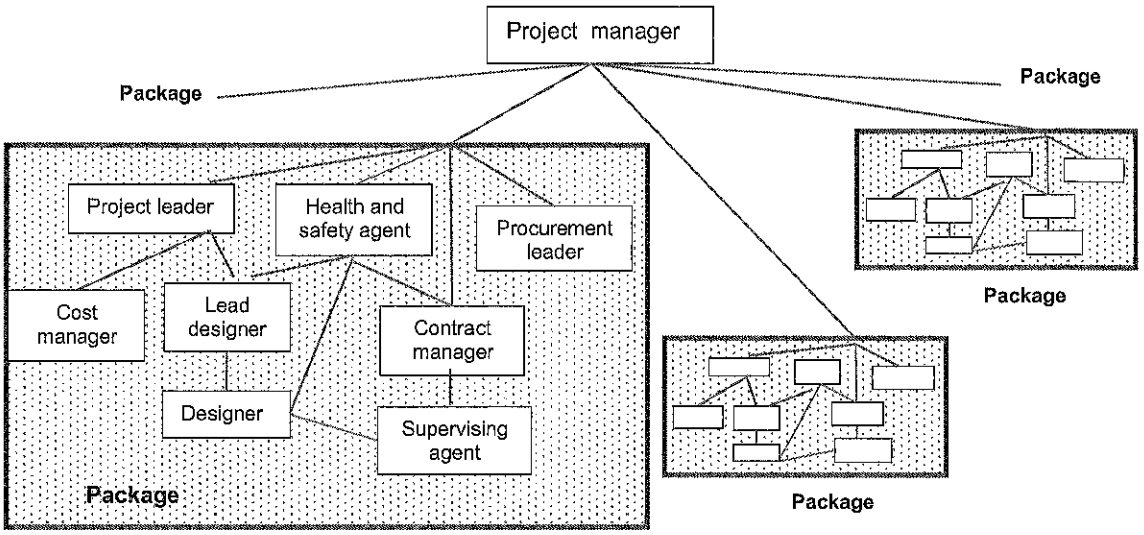
Roles and responsibilities

The Department of Public Works, Roads and Infrastructure's Standard Scope of Professional Services associated with the Delivery of a Package provides a scope of work for the functional roles described in the tabulation on the next page. There are many options available to an implementer in assigning functional responsibilities to particular persons (own staff or consultant). This ensures flexibility in the delivery of packages. For example, in some programmes of projects different persons will be assigned functional responsibilities for each of the identified roles. In other programmes it may be desirable to combine functional roles and responsibilities e.g. the project leader can also be the procurement leader or the same person can be appointed to function as project leader, lead designer, designer and cost manager or the contract manager and supervising agent.

This document needs to be read in conjunction with the Department of Public Works, Roads and Infrastructure's Standard Scope of Professional Services associated with the Delivery of a Package.

NOTE: Project management services associated with the delivery of works can be assigned to different persons as follows:

- project leader who leads and directs the design team in a non-technical role including the monitoring and integration of the activities, development and maintenance of a schedule, monitoring of progress and facilitation of the client acceptance of an end of stage deliverable;
  procurement leader who oversees the development of the procurement documents and manages the procurement process; and
- contract manager who administers a contract or an order on behalf of the employer.



Designation	Primary actions
Project manager	Manages the development and implementation of an infrastructure project and administers professional service contracts on behalf of the client / implementer
Project leader	Leads and directs the design team in a non-technical role including the monitoring and integration of the activities, development and maintenance of a schedule, monitoring of progress and facilitation of the client acceptance of an end of stage deliverable
Lead designer	Establishes and refines the design approach or solution so that it achieves the required standards and is co-ordinated within the project team
Designer	Provide design or conditional assessment services
Cost manager	Provides independent and impartial estimation and control of the cost of constructing, rehabilitating refurbishing and altering infrastructure
Procurement leader	Oversees the development of the procurement documents and manage the procurement process
Contract manager	Administers a package on behalf of the employer in accordance with the provisions of the contract
Supervising agent	Confirm that the works are proceeding in accordance with the provisions of the contract

Framework for the determination of professional fees associated with the delivery of a package

1 Scope

This document establishes:

a) the basis for time based fees for any professional service including those provided in accordance with the provision of the Department of Public Works, Roads and Infrastructure's Standard Scope of Professional Services associated with the Delivery of a Package; and

b) a competitive and auditable procedure for the determination after the award of a professional services contract of an appropriate percentage fee for architectural, cost management and engineering services which are provided in accordance with the provisions of the Department of Public Works, Roads and Infrastructure's Standard Scope of Professional Services associated with the Delivery of a Package.

This document does not provide fee percentages based on cost of construction for performing the role of project manager, procurement leader and health and safety agent.

NOTE 1: Services associated with the roles of project manager, procurement leader and health and safety agent and the role of contract manager, if the consultant providing the architectural service is not appointed to provide this service, can be paid for on a time charge, a lump sum (activity schedule) or a target contract basis. Although fee percentages based on the cost of construction are provided for architectural, cost management and engineering services, such services can also be paid for on a time charge, lump sum or target contract basis.

NOTE 2: The NEC3 Professional Service Contract does not include a percentage fee type of contract. The percentage fees derived from this document can be converted into lump sums which can then be incorporated into the activity schedule under Option A (Priced contract with activity schedule) or Option C (Target Contract) or the task schedule under Option G (Term Contract).

NOTE 3: Annexure 4 establishes an approach to determining percentage fees for landscape architectural services.

NOTE 4: Annexure 5 provides guidance on the incorporation of this framework in procurement documents.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced standard (including any amendments) applies.

Department of Public Works, Roads and Infrastructure's *Standard Scope of Professional Services associated with the Delivery of a Package*

National Treasury. *Framework for Infrastructure Delivery and Procurement Management*

SANS 10400, *The Application of National Building Regulations*

CIDB practice Note # 15 of 2008

3 Definitions

For the purposes of this document, the following terms and definitions apply:

building works: construction works that have the provision of shelter for its occupants or contents as one of its main purposes including any mechanical, services and electrical and electronic installations within such works and construction works or landscape work on land associated with and adjacent to such works

civil engineering works - category 1: shafts, tunnels, airport runways and aprons, roads, railways, sports fields, earthworks, earth dams and dredging,

civil engineering works – category 2: piling, jetties and quays, bridges and their abutments, culverts, cooling and other towers, reservoirs, caissons, canals, aqueducts, sewers, pipelines, electric mains, storage and treatment tanks, structural steelwork, grain elevators, silos and structures for housing of or bases for heavy industrial and public utility plant, machinery and equipment such as furnace houses and rolling mills for steelworks, boiler houses, reactor and turbine blocks and turbine halls to electricity generating stations and extraction and process plants

consultant: person providing services using the skill and care normally used by professionals providing services similar to the services that are required

contingency sum: sum of money budgeted to cover work that may be required, but cannot be foreseen or predicted with certainty

cost of construction:

a) the amount of money which is allocated or made available by the employer to construct, refurbish, rehabilitate, extend or alter construction works or a part thereof including a *pro rata* amount for general items, associated with a project or package excluding land costs, professional fees, all service and planning charges, value added tax, contingency sums and provision for price inflation; or

b) the total of the prices excluding VAT at the award of a construction works contract or the issuing of a package order to construct, refurbish rehabilitate, extend or alter construction works or a part thereof including a *pro rata* amount for general items, plus the fair market value of materials and equipment provided by the employer and provisional sums, excluding contingency sums, provision for price adjustment for inflation and value added tax

construction works: everything that is constructed or results from construction operations

employer: person who enters into a contract with the consultant

electrical engineering works: electrical installations and instrumentation other than electrical installations ancillary to building works

engineering works: construction works other than building works

expenses: amounts incurred by the consultant in the provision of a service which in terms of the contract are paid in addition to the fee

fee: the remuneration paid to a consultant excluding expenses which are recoverable from the employer in terms of the contract

general items: items which relate to a contractor's general contractual obligations, site services such as water and electricity, site facilities and site overheads

mechanical engineering works: means mechanical installations other than mechanical installations ancillary to building works

package: work which is grouped together for delivery under a single contract or an order

package order: the instruction to provide construction works under a framework agreement

process engineering works: process piping, flow control systems and equipment associated with process plants

provisional sum: sum of money included in the total of the prices for work that is foreseen but not yet specified at the time of the formation of a contract or order

stage: a collection of logically related activities in the infrastructure delivery cycle that culminates in the completion of a major deliverable

time charge: is the sum of the products of each of the staff rates multiplied by the total staff time appropriate to that rate properly spent on work in terms of the contract.

total annual cost of employment: the total amount borne by the consultant in respect of the employment of a staff member per year comprising basic salary and fringe benefits not reflected in the basic salary, including:

a) normal annual bonus,

b) consultant's contribution to medical aid, unemployment insurance fund, pension or provident fund,

c) group life insurance premiums borne by the consultant; and

d) all other benefits or allowances payable in terms of a letter of appointment excluding any share of profit and payment for overtime.

4 Fees on a time charge basis

The staff rates are the prices charged for staff excluding VAT but including:

a) all the costs to the consultant including total annual cost of employment, overhead charges incurred as part of normal business operations including the cost of management, as well as costs of administrative, clerical, IT support and secretarial staff used to support professional and technical staff in general and not on a specific project only;

b) where stated in the pricing assumptions, the time expended in travelling to and from a site, meetings or any other activity associated with the provision of the service;

c) non-recoverable expenses;

d) unless otherwise specified, all protective clothing and all standard equipment such as office furniture, copiers, plotters, computers and software used to perform the services; and

e) profit.

Fees on a time charge basis shall be determined using one of the methods set out in Table 1 as stated in the pricing data associated with the contract.

The rate per month shall include all leave taken in accordance with the letter of appointment and non-working days.

Table 1: Basis of staff rates

Method	Basis of staff rate	Tendered parameter
1	Rate per hour in Rand	R . . . . .
2	Rate per hour in Rand based on cents per hour for every R100 total annual cost of employment	. . . . . .cents
3	Rate per month in Rand where payment is made for leave and non-working days	R . . . . .
4	Rate per month based on total annual cost of employment divided by 12 multiplied by a factor where payment is made for leave and non-working days*	factor = ...

*Site allowances for construction monitoring staff should either be paid separately as expenses or included in the total annual cost of employment if stated in the letter of appointment.

NOTE The staff rates can conveniently be established in one of three ways, namely rates for named staff, rates for categories of staff or rates related to salaries paid to staff.

Examples:

Method 1: If 1000 hours are properly spent on the work and the maximum hourly rate is R 850 per hour, the time charge is 850 x 1000 = R 850 000
Method 2: If a consultant tenders 12c per hour for every R100 total annual cost of employment, the total annual cost of employment is R750 000 and 1000 hours are properly spent on the work, then the time based charge is 12 / 100/ 100 x 750 000 x 1000 = R 900 000
Method 3: If 6 months are properly spent on the work and the maximum monthly rate is R 120 000 per month, the time charge is 6 x R 120 000 = R720 000
Method 4: If a consultant tenders a factor of 1.7, the total annual cost of employment is R 750 000 and deploys the staff member for 8 months, then the time charge is 1.7 x 750 000 / 12 x 8 = 850 000.

5 Fees based on a percentage of the construction cost

5.1 General principles

5.1.1 The fees based on a percentage of the construction cost for architectural, cost management and engineering services are based on the following assumptions:

a) services are provided in accordance with the provisions of the Standard Scope of Professional Services associated with the Delivery of a Package;

b) services which may be required for project briefs, infrastructure planning and strategic resourcing) are excluded from the fee based percentage of the cost of construction (see Framework for Infrastructure Delivery Management and Procurement);

c) the employer has not fully developed a strategic brief as described in the Framework for Infrastructure Delivery and Procurement Management at the time that the consultant is appointed;

d) the required services exclude those relating to:

   1) the securing of finance;

   2) acquisition of land;

   3) the resolution of disputes in terms of the contract using an adjudication process or a tribunal (i.e. arbitration or court of law);

   4) litigation associated with the project;

   5) attending courts and commissions of enquiry, select committees and similar bodies convened by statute, regulation or decree

   6) the appointment as agent in accordance with Regulation 5(5) or 5(6) of the Construction Regulations 2014 issued in terms of the Occupational Health and Safety Act of 1993 (Act 85 of 1993);

   7) drafting of contract documents which require extensive modification to the employer's standard templates;

   8) drafting of non-standard contracts or additional clauses to those contained in the standard templates;

   9) the procurement of the professional team;

10) dealing with matters of law;

11) obtaining statutory approvals other than those required in terms of the National Building Regulations issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), licences or permits; and

12) services resulting from damages to or destruction of the works and insurance matters;

e) the fees, unless otherwise specified in the pricing assumptions, includes the travelling time and travel costs associated with the provision of the service;

f) the parties to the construction contract do not default on their contracts;

g) the contractor executes the works competently;

h) use is made of the contracts for engineering and construction works as stated in the scope of work;

i) the total of the prices of the package excluding VAT and any price adjustment for inflation at the completion or delivery of a package, does not exceed the construction cost at the time of the award of the contract or the issuing of an order by more than:

1) 10% in the case of building works; and

2) 15% in the case of engineering works;

j) completion is achieved within a period which is not more than 15% and 20% longer than the period allowed for completion or delivery at the start date of a package in the case of building works and engineering works respectively;

k) the values of all estimated parameters used in the determination of the adjustment factor that reflects the level of effort (F_{LE}) are agreed by both the employer and the consultant; and

l) the consultant's fee is based on the portion of the construction cost which relates directly to the specific part of the works for which the consultant's services are required.

NOTE: The cost of construction used to determine the basic fee percentage excludes price adjustment for inflation. A consultant can be compensated for price inflation under Secondary Option X1 (Price adjustment for inflation) of the NEC3 Professional Service Contract or clause 3.16 of the CIDB Standard Professional Service Contract.

5.1.2 All calculations that are performed to derive the fee based on a percentage of the construction cost shall be rounded to three decimal places.

5.2 Architectural services

5.2.1 Assumptions

The architectural services shall be provided in accordance with the relevant provisions of the Standard Scope of Professional Services associated with the Delivery of a Package as a project leader, lead designer, designer and supervising agent, and where specifically required by the employer, as the project leader.

Unless otherwise stated by the employer, a level 2 monitoring service is required (see Standard Scope of Professional Services associated with the Delivery of a Package).

The following constitute additional services which shall be remunerated on a time charge and / or expense basis:

a) town planning, urban design, master planning (i.e. the defining and planning the layout of future development of buildings or services on the same site), interior design (i.e. the design of interiors and the selection of furnishings, fixtures and special finishes) and landscape design services;

b) preparation of promotional materials and art work;

c) participation in the definition of plant and production layouts;

d) work for which no deemed to satisfy design rules are provided in SANS 10400 and which is required in terms of the National Building Regulations or the provisions of SANS 10400 require that the work be carried out by a person registered in terms of the Engineering Profession Act of 2000 or the Natural Scientific Professions Act of 2003 including specialist fire design services identified in the Standard Scope of Professional Services associated with the Delivery of a Package;

e) work associated with the satisfying of the provisions of Part XA (Energy usage in buildings) of the National Building Regulations using a method other than the application of the orientation, shading, services and building envelope rules provided in SANS 10400-XA;

f) specialist studies such as those relating to site selection and feasibility, environmental, energy usage and traffic studies;

g) cost and evaluation services; and

h) extraordinary inspection services during construction.

The architectural services include the provision of architectural inputs into procurement documents but exclude the evaluation of tenders.

The fee percentage for architectural services is based on the consultant applying the deemed to satisfy provisions of the National Building Regulations contained in SANS 10400, *The Application of National Building Regulations* which provide design and construction rules.

5.2.2 Basis for determining the fee for architectural services

5.2.2.1 The basic percentage fee (BFP) shall be derived as follows:

Step 1: Identify the section in Table 2 within which the cost of construction representing the works which require architectural services falls and identify the values in columns C and D which correspond to that section.

Table 2: Basic fee based on cost of construction

Section	Cost of construction		Fee (Base (column C) plus percentage cost (column D)	
	A	B	C	D
1	1	600 000	0	12.50%
2	600 001	1 200 000	15 000	10.00%
3	1 200 001	2 400 000	45 000	7.50%
4	2 400 001	4 800 000	51 000	7.25%
5	4 800 001	9 600 000	63 000	7.00%
6	9 600 001	19 200 000	87 000	6.75%
7	19 200 001	38 400 000	135 000	6.50%
8	38 400 001	76 800 000	231 000	6.25%
9	76 800 001	153 600 000	423 000	6.00%

10	153 600 001	307 200 000	807 000	5.75%
11	307 200 001	614 400 000	1 575 000	5.50%
12	614 400 001	+		5.75%

Step 2: Calculate the fee by adding the value identified in column C of Table 2 to the product of the construction cost and the percentage value identified in column D of Table 2 divided by 100.

Step 3: Divide the fee calculated in step 2 by the cost of construction and multiply by 100.

EXAMPLE: The fee for a cost of construction of R 5 300 000 = 51 000 + 5 300 000 x 7.25 / 100 = R 435 250
Basic fee percentage = 435 250 / 5 300 000 x 100 = 8.212%

5.2.2.2 Determine the adjustment factor that reflects the level of effort that is required (F_{LE}) as follows:

$$F_{LE} = F_{LE1} \times F_{LE2} \times F_{LE3} \times F_{LE4} \times F_{LE5} \times F_{LE6}$$

where the values of F_{LE1}, F_{LE2}, F_{LE3}, F_{LE4}, F_{LE5} and F_{LE6} are calculated in accordance with the provisions of the following Steps 1 to 6, respectively:

Step 1: Identify the building category or categories which are to be designed in terms of the consultant's contract or a task order issued in terms of such contract from Annexure 1. Establish the value or values of the adjustment factor for building category and complexity from Table 3 (F_{LE1}). Interpolate between the values for different building categories, if necessary, based on the estimated cost of the different parts of the building.

NOTE Building category (see Annexure 1) is linked to class of building occupancy and detailed descriptions.

EXAMPLE A multiple occupancy building has a construction cost or R 30 million comprising:
- a place of instruction for a university (occupancy A4.5) of average complexity with a construction cost of R16m; and
- a research facility (E4.3) of complex complexity with a construction cost of R 14 million

FL_{E1} = 0,90 x 16 / 30 + 1,15 x 14 / 30 = 1,017

Table 3: Adjustment factor for building category and complexity (F_{LE1})

Building category (see Annexure 1)	Adjustment factor for building category and complexity (F_{LE1})		
	Complexity		
	Simple: Utilitarian character without complication of design, a minimum of finishes and very basic structural mechanical and electrical design	**Average**: Conventional character requiring normal integration, coordination, detailing, structural mechanical and electrical designs and systems	**Complex:** Exceptional character and complexity of design requiring more advanced systems, integration and coordination of structural, mechanical and electrical design.
1	0,64	0,75	0.86
2	0,73	0,80	0,93
3	0,76	0,85	0,95
4	0,76	0,90	1,04
5	0,85	1,0	1,15

Step 2: Establish the adjustment factor for repeat buildings (F_{LE2}) as follows:

a) where there are no repeat buildings

F_{LE2} = 1,0

b) where there are repeat buildings

$F_{LE2} = 1 - 0{,}455\ A / B$

where

A = estimated cost of construction of the repeat buildings

B= cost of construction used in the determination of BFP

NOTE: F_{LE6} which is determined in Step 6 allows an appropriate adjustment to be made where the services are required on separate non-contiguous sites, or continuity is interrupted, unusually fragmented or are constructed as separately documented phases or sections.

EXAMPLE The estimated cost of construction associated with repeat buildings is R 900 000 while the cost of construction is estimated to be R 5 300 000.

$F_{LE2} = 1 - 0{,}455 \times A / B = 1 - 0{,}455 \times 900\ 000 / 5\ 300\ 000 = 0.923$

Step 3: Establish the adjustment factor where the employer pays separately for others to undertake work covered by the deemed-to-satisfy design and construction rules contained in SANS 10400 (F_{LE3}) as follows:

a) where the consultant applies the relevant deemed to satisfy design and construction rules for all parts of the National Building Regulations

$F_{LE3} = 1{,}0$

b) where the consultant applies not all the relevant deemed to satisfy design and construction rules for all parts of the National Building Regulations

$F_{LE3} = 1 - (1 - n / 100) \times C / B$

where B = cost of construction used in the determination of BFP

C = the estimated cost of the systems or elements of a building which are covered by the deemed to satisfy rules contained in SANS 10400 but are undertaken by others appointed by the employer

n = the estimated percentage of C which needs to be included in the cost of construction to provide a reasonable fee to the consultant for dealing with aspects of the system or element which is undertaken by others in the design of the building as a whole

NOTE 1 The fee percentage needs to be adjusted where wet services and fire protection specialists are appointed by the employer to provide design and inspection services relating to the application of the deemed to satisfy provisions of Parts P (Drainage), Q (Non-water-borne means of sanitary disposal) R (Stormwater disposal), T (Fire protection) and W (Fire installations). The fee percentage also needs to be adjusted where specialists advisors are appointed to advise on Part S (Facilities for persons with disabilities) or structural engineers to provide design and inspection services relating to the application of the design and construction rules provided in Parts G (Excavations), H (Foundations), J (Floors), K (Walls), L (Roofs), M (Stairways) and N (Glazing).

NOTE 2 A consultant providing architectural services may elect to subcontract work covered by the deemed to satisfy design and construction rules contained in SANS 10400 to a wet services engineer, fire protection specialist, structural engineer etc, in which case there is no reduction in the fee percentage. A reduction in fee is only applicable where the employer requires such work to be undertaken by the aforementioned persons.

EXAMPLE: A wet services specialist is appointed by the employer to design the wet services which are covered by SANS 10400-P. The cost of the wet services in the building is estimated to be R 500 000 while the cost of construction is estimated to be R 5 300 000. It is agreed that the percentage of the cost of the wet services which is included in the fee calculation is 60 %.

$FL_{E3} = 1 - (1 - n / 100) \times C / B = 1 - (1 - 60 / 100) \times 500\ 000 / 5\ 300\ 000 = 0,964$

Step 4: Establish the adjustment factor for the range of services that are provided (F_{LE4}) as follows:

a) where services are provided as project leader, lead designer, designer and supervising agent

$F_{LE4} = 1,0$

b) where services are provided as lead designer, designer and supervising agent

$F_{LE4} = 0,925$

Step 5: Identify the adjustment factor for the type of services (F_{LE5}) as follows:

a) where definition services are only required.

$F_{LE5} = 1,0$

b) where definition and review services are required

$F_{LE5} = 1 - f + D / (B \times BFP / 100)$

where f = the sum of the proportions for stage completion in Table 4 for the stages for which review services are required divided by 100

= 0,80 in the case of a design and construct contracting strategy and 0,45 in the case of a develop and construct contracting strategy

B = cost of construction used in the determination of BFP

BFP = basic percentage fee derived from Table 2 for the value of B

D = the total estimated time charge for identified review services

NOTE: Definition services are services which develop the deliverable associated with an end of a stage. They are encountered in the design by employer contracting strategy and in the stages prior to the mobilisation of a contractor in the design and construct and develop and construct contracting strategies. Review services are services which review the definition service of a stage undertaken by others for general conformity with the scope of work selected for a particular contracting strategy. These services are required after the mobilisation of a contractor in the design and construct and develop (after stage 4 – concept and viability) and construct contracting strategies (after stage 5 – design development).

EXAMPLE: A develop and construct contractor is appointed after the completion of stage 5 (Design development stage). The basic percentage fee (BFP) derived from Table 2 for a cost of construction of R 5,3m is 8,212%. The estimated total time charge for identified review services is R 60 000.

$F_{LE5} = 1 - f + D / (B \times BFP / 100) = 1 - 0,45 / 100 + 60\,000 / (5\,300\,000 \times 8,212 / 100) = 0,688$

Table 4: Apportionment of fees between stages where definition services are required

Stage (see Framework for Infrastructure Delivery and Procurement Management)	**Proportion**
1 Initiation stage	5%
2 Concept and viability	15%
3 Design development	25%
4 Design documentation	10%
5 Works	20%
6 Handover	12%
7 Close out	15%

Step 6: Identify from Table 5 the factors which were not known or were unforeseen prior to the formation of the consultant's contract or the issuing of a task order to a consultant which impact upon the services. Assess the additional time charge for each factor, based on reasonable estimates of the additional time required to address each of the identified factors

and applying the staff rates provided for in the contract in order to calculate the time charge. Calculate the adjustment factor for project specific variations in level of effort (F_{LE6}) as follows:

Table 5: Methodology to establish the values for project specific variations which were not known or could not be foreseen prior to the formation of the contract in level of effort (F_{LE6})

No	Issue	Considerations
1	Experience and reliability of the contractor	The lack of experience of the contractor requires additional effort in ensuring the required quality, particularly in respect of historical buildings.
2	Joint venture requirements	Joint venture assembled by the employer after the formation of the contract with other consultants may attract additional management costs.
3	Schedule	Fast track projects may necessitate the hiring of additional staff, pay staff for overtime, and re-schedule other work to accommodate project priorities.
		Long protracted projects can place additional demands on staff availability and frequency of interactions.
4	Employer Project documentation and computer modelling demands	The employer may have unique requirements which may require customising of standard templates, more extensive communications, providing documentation in different format etc.
5	Co-ordination of specialist consultants	Where there is an unusually high number of specialist consultants whether or not they are retained by the employer or the consultant e,g, acoustic, heritage, environmental, interior design, economist, energy management, facilities management, information technology, hospital services, lighting, laboratory, security, signage or graphic, specifications writer, way finding etc.
6	New technologies	New technologies can introduce unknown risks in using products or systems that don't have a track record or there may be additional requirements for certifications, testing, submittals, approvals etc. There may also be additional specialist consultants to be retained and co-ordinated. They may also be a need to undertake research.
7	Renovation and alterations	Work associated with renovation and alternations can have unknowns or require additional work in establishing reliable record information. Work associated with alterations can introduce complexities in linking common buildings together on a site.
8	Stop and start up workforce	On some projects it is necessary to stop work on the design or preparation of production information. This can lead to additional costs associated with loss of productivity etc.
9	Heritage buildings	Buildings that are affected by heritage legislation may not require the development of a concept report (stage 4: Package definition). It may, however, require abnormal research and specialist expertise to provide the services which need to be offset against the reduction in stage 4 services.
10	Phased building occupancies	Phased occupancies can occur on some projects. This can lead to increased resources to address fragmented commissioning.
11	Repeat buildings on different sites or different contracts	Repeat buildings on different sites or executed by different contractors.
12	Level of monitoring	Reduce fee if level 1 monitoring service is required. Increase if level 3 or 4 level service is required and not dealt with on a time charge basis.

a) none of the factors in Table 5 apply

$F_{LE6} = 1,0$

b) one or more of the factors in Table 5 apply

F_{LE6} = 1 + E / (B x BFP / 100)

where B = cost of construction used in the determination of BFP

BFP = basic percentage fee derived from Table 2 for the value of B

E = the sum of all the estimated time charges for identified project specific variations described in Table 5

EXAMPLE: The sum of the total time charge determined for the applicable issues contained in Table 5 total R 70 000. The basic percentage fee (BFP) derived from Table 2 for a cost of construction of R 5,3m is 8,21%.

F_{LE6} = 1 + E /(B x BFP / 100) = 1 + 70 000 / (5 300 000 x 8,212 / 100) = 1,161

5.2.2.3 Calculate the applicable fee percentage in accordance with the following formula:

Fee percentage = BFP x F_{LE} x F_{PO} x F_{CON}

where

BFP = basic percentage fee determined in accordance with the provisions of 5.2.2.1

F_{LE} = calculated adjustment factor that reflects the level of effort that is required as determined in accordance with the provisions of 5.2.2.2

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

5.2.3 Payment for stage completion

Payment for stage completion where definition services are required shall, unless otherwise motivated by the consultant and agreed to by the employer, be based on the percentages shown in Table 4.

5.3 Cost management services

5.3.1 Assumptions

The cost management services shall be provided in accordance with the relevant provisions of the Standard Scope of Professional Services associated with the Delivery of a Package under the assumption that the cost manager is:

a) delegated by the contract manager to deal with all matters relating to the assessment of amounts due to the contractor and changes to the prices where the contract manager is required to assess the amount due in terms of the contract; and

b) delegated by the employer or contract manager to correct wrongly assessed amounts in the contractor's application for payment and to deal with all matters relating to the prices in terms of the contract.

The cost management services shall, unless otherwise stated in the pricing assumptions or instructed by the employer, include the finalization of the procurement documents (expressions of interest, tenders, contracts and package orders) following inputs from the lead designer, designers, project leader and employer and include the basic evaluation of tenders and the preparation of a tender evaluation report.

Financial viability studies and other pre-design studies involving an economic investigation and appraisal of a project constitute additional services which shall be remunerated on a time charge or expense basis or a combination thereof.

5.3.2 Basis for determining the fee for cost management services

5.3.2.1 The basic percentage fee (BFP) shall be derived as follows:

Step 1: Identify the section in Table 6 within which the cost of construction representing the works which require cost management services falls and identify the values in columns A, C and D which correspond to that section.

Step 2: Calculate the fee by adding the value identified in column C of Table 6 to the product of the construction cost less the threshold identified in column A and the percentage value identified in column D divided by 100

Step 3: Divide the fee calculated in step 2 by the cost of construction and multiply by 100.

EXAMPLE: The fee for a cost of construction of R 5 300 000. = 256 000 + (5 300 000 – 4 0000 000) x 5.4 / 100 = 326 200
Basic fee percentage = 326 200 / 5 300 000 x 100 = 6.154%

Table 6: Basic fee based on cost of construction

Section	Cost of construction		Fee (Primary charges (C) + marginal rate (D)	
	A	B	C	D
1	Up to	1 000 000	11 000	6.40 % on balance over R 0
2	1 000 000	2 000 000	75 000	6.10 % on balance over R 1 000 000
3	2 000 000	4 000 000	136 000	6.00 % on balance over R 2 000 000
4	4 000 000	8 000 000	256 000	5.4 % on balance over R 4 000 000
5	8 000 000	16 000 000	472 000	5.06 % on balance over R 8 000 000
6	16 000 000	32 000 000	876 800	4.47 % on balance over R 16 000 000
7	32 000 000	64 000 000	1 592 000	4.00 % on balance over R 32 000 000
8	64 000 000	128 000 000	2 872 000	3.90 % on balance over R 64 000 000
9	128 000 000	256 000 000	5 368 000	3.10 % on balance over R 128 000 000
10	256 000 000	500 000 000	9 336 000	3.00 % on balance over R 256 000 000
11	500 000 000	1 500 000 000	16 656 000	2.65 % on balance over R 500 000 000
12	1 500 000 000	3 000 000 000	43 156 000	2.35 % on balance over R 1 500 000 000
13	3 000 000 000	>3 000 000 000	78 406 000	1.85 % on balance over R 3 000 000 000

5.3.2.2 Determine the adjustment factor that reflects the level of effort that is required (F_{LE}) as follows:

$$F_{LE} = F_{LE1} \times F_{LE2} \times F_{LE3} \times F_{LE4} \times F_{LE5}$$

where the values of F_{LE1}, F_{LE2}, F_{LE3}, F_{LE4} and F_{LE5} are calculated in accordance with the provisions of the following Steps 1 to 5, respectively:

Step 1: Identify the work category or categories for which cost management services are required in terms of the consultant's contract or a task order issued in terms of such a contract from Annexure 1. Establish the value of the adjustment factor for building category from Table 7 (F_{LE1}). Interpolate between the values for different building categories, if necessary, based on the estimated cost of the different parts of the work.

EXAMPLE A multiple occupancy building has a construction cost of R 30 million comprising:
- a primary school (occupancy A4.4) with a construction cost of R22 m; and
- a school laboratory (occupancy E4.1) with a construction cost of R 8 million

FL_{E1} = 0,92 x 22 / 30 + 1,0 x 8 / 30 = 0,94

Step 2: Establish the adjustment factor for replication of prototype (F_{LE2}) as follows:

a) where there is no replication of prototype

F_{LE2} = 1,0

b) where there is replication of prototype

F_{LE2} = 1 –(0,4 x A / B)

where A = estimated cost of construction associated with replications

B = cost of construction used in the determination of BFP

Table 7: Adjustment factor for work category (F_{LE1})

Work category	Adjustment factor (F_{LE1})
Building works	
Class 1 building (see Annexure 1)	0,75
Class 2 building (see Annexure 1)	0,80
Class 3 building (see Annexure 1)	0,85
Class 4 building (see Annexure 1)	0,92
Class 5 building (see Annexure 1)	1,0
Class 6 building (see Annexure 1)	1,10
Engineering works	
Civil, electrical, mechanical and process engineering works	1,0

EXAMPLE The estimated cost of construction associated with the replications are R 900 000 while the cost of construction is estimated to be R 5 300 000.

F_{LE2} = 1 – 0,4 x A / B = 1 – 0,4 x 900 000 / 5 300 000 = 0.932

Step 3: Identify the adjustment factor for the scope of services (F_{LE3}) as follows:

F_{LE3} = adjustment factor contained in Table 8 for definition services.

Step 4: Identify the adjustment factor for the type of services (F_{LE4}) as follows:

a) where definition services are only required.

F_{LE4} = 1,0

b) where definition and review services are required

F_{LE4} = the value obtained from Table 9

NOTE: Definition services are services which develop the deliverable associated with an end of a stage. They are encountered in the design by employer contracting strategy and in the stages prior to the mobilisation of a contractor in the design and construct and develop and construct contracting strategies. Review services are services which review the definition service of a stage undertaken by others for general conformity with the scope of work selected for a particular contracting strategy. These services are required after the mobilisation of a contractor in the design and construct and develop and construct contracting strategies.

Step 5: Identify from Table 10 the factors which were not known or were unforeseen prior to the formation of the consultant's contract or the issuing of a task order to a consultant which impact upon the services. Assess the additional time charge for each factor, based on

reasonable estimates of the additional time required to address each of the identified factors and apply the staff rates provided for in the contract in order to calculate the time charge. Calculate the adjustment factor for project specific variations in level of effort (F_{LE5}) as follows:

a) none of the factors in Table 10 apply

$F_{LE5} = 1,0$

b) one or more of the factors in Table 10 apply

$F_{LE5} = 1 + C / (B \times BFP / 100)$

where B = cost of construction used in the determination of BFP

BFP = basic percentage fee derived from Table 6 for the value of B

C = the sum of all the estimated time charges for identified project specific variations described in Table 10

Table 8: Adjustment factor for scope of services

Scope of service		Adjustment factor for the scope of services (F_{LE3})						
Type	**Description**	**Building work**	**Civil engineering works – category 1**	**Civil engineering works – category 2**	**Electrical engineering works**	**Mechanical engineering works**	**Process engineering works** – utilising general arrangement drawings	**Process engineering works** – utilising detail isometric drawings
A	Cost management services associated with: • a priced contract based on a price list or simplified bill of quantities where the contract manager is responsible for assessing the amount due to a contractor; or • a lump sum contract or a priced contract with an activity schedule	0,75	0,45	0.45	0,45	0,45	0,45	0,45
B	Cost management services associated with priced contract with a bill of quantities prepared in accordance with a standard system of measurement	1.0	0,55	0,70	0,65	0,65	1,0	0,55
C	Cost management services associated with a target contract with an activity schedule	1,0	0,55	0,70	0,65	0,65	1,0	0,55
D	Cost reimbursable contract or cost plus contract	0,70	0,55	0,55	0,55	0,55	0,55	0,55
E	Cost management services associated with a priced contract based on a price list or simplified bill of quantities where the contractor is responsible for	0,45	0,45	0.45	0,45	0,45	0,45	0,45

	preparing an application for payment							

Table 9: Adjustment factor for review services

Contracting strategy	Description	Stage after which contractor is appointed	F_{LE4} associated with a type of service as indicated in Table 8	
			Type A or E	Type C or D
Design and construct	Contract in which a contractor designs the works based on a brief provided by the client and constructs it	4	0,70	0,80
Develop and construct	Contract based on a scheme design prepared by the client under which a contractor finalises the production information and constructs it	5	0,80	0,85

Table 10: Methodology to establish the values of F_{LE5}

No	Issue	Considerations
1	Experience and reliability of the contractor	The lack of experience of the contractor requires additional effort in ensuring that claims, certificates, etc are done in terms of the contract
2	Joint venture requirements	Joint venture which is put together by the employer may attract additional management costs
3	Renovation and alterations	Work associated with renovations and alterations can have unknowns or require additional work in establishing reliable record information.
4	Stop and start up workforce	On some projects it is necessary to stop work on the design or preparation of production information. This can lead to additional costs associated with loss of productivity etc.
5	Locational bills of quantities	Employer may require that bills of quantities be separated into blocks, elements, functions or other locations. This may attract additional costs.
6	Multiple procurement contracts	Separate documentation and related services may be required for work executed under a large number of subcontracts where a principal contractor is appointed, or executed under a large number of direct contracts where no principal contractor is appointed. This may attract additional costs.
7	Development of cost norms	Services may be required for developing reports on the calculation of space and cost limits from given accommodation lists, monitoring and adjusting for cost against an advanced or elemental cost plan as necessary in order to maintain it within the prescribed limits and on completion of the contract the submission of reconciliation statements confirming compliance with the prescribed space limits and costs limits.
8	Extraordinary contract provisions	More than one payment certificate per month be required to be issued
9	Monitoring of development targets	The Employer may require that the flows of money to target groups are to be verified in terms of a targeted procurement procedure
10	New technologies	New technologies can introduce the development of non-standard items for description and quantification

EXAMPLE: Sum of the total time charge determined for the applicable issues contained in Table10 total R 35 000. The basic percentage fee (BFP) derived from Table 6 for a cost of construction of R 5,3m is 6,15%.

$F_{LE5} = 1 + C /(B \times BFP / 100) = 1 + 35\,000 / (5\,300\,000 \times 6{,}154 / 100) = 1{,}107$

5.3.2.3 Calculate the fee percentage payable in accordance with the following formula:

$$\text{Fee percentage} = BFP \times F_{LE} \times F_{PO} \times F_{CON}$$

where

BFP = basic percentage fee determined in accordance with the provisions of 5.3.2.1

F_{LE} = adjustment factor that reflects the level of effort that is required as determined in accordance with the provisions of 5.3.2.2

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

5.3.3 Payment for stage completion

Payment for stage completion where definition services are required shall unless otherwise motivated by the consultant and agreed to by the employer be based on the percentages shown in Table 11.

Table 11: Apportionment of fees between stages where definition services are required

Scope of service		Proportion for stages						
Type	**Description**	3	4	5	6	7	8	9
A	Cost management services associated with: • a priced contract based on a price list or simplified bill of quantities where the contract manager is responsible for assessing the amount due to a contractor; or • a lump sum contract or a priced contract with an activity schedule	2.5	7.5	10	20	52.5	-	7.5
B	Cost management services associated with priced contract with a bill of quantities prepared in accordance with a standard system of measurement	2.5	5	7.5	35	45	-	5
C	Cost management services associated with priced contract with a provisional bill of quantities prepared in accordance with a standard system of measurement	2.5	5	7.5	17,5	62,5	-	5
D	Cost management services associated with a target contract with an activity schedule	2.5	7.5	10	15	57.5	-	7.5
E	Cost reimbursable contract or cost plus contract	2.5	7.5	10	15	57.5	-	7.5
F	Cost management services associated with a priced contract based on a price list or simplified bill of quantities where the contractor is responsible for preparing an application for payment	2.5	7.5	10	20	52.5	-	7.5

5.4 Engineering services

5.4.1 Assumptions

5.4.1.1 The fee percentage shall only be applied to projects having a construction cost in excess of R 1,0 million. Time based charges shall apply to projects having a cost below this threshold.

Engineering services shall be provided in accordance with the relevant provisions of the Standard Scope of Professional Services associated with the Delivery of a Package as follows:

a) building works: designer and supervising agent; and

b) engineering works: project leader, lead designer, designer, cost manager, contract manager and supervising agent.

5.4.1.2 On multi-disciplinary projects involving engineering works where a consultant is responsible for only a portion of the works and other consultants are appointed to function as indicated in b) above, only services associated with a designer and supervising agent are required unless otherwise stated by the employer.

5.4.1.3 Unless specifically stated by the employer, a level 2 monitoring service is required (see Standard Scope of Professional Services associated with the Delivery of a Package).

5.4.1.4 The following constitute additional services which shall be remunerated on a time charge and / or expense basis:

a) services not directly relating to the design and construction of the works and its subsequent utilisation;

b) consultation with authorities having rights or powers of sanction as well as consultation with public stakeholders;

c) searching for, obtaining, investigating and collating available data, drawings and plans relating to the works;

d) arrangements for servitudes, expropriations and diversion of services not forming part of the works,

e) obtaining formal approval of government departments and utilities and revising or realigning work to comply with decisions relating to such approvals;

f) feasibility and economic studies;

g) topographical and environmental surveys, analyses, tests and site or foundation or other investigations, model tests, laboratory tests and analysis carried out on behalf of the employer;

h) setting out and staking out the work and indicating of boundary beacons and other reference marks;

i) detailed inspection, reviewing and checking of designs and drawings prepared by others and submitted as alternatives to those embodied in a contract for the provision of the works;

j) offsite inspection and testing of materials and plant during manufacture or prior to delivery;

k) preparing and setting out particulars and calculations in a form required by any relevant authority;

l) executing or arranging for the periodic monitoring or adjustment of the works, after final handover and completion of construction and commissioning, in order to optimize or maintain proper functioning of any process or system;

m) life cycle costing and considerations;

n) advance ordering or reserving of materials and obtaining licenses and permits; and

o) preparing detailed operating, operation and maintenance manuals.

The engineering services for engineering projects include the finalization of the procurement documents

NOTE In projects involving building work persons appointed to provide services other than engineering services are appointed to perform the roles of project leader, lead designer, cost manager and contract manager and the cost manager is responsible for the finalization of procurement documents.

5.4.2 Basis for determining the fee for engineering services

5.4.2.1 The basic percentage fee (BFP) shall be calculated from the following formula provided that BFP is not less than 4.0%:

$BFP = 24.1 - 2.3 \times \log B$

where B = cost of construction in Rands requiring engineering services provided that the cost of construction is equal to or greater than R 1,0 million and does not exceed R 1,0 billion.

BFP shall be negotiated where the formula indicates that the value of BFP is less than 4% or where the cost of construction exceeds R 1,0 billion.

NOTE: BFP equals 10,3% where B is R 1 000 000 i.e. 24.1 - 2.3 x log 1 000 000
BFP equals 8.0% where B is R 10 000 000 i.e. 24.1 – 2.3 x log 10 000 000
BFP equals 5.7% where B is R 1 00 000 000 i.e. 24.1- 2.3 x log 100 000 000
BFP equals 4.0 % where B is R 1 000 000 000 i.e 24.1 – 2.3 x log 1 000 000 000 = 3.4 which is less than 4.0%. As a result, the value of BFP will be negotiated.

5.4.2.2 Determine the adjustment factor that reflects the level of effort that is required (F_{LE}) as follows:

$$F_{LE} = F_{LE1} \times F_{LE2} \times F_{LE3} \times F_{LE4}$$

where the values of F_{LE1}, F_{LE2}, F_{LE3} and F_{LE4} are calculated in accordance with the provisions of the following Steps 1 to 4, respectively:

Step 1: Identify the project type or types which are to be designed in terms of the consultant's contract or a task order issued in terms of such a contract and the associated fee category from Annexure 2. Establish the adjustment factor for level of complexity (F_{LE1}) by considering the applicable influencing factors on the norm (average level of complexity) contained in Table 12 and categorize complexity of a project on a scale of 1 (simplest of projects) to 5 (most complex of projects). Determine F_{LE1} from Table 13 documenting the motivation for the selection of the adjustment factor. Interpolate between values for different types of projects, if necessary, based on the estimated cost of the different types of project.

NOTE The starting point in the categorisation of the complexity of a project is to assume in the first instance that the norm applies i.e. level 3 complexity. The influencing factors in Table 12 enable adjustments up or down from the norm to be made.

EXAMPLE A consultant is required to provide services for buildings works having a construction cost or R 30 million comprising:

- structural services for an educational building having a level 4 complexity with a construction cost of R16m; and
- site works (building civils) with a level 2 complexity with a construction cost of R 14 million

$FL_{E1} = 1,66 \times 16 / 30 + 1,19 \times 14 / 30 = 1,441$

Step 2: Establish the adjustment factor for duplication or repetitive work (F_{LE2}) as follows:

a) there is no duplication of work

$F_{LE2} = 1,0$

b) there is duplication of work

$F_{LE2} = 1 - (1 - n / 100) \times A / B$

where A = the estimated cost of works which are duplicated or where repetition exists

B = cost of construction requiring engineering services used in the determination of BFP

n = the estimated percentage of A which needs to be included in the cost of construction to provide a reasonable fee to the consultant for dealing with duplication or repetitive aspects of the work

EXAMPLE: The cost of works is R 10 000 000. The estimated cost of the duplicated work is R 2 000 000. The estimated percentage of A is 75%.

$FL_{E2} = 1 - (1- n / 100) \times A / B = 1 - (1- 75 / 100) \times 2\,000\,000 / 10\,000\,000 = 0,950$

Table 12: Influencing factors

Project Type	Less Effort	More Effort
Civil engineering services		
Airport runways, taxiways and aprons	Extensive available clearways and simple geometry	Complex geometry and clearway assessment and designs
Bridges	Few load cases, uniform foundations, short, straight and rectangular spans	Many load cases, seismic loads, variable foundations and complex geometry
Building civils	Few interfaces and good project management and few uncertainties	Many interfaces and uncertainties that need to be resolved by the engineer
Building structures	Uniform foundations, uniform and simple architecture and good project information	Variable foundations, seismic loads , complex architecture and many uncertainties
Large dams	Uniform geology and terrain and simple spillway and outlet structures	Complex geology, seismic loads, complex terrain, spillway and outlet structure(s)
Small dams	Simple water storage, hydrology, foundations and spillway requirements	Complex water storage, hydrology and spillway requirements
Irrigation	Simple water delivery systems	Complex water delivery systems
Minor structures	Uniform foundations, straight and rectangular	Variable foundations and complex geometry and load calculations
Municipal services	Greenfield site with few interfaces	Complex existing site with many service interfaces
Parking lots	Few accesses, few stormwater options and few interfaces	Many accesses and routes, many stormwater paths and interfaces
Pipelines	Relatively straight and level pipelines with minimal requirements in respect of removal of air and silt	Complex pipe geometry with many thrust blocks and valves. High wave energy for submarine pipes.
Ports – quays breakwaters etc	Uniform foundations, simple loading good information	Variable foundations, complex load cases and complex bathymetry and geology
Power stations civil and building	Uniform foundations, with repetitive layout and known loadings	Variable foundations and complex layouts and load calculations
Railways (excluding the cost of track)	Few turnouts and minimal rolling stock requirements	Many turnouts, extensive rolling stock requirements
Road rehabilitation	Relatively uniform conditions and minimal road furniture and drainage improvements	Variable conditions with many requirements in respect of road furniture and drainage improvements
Roads	Flat topography, few intersections and minimal obstructions and interfaces.	Difficult topography with many accesses, intersections, interchanges and interfaces with existing infrastructure and utilities
Stormwater Pipes	Straight pipelines with minimal inlet and catchment designs	Complex pipe networks with extensive catchment modelling requirements

Project Type	Less Effort	More Effort
Civil engineering services (continued)		
Stormwater structures and canals (Designed)	Uniform foundations, straight and rectangular	Variable foundations and complex geometry and load calculations
Underground Structures	Uniform geology and hard ground	Complex geology and soft ground
Unique structures	Uniform foundations, straight and rectangular	Variable foundations, seismic loads and complex geometry and load calculations
Water Retaining Structures	Uniform foundations and shape with simple inlet and outlets, packaged plants and tanks	Variable foundations and complex shapes as well as complex inlet and outlet works
Mechanical engineering and building services		
Commercial retail and office complexes	Simple architecture with uniform open plan layouts and single tenant or owner-occupier and well defined service requirements and provision	Complex and unique architecture, high rise buildings and multi-tenant buildings. Many uncertainties and interfaces requiring coordination
Educational facilities	Well-established, standard teaching and hostel facilities with well defined simple service requirements	Complex building design with many interfaces and service coordination and involving unusual or new and untried service design
Healthcare facilities	Simple primary healthcare facilities involving uniform, well established building services	Complex secondary and academic facilities involving complex building and services design with many interfaces and coordination and high consequences of failure
Industrial building services	Large open plan buildings with little interface between services, utilities and processes	Many interfaces, complex geometry with much service coordination, high service level requirements and severe consequences of failure
Industrial project utilities and process systems, including piping and instrumentation	Greenfield site and simple process and plant layout with single or few utilities and simple well-established or predetermined process design	Complex and existing building and plant layout with multiple utilities and poorly defined process design with serious consequences of failure. May involve high level of detail drawing.
Institutional buildings and facilities	Simple architecture with well established and defined layouts and basic service requirements and provision	Complex architecture with sophisticated and unusual service requirements. Many uncertainties and interfaces with coordination and a high consequence of failure.
Airport buildings, museums, theatres, libraries, public, entertainment, hotels, resorts, conference facilities, casinos	Simple architecture with uniform layouts and well defined service requirements and provision	Complex and unique architecture with many uncertainties and with many interfaces and coordination
Unique and specialized engineering systems	Simple design using standard, well established design codes and principles regularly used in the industry	Unique and unusual systems requiring specialised knowledge and experience. Often involves special regulatory requirements. Unusual level of responsibility and high consequence of failure
Wet services	Simple designs that follow established codes and principles regularly used in industry	Specific or unique requirements in respect of energy saving and waste that result in high effort relative to the cost of the works
Electrical engineering services		
Commercial retail and office complexes	Simple architecture with uniform open plan layouts and single tenant or owner-occupier and well defined service requirements and provision	Complex and unique architecture, high rise buildings and multi-tenant buildings. Many uncertainties and interfaces requiring coordination
Communications, instrumentation, data and IT cabling systems	Use of proprietary systems with performance specification	Complex systems, purpose-designed

Project Type	Less Effort	More Effort
Electrical engineering services (continued)		
Distribution (MV & LV) including substations	Greenfield site with few interfaces and large erven (> 250m²) LV only or single substation	Complex existing site with many service interfaces and small erven (< 250m²) Multi-substation interlinked systems with differential and/or directional protection
Educational facilities	Well-established, standard teaching and hostel facilities with well defined simple service requirements	Complex building design with many interfaces and service coordination and involving unusual or new and untried service design
Healthcare facilities	Simple primary healthcare facilities involving uniform, well established building services	Complex secondary and academic facilities involving complex building and services design with many interfaces and coordination and high consequences of failure
Industrial building services	Large open plan buildings with little interface between services, utilities and processes	Many interfaces, complex geometry with much service coordination, high service level requirements and severe consequences of failure
Industrial project utilities and process systems, including piping and instrumentation	Greenfield site, simple process and plant layout with single or few utilities and simple well-established or predetermined process design	Complex and existing building and plant layout with multiple utilities and poorly defined process design with serious consequences of failure. May involve high level of detail drawing.
Institutional buildings and facilities	Simple architecture with well established and defined layouts and basic service requirements and provision	Complex architecture with sophisticated and unusual service requirements. Many uncertainties and interfaces with coordination and a high consequence of failure.
Motor control and electrical installations for machinery and equipment	Greenfield site with few interfaces and excluding process cabling	Complex existing site and work involving plant shutdown/maintenance of supply during construction
Airport buildings, museums, theatres, libraries, and public entertainment, hotels, resorts, conference facilities, casinos	Simple architecture with uniform and simple layouts and well defined service requirements and provision	Complex and unique architecture with many uncertainties and with many interfaces and coordination
Street, area and sportsfield lighting	Uniform geometry and use of proprietary systems	Complex site with specialized lighting purpose-designed from first principles
Transmission (HV) including substations	Flat topography and uniform founding conditions	Difficult topography, variable founding conditions
Unique and specialized engineering systems	Simple design using standard, well established design codes and principles regularly used in the industry	Unique and unusual systems requiring specialised knowledge and experience. Often involves special regulatory requirements. Unusual level of responsibility and high consequence of failure

NOTE: Combinations of factors may apply in determining the level of effort

Step 3: Identify the adjustment factor for the type of services (F_{LE3}) as follows:

a) where definition services are only required.

$F_{LE3} = 1,0$

b) where definition and review services are required

$F_{LE3} = 1 - f + C / (B \times BFP / 100)$

where f = the sum of the proportions for stage completion in Table 14 for the stages for which review services are required divided by 100

B = cost of construction used in the determination of BFP

BFP = basic percentage fee derived from the formula 5.4.4.1 for the value of B

C = the total estimated time charge for identified review services

Table 13: Adjustment factor for level of complexity (F_{LE1})

Fee category (see Annexure 1)	Complexity of project				
	1 (simplest)	2	3 (norm)	4	5 (most complex)
A	0,75	0.81	0.88	0.94	1.0
B	0.88	0.94	1.0	1.06	1.13
C	1.0	1.06	1.13	1.19	1.25
D	1.13	1.19	1.25	1.31	1.44
E	1.25	1.34	1.44	1.53	1.63
F	1.38	1.47	1.56	1.66	1.75
G	1.5	1.59	1.69	1.78	1.88

Table 14: Apportionment of fees between stages where definition services are required

Stage	Civil: Engineering and building works	Structural: Engineering works	Structural: Building works:	Mechanical, electrical and electronic works
3 Preparation and briefing	5%	5%	5%	5%
4 Concept and viability	15%	15%	15%	15%
5 Design development	25%	25%	25%	25%
6 Design documentation	10%	10%	10%	10%
7 Works	20%	20%	20%	20%
8 Handover	12%	12%	12%	12%
9 Close out	15%	15%	15%	15%

NOTE: Definition services are services which develop the deliverable associated with an end of a stage. They are encountered in the design by employer contracting strategy and in the stages prior to the mobilisation of a contractor in the design and construct and develop and construct contracting strategies. Review services are services which review the definition service of a stage undertaken by others for general conformity with the scope of work selected for a particular contracting strategy. These services are required after the mobilisation of a contractor in the design and construct (after stage 4) and develop and construct contracting strategies (after stage 5).

EXAMPLE: A develop and construct contractor is appointed after the completion of stage 5 (Design development stage) for civil engineering works. The basic percentage fee (BFP) derived from the formula contained in 5.4.2.1 for a cost of construction of R 10,0m is 8,0%. The estimated total time charge for identified review services is R 150 000.

$F_{LE3} = 1 - f + C / (B \times BFP / 100) = 1 - (15 + 20 + 7 + 3) / 100 + 150\,000 / (10\,000\,000 \times 8{,}0 / 100) = 0{,}738$

Step 4: Identify from Table 15 the factors which were not known or were unforeseen prior to the formation of the consultant's contract or the issuing of a task order to a consultant which impact upon the services. Assess the additional time charge for each factor, based on reasonable estimates of the additional time required to address each of the identified factors and applying the staff rates provided for in the contract in order to calculate the time charge. Calculate the adjustment factor for project specific variations in level of effort (F_{LE4}) as follows:

a) none of the factors in Table 15 apply

$F_{LE4} = 1{,}0$

b) one or more of the factors in Table 5 apply

F_{LE4} = 1 + D / (B x BFP / 100)

where B = cost of construction used in the determination of BFP

BFP = basic percentage fee derived from the formula 5.4.4.1 for the value of B

D = the sum of all the estimated time charges for identified project specific variations described in Table 15

EXAMPLE: The sum of the total time charge determined for the applicable issues contained in Table 15 total R1 70 000. The basic percentage fee (BFP) derived from the formula contained in 5.4.2.1 for a cost of construction of R 10,0m is 8,0%

F_{LE4} = 1 + D /(B x BFP / 100) = 1 + 170 000 / (10 000 000 x 8,0 / 100) = 1,121

5.4.2.3 Calculate the fees payable in accordance with the following formula:

Fee percentage = BFP x F_{LE} x F_{PO} x F_{CON}

where

BFP = basic percentage fee determined in accordance with the provisions of 5.4.2.1

F_{LE} = adjustment factor that reflects the level of effort that is required as determined in accordance with the provisions of 5.4.2.2

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

Table 15: Methodology to establish the values of F_{LE4}

No	Issue	Considerations
1	Experience and reliability of the contractor	The lack of experience of the contractor can require additional effort in ensuring the required quality, particularly in respect of historical buildings
2	Joint venture requirements	Joint venture which is put together by the employer may attract additional management costs
3	Lead consultant	Requirements to lead the engineering team comprising a number of consultants may attract additional management costs in terms of administration, overall programming, financial control , processing of claims for payment etc
4	Schedule	Fast track projects may necessitate the hiring of additional staff, pay staff for overtime, and re-schedule other work to accommodate project priorities
		Long protracted projects can place additional demands on staff availability and frequency of interactions.
5	Employer Project documentation and computer modelling demands	The employer may have unique requirements which may require customising of standard temples, more extensive communications, providing documentation in different format etc

No	Issue	Considerations
6	New technologies	New technologies can introduce unknown risks in using products or systems that don't have a track record or there may be additional requirements for certifications, testing, submittals, approvals etc. There may also be additional specialist consultants to be retained and co-ordinated. They may also be demands for research.
7	Renovation, rehabilitation and alterations	Work associated with renovation, rehabilitation and alternations can have unknowns or require additional work in establishing reliable record information.
8	Stop and start up workforce	On some projects it is necessary to stop work on the design or preparation of production information. This can lead to additional costs associated with loss of productivity etc
9	Quality assurance system	Employer requirements for quality management systems or quality management services over and above monitoring services can place additional demands on resources.
10	Phased hand over	Phased occupancies can occur on some projects. This can lead to increased resources to address fragmented commissioning.
11	Level of monitoring	Reduce fee if level 1 monitoring service is required. Increase if level 3 or 4 level service is required and not dealt with on a time charge basis.
12	Integration with Existing Works	Extensive integration with many detailed surveys required to facilitate good integration and involving extensive re-use of existing works may necessitate the deployment of additional resources
13	Labour Intensity	Extensive design to suite labour based construction and additional supervision or longer duration due to involvement of labour may necessitate the deployment of additional resources
14	Review the application of design and construction rules by others	An employer can in the case of building works require the review of the application by others of the design and construction rules contained in parts of SANS 10400 for a drainage, stormwater disposal, fire protection, fire installation or structural, system or element which are deemed-to-satisfy the National Building Regulations. This typically involves the confirmation of the correct interpretation and application of these rules.
15	Design of parts of the structural, fire protection, artificial ventilation, stormwater disposal or non-water borne sanitary disposal, fire installation or drainage installation system by others	Regulation A19(7) of the National Building Regulations requires that the person appointed as an approved competent person assume responsibility for satisfying the functional regulations relating to that particular system in its entirety as a single point of responsibility. Regulation A19(8)(a) recognises that parts of a system may be designed by others but requires the approved competent person to ensure that: a) the component designs are generally in accordance with the approved application and in accordance with the requirements of the regulations; b) the component designs will achieve the necessary co-ordination and interaction of the different elements so as to achieve the objectives of the systems; and c) in the case of the structural system, the interaction of the various component elements will be such that the structural adequacy of all the parts of the building and the overall stability of the building is assured Regulation A19(8)(a) excludes responsibility for the detailed design of elements carried out by the other competent persons. Regulations 19(8)(b) enables the approved competent person for the design of system to requires those responsible for designing parts of the system to complete a standard form contained in part A of SANS 10400 and to provide information and documents relating to their designs.
16	Monitoring of development targets	The Employer may require that the flows of money to target groups to be verified in terms of a targeted procurement procedure

5.4.3 Payment for stage completion

Payment for stage completion where definition services are required shall unless otherwise motivated be based on the percentages shown in Table 14.

5.5 Supporting documentation for the determination of fee percentage

Supporting documentation shall be prepared to determine the applicable fee percentage. Such documentation shall contain all assumptions made regarding the cost of construction and the determination of the adjustment factor (F_{LE}) and contain sufficient notes to enable an independent reviewer to arrive at a similar determination (see Annexure 3).

The supporting documentation shall be agreed with the employer's representative and signed off by such person.

The supporting documents shall be retained by both the employer and the consultant for audit purposes.

Annexure 1: Fee categories for different classes of buildings

The fee categories for the different classes of buildings are as follows:

Class	Occupancy	Detailed description	Fee category	
			Architectural	Cost management
A PLACES OF ASSEMBLY				
A1	Restaurants	A1.1 A la Carte Restaurant	3	4
		A1.2 Fast Food Outlet / Snack Bar / Coffee Shop	2	4
		A1.3 Drive-through / Drive-in Food Outlets	2	4
A2	Entertainment / Assembly	A2.1 Community Hall	2	3
		A2.2 Multi-Purpose Hall	3	3
		A2.3 Dance Hall	2	3
		A2.4 Night Club / Disco	2	4
		A2.5 Civic Centre	4	5
		A2.6 Pub / Bar / Ladies Bar	2	4
		A2.7 Shebeen / Tavern	2	3
		A2.8 Open Air Amphitheatre	2	2
A3	Theatrical / Music	A3.1 Opera House / Concert Hall	5	6
		A3.2 Theatre	5	5
		A3.3 Auditorium	4	4
		A3.4 Cinema	4	4
		A3.5 Drive-in Cinema	2	2
		A3.6 Recording Studio	5	5
A4	Places of Instruction	A4.1 Small School / Farm School / Small Rural School	2	3
		A4.4 Primary & Secondary School	3	4
		A4.5 College / University / Place of Higher Learning	4	5
		A4.6 Specialised Training Facility	4	5
		A4.7 Conference Centre	4	5
		A4.8 Convention Centre	4	5
A5	Places of Worship	A5.1 Religious Assembly Hall	2	4
		A5.2 Church / Temple / Mosque / Synagogue < 150 people	2	4
		A5.3 Church / Temple / Mosque / Synagogue >150 people	3	4
A6	Indoor Sport	A6.1 Sports Club Building	3	4
		A6.2 Gymnasium	3	4
		A6.3 Health Club / Centre / Spa	4	4
		A6.4 Indoor Swimming Pool / Sports Track / Arena / Covered Stadium / Squash Court / Bowling Alley	3	4
		A6.5 Covered Stadium	4	4
A7	Outdoor Sport	A7.1 Arena	2	3
		A7.2 Stadium	3	3
		A7.3 Sports Field / Track / Court / Bowling Green	2	3
		A7.4 Domestic Swimming Pool	1	1
		A7.5 Swimming Pool / Diving Centre	3	3
		A7.6 Specialised Facilities e.g. Wave Pools / Climbing Walls / Skateboard Rinks	3	3
B COMMERCIAL				
B1	High risk commercial	B1.1 Facilities where Noxious / Toxic / Flammable Materials are Used / Sold	3	3
		B1.2 Petrol Station	3	4
B2	Moderate risk commercial	B2.1 Max 500sq m / max 1 storey	2	3
		B2.2 Max 1000sq m / max 3 storeys	2	3
		B2.3 Unlimited size / Multi-storey	2	3
B3	Low risk commercial	B3.1 Max 500sq m / max 1 storeys	2	2
		B3.2 Max 500sq m / max 2 storeys	2	2
		B3.3 Max 1000sq m / max 3 storeys	2	2
		B3.4 Unlimited size / Multi-storey	2	2
C EXHIBITION SPACES				
C1	Exhibition Building	C1.1 Individual Exhibition stand within Major Hall / Exhibition Space	1	2
		C1.2 Exhibition Hall	3	4
		C1.3 Private Art Gallery < 500 sq m	3	4
		C1.4 Private Art Gallery > 500 sq m	3	4
C2	Museums	C2.1 Heritage Precinct / Building	4	4
		C2.2 Town Museum	4	5
		C2.3 Regional / National Museum or Art Gallery	4	5
		C2.4 Planetarium / Specialised Exhibition Space	4	5

Class	Occupancy	Detailed description	Fee category	
			Architectural	Cost management
C EXHIBITION SPACES (continued)				
C3	Library	C3.1 Community / School Library	3	5
		C3.2 Higher Education / Regional / National Library	4	6
		C3.3 Multi-Media Centre	3	6
C4	Outdoor Exhibition Space	C4.1 Permanent Structure max 500 sq m	2	3
		C4.2 Permanent Structure - unlimited size	2	3
D INDUSTRIAL				
D1	High Risk Industrial	D1.1 Examples Petrochemical / Nuclear Reactor	3	3
D2	Moderate Risk Industrial	D2.1 Food & Pharmaceuticals Processing	3	3
		D2.2 Other to max 1500sq m / max 3 storeys	3	3
		D2.3 Unlimited size	3	3
D3	Low Risk Industrial	D3.1 Max 500sq m / max 1 storey	2	2
		D3.2 Max 1000sq m / max 2 storeys	2	2
		D3.3 Max 2000sq m / max 3 storeys	2	2
		D3.4 Unlimited size	2	2
D4	Plant Room	D4.1 Max 750sq m / max Double storey	3	3
		D4.2 Unlimited size	3	3
E INSTITUTIONAL				
E1	Correctional & Judicial	E1.1 Regional Police Station	3	5
		E1.2 Community Police Station	3	4
		E1.3 Satellite Police Station	2	4
		E1.4 Radio Control Centre	3	4
		E1.5 Prison (All grades)	3	5
		E1.6 Courts (All grades)	4	5
E2	Hospital / Medical Facility	E2.1 Private Doctors Consulting Rooms	3	5
		E2.2 Medical Consulting Rooms	3	5
		E2.3 Medical Centre	3	5
		E2.4 Satellite Clinic	3	5
		E2.5 Community Health Centre	3	5
		E2.6 Frail Care / Hospice	4	6
		E2.7 Hospital / Trauma Unit	5	6
E3	Residential Institution	E3.1 Home for the Elderly / Children	4	4
		E3.2 School Hostel max 3 storeys	2	3
		E3.3 School Hostel over 3 storeys	2	3
		E3.4 Student & Youth Hostel max 3 storeys	3	3
		E3.5 Student & Youth Hostel over 3 storeys	3	3
		E3.6 Workers Hostel max 3 storeys	2	3
		E3.7 Workers Hostel over 3 storeys	2	3
		E3.8 Community Care Centre	4	4
		E3.9 Sanatorium / Health Spa	4	4
E4	Research Facility	E4.1 School Laboratory	4	5
		E4.2 Privately Owned / Corporate Laboratory	5	5
		E4.3 Regional / National / University Research Institute	5	6
F SHOPPING CENTRES				
F1	Large Shop	F1.1 Shop Interior	3	3
		F1.2 Department Store maximum 2 storeys	4	2
		F1.3 Department Store more than 2 storeys	4	2
		F1.4 Local Convenience / Neighbourhood Retail Centre - maximum 1 000 sq m	3	2
		F1.5 Suburban Shopping Centre	4	2
		F1.6 Regional Shopping Centre	4	2
F2	F2 Small Shop	F2.1 Corner Store / Home (Spaza) Shop - maximum size 500 sq.m.	3	2
F3	Wholesaler's Store	F3.1 Max 2000sq m / max 3 storeys	3	1
		F3.2 Unlimited size	3	1
G OFFICES				
G1	Offices	G1.1 Individual Studio / Offices to max 500 sq m / max 1 storey	2	3
		G1.2 Individual Studio / Offices to max 500 sq m / max double storey L	2	3
		G1.3 Office Building / Park max 3 storeys	3	3
		G1.4 Multi-storey Office Building / Office Park	3	3
		G1.5 Office building higher than 30m, Service Towers & Skyscrapers	3	3

Class	Occupancy	Detailed description	Fee category	
			Architectural	Cost management
H RESIDENTIAL				
H1	Hotel / Hospitality	H1.1 Guest House (max 12 bedrooms)	2 to 3	2
		H1.2 Game Lodge	2 to 3	2
		H1.3 Holiday Apartments to max 3 storeys	3	2
		H1.4 Motel / Hotel / max 30 bed / max 3 storeys	3	2
		H1.5 Multi-storey Hotel / Holiday Apartments	4	2
H2	Multi-Unit Residential	H2.1 Multi-storey Apartment Building	4	2
		H2.2 Block of Apartments max 3 storeys	4	2
		H2.3 Block of Apartments max 2 storeys, max no units 10	4	2
		H2.4 Townhouse Development of max 2 storeys, max no units 10	3	2
		H2.5 Townhouse Development of max 3 storeys, max no units 40	3	2
		H2.6 Townhouse / Residential Village Development - unlimited size	3	2
		H2.7 Recreational Estate (Marina Golf etc)	3	2
H3	Dwelling House	H3.1 Single / Double Dwelling 2 storeys, max 500 sq m	2 to 4	2
		H3.2 Single / Double Dwelling max 2 storeys, max 750 sq m	3 to 4	2
		H3.3 Single / Double Dwelling unlimited size	3 to 5	2
J STORAGE				
J1	High Risk Storage	J 1 Example Petrochemical / Toxic Waste / Flammables	3	2
J2	Moderate Risk Storage	J2.1 Max 500sq m / max double storey	2	1
		J2.2 Max 1000sq m / max 3 storeys	2	1
		J2.3 Unlimited size	2	1
J3	Low Risk Storage	J3.1 Max 1000sq m / max double storey	1	1
		J3.2 Max 2000sq m / max 3 storeys	1	1
		J3.3 Unlimited size	1	1
J4	Parking Garage	J4.1 Single Storey Parking Garage	2	1
		J4.2 Max 3 Storey Parking Garage	2	1
		J4.3 Multi-Storey Parking Garage	2	1
		J4.4 Underground Parking	2	1
J5	J5 Cold Storage	Example Cold Chain Facilities / Ice Bunkers	3	3
K AGRICULTURAL				
K1	Farm Building	K1.1 Feed Storage	1	1
		K1.2 General Livestock Housing / Stables	2	1
		K1.3 General Use Barns & Sheds	1	1
		K2.3 Cold Storage	3	2
		K2.4 Grain Silos	3	2
		K2.5 Wine Cellars / Stills	3	2
L TRANSPORTATION				
L1	Terminal Building	L1.1 Airport	3	5
		L1.2 Harbour	3	5
		L1.3 Regional / City Main Railway Station / Subway Station	3	5
		L1.4 Suburban / Rural Railway Station	3	5
L2	Goods Handling Facilities	L2.1 National / Regional Depot	2	3
		L2.2 Suburban Depot	2	3
M FACILITIES FOR HANDLING MORTAL REMAINS				
M1	Human Remains	M1.1 Crematorium	4	5
		M1.2 Mortuary	4	5
		M1.3 Funeral Parlour (without Mortuary)	3	5
M2	Animal Remains	M2.1 Abattoir (Also Food Processing)	4	4
		M2.2 Crematorium	3	4

Annexure 2: Fee categories for engineering services for different project types

The fee categories for engineering services in different projects types are as follows:

Project Type	Fee Category
Civil and structural engineering and building works	
General agricultural engineering	D
Pipelines	
Pipelines – Water	A
Pipelines – hazardous substances, submarine pipeline	D
Transport Infrastructure	
Airports and runways, taxiways and aprons	A
New and improved unpaved roads	C
New and Improved Urban Roads	C
New Paved Rural Roads	A
New Rural Freeways	B
New Urban Freeways	D
Railway trackwork	A
Railways (excluding cost of tracks)	A
Road Rehabilitation	A
Rural Road Expansion	B
Water	
Large earth dams	B
Large concrete dams	C
Small dams	D
Stormwater Pipes (Pre-cast Units)	A
Irrigation – centre pivot., lateral move and similar	B
Irrigation – sprinklers and similar	C
Irrigation – micro drip and similar	D
River intakes, pump stations	E
Municipal and Building Civils	
Building civils	C
Municipal services	C
Parking lots	A
Water and sewage treatment works	F
Geotechnical	
Underground Structures and dredging	A
Reinforced Concrete and Structural Steel	
Complex load bearing structures, quay walls and jetties	F
Minor structures	C
Overpasses and freeway bridges	E
Powerstation civils and buildings	C
River bridges	F
Stormwater structures, breakwaters and canals (designed)	C
Unique structures	E
Water retaining structures	D
Water Towers	E
Building Structural	
Iconic and unique buildings and structural alterations	G
Hospitals, hotels, airports, stadia, exhibition halls. retail shopping centres and buildings with specialised requirements	F
Residential, offices, educational and industrial	E
Agricultural, warehouses, parking garages	D

Project Type	Fee Category
Mechanical engineering works	
Green building design and energy management	F
Specialised fire protection systems such as gas, foam extinguishing etc	D
Hazardous material systems	F
HVAC systems	D
Industrial process, piping and instrumentation	E
Mechanical plant and equipment	C
Pressure vessel design	F
Pumping and pipeline systems	D
Refrigeration and cold storage	C
Vertical transportation systems and materials handling	D
Mechanical building works	
Industrial building services and utilities	E
General – commercial, retail, offices, schools, hostels, clinic, hotels and resorts	E
Specialised – airport buildings, theatres, libraries, public entertainment, hospitals, research facilities, universities, laboratories, conference facilities, institutional buildings and facilities	F
Residential – individual luxury housing units and apartment buildings	F
Residential – multiple (>50) standard housing units	C
Wet services	G
Electrical engineering works	
Green building design and energy management	F
Communications, data and IT cabling systems	E
Energy generation and transmission	D
Fire protection, security and access control	E
Industrial process, wiring and instrumentation	E
Mining	D
Motor control and electrical installations for machinery and equipment	E
MV and LV Distribution	C
Street, area and sportsfield lighting	D
Electrical building works	
Industrial building services and utilities	E
General – commercial, retail, offices, schools, hostels, clinic, hotels and resorts	E
Specialised – airport buildings, theatres, libraries, public entertainment, hospitals, research facilities, universities, laboratories, conference facilities, institutional buildings and facilities	F
Residential – individual luxury housing units and apartment buildings	F
Residential – multiple (>50) standard housing units	C
Electronic engineering	
Electronic engineering (provision of complex purpose designed electronic systems and detailing the terminations, signals and interconnections of electronic components as distinct from proprietary designed electronic systems and conventional electrical HV, MV and LV systems and related reticulation)	G

Annexure 3: Recording the determination of a fee percentage based on the application of the framework

NOTE: Clause 5.5 of *Framework for the determination of professional fees for consulting services* requires that Supporting documentation be prepared to determine the applicable fee percentage. Such documentation is required to contain all assumptions made regarding the cost of construction and the determination of the adjustment factor (F_{LE}) and contain sufficient notes to enable an independent reviewer to arrive at a similar determination.

Contract no:	
Title of contract:	
Task Order no:	
Consultant:	
Type of Service: (tick relevant box)	☐ architectural ☐ cost management ☐ engineering
Nature of services: (provide short description)	

We the undersigned have applied the *Framework for the determination of professional fees for consulting services* in respect of the abovementioned services and have determined that the applicable fee percentage for the abovementioned Task Order is:

. . . . . % (in words) . . . . . % (in figures)

The supporting documentation containing the assumptions made in arriving at this fee percentage is as set out in the attached supporting documentation.

***Consultant's* representative**	***Employer's* Agent**
Signature:.	Signature:. . . . .
Name:	Name: . . . . .
Date:	Date: . . . . .

Supporting documentation for determination of architectural fee percentage

1 Cost of construction

Cost of construction representing the works excluding VAT = R ..... ❶

Briefly describe how the cost of construction was arrived at:

.....

2 Basic fee

Fee base (see column C of Table 2)	= R	❷
Percentage cost (see column D of Table 2)	percentage = ...	❸
	percentage cost = ❸ / 100 x ❶ = ... / 100 x ..... = R	❹
basic fee	= ❷ + ❹ = ... + ... = R	❺
basic percentage fee (BFP)	= ❺ / ❶ x 100 = ... / ..... x 100 = ...	❻

3 Level of effort

3.1 Adjustment factor for building category and complexity (F_{LE1})

Class of building(s) from Annexure 1: .....

Adjustment factor for building category and complexity from Table 3 (F_{LE1}) = ...

Provide motivation for selected complexity in Table 3:

.....

Where more than one category applies, provide calculation for interpolation of F_{LE1}

.....

3.2 Adjustment factor for repeat buildings (F_{LE2})

Check one of the following boxes:

☐ no repeat buildings: $F_{LE2} = 1,0$

☐ repeat buildings occur:

Estimated cost of construction associated with repeat buildings: R ..... ❼

Briefly describe how the cost of construction associated with repeat buildings was arrived at:

. . . . . .

F_{LE2} = 1 – 0,455 x ❼ / ❶

= 1 – 0,455 x . . . . . / . . . . . .

= . . . . . .

3.3 Adjustment factor where employer appoints others to undertake work covered by the deemed to satisfy design and construction rules contained in SANS 10400 (F_{LE3})

Check one of the following boxes:

☐ consultant applies the relevant deemed to satisfy design and construction rules for all parts of the National Building Regulations: F_{LE3} = 1,0

☐ consultant applies not all the relevant deemed to satisfy design and construction rules for all parts of the National Building Regulations

Estimated cost of the systems or elements of a building which are covered by the deemed to satisfy rules contained in SANS 10400 but are undertaken by others appointed by the employer: R . . . . . ❽

Briefly describe how such cost of the systems or elements of a building was arrived at:

. . . . . .

Estimated percentage of ❽ which needs to be included in the cost of construction to provide a reasonable fee for dealing with aspects of the system or element which is undertaken by others in the design of the building as a whole . . . . . % ❾

Briefly describe how such percentage was arrived at:

. . . . . .

F_{LE3} = 1 – (1 – ❾ / 100) x ❽ / ❶

= 1 – (1 - . . . . . / 100) x . . . . . / . . . . . .

= . . . . . .

3.4 Adjustment factor for the range of services that are required (F_{LE4})

Check one of the following boxes:

☐ services are provided as project leader, lead designer, designer and supervising agent: F_{LE4} = 1,0

☐ services are provided as lead designer, designer and supervising agent: F_{LE4} = 0,9

3.5 Adjustment factor for the type of services required (F_{LE5})

Check one of the following boxes:

☐ definition services are only required: F_{LE5} = 1,0

☐ definition and review services are required

Check one of the following boxes:

☐ design and construct contracting strategy in which case f = 0,8 ❿

☐ develop and construct contracting strategy in which case f = 0,45 ❿

The total estimated time charge for identified review services is. . . . . ⓫

Briefly describe how such time charge was arrived at:

. . . . . .

F_{LE5} = 1- ❿+ ⓫ / (❶ x ❻/ 100)

3.6 Adjustment factor for unknown / unforeseen additional time charge (F_{LE6})

Check one of the following boxes:

☐ no unknown or unforeseen additional factors listed in Table 6 apply : F_{LE5} = 1,0

☐ unknown or unforeseen additional factors listed in Table 6 apply:

applicable factor no(s) and description(s) from Table 6: . . . . . .

detailed estimated time charge for each identified factor:

. . . . . .

. . . . . .

Total of all estimated time charges = ... ⓬

F_{LE6} = 1 + ⓬/ (❶ x ❻ / 100)

= 1 + ... / (. . . . . + ... / 100)

= . . . . . .

3.7 Determination of F_{LE}

$F_{LE} = F_{LE1} \times F_{LE2} \times F_{LE3} \times F_{LE4} \times F_{LE5} \times F_{LE6}$

F_{LE} = ... x . . . . . x . . . . . x . . . . . x . . . . . x . . . . .

= . . . . . ⓭

4 Fee percentage

Fee percentage = ❻ x ⓭ x F_{PO} x F_{CON}

where

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

Fee percentage = ... x ..... x ..... / 16 x .....

= .....

Supporting documentation for the determination of cost management (building works) fee percentage

1 Cost of construction

Cost of construction representing the works excluding VAT = R . . . . . ❶

Briefly describe how the cost of construction was arrived at:

. . . . . .

2 Basic fee

Primary charge (see column C of Table 6)	= R	❷
Marginal rate (see column D of Table 6)	percentage balance over column A = ... %	❸
	column A = ...	❹
	= ❸ / 100 x (❶ – ❹)	
	= . . . . . / 100 x (. . . . . - . . . . .)	
	=	
		❺
Basic fee	= ❷ + ❺	
	= . . . . . + ...	
	= R	❻
basic percentage fee (BFP)	= ❻ / ❶ x 100	
	= . . . . . / . . . . . x 100	
	=.	❼

3 Level of effort

3.1 Adjustment factor for building category and complexity (F_{LE1})

Class of building(s) from Annexure 1: . . . . . .

Adjustment factor for building category and complexity from Table 7 (F_{LE1}) = ...

Where more than one category applies, provide calculation for interpolation of F_{LE1}

. . . . . .

3.2 Adjustment factor for replication of prototype (F_{LE2})

Check one of the following boxes:

☐ no replication of prototype: $F_{LE2} = 1,0$

☐ replication of prototype occurs

Estimated cost of construction associated with replications: R . . . . . ❽

Briefly describe how the cost of construction associated with repeat buildings was arrived at:

. . . . . .

F_{LE2} = 1 – 0,4 x ❽ / ❶

= 1 – 0,4 x . . . . . / . . . . . .

= . . . . . .

3.3 Adjustment factor for the scope of services (F_{LE3})

Applicable type of service – see Table 8: . . . . . .

Applicable adjustment factor contained in Table 8 for scope of services (F_{LE3}) = ...

3.4 Adjustment factor for the type of services (F_{LE4})

Check one of the following boxes:

☐ definition services are only required: F_{LE4} = 1,0

☐ definition and review services are required

contracting strategy (see first column Table 9): . . . . . ,

adjustment factor for the type of services from Table 9 (FL_{E4}) = ...

3.5 Adjustment factor for unknown or unforeseen additional time charge (F_{LE5})

Check one of the following boxes:

☐ no unknown or unforeseen additional factors listed in Table 10 apply : F_{LE5} = 1,0

☐ unforeseen unknown or additional factors listed in Table 10 apply:

applicable factor no(s) and description(s) from Table 10: . . . . . .

detailed estimated time charge for each factor identified:

. . . . . .

. . . . . .

Total of all estimated time charges = ... ❾

F_{LE5} = 1 + ❾ / (❶ x ❼ / 100)

= 1 + ... / (. . . . . x . . . . . / 100)

= . . . . . .

3.6 Determination of F_{LE}

$F_{LE} = F_{LE1} \times F_{LE2} \times F_{LE3} \times F_{LE4} \times F_{LE5}$

$F_{LE} =$ ..... x ..... x ..... x ..... x .....

= ..... ❿

4 Fee percentage

Fee percentage = ❼ x ❿ x F_{PO} x F_{CON}

where

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

Fee percentage = ... x ..... x ..... / 16 x .....

= .....

Supporting documentation for the determination of engineering fee percentage

1 Cost of construction

Cost of construction representing the works excluding VAT = R ..... ❶

Briefly describe how the cost of construction was arrived at:

.....

2 Basic fee

BFP = 24,1 – 2,3 x log ❶

= ..... ❷

NOTE: if BFP < 4,0% or where cost of construction exceeds R1,0 billion, the fee is negotiated.

3 Level of effort

3.1 Adjustment factor for level of complexity (F_{LE1})

Project type (s) from Annexure 2: .....

Applicable influencing factor for project type from Table 12 (less effort / norm / more effort) together with brief motivation for selecting the level of effort:

.....

F_{LE1} selected from Table 13: .....

Brief motivation for selection of F_{LE1}: .....

Where more than one project type applies, provide calculation for interpolation of F_{LE1}

.....

3.2 Adjustment factor for duplication of or repetitive work (F_{LE2})

Check one of the following boxes:

☐ no duplication of or repetitive work: F_{LE2} = 1,0

☐ duplication or repetition of work occurs:

Estimated cost of works which are duplicated or where repetition exists: R ..... ❸

Briefly describe how the cost of construction associated with such works was arrived at:

.....

Estimated percentage of ❸ which needs to be included in the cost of construction to provide a reasonable fee for dealing with duplication or repetitive aspects of the work: ..... % ❹

Briefly justify percentage value for ❹:

. . . . . .

F_{LE2} = 1 – (1 – ❹ / 100) x ❸ / ❶

= . . . . . .

3.3 Adjustment factor for the type of services (F_{LE3})

Check one of the following boxes:

☐ definition services are only required: F_{LE4} = 1,0

☐ definition and review services are required

Check one of the following boxes:

☐ design and construct contracting strategy in which case, f:

= 0,70 for civil engineering and building works and structural engineering works ❹
= 0,75 for structural building works ❹
= 0,80 for mechanical and electronic works ❹

☐ develop and construct contracting strategy in which case, f:

= 0,45 for civil engineering and building works and structural engineering works ❹
= 0,40 for structural building works ❹
= 0,55 for mechanical and electronic works ❹

total estimated time charge for identified review services : R . . . . . ❺

provide break down of time charges:

. . . . . .

F_{LE3} = 1 – ❹ + ❺ / (❶ x ❷ / 100)

= . . . . . - . . . . . + ... / (. . . . . x . . . . . / 100)

= . . . . . .

3.4 Adjustment factor for unknown and unforeseen additional time charge (F_{LE4})

Check one of the following boxes:

☐ no unknown and unforeseen additional factors listed in Table 15 apply : F_{LE4} = 1,0

☐ unknown and unforeseen additional factors listed in Table 15 apply:

applicable factor no(s) and description(s) from Table 15: . . . . . .

detailed estimated time charge for each identified factor:

. . . . . .

Total of all estimated time charges = ... ❻

F_{LE5} = 1 + ❻ / (❶ x ❷ / 100)

= 1 + ... / (. . . . . + ... / 100)

= . . . . . .

3.5 Determination of F_{LE}

$F_{LE} = F_{LE1} \times F_{LE2} \times F_{LE3} \times F_{LE4}$

F_{LE} = ... x . . . . . x . . . . . x . . . . . .

= . . . . . ❼

4 Fee percentage

Fee percentage = ❷ x ❼ x F_{PO} x F_{CON}

where

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

Fee percentage = ... x . . . . . x . . . . . / 16 x . . . . . .

= . . . . . .

Annexure 4: An approach to determining percentage fees for landscape architectural services

Landscape architectural services can be procured along similar lines to architectural, cost management and engineering services. However, there are no standard adjustment factors available for level of effort. Accordingly, the level of effort needs to be tendered in the adjustment factor (F_{CON}) on a project by project basis.

The basic fee percentage (BFP) may be interpolated from the following tabulation

Cost of construction	Fee
400 000.00	14.00%
500 000.00	13.53%
600 000.00	13.16%
700 000.00	12.86%
800 000.00	12.62%
900 000.00	12.42%
1 000000.00	12.25%
1 200000.00	11.95%
1 400000.00	11.70%
1 600000.00	11.45%
1 800000.00	11.21%
2 000 000.00	10.99%
2 400 000.00	10.64%
2 800 000.00	10.39%
3 500 000.00	9.94%
5 000 000.00	9.92%
9 000 000.00	9.90%

Time based fees should be applied where the cost of construction is less than R 400 000.

EXAMPLE: If the cost of construction is R 650 000, the BSP may be calculated as follows:

$$BSP = 13.16 - \frac{(650\,000 - 600\,000)}{(700\,000 - 600\,000)} \times (13.16 - 12.86) = 13.01$$

Fee percentage = BFP x F_{PO} x F_{CON}

where

BFP = basic percentage fee determined in accordance with the provisions of 5.4.2.1

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable etc.

Annexure 5: Activating the framework through procurement documents

Procurement documents need to be prepared in accordance with the provisions of the provisions of the National Treasury Framework for Infrastructure Delivery and Procurement Management and SANS 10845-2, *Construction procurement – Part 2: Formatting and compilation of procurement documentation*

The sections in the procurement document that need to be address matters relating to the framework are:

Contents		Broad outline of contents	Comments
Number	Heading		
C1.2	Contract data	Identifies the applicable conditions of contract and associated contract-specific data that collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the contract.	The Contract Data needs in the case of an NEC3 Professional Service Contract to identify the applicable Main Option. A Z clause (NEC3) or additional clause (CIDB SPSC) will be required if lump sum values are determined in accordance with the provisions of the framework
C2.1	Pricing assumptions	Provides the criteria and assumptions which it is assumed (in the contract) that the tenderer has taken into account when developing his prices, or target in the case of target and cost reimbursable contracts.	Pricing assumptions need to be drafted for the selected pricing strategy (strategy which is adopted to secure financial offers and to remunerate contractors in terms of the contract).
C2.2	Pricing schedules / Activity schedule /	Records the contractor's prices for providing goods, services or engineering and construction works which are described in the scope of work section of the contract.	Provision needs to be made for the tendering of staff rates and the adjustment factor
C3	Scope of work	Specifies and describes the goods, services, or engineering and construction works which shall be provided and any other requirements and constraints relating to the manner in which the contract work shall be performed	The scope of work needs to reference the *Standard scope of professional services associated with the delivery of a package* and provide project specific information as set out in Annexure A (Incorporating the provisions of this standard in the scope of work of contracts) of this document

A Z clause (NEC3 PSC) or additional clause (CIDB SPSC) will be required to make provision for the calling off of task orders in framework agreements unless the NEC3 PSC Option G (Term service) contract is utilised.

EXAMPLES:

A Z clause along the following lines can be added to the Contract Data associated with the NEC3 Professional Service Contract (Main Option G: Term Service Contract) to create a lump sum payment based on a fee percentage arrived at in accordance with the provisions of the framework contained in this document:

Contract Data

Z.. **Alternative basis for assessing compensation events relating to cost management services for buildings**

If the *Employer* and the *Consultant* agree, assessments for changed Prices for compensation events relating to services may be based on a percentage of the construction cost determined in accordance with the provisions of the *Framework for the Determination of Professional Fees for Professional Services* where:

F_{PO} = tendered professional and technical staff rate expressed in cents / R 100 or part thereof of total cost of employment as stated in the C2.2 Pricing Data / 16

F_{CON} = tendered adjustment factor to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, expenses that are not recoverable etc. as stated in C2.3 of the Pricing Data

The fees based on a percentage of the project cost includes the travelling time and travel costs associated with the provision of the service within . . . . km of the home base of the *key person* identified in Part 2 of the Contract Data.

The total fee for each stage required in terms of the scope of work in Rands, determined in accordance with the provisions of National Treasury's] *Framework for the Determination of Professional Fees for Consulting Services,* is entered as a lump sum amount in the Task Order. Such amounts may be further broken down should the *Consultant* so require.

C2: Pricing Data

C2.1 Pricing assumptions (Option G)

C.2.1.1 General

C.2.1.1.1 The *Consultant* is paid under Option G (Term Contract) i.e. on a combination of Time Charges (sum of the products for each of the *staff rate* multiplied by the time appropriate to that *rate* properly spent on work in the contract) and a proportion of the lump sum price for each item on the Task Schedule in proportion to the work completed on that item.

C.2.1.1.2 *Expenses* as provided for in the contract are paid in addition to the total of the Time Charges and lump sum prices.

C.2.1.1.3 There is no adjustment to the lump sums for items in the Task Schedule if the amount, or quantity, of work within that activity later turns out to be different to that which the *Consultant* estimated at the time that the Task Schedule was accepted by the *Employer*. The only basis for a change to the lump sum prices is as a result of a compensation event (See Clause 60.1).

C.2.1.2 Staff rates

C.2.1.2.1 The *staff rates* are the prices charged for staff excluding VAT including:

a) all the costs to the *Consultant* including total annual cost of employment, overhead charges incurred as part of normal business operations including the cost of management, as well as payments to administrative, clerical, IT support and secretarial staff used to support professional and technical staff in general and not on a specific project only;
b) the time expended in travelling to and from a site, meetings or any other activity associated with the provision of the service in the region identified in Part 2 of the Contract Data, except for travel to a place outside of such region required by the *Employer*;
c) non-recoverable expenses;
d) all protective clothing and all standard equipment such as office furniture, copiers, plotters, computers and software used to perform the services; and
e) profit.

C.2.1.2.2 The total annual cost of employment is the total amount borne by the *Consultant* in respect of the employment of a staff member per year comprising basic salary and fringe benefits not reflected in the basic salary, including:

a) normal annual bonus,
b) consultant's contribution to medical aid, unemployment insurance fund, pension or provident fund,
c) group life insurance premiums borne by the *Consultant*; and
d) all other benefits or allowances payable in terms of a letter of appointment excluding any share of profit and payment for overtime.

C.2.1.2.3 The staff rates for staff whose hourly or monthly rate is based on the total annual cost of employment shall not exceed the staff rate for category 1 or Category 3, respectively.

C.2.1.2.4 All staff that are deployed on a full time basis shall be remunerated in terms of staff rate 3 or 4 as relevant.

C.2.1.2.5 The rate per month shall include all leave taken in accordance with the letter of appointment and non-working days.

C.2.1.2.6 The staff rates exclude VAT.

C.2.1.3 Expenses

C.2.1.3.1 The *expenses* that may be paid to the *Consultant* are as stated in the Contract Data. All other cost to the Consultant associated with Providing the Services is included within the staff rates.

C.2.1.3.2 All air travel shall be in economy class on a scheduled airline.

C.2.1.3.3 Accommodation means a

- a bed and breakfast;
- a guest house;
- self catering; or
- hotel having a star rating of 1, 2 or 3 as defined by the Tourism Grading Council of South Africa (see www.tourismgrading.co.za).

Note: A lodge, country house or 4 star or higher star rated hotel is not accommodation. Any stay in such a facility cannot be claimed as an expense.

C.2.1.3.4 A hired car means a motor vehicle having an engine capacity of not more than 1800cc.

Note: A hired car having an engine capacity greater than 1800cc is not a hired car and cannot be claimed as an expense

C.2.1.3.5 The costs associated with the provision of facilities by the Consultant where required by the Employer shall be at open market or competitively tendered prices with deductions for all discounts, rebates and taxes which can be recovered.

C2.2 Staff rates

The staff rates are:

Rate	Description	*Basis of staff rate, excluding VAT*	Tendered parameter
1	Director, member or partner Senior professional staff whose calculated rate per hour equals or exceed the maximum hourly rate	Rate per hour in Rand	R . . . . .
2	Professional staff, who are appropriately registered with a statutory council with adequate expertise and relevant experience, who carry direct professional responsibility for one or more specific activities related to the *services;* and Technical staff with adequate expertise and relevant experience performing work with direction and control provided by professional staff.	Rate per hour in Rand based on cents per hour for every R100 total annual cost of employment	. . . . . cents
3	Director, member or partner Senior professional staff whose calculated rate per hour equals or exceed the maximum hourly rate	Rate per month in Rand where payment is made for leave and non-working days	R . . . . .
4	Professional staff, who are appropriately registered with a statutory council with adequate expertise and relevant experience, who carry direct professional responsibility for one or more specific activities related to the *services;* and Technical staff with adequate expertise and relevant experience performing work with direction and control provided by professional staff.	Rate per month based on total annual cost of employment divided by 12 multiplied by a factor where payment is made for leave and non-working days	factor = ...

C2.3 Adjustment factor

Adjustment factor	Description	Tendered value (a number)
F_{CON}	An adjustment factor (F_{CON}) (see National Treasury's *Framework for the determination of professional fees for consulting services)* (see Annexure 4) used in the calculation of the fee percentage for cost management services for buildings to reflect factors such as risk, productivity, efficiency, locality, local knowledge, particular methods or systems for delivering services, level of expenses that are not recoverable, alignment of services with scope of work etc	. . . . .

Annexure 4: Specification for developing skills that result in nationally accredited outcomes through

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE

Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts

March 2023

Issued by:

Department of Public Works, Roads and Infrastructure

Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts

Table of Contents

Specification for developing skills that result in nationally accredited outcomes through infrastructure contracts

1 Scope

This specification establishes a key performance indicator in the form of a contract skills development goal (CSDG) relating to the structured work learning component of occupational or professional learning, which enables learners to make measurable progress towards the attainment of:

a) a part or full occupational qualification registered on the National Qualification Framework,

b) a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012);

c) a national diploma registered on the National Qualification Framework; or

d) registration in a professional category by a recognized professional body or statutory council.

in the delivery, maintenance and operation of infrastructure through the performance of professional service, service, supply or engineering and construction works contracts or an order associated with such a contract.

This specification sets out the methods by which the key performance indicator is established, measured, quantified and verified in the performance of the contract or the execution of an order.

NOTE This specification can be applied to contracts or to orders (call-offs) issued in terms of framework agreements. Framework agreements are well suited to situations in which long term relationships are entered into. They offer flexibility in attaining contract skills development goals as requirements can be adjusted from one order to another, thus allowing key performance indicators to be improved upon over time.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

allowance
amount provided for in the contract or an order by the employer relating to one or more of the following:

a) the performance by the contractor of work or services that are foreseen but cannot be accurately specified at the time that the contract was entered into or the order issued;

b) work or services to be performed, or goods provided, by a subcontractor who is either nominated by the employer or is selected by the employer in consultation with the contractor after the award of the contract or the issuing of an order;

c) provision for price adjustment for inflation; or

d) other budgetary provisions intended to cover the employer's contractual risks

artisan
a person who has been certified as competent to perform a listed trade in accordance with Section 26B of the Skills Development Act of 1998 (Act No. 97 of 1998)

black people
a generic term which means Africans, Coloureds and Indians and who are citizens of the Republic of South Africa:

a) by birth or descent; or

b) by naturalisation before 27 April 1994 or on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalisation prior to that date

candidate
a person who is registered in a category of registration which ultimately leads to registration in a professional category by a statutory council in terms of their founding legislation

class of construction works
the class of construction works referred to in Schedule 3 of the Construction Industry Development Regulations 2004 as amended and published in terms of the Construction Industry Development Board Act of 2000 (Act 38 of 2000)

contract amount
financial value of the contract at the time of the award of the contract or the issuing of an order, excluding all allowances and expenses and value added tax

contract skills development goal (CSDG)
the number of hours of skills development opportunities that a contractor contracts to provide in relation to work directly related to the contract or order up to:

a) completion in the case of a professional service contract;

b) the end of the service period in the case of a service contract;

c) completion (state of readiness for occupation of the whole works although some minor work may be outstanding) in the case of an engineering and construction works contract; and

d) the delivery date for all the work required in terms of the supply contract

contractor
person or organization that contracts to provide the goods, services or engineering and construction works covered by the contract

employer
person or organization intending to or entering into the contract with the contractor for the provision of goods, services, or engineering and construction works

employer's representative
person authorized to represent the employer in terms of the contract

engineering and construction works contract
contract for the provision of a combination of goods and services arranged for the development, extension, refurbishment, rehabilitation or demolition of a fixed asset, including building and engineering infrastructure

expenses
costs incurred by the contractor in the performance of the contract or order which are in terms of the contract recoverable from the employer

framework agreement
an agreement between an organ of state and one or more contractors, the purpose of which is to establish the terms governing orders to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged

mentor
a qualified, experienced and, in the case of professionals, registered person, designated to guide a learner or candidate through a structured work experience learning component of a learning programme required for the acquisition of a part or full qualification or professional designation

occupational qualification
occupational qualification registered on the National Qualifications Framework Act (Act No 67 of 2008)

order
an instruction to provide goods, services or any combination thereof under a framework agreement

part qualification
an assessed unit of learning that is registered on the National Qualifications Framework as part of an occupational qualification

professional category
a category of registration identified in Table 1 or such other category recognised by the Employer in the application of this specification

Table 1: Categories of registration

Profession	Category of registration	Act
Architectural	Architect, Senior Architectural Technologist, Architectural Technologist or Architectural Draughtsperson	Architectural Profession Act of 2000 (Act No. 44 of 2000)
Construction project management	Construction Project Manager	Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000)
Construction management	Construction Manager	
Engineering	Engineer , Engineering Technologist, Engineering Technician or Certificated Engineer	Engineering Profession Act of 2000 (Act No. 46 of 2000)
Landscape Architectural	Landscape Architect, Landscape Technologist, Landscape Technician or Landscape Assistant	Landscape Architectural Profession Act of 2000 (Act No. 45 of 2000)
Quantity surveying	Quantity surveyor	Quantity Surveying Profession Act of 2000 (Act No. 49 of 2000)
Scientists	Natural scientists	Natural Scientific Professions Act (Act No. 27 of 2003)
Surveying	Land surveyor, Engineering surveyor or Technician engineering surveyor	Professional and Technical Surveyors' Act (Act No. 40 of 1984)

professional service contract
contract for the provision of services with the skill and care normally delivered by professionals

Sector Education and Training Authority (SETA)
an institution established under section 9 of the Skills Development Act, Act 97 of 1998 and which has the responsibility under this Act to register learners on learning programmes

service contract
contract for the provision of labour or work, including knowledge-based expertise, carried out by hand or with the assistance of equipment and plant

site
means the land or place made available by the employer, for the purposes of the contract or order, on, under, over, in or through which the works or services are to be executed

skills development agency
an agency which performs some or all of the functions set out in section 4.1.4.

statutory council
a council as established under the

a) South African Council for the Architectural Profession, established by the Architectural Profession Act of 2000 (Act No. 44 of 2000);

b) South African Council for the Project and Construction Management Professions, established by the Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000);

c) Engineering Council of South Africa, established by the Engineering Profession Act of 2000 (Act No. 46 of 2000);

d) South African Council for the Landscape Architectural Profession, established by the Landscape Architectural Profession Act of 2000 (Act No. 45 of 2000);

e) South African Council for the Quantity Surveying Profession, established by the Quantity Surveying Profession Act of 2000 (Act No. 49 of 2000);

f) South African Council for Professional and Technical Surveyors, established by the Professional and Technical Surveyors' of 2000 (Act No. 40 of 1984); or

g) South African Council for Natural Scientific Professions, established by the Natural Scientific Professions Act (Act No. 27 of 2003):

structured mentorship
mentorship provided by a person who is registered in a suitable category of professional registration by a statutory council or professional body which leads and directs a candidate towards professional registration

structured work experience learning component
component of learning in an occupational qualification or for professional designation whereby a learner is mentored by a qualified, and where required, registered mentor in the application and integration of the knowledge and practical skills learnt, under supervision, in the actual context of a workplace in accordance with the prescripts set by the relevant qualifying authority, professional body or statutory council.

supervisor
a supervisor is a person in the particular workplace charged with the responsibility of allocating workplace tasks to a learner that are aligned to the prescriptions of their learning programme and of overseeing and reporting on that learning using a formally agreed record keeping system

supply contract
contract for the provision of goods and associated services including design

work integrated learning
the workplace learning component required by learners completing a national diploma at a University of Technology or Comprehensive University.

3 Requirements

3.1 Contract skills development goal (CSDG)

3.1.1 The contractor shall attain or exceed the contract skills development goal in the performance of the contract or the execution of an order.

3.1.2 The contract skills development goal shall be not less than:

a) the contract amount in millions of Rand multiplied by:

1) the relevant number of hours per million Rand expenditure contained in Table 2 in the case of engineering and construction works contracts for the applicable class of construction works used in the application of the Construction Industry Development Regulations issued in terms of the Construction Industry Development Board Act of 2000; or

2) 300 in the case of a service contract; or

3) 100 in the case of a professional service contract or a supply contract; or

b) the hours tendered in the preference schedule or the quantum agreed in the scope of work of the contract or order.

Example: The contract amount for an engineering and construction works contract in the GB class of construction works is R65,7 million. The contract skills development goal is 65,7 x 250 = 16 425 hours.

Table 2: Number of hours per million Rand expenditure in an engineering and construction work contract

Class of construction works as identified in terms of Regulation 25(3) of the Construction Industry Regulations 2004		Number of hours per million Rand expenditure
Designation	**Description**	
CE	Civil engineering	125
CE or GB	Civil Engineering or general building	190
EE	Electrical engineering works (buildings)	125
EP	Electrical engineering works (Infrastructure)	125
GB	General building	250
ME	Mechanical engineering works	125
SB	Specialist	125

3.1.5 Where required in terms of the contract or order, a specified proportion of the learners and candidates shall be selected from a list of persons in the employ of the state contained in the scope of work of the contract or order under the terms and conditions embodied therein.

NOTE: The contract skills development goal can be achieved through the direct employment of persons who are developing skills that result in nationally accredited outcomes, through the engagement of subcontractors who employ such persons or, where specifically required, the provision of work place opportunities to employees of the state.

3.2 Achieving the contract skills development goal (CSDG)

3.2.1 The contractor shall achieve the measurable contract skills development goal by providing one or a combination of any of the following in relation to work directly related to the contract or order:

Method 1: structured work experience learning component opportunities for learners towards the attainment of a part qualification or a full occupational qualification;

Method 2: structured work experience learning component opportunities for apprentices or other artisan learners towards the attainment of a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012) subject to at least 60% of the artisan learners being holders of public FET college qualifications;

Method 3: work integrated learning opportunities for University of Technology or Comprehensive University students completing their national diplomas;

Method 4: structured work experience opportunities for candidates towards registration in a professional category by a recognized professional body or statutory council.

3.2.2 No single method, except in the case of professional service contracts, shall contribute more than 75 percent of the contract skills development goal, Method 1 shall not contribute to more than 25 percent of the contract skills development goal in engineering and construction works or service contract and related orders.

3.2.3 Not more than one method may be applied to any individual in the calculation of the contract skills development goal.

NOTE: The principle is that an individual can only be counted once towards the CSDG.

3.3 Contract skills development goal credits

3.3.1 Credits towards the contract skills development goal shall be granted by summating the hours of opportunities provided in accordance with this specification.

3.3.2 No more than 8 hours may be claimed for any 24 hour period for any individual.

3.3.3 Contract skills development goal credits shall be reduced to the extent that they fail to comply with the requirements of this specification.

3.4 Denial of credits

Credits towards the contract skills development goal shall be denied should:

a) the opportunities not be provided on site or the opportunities cannot be directly linked to the contract or order;

b) the following not be provided:

   1) the required contract compliance baseline plan, an interim contract compliance report or a final contract compliance report;

   2) the required mentorship plan for a candidate;

   3) the required training plan for learners;

   4) the training reports covering a period; or

   5) the required records, specified documents and signatures;

c) the structured mentorship be found not to be in accordance with the requirements of the applicable professional body, statutory council or qualifying authority;

d) the structured work experience learning component be found not to be in accordance with the curriculum requirements of the part qualification or qualification or prescription for professional registration for which the learner is registered;

e) conditions of employment and rates or allowances for learners not be in accordance with legislative provisions;

f) the contractor does not maintain the required training records or an audit reveals that there is insufficient information to substantiate claims for credits; and

g) a learner, learner artisan or candidate fails to present their credentials for assessment when they have, in the opinion of the mentor, sufficient structured work experience or structured mentorship to do so.

4 Compliance with requirements

4.1 General

4.1.1 The contractor shall submit to the employer's representative:

a) within 30 days of the contract coming into effect or the issuing of an order, a contract compliance base line training plan (see Annex A) taking into account the skills mix and type of workers that are to be engaged;

b) interim contract compliance training reports (see Annex A) at intervals which do not exceed 3 months;

c) a final contract compliance training report (see Annex A) within 15 days of reaching completion, final delivery or the end of the service as relevant; and

d) a report which provides a breakdown of the number of hours reported in each interim and in the final contract compliance report into black people and women and people with disabilities.

NOTE: The Code of Good Practice on Key Aspects of Disability in the Workplace issued in terms of Employment Equity Act No 55, OF 1998 provides guidance on establishing who are people with disabilities.

4.1.2 The contractor shall keep records of the name and identity number, hours worked, payments made to, registration particulars towards a part qualification or occupational qualification and particulars of opportunities offered to persons who are provided with work experience learning component opportunities which contribute to the contract skills development goal and any other training records required by or which demonstrate compliance with this specification. The contractor shall allow the employer's representative to inspect or audit such training records at any time within working hours.

4.1.3 The employer's representative shall undertake suitable random audits on records to confirm compliance with requirements.

4.1.4 Where learners are sourced through a Skills Development Agency (SDA), the contractor shall enter into a contract agreement with one or more SDAs of their choice that is participating in the implementation of this specification to, as relevant:

a) facilitate placement of learners for training opportunities;

b) prepare training plans for registered learners, including details of the scope of experiential work to be covered and expected outcomes;

c) register learners with the appropriate sector Education and Training Authority established in terms of the Skills Development Act of 2008 (Act 37 of 2008);

d) manage all the employment functions of learners such as payment of stipends, contributions to the Unemployment Insurance Fund, Workman's Compensation, provision of personal protective clothing, trade specific tools, etc.;

e) liaise with the training co-ordinators to monitor onsite training progress of learners;

f) liaise with the training co-ordinators to arrange for summative assessments at appropriate stages of the training; and

g) liaise with the training co-ordinators to prepare reports for the employer or employer's representative.

4.2 Structured workplace learning opportunities for learners

4.2.1 Structured work experience learning component opportunities shall be aligned to the curriculum requirements set for the particular part or full occupational qualification or professional designation for which the learner is registered.

4.2.2 A responsible supervisor shall be appointed to allocate learning tasks, under the guidance of a qualified person, to learners in line with their training plans

4.2.3 Mentoring associated with structured work experience learning component for artisan learners shall be undertaken by an artisan qualified in the applicable trade with a minimum of 3 years of trade related experience. The number of artisan learners mentored by a single mentor shall, unless otherwise permitted by the National Artisan Moderation Body, not exceed 4 at any one time.

4.2.4 Mentoring associated with structured work experience learning component for learners leading to a part or an occupational qualification other than artisan learners shall be undertaken by a person qualified in the applicable discipline with a minimum of 3 years of experience.

4.2.5 The contractor or service provider shall submit to the employer's representative, in respect of each learner:

a) within one month of commencing work directly related to the contract or order, a workplace training plan together with name of the learner's mentor and supervisor

b) within three months of commencing work directly related to the contract or order:

   1) proof of registration as a learner with the relevant SETA; and

   2) a copy of the mentorship agreement entered into with the learner or the company mentorship agreement entered into with the relevant qualified agency;

c) within two weeks of updating a workplace training plan, the revised workplace training plan; and

d) a quarterly progress report and a final report at the end of the structured mentorship period including a log of exposure and interactions with the mentor in sufficient detail to demonstrate compliance with requirements, signed off by the mentor, the supervisor and the learner.

4.2.6 Learners shall be required by the mentor to complete training reports required by the relevant qualifying authority whenever a substantial activity or training period has been completed.

4.2.7 The mentor and supervisor shall sign off all reports and logbooks to allow the learner to move to other projects or employment and continue on the path towards qualification and, where relevant registration, where the work related to the contract ends for whatever reason prior to the learner gaining sufficient experience for final assessment.

4.3 Structured mentorship opportunities for candidates

4.3.1 Mentoring associated with structured work experience for candidates shall be in accordance with the prescripts of the relevant professional body or statutory council.

4.3.2 The contractor shall:

a) appoint a supervisor who is actively engaged in work directly associated with the contract to issue tasks, oversee their implementation and provide input to the candidate on an on-going basis;

b) identify a suitable mentor for the candidate, if such candidate does not have a mentor, who shall enter into a mentoring agreement with the candidate or the company as required by the professional body or statutory council; and

c) issue each candidate with a portfolio of evidence file which is to be kept up to date with all the documentation issued or prepared including the workplace training plan and all revisions thereof as well as copies of the logbook entries and training period reports;

4.3.3 The mentor shall provide and update from time to time a workplace training plan for a candidate outlining the activities in which the candidate will be involved that includes activities required by the relevant statutory council. The mentor shall require candidates to maintain a logbook issued by the relevant statutory council. The mentor shall sign off such logbook at quarterly presentations and progress review meetings.

NOTE: The mentor should ensure where the duration of the contract or order exceeds the minimum time to register in a professional category of registration that candidates are exposed to the full range of activities and work towards assuming the full level of responsibility recommended by the relevant statutory council. This may require rotations and secondments.

4.3.4 The contractor or service provider shall submit to the employer's representative, in respect of each candidate:

a) within one month of commencing work directly related to the contract or order:
   1) a workplace training plan together with name of the candidate's mentor and supervisor

   2) proof of registration as a candidate with the relevant professional body or statutory council; and

   3) a copy of the mentorship agreement entered into with the candidate or the company mentorship agreement entered into with a professional body or statutory council;

b) within two weeks of updating a workplace training plan, the revised workplace training plan.

c) a quarterly progress reports and a final report at the end of the structured mentorship period including a log of exposure and interactions with the mentor in sufficient detail to demonstrate compliance with requirements, signed off by the mentor, the supervisor and the candidate.

4.3.5 Candidates shall be required by the mentor to complete training reports required by the relevant statutory council whenever a substantial activity or training period has been completed.

4.3.6 The mentor and supervisor shall sign off all reports and logbooks to allow the candidate to move to other projects or employment and continue on the path towards registration where the work related to the contract ends for whatever reason prior to the candidate gaining sufficient experience for registration.

5 Records

5.1 The contractor shall submit all the documentation required in terms of clause 4 in a timely manner.

5.2 The employer's representative shall certify the value of the credits counted towards the contract skills development goal, if any, whenever a claim for payment is issued to the employer, and shall notify the contractor of this amount.

5.3 The contractor shall, upon termination of the opportunities provided in order to satisfy the contract skills development goal, certify the quantum and nature of the opportunity and submit the certificate, counter-certified by the relevant individual, to the employer's representative for record-keeping purposes.

6 Sanctions

In the event that the contractor fails to substantiate that any failure to achieve the contract skills development goal was due to reason beyond the contractor's control which may be acceptable to the employer, the sanctions provided for in the contract or order shall apply.

Annex A: Skills compliance plans

(Normative)

Skills compliance base line plan

Name of contractor:

Contact person: Telephone:

Address: Cell phone:

Email:

Contract / order number: **Start date for contract / order:**

Contract title:

Contract skills development goal (CSDG) (tick appropriate box)

☐ Tendered / contracted CSDG = ... hours

☐ Minimum CSDG calculated in accordance with standard

Minimum CSDG calculated in accordance with the standard (complete only if applicable)

Contract type (tick appropriate box):

☐ professional service

☐ service

☐ engineering and construction works

CIDB Class of construction works, if applicable . . . . .

Contract amount excl VAT	**R**
Less expenses (if any)	**R**
Less allowances	**R**
Contract amount	**R**

Contract amount expressed in millions of Rand R . . . . . m ❶

Number of hours per million Rand expenditure from sub-clause 3.1.2 of the *Standard for developing skills that result in nationally accredited outcomes through infrastructure contracts* = ... ❷

Minimum contract skills development goal which the contractor is required to achieve (Gmin)

= ❶ x ❷ = ... x . . . . . = ... hours

I intend achieving the CSDG as follows:

☐ **Method 1:** structured work experience learning component opportunities towards a part or a full occupational qualification	. . . . . hours
☐ **Method 2:** structured work experience learning opportunities for apprentices or other artisan learners	. . . . . hours
☐ **Method 3:** work integrated learning opportunities for University of Technology or Comprehensive University national diploma students	. . . . . hours
☐ **Method 4:** structured work experience opportunities for candidates towards registration in a professional category of registration	. . . . . hours
	. . . . . hours
Total	

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the Contractor, confirms that the contents of this plan are within my personal knowledge and are to the best of my belief both true and correct.

Signed Date

Name Position

Skills compliance report **Date:**

(tick appropriate box) ☐ Interim report ☐ Final report

Name of contractor:

Contact person: Telephone

Address: Cell phone

email

Contract / order number: **Start date for contract / order:**

Contract title:

Contract skills development goal (CSDG) . . . . . hours

Method 1: structured workplace experience learning component opportunities towards a part or a full occupational qualification

Employed by contractor

Name	Identity or passport number	Cell or telephone number	Part or full occupational qualification NQF ref. no.	Student number	SETA with whom learner is registered	Dates for engagement on work related to contract		Total hours
						Start	End	

Employed by subcontractor: (state name)

Name	Identity or passport number	Cell or telephone number	Part or full occupational qualification NQF ref. no.	Student number	SETA with whom learner is registered	Dates for engagement on work related to contract		Total hours
						Start	End	

Method 2: structured work experience learning component opportunities for apprentices or other artisan learners

Employed by contractor

Name	Identity or passport number	Cell or telephone number	Listed trade	National artisan learner data base registration number (where available)	SETA with whom the learner is registered	Dates for engagement on works related to contract		Total hours
						Start	End	

Employed by subcontractor: (state name)

Name	Identity or passport number	Cell or telephone number	Listed trade	National artisan learner data base registration number (where available)	SETA with whom the learner is registered	Dates for engagement on works related to contract		Total hours
						Start	End	

Method 3: work integrated learning opportunities for University of Technology (UOT) or Comprehensive University (CU) diploma students

Employed by contractor

Name	Identify or passport number	Cell or telephone number	Diploma	Learner registration number	UOT/CU with whom the learner is registered	Date for engagement on contract		Total hours
						Start	End	

Employed by sub-contractor

Name	Identify or passport number	Cell or telephone number	Diplo ma	Learner registration number	UOT/CU with whom the learner is registered	Date for engagement on contract		Total hours

Method 4: structured work experience opportunities for candidates towards registration in a professional category of registration

Employed by contractor

Name	Identity or passport number	Cell or telephone number	Statutory council particulars		Dates for engagement on work related to contract		Total hours
			Title	Registration number	Start	End	

Employed by subcontractor

Name	Identity or passport number	Cell or telephone number	Statutory council particulars		Dates for engagement on work related to contract		Total hours
			Title	Registration number	Start	End	

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the Contractor, confirms that the contents of this plan are within my personal knowledge and are to the best of my belief both true and correct.

Signed Date

Name Position

Annex B: Incorporating this specification in a procurement document

B1 General

B1.1 The following clause should be added to the scope of work of a contract or order to establish requirements:

> **Skills development requirements**
>
> The contractor shall achieve in the performance of the contract the contract skills development goal established in the Department of Higher Education and Training's *Standard for developing skills that result in nationally accredited outcomes through infrastructure contracts (September 2012)*

Note: The term contractor may need to be changed to "consultant" or "professional service provider" depending upon the term that is used in the form of contract that is adopted. The term "performance of the contract" may need to be replaced with "execution of an order" where the scope of work forms part of an order.

B1.2 Where an employer requires that employees of the state be seconded to the contractor in order to be provided with work integrated learning opportunities, structured workplace experience opportunities or structured mentorship opportunities in accordance with the provisions of this standard, the following clause should be included in the scope of work:

> The specified proportion of employees of the state is . . . . . %. Work integrated learning opportunities / structured workplace experience opportunities / structured mentorship opportunities shall be offered to any of the persons identified in Annexure 1. Persons selected by the contractor from the list in Annexure 1 shall be seconded to the contractor under the following terms and conditions:
> . . . . . .

NOTE: The annexure should inform the contractor of the opportunities which the named employees of the state require through the contract or order in order to attain a nationally accredited outcome.

B2 Sanctions

Sanctions should be provided for in the contract in the event that the contractor fails to substantiate that any failure to achieve the contract participation goal was due to quantitative under runs, the elimination of items, or any other reason beyond the contractor's control which may be acceptable to the employer.

Appropriate action should be taken by employers against tenderers who are awarded contracts in preference to others on a fraudulent basis or against contractors who fail to achieve their contractual obligations relating to the development of skills. Employers have a number of sanctions and contractual remedies available to address such situations, including the imposition of a financial penalty (low performance damages) more severe than the financial preference calculated at the time when tenders were evaluated or more severe than complying with contractual obligations or not awarding future orders in terms of framework agreements.