



KOUGA MUNICIPALITY

REHABILITATION AND WATERPROOFING OF THE ROOF SLAB AND ANCILLARY WORKS AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICES

CONTRACT NUMBER: 16/2019

FEBRUARY 2019

SERVICE PROVIDER		
TELEPHONE / FACSIMILE		
CLOSING DATE		

ISSUED BY:

Kouga Local Municipality

Physical Address:
33 Da Gama Road
Jeffreys Bay

Postal Address:
P O Box 21
Jeffrey Bay
6330

Telephone: 042 200 0200
Email: aperils@kouga.gov.za
or tenders@kouga.gov.za

PREPARED BY:

D2 Engineers



Physical Address:
114 Park Drive
Central
Port Elizabeth
6000

Telephone: 041-585 0020

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TENDER

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T1.1 TENDER NOTICE AND INVITATION TO TENDER

KOUGA LOCAL MUNICIPALITY (EC108)
DIRECTORATE: FINANCE- ICT

NOTICE NO: 16/2019

REQUEST FOR QUOTATION (RFQ): REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS AT ICT BUILDING

Suitably Qualified, Capable and Experienced Service Providers are hereby invited to submit tenders for the appointment of a service provider for the repairs of the ICT building at the Kouga Municipal Offices.

A compulsory clarification meeting will be held on Monday, 11 February 2019 at the IT Boardroom, 33 Da Gama Road Jeffreys Bay at 11:00am. Please take note that no attendee arriving 15 minutes late or more will be allowed to attend the clarification meeting.

Tenders

An electronic copy of tender document will be available on E-Tender portal www.etender.gov.za or the municipal website www.kouga.gov.za. Printed copies of the Tender Document will be available at a non- refundable fee of R300 per document as from Monday, 04 February 2019 from the Registry Section, 33 Da Gama Road, Jeffreys Bay, 6330, Tel No: 042 2002200.

Please note:

- Telegraphic, telephonic, telex, facsimile, email or late tenders will not be accepted.
- This contract will be evaluated on the 80/20-point scoring system.
- A minimum functional assessment score will apply to this contract.
- **A CIDB Contractor grading of 1 GB OR CE or higher is required.**
- The Guidelines for locally produced goods or locally manufactured goods with a stipulated minimum threshold where applicable will be applied.
- A valid SARS Tax Clearance Certificate and the Tax compliance Status pin to be submitted.
- Prospective Service Providers must register on Kouga Municipality's Supplier database as per the registration requirements.
- The National Treasury Central Supplier Database Summary report must be submitted.
- In order to claim Preference points a valid originally or certified B-BBEE Status level Verification certificate or a Sworn Affidavit completed on the DTI format must be submitted to validate the claim.
- The Council reserves the right to accept any tender and, or part thereof, appoint more than one contractor, and does not bind itself to accept the lowest or any tender. The Council reserves the right to appoint any contractor.
- The validity period for submission must be 120 days from the closing date.
- Tenders that are deposited in the incorrect box or delivered to any other venue will not be considered.

Any information regarding this tender can be directed to Mr. A. Perils at 042 2002200 or aperils@kouga.gov.za and copy tenders@kouga.gov.za.

Completed documents in a sealed envelope endorsed "**NOTICE NO: 16/2019: "REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS AT ICT BUILDING"**", must be placed in the Tender Box in the foyer of the Municipal Offices at 33 Da Gama Road, Jeffreys Bay on or before **TUESDAY, 19 FEBRUARY 2019 at 12:00.**

C. DU PLESSIS
MUNICIPAL MANAGER

P.O. Box 21
JEFFREYS BAY
6330

T1.2 TENDER DATA

The conditions of tender are those contained in the latest edition of SANS 10845-3, Construction Procurement – Part 3: Standard conditions of tender.

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.

Clause	Wording / Data
3.1	The employer is the Kouga Local Municipality.
3.2	Refer to page 1 of this document for a complete and comprehensive list of all Tender Documents.
3.4	The employer's agent: Address: Tel: E-mail:
4.1	Only those tenderers who are registered with the CIDB, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations, for a GB or CE class of construction work, are eligible to have their tenders evaluated. Joint ventures are eligible to submit tenders provided that: a) Every member of the joint venture is registered with the CIDB; b) the lead partner has a contractor grading designation in the GB or CE class of construction work; and c) the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a GB or CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. It is estimated that tenderers should have a CIDB Contractor Grading Designation of Grade 1CE or 1GB or higher.
4.2	Add the following to this Clause: "Accept that the employer will not compensate the tenderer for any costs incurred in attending tender interviews in the office of the employer or the employer's agent."
4.7	The arrangements for the compulsory clarification meeting are: <u>Location:</u> The IT Boardroom, 33 Da Gama Road Jeffreys Bay <u>Date and Time:</u> Monday, 11 February 2019 at 11h00 Tenderers must sign and complete the attendance register in the name of the tendering entity. The bidder is advised to purchase the tender document prior to attending the Bid Clarification meeting, as no documents will be available at the clarification meeting.

Clause	Wording / Data
4.11	Add the following to this Clause: “In order to correct any errors, or to make alterations, or in the event of a mistake having been made in the Pricing Data, it shall be neatly crossed out in non-erasable ink and all signatories to the tender offer shall initial all such alterations.”
4.12	No alternative offer will be considered.
4.13.1 & 4.13.3	The original completed tender document (refer Clause 3.2), excluding Drawings, shall be returned with all the required information supplied, duly completed in non-erasable ink in all aspects.
4.13.4	Add the following to this Clause: “Only authorised signatories may sign the original and all copies of the tender offer where required in terms of 4.13.1. In the case of a One-Person Concern submitting a tender, this shall be clearly stated. In case of a Company submitting a tender, include a copy of a resolution by its board of directors authorising a director or other official of the company to sign the documents on behalf of the company. In the case of a Close Corporation submitting a tender, include a copy of a resolution by its members authorising a member or other official of the corporation to sign the documents on each member’s behalf. In the case of a Partnership submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such authorisation shall be included in the Tender. In the case of a Joint Venture / Consortium submitting a tender, include a resolution of each company of the Joint Venture / Consortium together with a resolution by its members authorising a member of the Joint Venture / Consortium to sign the documents on behalf of the Joint Venture / Consortium. Accept that failure to submit proof of authorisation to sign the tender shall result in a tender offer being regarded as non-responsive.”
4.13.5	The identification details are: • The Contract Number: IPD 16/2019 • The Title / Description of the Tender or Project: Rehabilitation and Waterproofing of the roof slab remedial and ancillary works at the ICT Building at the Kouga Municipal Offices. • The Closing Date: Tuesday, 19 February 2019 • The Closing Time: 12:00
4.13.5	A two-envelope procedure will not be followed.
4.13.6	Telephonic, telegraphic, telex, facsimile, e-mailed, posted and late tender offers will not be accepted.
4.14	Add the following to this Clause: “Accept that the employer shall in the evaluation of tenders take due account of the tenderer’s past performance in executing similar works of comparable magnitude and the degree to which the tenderer possesses the necessary technical, financial and other resources to enable him to complete the works successfully within the contract period. Satisfy the employer and Employers Agent as to his ability to perform and complete the works

Clause	Wording / Data
	timeously, safely and with satisfactory quality, by furnishing details under Part 2 – Returnable Documents of the Tender Portion. Accept that the employer is restricted in accordance with Regulation 4. (4) of the Constructions Regulations (2014), to only appoint a contractor who he is satisfied has the necessary competencies and resources to carry out the work safely. Accept that submitting inferior and inadequate information relating to health and safety, as required under Clause 4.13.4, shall be regarded as justifiable and compelling reasons not to award a contract to a tenderer.”
4.15	The closing date and time as well as the specified address and location of the tender box for submission of tender offers are stated in the Tender Notice and Invitation to Tender.
4.16.1	The tender offer validity period is 120 days.
4.18.2	Add the following new Clause: “The tenderer shall, when requested by the employer to do so, submit details of all management and supervisory staff that will be employed to manage and supervise the works, including the labour intensive portion of the works, together with satisfactory evidence that such staff members satisfy the eligibility requirements as required under Part 3 of the Contract Portion.”
4.19	Access shall be provided by the Tenderer to his premises during working hours for inspections, tests and analysis.
4.20	Add the following to this Clause: “The tenderer is required to submit with his tender a Letter of Intent from an approved insurer undertaking to provide the Performance Guarantee / Bond to the format included under Part 2 of the Tender Portion.”
4.13.4	The tenderer is required to submit with his tender all the documents, schedules and certificates as listed under Part 2 of the Tender Portion.
4.23	Add the following new Clause: “Accept that no tenderer shall make any attempt, either directly or indirectly, to canvass any of the employer’s officials or the employer’s agent in respect of his tender, after the opening of the tenders but prior to the employer arriving at a decision thereon. No tenderer shall make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.”
4.24	Add the following new Clause: “Accept that the employer is prohibited to award a tender to a person: a) who is in the service of the state; or b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or c) a person who is an advisor or consultant contracted with the municipality or municipal entity. “In the service of the state” means to be: a) a member of: • any municipal council; • any provincial legislature; or

Clause	Wording / Data
	• the National Assembly or the National Council of Provinces; b) a member of the board of directors of any municipal entity; c) an official of any municipality or municipal entity; d) an employee of any national or provincial department; e) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No 1 of 1999); f) a member of the accounting authority of any national or provincial public entity; or g) an employee of Parliament or a provincial legislature. In order to give effect to the above, the questionnaire for the declaration of interests in the tender for persons in service of state under Part 2 of the Tender Portion must be completed.”
4.25	Add the following new Clause: “Accept that the notes to the employer’s annual financial statements must disclose particulars of any award of more than R 2 000 to a person who is a spouse, child or parent of a person in the service of the state (refer definition under Clause F.2.25), or has been in the service of the state in the previous twelve months, including: a) the name of that person; b) the capacity in which that person is / was in the service of the state; and c) the amount of the award. In order to give effect to the above, the questionnaire for the declaration of interest in the tender of persons in service of state under Part 2 of the Tender Portion must be completed in full and signed.”
4.26	Add the following new Clause: “Municipal Clearance Billing Certificate must be submitted” Accept that no contract will be awarded to a tenderer who is in arrears for more than three months (or who fails to make suitable arrangements to settle the arrears) in respect of municipal rates and other charges due any municipality. Should the tender amount be more than R 10 million, the period for arrears reduces to one month.”
5.1	Amend the wording “five working days” to read “six working days.” Working days shall be as per a normal working week, Monday to Saturday between the hours of 08h00 and 17h00 and shall exclude all gazetted public holidays as well as the year-end break as defined by SAFCEC.
5.4	The time and place for the opening of valid tender submissions are stated in the Tender Notice and Invitation to Tender.
5.5	A two-envelope procedure will not be followed.
5.11.1	Tenders will be evaluated in terms of the Tender Data as well as the Kouga Local Municipality’s latest Supply Chain Management Policy for Infrastructure Procurement and Delivery Management. The method for the evaluation of responsive tenders shall be Method 3: Financial Offer and Preference as described under Clause 5.11.3. Tenders will be evaluated in terms of the Tender Data as well as the Kouga Local Municipality’s latest Supply Chain Management Policy for Infrastructure Procurement and Delivery Management.

Clause	Wording / Data															
	The method for the evaluation of responsive tenders shall be Method 3: Financial Offer and Preference as described under Clause 5.11.3. <table><thead><tr><th colspan="2">FUNCTIONALITY CRITERIA</th><th>POINTS</th></tr></thead><tbody><tr><td colspan="2"> - Proven recent experience of similar relevant projects (7 points per project, to a maximum of 4 projects) </td><td>28</td></tr><tr><td colspan="2"> - Staff and Personnel Site Agent: Experience in similar work 0 – 5 years (5) 6 – 10 years (10) 11 – 15 years (15) 15 and above (20) </td><td>20</td></tr><tr><td colspan="2"> - Relevant Construction Equipment 1 x Truck 5 Tonne (4) 1 x LDV (4) 1 x Concrete Mixer (4) </td><td>12</td></tr><tr><td colspan="2">TOTAL POINTS ON FUNCTIONALITY</td><td>60</td></tr></tbody></table> Minimum requirement/score for Functionality 50 Proven recent experience of similar projects A detailed list of projects completed by the company within the past 5 years including contactable references need to be submitted. Staff and Personnel A detailed summary must be provided with the Tender Submission, which must have sufficient detail to indicate how many years of similar experience the site agent have, which are in the full time employment of the Bidder, A clear indication must be given of their academic qualification as well as years of relevant experience. Relevant Construction Equipment The number of each piece of equipment that is owned by the applicant must be indicated. Vehicle registration documents, receipt/proof of purchase or company asset registers submitted during company audits are forms of acceptable proof of ownership and need to be submitted with the bid. Photographs given as proof of ownership will not be accepted. Bidders who will hire this equipment must provide copies of rental agreements (for the duration of the project). Please note that bidders will only be eligible for 50% of the points if they make use of this rental agreements. This information will be used to calculate the points for relevant construction equipment. The maximum number of points that can be awarded for relevant construction equipment is 12. NOTE: If no evidence is submitted no points will be scored	FUNCTIONALITY CRITERIA		POINTS	Proven recent experience of similar relevant projects (7 points per project, to a maximum of 4 projects)		28	Staff and Personnel Site Agent: Experience in similar work 0 – 5 years (5) 6 – 10 years (10) 11 – 15 years (15) 15 and above (20)		20	Relevant Construction Equipment 1 x Truck 5 Tonne (4) 1 x LDV (4) 1 x Concrete Mixer (4)		12	TOTAL POINTS ON FUNCTIONALITY		60
FUNCTIONALITY CRITERIA		POINTS														
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Relevant Construction Equipment 1 x Truck 5 Tonne (4) 1 x LDV (4) 1 x Concrete Mixer (4)		12														
TOTAL POINTS ON FUNCTIONALITY		60														
5.11.7	The financial offer shall be scored using Formula 2, within Table 1 with the value of W1 = 80.															
5.11.8	Up to 100 minus W1 tender evaluation points will be awarded to tenderers based on the data supplied under Part 2 – Returnable Documents of the Tender Portion.															

Clause	Wording / Data																				
	Tender evaluation points will be awarded to responsive tenderers who complete the Preferencing Form MBD 6: Preference Points Claim Form in terms of the Preferential Procurement Regulations 2001 who are found to be eligible for the preference claimed. Preference points can only be obtained by submitting a certified B-BBEE Certificate. Preference points will be awarded to a tenderer for attaining the B-BBEE Status Level of Contribution in accordance with the table below: <table> <tr> <th>B-BBEE Status Level of Contributor</th><th>Number of Points</th></tr> <tr><td>1</td><td>20</td></tr> <tr><td>2</td><td>18</td></tr> <tr><td>3</td><td>16</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>8</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>4</td></tr> <tr><td>8</td><td>2</td></tr> <tr><td>Non-compliant Contributor</td><td>0</td></tr> </table> A trust, consortium or joint venture will qualify for points for their B-BBEE Status Level as a <u>legal entity</u>, provided that the <u>entity</u> submits their B-BBEE Status Level Certificate. A trust, consortium or joint venture will qualify for points for their B-BBEE Status Level as an <u>unincorporated entity</u>, provided that the <u>entity</u> submits their consolidated B-BBEE Scorecard as if they were a group structure and that such a consolidated B-BBEE Scorecard is prepared for every separate tender.	B-BBEE Status Level of Contributor	Number of Points	1	20	2	18	3	16	4	12	5	8	6	6	7	4	8	2	Non-compliant Contributor	0
B-BBEE Status Level of Contributor	Number of Points																				
1	20																				
2	18																				
3	16																				
4	12																				
5	8																				
6	6																				
7	4																				
8	2																				
Non-compliant Contributor	0																				
5.13	Replace the entire contents and wording of Clauses 5.13 e) and 5.13 f) with the following: “ e) complies with all legal requirements, f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest, g) submits an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations and can provide proof thereof, h) submits a Letter of Intent from an approved insurer undertaking to provide the Performance Guarantee to the pro-forma format provided under Clause C1.3: Form of Guarantee of the Contract Data. i) is registered with and complies with the Construction Industry Development Board's Regulations in an appropriate Contractor Grading Designation, j) 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, k) has not: (i) abused the employer's Supply Chain Management System, or (ii) failed to perform on any previous contract and has been given a written notice to this effect, l) has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are not permitted to submit tenders or participate in the contract, m) submits a letter of Good Standing from the Compensation Commissioner. If the tenderer is in the process of applying for an updated certificate, proof of payment to the Compensation Commissioner must be provided; n) has, in terms of the Construction Regulations (2014) and the Occupational Health and Safety Act (1993), the necessary competencies and resources to carry out the work safely, ”																				

Clause	Wording / Data
	o) or any of its directors, partners or principals is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges, p) has correctly completed and signed the Form of Offer and Acceptance.” q) Provides proof of registration and good standing with the Bargaining Council for the Civil Engineering Industry.
5.17	The number of paper copies of the signed contract to be provided by the employer is one.

TENDER

PART 2 (OF 2): RETURNABLE DOCUMENTS

T2.1 List of Returnable Documents	12
T2.2 Returnable Documents	13

T2.1: LIST OF RETURNABLE DOCUMENTS

The original completed tender document (refer clauses 3.2 and 4.13 of the Tender Data), excluding Drawings, shall be returned with all the required information supplied, duly completed in non-erasable ink in all aspects.

The following documents and schedules are to be completed and returned, as they constitute the tender. Whilst many of the returnables are required for the purpose of evaluating the tenders, some will form part of the subsequent contract, as they form the basis of the tender offer. For this reason, it is very important that tenderers submit, return, complete and sign **all the information, documents and schedules, as requested.**

1. RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES (Included hereafter for completion)

- 1A Status of Concern Submitting Tender
- 1B Authority for Signatory
- 1C Certificate of Attendance at Clarification Meeting
- 1D Declaration of Interest in Tender of Persons in Service of the State
- 1E Compulsory Enterprise Questionnaire
- 1F Declaration of Tenderer's Past Supply Chain Management Practises
- 1G Form MBD6: Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2001
- 1H Schedule of Work Satisfactorily carried out by the Tenderer for Private Clients or Organs of State
- 1I Schedule of Contracts Awarded to Tenderer by Organs of State
- 1J Company Information Required for Tenders greater than R 5 million
- 1K Certificate of Independent Bid Determination
- 1L Proposed Amendments
- 1M Proof or Registration and good standing with the Civil Engineering Bargaining Council

2. RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES (To be attached with submission)

- 2A Original Valid Tax Clearance Certificate
- 2B Municipal Billing Clearance Certificate
- 2C B-BBEE Status Level Certificates / Consolidated Scorecard
- 2D Declaration certificate for local production and content for designated sectors

3. RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT (included hereafter for completion)

- 3A Record of Addenda to Tender Documents
- 3B Personnel Schedule
- 3C Declaration Concerning Fulfilment of the Construction Regulations
- 3D Schedule of Construction Equipment
- 3E Schedule of Proposed Subcontractors

4. OTHER SCHEDULES AND DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT (included hereafter for completion)

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C2.2 Bill of Quantities

T2.2: RETURNABLE DOCUMENTS

1A: STATUS OF CONCERN SUBMITTING TENDER

1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner or a joint venture:

(Mark the appropriate option below)

Public Company	
Private Company	
Closed Corporation	
Partnership	
Sole Proprietary	
Joint Venture	
Co-operative	

2. Information To Be Provided (Attached to the tender)

If the Tendering Entity is a:		Documentation to be submitted with the tender
1	Closed Corporation, incorporated under the Close Corporation Act, 1984, Act 69 of 1984	CIPRO CK1 or CK2 (Copies of the founding statement) and list of members
2	Private Company incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (Including Companies incorporated under Art 53 (b))	Copies of: a) CIPRO CM 1 – Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) CIPRO CM 39 – Notice of Change of Directors for private companies d) Shareholders Certificates of all Members of the Company.
3	Private Company incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, shares are held by another Closed Corporation or company with, or without, share capital	Copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies.
4	Public Company incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (Including Companies incorporated under Art 21)	A signed statement by the Company's Secretary confirming that the Company is a Public Company. Copy of CM 29
5	Sole Proprietary or a Partnership	Certified Copy of the Identity Document of: a) Such Sole Proprietary, or b) Each of the Partners in the Partnership Copy of the Partnership agreement
6	Co-operative	CIPRO CR 2 – Copies of Company registration document.

If the Tendering Entity is a:		Documentation to be submitted with the tender
		(The percentage of work to be done by each partner must clearly be indicated on Form RDB 1 (or RDB 2 as applicable) of the tender document: MBD 6.1 Preference Points Claim Form in terms of the Preferential Procurement Regulations 2001).
7	Joint Venture	All the documents (as described above) as applicable to each partner in the JV as well as a copy of the Joint Venture agreement. (The percentage of work to be done by each partner of the joint venture must clearly be indicated in the Joint Venture Agreement).

Note:

- (i) If the shares are held in trust provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court, wherein trustees have been duly appointed and authorised, must be provided.
- (ii) Include a copy of the Certificate of Change of Name (CM 9) if applicable. No. CM 9: name change certificate will be accepted as proof alone, for registration.

3. Bidders Must Register for VAT or be Registered for VAT Purposes in Terms of the Value-Added Tax Act, (Act No. 89 of 1991)

(Make an X in the appropriate space below)

Yes

No

REGISTRATION NO:

1B: AUTHORITY FOR SIGNATORY

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.

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

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 / Ms
..... acting in the capacity of
....., and who will sign as
follows: be, and is hereby authorized to sign the
tender and all documents and correspondences in connection with this tender as well as any contract resulting from
it on behalf of the company.

As witnesses:

1. Chairman:
2. Date:

NAME	CAPACITY	SIGNATURE

Note:

* Delete which is not applicable.

This resolution must be signed by all the Directors / Members / Partners of the Bidding Enterprise.

Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

B Certificate for Partnership

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

authorize * Mr / Ms, acting in the capacity of, and who will sign as follows: be, and is hereby authorized to sign the tender and all documents and correspondences in connection with this tender as well as any contract resulting from it on behalf of the company.

NAME	ADDRESS	SIGNATURE	DATE

Note:

* Delete which is not applicable.

This resolution must be signed by all the Directors / Members / Partners of the Bidding Enterprise.

Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

C Certificate for Joint Venture or Consortia

We, the undersigned, are submitting this tender offer in a * Joint Venture / Consortium and hereby authorise * Mr / Ms, acting in the capacity of lead partner, and who will sign as follows: be, and is hereby authorized to sign the tender and all documents and correspondences in connection with this tender as well as any contract resulting from it on behalf of the company.

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

NAME OF FIRM	ADDRESS	% OF CONTRACT VALUE	AUTHORISING SIGNATURE, NAME AND CAPACITY
(Lead Partner):			

Note:

* Delete which is not applicable.

This resolution must be signed by all the Members / Partners of the Bidding Enterprise.

Should the number of Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

D Certificate for Sole Proprietor

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

As witnesses:

1. Signature:

2. Date:

E. Certificate for Close Corporation

We, the undersigned, being the key members in the business trading as

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

NAME	ADDRESS	SIGNATURE	DATE

Note:

* Delete which is not applicable.

This resolution must be signed by all the Directors / Members / Partners of the Bidding Enterprise.

Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

1C: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

This is to certify that

..... (Tenderer)

of.....

..... (address) was represented by the

person(s) named below at the compulsory meeting held for all tenderers at

..... (location) on

..... (date), starting at (time).

We acknowledge that the purpose of the meeting was to acquaint ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting on behalf of **the tenderer**:

Name Signature

Capacity

Name Signature

Capacity

Attendance of the above persons at the meeting is confirmed by the **Employer's Representative**, namely:

Name Signature

Capacity Date & Time

1D: DECLARATION OF INTEREST IN TENDER OF PERSONS IN SERVICE OF THE STATE

1. Where the tenderer is a natural person, state / declare whether the tenderer or an employee is in the service of the state, or has been in the service of the state during the past twelve months.

YES / NO (INDICATE)

If so, state particulars:

.....

If so and where applicable, state the date of resignation:

.....

2. Where the tenderer is not a natural person, state / declare whether any of its directors, managers, principal shareholders or stakeholders is in the service of the state, or have been in the service of the state during the past twelve months.

YES / NO (INDICATE)

If so, state particulars:

.....

3. State / declare whether a spouse, child or parent of the tenderer or any of its directors, managers, shareholders or stakeholders referred to in subparagraph 2 is in the service of the state, or have been in the service of the state during the past twelve months.

YES / NO (INDICATE)

If so, state particulars:

.....

4. State / declare whether the tenderer or any of its directors, managers, shareholders, stakeholders or employees referred to in subparagraph 2 is a person who is an advisor or consultant contracted with the municipality or municipal entity.

YES / NO (INDICATE)

If so, state particulars:

.....

5. State / declare whether the tenderer or any of its directors, managers, shareholders or stakeholders referred to in subparagraph 2 is involved in another entity for this particular tender.

YES / NO (INDICATE)

If so, state particulars:

.....

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

1E: COMPULSORY ENTERPRISE QUESTIONNAIRE

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

SECTION 1: NAME OF ENTERPRISE:

SECTION 2: VAT REGISTRATION NUMBER, IF ANY

SECTION 3: CIDB REGISTRATION NUMBER, IF ANY:

SECTION 4: PARTICULARS OF SOLE PROPRIETORS AND PARTNERS IN PARTNERSHIPS

Name*	Identity Number*	Personal Income Tax Number*

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

SECTION 5: PARTICULARS OF COMPANIES AND CLOSE CORPORATIONS

Company registration number

Close corporation number

Tax reference number

SECTION 6: RECORD OF SERVICE OF THE STATE

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

- | | |
|--|---|
| ☐ a member of any municipal council | ☐ an employee of Parliament or a provincial legislature |
| ☐ a member of any provincial legislature | ☐ a member of an accounting authority of any national or provincial public entity |
| ☐ a member of the National Assembly or the National Council of Province | ☐ 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 the board of directors of any municipal entity | |
| ☐ an official of any municipality or municipal entity | |

If any of the above boxes are marked, disclose the following: (insert separate page if necessary)

Name of Sole Proprietor, Partner, Director, Manager, Principal Shareholder or Stakeholder	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 7: RECORD OF SPOUSES, CHILDREN AND PARENTS IN THE SERVICE OF THE STATE

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

- | | |
|--|---|
| ☐ a member of any municipal council | ☐ an employee of Parliament or a provincial legislature |
| ☐ a member of any provincial legislature | ☐ a member of an accounting authority of any national or provincial public entity |
| ☐ a member of the National Assembly or the National Council of Province | ☐ 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 the board of directors of any municipal entity | |
| ☐ an official of any municipality or municipal entity | |

Name of Spouse, Child or Parent	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

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

- (i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- (ii) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- (iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- (iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- (v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Enterprise name

1F: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES

1. This form serves as a declaration to be used by the Employer in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
2. The tender of any Tenderer may be rejected if that Tenderer, or any of its directors have:
 - a) abused the Municipality's / Municipal entity's supply chain management system or been guilty of any improper conduct in relation to such system;
 - b) been convicted for fraud or corruption during the past five years;
 - c) wilfully neglected, reneged on or failed to comply with any government, Municipal or other public sector contract during the past five years; or
 - d) been listed in the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004).
3. In order to give effect to the above, this form and the questionnaire must be completed in full and signed. Failure to comply will result in the tender being declared non-responsive.

ITEM	QUESTION	RESPONSE	
4.1	Is the Tenderer or any of its directors listed on the National Treasurer's database as a company or persons prohibited from doing business with the public sector? (Companies for persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied) The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za)	Yes	No
	If so, furnish particulars:		
4.2	Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004)? (To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number 012-326-5445)	Yes	No
	If so, furnish particulars:		
4.3	Was the Tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No
	If so, furnish particulars:		

ITEM	QUESTION	RESPONSE	
4.4	Was any contract between the Tenderer and the Municipality / Municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
	If so, furnish particulars:		
4.5	Does the tenderer or any of its directors owe any Municipal rates and taxes or Municipal charges to the Municipality/Municipal entity, or to any other Municipality/Municipal entity, that is in arrears for more than three months?	Yes	No
	If so, furnish particulars:		

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

1G: FORM MDB 6.1 – PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011
--

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

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

1. GENERAL CONDITIONS

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

- (a) The 80/20 system for requirements with a Rand value of up to R50 000 000.00 (all applicable taxes included); and
- (b) The 90/10 system for requirements with a Rand value above R50 000 000.00 (all applicable taxes included).

1.2 The value of this bid is estimated not to exceed R50 000 000.00 and therefore the 80/20 system shall be applicable.

1.3 Preference points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

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

1.3.1.1 PRICE	80 POINTS
----------------------	------------------

1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION	20 POINTS
--	------------------

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

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

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

2. DEFINITIONS

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

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

2.3 “**B-BBEE status level of contributor**” means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

2.4 “**bid**” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;

- 2.5 **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 **“comparative price”** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 **“consortium or joint venture”** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;
- 2.8 **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 **“EME”** means any enterprise with annual total revenue of R5 million or less;
- 2.10 **“Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 **“functionality”** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 **“non-firm prices”** means all prices other than “firm” prices;
- 2.13 **“person”** includes a juristic person;
- 2.14 **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 **“total revenue”** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;
- 2.17 **“trust”** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 **“trustee”** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

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

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

Score the financial offers using the following formula:

$$N_{FO} = W_1 \times A$$

Where

N_{FO} is the number of tender evaluation points awarded for the financial offer;

W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the tender data;

A is the number calculated using the relevant formula as stated in the tender data

For 80/20
$$A = 80 \left(1 - \frac{P}{P_m} \right)$$

or

For 90/10
$$A = 90 \left(1 - \frac{P}{P_m} \right)$$

Where

P_m = is the comparative offer of the most favourable comparative offer

P = is the comparative offer of the tender offer under consideration

5. Points awarded for B-BBEE Status Level of Contribution

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

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	8	16
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant Contributor	0	0

- 5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.
- 5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.

- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6 FUNCTIONALITY SCORING

FUNCTIONALITY CRITERIA	POINTS
Proven recent experience of similar projects (7 points per project, to a maximum of 4 projects)	28
Staff and Personnel Site Agent: Experience in similar work 0 – 5 years (5) 6 – 10 years (10) 11 – 15 years (15) 15 and above (20)	20
Relevant Construction Equipment 1 x Truck 5 Tonne (4) 1 x LDV (4) 1 x Concrete Mixer (4)	12
TOTAL POINTS ON FUNCTIONALITY	60

7. BID DECLARATION

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

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

- 8.1 B-BBEE Status Level of Contribution: = (maximum of 10 or 20 points)

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

9 SUB-CONTRACTING

- 9.1 Will any portion of the contract be sub-contracted? **YES / NO**
(delete which is not applicable)

- 9.1.1 If yes, indicate:

- (i) what percentage of the contract will be subcontracted?%
- (ii) the name of the sub-contractor?
- (iii) the B-BBEE status level of the sub-contractor?
- (iv) whether the sub-contractor is an EME? **YES / NO**
(delete which is not applicable)

10 DECLARATION WITH REGARD TO COMPANY / FIRM

10.1 Name of firm:.....

10.2 VAT registration number:

10.3 Company registration number:

10.4 TYPE OF COMPANY/ FIRM [Tick applicable box]

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

10.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

10.6 COMPANY CLASSIFICATION [Tick applicable box]

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

10.7 MUNICIPAL INFORMATION

Municipality where business is situated:

.....

Registered Account Number:

.....

Stand Number:

.....

10.8 TOTAL NUMBER OF YEARS THE COMPANY/FIRM HAS BEEN IN BUSINESS?

10.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points

claimed, based on the B-BBEE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution

WITNESSES:

- 1.
- 2.

.....
SIGNATURE(S) OF BIDDER(S)

DATE

ADDRESS

.....

.....

.....

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

1H: SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE TENDERER FOR PRIVATE CLIENTS OR ORGANS OF STATE

(Organs of State include any Local, Provincial or National Government Authority)

The following is a statement of **similar work** successfully executed by myself/ourselves:

Employer, Contact Person and Telephone Number	Description of Contract	Value of Work Inclusive of VAT (Rand)	Date Completed (State current if not yet complete)

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

11: SCHEDULE OF CONTRACTS AWARDED TO THE TENDERER BY ORGANS OF THE STATE

(Organs of State include any Local, Provincial or National Government Authority)

In terms of Clause 21(d)(iii) of the Supply Chain Management Policy, the tenderer shall list hereunder, particulars of contracts awarded to him by any Organ of State, during the past 5 years. **Any material non-compliance or dispute concerning the execution of any of these contracts must be mentioned.**

Include only those contracts where the tenderer identified in the signature block below was directly contracted by the Employer. Tenderers must not include services provided in terms of a sub-contract agreement. Where contracts were awarded in the name of a joint venture and the tenderer formed part of that joint venture, indicate in the column entitled "Title of the contract for the service" that the contract was in joint venture and provide the name of the joint venture that contracted with the employer. In the column for the value of the contract for the service, record the value of the portion of the contract performed (or to be performed) by the tender.

Organ of state, i.e. national or provincial department, public entity, municipality or municipal entity	Title of contract for the service	Value of Work Inclusive of VAT (Rand)	Date Completed (State current if not yet complete)

Any material non-compliance or dispute concerning the execution of any of these contracts?	Yes	No
If so, furnish particulars:		

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

1J: COMPANY INFORMATION REQUIRED FOR TENDERS GREATER THAN R 5 MILLION
--

1. The tenderer is required by law to prepare annual financial statements for auditing and is therefore requested to provide audited annual financial statements:

- for the past three years; or
- since their establishment if established during the past three years.

Indicate whether these have been included in the tender:

YES / NO

Does the tenderer have any undisputed commitments for Municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days?

YES / NO

2.

If so, state particulars:

.....

.....

.....

3. Has any contracts been awarded to the tenderer by an organ of state during the past five years?

YES / NO

If so, state particulars:

.....

.....

.....

4. Has there been any material non-compliance or dispute concerning the execution of such contract?

YES / NO

If so, state particulars:

.....

5. Is any portion of the goods or services expected to be sourced out from outside the Republic?

YES / NO

If so, state what portion and whether any portion of payment from the Municipality is expected to be transferred out of the Republic.

.....

.....

.....

.....

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

1K: CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

.....
(Bid Number and Description)

in response to the invitation for the bid made by:

.....
(Name of Municipality / Municipal Entity)

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

I certify, on behalf of that:
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium* will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

*** 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.**

9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signed

Date

Name

Position

Tenderer

1L: PROPOSED AMENDMENTS

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 3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the Employer's handling of material deviations and qualifications.

Page Number	Clause / Item	Proposal

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

1M:

PROOF OF REGISTRATION WITH THE BARGAINING COUNCIL

Tenderers must attach to this page, proof of registration and good standing with the Bargaining Council. (In the case of Joint Ventures, proof must be provided for each partner).

SIGNED ON BEHALF OF THE TENDERER:.....

2A: ORIGINAL VALID TAX CLEARANCE CERTIFICATE

In terms of Clause 43 of the Municipal Supply Chain Management Policy, tenderers must ensure that they are up-to-date with their payments of taxes.

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

The tenderer must attach to this page an **original(s)** of a **valid** Tax Clearance Certificate(s) and the Tax compliance Status pin must be submitted.

Note:

1. In order to meet this requirement bidders are required to complete in full the form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
2. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
3. The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
4. In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za
6. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za

2B: MUNICIPAL BILLING CLEARANCE CERTIFICATE
--

In terms of Clause 38 of the Municipal Supply Chain Management Policy, tenderers must ensure that they are up-to-date with their payments of municipal accounts.

The tenderer shall attach to this page a Municipal Billing Clearance Certificate, which provides proof that his payment of Municipal accounts is up-to-date.

These certificates are obtainable from:

Kouga Local Municipality
33 Da Gama Road
Jeffreys Bay.

Should the tenderer not be based in the Kouga Local Municipality, he shall submit a Municipal Billing Clearance Certificate issued by the municipality in which he is based.

2C: B-BBEE STATUS LEVEL CERTIFICATES / CONSOLIDATED B-BBEE SCORECARD

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

Bidders other than EMEs shall submit and attach to this page their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.

A trust, consortium or joint venture acting as a legal entity shall submit and attach to this page their B-BBEE status level certificate.

A trust, consortium or joint venture acting as an unincorporated entity shall submit and attach to this page their consolidated B-BBEE scorecard as if they were a group structure and such a consolidated B-BBEE scorecard shall be prepared for every separate bid.

Tertiary institutions and public entities shall submit and attach to this page their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.

All EME / B-BBEE certificates must reflect the B-BBEE status level of the bidder and must be certified.

2D: MBD 6.2 - DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS
--

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - \frac{x}{y} \times 100]$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on Error! Hyperlink reference not valid.[http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

- 1.6. A bid may be disqualified if –
 - (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
 - (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. “**bid**” includes written price quotations, advertised competitive bids or proposals;

- 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);
 - 2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
 - 2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
 - 2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
 - 2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
 - 2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
 - 2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and
 - 2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
3. **The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is:**

70% of all content:

<u>Description of services, works or goods (to be indicated by the Contractor)</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %

4. Does any portion of the services, works or goods offered have any imported content?

(Tick applicable box)

YES		NO	
-----	--	----	--

- 4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on **www.reservebank.co.za**.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?
(Tick applicable box)

YES		NO	
-----	--	----	--

- 5.1. If yes, provide the following particulars:

- (a) Full name of auditor:
- (b) Practice number:
- (c) Telephone and cell number:
- (d) Email address:

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

6. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the DTI must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):
.....

NB

1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of (name of bidder entity), the following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that

- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (ii) the declaration templates have been audited and certified to be correct.

(c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

(d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

3A: RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Procuring Department before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

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

Attach additional pages if more space is required.

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

3B: PERSONNEL SCHEDULE

The tenderer shall insert the number of personnel he proposes to employ on this tender/Contract:

JOB DESCRIPTION	NON-LOCAL (Key Personnel) (Permanently employed by Contractor)	LOCAL			
		Women	Men	Youth	SMME
Contract Manager**					
Site Agent**					
Quantity Surveyor					
Surveyors					
General Foreman					
Foremen					
Operators					
Bricklayers					
Carpenters					
Mechanics					
Electricians					
Watchmen					
Gang Bosses					
Pipe Layers					
Labourers					
* Other					
Total					

* To be filled in / completed by tenderer. **The CV's of the Contracts Manager and Site Agent must be attached, in which they highlight their previous experience. The Company Profile of the proposed Sub Contractor is also to be submitted.**

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

3C: DECLARATION CONCERNING FULFILMENT OF THE CONSTRUCTION REGULATIONS

In terms of Regulation 4(3) of the Construction Regulations (2014), hereinafter referred to as the Regulations, promulgated on 7 February 2014 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), the Employer shall not appoint a Contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

Tenderers shall answer the questions below:

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

(Tick)

Yes	
No	

2. Indicate which approach shall be employed to achieve compliance with the Regulations.

(Tick)

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

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

.....

.....

.....

.....

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

.....

.....

.....

.....

.....

5. List potential key risks identified and measures for addressing risks:

.....

.....

.....

.....

.....

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

(Tick)

Yes	
No	

SIGNATURE OF PERSON(S) AUTHORISED TO SIGN THIS TENDER:

1. ID NO:
(Name in Print):

2. ID NO:
(Name in Print):

3D: SCHEDULE OF CONSTRUCTION EQUIPMENT

The following are lists of major items of relevant equipment that I/we **presently** own or lease and will have available for this contract or will acquire or hire for this contract if my/our tender is accepted.

- (a) Details of major equipment that is owned by and immediately available for use on this Contract should my / our tender be accepted.

Quantity	Description, Size, Capacity, etc.

- (b) Details of major equipment that will be **hired in**, or acquired, for use on the Contract should my / our tender be accepted.

Quantity	Description, Size, Capacity, etc.

Attach additional pages if more space is required.

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

3E: SCHEDULE OF PROPOSED SUBCONTRACTORS

We notify you that it is our intention to employ the following Subcontractors to work on this Contract.

If we are awarded a Contract we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the Contract for such appointments. If there are no such requirements in the Contract, then your written acceptance of this list shall be binding between us.

Name and Address of Proposed Subcontractor	Nature and Extent of Work	Previous Experience with Subcontractor

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer

CONTRACT

PART 1 (OF 4): AGREEMENT AND CONTRACT DATA

C1.1	Form of Offer and Acceptance	56
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C1.1: FORM OF OFFER AND ACCEPTANCE

(Agreement)

1. 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 below, has examined the documents listed in the Tender Data and Addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

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

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

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

..... Rand (in words); R (in figures)

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

For the **Tenderer**:

.....
Signature

.....
Name

.....
Capacity

Name and Address of Organisation:

.....

.....

.....

.....

.....

Signature and Name of Witness:

.....
Signature

.....
Name

.....
Date

2. ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions 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: Agreements and Contract Data (which includes this Agreement)

Part C2: Pricing Data

Part C3: Scope of Work

Part C4: Site Information, 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 Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviation (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of the 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 Contractor) within five (5) days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

For the **Employer**:

.....
Signature

.....
Name

.....
Capacity

Name and Address of Organisation:

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

Signature and Name of Witness:

.....
Signature

.....
Name

.....
Date

3. SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process, of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance, either as a confirmation, clarification or change to the tender documents, and which it is agreed by the Parties becomes an obligation of the contract, shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1. Subject:
Details:
2. Subject:
Details:
3. Subject:
Details:
4. Subject:
Details:
5. Subject:
Details:
6. Subject:
Details:
7. Subject:
Details:

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and Addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Tenderer:

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

Name and Address of Organisation

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

..... Witness Signature
..... Witness Name
..... Date

For the Employer:

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

Name and Address of Organisation

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

4. CONFIRMATION OR RECEIPT

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

the (day)

of (month)

20 (year)

at (place)

For the **Contractor**:

.....
Signature

.....
Name

.....
Capacity

Signature and Name of Witness:

.....
Signature

.....
Name

.....
Date

C1.2: CONTRACT DATA

The General Conditions of Contract for Construction Works, Third Edition, (2015) published by the South African Institution of Civil Employers Agenting (SAICE), Private Bag X200, Halfway House, 1685, are applicable to this Contract and are obtainable from www.saice.org.za.

Copies of these Conditions of Contract may be obtained on the tenderer's own cost from the SAICE.
(Tel: 011 – 055 947).

PART 1: DATA PROVIDED BY THE EMPLOYER

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition, 2015, are applicable to this Contract:

Clause	Description / Wording
1.1.1.13	The Defects Liability Period is 3 months, measured from the date of the Certificate of Completion.
1.1.1.14	The time for achieving Practical Completion is 3 months , calculated from the Commencement Date.
1.1.1.15	The Employer is the Kouga Local Municipality.
1.1.1.16	The Employer's Agent is represented by an employee duly authorised thereto in writing.
1.1.1.26	The Pricing Strategy is: Fix Price Contract
1.2.1.2	The Employer's address for receipt of communications is: Physical Address: 33 Da Gama Road Jeffreys Bay Postal Address: P O Box 21 Jeffrey Bay 6330 Telephone: 042 200 0200 E-mail: aperils@kouga.gov.za or tenders@kouga.gov.za
1.2.1.2	The Employer's Agent's address for receipt of communications and notices is: -
3.2.3	The Employer's Agent shall obtain specific approval from the Employer before executing any of his functions or duties according to the following Clauses of the General Condition of Contract: 1. New Clause 3.2.3.1 "For expenditure on the Contract to exceed the Contract Sum"; 2. Existing Clauses: 3.3.1 - Nomination of person as Employer's Agent's Representative. 5.7.2 - Work at night as well as by day 5.8 – Non-working times 5.12 - Granting of extension of time excluding Clause 5.12.2.2 (Abnormal climatic conditions)

Clause	Description / Wording
	5.13 - Reduction of penalty for delay. 5.14.2 - The issue of a Certificate of Practical Completion. 5.14.4 - The issue of a Certificate of Completion. 5.16.1 - The issue of a Final Approval Certificate. 6.3 – Variation Orders which may exceed R 20 000 6.6 - Instruction to expend on Provisional and Prime Cost Sums 6.11 - Adjustment of General Items & Approval of Claims 8.2.2.2 - Order to repair and make good damage arising from any "excepted" risk.
3.2.4	The Employer's Agent has been appointed as Agent on this contract, in terms of Clause 5 of the Construction Regulations, 2014 as promulgated in terms of Section 43 of the Occupational Health and Safety Act, 1993. The duly appointed H&S Officials has been appointed as Client Agents on this contract, in terms of Clause 5 of the Construction Regulations, 2014 as promulgated in terms of Section 43 of the Occupational Health and Safety Act, 1993. The Principal Contractor shall perform a preliminary assessment of the project generated H&S plan and submit such to the employer's agent for legal compliance reassessment & verification / approval prior to any works commencing. The duly appointed H&S Officials will be responsible for further monitoring and the auditing of the approved H&S plan for legal compliance.
4.3.1	<u>Add the following</u> to the clause: "For conventional construction works the Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) shall apply and the minimum employment conditions which will apply shall be guided by the latest Sectorial Determination: Civil Employers Agenting Sector published from time to time. Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) as per Government Notice R63 of 25 January 2002, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers." "The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2014 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993). Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan."
4.3	Add the following at the end of Clause 4.3: "4.3.3 The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as 'the Act', that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act: (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act. (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with. The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions

Clause	Description / Wording
	imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations. (iii) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor. (iv) The Contractor shall be obliged to report forthwith to the Employer and Employer's Agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Employer's Agent, of such investigation, complaint or criminal charge. 4.3.4 The Contractor shall furthermore, in compliance with Constructional Regulations 2014 to the Act: (i) Acquaint himself with the requirements of the Employer's health and safety specification as laid down in regulation 5(1)(b) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 7(1)(b) of the Construction Regulation 2014 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted to the Employer for approval within fourteen (14) days after the Commencement Date and shall be implemented and maintained from the Commencement of the Works. (ii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to ensure that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Employer's Agent, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified."
5.3.1	The documentation required before the commencement of the Works is: (i) Health and Safety Plan (Refer Clause 4.3) The Contractor shall deliver his health and safety plan, complete with Risk Assessment, in terms of Regulation 5(1) of the Construction Regulations (2014). (ii) Initial Programme (Refer Clause 5.6) The Contractor shall deliver his Initial Programme of carrying out the Works. (iii) Security (Refer Clause 6.2) The Contractor shall submit a Performance Guarantee from an Insurance Company or Bank to be jointly and severally bound with the Contractor, in accordance with the provisions of the Form of Guarantee, in a sum equal to ten per cent (10%) of the Contract Sum. The wording of the Guarantee shall be identical to the pro-forma provided under Clause C1.3: Form of Guarantee of the Contract Data. (iv) Insurance (Refer Clause 8.6) The Contractor shall submit a "Letter of Confirmation" from the approved Insurance Company certifying that:

Clause	Description / Wording
	a) that the applicable Contractor complies in full with all the requirements and stipulations of Clause 8.6 of the Conditions of Contract, as amended in the Contract Data and, b) the Insurance Company will immediately notify the Employers Agent of any changes or amendments to the policy / policies and, c) the Insurance Company will immediately notify the Employers Agent of any non-payment or default relating to the premiums and or policy / policies and, d) the Insurance Company will immediately notify the Employers Agent should any of the applicable insurances expire or be cancelled before the issue of the "Certificate of Completion" or the "Final Approval Certificate", as the case may be."
5.3.2	The documentation shall be submitted within 14 days from the Commencement Date.
5.3.3	Add the following to Clause 5.3.3 after the last sentence: "The Contractor shall not commence working until they have an approved project specific health and safety plan in terms of the Occupational Health and Safety Act 1993: Construction Regulations 2014 and complied with the initial requirements thereof."
5.4.1	Between the wording "... Site," and "the location" In the third line, add the following: "subject to the Contractor having an approved project specific health and safety plan in terms of the Occupational Health and Safety Act 1993: Construction Regulations 2014 and complied with the initial requirements thereof,"
5.4.2	Access to and possession of Site shall not be exclusive to the Contractor but as set out in the Scope of Work and Site Information.
5.6.1	The Contractor shall deliver his Works programme within fourteen (14) days after the Commencement Date.
5.8.1	Delete the words "between sunset and sunrise" in the first line and replace with "outside normal working hours". Non-working days are Saturdays and Sundays. Special non-working days are all applicable gazetted public holidays, election day of the local government elections and national elections (when applicable) and the year-end break. For the purposes of this Contract the year-end break shall be as declared by SAFCEC. The work done by the contractor should be done at hours of the day so as not to influence the normal operation of the existing infrastructure in any manner.
5.8.3	Add the following new Clause: "5.8.3 The additional cost of supervision and monitoring by the Employers Agent or his representatives, outside non-working times, in accordance with Clause 5.8.1 shall be for the Contractor's account."
5.12.2.2	Add the following to Clause 5.12.2.2: The time period specified as the time for completion includes allowances for delays and days on which it is expected that work, on the critical path items of the Works, would be prevented due to normal weather conditions such as wind, rainfall or the subsequent waterlogged condition. Based on average weather conditions of wind, rain and sunshine the allowances are actual and consequential delays shall be as follows: • 3 working days per month for the months of May to October • 2 working days per month for the months of November to April If the Contractor has been prevented by these weather conditions from working on the critical path items of the works, then he must notify the Employer's Agent in writing. The submission shall be made within

Clause	Description / Wording
	five calendar days of the resumption of work. The Employer's Agent shall upon considering all the relevant factors determine the extension of time to be granted on the basis that an extension of time to the contract will only be granted if the total number of days upon which work on the critical items was prevented, exceeds the total number of days calculated in terms of the above allowance and considering the official contract period as a whole. The tendered sums of the appropriate time-related items shall be increased to take account of the extensions of time granted.
5.12.2.4	In the event of any disruption which is entirely beyond the Contractor's control, the only compensation will be under the rates tendered for under items 1.2.8 through to 1.2.11.
5.12.3	Delete the entire subclause 5.12.3.
5.12.5	<u>Add the following</u> to Clause 5.12 5.12.5 Critical Path Provision A delay in so far as extension of time is concerned, will be regarded as a delay only if, on a claim by the Contractor in accordance with the General Conditions of Contract, the Employer's Agent rules that all progress on an item or items of work on the critical path of the approved programme for the execution of the Works by the Contractor, has been brought to a halt. Delays on normal working days only, based on a working week, of five normal working days, will be taken in account for the extension of time.
5.13.1	The penalty for failing to complete the Works is R3000 per day.
5.14.1	The requirements for Practical Completion are that the Works reach a state of readiness, fit for the intended purpose and occupation without danger or undue inconvenience to the Employer.
5.14.2	Issue of Certificate of Practical Completion Replace "the Employer's Agent" in the second line with the following: " , the Contractor shall notify the Employer's Agent, who shall inspect the works and the Employer's Agent"
5.14.4	Add the following to Clause 5.14.4: "The work listed in terms of Clause 5.14.2 shall however be completed within 21 days from the date of issue of the Certificate of Practical Completion. Should the Contractor fail to complete all the work so listed within the stated period of 21 days, the date of issue of the Certificate of Practical Completion shall be amended and extended in respect of the outstanding work by the amount of additional time taken by the Contractor to complete all such work."
5.14.5.5	Delete the contents of Clause 5.14.5.5 and replace with: "Insurance of the Works shall continue until the expiration of the Defects Liability Period, in terms of the new Clause 8.6 contained in this Contract Data".
5.16.3	The latent defect period is 10 years.
6.2.1	Replace the wording "as selected" in Clause 6.2.1 with "as stated". The security to be provided by the Contractor shall be: • a Performance Guarantee of ten per cent (10%) of the Contract Sum, plus

Clause	Description / Wording
	Retention Money amounting to five per cent (5%) of the Contract Price. Retention monies due shall be subjected to Clauses 6.10.1.3 and 6.10.3. The Performance Guarantee shall be from an approved Insurance Company or Bank to be jointly and severally bound with the Contractor, in accordance with the provisions of the Performance Guarantee. A Retention Money Guarantee is not permitted. The wording of the Performance Guarantee shall be identical to the pro-forma provided under Clause C1.3: Performance Guarantee of the Contract Data The time to deliver the Performance Guarantee is within fourteen (14) days after the Commencement Date.
6.2.2	Replace the entire contents of Clause 6.2.2 with the following: "If the Contractor fails in his obligations to provide the stated security within the period stated in Clause 5.3.2, or if the Performance Guarantee shall differ from the pro-forma provided under Clause C1.3: Performance Guarantee of the Contract Data, the Employer may terminate the Contract in terms of Clause 9.2."
6.2.3	Replace the entire contents of Clause 6.2.3 with the following: "The Contractor shall ensure that the Performance Guarantee remains valid and enforceable until the issue of the Certificate of Completion."
6.5.1.2.3	The percentage allowance shall be seven percent (7%).
6.8.2	The value of the certificates issued shall not be adjusted by applying a "Contract Price Adjustment Factor" in accordance with the Contract Price Adjustment Schedule using the following values: The value of "x" is 0,15 The values of the coefficients are: a = 0,30 b = 0,25 c = 0,40 d = 0,05 The urban area nearest the Site is Port Elizabeth. The base month is the month prior to which the tender closes. Data for the Contract Price Adjustment Schedule "L" is the "<u>Labour Index</u>" and shall be the Consumer Price Index for the Eastern Cape where the Site is located and as published in the Consumer Price Index Statistical Release P0141, Additional Tables, Table 14 of Statistics South Africa. "P" is the "<u>Plant Index</u>" and shall be the Producer Price Index for Civil Employers Agenting Plant – as published in the Statistical Release P0151, Table 4 of Statistics South Africa. "M" is the "<u>Materials Index</u>" and shall be the Producer Price Index applicable to the Civil Employers Agenting industry as published in the Statistical News Release P0151 Table 3 of Statistics South Africa (Note – Table 4 is applicable to Concrete Works and Roads and Earthworks Projects). "F" is the "<u>Fuel Index</u>" and shall be the Producer Price Index for Diesel at Wholesale Level for the Coast area as published in the Statistical News Release P0151, Table 4 of Statistics South Africa."

Clause	Description / Wording
6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.10.1	In subclause 6.10.1 delete "monthly".
6.10.1.5	The percentage advance on materials on site not yet built into the Permanent Works is 80%.
6.10.1.9	<u>Add the following new clause:</u> "The Contractor is required to submit completed, accurate and signed monthly Expanded Public Works Programme (EPWP) reports, attached to this tender document as Appendix B, together with all monthly payment certificates. Payment to the Contractor will not be processed until the EPWP reporting for a specific month is provided. In addition a penalty for late submission of R1500.00 per day will be applicable for every day after the 5th working day of the subsequent month to the reporting month."
6.10.3	Replace the entire contents of Clause 6.10.3 with the following: "Payment of the amounts referred to in Clauses 6.10.1.1, 6.10.1.2, 6.10.1.3 and 6.10.1.4 shall be subject to a retention by the Employer of an amount (called the "retention money"), being the percentage retention stated in the Contract Data, of the said amounts due to the Contractor, until the retention money reaches the "Limit of retention money" stated in the Contract Data." The percentage retention shall be ten per cent (10%) and the "Limit of retention money" shall be five per cent (5%) of the Contract Price, excluding Value Added Tax.
6.10.4	Replace the wordings "within 7 days" and "within 28 days" in Clause 6.10.4 with the wording "within 5 working days: and "within 30 days".
6.10.6.2	Replace the contents of Clause 6.10.6.2 with the following: "No interest shall be payable to the Contractor upon any moneys retained or overdue in terms of the Contract."
6.11.1	Delete this clause.
7.8	The Defects Liability Period shall be three months, measured from the date of Certificate of Completion.
7.2.1	Add the following at the end of Clause 7.2.1: "Unless otherwise directed in writing by the Employers Agent, all materials for the Permanent Works shall be new and unused."
7.8.1	In subclause 7.8.1 delete the following: "(fair wear and tear excepted)"
7.8.2.2	In subsubclause 7.8.2.2 add the following: ", subject to such work being done on a written instruction by the Employer's Agent."
8.6	<u>Delete Clause 8.6. and replace with the following:</u>
8.6.1	Notwithstanding the provisions contained in the General Conditions of Contract regarding insurance, and without limiting the obligations, liabilities and responsibilities of the Contractor in any way whatsoever and on the understanding that the Contractor is not relieved from his obligations towards the Employer regarding the provision (by the Contractor) of any other insurances, the Employer shall effect and maintain for the duration of the Contract until the expiry of the Defects Liability Period, including initial transit to the Contract site ⇒ Contract Works Insurance (including SASRIA Insurance) and

Clause	Description / Wording
	⇒ Public Liability (Third Party) Insurance both in the joint names of the Employer and the Contractor (including all Sub-Contractors whether nominated or otherwise), and those on whose behalf the Employer has authority to arrange insurance. The Contractor shall pay for all deductibles incurred as a result of claims made under the Contract. The Policy will be subject to the normal Terms, Exceptions and Conditions applicable to such insurance and will provide the following cover: <u>Section 1 – The Contract Works</u> (a) The Contract Works to be undertaken in terms of the Insured Contract, including all temporary works erected or in the course of erection and all materials for incorporation therein. “Temporary Works” shall mean all constructional aids, equipment or structures (not being part of the permanent works) used or intended for use on the Insured Contract and which (i) do not comprise mobile plant, (ii) the Insured does not intend to remove from the Contract Site on completion of the Contract, and/or (iii) have no residual value at the completion of the Contract (other than scrap value) solely due to their specialized nature, to the extent that the value has been included in the Contract price. (b) Surrounding property (as defined in the Policy) not included in nor forming part of the property insured under Item 1 above. <u>Section 2 – Contract Liability</u> Indemnity against the insured parties’ legal liability in the event of accidental death of or injury to third party persons and/or accidental loss of or damage to third party property arising directly from the execution of the contract. THE SUMS INSURED/LIMIT OF LIABILITY Section 1 – CONTRACT WORKS (a) Property insured under Section 1(a) The Contract Works The Agreed and Accepted Contract Value (subject to a maximum of R100M) in respect of any one Contract plus a maximum of 25% escalation, unless the Insurers’ agreement to amend these limits is obtained in writing. (b) Property insured under Section 1(b) Surrounding Property R2,500,000 each and every loss SECTION 2 - CONTRACT LIABILITY Limit of Indemnity R10 000 000 (Ten Million Rand) for any one occurrence or series of occurrences arising out of one event. EXCLUDED CONTRACTS The following Contracts are specifically excluded from the “blanket” cover arranged by the Employer, and insurance cover will not be arranged by the Employer. The Employer shall arrange with the Insurer for specific insurance cover for these contracts, and shall confirm such arrangement and all specific Terms & Conditions of such policy with the Contractor in writing.

Clause	Description / Wording																																																																	
	- Any Contract with a Contract Price at award of over R100,000,000 - Any Contract with a construction period at award exceeding 24 months - Any Contract with a Maintenance or Defects Liability Period exceeding 12 months - Any Contract involving - Underground Mine or Colliery Working' - Tunnelling - Foul Berthing - Stevedoring Work "Wet" work at or about or connected with dams, docks, harbours, piers, breakwaters or otherwise involving construction in water																																																																	
	THE DEDUCTIBLES The first amount payable by the Insured in respect of each and every occurrence giving rise to a claim under the Policy shall be as follows: (A) STANDARD BUILDING CONTRACTS <table> <tr> <th rowspan="2"></th><th rowspan="2">Description</th><th colspan="2">Existing</th><th colspan="2">Renewal</th></tr> <tr> <th>Gross rate</th><th>Excess</th><th>Gross rate</th><th>Excess</th></tr> <tr> <td>A1</td><td>Contract Value up to R10M</td><td>0.205%</td><td>R 10,000</td><td>0.205%</td><td>R 10,000</td></tr> <tr> <td>A2</td><td>Contract Value above R10M up to R25M</td><td>0.255%</td><td>R15,000</td><td>0.255%</td><td>R15,000</td></tr> <tr> <td>A3</td><td>Contract Value above R25M</td><td>0.255%</td><td>R25,000</td><td>0.255%</td><td>R25,000</td></tr> </table> (B) CIVIL & ALL OTHER CONTRACTS <table> <tr> <th rowspan="2"></th><th rowspan="2">Description</th><th colspan="2">Existing</th><th colspan="2">Renewal</th></tr> <tr> <th>Gross rate</th><th>Excess</th><th>Gross rate</th><th>Excess</th></tr> <tr> <td rowspan="2">B1</td><td>Contract Value up to R1M</td><td rowspan="2">0.350%</td><td>0.25% of claim minimum R10 000</td><td rowspan="2">0.350%</td><td rowspan="2">R 10,000</td></tr> <tr> <td>Canals/water channels & bridges</td><td>R35,000</td></tr> <tr> <td rowspan="2">B2</td><td>Contract Value above R1M up to R5M</td><td rowspan="2">0.350%</td><td>0.25% of claim minimum R20 000</td><td rowspan="2">0.350%</td><td>0.25% of claim minimum R15,000</td></tr> <tr> <td>Canals/water channels & bridges</td><td>R35,000</td><td>Minimum R35,000</td></tr> <tr> <td>B3</td><td>Contract Value above R5M</td><td>0.350%</td><td>0.25% of claim minimum</td><td>0.350%</td><td>0.25% of claim minimum</td></tr> </table>						Description	Existing		Renewal		Gross rate	Excess	Gross rate	Excess	A1	Contract Value up to R10M	0.205%	R 10,000	0.205%	R 10,000	A2	Contract Value above R10M up to R25M	0.255%	R15,000	0.255%	R15,000	A3	Contract Value above R25M	0.255%	R25,000	0.255%	R25,000		Description	Existing		Renewal		Gross rate	Excess	Gross rate	Excess	B1	Contract Value up to R1M	0.350%	0.25% of claim minimum R10 000	0.350%	R 10,000	Canals/water channels & bridges	R35,000	B2	Contract Value above R1M up to R5M	0.350%	0.25% of claim minimum R20 000	0.350%	0.25% of claim minimum R15,000	Canals/water channels & bridges	R35,000	Minimum R35,000	B3	Contract Value above R5M	0.350%	0.25% of claim minimum	0.350%	0.25% of claim minimum
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Clause	Description / Wording																		
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	(C) <u>LIABILITY RISKS</u> Liability limit: R10,000,000 <table><tr><th rowspan="2">Description</th><th colspan="2">Existing</th><th colspan="2">Renewal</th></tr><tr><th>Gross rate</th><th>Excess</th><th>Gross rate</th><th>Excess</th></tr><tr><td>All Contracts</td><td>0.10%</td><td>R25,000 in respect of loss or damage caused by Fire and damage to Underground Services. R20,000 in respect of all other losses.</td><td>0.15%</td><td>R25,000 in respect of loss or damage caused by Fire and damage to Underground Services. R10,000 in respect of all other losses.</td></tr></table>					Description	Existing		Renewal		Gross rate	Excess	Gross rate	Excess	All Contracts	0.10%	R25,000 in respect of loss or damage caused by Fire and damage to Underground Services. R20,000 in respect of all other losses.	0.15%	R25,000 in respect of loss or damage caused by Fire and damage to Underground Services. R10,000 in respect of all other losses.
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	(D) <u>SASRIA</u> Rate : 1.00% The Employer will pay all premiums in connection with the insurance affected by the Employer. In the event of any occurrence which is likely to give rise to a claim under the insurance arranged by the Employer, the Contractor or sub-Contractor shall (a) in addition to any statutory requirement or other requirements contained in the Conditions of Contract, immediately notify the Employer's Insurance Brokers by telephone or in writing giving the circumstances, nature and an estimate of the loss or damage; (b) complete a Claims Advice Form available from the Insurance Brokers to whom the form shall be returned without delay – a copy shall be sent to the Employer's Agent; (c) negotiate the settlement of claims with the Insurers through the Employer's Insurance Brokers, subject to the settlement being approved by the Employer. The Employer and Insurers shall have the right to make all and any enquiries, either on the site or elsewhere, as to the cause and results of any such occurrence and the Contractor shall give full facilities for carrying out such enquiries. Any amount which becomes payable as a result of a claim by the Contractor under the insurance effected by the Employer shall be paid net of the deductibles to the Employer, who shall pay the said amount to the Contractor upon rectification, repair or reinstatement of the loss or damage, but this provision shall not in any way affect the Contractor's obligations, liabilities and responsibilities in terms of the Contract. Submission of a Tender shall be deemed as acceptance by the Contractor that he is satisfied with the scope of the insurances effected by the Employer. The Contractor and/or Sub-Contractor shall provide, as a minimum, the following: (a) Proof of registration with the Department of Labour as an employer, in terms of the Compensation for Occupational Injuries and Diseases Act 1993, as amended																		
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Clause	Description / Wording
	(b) Common Law Liability Insurance for the duration of the Contract Period and with a minimum Limit of Indemnity of not less than R1 000 000 for any one accident; (c) Insurance on an All Risks basis for construction plant, equipment and other things (except those intended to incorporation into the works) brought onto the site to the full value of such construction plant, equipment and other things; (d) Motor Vehicle Liability Insurance, comprising a minimum of Balance of Third Party motor risks, including Passenger Liability, subject to a minimum limit of R2,5 million; (e) Where the Contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the site, the Contractor shall satisfy the employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication, then such interest shall be noted by endorsement to the Contractor's Policies of Insurance. (f) Imported equipment or component parts or materials to be supplied in terms of this Contract which require any process of assembly or finishing in South Africa prior to delivery to the site are to be insured by the Contractor up to the commencement of transit to site of the assembled or finished equipment, component parts or materials, unless special arrangements are made with the Employer.
8.6.7	These insurances shall be maintained in force for the duration of the Contract, including any Defects Liability Period and in respect of Sub-Contractors, the Contractor shall be deemed to have complied with the provisions of the requirements relating to insurance by ensuring that the Sub-Contractors have affected such insurance.
8.6.8	The Contractor may affect, at his own cost, any insurance additional to that affected by the Employer which he deems necessary in his own interests. The Employer reserves the right to call for full information regarding such insurances.
8.6.9	The insurances to be provided by the Contractor and Sub-Contractor shall be affected with Insurers and on terms approved by the Employer (which approval shall not be unreasonably withheld) and the Contractor shall, if required by the employer, produce to the employer the Policy or Policies of insurance and the receipts for payment of the current premiums.
8.6.10	If the Contractor fails to effect and keep in force the insurances referred to, then the employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and, from time to time, deduct the amount paid by the Employer from any monies due or which may become due to the Contractor or recover same as a debt from the Contractor.
8.6.11	where the Contractor is responsible for the appointment of Sub-Contractors, then the Contractor shall (a) ensure that potential and appointed Sub-Contractors are aware of the whole content of this Special Conditions of Contract Clause; and (b) Ensure the compliance of Sub-Contractors with this Special Conditions of Contract clause, where applicable. The Contractor warrants that he shall give all notices and shall observe all the Terms and Conditions and requirements of all insurances applicable to this Contract.
9.1.4	Replace the contents of Clause 9.1.4 with the following: "Up to the time of termination of the Contract by either party in terms of this Clause, or until the Contractor

Clause	Description / Wording
	gives notice in terms of this Clause to terminate the Contract and the Contractor is precluded from exercising his right to terminate the Contract because the Employer agrees to bear any resultant additional costs provided for in Clause 9.1.2.2 hereof, the Contractor: a) will be entitled to an extension of calendar time for working days lost as may be approved by the Employer's Agent, and b) will be reimbursed the cost of delays per working day, where the number of working days will be determined pro rata the effect the delays have on the progress of the work as agreed with the Employer's Agent. Payment in full and final settlement will be made at the rates tendered for the payment items specially provided in the Bill of Quantities Where the circumstances described in Clauses 9.1.1 and 9.1.2 are applicable only to a certain portion of the contract, the Employer's Agent will decide after consulting the Contractor, to what extent the contract as a whole is affected and whether or not a claim in terms of this Clause can be submitted. No payment will be made in terms of this Clause after the expiry of the Due Completion Date.
10.3.2	Dispute resolution shall be by amicable settlement.
10.5.1	Dispute resolution shall be by ad-hoc adjudication.
10.5.3	The number of Adjudication Board Members to be appointed is one (1).
10.7.1	The determination of disputes which are unresolved in terms of Clause 10.5.3 shall be by arbitration.
10.11	Add the following additional clause: "Details to be confidential The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without the prior written consent of the Employer's Agent."

PART 2: DATA PROVIDED BY THE CONTRACTOR

Clause	Description / Wording
1.1.1.9	The Contractor is:
1.2.1.2	The Contractor's address for receipt of communications and notices is: Address (Postal): Address (Physical): Telephone Number (Work): Telephone Number (After Hours): Facsimile Number: Electronic Mail Address (E-mail):

C1.3: FORM OF GUARANTEE

**PRO FORMA
PERFORMANCE GUARANTEE**

GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means:

Physical address:

“Employer” means:

“Contractor” means:

“Employers Agent” means:

“Works” means:

“Site” means:

“Contract” means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

“Contract Sum” means: The accepted amount inclusive of tax of R

Amount in words:

“Guaranteed Sum” means: The maximum aggregate amount of R

Amount in words:

“Expiry Date”: This Performance Guarantee shall remain in full force and effect **until the issue of the Certificate of Completion of the Works** in terms of the Contract. (Refer Clause 2 hereunder).

CONTRACT DETAILS

Employers Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate of Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor’s liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor’s period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the date of issue by the Employers Agent of the **Certificate of Completion of the Works** or the date of payment in full of the Guaranteed Sum, whichever occurs first unless the Guarantor is advised in writing by the Employer of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated. The Employers Agent and / or the Employer shall inform the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.

4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employers Agent in an Interim or Final Payment Certificate has not been made in term of the Contract and failing such payment within (7) seven calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
 - 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
 - 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and / or the provisional / final sequestration and / or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the **Final Payment Certificate** submit an **expense account** to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear zero percent (0%) interest.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

C1.4: HEALTH AND SAFETY AGREEMENT

ARTICLE OF AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL SAFETY ACT (1993)

BETWEEN

THE KOUGA LOCAL MUNICIPALITY
(Hereinafter referred to as the "EMPLOYER")

AND

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

Herein represented by in his/her capacity as
....., duly authorised by virtue of a resolution dated
....., attached hereto as Annexure A, of the said
(Herein after referred to as the "CONTRACTOR")

WHEREAS the CONTRACTOR is the mandatory of the EMPLOYER as contemplated in an agreement in respect of:

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

Contract number:

AND WHEREAS section 37 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993, hereinafter referred to as the "ACT"), imposes certain powers and duties upon the EMPLOYER.

AND WHEREAS the parties have agreed to enter into an agreement in terms of section 37(2) of the ACT.

NOW THEREFORE the parties agree as follows:

- (a) The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
- (b) The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations will be fully complied with. Provided that should the EMPLOYER prescribe certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
- (c) The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedure, if any, imposed by the ACT and Regulations and the EMPLOYER expressly absolves the EMPLOYER from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedure as the case may be.
- (d) The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with the undertakings as more fully set out in paragraphs (a) and (b) above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to inspect any appropriate records held by the CONTRACTOR or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
- (e) The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigations, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such an investigation, complaint or criminal charge as the case may be.

.....
Name(s) (in block letters):

.....
Capacity of authorized agents:

.....
for and on behalf of the Contractor:

.....
.....
.....
(Name and address of organization)

Witness:

.....
(Full name in block letters as well as signature)

.....
(Signature)

Date:

for and on behalf of the Employer:

Signature of authorized agent:

Name of authorized agent:

Capacity of authorized agent:

for the **Employer:** **KOUGA LOCAL MUNICIPALITY**
 P O Box 21
 Jeffreys Bay
Witness: **6330**

.....
(Full name in block letters as well as signature)

.....
(Signature)

Date:

C1.5: DISCLOSURE STATEMENT

**PRO FORMA
DISCLOSURE STATEMENT**

Date:

Contract:
(Name)

Contractor:
(Name)

Employer:
(Name)

Employers Agent:
(Name)

Dear Sirs

I am willing and available to serve as (ad-hoc / standing) Adjudication Board Member in the above-mentioned Contract.

In accordance with the General Conditions of Contract for Construction Works Adjudication Board Rules relating to the disclosure statements by selected or nominated persons to the adjudication, I hereby state that:

- I shall act with complete impartiality and know of nothing at this time, which could affect my impartiality.
- I have had no previous involvement in this project.
- I do not have any financial interest in this project.
- I am not currently employed by the Contractor, Employer or Employers Agent.
- I do not have any financial connections with the Contractor, Employer or Employers Agent.
- I do not have or have not had a personal relationship with any authoritative member of the Contractor, Employer or the Employers Agent which could affect my impartiality.
- I undertake to immediately disclose to the parties any changes in the above position which could affect my impartiality or be perceived to affect same.

Should there be any deviation from the foregoing statements, details shall be given.

I further declare that I am experienced in the work which is carried out under the Contract and in interpreting the contract documentation.

Name in full:

Signature:

C1.6: ADJUDICATION BOARD MEMBER AGREEMENT

PRO FORMA

ADJUDICATION BOARD MEMBER AGREEMENT

This Agreement is entered into between:

Adjudication Board Member:

Name:

Physical Address:

Postal Address:

E-mail Address:

Facsimile Number:

Telephone Number:

Mobile Number:

Contractor:

Name:

Physical Address:

Postal Address:

E-mail Address:

Facsimile Number:

Telephone Number:

Mobile Number:

Employer:

Name:

Physical Address:

Postal Address:

E-mail Address:

Facsimile Number:

Telephone Number:

Mobile Number:

The Contractor and the Employer will hereinafter be collectively referred to as the Parties.

The Parties entered into a Contract for

..... (Name of project) which provides that a dispute under or in connection with the General Conditions of Contract for Construction Works, Second Edition 2015 (GCC), must be referred to **ad-hoc / standing adjudication**.

The undersigned natural person has been appointed to serve as Adjudication Board Member and together with the undersigned Parties agree as follows:

1. The Adjudication Board Member accepts to perform his duties in accordance with the terms of the Contract, the General Conditions of Contract for Construction Works Adjudication Board Rules and this Agreement.

2. The Adjudicator undertakes to remain independent and impartial of the Contractor, Employer and Employers Agent for the duration of the Adjudication Board proceedings.
3. The Adjudication Board Member agrees to serve for the duration of the Adjudication Board proceedings.
4. The parties may at any time, without cause and with immediate effect, jointly terminate this Agreement.
5. Unless the Parties agree, the Adjudication Board Member shall not act as arbitrator or representative of either Party in any subsequent proceedings between the Parties under the Contract. No Party may call the Adjudication Board Member as a witness in any such subsequent proceedings.
6. The standing Adjudication Board's duties shall end upon the Adjudication Board Member(s) receiving notice from the Parties of their joint decision to disband the Adjudication Board.
7. The Adjudication Board Member shall be paid in respect of time spent upon or in connection with the adjudication including time spent travelling:
 - a. A monthly retainer of (amount) for (number) of months, and/or
 - b. A daily fee of (amount) based on a (number) hour day, and/or
 - c. An hourly fee of (amount), and/or
 - d. A non-recurrent appointment fee of (amount) which shall be accounted for in the final sums payable
8. The Adjudication Board Member's expense incurred in adjudication work shall be reimbursed at cost.

Upon submission of an invoice for fees and expenses to the Parties, the **(Contractor / Employer)** * shall pay the full amount within 28 days of receipt of the invoice and shall be reimbursed by the other party by half the amount so that fees and expenses are borne equally by the Parties. Late payment of such invoice shall attract interest at prime plus 3% points compounded monthly at a prime rate charged by the Adjudication Board Member's bank.

This Agreement is entered into by:

Contractor's signature:

Contractor's name:

Place:

Date:

Employer's signature:

Employer's name:

Place:

Date:

Adjudication Board Member's signature:

Adjudication Board Member's name:

Place:

Date:

* Delete the inapplicable party

CONTRACT

PART 2 (OF 4): PRICING DATA

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C2.3	Summary Page for Bill of Quantities	100

C2.1: PRICING INSTRUCTIONS

C2.1.1 PREAMBLE TO THE BILL OF QUANTITIES

- C2.1.1.1 The method of measurement published by the South African Bureau of Standards in Clause 8 of the Standardized Specifications for Civil Employers Agenting Construction is applicable, subject to the variations and amendments contained in the section "Applicable SABS 1200 Standardized Specifications".
- C2.1.1.2 Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardized Specifications. Clause 8 of each Standardized Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardized Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardized or Scope of Work, as applicable, shall prevail.
- C2.1.1.3 The reference clauses in a specification in which further information regarding the bill item can be obtained appear under the "Reference Clause" or "Payment Refers" column in the Bill. The reference clauses indicated are not necessarily the only sources of information in respect of schedule/billed items. Further information and set specifications may be found elsewhere in the contract documents. Standardized Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, e.g. G for SABS 1200 G.
- C2.1.1.4 Work reserved for Labour Intensive construction methods will be numbered with a prefix "LI" in the Bill to distinguish them from the conventional construction works. Such work shall be constructed using local labour who is temporarily employed in terms of the Scope of Work.
- C2.1.1.5 Unless otherwise stated, items are measured nett in accordance with the Drawings, and no allowance is made for waste. The Bill has to be completed in black non-erasable ink and the tenderer is referred to the Conditions of Tender as well as the Tender Data with regard to the correction of errors.
- C2.1.1.6 The quantities set out in the Bill of Quantities are the estimated quantities of the work. The tenderers attention is directed to Clause 6.7 of the Conditions of Contract and the Contractor will be required to determine the actual and final quantities of the Works to be executed and the Contractor shall undertake whatever quantities may be directed by the Employers Agent from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
- C2.1.1.7 The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- C2.1.1.8 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price / rate is entered will be considered to be covered by the other prices or rates in the Bill.
- C2.1.1.9 Except where rates only are required, the tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.
- C2.1.1.10 All prices or rates inserted in the Bill of Quantities shall be EXCLUDING VAT. Provision has been made on the Summary Page of the Bill of Quantities, for the addition of VAT.
- C2.1.1.11 Arithmetical errors of responsive tenders shall be corrected in the manner specified under the Conditions of Tender as well as the Tender Data. **(Refer also CIDB Practice Note No. 2 dated February 2008)**

C2.1.1.12 The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

mm	=	Millimetre	h	=	hour
m	=	Metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1 000kg)
m ²	=	square metre	No	=	Number
m ² .pass	=	square metre-pass	Sum	=	Lump Sum
ha	=	hectare	MN	=	MegaNewton
m ³	=	cubic metre	MN.m	=	MegaNewton-metre
m ³ .km	=	cubic metre-kilometre	PC Sum	=	Prime Cost Sum
ℓ	=	Litre	Prov Sum	=	Provisional Sum
kℓ	=	kilolitre	Lab.month	=	Labourer.Month
MPa	=	Mega Pascal	%	=	per cent (percentage)
Mℓ	=	Mega litre	kW	=	kilowatt

C2.1.1.13 The quantities set out in the Bill are the estimated quantities of the Works but the Contractor will be required to undertake whatever quantities as may be directed by the Employers Agent from time to time. The Contract Price for the completed Contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

C2.1.1.14 An item against which no price / rate is entered or where a word or phrase such as "included" or "provided elsewhere" will be accepted as a rate of nil (R 0,00) having been entered against such items and covered by the other prices or rates in the Bill. Any work executed to which such a payment item applies, shall be measured under the appropriate items in the Priced Bill and valued at a rate of nil (R 0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.

NOTE: CORRECTION OF ENTRIES MADE BY TENDERER

Any entry made by the tenderer in the Bill of Quantities, forms, etc., which the tenderer desires to change, shall not be erased or painted out. A line shall be drawn through the incorrect entry and the correct entry shall be written above in black ink and the full signature of the Tenderer shall be placed next to the correction.

C2.2: BILL OF QUANTITIES

**REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES**

SECTION A

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
<u>A</u>	SABS 1200 A	<u>PRELIMINARY AND GENERAL</u>				
A1	PSA8.2.1	<u>FIXED-CHARGE ITEMS :</u>				
A1.1	8.3.1	Contractual Requirements	Sum	-		
	8.3.2	Establish facilities on the site :				
	8.3.2.2	Facilities for Contractor				
A1.2		a) Offices and storage sheds	Sum	-		
A1.3		b) Workshops	Sum	-		
A1.4		d) Living accommodation	Sum	-		
A1.5		e) Ablution and latrine facilities	Sum	-		
A1.6		f) Tools and equipment	Sum	-		
A1.7		g) Water supplies, electric power and communications, dealing with water and access	Sum	-		
A1.8	8.3.3	Other fixed-charge obligations	Sum	-		
A1.9	8.3.4	Removal of site establishment	Sum	-		
A2	PSA8.2.2	<u>TIME-RELATED ITEMS</u>				
A2.1	8.4.1	Contractual Requirements	Sum	-		
	8.4.2	Operation and maintenance of facilities on site for duration of construction, except where otherwise stated.				
	8.4.2.2	Facilities for Contractor				
A2.2		a) Offices and storage sheds	Sum	-		
A2.3		b) Workshops	Sum	-		
A2.4		d) Living accommodation	Sum	-		
A2.5		e) Ablution and latrine facilities	Sum	-		
A2.6		f) Tools and equipment	Sum	-		
A2.7		g) Water supplies, electric power and communications, dealing with water and access	Sum	-		
A2.8	8.4.3	Supervision for duration of construction	Sum	-		
A2.9	8.4.4	Company and head office overhead costs	Sum	-		
A2.10	8.4.5	Other time-related costs (specify)	Sum	-		
CARRIED FORWARD TO NEXT PAGE						

**REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES**

SECTION A

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
A3	<u>PSA8.4.6</u>	<u>STANDING TIME COSTS</u>				
		a) Plant	Sum /day	-		
		b) Labour	Sum /day	-		
		c) Other resources (to be specified by Tenderer)	Sum /day	-		
<u>A4</u>	<u>PSA8.8</u>	<u>TEMPORARY WORKS</u>				
	PSA8.8.3	Protection of building, equipment during construction:				
A4.1		a) Building structure	Sum	-		
A4.2		b) Protection of IT equipment, furniture, etc	Sum	-		
A4.3		c) Relocation of IT equipment, furniture, etc	Sum	-		
A4.4	PSA8.8.4	Existing services including mechanical units and electrical services	Sum	-		
<u>A5</u>	<u>PSA8.9</u>	<u>COMPLIANCE WITH OHS REGULATIONS</u>				
A5.1	PSA8.9.1	Health and Safety Measures	Sum	-		
A5.2	PSA8.9.2	Health and Safety Plan	Sum	-		
A5.3	PSA8.9.3	Health and Safety File	Sum	-		
A5.4		Health and Safety Plan approval	PC Sum	-	-	R 12 000.00
A5.5		Health and Safety Audits	PC Sum	-	-	R 20 000.00
TOTAL CARRIED FORWARD TO SUMMARY						

**REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES**

SECTION B

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<u>B</u>		<u>ROOF REPAIRS TO ICT AREA</u>				
B1		<u>TEMPORARY PROPPING</u>				
B1.1		Temporary propping of existing openings, soffits, beams, slabs, or trusses not exceeding 3.5m high, with steel Kwikjack adjustable props on timber sole plate at not exceeding 600mm centres.	m	30		
B1.2		Temporary propping of existing openings , soffits, beams, slabs, or trusses exceeding 3.5m and not exceeding 5m high, with steel Kwikjack adjustable props on timber sole plate at not exceeding 600mm centres.	m	-		Rate Only
B2		<u>REMOVAL OF EXISTING WATERPROOFING</u>				
		<u>Temporary roof protection, etc. including removal:</u>				
		<u>Contractors will be held responsible for all damage, however caused, to slab soffits, ceilings, finishes, etc, inside rooms where the existing roof coverings have been removed and he must make good all damages at his own expense to the approval of the employer.</u>				
B2.1		Remove existing waterproofing material and dispose of at approved spoil site	m ²	30		
B2.2		Cover and maintain existing roofs in a perfectly watertight condition during alterations by means of thick plastic sheet 400 micron lapped over parapet walls, propped to create falls, properly secured and maintained in position to the approval of the Engineer and Kouga Municipal Officials and make good all work damaged or disturbed after completion.	m ²	80		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES

SECTION B

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
B3		<u>PREPARATORY WORK TO EXISTING CONCRETE AND BRICKWORK SURFACES</u> <u>Breaking up/off and remove screed, plaster, etc., from concrete or brickwork to the direction of the Engineer and prepare surfaces, for new screed, plaster etc.</u>				
B3.1		Breaking up/off and remove existing screed from floors approx. 80mm thick (new screed elsewhere measured)	m ²	20		
B3.2		Hack up/off and remove existing plaster from walls (new plaster elsewhere measured)	m ²	25		
B3.3		<u>Repair to cracks in concrete slab:</u> Cut out crack in soffit of concrete roof slab 15mm wide x 25mm deep, where instructed with square edges, clean out and fill with Pro-Struct 524" epoxy mortar or Sikaflex polyurethane sealant (as directed by the Engineer) or similar approved.	m	10		
B3.4		<u>Preparation to existing horizontal surfaces:</u> Clean existing concrete slabs using a water pressure cleaning system and steel brushes and remove all dirt and loose particles.	m ²	-		Rate Only
B3.5		<u>Preparation to existing vertical surfaces:</u> Clean existing walls using a high pressure water pressure cleaning system and steel brushes and remove all dirt and loose particles.	m ²	-		Rate Only
B4		<u>CRACK REPAIRS</u> <u>Repairs to cracks in existing plaster</u>				
B4.1		Cut out plaster at crack on wall or beam face for full depth and minimum 5mm to maximum 10mm wide, prepare and fill with "Sikacryl" or other approved acrylic sealant to finish flush.	m	10		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES

SECTION B

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
B5		<u>CONCRETE REPAIRS</u>				
		<u>Connection between existing slab and added slab.</u>				
B5.1		10mm Diameter x 200mm long high tensile steel dowel bar set in Epidermix 327 epoxy mortar in and including 12mm diameter x 100mm deep mortice, in side of existing concrete slab or beam and one end greased and wrapped in polythene sheeting and cast into new insitu concrete.	No.	20		
B6	PT	<u>PREPARATORY WORK TO EXISTING PLASTER SURFACES</u>				
		<u>Making good cement plaster</u>				
B6.1		Chase out plaster cracks to form recess 25mm wide and 20mm deep, and fill with 1:4 cement mortar, including floating up smooth to match existing.	m	-		Rate Only
B6.2		Rake out existing polysulphide expansion joint filler and prepare to receive new.	m	2		
B6.3		Cut 5 x 25mm groove in plastered brick walls for wedging and pinning metal flashing (elsewhere measured).	m	15		
B6.4		Cut stepped 5 x 25mm groove in plastered brick walls for wedging and pinning stepped metal flashing (elsewhere measured)	m	3		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES

SECTION B

SECTION 7						
ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
B7	PT	<u>SCREEDS</u>				
		<u>Screeds on concrete:</u>				
B7.1		Polystyrene lightweight screed to min 1:80 falls toward roof outlets on prepared concrete roof	m ³	0.8		
		<u>Slush topping of 1:3 cement and sand mixture on top of lightweight screed to create suitable surface for applying waterproofing:</u>				
B7.2		Brushed on top of concrete slabs	m ²	20		
B8		<u>EXTERNAL PLASTER</u>				
		<u>1:5 Cement plaster on brickwork - rate should include for large areas eg full wall panel and localised areas eg for crack repair:</u>				
B8.1		On walls	m ²	22		
B8.2		On narrow widths	m ²	5		
B9		<u>ROOF SUNDRIES</u>				
B9.1		Supply and install aluminium flashing to manufacturer's details	m	12		
B10	PV	<u>RAINWATER GOODS</u> <i>The following rates shall include the supplying, delivering to Site, erecting and fixing of rainwater goods to various elements ie roof slab, walls etc, including the supply of all necessary fasteners, etc.</i>				
B10.1		Supply and install PVC rainwater guttering	m	-		Rate only
B10.2		Supply and install PVC rainwater downpipes	m	12		
B10.3		Extra-over for shoe	No.	2		
B10.4		Create new opening in parapet wall, install new PVC 110mm rainwater pipe, make good and seal	No.	3		
B10.5		Extra-over for bends	No.	4		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
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SECTION B

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
B11		<u>JOINT SEALANTS, ETC</u> Approved joint sealants are: Sikaflex 35SL; Durakol 25; Prostruct 642 or 644. <u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, Bitumen primer, etc:</u>				
B11.1		12 x 10mm In vertical expansion joints between walls.	m	3		
B12		<u>WATERPROOFING</u> <u>Waterproofing to SANS 021:</u> <i>Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional material and labour to all turn-ups and turn-downs, square cutting and waste; additional material in laps; dealing with services ie cables, pipes, electrical distribution boxes, air-conditioning units and communication infrastructure; and all necessary to achieve water-tightness of the finished product.</i> Prime cleaned and prepared surface with approved bitumen primer and apply one layer Derbigum SP4 (or similar approved) waterproofing membrane, with 75mm side laps and 100mm end laps, sealed to primed surface to falls and crossfalls by `torchfusion` finished with two coats Roofcote bituminous aluminum paint - all done to manufacturers specifications. Waterproofing to be installed by an Approved Derbigum Contractor under a ten year guarantee.				
B12.1		On flat roofs laid to falls and cross falls.	m ²	20		
B12.2		On tops and sides of parapet walls.	m ²	25		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
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SECTION B

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
B12.3		Sealing edges to brickwork or concrete.	m	20		
B12.4		Collar around pipe not exceeding 200mm internal diameter.	No.	3		
		One layer Neodyl expansion joint membrane heat fused over bitumen primed expansion joint. Expansion joint to be pre filled with polyurethane jointing compound followed by a suitable diameter Polycord forming a raised bump above the expansion joint. One layer of Derbigum SP4 heat fused over the Neodyl to finish. Waterproofing to be installed by an Approved Derbigum Contractor under a ten year guarantee.				
B12.5		At expansion/movement joint	m	6		
B13		<u>ELECTRICAL</u>				
B13.1		Supply and install duct/sleeve to permanently protect electrical cables/wiring	m	10		
TOTAL CARRIED FORWARD TO SUMMARY						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES

SECTION C

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
<u>C</u>		<u>REMEDIAL WORKS TO BUILDING</u>				
C1		<u>PREPARATORY WORK TO EXISTING CONCRETE AND BRICKWORK SURFACES</u>				
		<u>Hacking up/off and removing screed from concrete or brickwork to the direction of the Engineer and prepare surfaces for new plaster</u>				
C1.1		Hack up/off and remove existing plaster from walls. For crack repair, plaster to a width of 200mm each side of crack (ie 400mm wide), to be removed. (new plaster elsewhere measured)	m ²	15		
C1.2		<u>Repair to cracks in soffit of concrete slab:</u> Cut out crack in soffit of concrete roof slab 10mm wide x 25mm deep, where instructed with square edges, clean out and fill with Pro-Struct 524" epoxy mortar or Sikaflex polyurethane sealant (as directed by the Engineer) or similar approved.	m	6		
C1.3		<u>Preparation to existing horizontal surfaces:</u> Clean existing concrete slabs using steel brushes and remove all dirt and loose particles.	m ²	-		Rate Only
C1.4		<u>Preparation to existing vertical surfaces:</u> Clean existing walls using steel brushes and remove all dirt and loose particles.	m ²	-		Rate Only
C2		<u>CRACK REPAIRS</u>				
		<u>Repairs to cracks in existing plaster and brickwork</u>				
C2.1		Cut out plaster at crack on wall or beam face for full depth and minimum 5mm to maximum 10mm wide, prepare and fill with "Sikacryl" or other approved acrylic sealant to finish flush.	m	40		
C2.2		Remove the plaster both sides of the crack for 200mm each side. Fix galvanized steel lathing over the full width of the exposed area and replaster	m ²	10		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
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SECTION C

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
C2.3	PT	Create control joint between original and added building. Tie skins together with horizontal bars in the bed joint every fourth brick layer and formalize with a saw-cut and approved polyurethane sealant complete as per drawing P029-RM-01 Type 3.	m	5		
C3		<u>CONCRETE REPAIRS</u>				
		<u>Making good internal cement plaster:</u>				
C3.1		To walls.	m ²	10		
C3.2		To walls in small areas.	m ²	5		
C3.3		Concrete ceilings in small areas.	m ²	5		
C4		<u>PREPARATORY WORK TO EXISTING PLASTER SURFACES</u>				
		<u>Making good cement plaster</u>				
C4.1		Chase out plaster cracks to form recess 25mm wide and 20mm deep, and fill with 1:4 cement mortar, including floating up smooth to match existing.	m	10		
C4.2		Seal 5 x 10mm joint with approved silicone sealant at junction of wall and slab.	m	25		
C4.3		Rake out existing polysulphide expansion joint filler and prepare to receive new.	m	6		
CARRIED FORWARD TO NEXT PAGE						

REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
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SECTION C

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
C5	PZ23	<u>APRON SLABS</u>				
		<u>Excavations other than bulk in earth not exceeding 2m deep and stock pile on site:</u>				
C5.1		Reduced levels under floors (aprons)	m ³	3		
C5.2		Trimming and shaping of area around building using stockpiled material	m ³	3		
		<u>FINISHING TOP SURFACE OF CONCRETE</u>				
		<u>Finishing top surface of concrete smooth with a wood float:</u>				
C5.3		Apron slabs cast in alternate panels	m ²	15		
		MOVEMENT JOINTS ETC				
		<u>Isolation joints with Bitumen impregnated softboard or jointex between vertical concrete and brick surfaces</u>				
C5.4		10mm Joints not exceeding 300mm high	m	10		
		<u>JOINT SEALANTS, ETC</u>				
		Approved joint sealants are: Sikaflex 35SL; Durakol 25; Prostruct 642 or 644.				
		<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, Bitumen primer, etc:</u>				
C5.5		12 x 10mm In expansion joints between apron slab and walls including tearing off hinged edge of 'Jointex' preformed joint filler.	m	10		
CARRIED FORWARD TO NEXT PAGE						

**REHABILITATION AND WATERPROOFING OF ROOF SLAB AND ANCILLARY WORKS
AT THE ICT BUILDING AT THE KOUGA MUNICIPAL OFFICE
BILL OF QUANTITIES**

SECTION C

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
BROUGHT FORWARD FROM PREVIOUS PAGE						
C5.6	PG	FORMWORK Rough Formwork (Degree of Accuracy III) to Edges, risers, etc not exceeding 300mm high (Aprons)	m	12		
C5.7		VIBRATED REINFORCED CONCRETE Class 25MPa/19mm concrete: Aprons	m ³	2.5		
C5.8		REINFORCEMENT Type 245 fabric reinforcement in concrete apron slabs	m ²	15		
C6	PZ30	STRUCTURAL STEEL				
C6.1		Repairs to structural steel staircase including localised cold galvanising and painting	Sum	-	-	
C7		PAINTING				
C7.1		Repainting exterior to match existing. Plascon to suppliers specification (to include plaster primer and 2 top coats)	m ²	50		
C7.2		Repainting interior to match existing. Plascon to suppliers specification (to include plaster primer and 2 top coats)	m ²	60		
TOTAL CARRIED FORWARD TO SUMMARY						

C2.3: SUMMARY PAGE FOR BILL OF QUANTITIES
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SUMMARY OF THE BILL OF QUANTITIES

SECTION	A: PRELIMINARY AND GENERAL	R.....
SECTION	B: ROOF REPAIRS TO ICT AREA	R.....
SECTION	C: REMEDIAL WORKS TO BUILDING	R.....

NETT TOTAL OF TENDER R.....

ADD 15% VALUE ADDED TAX R.....

OFFERED TOTAL OF PRICES R.....

(This offered Total of Prices is to be carried over to the Form of Offer)

Note:

The Contract Price is **NOT** subject to Contract Price Adjustment in terms of Clause 6.8.2 of the Conditions of Contract.

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed Date

Name Position

Tenderer

CONTRACT

PART 3 (OF 4): SCOPE OF WORK

C3.1	Description of the Works	102
C3.2	Employers Agent	103
C3.3	Procurement	105
C3.4	Construction	108
C3.5	Management	126

C3.1: DESCRIPTION OF THE WORKS

STATUS

In the event of any discrepancy between the Scope of Work and any part of the SABS 1200 Standardized Specifications, the Bill of Quantities or the Drawings, the Scope of Work shall take precedence and prevail in the Contract.

C3.1.1 EMPLOYER'S OBJECTIVE

The employer's objective is to rehabilitate and waterproof a part of the ICT building at the Kouga Municipal Offices in the Jeffreys Bay area. These remedial measures will ensure the watertightness, structural integrity and safety of the building.

C3.1.2 OVERVIEW OF THE WORKS

The employer's objective is to improve the structural integrity of the Kouga ICT municipal building to ensure the safety of the equipment and employees.

C3.1.3 EXTENT OF THE WORKS

The Works to be carried out by the Contractor under this Contract comprise mainly of the following:

Kouga Municipality ICT Building

- Construction of apron slabs around the ICT building.
- Repairs of vertical and horizontal cracks in the walls.
- Repairing of the roof slab and replacing waterproofing.
- Waterproofing of parapet wall.
- Rerouting rainwater from higher level roof.
- Repairing of access stairway steps to roof.

Construction methods must be such that no property or life is endangered. The Employer accepts no responsibility for work that is done outside the site boundaries without the Employer's agent's approval.

Sufficient photos of structures, walls and areas that have to be crossed must be taken by the Contractor and handed over to the Employer's agent before such operations commence.

Special care must be taken for working next to adjacent building structures and must form part of the Contractor's Health and Safety Plan.

The Contractor must program his work in such a way that no construction is to be done during the holiday season and public holidays.

The above description is not necessarily complete and shall not limit the work to be carried out under this Contract.

Approximate quantities of the Works are provided in the Bill of Quantities.

C3.1.4 LOCATION OF THE WORKS

The location (Coordinates) of the works is indicated in the table below, as well as in the locality plan:

Name	Latitude	Longitude
Kouga Local Municipality	34.051823° S	24.922989° E

C3.1.5 TEMPORARY WORKS

Temporary works are envisaged in the current design and planned execution of the works. Refer also C3.2.5.

C3.2: EMPLOYERS AGENTING

C3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

Works designed by, per design stage:

Concept, feasibility and overall process	Employer
Basic Employers Agenting and detail layout to tender stage	Employer
Final design approved for construction stage	Employer
Temporary Works	Contractor
Preparation of As-Built (marked up Employers Agents drawings)	Contractor

- The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents, unless otherwise stated.
- The Contractor is responsible for the design of the temporary Works and their compatibility with the permanent Works.
- The Contractor shall supply all details necessary to assist the Employers Agent in the compilation of the As-Built Drawings.

C3.2.2 EMPLOYER'S DESIGN

All work in this Contract has been designed in full and are specified in the Agent's tender document.

C3.2.3 DESIGN BRIEF

The design of the permanent Works is the responsibility of the Employer.

The Contractor is responsible for the design of the Temporary Works and Workshop Drawings required for the construction and execution of the Permanent Works. Where applicable, the designs shall be completed in accordance with the relevant design codes and shall be executed by competent personnel. The Contractor's attention is also drawn to the relevant health and safety requirements concerning the design of any temporary works.

C3.2.4 DRAWINGS

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works and dimensions shall not be scaled from the Drawings, unless required by the Employers Agent.

The contractor is to provide the Employer with a full set of Workshop Drawings and pump specifications of all pumping, electrical panels (equipment) and pipework that he intends to install. Please note that material and pumps may only be ordered once the Employer has approved the above.

The Employers Agent will, on the request of the Contractor, and in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

The Contractor shall ensure that accurate As-Built records are kept of all infrastructure installed or relocated during the contract and where necessary, levels shall also be provided.

A marked-up set of Drawings shall be kept and updated by the Contractor on a day to day basis. This information shall be supplied to the Employers Agent's Representative as and when needed.

All information in possession of the Contractor where required by the Employers Agent and/or the Employers Agent's Representative to complete the As-Built/Record Drawings, must be submitted to the Employers Agent's Representative before the Certificate of Completion may be issued.

The Tender Drawings prepared by the Employer for the construction of the Permanent Works are listed and bound under Appendix C. The Employer reserves the right to issue amended and/or additional Drawings during the Contract.

C3.2.5 DESIGN PROCEDURES

The Contractor is responsible for the design of all the Temporary Works/Workshop Drawings/Electrical diagrams and pipework drawings required for the construction and execution of the Permanent Works. This includes, inter alia, relocation and protection of KLM equipment, temporary interconnections of pipework, etc., all health and safety measures as well as temporary support systems, until the completion of the Contract.

As guidance to the Contractor, the following Temporary Works that may be required during construction and execution of the Permanent Works are:

- (i) Relocation and protection of IT equipment
- (ii) Fall protection and safety when working at heights
- (iii) Record keeping and recording of As Built data for the Employers Agent.

The above description is not necessarily complete and shall not limit the work to be carried out.

C3.3: PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

C3.3.1.1 Requirements

Tenders will be evaluated in terms of the Standard Conditions of Tender, the Tender Data and Employer's Supply Chain Management Policy.

Copies of the Employer's Supply Chain Management Policy are obtainable from the Employer's website.

C3.3.1.2 Resources Standards pertaining to targeted procurement

Refer Conditions of Contract.

C3.3.2 SUBCONTRACTING

C3.3.2.1 Scope of mandatory subcontract works

None

C3.3.2.2 Preferred subcontractors / suppliers

None

C3.3.2.3 Subcontracting procedures

None

C3.3.2.4 Attendance on subcontractors

None

C3.3.3 FEATURES REQUIRING SPECIAL ATTENTION REGARDING USE OF LOCAL LABOUR

C3.3.3.1 SMME & LOCAL LABOUR SPECIAL REQUIREMENTS

The Tenderer's attention is drawn to the following requirements which will form part of his responsibility and which he needs to take into consideration in his tender price regarding the use of SMME Contractors and the use of Local Labour :

- Worker Contracts need to be set up with each employee (full-time and casual) and sub-contractor.
- The Contractor is required to register with the South African Revenue Services.
- Registration with the Unemployment Insurance Fund (UIF) as well as the Compensation of Occupational Injuries and Diseases Fund (Workmen's Compensation) is required.
- Fulfilment of the following employment targets are essential and need to be attained:
 1. **At least 10% of the Contract value must be sub-let to local SMME's (emerging sub contractor's in Humansdorp/Patensie/Hankey/Jeffrey's Bay/St Francis Bay/Oyster Bay areas).**
 2. **Create a minimum of 5 job opportunities on site for the duration of the contract period.**
- The ratio of local labour employed on the project must conform to the following:
 - * At least 20% women (Preference must be given to single heads of household)
 - * At least 40% youth (Persons above school going age of 18 to 35 years old)
 - * 40% men (Over the age of 35 years)

C3.3.3.2 LABOUR INTENSIVE WORK

Guiding Principle

The guiding principles upon which the labour intensive work to be provided is based, include:-

- creating sustainable job opportunities,
- poverty alleviation,
- local authority empowerment, and
- ensuring financial accountability

In line with the above, the following targets have been set in order to reach objectives and this Contract will be subject to these targets:

- **Labour intensive methods of construction** are to be used where possible.
- **Women** are to make up at least **20%** of the **Total Local Labour** employed on this project with an emphasis on “Women who are the single head of households and have dependants”.
- **Youth** are required to make up at least **40%** of the **Total Local Labour** employed.
- **Men** are required to make the balance of the **Total Local Labour** employed.

The Contractor shall therefore be required to plan his activities to maximise the use of local labour. A “local worker” is defined as a person whose domicilium citandi ex executandi shall be in Jeffreys Bay. The rates tendered shall cover the full cost of the all labour intensive work.

The following activities, but not limited too, will be conducted by hand:

- Stripping of waterproofing
- Formwork
- Concrete works (apron slabs)
- Brickwork
- Painting
- Plastering

Furthermore, the Tenderer is required to complete the **Statement of Intent** relating to the use of local labour. This statement is required to indicate the methods which the Contractor intends employing to achieve the employment targets. The Contractor shall be expected to limit the use of non-local persons to his permanent core of key personnel only. The table attached should also be completed in full for tender purposes. The statement will be taken into consideration in the adjudication of the tender.

C3.3.3.3 PENALTY CALCULATION

Use of SMME's

Should the contractor fail to meet the minimum requirement of subletting at least 10% of the Contract value to SMME's (emerging sub-contractors), a penalty of 1,2 x the value of the amount to be sublet, minus the actual value sublet, will be implemented. This amount will be deducted from the Contractor's payment certificate.

The Contractor is to indicate to the Client via a report certified by their auditors indicating that at least 10% of the Contract value has been paid to SMME's.

Use of Local Labour

Should the contractor fail to meet the minimum requirement of creating 5 employment opportunities on site for the duration of the contact, a penalty of 1,5 x the value of the amount of employment that was not created, calculated at R240-00 per day per person, will be calculated and imposed. This amount will be deducted from the Contractor's payment certificate.

The Contractor is to indicate to the Client via a report certified by their auditors indicating the payments made to Local Labour and SMME.

C3.4: CONSTRUCTION

C3.4.1 WORKS SPECIFICATION

C3.4.1.1 Applicable SANS standards

The applicable SABS 1200 Standardized Specifications for Civil Engineering Construction, as amended in the various variations and additions listed under C3.4.11 and read in conjunction with the SABS 0120 Code of Practice for use with Standardized specifications for Civil Engineering Construction and Contract Documents shall apply.

Other applicable SANS specifications and standards are specified elsewhere.

C3.4.1.2 Other standards

As specified elsewhere.

C3.4.1.3 Applicable national and international standards

For the purpose of this Contract the latest issues of the following SANS 1200 Standardized Specifications for Civil Engineering Construction as applicable at the date of the tender advertisement and as amended in the various variations and additions listed under C3.4.11, shall apply:

SABS 1200 A : GENERAL

The various variations and additions applicable to the SABS 1200 Standardized Specifications are listed under C3.4.11.

The following Particular Specifications for work not covered by the SABS 1200 Standardized Specifications, as amended, are also bound under the Scope of Work and C3.4.11, namely

PB	Health and Safety Specifications
PC	Building work

C3.4.1.5 Certification by recognised bodies

As specified elsewhere.

C3.4.1.6 Agreement certificates

As specified elsewhere.

C3.4.2 PLANT AND MATERIALS

C3.4.2.1 Plant and materials supplied by the employer

The Employer shall not supply any Plant or materials.

All construction materials are to be supplied by the contractor. The SANS/SABS standard specification will be applicable for all construction materials to be supplied by the contractor.

C3.4.2.2 Materials, samples and shop drawings

Materials or work, which does not conform to the approved samples submitted in terms of the Conditions of Contract, will be rejected. The Employers agent reserves the right to submit samples to tests to ensure that the material represented by the sample meets the specification requirements.

The costs of any such test conducted by or on behalf of the Employers agent, the results of which indicate that the samples provided by the Contractor do not conform to the requirements of the Contract, shall, in accordance with the provisions of the Conditions of Contract, be for the Contractor's account.

C3.4.3 CONSTRUCTION EQUIPMENT

C3.4.3.1 Requirements for equipment

All equipment must comply with the requirements as stipulated in the Conditions of Contract, Scope of Work and Environmental Regulations and Specifications and as stipulated in the OHS Act.

C3.4.3.2 Equipment provided by the Employer

The Employer shall not supply any equipment.

C3.4.4 EXISTING SERVICES

As specified elsewhere. The Contractor's attention is directed to the requirements of PSA 5.4.

The Contractor shall familiarize himself with all existing services and liaise with all relevant authorities for the location and detection of existing services. The Contractor shall also use all necessary means to locate and expose services without damage to such services.

C3.4.4.1 Known services

Information regarding the approximate positions of services will be supplied to the Contractor. Before any construction work starts, however, it is the responsibility of the Contractor to contact the relevant authorities responsible for existing services to be indicated to him. The Contractor will be solely responsible to locate these existing services by hand excavation before any machine excavation operations may commence. Any problems encountered shall be immediately brought to the attention of the Employers agent. After the services have been exposed and located, they must be marked and backfilled in order not to present a safety hazard. No distinction will be made between the various types of services to be exposed or the depth to which excavations are taken.

Payment for services not shown on the drawings but indicated to the Contractor on sit, will be measured in cubic metre of excavation and will include for all hand excavation in all materials to expose the service, irrespective of the depth or type of service. The repair of unknown existing services damaged during construction will be paid for by the Employer. Care must be

taken not to damage services during hand excavation thereof. Any remedial work will be for the account of the Contractor.

The Contractor must note that all above ground existing services (irrigation channels, overhead lines, poles, ballast to railway line etc) are defined as known services and payment for the location and protection thereof must be included in the lump sum payment for location and protection of services shown on plans (known services).

The positions of existing services, insofar as they are known, are shown on the drawings. Items have been allowed in the Bill of Quantities for dealing with and protecting services.

C3.4.4.2 Treatment of existing services

Where existing services are either indicated on drawings supplied to the Contractor or indicated on site, or in the course of excavation the Contractor identifies any service, these services, as well as telegraph or telephone poles, or any existing structures, shall be shored, strutted or slung and sufficiently protected to ensure that no damage be done to them until back filling has been completed. In the case of electric and telephone cables, if these are exposed during the course of excavation, the Contractor shall not refill the excavation around such cables until the cables have been inspected and passed as intact by the responsible authorities. The costs of protecting, maintaining and repairs necessitated by damage caused by the Contractor, must be included in the rates measured as specified in Clause 8.3.5 of SABS 1200 DB. (Intersect and adjoin).

The protection of electric and GPO poles will be measured in the number. Overhead services must be protected. No additional payment for overhead services will be made and the cost must be included in the rate for excavation.

Protection of services will only apply to existing services. Protection of services installed during the execution of this contract will not be paid for separately and must be included in the rates for excavation and pipe laying of new pipes.

Services which are within 0,15 m from each other (wall to wall) will be measured as one service with respect to exposure, crossing and working parallel to services.

C3.4.4.3 Damage to services

The Contractor shall take all necessary steps to protect any existing services whatsoever against damage, which may arise as a result of his operations on site. The Contractor shall bear the cost of repairing (by the relevant authority) the damage to any service, the possible existence of which could reasonably have been ascertained by him in good time.

Where the Contractor is responsible for damage for which repairs must be settled by the Contractor or will be recovered by means of a deduction from the Contractor's monthly Payment Certificates.

C3.4.4.4 Reinstatement of services and structure damaged during construction

Should a service be damaged, the Contractor shall inform the relevant Authority and the Employers agent immediately. The relevant authority will either repair the service or task the contractor to repair the service under their supervision.

Should a service, which the Contractor deems to be unknown service, be damaged, the Contractor shall inform the relevant Authority and the Employers agent immediately and inform the Employers agent's representative in writing within 24 (twenty-four) hours that he considers it unknown service. The cost of repair then will be recovered from the first payment certificate thereafter due to the contractor. Should the Employers agent thereafter confirm that it was an unknown service, the Contractor will be recompensed in the next payment certificate plus a handling fee of 7, 5 %. No claim for additional time, standing time or any other additional payment for the breaking of known or unknown services will be entertained.

No additional payment will be made for the care required or for any additional costs incurred by the Contractor when constructing in the proximity of existing services and structures. The Contractor must therefore allow for all such costs in his tendered rates in the Bill of Quantities.

C3.4.5 SITE ESTABLISHMENT

C3.4.5.1 Water supply

The Contractor shall make his own arrangements regarding the supply of water.

The Contractor shall, at his own expense, be responsible for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposes and domestic use as well as for making all arrangements in connection therewith. The Contractor shall further, at his own expense, be responsible for providing all necessities for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping, valves, tanks, pumps, meters and other plant and equipment, as well as for all work and superintendence associated therewith.

The Contractor shall make himself thoroughly acquainted with the regulations relating to the use of water and shall take adequate measures to prevent the wastage of water.

The sources of all water utilised for the purposes of the Contract shall be subject to the prior approval of the Employers agent, which approval shall not be unreasonably withheld. The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Employers agent, produce proof of such compliance.

The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations. All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract.

The Contractor shall, whenever reasonably required by the Employers agent, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

The Contractor may make application to the Municipality's Water Division for a clean water supply point but shall bear all the costs for the installation of such supply point. Water used by the Contractor from the Employer's mains will be charged for at the tariffs ruling at the time of use. The Contractor shall make himself thoroughly acquainted with the regulations relating to the use of water and shall take adequate measures to prevent the wastage of water.

The Employer accepts no responsibility for the shortage of water due to any cause whatsoever or for the additional costs incurred by the Contractor as a result of such shortage.

The Contractor shall take note that no separate or direct payment of any kind whatsoever will be made for any cost incurred to obtain, distribute, consume and use water or for the provision of a water supply point or for the cost of water drawn. Payment for the aforementioned shall be deemed to be covered by the rates and prices tendered and paid for the various items of work included under the Contract.

Accounts issued by the Kouga Local Municipality, for water drawn, shall also be settled directly by the Contractor.

C3.4.5.2 Power / Electricity supply

The Contractor shall make his own arrangements regarding the supply of electricity.

The Contractor may make his own arrangements with Kouga for a supply of electricity if required and shall pay establishment and consumption costs at the tariffs ruling at the time.

The Contractor shall, at his own expense, be responsible for obtaining and distributing all electricity as he may require for the purposes of executing the Contract, including electricity for construction purposes, domestic use as well as for making all arrangements in connection therewith.

The distribution of electricity shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations. No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's tendered rates and prices.

C3.4.5.3 Location of site camp and materials storage area

The Employer has agreed that a portion or open area inside the sports facility may be utilised by the Contractor at his own risk.

The Contractor may, should he so elect, erect offices, workshops, stores and other facilities on this site as may be required for the purposes of the Contract.

The Contractor shall, at his own cost, be responsible for making all arrangements necessary for securing the area to meet his needs in respect of the erection of the Contractor's offices, stores and other facilities, including the facilities to be provided for the Employers agent, all in accordance with the Contract.

Should the Contract elect not to use the designated area, any other potential area so proposed by the Contractor shall be within reasonable proximity to the Site of the Works and its location shall be subject to the approval of the Employers agent, which approval shall not be unreasonably withheld.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may so require within this area, or anywhere else. On completion of the Contract Works the surface and areas utilised shall be properly re-instated.

Should the Contractor wish to occupy another location for his material storage and site camp, or should this area fall outside the bounds of the Site, written confirmation of the owner's permission to occupy the chosen location shall be issued to the Employers agent.

The site of the camp shall be kept clean and tidy, and on completion of the Works, the Contractor shall remove all temporary offices, sheds, etc. and reinstate the area to the Employers agent's and/or the owner's satisfaction.

C3.4.5.4 Temporary offices for the Employers agent and Contract Meetings

Contractor shall ensure suitable venue is available for monthly site meetings.

C3.4.5.5 Sanitary facilities

The Contractor shall, at his own expense, be responsible for safely and hygienically dealing with and disposing of all human excrement and similar matter generated on the Site during the course of the Contract, all to the satisfaction of the responsible health authorities in the area of the Site as well as the Employers agent.

All such excrement shall be removed from the Site and shall not be disposed of by the Contractor on the Site. The Contractor shall further comply with any other requirements in this regard as may be stated in the Contract and Health and Safety regulations.

The Contractor shall further, as a minimum, supply and maintain chemical toilets for use by his workmen. The number of toilets shall be based on one toilet per fifteen personnel on site.

Under no circumstances will the Contractor's staff be allowed to use any other toilet facilities in and around the Site.

C3.4.5.6 Contract name boards and identity boards

Not required

C3.4.5.7 Accommodation of employees

The Contractor shall make his own arrangements for the accommodation of his employees.

C3.4.5.8 Security of Contractor's site camp

Security of the Contractor's site camp will be the Contractor's own responsibility and no additional payment will be made should additional security measures need to be taken during the Contract.

C3.4.5.9 Laboratory facilities

The Contractor's attention is directed to C3.4.9.2.

Acceptance Control Testing required and ordered by the Employers agent will be carried out by another separate laboratory designated by the Employers agent.

A Prime Cost or Provisional Sum has been provided in the Bill of Quantities to cover the cost of Acceptance Control Testing ordered by the Employers agent. The Contractor shall however take note that if the work or material tested does not comply with the relevant specification the invoiced cost of tests carried out shall be borne by him.

C3.4.6 SITE USAGE

Access to site shall be limited to the Employer's, Employers agent's and Contractor's personnel only. The Contractor shall be responsible to control unauthorized entry to the site and shall inform the Employers agent of any breach of such rules. The Site shall be properly managed and only used for its intended purpose.

C3.4.7 SURVEY CONTROL AND SETTING OUT OF THE WORKS

All work to be set out by the Contractor as per the approved issued construction drawings from the Employers agent and approved workshop drawings as submitted by the Contractor. The Contractor will be responsible to ensure that all dimensions and levels are correctly set out on site and to inform the Employers agent if any discrepancies are found on site or on any drawings approved for construction.

Before commencement of work, the Contractor is to liaise with the Employers agent to establish exactly the status of all benchmarks and reference pegs at the site. The position of all bench marks and reference pegs found will be recorded on a marked-up print of the site layout plan.

On completion of the Contract the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Employers agent, been disturbed due to the negligence of the Contractor will be replaced at the Contractor's cost.

C3.4.8 FEATURES REQUIRING SPECIAL ATTENTION

C3.4.8.1 Site maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition in order prevent any dissatisfaction from the Client, Employers agent, and general public.

The Contractor shall store materials and equipment for which he is responsible in an orderly manner and he shall keep the Site free from debris and obstructions.

C3.4.8.2 Testing and quality control

a) Contractor to engage services of an independent laboratory

The Contractor shall be responsible for all Control Testing.

Notwithstanding the requirements of the specifications pertaining to testing and quality control, the Contractor shall engage the services of an independent laboratory certified and approved by the South African National Accreditation Systems (SANAS) to undertake all testing materials, the results of which are specified in, or any reasonably be inferred from, the Contract.

These results will be taken into consideration by the Employers agent in deciding whether the quality of materials utilised and workmanship achieved by the contractor comply with the requirements of the specifications.

The above shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Employers agent or by the Contractor.

The contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Employers agent with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" (as defined in subclause PSA 7.2) which is not under the management or control of the contractor and in which the Contractor has no financial

interest, nor which has any control or financial interest in the Contractor.

b) Additional testing required by the Employers agent

The Employers agent shall be responsible for all Acceptance Control Testing.

In addition to the provisions of sub clause C3.4.9.2 (a), the Employers agent shall be entitled at any time during the Contract to instruct the Contractor to arrange with another independent laboratory to carry out any Acceptance Control Testing, additional to those described in sub clause C3.4.9.2 (a), at such times and at such locations in the Works as the Employers agent shall prescribe.

The Contractor shall promptly and without delay arrange with such independent laboratory for carrying out all such additional testing as required by the Employers agent, and copies of the test results shall be promptly submitted to the Employers agent.

c) Costs of testing

(i) Tests in terms of subclause C3.4.9.2 (a)

The cost of all Process Control Testing carried out by the Contractor's independent laboratory in accordance with the requirements of C3.4.9.2 (a) above shall be borne by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Bill of Quantities and which require testing in terms of the Scope of Work.

No separate payment will be made by the Employer to the Contractor in respect of any testing carried out in terms of subclause c3.4.9.2 (a).

Where, as result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

(ii) Additional tests required by the Employers agent

The costs of all the additional Acceptance Control Testing required and instructed by the Employers agent in terms of sub clause C3.4.9.2.(b), shall be reimbursed to the Contractor against substitution of the Prime Cost or Provisional Sum allowed therefore in the Bill of Quantities; provided always that the costs of any such additional tests ordered by the Employers agent, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

C3.4.8.3 Subcontractors

All matters pertaining to subcontractors (including Selected Subcontractors appointed in terms of Clause 4.4.3 of the Conditions of Contract) and the work executed by them shall be dealt with directly between the Employers agent and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Employers agent will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Employers agent will not be involved.

C3.4.8.4 Opening up and closing down of designated borrow pits

Not applicable.

C3.4.8.5 Access to properties (where relevant)

The Contractor shall organise the work to cause the least inconvenience to the public and to the property owners adjacent to or affected by the work, including along the haul road, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to clause 8.1 of the Conditions of Contract.

Where applicable and if as a result of restricted road reserve widths and the nature of the work, the construction of bypass is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

Notwithstanding the above, the Contractors may, with prior approval of the Employers agent (Which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of the street, road, footpath or entrance temporally, provide the Contractor duly notifies the occupiers of the intended closure and its probable duration, and reopens the route as punctually as possible. Where possible, such streets, roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the Contractor from his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

C3.4.8.6 Employment of local labour

It is the intention that this Contract should make maximum use of the local labour force that is presently under-employed. To this end the Contractor shall limit the utilisation on the Contract of non-local employees to that of key personnel only to employ and train local labour to the extent necessary for the execution and completion of this Contract.

The Contractor shall fill in the form entitled Key Personnel in the Forms to be completed by the Tenderer. The data stated on the above-mentioned form will be strictly monitored during the Contract period and any deviations therefrom shall be subjected to the prior approval of the Employers agent, which approval shall not be unreasonably withheld.

C3.4.8.7 Monthly statements and payment certificates

The statement to be submitted by the Contractor in terms of Clause 6.10 of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Employers agent, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement. All supporting documentation including MOS delivery notes, signed MOS cession forms from material suppliers, labour information, etc. shall also be submitted to the Employers agent as requested in an electronic format and two (2) A4 sized hard copies.

For the purposes of the Employers agent's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Employers agent for the purposes of accurately reflecting the actual quantities and amounts, which the Employers agent deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Employers agent within three (3) normal workings days from the date on which the Employers agent communicated to the Contractor the adjustments required. The Contractor shall submit to the Employers agent five (5) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Employers agent the requisite copies of the adjusted statement for the purposes of the Employers agent's payment certificate will be added to the times allowed to the Employers agent in terms of Clause 6.10 of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

C3.4.8.8 Construction in restricted areas

Working space is extremely restricted. The construction method used in these restricted areas largely depends on the Contractor's equipment.

Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties

encountered by the Contractor while working in restricted areas. No extra payment or any claim for payment due to these difficulties will be considered.

C3.4.8.9 Notices, signs, barricades and advertisements

The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal of all notices, signs, barricades and any advertisements and he shall make provision for such within the various tendered rates and prices.

The Employers agent shall have the right to instruct the Contractor to move any sign, notice or advertisement to another position, or to remove it from the Site of the Works, if in his opinion, it is unsatisfactory, inconvenient or dangerous.

C3.4.8.10 Workmanship and quality control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced employers agents, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of Control Testing so required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Employers agent for examination and measurement, the Contractor shall furnish the Employers agent with the results of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the applicable specifications.

C3.4.8.11 Public Safety

The Contractor shall at all times ensure that his operations do not endanger any member of the public.

C3.4.8.12 Sand and Dust Control

The Contractor shall, for the duration of the contract, take appropriate measures to control the dust and soil movement which may arise due to his operations.

C3.4.8.13 Construction Regulations (2014)

The Contractor shall be required to comply with the Occupational Health and Safety Act and the Construction Regulations. Non-compliance with these regulations, in any way whatsoever, shall be deemed adequate reason for suspending the Works.

The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the various specifications, Bill of Quantities and Drawings as well as in the Employer's health and safety specification, Refer Regulation 4(1) of the Construction Regulations as well as Particular Specification PB.

The Contractor shall, in terms of Regulation 5(1) of the Construction Regulations, provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer or his H&S Agent.

The Contractor shall at times be responsible for full compliance with the approved plan as well as the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the above-mentioned plan or regulations.

A payment item is included in the Bill of Quantities to cover the Contractor's cost for compliance with the OHS Act and the above-mentioned regulations.

The Contractor shall obtain his own copy of the Construction Regulations.

The Employer and the Contractor hereby agrees, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), hereinafter referred to as "the Act", that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act:

- (a) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.
- (b) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with.
- (c) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations.
- (d) The Contractor agrees that any duly authorised official of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the Contractor has conformed to his undertakings as described in paragraphs a) and b) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.
- (e) The Contractor shall be obliged to report forthwith to the Employer, his H&S Agent and Employers agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer, his H&S Agent and Employers agent, of such investigation, complaint or criminal charge.

The Contractor shall furthermore, in compliance with Constructional Regulations (2014) to the Act:

- (a) Acquaint himself with the requirements of the Employer's health and safety specification as laid down in Regulation 4(1)(a) of the Construction Regulation (2014), and prepare a suitably and sufficiently documented health and safety plan as contemplated in Regulation 5(1) of the Construction Regulation (2014) for approval by the Employer or his assigned H&S Agent. The Contractor's health and safety plan and risk assessment shall be submitted to the Employer within the time as stated in the Conditions of Contract and shall be implemented and maintained from the Commencement of the Works.
- (b) The Employer, or his assigned H&S Agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations (2014), to ensure that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Employers agent, at the request of the Employer or his H&S Agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages or loss incurred as a result of such suspension, until such time that the Employer or his H&S agents are satisfied that the issues in which the Contractor has been in default have been rectified.

C3.4.8.14 Spoil Sites

The Contractor shall spoil material at the nearest spoil site in Jeffreys Bay. No payment will be made for the cost of hauling material to spoil sites and all relevant costs shall be deemed to be included in the tendered rates.

C3.4.8.15 Finishing and tidying

The Contractor shall take note that progressive and systematic finishing and tidying will form an essential part of this Contract. On no account shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance to or impede the activities of others. In the event of this occurring the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area(s) concerned.

C3.4.9 EXTENSION OF TIME DUE TO ABNORMAL RAINFALL

A claim for extension of time in respect of delays suffered by the Contractor in consequence of abnormal wet climatic conditions will be considered by the Employers agent in terms of Clause 5.12 of the Conditions of Contract and in accordance with

For the purposes of extension of time, a delay caused by abnormal wet climatic conditions will be regarded as a delay only if, in the opinion of the Employers agent, all progress on an item or items of work on the critical path of the Contractor's working programme as approved in terms of Clause 5.6 of the Conditions of Contract has been brought to a halt.

Unless it is customary to carry out the work, in respect of which a delay was suffered, by rotary shifts or by day and by night, only delays to critical path items experienced as a result of wet climatic conditions during normal working hours (as defined in Clause 5.8 of the Conditions of Contract) will be taken into account for extension of time. This will apply notwithstanding the fact that a delay may have occurred on a portion of the Works on the critical path due to wet climatic conditions, which work was being executed outside the said normal hours with the permission of the Employers agent, granted in terms of Clause 5.8 of the Conditions of Contract.

The Contractor shall make due allowance within his programme submitted in terms of Clause 5.6 of the Conditions of Contract, for the total delay to work items on the critical path resulting from normal wet climatic conditions. The specified allowances for this Contract are defined in Clause 5.12.2.2 of the Conditions of Contract.

Extension of time, if granted by the Employers agent, will be determined as the aggregate number of normal working hours for which all progress on the item or items on the critical path was brought to a halt as a result of wet climatic conditions, less the number of normal working days specified in Clause 5.12.2.2 of the Conditions of Contract.

In determining the revised Due Completion Date of the Contract, the Employers agent shall add the equivalent number of normal working days delay determined in accordance with this Clause and all intervening normal non-working days to the prevailing Due Completion Date.

C3.4.10 VARIATIONS AND ADDITIONS TO SABS 1200 STANDARDIZED SPECIFICATIONS AND PARTICULAR SPECIFICATIONS.

The following variations and additions to the SABS 1200 Standardized Specifications shall apply to this Contract. It should be noted that these variations and additions to the SABS 1200 Standardized Specifications shall be implemented and effect prior to the interpretation and application of such.

The prefix "PS" indicates amendment to SABS 1200 Standardized Specifications. The Prefix "PSA" indicates an amendment to the SABS 1200 A Standardized Specification, "PSDB" to SABS 1200 DB standardized Specifications and so on.

Similarly, the numbers following the applicable "PS" prefix indicate the corresponding SABS 1200 Standardized Specification clause number to which this variation or addition shall apply.

An asterisk (*) placed after to a "PS letter and clause number" denotes the inclusion of an additional new clause for which no equivalent appears within the relevant SABS 1200 Standardized Specification.

For example, "PSMK 8.2.11" indicates an amendment to clause 8.2.11 within the SABS 1200 MK Standardized Specification, "PSL 5.3" indicates an amendment to clause 5.3 within the SABS 1200 L Standardized Specifications and so on.

The prefix "PSMK 8.2.14" denotes the inclusion of an additional new clause within the SABS 1200 MK Standardized Specification for which no equivalent appears.

The terms "project specification", "Project Specification" or "Portion 2 of the project specification" appearing in any of the SABS 1200 Standardized Specifications shall be replaced with the term "Scope of Work".

The term "Scope of Work" shall mean Part 3 of the Contract.

SABS 1200 and SANS 1200 shall have corresponding meanings.

Further to the above it should be noted that where in a specific Standardized Specification reference is made to a sub-clause in another Standardized Specification, any amendment or addition to the sub-clause referred to, as provided for in the specification, shall apply. The aforementioned shall also apply with respect to clauses referred to in a Particular Specification.

The variations and additions to the SABS 1200 Standardized Specifications as well as Particular Specifications follow

herewith:

PSA GENERAL

PSA 1 SCOPE

Replace the contents of Clause 1.1, including the notes, with the following:

“1.1 This specification covers requirements, principles and responsibilities of a general nature which are generally applicable to civil employer’s agent construction and building works contracts, as well as the requirements for the Contractor’s establishment on the Site.”

PSA 2 INTERPRETATIONS

PSA 2.3 DEFINITIONS

In the opening phrase, insert the words: “the definitions given in the Conditions of Contract and” between the words “specification” and “the following”.

a) General

Add the following definitions:

“General Conditions and Conditions of Contract: The General Conditions of Contract specified for use with this Contract as amended in the Contract Data.

Specified As specified in the Standardized Specifications, the Drawings or the Scope of Work. “Specifications” shall have the corresponding meaning.”

c) Measurement and payment

Replace the definitions for “Fixed charge”, “Time-related charge” and “Value-related charge” with the following:

“Fixed charge. A charge that is not subject to adjustment on account of variations in the value of the Contract Price or the time allowed in the Contract for the completion of the work.

Time-related charge. A charge, the amount of which varies in accordance with the Time for Completion of the Works, adjusted in accordance with the provisions of the Contract.

Value-related charge. A charge, the amount of which varies pro rata with the final value of the measured work executed and valued in accordance with the provisions of the Contract.”

PSA 2.4 ABBREVIATIONS

a) Abbreviations relating to standard documents

Add the following abbreviation:

“CKS: SABS Co-ordinating Specification.”

PSA 3 MATERIALS

PSA 3.1 QUALITY

Substitute the second sentence of the first paragraph of A 3.1 with the following

Materials shall bear the official mark of the appropriate standard (SABS or BS specifications).

Substitute the second paragraph with the following:

Samples on which laboratory testing is required, shall be delivered free of charge to an approved laboratory. The contractor is responsible for the cost of all testing to ascertain that the materials do comply with the specified minimum requirements of the relative materials and no additional payment will be made for such testing.

The Contractor shall inform the Employers agent of any control testing to be done at least 48 hours before Such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof.

The handling, storage and transport and transport and erection of equipment, machinery and materials shall be strictly in accordance with the requirements of the supplier and or manufacturer.

All materials shall be new and of the best quality available unless otherwise specified. It must function Satisfactorily under prevailing climate and weather conditions at the place of installation.

PSA 4 PLANT

PSA 4.2 CONTRACTOR'S OFFICES, STORES AND SERVICES

Add the following new paragraph before the existing paragraph in Clause 4.2:

Security of the Contractor's camp and construction site will be the Contractor's own responsibility and no additional payment will be made if additional security measures (crime prevention etc.) need to be employed during the contract period.

The Contractor's shall make his own arrangements for the accommodation of his employees and labourers. The Contractor's shall acquaint himself with the regulations regarding the camp site, housing, sanitary facilities, etc. as required by the relevant authority.

PSA 5 CONSTRUCTION

PSA 5.1 SURVEY

PSA 5.1.1 Setting out of the Works

Setting out of the works is the sole responsibility of the Contractor and shall be done as agreed by the engineer. The Contractor shall, within two (2) weeks after the site has been handed over to him, ascertain for himself the correctness of all pegs and bench marks. Any discrepancy shall immediately be reported in writing to the Employers agent. Any costs or subsequent costs arising from discrepancies which had not been reported to the Employers agent within the aforementioned period, shall be the sole responsibility of the Contractor.

Add the following to A 5.1.1

Setting out of the works will not be measured and paid for directly, and compensation for the work involved In setting out shall be deemed to be covered by the rates and prices tendered and paid for the various Items of work included under the Contract.

The contractor shall check the levels given in a specific area well in advance of construction in that area to allow both the accurate measurement of quantities for payment purposes, and should major discrepancies be found, to allow the Employers agent sufficient time to check and if required revise the working drawings. Should the Contractor fail to do this, the levels shown or any amendments to these made by the Employers agent will be used for measurement and payment purposes, and should major discrepancies evidence themselves during construction no claim of whatever nature (delay, returning to excavate. Filling, etc.) will be

entertained due to the Employers agent revising his requirements at a later stage.

PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

Add the following to A 5.4:

The Contractor shall as soon possible after handing over of the site, commence with the detection to existing services, continue with it without interruption and finalize it at least 7 days before excavation starts at that particular section.

PSA 5.5 DEALING WITH WATER ON WORKS

Add the following to A 5.5:

All work must be protected against flooding and damage by water (stormflow, groundwater etc) and the required (including out of material or layerworks or any consequential losses, slow progress, deviations, labour and pumping of water).

Care shall be taken that a free passage for water is maintained in all gutter and waterways. Special precautions shall be taken by the Contractor not to change existing conditions by allowing water to pond on the roof slab. No water is allowed to pond on the roof slab.

The Contractor shall make good any damage and shall settle all claims at his own expense in the event of flooding of the property occurring through waterways being obstructed by his operations or through the effect of any other of his acts or omissions.

The Contractor shall be responsible throughout the duration of the Contract, inclusive of the Defects Liability Period, for the implementation and maintenance of all measures necessary to protect the property utilised by the Contractor during the Contract from any adverse effects of stormflow.

Unless otherwise allowed for in the Bill of Quantities, the Contractor shall be responsible for all costs in dealing with water and must therefore allow for such costs in the tender rates.

PSA 7 TESTING

PSA 7.2 APPROVED LABORATORIES

Add the following to 7.2:

The Employers agent will not require any laboratory facilities.

Control testing required by the Employers agent will be carried out by an independent laboratory after the Contractor has submitted the results of his own test, carried out by an approved laboratory.

The Employers agent may instruct the Contractor to recompact/reconstruct, at the Contractor's expense, any section on which the specified densities or strengths have not been obtained.

The results of the control tests carried out by the Employers agent shall be regarded as final.

Should any control test fail to attain the specified requirements, the Employer will recover from the contractor, the cost for retesting. The Contractor must satisfy himself and provide proof (normal testing) prior to requesting approval of any work.

All requests for approval are to be made in writing to the Employers agent at least twenty four (24) hours before Such approval is required and should Employers agent require tests, the test results will be made available as soon as possible, but not later than forty eight (48) hours (excluding non- working days), plus the normal time required to do the tests, from the time of testing.

The cost of control tests required by the Employers agent shall be paid for out of the provisional sum allowed

in the Bill of Quantities. Should the results of the control testing however lead to failure of the relevant item, the Contractor will be liable for the cost of the control test. The cost of normal testing (all testing required by the specifications other than control testing) by the Contractor shall be included in the unit rates for items requiring testing before approval.

Before any concrete work will be allowed, the Contractor shall timeously submit representative samples of materials to an approved laboratory and the Employers agent. The laboratory shall then design mixes as required which are to be submitted to the Employers agent for approval.

PSA 7.4 Statistical Analysis of Control Tests

Replace A 7.4 with the following:

Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.2 PAYMENT

PSA 8.2.1 Payment of Fixed-Charge and Value-related items

Replace A 8.2.1 with the following:

PSA 8.2.1.1 The value of fixed-charge and time-related items should not exceed 25% of Sub Total A on the Summary of the Bill of Quantities. In this event (ie the value of the fixed-charge and time-related items in a tender is lower than 25% of the abovementioned total), payment of the fixed-charge items will be made as follows:

Fixed-charge items

Two payments will be made as follows:

50% of the amount with first payment certificate, ie after establishment on site and approval of the contractual obligations such as contractual guarantee and insurances.

Final 50% after completion of 1/3 of the work.

PSA 8.2.1.2 If the value of the fixed-charge and time-related items exceeds 25% of Sub Total A in the Bill of Quantities, payment of the fixed-charged and time-related items will be made as follows:

(a)Fixed-charged items

Four payments will be made as follows:

-25% of the amount with the first payment certificate i.e. after establishment on site and approval of the contractual obligations such as contractual guarantee and insurances have been compiled with.

-25% of the amount after completion of 1/3 of the work.

-25% of the amount after completion of 2/3 of the work.

-Final 25% of the amount after completion 100% of the work.

(b)Time-related items

The contractor will be paid equal monthly payments provided that he proceeds with the construction with due diligence, failing which, the time-related items will be paid at the sole discretion of the Employers agent.

PSA 8.2.2 Time-related items

Replace the contents of Clause 8.2.2 with the following:

In the event of additional time being authorised for additional work, the specific time related charges will be taken into account to calculate the time-related charges into the extended contract time. The amount will be calculated according to the rates tendered for time-related charges taking into account the original time for completion, the cost of the additional work and the number of employees and machinery required for the additional work, to that of the original contract.

The annual builders holiday will not be taken into account when calculating payment of time-related items.

Add the following to A 8.2

PSA 8.2.5 Adjusted Payment for Time-Related Items

The payment to the Contractor for Time-Related Items shall be adjusted in accordance with the following formula in the event of the Contract being extended by means of a Variation Order:

Sum of Tendered amounts for Time Related Items X $\frac{\text{Extension of Time authorised by Variation Order}}{\text{Time stated for Achieving Practical Completion}}$

For the purposes of applying this formula "Extension of Time" will exclude the specified year-end break, if applicable.

The abovementioned adjustment of the payment for Time-Related Items shall be made in the completion Payment Certificate and shall be the only payment for additional Time-Related costs irrespective of the actual period required to complete the Contract including its authorised extensions.

"PSA 8.4.6 Standing Time Costs

- (a) Plant Unit: Sum per working day
- (b) Labour Unit: Sum per working day
- (c) Other resources (to be specified by..... Unit: Sum per working day

The sum tendered sum for each item shall include full compensation for all standing time costs of the specified resource of whatever nature and approved by Employers agent, which are not recoverable by way of the provision made in PSA 8.2.5 for the adjusted payment of time-related items.

For the purposes of calculating the total standing time cost, a working week shall be held to consist of five working days and a working day 9 hours.

Payment for the partial standing of any of the scheduled resources for a day or part thereof, or the standing of a complete resource for a part day, will be made pro-rata in proportion to an appropriate factor assessed by the Employers agent.

"PSA 8.7 DAYWORK

Daywork will be paid according to the percentage allowance method. For calculating the total remuneration the general conditions of contract for the construction of civil employers agent work, edition (2015) shall apply, with the amendments as in the appropriate special conditions of contract as noted in the scope of works.

PSA 8.8 TEMPORARY WORKS

PSA 8.8.2 Accommodation of traffic..... Unit: Sum

The rate shall cover all costs pertaining to the provision, erection, moving, re-erection and maintenance of all temporary

Barricades, road signs, lights, flagmen etc. as required, for the guarding and protection of the works, for the construction, gravelling and maintenance of access roads and detours to the site of the works, borrow pits or

spoil sites, as well as for lateral removal or the cleaning and tidying u thereof, for making the necessary traffic arrangements and arrangements with regard to the moving and/or re-erection of existing traffic signs, as well as all other costs to accommodate the traffic during construction.

PSA 8.8.3 Protection of building structure and contents

The Contractor shall take all precautions necessary to protect the building structure and contents against damage during construction. It shall include protection of the executed works, the items made available for execution of the works and the property of the Client from damage, fire, inclement weather, vandalism and theft etc., to the time of final acceptance.

It is envisaged that all the IT and other equipment in the server room must be temporarily relocated to another room or venue within the Municipal Buildings. The tenderer must allow for this relocation cost and effort from and back to the server room in a time frame as agreed with the Kouga Municipality IT Department. The Kouga Municipality will be responsible for the planning, preparation, disconnections, reconnections, etc necessary to minimise the server downtime to a minimum.

PSA 8.8.4 Existing services

Add the following to A 8.8.4:

Where the Contractor is responsible for the cost of repairs carried out by the Employer or others, the costs will be recovered by means of a deduction from the Contractor's monthly payment certificate. The Employer will attend to the payment of monies due to others.

PSA 8.8.5 Cost of Survey in Terms of the Land Survey Act.....Unit: Sum

Substitute 8.8.5 with the following

The sum shall cover the cost of all labour, plant and material required for the searching and compilation of a list, all in accordance with the requirements as set out in clause A 5.1.2

"PSA 8.9* COMPLIANCE WITH OHS AND REGULATIONS

PSA 8.9.1 Health And Safety Measures.....

The rate shall cover all costs pertaining to the provision and maintenance for the duration of the contract of the health and safety measures required in terms of Clause 5 (Principle Contractor and Contractor) of the Construction Regulations (2014) of the Occupational Health and Safety Act. No other sum shall be paid in this respect and tenderers must therefore ensure that adequate provision has been allowed for.

PSA 8.9.2 Health And Safety Plan.....

The rate shall cover all costs pertaining to the provision and maintenance for the duration of the contract of the health and safety plan as required in the Construction Regulations (2014). The rate shall include for all risk assessments required as well as for the development and implementation of safe work procedures and method statements. No other sum shall be paid in this respect and tenderers must therefore ensure that adequate provision has been allowed for.

PSA 8.9.3 Health and Safety File

The rate shall cover all costs pertaining to the provision and/or collection of data (drawings, design, materials, operation and maintenance manuals etc) to be contained in the file, co-operation with parties, compilation and maintenance of the file during the duration of the contract and handing over of the file to the Client on completion of contract .No other sum shall be paid in this respect and tenderers must therefore ensure that adequate provision has been allowed for.

SABS 1200 AB: EMPLOYERS AGENT'S OFFICE

AB 4 PLANT

PSAB 4.1 TELEPHONE

Substitute AB 4.1 with the following:

A cellular phone will be provided for the use of the Employers agent/client for official purposes for the duration of the contract.

Should the Employers agent's representative have his own cellular phone and if so provided for in the bill of quantities. The appropriate amount will be payable to the consulting employers agent.

AB 5 CONSTRUCTION

PSAB 5.5 SURVEY ASSISTANTS

Substitute "two or more suitably educated survey labourers" in the first sentence of AB 5.5 with "two semi-skilled labourers"

PSAB 5.6 SURVEY EQUIPMENT

The Contractor shall provide the following tested and approved survey equipment on the site for the duration of the contract and for the use of the Employers agent whenever needed:

- (a) One tachometer capable of reading to minimum 20 seconds of arc, plus tripod;
- (b) One automatic level plus tripod;
- (c) Two tachometer staffs and one level staff, all graduated metrically; and
- (d) One 5m and one 100m tape measure.

The above-mentioned equipment may by arrangement be shared between the Contractor and the Employers agent's representative.

The contractor shall keep equipment continuously insured against any loss, damage or breakage, and he shall indemnify the Employers agent and the Employer against any claims in this regard.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the contract period.

AB 8 MEASURE AND PAYMENT

AB 8.2 PAYMENT

PSAB 8.2.2 Telephone, Survey Assistants and Survey Equipment

No payment shall be made for the telephone, survey assistants or survey equipment and all costs shall be deemed to be covered by the rates tendered for the Contractor's facilities.

C3.5: MANAGEMENT

C3.5.1 MANAGEMENT OF THE WORKS

C3.5.1.1 Applicable SANS standards

As specified under C3.4.

C3.5.1.2 Particular / generic specifications

As specified under C3.4.

C3.5.1.3 Planning and Programming

Refer Clause 5.6 of the Conditions of Contract.

The Contractor is further reminded to incorporate and cater for the following within the programme:

- Allowance for normal weather conditions as specified under Clause 5.12.2.2 of the Conditions of Contract.
- Allowance for the subcontracting procurement and procedures as specified under C3.3: Procurement under the Scope of Work.

If the programme submitted by the Contractor in terms of Clause 5.6 of the Conditions of Contract has to be revised because the Contractor is falling behind in his programme, he shall submit a revised programme of how he intends to regain lost time to ensure completion of the Works within the period defined in Clause 5.12 of the Conditions of Contract or within a granted extension of time.

Proposal to increase the tempo of work must incorporate positive steps to increase production either by more labour and plant on the Site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the Employers agent to take steps as set out in Clause 9.2 of the Conditions of Contract.

The approval of a programme by the Employers agent shall have no contractual significance other than that the Employers agent will be satisfied if the work is carried out according to the programme. The said approval shall not limit the right of the Employers agent to instruct the Contractor to vary the programme if necessary. The Contractor's attention is also drawn to C3.4.10.

C3.5.1.4 Sequence of the works

To be determined by the Contractor.

C3.5.1.5 Software application for programming

To be determined by the Contractor.

C3.5.1.6 Methods and Procedures

The Works shall be executed in terms of the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.7 Quality plans and control

Refer to the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications, the subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.8 Environment

Refer to the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications, the subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

The Contractor shall, for the duration of the contract, take appropriate measures to control the dust and soil movement which may arise due to his operations.

C3.5.1.9 Accommodation of traffic on public roads occupied by the Contractor

Refer to the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications, the subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.10 Other contractors on site

Refer also to the various and applicable SANS/SABS 1200 Specifications, the EMP, the general health and safety specifications, the subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.11 Testing, completion, commissioning, and correction of defects

Refer to the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications, the subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.12 Recording of weather

Refer C3.4.10.

C3.5.1.13 Format of communications

All contractual communication shall be in writing.

The Contractor shall, for the full duration of the Contract Period, supply and maintain the following documentation:

- (a) Site Communication and Request Book.
- (b) Safety File containing all relevant safety data.
- (c) Daily register of all labour, plant and equipment.
- (d) Quality Control files containing all quality control/assurance forms and records.
- (e) One full set of Contract Drawings and documents.
- (f) Latest revision of the Construction Programme.

The above-mentioned shall be kept on Site and shall be accessible to the Employers agent at all times.

C3.5.1.14 Key personnel

Key personnel shall be on site at all times to control, manage and supervise construction activities.

C3.5.1.15 Management meetings

The Contractor shall have regular site management meetings to coordinate and manage the Works.

Monthly Contract Meeting shall be held on site. This meeting shall be chaired by the Employers agent.

C3.5.1.16 Forms for contract administration

The Employer, the Contractor and the Employers agent shall operate and maintain their own individual contract administration systems.

C3.5.1.17 Electronic payments

Not applicable.

C3.5.1.18 Daily records

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.19 Bonds and guarantees

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.20 Payment certificates

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.21 Permits

Not applicable.

C3.5.1.22 Proof of compliance with the law

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.23 Insurance provided by the employer

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.2 HEALTH AND SAFETY

The Contractor shall comply with the Employers health and safety specifications as specified in Particular Specifications, the Scope of Work as well as the Conditions of Contract.

C3.5.2.1 Health and safety requirements and procedures employer

- a) In terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as the Act, the following arrangements and procedures shall apply between the Contractor and the Employer to ensure compliance by the Contractor with the provisions of the Act:
- b) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.
 - (i) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with.
 - (ii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations.
 - (iii) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.
 - (iv) The Contractor shall be obliged to report forthwith to the Employer and Employers agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work

- performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Employers agent, of such investigation, complaint or criminal charge.
- (v) The Contractor shall furthermore, in compliance with Constructional Regulations 2014 (Notice No R84, dated 7 February 2014) to the Act acquaint himself with the requirements of the Employer's health and safety specification as laid down in regulation 4(1)(a) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 5(1) of the Construction Regulation 2014 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted for approval, to the Employer or his agent, within 14 days of the Commencement Date and shall be implemented and maintained from the commencement of the Works. The Contractor shall at all times be responsible for full compliance with the approved plan as well as with the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.
 - (vi) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to monitor that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Employers agent, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified.
 - (vii) The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the C3.4: Construction, the Bill of Quantities, the Drawings, and in the Employers' health and safety specification (regulation 4(1) of the Construction Regulations 2014).

Payment items are included in the Bill of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

C3.5.2.2 Protection of the public

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

The Contractor shall at all times ensure that his operations do not endanger any member of the public.

C3.5.2.3 Barricades and lighting

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.2.4 Traffic control on roads

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.2.5 Measures against disease and epidemics

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.2.6 Aids awareness

Refer the various and applicable SANS/SABS specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

CONTRACT

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C4.1: SCOPE

C4.1.1 GENERAL

For the purposes of the Contract it will be deemed that, prior to submitting their Tender, the Contractor has acquainted himself fully with the specifications, information and data provided within the various and applicable SANS/SABS specifications, the health and safety specifications, subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C4.2: SUBSOIL INVESTIGATIONS AND REPORTS

C4.2.1 GEOTECHNICAL INVESTIGATION REPORT

Trial holes have not been dug to determine the nature of ground and subsoil conditions. Prospective tenderers shall Acquaint themselves with the nature materials on site and no claim in this regard will be considered.

Tenderers who want to dig trial holes as part of their own pre tender soil investigations shall do so at their own cost and they must first notify the Employers agent to obtain information to ensure that existing underground services are not damaged when trial holes are made.

C4.3: EXISTING SERVICES, BUILDINGS AND STRUCTURES

C4.3.1 GENERAL

The Contractor is responsible for locating all existing services and should contact the relevant officials at the Kouga Local Municipality in order to determine the exact location and operation of the services. The Contractor is responsible for the protection of all affected existing services for the duration of construction.

The Contractor's attention is further directed to the various specifications and conditions under the SANS 1200 A Standardized Specification as amended under the Scope of Work as well as to the applicable Clauses within the Conditions of Contract.

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APPENDIX A: HEALTH AND SAFETY SPECIFICATION
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PARTICULAR SPECIFICATIONS

PARTICULAR SPECIFICATION: PB

PB: HEALTH AND SAFETY SPECIFICATIONS

PORTION 1:

GENERAL CONSTRUCTION HEALTH AND SAFETY SPECIFICATION



**ISSUED IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
CONSTRUCTION REGULATIONS, 2014**

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Annexure F – Construction Project Contractor H&S Plan / File Layout & Document Content

Annexure G - Document Review Panel

1. Definitions

For the purpose of the General construction Health and Safety Specification, the abbreviations or definitions given hereunder shall apply:

- 1.1 “Agent” refers to an occupational health and safety practitioner, appointed by the KLM to act on its behalf, and who is appointed in writing.
- 1.2 “Client” refers to the Kouga Local Municipality
- 1.3 “Competent person” refers to any person having the knowledge, training, experience and qualifications specific to the work or task being performed: Provided that where appropriate qualifications and training are registered in terms of the provisions of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), these qualifications and training shall be deemed to be the required qualifications and training;
- 1.4 “Construction work” refers to any work in connection with –
 - 1.4.1 the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar [structure](#);
 - 1.4.2 the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
 - 1.4.3 the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil employers agenting structure; or
 - 1.4.4 the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;
- 1.5 “Contractor” refers to a Contractor of the Principal Contractor, including the Principal Contractor himself
- 1.6 “CR” refers to the Construction Regulations, 2014
- 1.7 “Excavation work” means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping.
- 1.8 “Fall arrest equipment” refers to equipment used to arrest the person in a fall from an elevated position, including personal equipment, body harness, lanyards, deceleration devices, lifelines or similar equipment, but excludes body belts.
- 1.9 “Fall prevention equipment” refers to equipment used to prevent persons from falling from an elevated position, including personal equipment, body harness, body belts, lanyards, lifelines or physical equipment, guardrails, screens, barricades, anchorages or similar equipment.
- 1.10 “Fall protection plan” refers to a documented plan, of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk. “GCHSS” refers to this document, the General Construction Health & Safety Specification
- 1.11 “H&S” refers to Health and Safety
- 1.12 “HCS” refers to Hazardous Chemical Substances
- 1.13 “Health and Safety Plan” refers to a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.
- 1.14 “Health and Safety Specification” refers to a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons.
- 1.15 “Hot Work” means any work where there is a fire or explosion risk, including but not limited to all welding, plasma cutting, LPG-or acetylene gas applications, grinding, work with flammable or explosive substances and work with chemicals with the potential of exothermic reactions.
- 1.16 “Medical certificate of fitness” means a certificate valid for one year issued by an occupational health practitioner, issued in terms of these regulations, whom shall be registered with the Health Professions Council of South Africa.
- 1.17 “Method statement” refers to a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in the risk assessment.
- 1.18 “KLM” refers to the Kouga Local Municipality
- 1.19 “OHS Act” refers to the Occupational Health & Safety Act of 1993
- 1.20 “OHSAS 18001” refers to the Occupational Health & Safety Auditing System standard
- 1.21 “Plant” includes fixtures, fittings, implements, equipment, tools and appliances, and anything which is used for any purpose in connection with such plant.
- 1.22 “Principal Contractor” means an employer, as defined in [section 1](#) of [the OHS Act](#) who performs [construction work](#) and is appointed by the KLM to be in overall control and management of a part of, or the whole of a construction site.

- 1.23 "Regulations" refers to the Regulations issued under the Occupational Health & Safety Act.
- 1.24 "Risk Assessment" refers to the systematic & methodical assessment methodology utilised to identify hazards and risks to persons / plant and equipment and the corresponding listing of risk controls; the risk assessment must form part of the health and safety plan to be applied on a site of works
- 1.25 "S" refers to a Section in the Occupational Health & Safety Act of 1993.
- 1.26 "Site" refers to the factories, lands and other places, made available by the KLM for the purposes of the Contract, on, under, over, in, or through which the construction work is to be executed or carried out.
- 1.27 "Structure" includes:
 - 1.27.1 Any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, batching plants, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
 - 1.27.2 Any formwork, false work, [scaffold](#) or other structure designed or used to provide support or means of access during [construction work](#); or
 - 1.27.3 Any fixed plant in respect of work which includes the installation, commissioning, decommissioning or dismantling and where any such work involves a risk of a person falling two meters or more.
- 1.28 "Work Instruction" [WI] refers to a portion or the whole of a method statement which is essential to ensure employee competence with the relevant task.
- 1.29 "Standard" refers to the OHSAS 18001 auditing system standards covering OH&S management that is intended to provide the KLM with the elements of an effective OH&S management system that can help the KLM achieve OH&S and economic objectives. This OHSAS standard specifies requirements for an OH&S management system to enable the KLM to develop and implement a policy and objectives which take into account legal requirements and OH&S risks.

The Occupational Health and Safety Assessment Series Standard is a recognizable occupational health and safety management system standard against which management systems can be assessed and certified.

OHSAS 18001 has been developed to be compatible with the ISO 9001:2000 (Quality) and ISO 14001:2004 (Environmental) management systems standards, in order to facilitate the integration of quality, environmental occupational health and safety management systems by organizations.

2. Introduction to the General Construction Health and Safety Specification

- 2.1 The KLM aims to execute its health and safety duties as mandatory with the aim of 'zero harm to all'. The KLM is further committed to ensuring that the highest standards of health and safety prevail. For this purpose, the client's duty of the KLM is bestowed on the Public Health Directorate, whose task it is to execute or manage all the statutory duties of the KLM as mandatory for construction.
- 2.2 This General Construction Health & Safety Specification is published in terms of the Occupational Health & Safety Act of 1993, Construction Regulation 5(1)(b). It applies to the Principal Contractor and to all other contractors and all persons who work on a construction project.
- 2.3 This GCHSS formulates the minimum requirements which must be met by Contractors and documented in the contractors' health and safety plan. The specification is not a limited or exhaustive list of legal and corporate compliance requirements. By its very nature, construction work and its occupational health and safety hazards are dynamic; work methods, site conditions or occupational hazards may change or become apparent after the H&S specification's development. The KLM requires each contractor to document and plan ongoing assessments of risks and review of controls in the H&S plan and file. Chapters included in this specification, which do not apply to a project, must be ignored.
- 2.4 The Principal Contractor must appoint contractors where applicable, for each part of the project and the contractor shall submit his H&S plan for approval to the Principal Contractor before commencement of the construction work. Additionally to the requirements of Construction Regulations, a Principal Contractor shall notify the KLM of every H&S plan which has been approved before commencement of the relevant contractor on the site.
- 2.5 Additional to the legal requirement of the Construction Regulations, each sub-contractor appointed by a contractor of the Principal Contractor, must submit his H&S plan for approval to both the appointing

- contractor and the Principal Contractor; both the appointing contractor and the Principal Contractor shall approve the H&S plan before commencement of the relevant construction work.
- 2.6 The GCHSS does not replace the Construction Regulations, but is a supplementary specification as required in terms of the Regulations. Partial references to or quotes from the Regulations do not imply that the sections not referred to or quoted from are of lesser importance or are not applicable.
- 2.7 All Contractors are, at all times required to and will remain responsible to fully address all requirements and standards of the Occupational Health and Safety Act, Regulations and the full Construction Regulations in the Health and Safety Plan and the implementation thereof. The controls of the approved H&S plans must be strictly and comprehensively implemented and maintained by all contractors.
- 2.8 This Health & Safety Specification must be included in all tender documents for construction work. It shall be known within the KLM as the General Construction Health & Safety Specification.
- 2.9 It may be supplemented on various projects by a specific Construction Health & Safety Specification which deals with health & safety issues relevant to that specific project only.
- 2.10 Through the Public Health Directorate the KLM may appoint an Agent who shall (inter-alia) be responsible for the approval of all Principal Contractors' H&S Plans, for the auditing of the Principal Contractors' implementation thereof, and for maintaining the document control associated with the GCHSS. The Public Health Directorate shall ensure quality control of all agents appointed and shall ensure that no person is appointed as agent, unless the Public Health Directorate is reasonably satisfied that the person it intends to appoint has the necessary competencies and resources to perform the duties imposed on a client by the statutes.
3. Limitation of liability
- 3.1 The KLM and its agent shall not be responsible for any acts or omissions of any Contractor which may directly or indirectly result from the application of the GCHSS or any project specific version thereof.
- 3.2 Contractors must ensure that work, equipment, machinery, plant and work practices are, at all times, compliant to the legal requirements as these apply.
- 3.3 Contractors must ensure that where the scope of work is changed or where, for whatever reason, additional or new risks are identified the H&S plan is adapted accordingly. Any change to the H&S plan must be approved by the Public Health Directorate or its agent. No such work, not included in the approved H&S plan, may be commenced unless discussed and finally approved by the Public Health Directorate or its agent.
- 3.4 The KLM and its agent shall limit its responsibility to the application of the Construction Regulations' Client Requirements only.
- 3.5 Any other potential responsibility on the part of the KLM shall be dealt with in a Mandatory Agreement, as defined in Section 37(2) of the OHS Act. The signed contract must be included in the H&S plan.
- 3.6 Each contractor shall enter into a Section 37(2) mandatory agreement with the KLM prior to starting work on the site. It is the responsibility of the Principal Contractor to ensure that each contractor has a completed and signed Section 37(2) mandatory agreement with the KLM in the contractors' health and safety file on site.
4. Purpose of the General Construction Health and Safety Specification
- 4.1 The purpose of the GCHSS is for the specification to be used as a specific standard on which all Contractors' H&S Planning must be based.
- 4.2 The GCHSS will be applicable on any construction project within the KLM.
5. Implementation of the General Construction Health and Safety Specification
- 5.1 This GCHSS forms an integral part of the Project Contract, and Principal Contractors are required to make it an integral part of their contracts with subcontractors and suppliers. It will be disseminated by the KLM to persons responsible for the design of structures, who will ensure that it is included in the Tender Document(s) issued to prospective Principal Contractors.
- 5.2 The prospective Principal Contractors shall allow in their tenders for the cost of complying with the requirements of the GCHSS. The H&S plan shall outline the budgeted costs for occupational health and safety, applicable to each construction project.

- 5.3 The signing by the Principal Contractor of the Contract with the KLM shall constitute acknowledgement that the Principal Contractor has familiarised himself with the content of the GCHSS and that he will comply with all obligations in respect thereof.
6. Scope
- 6.1 This GCHSS covers the general requirements for addressing, mitigating and controlling Occupational Health and Safety related risks, problems, incidents and injuries on projects constructed or executed for the KLM.
- 6.2 The scope addresses legal compliance, hazard identification, risk assessment, risk control methodology and the promotion of a health and safety culture amongst those working on the KLM projects.
- 6.3 The GCHSS contains clauses that are generally applicable to building, employers agenting and construction and imposes controls associated with activities that impact on human health and safety.
- 6.4 The Principal Contractor is required to comply with the provisions of the OHS Act, all applicable Regulations and this GCHSS.
- 6.5 The KLM, through the Public Health Directorate will monitor the Principal Contractor's compliance with the requirements of the OHS ACT, Regulations and their H&S Plan.
7. Compensation of Occupational Injuries and Diseases
- 7.1 The Principal Contractor shall submit proof of registration as an employer, and proof of Good Standing with the COIDA Commissioner in the H&S plan and prior to starting the work;
- 7.2 A copy of the Letter of Good Standing with the COIDA Commissioner must be included in the H&S Plan.
8. Notification of Intention to Commence Construction Work
- 8.1 After receipt of the Letter of Acceptance from the KLM, the Principal Contractor shall notify the Provincial Director of the Department of Labour of a notifiable project before work commences.
- 8.2 The notification shall be similar in format to Annexure 2 in the Construction Regulations, 2014.
- 8.3 A copy of the notification letter to the Provincial Director and proof of notification must form part of the H&S Plan.
9. Competency
- 9.1 The H&S plan shall include signed letters of appointment of competent persons.
- 9.2 The competency of each person shall be documented in an attachment to the letter of appointment.
- 9.3 Such attachment shall contain verifiable evidence of the competent persons':
- 9.3.1 Knowledge; and
- 9.3.2 Training; and
- 9.3.3 Experience; and
- 9.3.4 Qualifications specific to the work or task for which the appointee is competent.
- 9.4 The Principal Contractor shall include a competency matrix linking the competent employees, as per the organisational chart, to the competency required as a result of the risk assessment. The competency matrix forms part of the methodology for assessing the Principal Contractors' overall competence as required in the Construction Regulations.
10. Construction Safety Officer
- 10.1 The Principal Contractor shall appoint a fulltime competent person to function as Construction H&S Officer for the construction work at the KLM.
- 10.2 Proof of competence of the appointed construction safety officer must be included in the H&S Plan for approval by the KLM
- 10.3 The planned functions, including the applicable attendance, inspection- and audit procedure and forms applicable to the work of the Construction Safety Officer must be outlined in the H&S Plan.
11. Principal Contractor's Health & Safety Plan

- 11.1 The Principal Contractor shall submit an H&S Plan to the Public Health Directorate, in accordance with the legal requirements and the GCHSS, prior to work starting.
 - 11.2 This plan must be presented to and approved by the Public Health Directorate or its agent prior to the site being handed over to the Principal Contractor.
 - 11.3 The content of the H&S Plan shall follow a specific order as per Annexure A and include the following:
 - 11.3.1 A cover page indicating:
 - 11.3.1.1 The contract reference;
 - 11.3.1.2 The name and address of the Principal Contractor and its CEO;
 - 11.3.1.3 The name and signature of the designated person in terms of section 16(2) and of the Construction Supervisor;
 - 11.3.1.4 A space for the client and Agent to sign for approval;
 - 11.3.2 An index of the H&S Plan
 - 11.3.3 The Principal Contractors' Occupational Health and Safety Policy, if any;
 - 11.3.4 A detailed overview of the scope and activities of the project; such overview must identify all activities of the project in a chronological manner, following the planned progress of the project; the scope must include all work done by sub-contractors.
 - 11.3.5 An overview of the machinery and plant used in the project;
 - 11.3.6 An organisational chart of the competent staff deployed in the project, which identifies legal appointments and responsibilities (see Annexure C); the chart must refer to the proof of competence of each person.
 - 11.3.7 A hazard identification and risk assessment based on the scope of work as indicated in item 11.3.4. and the machinery identified in item 11.3.5 herein;
 - 11.3.8 An overview of the management controls, with reference to the hazard identification and risk assessment, to ensure compliance with legislation and the relevant sections of the GCHSS; these controls shall be documented in method statements addressing employers agenting- and administrative risk control.
 - 11.3.9 All relevant documents, appointment letters, programmes, instructions, inspection register templates, etc. to support each section of the H&S Plan. Where practical, such documents may be inserted in the H&S file; the H&S file, together with the H&S plan may be submitted for approval by the Public Health Directorate.
 - 11.3.10 The Public Health Directorate shall assess and discuss, where applicable, the contents of the H&S plan with the Principal Contractor. The assessment systematically verifies compliance of the H&S plan with the statutory requirements and with the requirements in the H&S specification. The assessment is done in accordance with the KLM H&S procedure for the assessment of construction H&S plans
12. Hazard Identification and Risk Assessment
 - 12.1 Interfacing with the Public Health Directorate's H&S structures, a pre-construction baseline risk assessment shall be conducted by the KLM project management team at the pre- construction work / project stage, prior to releasing any tender documentation.
 - 12.2 The Principal Contractor shall appoint a competent person to perform a baseline and issue-based hazard identification and risk assessment. The competent persons' proof of training as a risk assessor shall be attached to the letter of appointment.
 - 12.3 The baseline assessment shall be included in the H&S Plan.
 - 12.4 Risk assessments of all risk-bearing activities identified in the scope of work shall form an integral part of the H&S Plan.
 - 12.5 The risk assessment must be based on the scope of work, the materials required and the machinery used.
 - 12.6 The risk assessment must refer to all controls which the Contractor plans to put in place [CR 9].
 - 12.7 All risk assessments shall be conducted in terms of an acceptable and documented methodology, prior to commencement of work and in accordance with the provisions of the CR.
 - 12.8 The methodology shall ensure that:
 - 12.8.1 For each hazardous event, hazards must be identified separately and the risk assessment and identification of controls must be documented separately.
 - 12.8.2 Risk scoring must, at least, identify a residual risk.
 - 12.8.3 Risk controls are referenced to the planning in the H&S plan.
 - 12.8.4 A risk register, listing the residual risks from highest to lowest must be included in the baseline risk assessment.

13. Health & Safety File

- 13.1 The Principal Contractor shall provide and maintain a H&S File, containing all relevant documents as prescribed in the OHS Act and Regulations and all records referred to in the H&S Plan.
- 13.2 The H&S file, in its original start-up format, shall be presented to the Public Health Directorate together with the H&S plan during the discussions for final approval.
- 13.3 The H&S File shall be kept on the construction site and available for inspection by the KLM, its Agent, or the Department of Labour's Inspectors.
- 13.4 The H&S File shall include an index as per Annexure B.
- 13.5 The H&S File becomes the property of the KLM after completion of the project.

14. Induction

- 14.1 The Principal Contractor shall develop a job- or project-specific induction training programme in health and safety, based on the risk assessment, to ensure that all employees on site are conversant with:
 - 14.1.1 The risks of the construction project
 - 14.1.2 The controls documented in the H&S Plan
 - 14.1.3 The role they are expected to play in ensuring health and safety on the construction site.
- 14.2 The Principal Contractor shall ensure that all employees are competent in the induction training before commencing duties on site.
- 14.3 The contents of the induction programme and method of ensuring that all employees are inducted will be documented in the H&S Plan.
- 14.4 When working in or close to production areas or areas where the KLM employees, visitors or stakeholders are working, each employee of a contractor accessing the site, including management, shall complete the KLM induction; Each contractor shall ensure that none of his employees accesses the KLM site/s unless having been inducted by the KLM.

15. Health and Safety Training and Ongoing Risk Competency

- 15.1 The Principal Contractor shall ensure that daily pre-task health and safety instructions are given to all employees.
- 15.2 The methods for ensuring that daily pre-task instructions or start-up talks or toolbox talks occur, including the method of documenting the contents and attendance, shall be described in the H&S Plan.
- 15.3 Competency of employees and ongoing training in H&S matters shall be documented by including a training matrix indicating; occupation, employee name & surname, subject matter, date of training, reference number and employees' competency in safe working processes:
 - 15.3.1 Each applicable safe work instruction must be included in the H&S Plan;
 - 15.3.2 The method of training and ensuring competence must be included in the H&S Plan.

16. Inspection, Monitoring and Reporting

- 16.1 The Principal Contractor shall carry out daily safety inspections on the site (or more frequent, where so required in the Regulations), and shall take steps to rectify any unsafe condition of which he is aware.
- 16.2 The H&S plan shall contain an inspection schedule addressing all identified risks; the schedule and contents of the inspection shall be relative to the residual risks.
- 16.3 The Construction Supervisor and Safety Officer shall perform regular inspections and document these in the H&S File.
- 16.4 The relevant inspection templates and the frequency of inspections shall be included in the H&S Plan.
- 16.5 The H&S Plan shall contain a list and template of all statutory inspection registers which shall be kept on site:
 - 16.5.1 The templates must correlate with the machinery and equipment listed on site;
 - 16.5.2 The inspector responsible for the inspection and maintenance of the register must be appointed in writing, and competency must be documented.

17. Incident Management [Incidents, Accidents and Emergencies]
 - 17.1 All near misses, incidents and accidents must be recorded, investigated and managed in accordance with the statutory provisions.
 - 17.2 Each H&S incident and accident must be recorded in a register kept in the H&S file; a template of the register shall be included in the H&S Plan.
 - 17.3 Every incident in which an employee sustains any form of injury shall be reported to the Public Health Directorate or its Agent within the working shift in which the incident occurs. Section 24 of the OHS Act incidents shall be reported in the prescribed manner to the Department of Labour, to the COIDA Compensation Commissioner in the prescribed manner [Annexure 1 & WCL2] and to the KLM Public Health Directorate or its Agent
 - 17.4 A record of all incidents and investigations shall be kept in the health and safety file.
 - 17.5 A record / register [matrix] shall be kept to indicate the categories of injuries [first aid / IOD non-disabling, IOD Disabling and dangerous occurrences] sustained by employees, visitors and sub-contractors to date.
 - 17.6 Each contractor shall ensure that a proper incident reporting and investigation management procedure is documented and a site emergency procedure is formulated, documented, implemented (drills) and is available on site, outlined in detail, and included in the H&S Plan. The emergency arrangements shall be displayed on site and shall include:
 - 17.6.1 A comprehensive emergency and evacuation plan;
 - 17.6.2 An site specific emergency evacuation top down plan/flow chart;
 - 17.6.3 An updated list of emergency telephone numbers.
18. Audits and inspections
 - 18.1 The Public Health Directorate shall perform regular inspections and audits of the construction site. Unsafe work will be stopped. All inspections and audits are done in accordance with the KLM H&S procedure for the audit and inspection of construction sites.
 - 18.2 Records of audits shall be kept in the H&S File together with a record of any non-conformance report/s, investigation and corrective & preventative actions required by the Principal Contractor.
 - 18.3 The Principal Contractor's H&S Plan shall document the corrective and preventative action procedure applicable to the project, including the planned method to ensure that non-conformities are managed immediately.
 - 18.4 The KLM or its Agent shall stop all or any work activity which does not conform to the H&S Plan, which is contradictory to statutory requirements or which poses a threat to the health and safety of persons.
 - 18.5 The Principal Contractor shall conduct regular health & safety audits (at least once a month) to ensure compliance with the OHS Act, its Regulations and the Contractors' H&S Plan. Each contractor on site, whether appointed by the Principal Contractor or by any of his sub-contractors shall be audited by the Principal Contractor. The H&S plan of the Principal Contractor shall include a contractor's auditing procedure, template and schedule.
 - 18.6 The Principal Contractor shall stop all or any work activity which does not conform to the H&S Plan, which is contradictory to statutory requirements or which poses a threat to the health and safety of persons.
19. Personal Protective Equipment (PPE) and Clothing
 - 19.1 The Principal Contractor shall ensure that every employee is issued with, and wears SABS-approved PPE, consisting of all PPE identified in the PPE needs analysis and indicated in the risk assessment.
 - 19.2 The Principal Contractor shall document the procedure applicable for to the issue, use and replacement criteria of PPE in the H&S plan.
 - 19.3 All the contractors' employees shall wear; full length overalls, and shall wear clearly visible identification with respect to their employer.
 - 19.4 All employees performing construction work at the KLM shall wear steel-capped safety boots.
 - 19.5 The H&S Plan shall contain an outline of the PPE to be used, the management of such PPE on site, including the issuing of PPE, training in the safe use of PPE, overnight storage, any sanitising of PPE and the disposal of PPE.
 - 19.6 Contaminated PPE shall be disposed of in the prescribed manner as referenced in the OHS Act – HCS Regulations and to an approved waste disposal site

20. Occupational Health and Safety Signage

20.1 The Principal Contractor shall erect and maintain quality mandatory, warning, general information, prohibiting and firefighting safety signage.

20.2 The signage shall reflect through text & symbolics, all the risks identified in the H&S plan that necessitate the use of PPE as a control factor, including but not be limited to:

20.2.1 A warning on construction activities;

20.2.2 Access restrictions;

20.2.3 The name and telephone number of the responsible person(s);

20.2.4 Emergency telephone number(s);

20.2.5 PPE to be worn at the particular site;

20.2.6 Where falling objects may occur, relevant barricading and warning signs must be erected;

21. Sub-contractors

21.1 Sub-contractors must be given a copy of this general H&S Specification and any additional specification issued by Principal Contractor, the KLM or the Public Health Directorate, and shall comply with these specifications integrally.

21.2 The H&S specification applicable to every sub-contractor issued by the Principal Contractor shall be included in the H&S Plan of the Principal Contractor.

21.3 The Principal Contractor shall ensure that all sub-contractors on site, including sub-contractors of his sub-contractors plan the construction work in an H&S Plan, approved by the Principal Contractor.

21.4 Principal Contractors shall ensure that sub-contractors comply with their H&S Plans, based on all applicable H&S Specifications, the requirements of the OHS Act and all other relevant legislation.

21.5 Monthly audits of all sub-contractors must be recorded and filed in the H&S File, for inspection by the KLM or its Agent.

21.6 All sub-contractor H&S Plans and Files must strictly follow the Contents and Numbering system as per Annexure A and B.

21.7 The H&S Plan must include the Principal Contractor's actions to ensure that all sub-contractors fully comply with the Regulations, including but not limited to:

21.7.1 The H&S Plans of sub-contractors, after approval by the Principal Contractor; where sub contractors' H&S plans are approved later in the project, the letter of approval shall be copied to the Public Health Directorate

21.7.2 A signed agreement in terms of Section 37(2) between the Principal Contractor and every subcontractor and a template of such agreement.

21.7.3 A maintained list of all contractors, the date of approval of their respective H&S plan, their registration number with COIDA, the name and telephone number of the Contractors' Construction Supervisor and the date of the last audit of the sub-contractor by the Principal Contractor.

22. Public Health and Safety

22.1 Appropriate health and safety signage shall be posted; the type of signage planned for must be documented in the H&S Plan.

22.2 The Principal Contractor shall ensure that each person visiting the site shall be inducted to the site and such abridged induction shall outline the hazards likely to arise from on-site activities and the precautions to be observed to avoid or minimise those risks. The template induction and record shall be included in the H&S plan.

22.3 No construction work shall be performed, where there is a risk of the activity affecting the KLM employees, the KLM production processes or where there is risk that the KLM employees access the construction site, unless defined through a Specific Construction H&S Specification.

22.4 Where the need for public barricading is identified in the risk assessment or in a specific construction H&S Specification, the Principal Contractor shall document a method statement for the erection, maintenance and control of barricades or fences and controlled access points, to prevent the entry of unauthorized persons.

22.5 Where the need for traffic deviation is identified in the risk assessment or in a specific construction H&S Specification, the Contractor shall perform an issue based risk assessment and document a method

statement compliant to the relevant traffic ordinances and traffic controls standards; the method statement shall include competence of traffic officers, flagmen and operators of traffic control equipment.

23. Night Work and After-Hour's Work

23.1 No night work shall be performed unless authorised by the KLM or its Agent.

23.2 Where applicable the risk assessment and method statements in the H&S plan shall include night risks including but not limited to excavations, road obstructions, traffic obstructions or deviation, night security, after hours delivery.

23.3 Where applicable the risk assessment and method statements in the H&S plan shall include after hour work and the safe management thereof.

24. Facilities Management [Facilities for Employees]

24.1 The Principal Contractor shall document the construction site's method to ensure the statutory application of employee's rights in terms of employee facilities as defined in the OHS Act, the General Safety Regulations and the Construction Regulation, including:

24.1.1 The provision of facilities for safekeeping and changing;

24.1.2 The method of ensuring that employees requiring to change on site can do so in privacy;

24.1.3 The provision of an eating area;

24.1.4 The provision and maintenance of sufficient toilets and showers / washing / cleaning on site.

24.2 Where the construction work includes access to production or utility areas, such access shall be planned and authorised by the KLM or the Public Health Directorate.

25. Health and Safety Representatives and Committees

25.1 The Principal Contractor and all contractors must ensure that for any workplace where more than 20 employees work, the minimum legislative prescribed number of Health and Safety Representatives in a ratio of 1:50 employees be nominated, elected, designated in writing and trained to carry out their prescribed functions.

25.2 In areas where twenty (20) or less employees are engaged in an activity, at least one Health and Safety Representative shall be designated in writing and operate as above.

25.3 Health and Safety Representatives shall be required to conduct monthly inspections within their area of responsibility; all deviations recorded must immediately be reported to the Construction Supervisor and Construction Safety Officer where applicable and appropriate action must immediately be taken to eliminate the identified health or safety hazard.

25.4 The Principal Contractor shall ensure that Health and Safety Committee meetings are held monthly and are chaired by the Construction Supervisor. Meeting agendas and minutes shall be filed in the H&S file.

25.5 The H&S plan shall include a Work Instruction (WI) on the management of H&S representatives and committees.

26. Housekeeping, Stacking, Storage, Drop Zones and Lay-down Areas

DROP ZONE = AN ELEVATED AREA WITHIN THE WORKING ENVIRONMENT WHERE THERE IS A POTENTIAL RISK OF FALLING MATERIALS AND OR OBJECTS THAT MAY CAUSE INJURIES

LAY-DOWN AREA = AN AREA WHERE MATERIALS, EQUIPMENT AND SUNDRY IS STAGED THAT IS REQUIRED FOR PROJECT RELATED PURPOSES

26.1 The principal contractor shall appoint a person responsible for general housekeeping, and stacking and storage of materials and equipment on the entire site.

26.2 Where the baseline risk assessment identified the risk of falling tools, items, objects and materials, the area shall be barriered or demarcated, appropriate warning signage installed and such hazards included in a method statement & issue based risk assessment prior to or when work activities are performed within such zones. Furthermore, the same stipulation is required for site lay-down areas where equipment, plant, materials, substances and other items are stored / staged for the site project works. A method statement &

issue based risk assessment must be generated for the safe raising and lowering of materials, equipment and plant to ensure safe management of the lay-down area. A lifting and lowering work instruction shall be included in the H&S Plan.

26.3 Stacking and storage areas shall be clearly defined and demarcated on the site with the appropriate symbolic signs.

26.4 Offloading of building materials equipment and plant shall occur under the direct supervision of the appointed person responsible for general housekeeping, and stacking and storage.

26.5 Where offloading may occur after normal working hours, a method statement and risk assessment for such offloading will be included in the H&S plan.

27. Waste Management

27.1 The principal contractor shall appoint a person responsible for site-wide control & removal of scrap, waste and debris;

27.2 No waste, including scrap, debris, hazardous waste, combustible materials and containers shall accumulate on the construction site;

27.3 The principal contractor shall document a waste management method statement in the H&S Plan. Such method statement shall include all liquid, gaseous or solid waste produced during the construction process and shall define appropriate legislative – Local & National required waste management & disposal requirements.

28. Occupational Health

28.1 The H&S Plan shall include all medical certificates of fitness for those employees legally requiring such.

28.2 Medical certificates must be issued by an occupational medical practitioner after personally performing the medical tests

28.3 Medical certificates must be on the doctors' letter head and conform to the applicable statutory requirements.

29. First Aid Management

29.1 Principal Contractors & sub-contractors shall ensure that every site where they are engaged in work activities, has adequately trained first aiders at all times.

29.2 Where high risk substances, toxic, corrosive or similar hazardous substances are used, handled, or processed, the Principal Contractor shall ensure that the First Aider is trained in the first aid procedures to treat injuries that may result from such activities.

29.3 First aiders shall be identified and shall have immediate access to a comprehensively stocked first aid box.

29.4 Such first aid box/s shall be stocked to include all first aid equipment as per the minimum requirements listed under General Safety Regulation 3, and any additional items identified in the risk assessment.

29.5 All the above first aid controls, including the letter of appointment, proof of competency, signage, injury-record and stock-control registers shall be documented in the H&S Plan.

30. Access and traffic management

30.1 Where access to the construction site or to the KLM has been identified as a risk, an 'Access and traffic' method statement shall be included in the H&S Plan.

30.2 The risk of all traffic arrangements included in the scope of the work shall be assessed and a traffic control method statement included in the H&S plan. Any alteration to this method statement during the course of the project shall be assessed and, where applicable, any amended & reviewed method statement shall be presented to the Public Health Directorate prior to being implemented.

31. Work within operational areas of the KLM

31.1 The Principal Contractor shall ensure that all employees working inside municipal buildings in which business is conducted have been subjected to the required induction.

31.2 The Principal Contractor shall discuss and agree with the KLM contract manager and the health and safety officer responsible for that directorate in order to define the procedure and subject matter for induction.

- 31.3 Such health and safety induction shall, as a minimum, include instructions with respect to emergency exits, location of fire equipment, smoking arrangements, mustering points, special hazards in the building and housekeeping arrangements.
32. Hot Work, Fire Risks, Fire Extinguishers and Fire Fighting Equipment
- 32.1 No open fires are allowed on site.
- 32.2 No smoking is allowed on site, except in designated smoke areas, identified in the H&S Plan.
- 32.3 All combustible and all flammable products must be stored in an adequate storage facility; this process shall be documented in a method statement in the H&S Plan.
- 32.4 Where hot work is performed on a production site, the contractor shall interface with the Public Health Directorate in order to establish dangerous work permission; such interface will be documented in the H&S Plan.
- 32.5 The Principal Contractor shall provide suitable fire extinguishers, as defined in the H&S controls, which shall be serviced regularly, in accordance with the manufacturer's recommendations.
- 32.6 Safety signage shall be prominently displayed in all areas where fire extinguishers are located. The Principal Contractor shall arrange for the training of the relevant personnel, in the use of fire extinguishers. The following are minimum requirements for competency in the use of fire extinguishers:
- 32.6.1 At least one employee on each construction site;
- 32.6.2 All employees engaged in hot work;
- 32.6.3 All store men;
- 32.6.4 All persons involved in re-fuelling;
- 32.6.5 All persons handling flammable substances;
- 32.7 The fire extinguisher inspection register, the inspection methodology and the letter of appointment of the competent inspector shall be included in the H&S Plan.
33. Live Energy Work
- 33.1 Where live energy work (electrical-, chemical-, pneumatic-, hydraulic-, gravity and or kinetic energy) will be done, a competent person shall be appointed.
- 33.2 Where live energy work is planned, the H&S Plan shall include:
- 33.2.1 Proof of competency and signed letters of appointment of the responsible person;
- 33.2.2 The 'dangerous work, method statement' and its interface with the KLM and relevant documents;
- 33.2.3 A Zero Potential, Energy-Purge, Lock Out and Tag Out method statement;
- 33.2.4 The method statement, shall apply at all times.
34. Work in Confined Spaces
- 34.1 Confined space work shall not be performed unless defined through a Specific Construction H&S Specification.
- 34.2 Where confined space work is performed, the contractor shall interface with the Public Health Directorate in order to establish dangerous work permission; such interface shall be documented in the H&S Plan.
- 34.3 A method statement and issue based risk assessment for all confined space work must be presented in the H&S Plan or prior to such work starting.
35. Elevated Work [Fall Protection and Work on Heights]
- 35.1 The Principal Contractor shall submit the name and proof of competency of the competent person who has been appointed to prepare a fall protection plan, in terms of the CR, together with the signed letter of appointment, in the H&S Plan.
- 35.2 The fall protection plan shall strictly comply with the requirements of the OHS Act. Besides the legal requirements, the plan shall include:
- 35.2.1 A method statement and risk assessment of all work at heights or work with a risk of falling;
- 35.2.2 All risk controls and method statement relevant to heights work;
- 35.2.3 Fall prevention methods applicable to the project;

- 35.2.4 Fall arrest methods applicable to the project;
 - 35.2.5 Fall recovery method applicable to the project;
 - 35.2.6 Attachment methods and points and the management thereof;
 - 35.2.7 The method to ensure that employees working at heights present is fit for heights-duty
- 35.3 The contractor shall ensure that:
- 35.3.1 All heights work is planned. Its risks are assessed and all heights work forms part of the daily safe task instructions;
 - 35.3.2 Only trained and competent persons with a valid medical certificate of fitness are permitted to work on heights;
 - 35.3.3 All medical certificates of fitness for heights work are issued by a registered occupational medical practitioner and are included in the H&S Plan;
 - 35.3.4 All elevated areas are reached by means of a ladder, scaffold or man cage; and climbing on machinery, installations or make-shift means of access is not permitted; where work, with a risk of falling, is to be performed from structures other than ladders, scaffolds or a man cage, such work will be documented in a method statement, which must be approved by the Public Health Directorate
 - 35.3.5 No persons are allowed to work under an area where there is a risk of falling tools or materials;
 - 35.3.6 All openings through which persons can fall are closed off with material which can support the weight of a person; such material shall be permanently fixed over the opening; where such openings are present, clear signs will indicate this at all access points;
 - 35.3.7 Where openings cannot be closed, a sturdy barricade of at least 1.5 m high, which adequately prevents persons from falling through the opening (withstands 2kN force), shall be in place at all times.
 - 35.3.8 A copy of the fall protection plan, the signed appointment letter and proof of competency must be included in the H&S Plan.
 - 35.3.9 Where elevated work is performed in production areas or where the elevated work may affect the KLM 's employees, visitors or stakeholders, the contractor shall interface with the Public Health Directorate in order to establish dangerous work permission; such interface will be documented in the H&S Plan.
 - 35.3.10 No contractor shall access any of the existing KLM properties sheeted roofs unless defined through a Specific Construction H&S Specification.
 - 35.3.11 No work on existing KLM buildings, including windows, roofs, stacks, shall be performed unless defined through a Specific Construction H&S Specification issued by the Public Health Directorate.
 - 35.3.12 Where the use of harnesses is indicated in the fall protection plan, the H&S Plan shall contain the following:
 - 35.3.12.1 The need for the use of fall prevention-or fall arrest harnesses; (double lanyard type)
 - 35.3.12.2 The safe application, attachment and maintenance processes for harnesses;
 - 35.3.12.3 The type of hook to be used and the attachment points applicable to the heights work;
 - 35.3.12.4 The method of storing the harnesses when not in use;
 - 35.3.12.5 The method and register for the safety inspection of harnesses.
 - 35.3.13 Where a fall-risk is identified in work requiring access to roofs or free-standing structures with a residual fall risk, a life line will be made available and used at all times; the life line will be designed and erected by a competent person appointed in writing; a life line inspection method and record will be included in the H&S Plan;
36. Ladders
- 36.1 Ladders shall be compliant with statutory requirements.
 - 36.2 Ladders shall only be used for the purpose for which they are designed.
 - 36.3 Ladders shall be inspected regularly and the record of the inspection shall be kept in the H&S file.
 - 36.4 A-frame ladders shall have a patent spreader bar system.
 - 36.5 Ladders shall extend at least 1 metre above any level or opening accessed with the ladder.
 - 36.6 No ladders shall be accessed by any person unless held in place by a fixed installation or a buddy.
37. Excavation Work
- 37.1 The Principal Contractor shall submit the name and proof of competency of the competent person who has been appointed to supervise all excavation work, in terms of the CR.

- 37.2 Should the opinion of a professional employers agent or professional technologist be sought, in terms of the CR, the Principal Contractor shall submit the name and the curriculum vitae of the said professional.
- 37.3 Proof of competency and the appointment letters must form part of the H&S Plan.
- 37.4 The records of the inspections contemplated in the CR shall be maintained in the H&S File; a template of the register shall be included in the H&S Plan.
- 37.5 The Principal Contractor shall make provision in his tender for all shoring, dewatering or drainage of any excavation unless otherwise stipulated in the Contract.
- 37.6 The Principal Contractor shall make sure that:
 - 37.6.1 The excavations are inspected before the shift starts and that a record is kept; the record template shall be included in the H&S Plan.
 - 37.6.2 There are no unguarded excavations, regardless of depth;
 - 37.6.3 Guarding of excavation must be of solid and sturdy material so as to prevent persons from falling into the excavation; barrier tape alone is not sufficient.
 - 37.6.4 No person is allowed to work in or near an excavation which has any instability that is not adequately protected, shored or braced.
 - 37.6.5 No load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to collapse or endanger the safety of any person – spoil to be moved back minimum of 1m.
 - 37.6.6 Safe means of access and exiting is provided at every excavation.
 - 37.6.7 Any open excavation is backfilled at the end of each shift, unless a method statement managing open excavations is included in the H&S plan. Such method statement shall be assessed and approved by the Public Health Directorate
- 37.7 Detailed method statements and risk assessments, including but not limited to depth of excavation, anticipated stability, battering, shoring, bracing, length of excavation, proximity to the public and duration of exposure shall be included in the H&S Plan.
- 37.8 Where excavation work may interface with existing services; surface-, below-ground- or aerial- services, method statements and risk assessments shall include the location-, exposure- and rendering safe of such services; method statements and risk assessments shall also include work above or underneath such services.
- 38. Explosives and Blasting
 - 38.1 The Principal Contractor shall ensure that the use of explosives and blasting (where required) be undertaken by a competent specialist contractor, with proven track record in the type of work to be performed.
 - 38.2 The letter of appointment and proof of competency must be included in the H&S Plan.
 - 38.3 A method statement and risk assessment encompassing all processes of working with explosives, blasting and potential blasting non conformities shall be included in the H&S Plan.
 - 38.4 No use of explosives or blasting shall be planned unless such need and the applicable conditions are defined through a Specific Construction H&S Specification issued by the Public Health Directorate.
- 39. Demolition Work
 - 39.1 Demolition must be addressed through the method statement and risk assessment process and, both of which must be included in the H&S Plan.
 - 39.2 The method statement must include the employers agenting survey, where applicable, and shall be approved in writing by the KLM-appointed designer (employers agent) or another person appointed by the KLM, its agent or the Public Health Directorate.
 - 39.2.1 The H&S Plan must document the name, signed letter of appointment and competency of the competent person who has been appointed to supervise all demolition work.
 - 39.2.2 The Principal Contractor shall ensure that demolition work complies with the CR at all times.
 - 39.2.3 Safe work instructions for employees working on demolition must be documented in the H&S Plan.
 - 39.2.4 No demolition work shall be performed unless defined through a Specific Demolition H&S Specification.
 - 39.2.5 Demolished materials, which are not used on site, must be removed off site within the shorted delay. The staging, removal and disposal activities and procedures must be covered in a Work Instruction (WI) that will include the separation methodology and disposal medium and is to be recorded, ensuring a cradle to grave

compliance of all demolished materials. Such activities shall be referenced in the Waste Management Method Statement

40. Electrical Installations and Machinery

- 40.1 All electrical installations and cables shall be deemed to be “alive” and, where applicable, the Principal Contractor shall take adequate steps to ensure that employees, including the KLM employees and members of the public are prevented from accessing any electrical cables and equipment.
- 40.2 The Principal Contractor shall not allow or permit any of his personnel to work on or manhandle any electrical reticulation equipment (Distribution Boards, transformers, Switchgear etc.), unless explicitly authorised by the KLM or the Public Health Directorate.
- 40.3 Where work is performed on existing structures or where work is performed in production areas or where the work may affect the KLM employees, visitors or stakeholders, the principal contractor shall communicate with the Public Health Directorate and plan all electrical work prior to any work on the KLM electrical reticulations starting.
- 40.4 Such planning shall be documented in a method statement and risk assessment and included in the H&S Plan.
- 40.5 The Principal Contractor shall appoint a competent person to identify and inspect all exposed underground cables, overhead cables and any electrical installations such as transformers or distribution boxes, to ensure that these are not a hazard to employees or to members of the public. The competent person shall inspect all temporary electrical installations and machinery at least once a week and recorded in a register.
- 40.6 The letters of appointment, proof of competency and registers applicable to these inspections shall be included in the H&S Plan.
- 40.7 The principal Contractor shall ensure that all electrical testing equipment to be used on the KLM site has a valid calibration certificate and that a calibration sticker is affixed to the equipment, clearly indicating the calibration date and the next due date.
- 40.8 Any unsafe condition shall be reported immediately to the Public Health Directorate and the Principal Contractor shall take immediate steps to prevent employees or members of the public from gaining access to the dangerous installation and the area surrounding it.
- 40.9 No live electrical work shall be performed unless defined through a Specific Construction H&S Specification.
- 40.10 Where live electrical work is to be performed in a KLM production area or potentially affecting the production areas or where the work may affect the KLM employees, visitors or stakeholders, the contractor shall interface with the Public Health Directorate in order to establish work permission.
- 40.11 Where the need arise to de-energise plant & equipment, permission for the de-energisation of energy sources and lock out requirements shall be obtained via the Public Health Directorate or project employers agent in order to establish work permission and permit controls; such interface will be documented in the H&S Plan.
- 40.12 The Principal Contractor shall appoint a competent person to inspect all portable electrical tools, including leads. No electrical extension leads or fixed machinery to be used during the project work, shall be allowed to have any joined leads.
- 40.13 The letter of appointment and template of the inspection register shall be included in the H&S Plan.
- 40.14 The Principal Contractor shall include a method statement for the safe use of portable electrical tools, including the management of the hazards of extension leads.
 - 40.14.1 All portable electrical equipment must be on a register and be inspected monthly by a SHE Representative.
 - 40.14.2 Identify and record all portable electrical equipment in a register.
 - 40.14.3 Ensure that regular checks are carried out according to the requirements of the equipment usage.
 - 40.14.4 The frequency must, depending on circumstances, be determined by a competent person to ensure maximum safety.
 - 40.14.5 The user is responsible that all identified defects of electrical equipment are reported.
 - 40.14.6 Remove faulty portable electric equipment form use.
 - 40.14.7 Determine the frequency of polarity tests and, depending on circumstances, be determined by a competent person to ensure maximum safety
- 40.15 Where temporary installations are installed, including those in the site office or employee facilities, a COC for these installations shall be included in the H&S File.
- 40.16 Where applicable, the contractor shall include a method statement covering dangerous work w.r.t electrical installations and include it in the H&S Plan.

- 40.17 Where applicable, the contractor shall include a zero Potential, Lock Out and Tag-Out method statement and safe work instruction(s) in the H&S Plan.
41. Form work and Support work
- 41.1 The Principal Contractor shall submit the appointment letter of the competent person(s) appointed to supervise all formwork and support work operations in terms of the CR; the H&S Plan must include the signed letters of appointment and the proof of competency.
- 41.2 The H&S Plan shall include a comprehensive method statement ensuring health and safety controls, of all risks assessed i.r.o the erection and removal of form work and support work and with the concrete casting of the structures.
- 41.3 The Principal Contractor shall ensure that all formwork and support work complies with the requirements of the OHS Act and Regulations. [Method statement and issue based risk assessment shall be generated prior to activities commencing].
- 41.4 Form work designers, supervisors, erectors and inspectors must be formally trained and certified competent.
- 41.5 Support work must be clearly tagged with safety signage and inspected prior to load bearing and daily thereafter.
- 41.6 Inspections of support work must be documented in a register; a template of the register shall be included in the H&S Plan.
- 41.7 All Support structures must be differentiated from scaffolds; where access is required, such access must be means of a ladder only.
- 41.8 Formwork and support work erectors working at heights must attach a fall prevention harness at all times to safe structures, or plant where appropriate; the double lanyards must be fitted with safe and sufficient strength hooks [steel line hook (small) or scaffold line hook (large), allowing it to be attachment to a point of anchorage. Where such anchorage is not available, anchorage points shall be made available and life lines erected when and where necessary.
- 41.9 The H&S Plan shall include the safe work instruction applicable to all employees working on form work and support work and the method of ensuring competency.
42. Scaffolding [Accessing and Descending Scaffolding / SUSPENDED SCAFFOLDING]
- 42.1 The Principal Contractor shall submit the appointment letter of the competent person(s) appointed to supervise all scaffolding operations, in terms of the CR; the H&S Plan must include the signed letters of appointment and the proof of competency.
- 42.2 The H&S Plan shall include a comprehensive method statement ensuring health and safety controls of all risks assessed with the erection, work on and removal of scaffolds.
- 42.3 The Principal Contractor shall ensure that all scaffolding complies with the requirements of the OHS Act and Regulations.
- 42.4 Scaffold erectors and inspectors must be formally trained and certified competent; such training must conform to the requirements of SANS 10085-1.
- 42.5 Scaffolds must be clearly tagged with safe access signage; scaffolds must be inspected daily prior to use and weekly by the scaffold inspector.
- 42.6 Inspections by the scaffold inspector must be documented on the scaffold tag and in a register; a template of the tag and of the register shall be included in the H&S Plan. Daily pre-start inspections of all scaffolds must be planned for in the H&S plan.
- 42.7 All scaffolds must only be accessed with a ladder fitted inside the scaffold and extending to at least 90 cm above the working surface.
- 42.8 All scaffold decks must be fitted with safety rails and toe-boards / kick-plates so as to prevent persons working there from falling through or off.
- 42.9 Scaffold erectors must attach a fall prevention harness at all times; the double lanyards must be fitted with scaffold hooks only
- 42.10 The H&S Plan shall include the safe work instruction applicable to all employees working on scaffolds and the method of ensuring competency.
43. Piling Operations
- 43.1 The Principal Contractor shall ensure that piling, (where required) is undertaken by a competent specialist contractor, or a Contractor with proven record in the type of work to be performed.

- 43.2 Risk assessments, method statements and safe work instructions shall be submitted as part of the H&S Plan.
- 43.3 No piling activities shall be performed unless defined through a Specific Construction H&S Specification.
- 44. Construction Plant, [including Rented / Hired Plant]
 - 44.1 The Principal Contractor shall ensure that all construction vehicles and mobile and fixed plant, whether owned, rented or hired, complies with the requirements of the OHS Act and Regulations.
 - 44.2 The Principal Contractor shall inspect and keep records of inspections of plant and equipment used on site. A template of the daily inspection record for each type of construction vehicle or mobile plant shall be included in the H&S Plan.
 - 44.3 A method statement applicable to each type of construction plant, for which H&S risks were identified, shall be included in the H&S Plan, together with the contractor's procedure for ensuring that only employees who are competent in the safe use of the plant are using such plant.
 - 44.4 Only competent and authorised / appointed persons with a valid medical certificate of fitness are to operate plant and machinery, under proper supervision. Competency of operators and medical fitness shall be documented individually for each operator accessing the work site.
 - 44.5 Appropriate safety equipment and clothing shall be provided for the operators and maintained in good condition at all times.
 - 44.6 The risks of access, egress, parking and on-site movement of construction vehicles and mobile plant and the corresponding method statement shall be included in the H&S plan of every project in which such vehicles and plant are used.
- 45. Suspended Platforms
 - 45.1 In the H&S Plan, the Principal Contractor shall submit proof of competency and the appointment letters of:
 - 45.1.1 The competent person(s) appointed to supervise all suspended platform work operations;
 - 45.1.2 The competent person who performs the performance tests;
 - 45.1.3 The suspended platform erectors, operators and inspectors;
 - 45.1.4 The suspended platform operators, together with their medical certificate of fitness.
 - 45.2 The H&S Plan shall include:
 - 45.2.1 A copy of the certificate of system design;
 - 45.2.2 The operational compliance plan;
 - 45.2.3 Proof of submission of the above to the Department of Labour;
 - 45.2.4 The inspection registers of the safety harness;
 - 45.2.5 The inspection registers of the whole installation, including the performance test;
 - 45.2.6 The inspection registers of the hoisting ropes, hooks or other load-attaching devices;
 - 45.2.7 The inspection registers of the daily inspection by the suspended platform Supervisor.
 - 45.2.8 The method statement for safe use of the scaffold, including procedures dealing with emergencies, malfunctioning and the discovery of defects, and the isolation process of the scaffold when not in use.
- 46. Material Hoists
 - 46.1 With regard to material hoists and towers on construction sites, the Principal Contractor shall ensure he / she or their sub-contractors construct / erect such structures with materials that is technically and operationally of good standard, erected by experienced persons and operated by trained and competent persons.
 - 46.2 In the H&S Plan, the Principal Contractor shall submit proof of competency and the appointment letter of the competent person who performs the daily inspections on the material hoists.
 - 46.3 The H&S Plan shall include the method statement for safe erection, use, inspection, maintenance and dismantling of the material hoist.
 - 46.4 A template of the maintenance inspection register shall be included in the H&S Plan.
- 47. Batch Plants

- 47.1 Batch plants shall be operated by trained persons and the Principal Contractor shall ensure that his / her or their sub-contractors batch plant operations are supervised by an appointed competent person.
- 47.2 In the H&S Plan, the Principal Contractor shall submit proof of competency and the appointment letter of the batch plant supervisor.
- 47.3 The H&S Plan shall include the method statement for safe erection and dismantling of the plant, for safe batching, for safe maintenance and repair work to be done and the training material used to ensure operator competency in the H&S controls of the batch plant.
- 47.4 The Principal Contractor shall ensure that the placement of a batch plant is conducted in such a manner as not to present a safety risk to persons and erection to be performed as prescribed by the manufacturer to ensure safe operating conditions
- 47.5 The Principal Contractor shall ensure that appropriate controls and safety interlocking devices are installed on batch plants;
- 47.5.1 Placed in an easily accessible position; and
- 47.5.2 Constructed in such a manner as to prevent accidental starting.
- 47.6 The Principal Contractor shall ensure that all dangerous moving parts are adequately guarded and placed beyond the reach of persons by means of doors, covers or other similar preventative measures.
- 47.7 The Principal Contractor shall ensure that no employee, sub-contractor employee or other persons remove or modify any guard or safety device
- 47.8 The H&S plan shall include a method statement and risk assessment of elevated work and fault finding-, maintenance- and repair work to the Batch Plants.
- 47.9 The Principal Contractor shall ensure that all lifting machines and lifting tackle used in the operation of a batch plant complies with the requirements of the Driven Machinery Regulations 18
- 47.10 The Principal Contractor shall ensure that all precautionary measures are adhered to regarding the usage of electrical equipment in explosive atmospheres, when entering a silo, as contemplated in the Electrical Installation Regulations
- 47.11 A template register of installation, maintenance and repair shall be included in the H&S Plan.
- 47.12 The H&S Plan shall include the method statement for entry and work in the confined spaces of a batch plant, where applicable
- 48. Explosive Powered Tools
- 48.1 No explosive powered tool shall be used by The Principal Contractor unless persons making use thereof is provided with and uses suitable protective equipment; and is adequately trained in the operation, maintenance and use of such a tool.
- 48.2 In the H&S Plan, the Principal Contractor shall submit proof of competency and the appointment letter of the person in charge of explosive powered tools and of the person in charge of the issuing and collection of cartridges and nails.
- 48.3 The H&S Plan shall include the Work Instruction (WI) for the safe use of explosive powered tools, including the type of PPE, barricading and warning notice which the contractor intends to use and the method of accounting for cartridges and nails.
- 48.4 The H&S Plan shall include proof of training and competency of all operators using explosive powered tools.
- 48.5 A template inspection register of the explosive powered tools shall be included in the H&S Plan.
- 48.6 A template record for the issuing and collection of cartridges and nails shall be included in the H&S Plan.
- 49. Cranes [Mobile]
- 49.1 The H&S Plan shall include the method statement for safe use of the crane, including the method of communication, the protection of fall zones and the method of determining whether the weather permits safe crane work of which shall also be reflected in the risk assessment
- 49.2 In the H&S Plan, the Principal Contractor shall submit proof of competency and the appointment letter of competency:
- 49.2.1 The registered person/s testing and certifying the crane;
- 49.2.2 The registered person/s testing and certifying the lifting gear;
- 49.2.3 The crane operator/s, as well as their medical certificate of fitness;

- 49.3 The H&S Plan shall include the method statement and risk assessment for the erection, maintenance, inspections and dismantling of the crane.
- 49.4 The crane's load test certificates shall be included in the H&S Plan.
- 49.5 All lifting gear used with the crane shall be identified and listed in a register contained in the H&S Plan.
- 49.6 A template inspection register of the lifting gear shall be included in the H&S Plan.

- 50. Storage and use of flammable liquids
 - 50.1 Where work is done on a construction site or where the work may affect KLM employees, visitors or stakeholders, the contractor shall interface with the Public Health Directorate before flammable liquids may be brought on site.
 - 50.2 The Principal Contractor shall ensure that where flammable liquids are being used, applied or stored at the workplace concerned, this is done in such a manner which would cause no fire or explosion hazard.
 - 50.3 Dangerous work permission shall be obtained where applicable and defined in a specific H&S specification.
 - 50.4 Should flammable substance need to be stored on the construction site, a flammable store or cabinet approved by the Municipal Chief Fire Officer must be used, and no flammable liquids shall be stored outside this facility; no other materials shall be stored in the flammable store or cabinet.
 - 50.5 The H&S Plan shall include a method statement detailing the safe use, storage, decanting and spill controls for all flammable liquids used or stored on site.
 - 50.6 The H&S Plan shall include the appointment and proof of competency of the persons controlling the use, storage, decanting and spill controls of all flammable liquids used or stored on site

- 51. Hazardous Chemical Substances
 - 51.1 Where hazardous chemical substances are used, the contractor shall ensure that:
 - 51.1.1 All MSDS are included in the H&S Plan.
 - 51.1.2 The safe use, storage, decanting, labelling, transport, emergency procedures and safe disposal of hazardous substances are addressed in a method statements included in the H&S Plan.
 - 51.1.3 Proof of competency and signed letters of appointment of the person responsible for chemical handling, is included in the H&S Plan.
 - 51.2 A hazardous chemical substance intended to be applied on site during the project (i.e. after approval of the H&S Plan) shall be subject to an method statement and issue-based risk assessment, which must be presented to the Public Health Directorate for approval prior to the substance being introduced on site.

- 52. Water Environments [Work in Proximity of Water]
 - 52.1 The Principal Contractor shall ensure that where a worker is exposed to the risk of drowning by falling into the water, a lifejacket is provided to and worn by the worker.
 - 52.2 The hazards and risks identified in the base line risk assessment, the Principal Contractor shall document a method statement and issue based risk assessment for work in the proximity of water, in the H&S Plan.
 - 52.3 The method statement shall include preventative safety measures and environmental controls to prevent pollution, as well as corrective measures in case of an accidental spill.

ANNEXURE A

CONTENTS AND NUMBERING SYSTEM FOR THE HEALTH AND SAFETY PLAN

No	Content			Approved	
				Yes	No
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2	Scope of Work				
3	Notification to Commence Construction Work		Current		
4	H&S Agreement (S37(2))		Signed		
5	Letter of Good Standing		Current		
6	H&S Budget				
7	H&S Plan	7.1	Refer H&S Specification		
		7.2	Fall Protection Plan		
		7.3	Environmental Management Plan ("Process" Waste management / Spillage Control / Disposal certificates)		
8	Hazard Identification Risk Assessment & Applicable Method Statement	8.1	Baseline Risk Assessment		
		8.2	Issue Based Risk Assessment		
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9	Emergency Plan & Response				
10	H&S Policy		Signed		
11	Organisational Chart				
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		19.6	Excavation / Trenching		
		19.7	Energy Sources & Lockout		
		19.8	Elevated Working @ Heights		
		19.9	Formwork & Support Work		
		19.10	Hot Work		
		19.11	Hazardous Chemical Substances		
		19.12	Moving Equipment		
		19.13	Piling		
		19.14	Scaffolding		
		19.15	Suspended Platforms		
		19.16	Welding / Cutting & Grinding		
		19.17	Water Environments		

No	Content			Approved	
				Yes	No
20	Facilities Management (male / female)	20.1	Washing		
		20.2	Sanitary		
		20.3	Change room		
		20.4	Sheltered Eating		
		20.5	Accommodation / Transportation		
21	PPE Management	21.1	PPE Needs Analysis		
		21.2	PPE Issue		
22	Contractor Management	22.1	H&S Agreement (S37(2) (signed)		
		22.2	Appointments (signed)		
23	H&S Committee				
24	Work Procedures				
25	Work Instructions				
26	Audits & Inspections		Internal & External		
27	Record Keeping Management		Completed Audit / Inspections / Registers / Checklists		

ANNEXURE B

CONTENTS AND NUMBERING SYSTEM FOR HEALTH AND SAFETY FILE

1. Index to H&S Plan / File
2. Scope of Work
3. Notification to Commence Construction Work
4. H&S Agreement (S37(2))
5. Letter of Good Standing
6. H&S Budget
7. H&S Plan
8. Hazard Identification Risk Assessment
9. Emergency Plan & Response
10. H&S Policy
11. Organisational Chart
12. Appointments
13. Medical Certificates
14. Training & Competency Management
15. Accident / Incident Management including First Aid Facilities
16. Construction Plant, Machinery & Equipment Management
17. Access, Traffic Control & Public Safety Management
18. Hazardous & Flammable Substance Management
19. Hazardous & Dangerous Work Management & Control
20. Facilities Management
21. PPE Management
22. Contractor Management
23. H&S Committee
24. Work Procedures
25. Work Instructions
26. Audits & Inspections
27. Record Keeping Management

ANNEXURE C

CONSTRUCTION APPOINTMENTS

#	DESIGNATION	LEGAL REFERENCE	TYPE OF CONSTRUCTION WORK WHEN REQUIRED
1.	Assigned Responsibility Designation	OHS Act S16(2) & CR 5.3(B)	All construction work
2.	Construction Manager	CR 8(1)	All construction work
3.	Construction Manager Assistant(s)	CR 8(2)	All construction work
4.	Construction Supervisor	CR 8(7)	All construction work
5.	Construction Supervisor Assistant(s)	CR 8(8)	All construction work
6.	Contractor	Contractor - CR 7(1)(c)(v)	When using sub-contractors
7.	Emergency / Fire Co-ordinator	OHSAct S 8	All construction work
8.	Fire Extinguisher Inspector	CR 29	All construction work
9.	First Aider	GSR 3	All construction work
10.	Health & Safety Officer	CR 8(5)	All construction work
11.	Health & Safety Reps	OHSAct S 17	Min. 3 and then 1 for every 10 persons
12.	H&S Committee Members	OHSAct S 19	Equal no. of management & OHS reps
13.	Incident Investigator	GAR 9	All construction work
14.	Risk Assessor	CR 9	All construction work
15.	Excavation Work Supervisor	CR 13	When excavating
16.	Demolition Work Supervisor	CR 14	When demolishing
17.	Explosives Manager	Exp R12(1)	When using explosives for blasting
18.	Explosives Supervisor	Exp R 12(3)	When using explosives for blasting
19.	Fall Protection Plan Developer	CR 10(1)(a)&(b)	When there is a risk of persons falling
20.	Fall Protection Plan Supervisor	CR 10(1)(a)&(b)	When there is a risk of persons falling
21.	Bulk Mixing Plant Supervisor	CR 20	As required
22.	Bulk Mixing Plant Operator	CR 20	As required
23.	Construction Vehicle & Mobile Plant Inspector	CR 23	When using construction vehicles; When using mobile plant;
24.	Construction Vehicle & Mobile Plant Operators	CR 23	When using construction vehicles; When using mobile plant;
25.	Electrical Installation Inspector	CR 24	When any electrical installations are brought to site or used on site or installed on site
26.	Explosive Actuated Fastening Device Inspector	CR 21	As required
27.	Explosive Actuated Fastening Device Controller / Issuer	CR 21	As required
28.	Explosive Actuated Fastening Device Operator	CR 21	As required
29.	Temporary Works Designer	CR 12(1)	As required
30.	Temporary Works Supervisor(s)	CR 12(2)	As required
31.	Ladder Inspector	GSR 13A	When ladders are used

#	DESIGNATION	LEGAL REFERENCE	TYPE OF CONSTRUCTION WORK WHEN REQUIRED
32.	Lifting Machine & Equipment Inspector	DMR 18(5)	When cranes, block and tackle, gantries or A frames are used for lifting; When rigging is done;
33.	Lifting Machine Operator	DMR 18	When cranes, block and tackle, gantries or A frames are used for lifting; When rigging is done;
32	Material Hoist Operator	CR 19	When material hoist is used
33	Mixer Operator	CR 20 / OHSA 8	When a concrete mixer is used
34	Portable Electrical Equipment Inspector	EMR 9	When portable electrical equipment is used
35	Pressure Vessel Inspector	PER	When compressors with pressure vessels are used
36	Scaffold Erector	SANS 10085-1:2004 Item 16.1(a)	When scaffolds are used
37	Scaffold Inspector	SANS 10085-1:2004 16.1(c)	When scaffolds are used
38	Scaffolding Supervisor	CR 14(2)	When scaffolds are used
39	Scaffold Team Leader	SANS 10085-1:2004 Item 16.1(b) and 10.1.1.	When scaffolds are used
40	Stacking & Storage Supervisor, including chemicals	CR 25 & CR 27	All construction work
41	Suspended Platform Supervisor	CR 17	When suspended platforms are used
42	Suspended Platform Erector	CR 17	When suspended platforms are used
43	Suspended Platform Operational Compliance Plan Developer	CR 17	When suspended platforms are used
44	Suspended Platform Inspector	CR 17	When suspended platforms are used
45	Tower Crane Operator	CR 22	When tower cranes are used
46	Tower Crane Inspector	DMR 18	When tower cranes are used
47	Hand tool inspector	OHSA 8	When hand tools are used
48	Combustion machinery inspector	OHSA 8	When petrol or diesel engines are used

ANNEXURE: D

RESPONSIBILITIES / DUTIES

Definitions:

- “Client” means any person for whom construction work is performed; the Kouga Local Municipality, as established in the Province of the Eastern Cape.
- “Principal Contractor” means a Principal Contractor, as defined in the Construction Regulations, 2014, who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site; who has also been appointed as the Contractor as defined in the General (and / or Special) Conditions of Contract.
- “Agent” means any person who acts as a representative for a client in the managing the overall construction work; employee, the firm of consulting employers agents, or other practitioner, who is appointed by the Municipality to act on its behalf, and who is named in the Letter of Acceptance given to the Principal Contractor.

Roles and Responsibilities

Client:

1. Shall be responsible for the following in order to ensure compliance with the provisions of the Act;
 - To prepare a documented health and safety specification for the construction work, and provide any principal contractor who is making a bid or appointed to perform construction work for the client with the same;
 - To promptly provide the principal contractor and his or her agent with any information which might affect the health and safety of any person at work carrying out construction work;
 - To appoint each principal contractor in writing for the project or part thereof on a construction site;
 - To take reasonable steps to ensure that each principal contractor's health and safety plan as determined in the CR is implemented and maintained on the construction site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed upon between the client and principal contractor, but at least once every month;
 - To stop any contractor from executing construction work which is not in accordance with the principal contractor's health and safety plan contemplated in the CR for the site or which poses to be a threat to the health and safety of persons;
 - To ensure that where changes are brought about, sufficient health and safety information and appropriate resources are made available to the principal contractor to execute the work safely
 - To ensure that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and
 - To ensure that potential principal contractors submitting tenders, have made provision for the cost of health and safety measures during the construction process.
2. Shall discuss and negotiate with the principal contractor the contents of the health and safety plan contemplated in the CR and thereafter finally approve the health and safety plan for implementation.
3. Shall ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor.
4. Shall appoint a principal contractor to perform construction work, unless the client is reasonably satisfied that the principal contractor that he or she intends to appoint has the necessary competencies and resources to carry out the work safely.
5. May appoint an agent in writing to act as his or her representative and where such an appointment is made, the responsibilities as are imposed by these regulations upon a client, shall as far as reasonably practicable apply to the person so appointed.
6. Shall appoint any person as his agent, unless the client is reasonably satisfied that the person he or she intends to appoint has the necessary competencies and resources to perform the duties imposed on a client by these regulations.

1. Shall provide and demonstrate to the client a suitable and sufficiently documented health and safety plan, based on the client's documented health and safety specification contemplated in the CR, which shall be applied from the date of commencement of and for the duration of the construction work.
2. Shall take reasonable steps as far as is necessary to ensure co-operation between all contractors to enable each of those contractors to comply with the provisions of these regulations.
3. A principal contractor shall be responsible for the following in order to ensure compliance with the provisions of the Act:
 - To provide any contractor who is making a bid or appointed to perform construction work for the principal contractor, with the relevant sections of the documented health and safety specification contemplated in the CR pertaining to the construction work which has to be performed;
 - To appoint each contractor contemplated in the CR in writing for the part thereof of the project on a construction site;
 - To take reasonable steps to ensure that each contractor's health and safety plan contemplated in the CR is implemented and maintained on the construction site: Provided that the steps taken shall include periodic audits at intervals mutually agreed upon between the principal contractor and contractor(s), but at least once every month;
 - To stop any contractor from executing construction work which is not in accordance with the principal contractor's and/or contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
 - To ensure that where changes are brought about, sufficient health and safety information and appropriate resources are made available to the contractor to execute the work safely;
 - To ensure that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and
 - To ensure that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process.
4. A Sub-contractor shall provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the principal contractor's health and safety specification contemplated in the CR provided by the principal contractor, which plan shall be applied from the date of commencement of and for the duration of the construction work.
5. Shall discuss and negotiate with the contractor the contents of the health and safety plan contemplated in the CR, and shall finally approve that plan for implementation.
6. Shall ensure that a copy of his or her health and safety plan contemplated in the CR, as well as the contractor's health and safety plan contemplated in the CR, is available on request to an employee, inspector, contractor, client or client's agent.
7. Shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of the Act and these Regulations, is opened and kept on site and made available to an inspector, client, client's agent or principal contractor upon request.
8. Shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall, in addition to the documentation referred to in the CR, include a record of all drawings, designs, materials used and other similar information concerning the completed structure.
9. Shall ensure that in addition to the documentation required in the health and safety file as determined in the CR, a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done is included and available.
10. Shall not appoint a contractor to perform construction work unless the principal contractor is reasonably satisfied that the contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely.
11. Where a contractor appoints another contractor to perform construction work, the responsibilities as determined in the CR that apply to the principal contractor shall apply to the contractor as if he or she were the principal contractor
12. Shall not appoint another contractor to perform construction work unless he or she is reasonably satisfied that the contractor he or she intends to appoint has the necessary competencies and resources to perform the construction work safely.
13. Shall co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act.

14. Ensure every Sub-contractor shall as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work or any person who might be affected by the work of such a person at work or which might justify a review of the health and safety plan.
15. The Contractor shall establish and maintain, and ensure that all his sub-contractors establish and maintain safety, health and environmental standards and systems as necessary, and to comply with local laws, the Occupational Health & Safety Act & Regulations and Municipality's Occupational Health & Safety requirements under the Contract.
16. The Contractor shall be solely responsible for carrying out the work under the Contract, having the highest regard for the safety of his employees, Municipality's employees and persons at or in the vicinity of the site, as well as the safety of the Works, temporary work, materials and the property of third parties.

Agent:

Ensure compliance to the duties of a client as set out in the Construction Regulations

- To prepare a documented health and safety specification for the construction work, and provide any principal contractor who is making a bid or appointed to perform construction work for the client with the same;
- To promptly provide the principal contractor and his or her agent with any information which might affect the health and safety of any person at work carrying out construction work;
- To appoint each principal contractor in writing for the project or part thereof on a construction site;
- To take reasonable steps to ensure that each principal contractor's health and safety plan as determined in the CR is implemented and maintained on the construction site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed upon between the client and principal contractor, but at least once every month;
- To stop any contractor from executing construction work which is not in accordance with the principal contractor's health and safety plan contemplated in the CR for the site or which poses to be a threat to the health and safety of persons;
- To ensure that where changes are brought about, sufficient health and safety information and appropriate resources are made available to the principal contractor to execute the work safely
- To ensure that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and
- To ensure that potential principal contractors submitting tenders, have made provision for the cost of health and safety measures during the construction process.
- Shall discuss and negotiate with the principal contractor the contents of the health and safety plan contemplated in the CR and thereafter finally approve the health and safety plan for implementation.
- Shall ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor.
- Shall appoint a principal contractor to perform construction work, unless the client is reasonably satisfied that the principal contractor that he or she intends to appoint has the necessary competencies and resources to carry out the work safely.

The responsibilities for the key management and supervision roles include (but are not limited to) the following:

1. Directors

- Develop a culture in which safety is integral.
- Maintain adherence to the standards at all times.
- Ensure safety responsibility is an integral part of all management systems and processes.
- Ensure systems are in place to guarantee the safety of employees, clients, contractors and visitors.
- Provide resources and ensure that actions to address safety issues are implemented
- Implement the Municipality safety policy and safety standards into the business.
- Maintain adherence to the policy and standards at all times.
- Incorporate safety, health and environmental targets into Business Plans and Achievement Appraisals of direct reports.
- Foster a risk management approach to all projects and business decisions.
- Review all high potential incident investigations.
- Monitor OH&S performance for trends and learning's.

2. Project Manager

- Promote a culture in which safety is the prime concern that shall never be compromised.
- Ensure that adequate safety, health and environmental hazard evaluations are made on all projects, plant and equipment purchases.
- Prepare project plans that comply with the Municipality OH&S policy and safety management standards.
- Provide resources to eliminate hazards and improve safety.
- Incorporate safety, health and environmental targets into Achievement Appraisals of direct reports.
- Ensure that safe systems of work are defined and documented, and that hazards analysis and risk control methods have been incorporated during the preparation.
- Ensure that any Safety Committee established functions effectively.
- Ensure thorough investigation of all incidents to avoid recurrence.
- Ensure safe management of contractors, vendors and visitor's on sites.
- Conduct safety audits and ensure safety meetings are held.
- Promote the involvement of all employees in improving safety
- Focus on the elimination of unsafe acts, and rectify unsafe conditions quickly.
- Ensure safety responsibility is an integral part of all management systems and processes.
- Provide resources and ensure that actions to address safety issues are implemented.
- Ensure that adequate safety and environmental evaluations are made of all modification designs, plant and equipment purchases.
- Ensure systems are in place to guarantee the safety of employees, contractors and visitors.
- Review training needs for all employees and provide the training as required.
- Ensure that drills and exercises are carried out to test the effectiveness of Emergency Response Plans
- Ensure safe management of contractors on the site.
- Ensure competent and trained, responsible employers agents and supervisors exist to manage contractors on the works.

3. Employers agenting Manager

- Ensure management systems are in place and understood to give safe design and operation.
- Ensure hazards and risks are identified for all plant and major equipment.
- Ensure designs are fit for purpose and safe to implement.
- Ensure a safe workplace is provided for employers agenting staff.
- Ensure all employers agenting staff is inducted and have received the required training to enable safe access to site.
- Contribute to and participate in the Project safety program.
- Provide Employers agenting support as required to assist in the implementation and compliance of these Rules.

4. Construction Manager

- Contribute to a positive safety culture by example.
- Ensure that management systems are in place and understood to provide a safe construction workplace.
- Ensure that hazards and risks are identified on all construction activities.
- Arrange construction pre-start-hazard-analysis studies for all "at risk" operations.
- Contribute to and participate in the Project safety program.
- Participate in safety committees and safety meetings.
- Participate in safety inspections and serious incident investigations.
- Be seen to "walk the talk."
- Participate in safety audits.
- Focus on the elimination of unsafe acts, and rectify unsafe conditions quickly.
- Ensure safe management of contractors on the site.
- Ensure competent and trained, responsible employers agents and supervisors exist to manage contractors on the works.
- Coordinate and participate in daily Safety Management walkabouts.
- Chairperson of weekly contractor's safety meetings.
- Final approval of all Risk Assessments.

5. Assistant Director OHS

- Promote a culture in which safety is the prime concern and shall never be compromised
- Promote the involvement of all employees in improving safety.
- Coordinate the implementation of the site safety management plans.
- Conduct comprehensive site safety audits to evaluate contractor's compliance with safety management plans and systems as per the audit / inspection schedule, at least once a month.
- Reporting of OH&S matters and performance to the Municipality Management Team.
- Liaise with Safety management to ensure full understanding and communication of all safety issues impacting on Municipality and Contractor activities and vice versa.
- Ensure appropriate Municipality personnel are involved in local dept OH&S Committees.
- Facilitate reviews by these Rules.
- Participate in a pre-start safety review with the Vendor's / Contractor's Management to facilitate a "bridging document" to remove any uncertainty/differences between these Rules and the Vendor's / Contractor's SMP.
- Co-ordinate the preparation of Emergency Response Plans.
- Co-ordinate and participate in drills and exercises to test the effectiveness of Emergency Response Plans.
- Facilitate and lead all LTI investigations.
- Safety pre-qualification of all contractors at tender invitation stage.
- Interview and approval of site and contractors Safety Officers

6. Area Managers

- Ensure compliance and keep all required records as per the Construction Regulations.
- Ensure hazards and risks are identified in design stage.
- Ensure that management systems are followed to give safe designs.
- Ensure self and others safety awareness at all times.
- Be aware of hazards and risks in the plant area of activity.
- Participate in and contribute to the Municipality Management team safety plan.
- Promote a culture in which safety is the prime concern and shall never be compromised.
- Define and document safe systems of work and, through consultation, ensure they are applied.
- Ensure that the Safety Committee functions effectively.
- Ensure that all incidents are thoroughly investigated to avoid re-occurrence.
- Ensure safe management of contractors on the site.
- Ensure competent and trained, responsible employers agents and supervisors exist to manage contractors on the works.
- Know that contractors and employees understand the hazards associated with performing tasks.
- Promote the involvement of all employees in improving safety.
- Focus on the elimination of unsafe acts, and rectify unsafe conditions quickly.
- Conducting safety inspections, monitoring safety behaviour on site and participating in audits.
- Ensuring that all involved personnel prior to commencement of any work complete Risk Assessment (RA) and Daily Safety Task Instruction (DSTI). Then, by a review process, verifying that the development process is appropriate, communicated and understood by the users and subsequently complied with.
- Notifying of incidents and addressing unsafe acts and conditions in accordance with these Rules and following-up to ensure corrective and preventative actions are timely and effective.
- By their actions, demonstrating to contractors at all times the commitment of these Rules to the highest standards of safety management.
- Participation in accident /incident investigations.
- Facilitate Contractors Risk Assessments and sign of and approval thereof before submitting to the site Safety Officer.
- Participate in daily management Safety walkabouts and ensure Contractors in your discipline comply to these rules and rectify deviations.
- Ensure Contractors implement and compliance with the Construction Regulations.

7. Health & Safety Officers & Coordinators

- Implement and maintain the Municipality Safety Management Plan on site for all Contractors.
- Advise the Site Management team on safety issues and suggested solutions.

- Report directly to the Construction Manager and act on his authority regarding safety issues.
- Promote a culture in which safety is the prime concern and shall never be compromised.
- Promote the involvement of all employees and Contractors in improving safety.
- Focus on and establish a culture of the elimination of unsafe acts, and rectification of unsafe conditions quickly, by Management and supervision.
- Ensure self and others safety awareness at all times.
- Facilitate and participate in all Contractors accident /incident investigations. Ensure that all incidents are thoroughly investigated to avoid re-occurrence.
- Participate in and contribute to the Municipality Management team Safety Plan.
- Ensure that all involved Municipality and Contractors personnel prior to commencement of any work complete Risk Assessments (RA) and Daily Safety Task Instruction (DSTI). Then, by a review process, verifying that the development process is appropriate, communicated and understood by the users and subsequently complied with by means of at least two daily site inspections.
- Ensure Safety Management Information Boards are erected in each working area, and the following minimum information is displayed – Method Statement, Risk Assessment, DSTI, Supervisor, First Aider and Safety Representative.
- Coordinate all safety induction training requirements and conduct Municipality specific induction for Municipality and contractor supervision.
- Coordinate site accesses and security.
- Coordinate and implement comprehensive daily incident reporting by management, supervision, foremen and Safety Officers.
- Compile and present a weekly safety report to include: Incident trend analyses & preventative measures. Injury trend analysis and preventative measures. Contractors Planned Tasked Observations for week ahead. DSTI quality and effectiveness. Management walkabouts including participation and findings. High risk activities for the week ahead. Risk Assessment plan for week ahead, based on the construction plan. Statistics for previous week regarding man-hours, complement, RA's completed, induction & medicals (entry and exit). Estimates for week ahead regarding, complement, RA's, induction & medicals (entry and exit).
- Conduct a monthly internal contractors audit to ensure implementation and continuous compliance with the Safety Management Plan. Record findings and issue action sheets for deviations to include an action close out plan and report.
- Accompany injured people to doctor/hospital and ensure prompt treatment and return to work. Report all medical treatment cases immediately (telephonic) to the Municipality OHS Director and follow it up with an initial SSO report before the end of work day and a complete investigation within 24 hours.
- Coordinate and ensure the pre check and recording thereof for all tools, plant and equipment.
- Final check and sign of RA's before submitting to the Construction Manager for approval.
- Implement and maintain the Construction Regulations.

ANNEXURE E

SECTION 37(2) MANDATORY H&S AGREEMENT:

**WRITTEN AGREEMENT ON
OCCUPATIONAL HEALTH AND SAFETY**

In accordance with the provisions of Section 37(2) of the Occupational Health and Safety Act 85 of 1993 as amended

AS ENTERED INTO BY AND BETWEEN

(Hereinafter referred to as “the Employer”)

AND

(Hereinafter referred to as “the Mandatory”)

Compensation Fund number:

**Common Law Liability
Insurance in respect of Third
Parties for the Minimum Sum of R...**

1. Reporting

The Mandatory and/or his designated person appointed in terms of Section 16 (2) of the Occupational Health and Safety Act 85 of 1993 ("the OHS Act") as amended shall report to the Site Manager CR6.1 and/or a representative designated by the Employer prior to commencing the work at the premises.

2. Warranty of compliance

2.1 In terms of this agreement the Mandatory warrants that he agrees to the arrangements and procedures as prescribed by the Employer and as provided for in terms of Section 37 (2) of the OHS Act for the purposes of compliance with the Act.

2.2 The Mandatory acknowledges that this agreement constitutes an agreement in terms of Section 37 (2) of the OHS Act, whereby all responsibility for health and safety matters relating to the work that the Mandatory and his employees are to perform on the premises shall be the obligation of the Mandatory.

2.3 The Mandatory further warrants that he and/or his employees undertake to maintain such compliance with the OHS Act. Without derogating from the generality of above, neither from the provisions of the said agreement, the Mandatory shall ensure that the clauses as hereunder described are at all times adhered to by himself and his employees.

3. Refer:

- Occupational Health & Safety Act No.85 of 1993 as amended including Regulations
- Hazards Chemical Substance Regulations of 1995
- Compensation for Occupational Injuries and Diseases Act 130 of 1993 as amended
- Hazardous Substance Act 15 of 1973
- National Environmental Management Act 107 of 1998
- National Environmental Management: Air Quality Act 39 of 2004
- National Road Traffic Act No.83 of 1996
- National Water Act 36 of 1989
- National Building Regulations and Building Standards Act 103 of 1977

4. Mandatory an employer

The Mandatory shall be deemed to be an employer in his own right while on the Employer's premises. In terms of Section 16 (1) of the OHS Act, the Mandatory shall accordingly ensure that himself, and/or his nominated Chief Executive Officer comply with the requirements of the OHS Act.

5. Appointments and training

5.1 The Mandatory shall appoint competent persons as per Section 16 (2) and/or the CR of the OHS Act.

5.2 Any such appointed person shall be trained on any occupational health and safety matter and the OHS Act provisions pertinent to the work that is to be performed under his responsibility.

5.3 Copies of any appointments made by the Mandatory shall immediately be provided to the Employer.

5.4 The Mandatory shall further ensure that all his employees are trained on the health and safety aspects relating to the work and that they understand the hazards associated with such work being carried out on the premises.

5.5 Without derogating from the foregoing, the Mandatory shall in particular, ensure that all his users or operators of any materials, machinery or equipment are properly trained in the use of such materials, machinery or equipment.

5.6 Notwithstanding the provisions of the above, the Mandatory shall ensure that he, his appointed responsible persons and his employees are at all times familiar with the provisions of the OHS Act, and that they comply with the provisions of the Act.

6. Supervision, discipline and reporting

The Mandatory shall ensure that all work performed on the Employer's premises are done under strict supervision and that no unsafe or unhealthy work practices are permitted.

Discipline regarding health and safety matters shall be strictly enforced against any of his employees regarding non-compliance by such employee with any health and safety matters.

The Mandatory shall further ensure that his employees report to him all unsafe or unhealthy work situations immediately after they become aware of the same and that he in turn immediately reports these to the Employer and/or his representative.

7. Access to the OHS Act

The Mandatory shall ensure that he has an updated copy of the OHS Act on site at all times and that this is accessible to his appointed responsible persons and employees, save that the parties may make arrangements for the Mandatory and his appointed responsible persons and employees to have access to the Employer's updated copy/copies of the Act.

8. Cooperation

- 8.1 The Mandatory and/or his responsible persons and employees shall provide full co-operation and information if and when the Employer or his representative inquiries into occupational health and safety issues concerning the Mandatory.
- 8.2 It is hereby recorded that the Employer and his representative shall at all times be entitled to make such inquiry.
- 8.3 Without derogating from the generality of the above, the Mandatory and his responsible persons shall make available to the Employer and his representative, on request, all and any checklists and inspection registers required to be kept by him in respect of any of his materials, machinery or equipment

9. Work procedures

- 9.1 The Mandatory shall be entitled to utilise the procedures, guidelines and other documentation as used by the Employer for the purposes of ensuring a healthy and safe working environment.
- 9.2 The Mandatory shall then ensure that his responsible persons and employees are familiar with and utilise the documents.
- 9.3 The Mandatory shall implement safe work practices as prescribed by the Employer and shall ensure that his responsible persons and employees are made conversant with and adhere to such safe work practices.
- 9.4 The Mandatory shall ensure that his employees prior to the obtaining of such a permit do not perform work for which the Employer requires a permit.

10. Health and safety meetings

- 10.1 If required in terms of the OHS Act, the Mandatory shall establish his own health and safety committee(s) and ensure that his employees, being the committee members, hold health and safety meetings as often as may be required and at least once every three (3) months.
- 10.2 The Employer may elect to permit the Mandatory's health and safety representatives or a mandatory representative to attend the Employer's health and safety committee meetings.

11. Compensation registration

- 11.1 The Mandatory shall ensure that he has a valid registration with the Compensation Commissioner, as required in terms of the Compensation for Occupational Injuries and Diseases Act 130 of 1993, and that all payments owing to the Commissioner are discharged.
- 11.2 The Mandatory shall further ensure that the cover shall remain in force while any such employee is present on the premises.

12. Medical examinations

The Mandatory shall ensure that all his employees undergo routine medical examinations and that they are medically fit for the purposes of the work they are to perform.

13. Incident reporting and investigation

- 13.1 The Mandatory to the Department of Labour and to the Employer shall report all incidents referred to in Section 24 of the OHS Act.
- 13.2 The Employer shall further be provided with copies of any written documentation relating to any incident.

- 13.3 The Employer retains an interest in the reporting of any incident as described above as well as in any formal investigation and/or inquiry conducted in terms of Section 32 of the OHS-Act into such incident.
14. Statutory Obligations of the Mandatory & Contractor
- 14.1 The Mandatory shall notify the Employer of any subcontractor he may wish to perform work on the Employer's premises.
- 14.2 It is hereby recorded that all the terms and provisions contained in this clause shall be equally binding upon the subcontractor prior to the subcontractor commencing with the work.
- 14.3 Without derogating from the generality of this paragraph:
- 14.3.1 The Mandatory shall ensure that training as discussed under Appointments and training, is provided prior to the subcontractor commencing work on the Employer's premises.
- 14.3.2 The Mandatory shall ensure that work performed by the subcontractor is done under strict supervision and discipline enforced, as well as reporting of incidents and / or injuries.
- 14.3.3 The Mandatory shall inform the Employer of any health and safety hazard and/or issue that the subcontractor may have brought to his attention.
- 14.3.4 The Mandatory shall inform the Employer of any difficulty encountered regarding compliance by the subcontractor with any health and safety instruction, procedure and/or legal provision applicable to the work the subcontractor performs on the Employer's premises.
- 14.3.5 The Mandatory hereby undertakes to ensure that the health and safety of any other person on the premises is not endangered by the conduct and/or activities of all his employees while they are on the Employer's premises i.e.
- Horseplay, scuffling, fighting, running or throwing of objects.
 - The possession, consumption or offering for consumption to any person of intoxicating liquor or habit-forming drugs.
 - Any employee suspected of being under the influence of alcohol or other intoxicating substance will not be allowed to enter or remain on the Employer's premises.
 - The tampering with or misuse of any safety equipment installed or provided to any person by an employer or user of machinery.
 - The failure to use any safety equipment at a workplace, or in the course of employment or in connection with the use of machinery which is provided by an employer or user of machinery.
 - The doing of anything at a workplace or in connection with the use of machinery, calculated to threaten the safety of any person.
 - Contractors are required to take all reasonable measures to ensure that the requirements of the Act and the regulation are observed by his employees.
 - Contractors must, in the interests of safety, enforce discipline.
15. Security and access
- 15.1 The Mandatory and his employees shall enter and leave the premises only through the main gate(s) and/or checkpoint(s) designated by the Employer.
- 15.2 The Mandatory shall ensure that employees observe the security rules of the Employer at all times and shall not permit any person who is not directly associated with the work from entering the premises.
- 15.3 The Mandatory and his employees shall not enter any area of the premises that is not directly associated with the work.
- 15.4 The Mandatory shall ensure that all materials, machinery or equipment brought by him-self onto the premises are recorded at the main gate(s) and/or checkpoint(s). A failure to do this may result in a refusal by the Employer to allow the materials, machinery or equipment to be removed from the premises.
- 15.5 The Mandatory shall ensure that no persons carry firearms on the company's or Employer's premises unless written permission has been obtained from the designated person.
16. Fire precautions and facilities
- 16.1 The Mandatory shall ensure that an adequate supply of fire-protection and first-aid facilities are provided for the work to be performed on the Employer's premises, save that the parties may mutually make arrangements for the provision of such facilities.
- 16.2 The Mandatory shall further ensure that all his employees are familiar with fire precautions at the premises, which include fire-alarm signals and emergency exits, and that such precautions are adhered to.
17. Hygiene and cleanliness

- 17.1 The Mandatory shall ensure that the work site and surrounding area is at all times maintained to a reasonably practicable level of hygiene and cleanliness.
- 17.2 17.2 In this regard, no loose materials shall be left lying about unnecessarily and the work site shall be cleared of waste material regularly and on completion of the work.
18. No nuisance
- 18.1 The Mandatory shall ensure that neither he nor his employees undertake any activity that may cause environmental impairment or constitute any form of nuisance to the Employer and/or his surroundings.
- 18.2 The Mandatory shall ensure that no hindrance, hazard, annoyance or inconvenience is inflicted on the Employer, another Mandatory or any tenants. Where such situations are unavoidable, the Mandatory shall give prior notice to the Employer.
19. Intoxication not allowed
- 19.1 No intoxicating substance of any form shall be allowed on site. Any person suspected of being intoxicated shall not be allowed on the site.
- 19.2 Any person required to take medication shall notify the relevant responsible person thereof, as well as the potential side effects of the medication.
20. Personal protective equipment
- 20.1 The Mandatory shall ensure that his responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform and in accordance with the requirements of General Safety Regulation 2 (1) of the OHS Act.
- 20.2 The Mandatory shall further ensure that his responsible persons and employees wear the PPE issued to them at all material times.
21. Plant, machinery and equipment
- 21.1 The Mandatory shall ensure that all the plant, machinery, equipment and/or vehicles he may wish to utilise on the Employer's premises is/are at all times of sound order and fit for the purpose for which it/they is/are intended, and that it/they complies/comply with the requirements of Section 10 of the OHS Act.
- 21.2 In accordance with the provisions of Section 10 (4) of the OHS Act, the Mandatory hereby assumes the liability for taking the necessary steps to ensure that any article or substance that it erects or installs at the premises, or manufactures, sells or supplies to or for the Employer, complies with all the prescribed requirements and will be safe and without risks to health and safety when properly used.
- 21.3 The Mandatory shall further ensure that all plant, machinery and equipment is inspected by a competent person as prescribed by legislation & records thereof retained.
22. No usage of the Employer's equipment
- The Mandatory hereby acknowledges that his employees shall not be permitted to use any materials, machinery or equipment of the Employer unless the prior written consent of the Employer has been obtained, in which case the Mandatory shall ensure that only those persons authorised to make use of same, have access thereto.
23. Transport / Vehicles
- 23.1 The Mandatory shall ensure that all road vehicles used on the premises are in a roadworthy condition and are licensed and insured.
- 23.2 All drivers shall have relevant and valid driving licences and no vehicle shall carry passengers unless it is specifically designed to do so.
- 23.3 All drivers shall adhere to the speed limits and road signs on the premises at all times.
- 23.4 In the event that any hazardous substances are to be transported on the premises, the Mandatory shall ensure that the requirements of the Hazardous Chemical Substances Act of 1995 are complied with at all times.
24. Clarification

In the event that the Mandatory requires clarification of any of the terms or provisions of this agreement, he should contact the Public Health, Safety & Wellness Sub-Directorate of the Employer.

25. Duration of agreement

This agreement shall remain in force for the duration of the work to be performed by the Mandatory and/or, while any of the Mandatory's workmen would be present on the Employer's premises.

26. Headings

The headings as contained in this agreement are for reference purposes only and shall not be construed as having any interpretative value in them or as giving any indication as to the meaning of the contents of the paragraphs contained in this agreement.

Thus done and signed at on

For, and on behalf of the Employer

Date

For and on behalf of the Mandatory

Date

Witness

Date

ANNEXURE F

Construction Project Contractor H&S Plan / File Layout & Document Content

#	DESCRIPTION	REMARKS
1	Scope of Work	
2	H&S Specification	▪ Where Applicable
3	H&S Plan [Environment Management Plan]	
4	Notification to Department of Labour	▪ Where Applicable
5	Letter of Good Standing	
6	Organisational	▪ Organogram / Contact Details / Sub Contractor Contact Details Sheet
7	Appointments	▪ Management / Supervision / H&S Officer Sub-Contractor / Mobile Plant & Equipment Operators / Drivers / First Aid / Risk Assessor / Incident Investigator / Fire Fighters / Excavation Supervisor / Stacking & Storage Supervisor, Scaffold Supervisor, Scaffold Erector etc., etc.
8	CV, Training & Competency	▪ Management / Supervision / H&S Officer ▪ Sub-Contractor / Mobile Plant & Equipment Operators / Drivers / First Aid / Risk Assessor / Incident Investigator / Fire Fighters / Excavation Supervisor / Stacking & Storage Supervisor, Scaffold Supervisor, Scaffold Erector / Blasters etc., etc.
9	Medicals	▪ Mobile Plant & Equipment Operators / Drivers / Elevated Work / Confined Spaces
10	Method Statement [MS]	▪ All Work Activities
11	Risk Assessment [RA]	▪ All Work Activities
12	Incident Management & Emergency Response	▪ First Aid / IOD-Non Disabling / IOD Disabling / Fire / Evacuation
13	Inspection Registers	▪ Plant & Equipment
14	Daily Safety Task Instruction [DSTI]	▪ All Work Activities
15	Safe Work Procedures [SWP]	▪ All Work Activities
16	Work Instructions [WI]	▪ All Work Activities
17	Permits	▪ Safe Work & Excavations
18	Legal	▪ Section 37(2) / BCEA / OHSA / Annexure.1 / WCL.2
19	Auditing & Inspections	
20	Document Masters	

ANNEXURE G

DOCUMENT REVIEW PANEL:

NAME	SURNAME	DESIGNATION
		Director: Occupational Health, Safety & Wellness
		Doctor: Occupational Medical Practitioner & H&S Consultant
		Safety Employers agent
		Acting Chief Health & Safety Officer
		Health & Safety Officer
		Health & Safety Officer
		Health & Safety Officer
		Health & Safety Officer
		Health & Safety Officer
		Health & Safety Officer

PORTION 2:

PROJECT- AND SITE-SPECIFIC CONSTRUCTION HEALTH AND SAFETY SPECIFICATION (ADDENDUM)



**ISSUED IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
CONSTRUCTION REGULATIONS, 2014**

This Project- and Site-specific Construction Health and Safety Specification (Portion 2) is issued as an Addendum to the General Construction Health and Safety Specification (Portion 1) of the KOUGA MUNICIPALITY.

Together, Portion 1 and Portion 2, make up the Construction Project Health and Safety Specification, as contemplated in the Construction Regulation 5(1)(b).

Project- and Site-specific Requirements and Considerations Include:

Potential principal contractors shall demonstrate in their tender to the client that they have the necessary competencies and resources to carry out the work safely.

The bill of quantities includes a dedicated portion for occupational health and safety (OHS); to allow the potential principal contractor's to make adequate provision for the cost of OHS during the construction process (relating to statutory and contractual obligations).

The aforementioned aspects are deemed critical during tender adjudication.

The successful tenderer will be appointed as the principal contractor as contemplated in the CR 5(1)(k).

The principal contractor must be fully compliant with the provisions of the Construction Regulations, 2014 by the 07 August 2014.

The principal contractor shall keep records that demonstrate that he has carried out similar processes to the abovementioned; leading up to the appointment of any (sub-) contractors.

Evidence of the following competencies must be submitted at tender stage as returnables:

Applicable Legislation	Designation	Evidence of Competency
OHSA 16(1)	Chief Executive Officer	N/A
OHSA 16(2)	Contracts Director	CV & Certificates
CR 8(1)	Construction Manager	CV & Certificates
CR 8(2)	Construction Manager Assistant(s)	CV & Certificates
CR 8(5)	Part-time Construction OHS Officer	CV & Certificates
CR 8(7)	Construction Supervisor	CV & Certificates
CR 8(8)	Construction Supervisor Assistant(s)	CV & Certificates

Evidence of the following competencies must be submitted by the successful principal contractor when submitting the project- and site-specific OHS plan and file (OHS plan and file) for approval – at least 14 (fourteen) days prior to scheduled commencement of physical works on the site:

Applicable Legislation	Designation	Evidence of Competency
OHSA 16(1)	Chief Executive Officer	N/A
OHSA 16(2)	Contracts Director	CV & Certificates
CR 8(1)	Construction Manager	CV & Certificates
CR 8(2)	Construction Manager Assistant(s)	CV & Certificates
CR 8(5)	Part-time Construction OHS Officer	CV & Certificates
CR 8(7)	Construction Supervisor	CV & Certificates
CR 8(8)	Construction Supervisor Assistant(s)	CV & Certificates
CR 9(1)	Risk Assessor	CV & Certificates
CR 9(3)	Work Procedure Trainers	CV & Certificates
GAR 9(2)	Incident Investigator	CV & Certificates
CR 29 (l)	Emergency Coordinators	CV & Certificates
CR 13(1)	Excavation Work Supervisor	CV & Certificates
CR 12(1)	Temporary Works Designer(s)	CV & Certificates
CR 12(2)	Temporary Works Supervisor(s)	CV & Certificates
CR 10(1)(a)	Fall Protection Plan Developer / Supervisor(s)	CV & Certificates
CR 16(1)	Scaffold Supervisor	CV & Certificates
CR 16(1) & SANS 10085: 16.1(a)	Scaffold Erector	CV & Certificates
CR 16(1) & SANS 10085: 16.1(b) and 10.1.1.	Scaffold Team Leader	CV & Certificates
CR 16(1) & SANS 10085: 16.1(c)	Scaffold Inspector	CV & Certificates
CR 24(d)&(e) & EMR & EIR	Temporary Electrical Installations & Machinery Inspector	CV & Certificates
HCSR 3(3)	Hazardous Chemical Substances Supervisor	CV
GSR 9(1)(a)	Welding, Flame Cutting & Soldering Operator	Certificates

Please note that the items in the table above are only relevant and required to be submitted if the specific project's components require these items.

Once the principal contractor's construction OHS plan and file has been approved for implementation; ongoing OHS compliance monitoring and at least monthly audits of the principal contractor's performance will be carried out on the client's behalf.

The client is required to (and will) stop work which, in the opinion of the client-appointed OHS agent, poses a threat to the health and safety of persons.

The principal contractor will be responsible for the site as detailed in the tender / contract document. Access, egress and accommodation of own and other parties on site, including fire and emergency services / other local authorities, shall be managed by the principal contractor.

The Occupational Health and Safety Act and Regulations (Act No. 85 of 1993) [OHSA] forms part of this Construction Project Health and Safety Specification – any word or expression to which a meaning has been assigned in the OHSA shall have the meaning so assigned to it unless the context otherwise indicates.

1. Part-time Construction OHS Officer CR 8(5)

The successful principal contractor shall appoint a part-time Construction OHS Officer to the contract for its duration.

The candidate needs to have a competency profile that is at least equivalent to the following:

Education: Grade 12 (Matric) + 3 years further study (360 NQF credits in OHS).

Alternatively, Grade 12 (Matric) + all of the following accredited courses:

- Risk Assessment (RA) (SAQA U/S 120330)
- Incident Investigation (SAQA U/S 120335)
- SAMTRAC or equivalent (minimum SAQA U/S 244283)

Experience: 3 (five) years of relevant work experience in construction OHS practice.

Professional Registration: In the Construction Health and Safety Officer category, as contemplated in the Construction Regulations, 2014, Government Notice No. R. 85, Item 3, and, as to be demonstrated by contractors by the 07 August 2014.

2. Medical Examinations and Certificates of Fitness

It should be noted that all contractor's must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 to the Construction Regulations, 2014.

3. Practical Matters that Impact / May Impact upon OHS

The items mentioned below are indicative of the concerns to the client – with regards to the health and safety of contractor's employees, client's employees and those people who are not involved with this contract, but may be affected by the execution of the works – and include:

- 3.1. Working in confined spaces – The structure involves the construction of canals and will involve building in confined spaces of widths of 600mm or less.
- 3.2. Working with electrical equipment – The use of an angle grinder and other electrical equipment will be required in order to complete the work.
- 3.3. Lifting of heavy equipment – the proposed filters/valves/pipework will be required to be placed in position and connected to the existing pipework which may require heavy lifting.

APPENDIX B: PARTICULAR SPECIFICATION – BUILDING WORKS
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PARTICULAR SPECIFICATION: PC

BUILDING WORK

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SASS 42 Pentachlorophenol for Timber Preservation

SANS 62-1 Steel Pipes and Pipe Fittings up to 150 mm nominal bore

SANS 282 Bending Dimensions of Bars for Concrete Reinforcement

SANS 92 Bituminous Roofing Felt

SANS 151 Fixed Electric Water Storage Heaters

SANS 226 Water Taps (Metallic)

SANS 227 Burnt Clay Masonry Units

SANS 242 Stainless Steel Sinks with Draining Boards (for Domestic Use) SANS 248 Bituminous Damp-Proof Courses

SANS 266 Gypsum Plasterboard

SASS 281 Hardwood Block and Strip Floorings

SANS 297 Mastic Asphalt for Roofing

SASS 307 - 309 Bitumen Emulsion

SASS 312 Red Lead Base Primers for Structural Steel

SASS 460 Copper and Copper Alloy Tubing

SASS 471 Portland Cement (ordinary, rapid hardening and sulphate resisting) SANS 497 Glazed Ceramic Sanitaryware

SASS 509 Malleable Cast-Iron Pipe Fittings

SASS 515 Decorative Paint with a Non-Aqueous Solvent Base for Interior SASS 523 Lime for Use in Buildings

SASS 540 Wood fibre Building Board SANS 542 Concrete Roofing Tiles

SANS 543 Fire Hose Reels (with hose) SANS 545 Wooden Doors

SABS 546 Cast Iron Fittings for Fibre Cement Pressure Pipes

SANS 558 Cast Iron Surface Boxes and Manhole and Inspection Covers and Frames

SANS 559 Vitrified Clay Sewer Pipes and Fittings

SABS 563 Stress-graded Softwood: General Structural Timber

SASS 565 Pentachlorophenol-Zinc Naphthenate Timber Preservative

SANS 581 Semi-Flexible Vinyl Floor Tiles

SANS 622 Gypsum Cove Cornice

SASS 626 Portland Blast furnace Cement

SANS 629 Softwood Flooring Boards

SASS 631 Decorative Oil Gloss Paint for Interior and Exterior Use

SANS 632 Clay Roofing Tiles

SASS 633 Emulsion Paints for Interior Decorative Purposes SABS 634 Emulsion Paints for Exterior Use

SASS 653 Softwood Branding and Battens

SANS 675 Zinc-coated Fencing Wire (plain and barbed)

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SANS 678 Primers for Wood for Interior and Exterior Use SANS 680 Glazing Putty for Wood and Steel Sashes

SANS 681 Undercoats for Paints

SANS 682 Finishing Paint, Aluminium-type

SASS 683 Roof Paints

SASS 684 Structural Steel Paint

SANS 685 Fibre-Cement Sheets: Profiled and Flat SASS 723 Wash Primer (Metal Etch Primer)

SANS 727 Windows and Doors made from rolled mild steel sections

SANS 746 Cast-Iron pipes and pipe fittings for use above ground in drainage installations SANS 752 Float Valves: Part I and Part II

SASS 763 Hot-dip (Galvanised) Zinc Coatings other than on zinc-coated sheet and wire

SANS 786 Flexible Vinyl Flooring

SASS 801 Epoxy-tar Paints

SANS 802 Bituminous Aluminium Paint SANS 803 Fibre-Cement Boards

SANS 821 WC Flushing Cisterns

PA.1 USE OF LOCALLY MANUFACTURED MATERIALS

Materials and products manufactured in South Africa shall be used in carrying out the work to which this specification refers, unless an imported product is prescribed specifically, or when no suitable locally manufactured product for the specific use is available.

PA.2 APPLICATION OF CLAUSES

All clauses in this specification which describe the materials and methods to be used in carrying out the work specified in the specification of work to be done, or indicated on the drawings, or included in the bills of quantities, or in any detail drawings, or instructions issued by the Client Representative/Clerk of Works/Principal Agent to the Contractor during the progress of the work, shall be considered as applying to the performance of the contract

PA.3 SAMPLES

The Contractor shall furnish without delay, such samples and/or certificates as called for or may be called for by the Representative/Principal Agent. Materials and/or workmanship not corresponding with approved samples may be rejected.

PA.4 WATER

Clean, fresh water free from vegetable or organic matter, earth, clay, acid or alkaline substances either in suspension or in solution, other than those used for purification thereof by the responsible authority, shall be used through-out. Where there is any reason to suspect the presence of impurities, the Representative / Principal Agent may require the Contractor to obtain a chemical analysis of the water by a competent analyst at his own cost. Should the water prove unsuitable for use the Contractor must procure water fit for domestic consumption.

PA.5 STANDARD DETAIL DRAWINGS

All standard detail drawings applying to a particular service and referred to in this document, in the specification or in the bills of quantities, will be issued to the Contractor upon request, for the carrying out of the work.

PA.6 SCALES

The scale to which the drawings are prepared is only to be made use of when no figured dimensions are given, either on the drawings or in the specification. Figured dimensions are always to be followed though they may not coincide with the scale of the drawings

PA.7 UNITS OF MEASUREMENTS

Units of measurements have been standardised in accordance with "Système International d'Unités" (SI)

PA.8 INTERPRETATION OF DRAWINGS ETC.

Should any part of the drawings, specification or bills of quantities not be clearly intelligible to the Contractor or that the materials or articles to be used in the execution of the works be considered insufficiently described, the Representative/Agent shall be requested in writing, to make clear, also in writing, his requirements, failing which the Contractor shall be liable to make, at his own expense, any alterations or substitutions rendered necessary through incorrect interpretation of such drawings, specification or bills of quantities

PA.9 DETAILS

Upon receipt of detail drawings for any work the Contractor shall, before putting that work in hand, ascertain that the dimensions given on the Detail Drawings correspond with the dimensions of any work already built or to be built, which governs the sizes of the work for which the detail is given. In the event of the detail drawings not agreeing with the work already built, the drawings shall be at once returned for alterations as no claim for extra work will be entertained in this respect

PA.10 SOUTH AFRICAN NATIONAL STANDARDS

SAN 2 Glazed Ceramic Wall Tiles and Fittings

SANS 28 Metal Ties for Cavity Walls

SANS 38 Metallic Naphthenates for Timber Preservation

SASS 831 Portland Cement 15 (Ordinary and Rapid Hardening)

SANS 887 Varnish for Interior Use

SANS 903 Aluminium Alloy Corrugated and Troughed Sheets

SANS 906 Stainless Steel Wash Hand Basins and Wash Troughs SANS 907 Stainless Steel Sinks for Institutional Use

SASS 909 Red Oxide Zinc Chromate Primer for use on Steel Windows and Doors

SASS 912 Calcium Plumbate Primer

SANS 920 Steel Bars for Concrete Reinforcement

SASS 926 Two pack zinc-rich epoxy primer

SANS 929 Plywood and Composite Board

SASS 934 Hot-dip (Galvanised) Zinc Coatings on Steel Sheet and Strip

SANS 949 Strongroom Doors

SANS 952 Polyolefin film for damp-proofing and waterproofing in buildings

SANS 978 Wood Mosaic Flooring

SANS 1024 Welded Steel Fabric for Concrete Reinforcement

SANS 1039 Wooden Ceilings and Panelling Boards

SANS 1083 Aggregates from Natural Sources SANS 1090 Sand for Plaster and Mortar

SANS 1099 Hardwood Furniture Timber

SANS 1128 Fire Fighting Equipment'

SANS 1200 Standardized Specifications for Civil Employers agenting Construction

SANS 1223 Fibre-cement Pressure Pipes and Couplings

SANS 1227 Textured wall coatings, emulsion base, for interior and exterior use

SANS 1236 Silvered Glass Mirrors for General Use

SASS 1245 Stress-graded Softwood Employers agenting Timber. SANS 1263 Safety and security glazing materials for buildings SANS 1288 Preservative-Treated Timber

SASS 1300 Particle board: Exterior and Flooring Type

SASS 1301 Particle board: Interior Type

SASS 1359 Softwood timber for industrial use

SANS 1373 Chain-Link Fencing and its wire accessories

SANS 1381 Materials for thermal insulation of buildings

SANS 1388 Tributyltin Oxide-Lindane Timber Preservative

SANS 1460 Laminated Timber (Glulam)

SANS 1466 Portland fly ash cement

SANS 1491 Portland cement extenders

CODES OF PRACTICE:

SANS 03 The Protection of Buildings against Lightning SANS 05 Preservative Treatment of Timber

SANS 021 Waterproofing of Buildings

SASS 043 The laying of Wood Floors

SANS 064 Preparation of Steel Surfaces for coating

SANS 070 The laying of thermoplastic and similar types of flooring SANS 096 Manufacturing of Finger-Jointed Structural Timbers

SASS 0107 The fixing of Glazed Wall Tiles

SANS 0137 The installation of glazing materials in buildings

SANS 0155 Accuracy in building

SANS 0400 The application of the National Building Regulations

NATIONAL HOME BUILDERS REGISTRATION COUNCIL

NHBRC Home Building Manual - Parts 1 to 3

CKS SPECIFICATIONS:

CKS 208 Concrete Flooring Tiles

CKS 451 Specification for Anti-intruder Fences

STANDARD TEST METHODS:

SANS 5861 Sampling of freshly mixed concrete SANS 5862 Slump of freshly mixed concrete

SANS 5863 Compressive strength of concrete

(IN ALL CASES THE LATEST PUBLICATION OR REVISION SHALL APPLY.)

PA.11 ACCURACY IN BUILDING WORK

The method of measurement and accuracy of dimensions required for the setting out of structures and for completed building work shall be as described in SABS Code of Practice 0155, unless otherwise specified in this document.

PG. STEEL REINFORCEMENT

PG.1 STANDARD SPECIFICATION

All work involving steel reinforcement in reinforced concrete shall conform to the requirements of SABS 1200 G

PG.2 DEFINITION

Reinforcement shall mean all or any of the following: steel wire, round twisted or deformed steel bars and steel wire fabric mesh which are to be embedded in concrete for the purpose of assisting the concrete to resist forces which may be imposed on it or to prevent its cracking.

- (a) Reinforcing bars shall be of the grades specified on the drawings and in accordance with the "Standard Specification for Steel Bars for Concrete Reinforcement" SANS 920.
- (b) Steel wire fabric mesh shall be of the grade specified on the drawings and in accordance with SABS 1024

PG.3 STORAGE OF REINFORCEMENT

Further to the requirements of SABS 1200 G the Contractor shall stack separately and label different types of reinforcement for positive identification.

Care shall be taken in stacking the reinforcement to avoid bending or twisting the bars or cages at the bottom of the stack due to the weight of the steel in the upper part of the stack.

PG.4 REINFORCING STEEL

Mild steel reinforcement shall comply to SANS 920, Type A or B. High tensile steel shall comply with the requirements of SANS 920 Type C or D. Reinforcing bars shall be bent in accordance with SANS 282.

PG.5 WELDED STEEL FABRIC REINFORCEMENT

All welded steel fabric reinforcement shall comply with the requirements of SANS 1024.

The preferred dimensions are as follows:

*These mass values are based on the wires having mass of 0,00785kg/mm² per metre of length. The actual mass of the fabric should not differ from the nominal value by more than 6%

PG.6 RATES

Rates for all steel reinforcement to concrete shall be deemed to include cutting and waste, bending, hooked ends, binding at lappings and intersections with annealed wire all as above described, hoisting or lowering and maintaining in position whilst the concrete is being deposited and cover blocks and spacers in accordance with the relevant SABS Codes of Practice.

Rates of standard fabric reinforcement as included in Table 1 of SANS Specification 1024 shall be deemed to include 300 mm wide laps.

The mass of binding wire is not included in the mass of the reinforcement and the cost thereof shall be deemed to be included in the prices for the reinforcement

PI. GENERAL CONCRETE WORK

PI.1 GENERAL

All in situ concrete work (mass and reinforced) shall comply with SASS Specification 1200G. Where SASS Specification 1200G and the clauses in this section are in conflict the clauses in this section shall take precedence. Where the term "plain concrete" appears in SANS Specification 1200G it shall be read as "mass concrete"

PI.2 CEMENT

Cement shall be Portland cement complying with the requirements of SANS 50197-1/EN 197-1 strength class 32.5 or higher. Samples of cement from any one, or from every consignment, may be required by the Representative/Agent for test purposes. Cement in any consignment from which a sample may have been taken for testing shall not be used until it has been approved. Allowance must be made for possible delay in that tests may take 10 days to carry out. Bags of cement shall be stacked in a waterproof, solidly constructed shed with a central door and a floor rendered damp-proof with a tarpaulin. The bags of cement shall be closely

stacked (but not against walls) in order to reduce air circulation in such a manner that the cement is used in the order in which it was received.

Units shall be adequately protected during storage, handling, lifting and transporting to avoid any straining or damage to the units. Any units so strained or damaged shall be rejected and replaced at the Contractor's expense. Projecting reinforcement, bolts, etc. shall be protected so that they are maintained in their correct position.

All units shall be clearly marked with date of manufacture and identification marks so that the marking will not be visible on the final structure.

PI.3 SAND (FINE AGGREGATE)

The fine aggregate shall comply with the requirements of SANS Specification 1083. No aggregate may be used until it has been approved by the Representative/Agent.

If cast in-situ concrete is used, samples having a mass of 25 kg (16,51 litre) of the aggregate proposed to be used is to be submitted to an accredited laboratory for testing and the results forwarded to the Representative/Agent for approval. The cost for testing will be for the contractors' account.

PI.4 STONE (COARSE AGGREGATE):

The coarse aggregate shall comply with the requirements of SANS Specification 1083.

If cast in-situ concrete is to be used, samples having a mass of 25 kg (16,51 litre) of the aggregate proposed to be used is to be submitted to an accredited laboratory for testing and the results forwarded to the Representative/Agent for approval. The cost for testing will be for the Contractors' account.

NB: Certain fine grained sand and stone originating from the Beaufort Series and Karoo Systems which are known by reputation, local experience or tests, to exhibit excessive shrinkage when used in concrete, may be deemed unacceptable by the Representative/Agent.

A certificate of proof may be required from the Contractor that the aggregates are not alkali-reactive. The cost of testing and certification are to be borne by the Contractor.

PI.5 CONCRETE GENERAL

Concrete shall be of the classes given below: Class Application

- 15/19 MPa Foundations, apron slabs
- 20/19 MPa Floor, raft foundation, other

The strength given in the above table shall be the minimum required at 28 days. Maximum concrete slumps acceptable for different types of construction concrete are as follows:

- (a) Vibrated reinforced concrete = 50 mm
- (b) Unvibrated reinforced concrete = 75 mm
- (c) Mass concrete = 75 mm

When so required by the Representative/Agent, and whilst concreting is in progress, the consistency of the mixture shall be ascertained by means of the slump test as later described herein.

PI.6 VOLUME BATCHING

The coarse and fine aggregate shall be measured by volume and, unless otherwise directed, cement shall be measured by mass; the volume of a 50 kg bag of cement shall be taken as 33 litre. Suitable measuring boxes for the coarse and fine aggregates shall be provided to the approval of the Employers agent.

The proportions given above are approximate only, and should the Representative /Agent consider that the voids in the coarse aggregate require more or less matrix than is formed by the proportions specified, he may vary the quantities of coarse and fine aggregates to obtain the required density and workability of the concrete, provided that the proportion of cement to the total volume of the aggregate shall not be less than that specified.

When the sand is not completely dry, allowance must be made for bulking due to the moisture content. The amount of bulking shall be determined by the Contractor in the presence of the Representative/Agent. On no account shall the amount of water exceed 34 litres to every bag of cement used. This figure includes the water contained in the sand. Effective screens shall be provided to protect the mixing of concrete during windy weather.

PI.7 CAST IN-SITU CONCRETE

Any application to use cast in-situ concrete shall be submitted by the Contractor to the Representative/Agent.

The Contractor shall be responsible for the design of strength concrete and for the measurement of the constituent materials to produce concrete that complies with the specified requirements.

The apparatus and the method of determination of the slump of freshly mixed concrete shall comply with SANS 5862 and shall be taken for every truck or concrete batch supplied or mixed on site. The results of all slump tests shall be recorded and submitted to the Representative/Agent for approval.

PI.7.1 Trial Mixes.

The Contractor must ensure that samples of the constituent materials of the concrete, together with evidence that they comply with the provisions are supplied for approval in good time and provide the Employers agent with-

- i) a statement from an approved independent laboratory of the results of tests, or
- ii) an authoritative and acceptable report, or record of the previous use of, and experience with, the material concerned.

The cement, types of aggregate and their origins may not be changed throughout the duration of the contract without giving prior notification to the Employers agent who shall verify that the above requirements are complied with and that the important qualities of the concrete will not be impaired.

PI.7.2 Durability

For each grade of concrete the Employers agent will, notwithstanding strength considerations, specify the cement/water ratio appropriate to the exposure conditions indicated in Table 5, SASS Specification 1200G, Sub-clause 5.5.15.

PI.7.3 Consistency

Unless otherwise indicated by the general workability of the concrete, method of transportation, conditions of placement or otherwise specified by the Employers agent, the suggested slump values, for different mixes of concrete shall be as specified in Error! Reference source not found.

PI.7.4 Workability

Ensure that the concrete is of such workability that it can be readily compacted into the corners of the formwork and around reinforcement without segregation of the materials and without excessive "bleeding" of free water at the surface.

PI.8 EXPANSIVE ALKALI-AGGREGATE REACTION

The use of some local aggregates may lead to an expansive alkali-aggregate reaction if the concrete in the structure will be exposed to continual dampness, or will be subject to alternate wetting and drying.

Alkali reactive aggregates, i.e. certain granites, quartzites and Malmesbury homfels (shale), shall not be used in conjunction with high alkali cement for concrete in any part of the works. High alkali cement is one in which the equivalent alkali content exceeds 0,60% by mass of the cement.

If the Contractor chooses to use one of the aggregates stated above in lieu of stone as described in Clause PI.4 of this section he shall comply with the following requirements regarding the cement:

- (a) He shall ensure that no high alkali cement is delivered to the site. Any such high alkali cement shall be rejected and the cost of its removal and replacement with cement having an acceptable alkali content shall be borne by the Contractor.
- (b) Certificates stating the alkali content of each delivery of cement to the site shall be supplied by the Contractor. These certificates shall be based on tests carried out at a laboratory approved by the Employers agent. The cost of testing, including sampling, transporting of samples and issuing of certificates, shall be borne by the Contractor.
- (c) The Contractor shall be entitled to use an approved brand of cement as a means of ensuring that the permissible alkali content is not exceeded. The Contractor shall make allowance for the higher price of such approved brand, if he chooses to use this method.

PI.9 PUMPING OF CONCRETE:

The placing of concrete by pumping in any section of the works shall be subject to the written approval of the Employers agent. The Contractor shall furnish full details regarding the mix proportions of the concrete that he intends to place by pumping.

PI.10 ADMIXTURES TO CONCRETE:

The use of admixtures in concrete will only be considered should special circumstances warrant this and then only with the prior written approval of the Employers agent. The Contractor shall provide the following information:

- (a) The trade name of the mixture, its source and the Manufacturer's recommended method of use,
- (b) Typical dosage rates and possible detrimental effects of both under and over dosage;
- (c) The expected average air content of freshly mixed concrete containing an admixture which causes air to be entrained when used at the Manufacturer's recommended rate of dosage.

PI.11 SLUMP TEST:

i.e. first in first out.

Unless otherwise specified in the tender documents the use of ordinary Portland cement blended with ground granulated blast furnace slag complying with SABS Specification 1491, or ordinary Portland Cement blended with Pulverised Fly Ash complying with SABS Specification 1466 will be allowed in certain instances as an alternative, after acceptance of tender, but only with the approval of the Representative/Agent.

PI.12 CONCRETE TEST CUBES:

The apparatus for making and testing of concrete cubes shall comply with SABS STM 863.

PI.12.1 Sampling and making cubes

Sampling shall comply with SANS 5861.

One set of three cubes shall be required for every 10 cubic metres, or every floor cast in the case of floor slabs smaller than 50m².

The sample taken from a batch of concrete and sufficient to make three cubes shall be placed in a tray or on a platform and mixed thoroughly.

The moulds shall each be filled in three layers approximately 50 mm thick. Each layer shall be compacted with the tamping rod as previously specified, with at least 35 blows to give full compaction of the concrete.

After the top layer has been compacted, strike off the surface of the concrete with a trowel, level with the top of the mould.

Any small hollows shall be filled in with additional concrete. Cement/sand slurry shall not be worked into the surface. At this stage, the identity of each sample shall be placed on the moulded cube, by means of a label of absorbent material and not by scouring of the surface of the concrete.

Laboratory test results of cubes shall be submitted to the Employers agent for approval once available

PI.12.2 Curing cubes on site:

Cover the test cubes in their moulds with an impervious sheet or wet sacking and store indoors in a place that is free from vibration, excessive draughts, cold and direct sunlight.

After 24 hours the cubes shall be demoulded, remarked with a waterproof crayon or marker and placed in a curing tank for seven days before being transported to the laboratory.

PI.12.3 Testing Cubes

The testing of all concrete cubes will be done by an accredited laboratory in accordance with SASS STM 863.

PI.13 CONCRETE QUALITY:

Should the Contractor dispute any results obtained from concrete test cubes, the concrete represented by the cubes will be considered acceptable if the Contractor, at his own cost, proves to the satisfaction of the Employers agent that the estimated actual strength of cores taken from the structure (by an approved independent testing laboratory and determined in accordance with SASS STM 865) is not less than the specified strength.

If the concrete fails to meet the strength criteria stipulated, the Employers agent may at his sole discretion and in addition to the options listed in SASS Specification 1200G, accept the concrete subject to approved remedial measures being undertaken by the Contractor at his own cost

PI.14 CONCRETING:

It is essential that the foreman who has charge of the construction of all concrete work, whether reinforced or not, shall be skilled in this class of work and shall personally superintend the whole construction, paying special regard to:

- (a) the quality, testing and mixing of the materials.
- (b) the laying of the material in place and the thorough compaction of the concrete to ensure solidity and freedom from voids;
- (c) the construction and removal of formwork; and
- (d) the sizes and positions of the reinforcement.

Particular care shall be taken to work concrete against formwork and around reinforcement. Internal vibrators may be used with the approval of the Representative / Agent but external vibrators which act only on the formwork will not be permitted. Concrete to be reinforced shall be deposited in such quantities as will permit of it being properly compacted around the reinforcement.

The placing of concrete shall be completed within half-an-hour after mixing or within half-an-hour after agitating and within 2,5 hours after mixing in the case of ready mixed concrete. On no account shall concrete be incorporated into the work after it has attained its initial set.

Care shall be taken to prevent, as far as possible, the formation of laitance or scum.

Laitance is to be understood to mean the scum of strengthless and inert material which forms on the surface of concrete. Concrete must not be dropped into position from a height greater than 2,5m unless prior approval is obtained from the Employers agent.

If an inclined chute is used for transporting concrete, it shall be of such slope as will ensure a continuous flow of concrete without the use of an excessive quantity of water and without segregation of the aggregates. The chute must be flushed out and properly cleaned before and after each working period. All waste from flushing shall be discharged outside the formwork.

All concrete in quantities smaller than 10m³ which forms part of a structure's foundations or floor slab, shall be cast in one continuous operation unless instructed otherwise.

On resuming concreting, the old surface shall be roughened and all laitance thoroughly and carefully removed before any new concrete is deposited. This must be carried out by brushing the surface of the concrete while it is still green. Great care must be taken to avoid any weakness at the junction of old and new concrete, and the old surface shall be coated with a thin layer of cement and sand mortar, in the same proportions as that of the adjoining concrete.

While the concrete is setting it shall not be disturbed or shaken by traffic, either on the concrete itself or upon adjoining formwork.

No holes in concrete elements shall be patched or filled in without inspection, instruction and approval of the Representative/Agent.

No concreting shall be carried out when the air temperature is below 4 °C when it is rising and 8 °C when it is falling. Before concreting is commenced the Contractor shall give the Representative/Agent 24 hours' notice of his intention to do so. On sites further than 200 km from the Representative/Agent, 48 hours' notice must be given.

PI.15 FINISHED CONCRETE FLOOR LEVELS

Unless instructed or shown otherwise, all finished concrete floor levels in structures shall be at least 150mm above the surrounding ground level.

PI.16 CONSTRUCTION ON CONCRETE STRUCTURES

Any construction work imposing a load on a load bearing concrete structure shall only commence minimum 3 days after such concrete structure is cast on a mass concrete foundation and 7 days in the case of a reinforced foundation.

PI.17 CURING OF CONCRETE:

After the concrete has been placed, all exposed surfaces shall be kept continuously damp for at least 10 days by methods as may be approved by the Representative/Agent, such as covering with approved building paper, or by means of wet canvas, wet sacks, wet sand, by continuous hosing or ponding with water.

PI.18 CONCRETE LINTELS

PI.18.1 Cast In-Situ lintels

Concrete lintels cast in situ shall be of Class 25 concrete, reinforced with steel reinforcement & comply with SANS 10400-K & SANS 1504.

Each lintel shall be the full thickness of walls into which they are cast and 450 mm longer than width of openings.

PI.18.2 Pre-cast lintels

Pre-cast lintels shall be supplied from a reputable concrete panel manufacturing company. The concrete in pre-cast lintels shall be minimum Class 25 concrete & shall exhibit no cracks & shall be supported by the door or window frame when placed. Should a lintel crack after placement these shall be replaced at the Contractor's expense.

Only pre-cast lintels which are sawn to achieve the desired width shall be used. The minimum overlap over windows & door openings shall be 230mm.

Reinforcement shall comply with the following:

PI.19 MOVEMENT JOINTS:

All movement joints (if required) are to be filled in with approved bitumen impregnated softboard or expanded polyethylene strip unless otherwise specified or detailed on drawings. Form similar movement joints where pathways adjoin buildings externally.

PI.20 CUTTING, PUNCHING OR HACKING CONCRETE:

No reinforced concrete shall be cut or hacked without the approval of the Representative/Agent.

PI.21 POWER FLOATED FINISH:

Power floated finish to floors etc. means that surfaces shall be floated mechanically to a smooth and even finish before the concrete has set. Small areas inaccessible to the machine are to be floated by hand. Under no circumstances is cement mortar to be added while floating the concrete.

PJ. MASONRY (GENERAL)

(Including brickwork and stone masonry)

NB: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick.

PJ.1 MATERIALS

Lime shall be hydrated bedding mortar lime complying with the requirements of SANS Specification 523. Cement shall be as described in Clause 3.1.

Sand shall comply with the requirements of SANS Specification 1090, unless otherwise stated.

PJ.2 BURNT CLAY BRICKS:

Burnt clay bricks shall comply with the requirements of SANS Specification 227, and shall be equal in all respects to the selected samples.

Clay bricks for foundations shall be as described as above, but extra hard burnt.

Where bricks with holes are used the holes in such bricks must only be filled in solid with mortar where specifically specified.

All bricks that do not carry the SANS Mark, must be tested by the accredited laboratory.

PJ.3 FIREBRICKS:

Firebricks shall be of well burnt refractory fireclay, resistant to spalling and cracking and of same size as ordinary bricks.

PJ.4 WORKS MORTAR TESTS:

PJ.4.1 Sampling

The frequency of sampling will be decided by the Representative/Agent. Sufficient mortar shall be taken from each of the points of laying to prepare a composite sample to make a set of three mortar cubes

PJ.4.2 Moulding

Cube moulds with a nominal size of 100 mm that comply with SANS 5863 must be used.

Fill each mould with mortar in three equal layers and compact each layer by means of a tamper.

The tamper must be made of hard wood with a flat tamping surface with nominal dimensions of 50 x 25 mm and shaped to provide a round stem of approximately 25mm diameter and long enough to afford sufficient hand grip. Immerse the tamper in water for 15 minutes before use.

Each layer of mortar must be compacted by means of 8 evenly spaced pressing strokes of the tamper. After the final layer has been tamped the excess mortar must be struck off level with the top edges of the moulds.

PJ.4.3 Curing

Cover the test cubes (in their moulds) with an impervious sheet followed by wet matting, sacks or similar material, and store them in a place free from vibration, excessive draughts and direct sunlight.

After 24 hours mark each cube so that it can be identified. After 48 hours the cubes must be removed from their moulds and placed into water in a curing tank at 22° -25 °C for a minimum period of 7 days before they are transferred to the testing laboratory.

Ensure that loss of moisture is prevented during transportation and that they are well protected against damage.

PJ.4.4 Testing of Cubes

The testing of all mortar cubes will be done by an accredited by the Employers agent.

PJ.5 CEMENT MORTAR:

Cement mortar shall be composed of 6 parts (by volume) of sand and 1 part (by volume) of cement. The material shall be mixed dry until of uniform colour and then water added and the mixture turned over until the ingredients are thoroughly incorporated. Cement mortar shall be produced in such quantities as can be used before commencing to set as no cement mortar that has once commenced to set shall be used in any way.

Cement mortar shall be mixed on a surface free of contaminants and of batch size such that it is used within 2 hours of mixing.

Mortar not used within 2 hours must be discarded.

Care shall be taken in mixing cement mortar to remove from the mixing machine or platform any old mortar that has already set as such mortar may not be incorporated into any new batch.

PJ.6 COMPO MORTAR:

Compo mortar shall be composed of 6 parts (by volume) of sand -depending on the quality of the sand available, 1 part of lime and 1 part of cement (by volume). The lime and sand shall be mixed dry, then mixed wet, before the cement is added, approximately half an hour before using and the adding of the necessary additional water as required.

Compo mortar shall be produced in such quantities as can be used before commencing to set as no compo mortar that has once commenced to set shall be used in any way.

In all cases the mortar should achieve the minimum required strength (in MPa) for the classes of mortar as set out in the National Building Regulations.

PJ.7 BUILDING IN:

Ends of timbers, dowels, etc. shall be built-in in cement mortar.

Door and window frames, lift door frames and the like shall be set up in position for building in and securely strutted to prevent distortion whilst the brickwork, lintels, etc. are being built.

Wood slips, fixing bricks, hoop iron roof ties, etc. shall be built in as the work proceeds.

Voids in blockwork shall be filled with Class 15/19 MPa concrete flush to the edge of the door or window frame. Before placing the frame in position, a wet to dry epoxy adhesive for structural bonding (Sikadur-31 SBA or similar approved) shall be applied to the outside frame structure.

Unless otherwise described, composition mortar is to be composed of 12 parts sand to 2 parts lime and 1 part cement by volume, the cement added to the mixture in small batches, immediately before use.

PK. BLOCKWORK

PK.24 WATERPROOFING CODE OF PRACTICE

The Contractor will be required to construct the work measured under the Blockwork trade in accordance with the requirements of SANS 021-1973 "The Waterproofing of Buildings".

PK.25 CLEANING DOWN

Acid shall not be used to clean down concrete masonry walls.

PK.26 REMOVAL OF MORTAR DROPPINGS

Mortar droppings which fall on the wall ties in a cavity wall shall be removed and temporary openings shall be provided to permit the removal of the droppings from the bottom of the cavity.

PK.27 WEEP HOLES

Where required to drain away moisture and where detailed on the drawings, weep-holes shall be located in the first course above any damp proof course or bond beam, or the like, the holes being approximately 50 mm high and located in each end.

PK.28 DAMP-PROOF COURSES

The block course on which a damp-proof course is to be laid shall be flushed up with mortar to form an even bed free from projections liable to puncture or damage the damp-proof course.

Where a damp-proof membrane is extended over the full thickness of a hollow masonry wall not less than 150 mm thick, the membrane may be regularly pierced over the centre of each cavity in blocks forming the wall. The piercing shall not exceed 40 mm in diameter and the surface of the membrane adjacent to the piercing shall be depressed towards the piercing.

PK.29 BLOCKWORK OVER OPENINGS

All masonry built over openings shall be adequately supported for not less than 7 days.

Where hollow blocks are used the cores adjacent to the openings shall be filled with concrete (Class 20).

Sills of windows where there is not a clear overhang shall unless specified or indicated otherwise extend at least 15 mm past the finished wall face.

Lintels over openings shall bear on the full thickness of the wall with a bearing length, at each end, of at least 230 mm.

PK.30 BEARING PLATES ON BLOCKS

Bearing plates on blocks shall be bedded in mortar similar to that used for the masonry and shall be set level.

Control joints shall be provided at positions indicated on the drawing and shall be constructed as shown.

PK.32 PROTECTION AGAINST DAMAGE

Finished masonry shall be protected where necessary to avoid damage during the building operations.

PK.33 PROTECTION OF NEW WORK

In order that the hardening and strength development of the masonry will not be adversely affected, all new work shall be suitably protected from rain and against the possibility of the work drying out rapidly.

PK.34 BRACING DURING CONSTRUCTION

Masonry walls constructed in locations where they may be exposed to high winds during erection shall not be built higher than ten times their thickness unless adequately braced, or until provision is made for the prompt installation of permanent bracing at the floor or roof level immediately above the storey under construction.

Back-filling shall not be placed against foundation walls until they have been braced to withstand the horizontal pressure.

PL. BRICKWORK

PL.1 SAND

Sand shall be as obtained from an approved source and shall conform with the requirement of SANS 1090-1976.+

PL.2 LIME

All lime used shall be hydrated bedding mortar lime complying with the requirements of SANS specification for Building Lime 523.

PL.3 CEMENT

Cement is to be as described under "Concrete Work".

PL.4 LIME MORTAR

Unless otherwise described, lime mortar shall be composed of four parts sand to one part lime by volume and allowed to slake for at least ten days before use. The mortar shall be kept moist until required for use by covering with wet sacks or other approved means.

PL.5 CEMENT MORTAR

Unless otherwise described, cement mortar shall be composed of 6 parts sand to 1 part cement by volume mixed in small batches which can be reasonably used up within half an hour of mixing. No mortar is to be retained and subsequently re-used the following day by the mixing in of additional cement.

PL.6 BRICKS

Unless otherwise described, bricks are to be good, hard, sound, well burnt commons and shall comply with SANS 227. All soft or inferior bricks will be rejected and samples of all bricks are to be submitted to the Employer's agent and approved by him before the bricks are delivered on the site in bulk. Bricks for foundations to be selected for hardness.

Unless otherwise described, all brickwork is to be in header bond with galvanised wall ties in accordance with SANS 28 built in between skins and evenly spaced at a density of not less than 6 ties per m^2 of wall area. Bricks are to be well wetted before laying the next course. The brickwork is to have the joints flushed up at every course solid throughout the whole width of each course and to be laid on a solid bed of mortar. The joints of all walls to be plastered are to be raked out as the work proceeds to form key for plaster.

All walls to be raked out as the work proceeds to form key for plaster. All walls to be carried up regularly so that no part is built more than 1,2m higher than the adjoining walls.

Walls are to be true and plumb with all alternate perpendicular joints in the vertical alignment. Mortar joints generally are not to exceed 10 mm thickness.

Unless otherwise described, the skins of hollow walls are to be tied together with and including wall ties in accordance with SANS 28. Wall ties are to be 150 mm longer than the width of the cavity, staggered vertically and spaced not more than 1 m apart in every third course of brickwork. Prices are to include for keeping the cavities free of rubbish, mortar droppings, etc. Openings are to be left as required for this purpose and afterwards built up and made good.

No false headers shall be used and none but whole bricks employed, except where legitimately required to form bond.

Brickwork shall be built level and plumb with mortar as specified.

The bricks shall be laid on a solid bed of mortar and all joints thoroughly grouted up solid throughout the whole width of each course.

Clay bricks shall be well saturated with water, in the stack or dump, approximately 2 hours before being used. The tops of walls left unfinished shall be well wetted before work recommences.

NB; Cement or concrete bricks shall not be wetted. All rough and fair cutting, cutting of splay, skewbacks, chamfers, etc. shall be properly performed. Form or leave all necessary openings for pipes etc. and make good after pipes etc. are fixed in position

PL.7 BRICKWORK IN CEMENT MORTAR:

- a) All brickwork below damp course level, all isolated piers three bricks wide and under, half brick thick walls and chimney stacks above ceiling level, shall be built in cement mortar as described in PJ.5.

Brick arches and brick lintels shall be built in cement mortar as described in PJ.5, but in the proportion of 3:1.

PL.8 MORTAR JOINTS:

Mortar joints to brickwork generally shall be 10 mm in thickness with level bedding joints and vertical perpends. The joints in brickwork receiving plaster, tiling or similar finishes shall be raked out whilst the mortar is soft to form key for the plaster or mortar backing. The depth of the raking out will depend on the condition of the bricks; the rougher the bricks on face the shallower the raking out and the smoother the bricks the deeper the raking out.

The joints in brickwork shall be flushed off where walls are to be bagged, in readiness for the bagging

PL.9 GROUT IN JOINTS IN BRICK FOUNDATION WALLS:

All joints in brick foundation walls shall be grouted in solid with 3:1 liquid cement mortar to obviate any crevices for ant (termite) tracks.

PL.10 BRICKWORK REINFORCEMENT

Brick reinforcement shall be of hard drawn mild steel comprising two 2,8mm diameter main wires spaced 75 mm apart and 2,5mm diameter cross wires spaced at not exceeding 300mm apart, welded to main wires.

PL.11 BRICKWORK LINTELS

Brick lintels in 270 mm thick cavity walls shall be built with inner face of outer thickness, for a depth of three courses above soffit, covered with sheeting as for damp-course, the full length of lintels, and space between the two thicknesses for the depth of the sheeting filled in solid with Class 25 concrete. Where cavities continue above lintels, the sheeting shall be taken up and turned on to top of first course of brickwork to inner thickness of wall above the concrete filling in lintels. The sheeting is not required in lintels protected from the weather.

PL.12 BAGGED FINISH TO BRICKWORK:

Bagging to walls (if specified) is to be carried out after the mortar in joints has set. The wall surfaces shall be rubbed over with wet rough sacking until all joints and crevices are filled up and an even surface is obtained. Cement grout shall be added if necessary to fill up the joints and crevices.

PL.13 RAKING OUT FOR AND POINTING FLASHINGS:

Brick joints shall be raked out where required for fixing cover flashings and flashings, which shall be pointed in 3:1 cement mortar.

PL.14 BRICKWORK IN THICKNESSES:

Walls built in two or three half brick thicknesses shall only be built where bonded brickwork proves impractical or where required due to the prescribed bond of faced brickwork, all tied together with metal ties in accordance with SANS Specification 28, of the Butterfly or Modified PWD Types only, of sufficient length to allow not less than 75 mm of each end to be built into brickwork. Ties shall be evenly spaced at not more than 1 m apart to every third course and staggered

PL.15 BRICKWORK IN LININGS:

Brick linings to concrete shall be tied thereto with 4mm diameter galvanised crimped wire ties bent at ends and of necessary length to allow 75 mm to be cast into concrete and 75 mm of the other end to be built into brickwork and evenly spaced at not more than 1 m apart to every third course and staggered.

PL.16 HALF BRICK THICK WALLS:

Half brick thick walls shall be built in cement mortar as described in PJ.5, and built 100mm into main connecting walls. Brickwork shall be built level and plumb.

Cavity walls shall be built with two half brick thicknesses of brickwork in stretcher bond with 50 mm cavity between, and the two thicknesses tied together with 200 mm long metal wall ties evenly spaced at not less than the rate of 9 ties per m² of face area.

The ties shall comply with the requirements of SANS Specification 28 and be of the Butterfly or Modified PWD Type only.

The brickwork shall be built level and plumb with mortar as specified.

The cavities shall be carried up from 1 course of brickwork below damp course level up to two courses below roof plate level.

The brickwork above cavities shall be built solid and where 270 mm thick shall be cut and well bonded where possible.

The cavities shall be kept free of all rubbish, mortar droppings and projecting mortar.

The tops of walls shall be covered with planks or sacking during wet weather to prevent rain from entering the cavities.

Form weep-holes in outer skin of external cavity walls by leaving the perpendicular joints open, one every 1m apart in the second brick course below the damp-proof course.

The cavities shall not be ventilated.

At door, window and other openings the cavities shall be stopped 110 mm back from jambs of openings with the inner thickness of brickwork returned and stopped against the outer thickness and not bonded to same. A 100 mm wide strip of damp-proof sheeting shall be built into the joint formed between the return and the outer thickness.

Each damp-proof strip shall be lapped at least 50 mm on to the damp-proof course between the two wall thicknesses of sills and between the two wall thicknesses of lintels.

Sills of windows shall be divided into external and internal thicknesses with strips of damp-proof sheeting as above, built in line with the damp-proof sheeting in jambs and extending 100 mm beyond the jambs of openings.

Sills of windows where there is not a clear overhang shall unless specified or indicated otherwise extend at least 15 mm past the finished wall face.

The lintels shall be provided with damp-proof sheeting as described under lintels.

Cavities shall be stopped 1 course below and 1 course above and 110 mm from sides of openings for air bricks and the like.

PL.18 BEAM FILLING

Beam filling shall be half brick thick, built up in mortar as used in the walls below, cut in between roof timbers and carried hard up to underside of roof covering and flushed up with mortar.

PL.19 BAGGING

Bagging down brickwork and exposed faces of concrete occurring in brick walls, is to include for filling all joints, crevices and any defects with 3:1 sand and cement mortar and then rubbing over with wet rough sacking or brushes soaked in liquid 5:1 sand and cement grout.

PL.20 BRICK REINFORCING FABRIC

Unless otherwise described, brickwork reinforcement is to be of approved SA manufactured welded high-tensile steel wire reinforcing fabric of the widths stated, cut to lengths and lapped full width at angles and passings. Rates are to include for building into brick walls.

PL.21 HOOP IRON CRAMPS

Cramps to wood frames to be 2 mm galvanised hoop iron 30 mm wide and 230 mm girth with one end twice screwed to frame and other end built into brickwork in cement mortar and turned up into brick joint, or shot-bolted to concrete as necessary.

PL.22 HOOP IRON ROOF TIES

Ties to roof trusses to be 1,6 mm galvanised hoop iron 30 mm wide and 300 mm girth with one end wrapped around and spiked to roof timbers and other end built into head of brick wall in cement mortar or embedded into concrete beam or slab.

PL.23 WATERPROOFING - CODE OF PRACTICE

The Contractor will be required to construct the work measured under the Brickwork trade in accordance with the requirements of SANS 021-1973 "The Water Proofing of Buildings".

PL.24 FACE BRICKWORK

Facing bricks generally to be best quality sound facing bricks, size approximately 222 x 106 x 73 mm thick rising four courses to 340 mm, even in size, shape and colour and equal to samples to be submitted to and approved by the Employers agent before the signing of the Contract.

Special care must be taken to preserve arises and faces of these bricks during transit and handling. Any facing bricks

brought on to the site that are not in accordance with the samples will be rejected by the Employers agent, the delivery and removal of which will be solely at the Contractor's expense.

The face bricks are not to be used by the load, but are to be used from several stockpiles to ensure a uniform and even colour mixture. The joints are to be pointed as described while the work proceeds.

All cutting to facings is to be done with a carborundum or other approved saw. Where cutting in faced work is required, it shall be done over three or more bricks in order to maintain the flow of the brickwork.

All face brickwork is to be protected from damage during the progress of the work to the entire satisfaction of the Employers agent, and cleaned down at completion, care being taken not to damage finished surfaces. No oiling will be allowed on any face brickwork.

PL.25 CLEANING OFF

Great care is to be taken to keep face brickwork, quarry tiles, etc. free from mortar as the work proceeds and at completion they are to be cleaned down with spirits of salts and water.

PM. WATERPROOFING

PM.1 GENERAL

Where applicable, damp proofing and waterproofing shall comply in all respects with SABS 021 Code of Practice, "The Waterproofing of Buildings".

PM.2 DAMP-PROOFING TO WALLS

Unless otherwise described bituminous sheet damp-proof courses are to comply with SANS Specification 952 Type B sheeting, 0,38mm thick (375 microns), lapped 150mm at angles and passings, including cranking up as necessary and all cutting and waste.

Unless otherwise described u-PVC plastic sheet damp-proof courses are to be of rippled S.A. manufactured approved plastic sheeting complying with SANS 952 Type B, lapped 150 mm at angles and passings including cranking up as necessary and all cutting and waste.

PM.3 DAMP-PROOFING TO FLOORS, ETC

Unless otherwise described damp-proofing to floors, etc. is to consist of S.A. manufactured approved plastic sheeting complying with SANS 952 Type B, in wide widths, laid with minimum 300 mm laps at all edges and laps sealed with pressure sensitive tape, all in strict accordance with the manufacturer's instructions.

Prices for all damp proof membranes are to include for all laps and all cutting and waste.

PM.4 INSTALLATION

Where so required all laps in the damp-proof course shall be sealed over the whole area of laps as recommended by the Manufacturer. Care shall be taken not to tear or otherwise damage the sheeting.

Similar damp-proof course, but in unbroken lengths, shall be laid behind all window sills, sealed with an approved bituminous solution to the back of the sills and taken down within the thickness of the wall and under the first full course of external brickwork.

No damp-proof course shall be laid directly below the mortar or other bedding material under sills.

PM.5 DAMP-PROOF MEMBRANE :

The damp-proof membrane under surface beds shall, unless otherwise specified, be of green polyethylene sheeting complying with SANS Specification 952 Type C - plain surface -- 0,25mm thick (250 microns) and manufactured in widths of 1000mm and greater, all laid in the widest practical widths to minimise joints, turned up to the top of the level of the proposed floor slab level and dressed to abut bearing walls and, if applicable, lapped with the damp-proof course in the walls. All joints shall be sealed with pressure sensitive tape applied over the leading edge of the joint.

All cutting of plastic membranes shall be carried out using sharp instruments.

damp proof membrane under a raft foundation shall be pegged in the excavated corners of the concrete thickening before the foundation is cast. Once the entire slab is cast may the pegs be removed.

Should the damp proof membrane be punctured, damaged or holes formed, the damaged section must be repaired or replaced before the floor slab is cast.

PT. PLASTERING & SCREEDING

PT.1 CEMENT, LIME AND SAND

Cement to be described under "Concrete Work" & comply with SANS 50197-1/EN 197-1 or SANS 50413-1/EN 413-
Lime (if specified) to be as described under "Brickwork" and to be slaked and run at least four weeks before being used.
Sand to be described under "Brickwork" & comply with SANS 1090

PT.2 PREPARATION OF PLASTER

Cement plaster shall comprise a mixture of cement and sand with or without the additional of lime and shall:

- 1) In its fresh state be workable and cohesive and have water retention properties, and
- 2) In its hardened state be durable, have sufficient strength to hold paint, withstand local impact and abrasions, be free of unsightly cracking and adhere to substrates.

Cement plaster shall be mixed on a surface free of contaminants and of batch size such that it is used within 2 hours of mixing. Plaster not used within 2 hours must be discarded.

Surface preparation (blockwork):

Ensure surface is free from oil, dirt or any substance which may affect the bond. Roughen surfaces where necessary by hacking and clean with a wire brush. Check surface for water suction prior to plastering and where necessary apply a properly bonding agent or a splatter dash layer of 1 part cement to 1 % parts sand. If the surface is excessively absorbent, wet the surface before applying plaster.

Ensure the surface to be plastered does not deviate from the required plane. By more than 10mm. remove high areas by hacking or cutting and fill low areas with an undercoat plaster layer, scored to ensure a bond with the top layer.

Plastering:

Plaster shall be applied in one operation. Joints in plasterwork may only occur at changes in direction. Plaster to be firmly trowelled onto walls, allowed to stiffen and struck off with a striker board and wood floated to an even surface. Plaster shall be returned into reveals and soffits of openings with all angles true and straight. Form a V-joint in the plaster across the line of the damp-proof course. Protect surface against drying out and dampen with a spray for 3 days.

PT.3 PROPORTIONS OF CONSTITUENT PARTS OF PLASTER, RENDERING, ETC

The mixes stated are proportions by volume. Water is to be accurately measured for each mix to the Employer's agent's approval.

PT.4 LIME PLASTER FOR WALLS

Unless otherwise described, lime plaster for one coat work is to be in the proportion of 4 parts sand to 1 part lime (4:1). For two coat work the rendering coat is to be in the same proportion and the setting coat is to be white lime putty. The plaster of paris is not to be added to the mixture until immediately before the setting coat is to be applied and then to be thoroughly incorporated in the mixture.

PT.5 CEMENT PLASTER

Unless otherwise described, cement plaster to walls is to be in the proportion of 6 parts sand to 1 part cement for (5:1) internal work and 4 parts sand to 1 part cement for external work (4:1). Cement plaster to concrete ceilings, beams, etc. is to be in the proportions of 4 parts sand to 1 part cement (4:1).

Cement plaster mixed in the following mix proportions shall be deemed to satisfy the above mentioned requirements.

Common cements (CEM 132, 5 & 42, 4):

External Plaster:

50kg common cement (1 Bag) - 150 l (maximum) loose sand (2 std (651) wheelbarrows).

Internal Plaster:

50kg common cement (1 Bag) - 200 l (maximum) loose sand (3 std (651) wheelbarrows).

PT.6 PREPARATION FOR PLASTERING GENERALLY

Joints in brickwork are to be raked out and the surface cleaned and wetted to receive plaster or tiling. Prices for plastering or tiling on concrete are to include for hacking if necessary to form key, brushing with a wire brush thoroughly wetting and

PT.7 PREPARATION FOR PLASTER TO RECEIVE MOSAIC TILING

Joints in brickwork are to be raked out and all concrete surfaces are to be roughened by chipping at approximately 150mm centres in both directions. All surfaces are to be thoroughly cleaned of all foreign and loose material, including grease, etc. and slushed with a wet mixture of Portland cement and a well graded clean sharp river sand in the proportion of one part cement to two parts sand (2:1), thrown on vigorously, left rough and allowed to harden before receiving the plaster coat. The section of brick and concrete surfaces are to be adequately adjusted by properly wetting the surfaces of a minimum of two days before application of the slush

PT.8 PLASTERING GENERALLY

Brickwork walls shall be well wetted before plastering is commenced.

The surfaces of plastered walls internally shall be steel trowelled to a smooth even and true finish. All external plaster shall be finished to a true and even surface with a wood float. All plaster surfaces shall be free from any blemishes.

All cracks, blisters and other defects shall be cut out, made good and the whole perfect at completion. Plastering is to be avoided in hot and/or windy weather.

Plaster on walls shall be not less than 10mm nor more than 16mm thick unless otherwise described.

Unless otherwise described, all external plaster to be finished with a wooden float and internal plaster to be finished with a steel trowel, to a smooth, straight and even surface, free from tool marks and other blemishes, and any cracks, blisters and other defects are to be cut out and made good and the whole left perfect at completion.

Rates are to include for forming plain internal angles and internal angles of ceilings covered to not more than 25mm radius, working around nibs, rafter feet etc. and into corrugations of iron or asbestos-cement sheeting where applicable.

All mouldings, weathering's, etc. are to run to detail and prices are to include for dubbing out, forming templates, runners, etc. plastering on faces of flush concrete columns and beams in brick walls has been measured as "on vertical surfaces".

PT.9 CONCRETE FLOORS

PT.9.1 Code of practice

The Contractor will be required to execute the work described under this heading in accordance with the requirements of SABS 0109-1969 "Floor Finishes on Concrete".

PT.9.2 Preparation of surfaces

Concrete surfaces to receive floor renderings are to be chipped if required, thoroughly cleaned with a wire brush, well soaked with water and to have a coating of neat cement grout applied immediately before the rendering coat is applied.

PT.9.3 Cement screeds (Floor coverings only)

Concrete sub-floors finished with wood mosaic, semi-flexible tiles and fully flexible vinyl sheeting and tiles and similar finishes shall be screeded with 3:1 cement plaster of thickness required, but in no case less than 12 mm, all steel trowelled to true and smooth surfaces. The sand used in the plaster shall be of such fineness as will allow for the screed being trowelled to a surface suitable to receive the finishes.

The screeding shall be laid before the concrete sub-floors have matured, otherwise the exposed surfaces of the concrete shall be thoroughly cleaned with a wire brush and a coat of neat cement grout applied immediately before the screeding is laid.

The screeding shall be laid in good time, but no finishes are to be laid if the screed exceeds 70% moisture content when measured with a hygrometer.

No traffic shall pass over nor shall any building operations take place on the screeding unless a proper protective covering is first provided.

PT.9.4 Cement rendering

Rendering unless otherwise described is to be composed of 3 parts coarse river sand and to 1 part cement (3:1) brought up to a smooth hard steel trowelled surface by repeated trowellings as required.

PT.9.5 Granolithic

Granolithic finish to floors, treads of steps, thresholds and similar horizontal surfaces (if required) shall be not less than 25mm thick, composed of 2 parts granite, or other approved hard stone chippings, or approved hard coarse sharp washed granitic or quartzitic river sand, graded up to a maximum size of

5 mm, 1/3 part clean pit sand screened through a 2.4mm mesh sieve and 1 part of cement, and hand or mechanically steel trowelled to a true and smooth surface.

The material must test between 30 and 35 MPa. No dry cement powder or grout shall be applied to the surface. The

granolithic shall be laid before the concrete subfloor has matured otherwise the exposed surface of the concrete shall be thoroughly cleaned with a wire brush and a coat of neat cement grout applied immediately before the granolithic is laid.

The granolithic shall be laid in panels not exceeding 20m² in area and joined to lines of panels with V-joints as directed. The length of any panel shall not exceed 4,5m and wherever possible the joints between the panels shall coincide with any joints in the concrete sub-floor.

Exposed salient angles of granolithic shall be neatly rounded to approximately 20mm radius.

All granolithic work shall be carried out by experienced workmen and shall be protected from injury caused by rain or other extremes of weather for 12 hours after being laid, and against drying out too rapidly whilst hardening by covering with wet sacks or other suitable material and shall be protected from other injury and discoloration during the progress of the remaining work.

Edges of granolithic floors adjoining other floor finishes, edges of margins, etc. shall be true and sharp, all protected by fixing temporary wood strips which shall remain in position until laying of the adjoining flooring material is commenced.

PT.9.6 Non-slip granolithic

Granolithic where so described, is to be treated with carborundum chips evenly distributed and rubbed into the upper surface before granolithic has set. The carborundum must be saturated with water and applied at the rate of 1,4kg/m², well rolled in or worked in with a steel trowel, all in strict accordance with the manufacturer's instructions and to the approval of the Employers agent.

PT.9.7 Hardened granolithic

Granolithic where so described, is to be hardened by the addition of an approved hardening compound mixed into granolithic in the proportion of 10,5kg per sack of cement, and in addition, dusted on with equal proportions of cement and well trowelled in (approximately 2kg of compound per square metre of surface), all in strict accordance with the manufacturer's instructions.

PT.9.8 Generally

All granolithic work and rendering shall be done by experienced workmen, and properly protected and cured, final trowelling to be executed after the bleeding of water ceases and the finish has started to stiffen.

The work is to be laid in panels not exceeding 6 m² in area and finished with small V-joints or as described in these Bills of Quantities.

In no circumstances will the sprinkling on of dry cement, or a dry mixture of cement and sand be permitted.

Where rendering or granolithic is described as tinted, the requisite quantity of approved colouring materials is to be mixed with the cement. No dusting on of colouring material will be allowed. In no case should over 10 per cent of pigment be added to the cement.

Rates are to include for dressing to falls where required, for forming neat sunk V-joints to panels, protecting from injury cleaning down, and where tinted for finished with a coat of approved wax polish or stoep reviver well rubbed in at completion.

NOTE:

Mitres, etc.

Except where mitres, etc. are separately measured the prices for all slightly rounded angles, coves, V-joints, fair edges, skirting's, etc. are to include for all mirrors, stops, etc.

Defects

All cracks, crazes, blows, blisters and other defects in plaster, granolithic etc. are to be made good to the Employers agent's approval.

PV. PLUMBING AND DRAINLAYING

PV.1 REGISTERED PLUMBERS AND DRAINLAYERS:

Only qualified plumbers and drainlayers shall be employed on any plumbing and drainage work.

PV.2 DIAMETERS

All dimensions of pipes are internal diameters unless otherwise described.

PV.3 REGULATIONS

All drainage, sanitary and general plumbing work is to be executed in accordance with the Drainage and Plumbing Regulations of the appropriate Local Authorities and to the approval of the Employers agent, and shall be tested throughout in accordance with the requirements of the Regulations and Employers agent's instructions.

Excavations generally:

Excavations shall be deemed to be in "earth", unless otherwise described.

Excavations for drainage trenches etc.:

Excavations for drainage trenches, gullies, chambers, trench drains, etc. shall be of depths and gradients shown on drawings or as directed. Trenches shall be excavated to straight lines and shall be of sufficient width to allow adequate working space. Sight rails, boning rods, etc. shall be employed in excavating the trenches to ensure even gradients.

The minimum cover for drain pipes not termed as vertical shall be 400mm.

Any soft or loose areas in the trenches shall be filled in with well rammed earth, or other approved filling. Uneven bottoms in rock cutting shall be made good with 19mm stone or other approved bedding material.

Any excavations taken out too deep shall be made up with well compacted earth approved bedding material at the Contractor's expense.

Properly perform all planking and strutting to sides of trenches and excavations as may be required.

The excavations and trenches shall be kept free from water and other liquids, by pumping or other approved methods.

PV.5 MEASUREMENT OF ROCK EXCAVATIONS IN DRAIN TRENCHES:

Where trenches for drainage pipes are included in the descriptions of the pipe or group of pipes and are excavated in hard rock, in measuring the volume of "extra over" based on excavations in earth, the following shall apply: Trenches not exceeding 1 m deep shall be taken of such width as to provide a clearance of 300 mm on each side of the pipe or group of pipes.

PV.6 BEDDING MATERIAL

Bedding material shall be clean sand complying to SANS 1200 LB & free from any stones or vegetation.

PV.7 BACKFILLING TO DRAIN TRENCHES:

Approved bedding material shall be carefully placed around the pipes to a height of 300mm above top of pipes, watered and lightly compacted on either side and filled in above this level with similar filling, watered and well rammed in layers not exceeding 300mm in depth and thoroughly consolidated to finished ground level.

Backfilling to sides of gullies, chambers, etc. as required shall be as above.

If the material from the excavations is found to be unsuitable as backfilling for drainage trenches and inspection chambers, etc. written approval must first be obtained from the Representative/Agent to use imported fill.

PV.8 SURPLUS EXCAVATED MATERIAL:

All surplus earth and other materials arising from the drainage work shall be deposited and levelled on the site or carted away as directed by the Representative/Agent.

PV.9 PIPELAYING

Drain pipes shall be laid at line and level as indicated on the drawings. Where levels are not provided, drain pipes are to be laid at a maximum slope of 1:10 and minimum slope of 1:40 to the municipal connection point (unless specified otherwise). Should this not be possible, the Contractor shall notify the Employer's agent immediately.

PV.10 DRAIN PIPES

Drain pipes & fittings are to be u-PVC Class 400 kPa complying to SANS 791 and installed in accordance With SASS 0112-1971 Code of Practice for "The Installation of Polyethylene and Unplasticised UPVC Pipes.

u-PVC waste and vent pipes and fittings are to be u-PVC in accordance with SANS 967 and are to be jointed with solvent welded joints.

PV.11 RODDING (CLEANING) EYES

Rodding eyes shall be provided to drains in the positions indicated on the drawings each formed by inserting junction in the drain, or bend at end of drain, and bringing a branch up to ground level with bends where required, the vertical pipe being of same diameter as the drain, and fitting on top of pipe to be 50mm above ground level with approved u-PVC access branch and cover. The cover shall be set in tallow and secured with non-ferrous metal screws and the branch shall be jointed to socket of u-PVC pipe with jointing as described for drain pipes.

The vertical bends and pipes shall be bedded in approved bedding material from bottom of trench up to ground level. A 300 x 300 x 150mm thick concrete surround reinforced with brick force in the centre shall be cast around the rodding eye (see detail PV.11).

PV.12 GULLIES

Gullies shall be provided to drains where indicated on drawings, each formed with 110mm diameter u-PVC gully trap with gully head carried up to not less than 40mm above finished ground level and provided with 50mm diameter vertical and/or side inlets as required (& complying to SANS 791). Fit head with 150mm diameter u-PVC gully grating, laid loose in the socket. The trap, vertical pipe and head shall be bedded on and encased in Class 15/19 MPa concrete, not less than 100mm thick at any part, and finished where exposed with cement mortar, trowelled smooth, flush with top of gully head and splayed on edges. The top of Gullies must be placed below the floor level.

PV.13 DISHED GULLIES

Dished gullies shall be provided to drains where indicated on drawings, each formed with trap and head, with or without inlets as required and fitted with u-PVC grating, all as described in Clause PR.10 but with head carried up to the height required.

The trap, vertical pipe and head shall be encased in concrete as described in Clause PR.10, but with a dished hopper, size 750 x 525mm overall, formed around gully head with Class 15/19 concrete having 50mm wide rounded kerb to front and sides and 25mm wide kerb at back, all 40mm high above top of dishing, and finished on exposed surfaces with cement mortar. Top of kerb shall be not less than 40 mm above finished ground level.

PV.14 UNIVERSAL TRAPS

Universal traps shall comply to SANS 1321 part 1 & shall be provided to drains where indicated on drawings, each formed with u-PVC trap with the same diameter as drain pipes, jointed together and to drain pipes as described for drains.

The trap shall be bedded on and encased in Class 15/19 MPa concrete, not less than 100 mm thick at any part, and finished where exposed with cement mortar, trowelled smooth, flush with top of vertical shaft and splayed on edges.

PV.15 RAINWATER GOODS

u-PVC gutters and downpipes shall comply with SANS 11 "Unplasticised polyvinyl chloride components for external rainwater systems".

PV.16 CONCRETE PIPES FOR STORMWATER

Concrete pipes for stormwater drainage are to be reinforced spun non-pressure S.C. type and Class B unless otherwise described in accordance with SANS 677. The piping may have self-centering spigot and socket joints or be in plain lengths with loose collars, and jointed all in accordance with SABS 058, Code of Practice for Sewer and Drain Jointing.

All joints are to be wiped clean inside.

PV.17 JUNCTION BOXES

At intersections of concrete stormwater drains, junction boxes are to be formed with chamber of sufficient size to take ends of pipes described and formed of cement concrete (Class 15/19) bottom and sides not less than 150mm thick worked around ends of pipes and having a 75mm thick loose precast concrete cover with at least 75mm bearing all round.

PV.18 STAINLESS STEEL PIPES

Stainless steel water piping up to 50mm diameter is to be of 304 grade stainless steel to B.S.4127. Compression pipe fittings are to be of stainless steel in accordance with BSS 864.

PV.19 GALVANISED MILD STEEL PIPES

Mild steel piping to be in accordance with BSS 1387 galvanised inside and outside of medium class, unless otherwise described, with screwed and socketed joints. The joints made with red lead and hemp to cold water piping and with graphite and hemp to hot water piping and all cut ends properly reamed out to remove burrs.

Fittings to pipes to be galvanised malleable cast iron fittings in accordance with SABS Specification 509.

PV.20 COPPER PIPES

Copper piping to be in accordance with SANS 460 Class 2 for fixing to walls, soffits, etc. and SABS 460 Class 3 for piping buried under ground. Pipes are to be bent in a proper tube bending machine. Compression pipe fittings are to be brass and of the expanded tube and cone type and coupling nuts and rotary sleeve pieces and of approved manufacture. Tenderers to submit specification.

PV.21 UPVC WASTE AND VENT PIPES

u-PVC waste and vent pipes and fittings are to be of unplasticised u-PVC in accordance with SABS 967 and are to be jointed with solvent welded joints.

PV.22 FIXING OF PIPES

Galvanised pipes to be fixed to brickwork or concrete are to be done with approved galvanised malleable iron or u- PVC holderbats fastened with set screws and with spike cut and pinned or built in (3:1) cement mortar, and to roof and other timbers with stout galvanised iron saddle pipe clips screwed on.

Copper or polycop pipes are to be fixed to brickwork or concrete with bronze holderbats fastened with brass set screws and with spike cut and pinned or built in (3:1) cement mortar, and to roof and other timbers with stout copper clips, brass screwed on.

u-PVC Pipes are to be fixed with approved u-PVC pipe clips spaced at not exceeding 1,25m centres to vertical piping and not exceeding 0.75 m centres to horizontal piping.

PV.23 STOP COCKS, BIB COCKS ETC

Unless otherwise described, stop cocks, bib cocks, pillar cocks, etc. are to be brass screw down type of approved manufacture in accordance with SANS 226 and are to be jointed to polycop pipe with either Maksal welded type or "Cobra Conex" or similar approved fittings.

PV.24 TAPS

Unless otherwise described, taps are to be de-zincification resistant (DZR) brass to comply with SANS 226.

PV.25 WATER CLOSETS

Water closets shall be ceramic coated to SANS 497. Cisterns are to have a minimum 91 litre capacity and must be Duranite or hard white u-PVC to comply with SANS 821.

Cisterns must have a 15mm dia inlet float valve complying to SANS 752 with a stilling pipe. The cistern must have a 20mm overflow draining to the outside of the structure with.

The water flow to the cistern shall be controlled by an inline stopcock to be installed below the cistern on the inside of the building structure.

PV.26 SINKS

Sinks to be stainless steel to comply to SANS 242 and with size as specified. Sinks are to be securely fitted complete with coverstrips and sealed between the wall and sink with an approved sealant (white marine silicone or similar approved).

PV.27 BALL VALVES

Ball Valves shall comply with the requirements of SANS 752.

PV.28 SANITARY FITTINGS

All sanitary fittings to be approved by the Employers agent before fixing. The Employers agent will instruct that all sanitary fittings are to be properly pasted and covered with paper until the building is ready for handing over. The Contractor will under no circumstances whatsoever be allowed the use of various fittings and no fittings are to be finally connected up until the whole of the sanitary system is in position when the jointed up will be authorised.

PV.29 DESCRIPTIONS AND PREAMBLES

The Contractor is referred to the previous trade headings for preambles and full descriptions of materials and items not described in this trade.

Descriptions (prices) of connections of new to existing pipes shall be deemed to include searching for the existing pipe and exposing if necessary.

PX. PAINTING

All paints, oil stains, varnish, linseed oil, knotting driers, distempers, etc. are to be in accordance with the latest SANS Specification where applicable or of the quality, type and brand and manufacture specified and/or approved by the Employers agent. All materials for paint work must be brought on to the site in unopened tins or drums. Unless specifically instructed by the directions or sanctioned by the Employers agent, no paints are to be thinned or otherwise adulterated, but are to be used as supplied by manufacturers and direct from tins. Mixing of different coloured paints to obtain special tints may only be done with the sanction of the Employers agent.

Where special brands of paints are to be used, the manufacturer's "priming" and all subsequent coats of paint suitable for that particular brand are to be employed, all in accordance with manufacturer's instructions. Wherever possible all paints used in this contract are to be manufactured by a member of the SA Paint Manufacturers Association.

In all cases Test Standards are to be set up under the supervision of the Manufacturer's Representative and such standard of finish maintained throughout the relative work to the full satisfaction of the Employers agent. Where for any reason the Test Standard required cannot be achieved, information concerning this should be sought from the Manufacturer's Representative for requisite action.

All colours and tints used throughout the work are to be selected and/or approved by the Employers agent before painting

of any description is commenced. Each coat of paint is to be a distinctive colour.

PX.1 PREPARATORY WORK

PX.1.1 General

All plaster, metal, wood or other surfaces which are to receive finishes of paint, lacquer, stain, oil distemper, lime wash or paint work of any other description are to be carefully cleaned, dusted off and inspected by the Contractor, or his principal painter, who must satisfy himself that such surfaces are in a fit state to take the paint work specified, before he allows any of his painters to commence the work. The Contractor, will be held solely responsible for all defective work condemned as a result of the Painter's failure to insist on receiving from the other trades, surfaces in the proper condition to allow first class finishes of the various kinds specified being applied to them.

Areas not being painted (face brick, floors etc.) shall be covered and protected against spotting before any painting is carried out.

Prior to commencing paint work of any description and before each coat is applied, surfaces are to be thoroughly dry and are to be rubbed down.

PX.1.2 On plaster, bagging, etc.

All plaster work, etc. to be painted must be thoroughly brushed down to remove all traces of efflorescence, filled where necessary with suitable stopping or patching plaster and left perfectly dry and smooth

PX.1.3 On metal

All metal to be painted shall be scraped and cleaned of all dust, rust and other surface incrustations shall be removed and surfaces left smooth. Also all oil and grease shall be removed and perfectly clean surface obtained.

PX.1.4 Exterior timber (New Timber)

Woodwork being painted shall be well brushed down and shaded in the direction of the grain.

Woodwork being oiled or stained shall have all plaster stains, pencil marks and other surface discolorations/blemishes carefully removed, be stopped with tinted stopping and well rubbed down.

PX.2 MATERIALS AND APPLICATION

PX.2.1 Paints

All materials for paintwork brought on site shall comply with the relevant SANS specifications.

Materials for paintwork for which no SANS Specification have been published must first be approved by the Representative/Agent.

All materials for paintwork must be brought on to the site in unopened containers and no adulteration will be allowed. Primers and undercoats for paintwork shall be as supplied by the Manufacturer of the paint being used for the finishing coat.

Paint etc. shall be suitable for application on the surfaces on which they are to be applied and those used externally shall be of exterior quality.

If necessary, paints etc. shall be strained free from skins and similar impurities immediately before application.

The various primers, undercoats and paints shall comply with the requirements of the specifications quoted hereunder and shall be of the type or grade stated, viz:

(a) Primers;

(i) For wood:

SANS Specification 678. Type I shall be used on exterior woodwork and Type II on interior woodwork.

(ii) For metal:

DIP OR SPRAY APPLICATION (RED OXIDE ZINC CHROMATE):

For steel windows, doors, door frames and other articles normally dip or spray primed in the Manufacturer's works: SABS Specification 909.

BRUSH APPLICATION (ZINC PHOSPE):

For all metal surfaces primed on site and then painted: SABS Specification 1319.

(iii) For plaster:

Alkali resistant primer shall be as described in SANS Specification 681 [see (b) "Undercoats" hereunder].

(b) Undercoats:

For all surfaces under HIGH GLOSS, OIL GLOSS, FLAT and EGGSHELL finishing paints; SANS Specification 681, Type II.

(c) Finishing paints:

- (i) High gloss enamel paint: SANS Specification 630. (ii) Oil gloss: SABS Specification 631.
- (ii) Flat and eggshell: SANS Specification 515.
- (iii) Emulsion paint (interior): SABS Specification 633, Grade I.
- (iv) Emulsion paint (exterior): SANS Specification 1586 Grade 2 (Plascon Micatex or Dulux Weatherguard or similar approved (see "e" below).
- (v) Aluminium paint: SANS Specification 682, Grade II.
- (vi) Roof paint: Alkaline type SASS Specification 683, Type B.

(d) Emulsion base wall coating:

Finish on walls shall be an Emulsion Base Coating complying with SANS Specification 1586 grade 2 and of colour and texture to the approval of the Representative/Agent.

The finish shall be applied in three coats and the texture of the base and second coats shall be compatible with the texture of the finishing coat.

The material (all three coats) shall be applied by an applicator approved by the Manufacturer of the coating being used (or his agent) and shall be mixed and applied in strict accordance with the Manufacturer's instructions.

Before proceeding with the application of the coating the Contractor shall furnish the Representative Agent with a certificate from the South African Bureau of Standards stating that the material being used complies with SASS Specification 1586 and he shall also furnish proof that the applicator has been approved by the Manufacturer of the coating being used.

The Contractor is to arrange for a trial panel of not less than 1 m² to be done and approved by the Representative/Agent before proceeding with the application.

Varnish/sealer (To doors/doorframes/windows):

(i) SANS 887, Type I (not for use externally).

(ii) Exterior varnish/clear sealer:

Exterior quality varnish/sealer shall be suede finish and clear when dry.

The material shall be a waterbased acrylic product, non-toxic, non-inflamable and offer protection against ultra-violet rays. In addition, it shall also contain algaecides, fungicides and bactericides and be resistant to damage by termites and wood boring insects whilst retaining great flexibility.

Once cured, the material shall be highly resistant to staining by petrol, diesel fuel, oil, hot fat, wine, carbon black grease, chemicals and other substances; it shall not deteriorate, dissolve or wash out.

(g) Rust neutralising paint:

Rust neutralising paint shall be of water based type containing suitable chemicals for converting rust to iron phosphate.

The paint shall be capable of being used successfully as a finishing coat or as a primer under epoxy paints, vinyl, chlorinated rubbers, laquers and coal tars. It shall be suitable for painting on steelwork prior to welding and shall not cause the failure of such welds due to flaking and migration of the paint into the weld area. In addition, the paint shall be suitable for application on wet surfaces without permitting rust creep and/or underrusting of the metal surface.

Preparation of rusted metal surfaces shall be limited to no more than wire brushing of such surfaces using power tools.

NB: This material shall be covered by a guarantee, underwritten by a recognised insurance company, as Public Liability Insurance to an amount of R500 000 should the product fail due to material or manufacturing defects.

PX2.2 On plaster, bagging, etc.

Unless otherwise described, paint is to be carried into all recesses, reveals, sills, soffits,

Etc. and around all breaks, projections, etc. occurring within the height specified to be painted.

PX2.3 Line wash

To be a prepared lime wash powder of South African manufacture mixed with water in accordance with the manufacturer's instructions, or a pre-mixed liquid brand approved by the Employers agent.

PX2.4 Colour Wash

Is to be as last and tinted with yellow ochre to bring to a light cream colour.

PX2.5 Distemper

Prepare as previously prescribed and twice distemper where specified with powder distemper in accordance with SABS 322 and

PX.2.6 Emulsion paints, internally

Prepare as previously described and one preparatory coat of an approved filler/sealer mixed with the finishing paint in the proportion recommended by the manufacturer and two coats emulsion paint for interior use in accordance with SANS 633 (Grade 1) applied in strict accordance with the manufacturer's instructions.

PX.2.7 Emulsion paints, externally

Prepare as previously described and three coats emulsion paint for exterior use in accordance with SANS 634 (Grade 1) (synthetic polymer base type) applied in strict accordance with the manufacturer's instructions.

PX.2.8 Gloss, flat or eggshell oil paints and high gloss enamel paints

Prepare as previously described, seal with one coat of alkali resisting primer and two undercoats in accordance with SANS 681 (Type 2) and one finishing coat of approved gloss, flat or eggshell oil paint or high gloss enamel paint in accordance with the relative SABS specification, applied in strict accordance with the manufacturer's instructions.

PX.2.9 On metalwork

Prepare as previously described, prime with zinc chromate primer in accordance with SABS 679 (Type 1) followed by the number of undercoats and finishing coats later described.

Galvanised iron and aluminium surfaces are to be pre-treated with a wash primer (Metal etc. primer) in accordance with SABS 723 followed by a second primer, and the number of undercoats and finishing coats later described.

Decorative high gloss enamel paint for interior and exterior use is to be in accordance with SANS 630 (Type 1).

PX.2.10 On woodwork

Priming to wood surfaces to be executed with primers in accordance with SANS 678 (Type 1) for exterior work and (Type 3) for interior work, alternatively an approved varnish thinned with turpentine (60%/40%).

For external use the wood surface is to be sanded down in the direction of the grain and painted two coats approved exterior preservative or as specified in accordance with the Manufacturer's instructions.

PX.3 GENERALLY

PX.3.1 Making good

All damaged paint work is to be touched up or redone. All painter spots, stains, etc. are to be removed from the floors, walls, doors, windows, etc. and the whole left perfect.

PX.3.2 Mixing paints

The Contractor will not be permitted under any circumstances to prepare or mix paints or similar materials on floors where the finishings are laid complete, and such rooms must not be used as workshops for any trades whatsoever. This clause will be strictly enforced and any damage done in neglect of this precaution will have to be borne by the Contractor to the extent of completely relaying the floor finish where damaged in any rooms or room.

Merely cleaning up will not be acceptable.

PZ. GENERAL RECTIFICATION WORK

PZ.1 PREAMBLE

This project specification covers rectification of low cost housing units up to 50m² in size.

For larger units

PZ.2 DEMOLISH AND RE-CONSTRUCT UNIT

In a case where an existing structure must be demolished, contractor must first isolate and protect all services, before demolishing the superstructure (water, electricity, sewer lines, erf beacons and sewer manholes). The Contractor needs to price for the disconnection and relocation of the electrical ready-board from the existing unit to the temporary shelter as an interim and thereafter to reinstate in the new unit once complete (unless specified otherwise).

Reconnection to the existing sewer house connection and the reconnect to the water meter is the responsibility of the main contractor.

PZ.3 WARRANTS FOR DEMOLISHING OF AN EXISTING HOUSE

A housing unit will be demolished when:

- (a) There are serious structural defects that have occurred, or
- (b) a unit is 18sqm or smaller in size, including temporary relocation and furniture movement and storage. The contractor to provide a method statement to the Principle Agent before construction commences.

PZ.4 MAINTENANCE OF EXISTING SERVICES

Special care shall be exercised during the progress of the work to ensure that any electrical installations, water supply pipes, telephone and other services which may be encountered are not interfered with and notice shall be given to the Principal Agent if any disconnection or alterations become necessary. Rate to include disconnection and connection fees.

Materials described as "removed" shall be removed from the erf immediately to an approved Municipal waste. No stockpiling will be allowed on site.

PZ.5 SETTING OUT

Setting out of the new units must be completed before the Principal agent is called for verification. At this stage the Contractor has to confirm the position of existing services and the depth thereof to ensure that the new unit is placed on the appropriate position on site to accommodate all existing services. Once approved the Contractor may commence with the excavation of the foundations as per the specifications.

PZ.6 CONSTRUCTION OF NEW HOUSING UNITS

A new housing unit will comply with the size and details as per the drawings & specifications. The construction must include the reconnection of sewer and water connections. An allowance has been made in the Bill of Quantities for this.

Specification PA to PY will apply to all new housing units to be constructed.

PZ.7 RECTIFICATION OF AN EXISTING UNIT

Where a unit is to be rectified and not demolished the Contractor first must confirm with the Principal Agent and the Beneficiary on what work will be done on the unit in question.

This will then be signed off by all parties before work can commence. No more work will be allowed than the allowable quantum as agreed with the Client before commencing.

PZ.8 PROVISION OF TEMPORARY HOUSING

The contractor is to provide a basic housing structure for the identified beneficiary group, provided with minimum a 30m² waterproof top structure with a water and sewer connection.

PZ.9 SITE PREPARATION

Refer to Specification PE.

PZ.10 MATERIALS

All materials and construction methods used, to be in accordance with NHBRC & SANS standards.

PZ.11 SAMPLES OF ALL MATERIALS

The Contractor is to provide samples & data sheets of the following materials, before commencement of any construction to the Employers agent for approval:

- 1) Door frames,
- 2) Window frames,
- 3) Doors,
- 4) Door locks,
- 5) Hinges,
- 6) bathroom kits,
- 7) Paint & varnishes,
- 8) Cupboards and sink,
- 9) Sealants (silicone, carbolinium, etc.),
- 10) Ceiling,
- 11) Under-tile membrane,
- 12) Ceiling insulation or similar approved, and
- 13) Samples & laboratory results of sand and stone to be used.

PZ.12 FOUNDATIONS

Refer to Specification PI.

PZ.13 REINFORCING
Refer to Specification PG.

PZ.14 BLOCK WORK
Refer to Specification PK.

Any work done inside a house with furniture must be done with the uttermost care.
Internal walls to be fixed securely to external walls with suitable bonding straps every 2 courses. All tie-in of internal block work with external block work must be in accordance with the NHBRC manuals/standards.

PZ.15 EXTERNAL BEAM FILLING
Refer to Specification PL.18.

PZ.16 STEPS (IF REQUIRED)
All Steps to be 1,0m wide and constructed with M6 blocks, existing granular fill to be compacted inside the block and each riser to have a 50mm concrete wood floated step constructed to be flush with the top of the block. The concrete footing to be 100 deep x 400mm wide along the perimeter of the steps for all steps up to 3 blocks high. The concrete footing to be 150 deep x 400mm wide along the perimeter of the steps for all steps greater than 3 blocks high.

PZ.17 MORTAR
Refer to Specification PJ.5.

PZ.18 BLOCK FORCE
Refer to Specification PL.10.

PZ.19 NEW EXTERNAL DOOR FRAMES AND DOORS
Refer to Specification PO.

PZ.20 NEW INTERNAL MERANTI DOOR FRAMES AND DOOR
Refer to Specification PO.
Fit frame into existing M4 block work where no frames exists. Block force to be used where required.

PZ.21 NEW MERANTI WINDOWS FRAME
Refer to Specification PO.

PZ.22 PREPARATION OF EXIST. WOODEN WINDOW FRAME
Prepare existing window frame by sanding down, Apply x2 coats of new approved type mat varnish to suite existing colour.

PZ.23 CONCRETE WORKS
Refer to Specification PI.

It is the contractor's responsibility to make sure that test cubes are taken on site for every batch of concrete. Concrete can only be placed once the excavations have been inspected and approved by the Employer's agent's Representative/Agent. No concrete work can be carried out without the Employer's agent's Representative/Agent being present.
No concrete is allowed to be placed after 16h00 or on Saturdays or Sundays.

Aprons:

Only 15Mpa ready mixed concrete shall be used for construction of aprons. Casting of concrete shall be carried out in one continuous operation.

Aprons to be cast in panels not exceeding 3.0m (for slab thicknesses up to 75mm) unless specified otherwise. Filling to consist of 100mm compacted selected fill under concrete to 90% Mod AASHTO density.

Finish to concrete to be wood float with broom finish as per detail PK.2. Apron to slope away from building with minimum 1% fall.

PZ.24 REPAIR/REPLACEMENT OF ROOF STRUCTURE
Replacing timber trusses/purlins:
The Employer's agent's Representative shall inspect the timber trusses for defects and establish which timber trusses to be replaced.

The tolerance for repair/replacement for timber trusses from a structural point of view is as follows:

- 1) Where maximum slenderness ratio < 180 for compression members that carry loads due to live and dead loads. For members that resist loads caused by winds the slenderness ratio shall be < 250 ,
- 2) Plumb of trusses shall not exceed 100mm or total span/20 whichever is the least. Other reasons for replacement will include but not be limited to the following:
 - 1) Deflections exceeding acceptable limits,
 - 2) Inadequacy in design e.g. structural strength, instability, load conditions,
 - 3) Decay of large portions of truss members (defective member),
 - 4) Worn out screw holes in purlins,
 - 5) Inappropriate spacing of purlins,
 - 6) Large portions of truss members having numerous defects (cracked timber, corroded connector nail plates etc. that will be uneconomical to repair.

Repair of timber trusses/purlins:

Repair work shall include the following:

Strengthening of truss members, connections, splices and anchorage at supports,
Strengthening of truss members due to unforeseen loads, rotting and cutting for services.

Repair of truss members where large knots and wanes occur.
Securing of purlins to rafters at each intersection,

Staggering of purlin splices,

Replacing metal plate connectors in cases of corrosion, unsymmetrically fitted connector plates, connector plates with teeth flattened or where a connector plate has less than 65mm "bite" on a truss member.

Replacement of decayed timber, particularly at rafter ends at roof overhangs and at roofing screws.

Timber subject to insect attack and fungal decay should be treated with an appropriate preservative,

Replacing cracked timber members

All exposed roof timbers, incl. the last two battens, shall be painted with two coats carbolineum, before erecting. Roof tie wires must be placed min 400mm into block work, with one wire visible on the in/outside of the wall for inspections. A continuous 38x50mm SAP to be used for a wall plate, in order to do beam filling with 90mm blocks. The undertile membrane must be fitted as per plan and wrapped around the end battens on gable ends. The first two rows of roof tiles all around the building must be nailed down with alloy type threaded nails or hurricane clips.

PZ.25 CEILING

Refer to Specification PP.5

PZ.26 REPAIR TO PLASTERING

PZ.27 REPAIR TO EXISTING PLASTERED WALLS

The procedure for the repair to existing plastered walls is as follows:

PZ.27.1 Slight cracking

Very slight cracking, cracks up to 10mm wide are too repaired as follows:

- 1) Rake and clean out crack and fill with a suitable flexible filler, prime, plaster and paint exterior walls, or masonry paint over face brick (Beton seal),

PZ.27.2 Moderate cracking

Moderate cracks between 2,0mm and 4,0mm wide are too repaired as follows:

- 1) Remove plaster over an area of some 250mm to 300mm wide either side of crack,
- 2) Rack and clean out crack and inject with suitable epoxy filler,
- 3) Fix galvanised chicken wire to existing brick face over the stripped area,
- 4) Prime, plaster and paint exterior walls, or masonry paint over face brick (beton seal).

PZ.27.3 Severe cracking

- 1) Remove plaster over an area of some 600mm to 600mm wide either side of crack,
- 2) Rake and clean out crack of all friable plaster,

- 3) Use angle grinder and cut slot in the brick course to accept a 3mm galvanised steel wire boped at each end. The slot is to be cut a minimum depth of 40mm into the brickwork, extending a minimum of 500mm beyond the crack either side, repeated at an interval of 150mm along the length of the crack.
- 4) Secure boped ends of the galvanised wire into the sound brickwork by means of wall plugs or Hilti nail over a minimum depth of 50mm into the sound brickwork,
- 5) Inject the crack with suitable epoxy filler and fill cut slot containing a galvanized rod with epoxy,
- 6) Prime, plaster and paint exterior walls or masonry paint over face brick (beton seal).

Construction joints must be created on floor level. Construction joint must be provided on houses, between the front door and window, situated next to the door at soffit level (just below the lintel). Continuous lintels must be provided over the front door and window opening, situated next to the door.

All construction joints must be provided internally between internal and external walls while plaster is still workable.

PZ.28 PLUMBING

Taps over sinks and baths

Supply and fit the following to the new system (refer to drawing): PVC Wall mounted basin

Brass bibtap fixed to above sink and connected to water supply with 15mm galvanised stub through the 140mm external wall connected to the 15mm polycop water supply.

External brass tap with standard concrete gulley connected to sewer pipe

White porcelain toilet pan. Plastic cistern connected to water supply and fitted with a cut-off inline valve. Taps over sinks and baths must be placed off-centre, to allow for future hot water taps. All polycop pipes must be connected underground with brass fittings.

Drainage

Refer to Specification PV.11 for rodding eyes. All rodding eyes to be placed in concrete level with the finish ground levels surrounding.

Refer to Specification PV.10 for the installation of drainage pipes. Refer to Specification PV.12 & PV.13 for the installation of gullies.

No underground sewer pipe to be above the apron. Stub stack to be followed by 2 x 45 degree bends underground. Vent pipe to be fitted to the wall with 2 holder-bat brackets.

Vent pipe not to proceed around the roof tiles.

Drainage Inspectors need to be informed two working days in advance for inspections of drainage prior to backfilling of trenches.

Sewer Erf Connection

The procedure for the connection/re-connection of sewer lines is as follows:

1. Fit sewer connection from house to main sewer reticulation network.
2. Connect to existing 160mm pipe.
3. All junctions, bends and rodding eyes to be provided as per the drawings and specifications provided. Refer to Specification PV.6 for excavation & bedding details of drainage pipes.

House connection points at the existing external toilets must be opened to ensure that sufficient fall can be maintained at all times. The connection point level is to be confirmed with the Employer's agent's Representative/Agent before the final floor level is determined during the preparations for the raft foundations.

Water Erf Connection

Fit water connection from house supply to main water reticulation network. Re-connect to existing water meter.

Fill material to trenches to consist of fine material and no stones, rocks or boulders are allowed. To be excavated in all materials.

Water Meter

The water meter is already installed on each erf. If an erf is not fitted with a meter the responsibility is with the Contractor to inform the Principal Agent immediately in writing before commencing with the water connection.

PZ.29 FINISHES

Refer to specification PX for painting.

PZ.30 REPAINTING

PZ.30.1 Exterior timber (New Timber)

Existing woodwork shall, if the paint film is firm and sound, be washed down, have all cracks, crevices and holes scraped out,

primed, made good with hard stopping, faced up and rubbed down to an even surface ready to receive the new paint. If the old paint film has blistered or broken down, the old paint must be completely removed back to the bare surface by the use of a blow lamp or paint remover and the woodwork prepared as above.

Care must be taken when burning off old paint not to "char" or otherwise damage the woodwork. All paint removers used must be free from soda or other caustic substances.

PZ30.2 On metalwork:

All metal surfaces being painted, except for structural steelwork, shall be cleaned of all rust, scale and dirt, removed by scraping or with steel wire brushes. All oil and grease shall also be removed and a perfectly clean surface obtained. If necessary, the surface shall be degreased, immediately before application of the priming coat, by the use of a suitable solvent. Any salt deposits on the metal surfaces, as may occur in industrial and marine atmospheres, shall be removed by means of a suitable detergent and the surfaces thoroughly rinsed and allowed to dry.

New galvanised metal surfaces, which are to be painted, shall be cleaned down as above and given 1 coat of self-etching wash primer complying with the requirements of SANS Specification 1319.

Protective coatings on new galvanised metal surfaces, applied by the Manufacturer to prevent storage stain and white rust, shall be completely removed by the use of a suitable cleaning agent and the surfaces thoroughly rinsed and allowed to dry before the surfaces are primed.

Existing painted metal surfaces being redecorated shall be thoroughly rubbed and cleaned down before repainting, but if the paint film has blistered or broken down, the paint shall be completely removed down to the bare metal.

After removing rust from metalwork those portions so affected shall be treated with an approved rust inhibitor or rust neutralising paint.

PZ30.3 On plaster:

All plastered walls, ceilings and such like surfaces being painted shall be filled, where necessary, with suitable stopping or patching plaster and the whole rubbed down ready to receive the finishing's.

Existing plastered surfaces previously painted and being redecorated shall be washed down, filled as above, where necessary, spot primed and rubbed down ready to receive the new paint. Apply a bonding agent before applying the first coat.

Existing plastered surfaces previously distempered and being redecorated shall have the old distemper completely removed by wetting and scraping the surfaces, filled as above, where necessary, and rubbed down ready to receive the new finish. Apply a bonding agent before applying the first coat.

Existing plastered surfaces previously lime washed and being redecorated shall be wire brushed to remove loose, flaking or powdered lime wash, filled as above where necessary, and left ready for new lime wash. If a finish other than lime wash is to be applied, the old lime wash must be completely removed, the surfaces washed down, filled, where necessary, and left in a fit state to receive the new finish. Apply a bonding agent before applying the first coat.

Paint

Paint to all walls shall be one coat approved plaster primer and two top coats. All imperfections, holes, etc. shall be filled and sanded down with approved crack filler and repainted with plaster primer before the application of the final coats.

Plascon Micatex or Dulux Weatherguard or similar approved paint shall be used as two top coats on external walls. The Contractor shall first submit material data sheets for approval by the Employers agent before other paint that that specified above may be used.

PZ.30.4 On ceilings boards

Ceiling boards, including cover strips and cornices, being painted shall be filled where necessary with suitable stopping. All nail heads in ceilings, cover strips and cornices being painted shall be primed with flat paint.

Existing ceilings being redecorated shall be prepared for new finish as described in Clause PU.1.

PZ.31 NUMBERING OF HOUSES

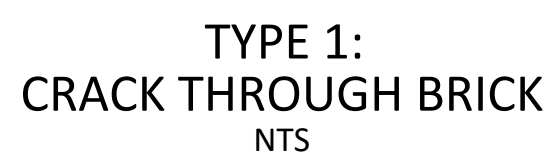
Each unit to be correctly numbered as per the General Plan erf numbers.

Number to be black and constructed with a suitable waterproof product. Constructed with a stencil not larger than 200mm. To be placed either left or right of the front door.

PZ.32 BATH AND KITCHEN CUPBOARD

Baths and kitchen cupboards to be cut into plastering during installation and bedded properly to ensure the stiffness of the bath and kitchen cupboard. On completion, the edges of the bath must be sealed with white marine silicone where it meets plastering. All front faces of the baths, where built in, must be plastered and painted.

APPENDIX C: TENDER DRAWINGS



REFERENCE DRAWINGS		REVISIONS			DESIGNED BY	ZB	CONSULTANT  D2 ENGINEERS CIVIL + STRUCTURAL + PROJECT MANAGEMENT SUITE 3 - LYNDON 114 PARK DRIVE CENTRAL, PE, 6001 TEL +27 41 585 0020 © COPYRIGHT RESERVED FOR D2 ENGINEERS DATE	PROJECT	CLIENT	PROJECT	PROJECT NUMBER	DATE	DRAWING SIZE
DWG No.	DESCRIPTION	No.	DESCRIPTION	DATE	CHECKED BY	LR		PROJECT KOUGA MUNICIPALITY ICT BUILDING CONSTRUCTION OF THE SLAB REMEDIAL AND ANCILLARY WORKS	CLIENT  KOUGA local municipality Good Governance Through Service Excellence 33 DA GAMA ROAD JEFFREYS BAY 6330 FOR CLIENT DATE	P029	DECEMBER 2018	A1	
G01	GENERAL NOTES	A	FOR TENDER PURPOSES	2018-12-09				TITLE		CLIENT DRAWING No.	-		
									D2 ENGINEERS DRAWING No.	P029-RM-01			
									SCALE	AS SHOWN	REVISION	A	
					CHECKED BY	LR							