1al nl PARKS & TOURISM AGENCY

BID NO: 16/FY/24

CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

Closing Date & Time	:	31 OCTOBER 2023					
A Tender for Category	:	CIDB 5 GB Only CIDB Registered Contractors					
Name of Tenderer	:						
Compulsory Briefing	:	11 October 2023 @ 12h00, at Commando Drift Nature Reserve					
GPS Co-ordinates	:	S 32,11628 E 026, 04515					
Total Bid Price	:						
CSD Number	:						
CIDB CRS Number	:						

BID NO: 16/FY/24- CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

TABLE OF CONTENTS

Description		Colour	Page
<u>1: TENDER</u>			
SUMMARY FOR	R TENDER OPENING PURPOSES	Yellow	iv
THE TENDER		White	T1.0
PART T1 TEND	ERING PROCEDURES	White	T1.1
T1.1 Ter	nder Notice and Invitation to Tender	White	T1.1.1
	nder Data ard Conditions of Tender	Pink Pink	T1.2.1- T1.2.18 T1.3.1 – T1.3.12
2: RETURNA	BLE DOCUMENTS		
RETURNABLE	DOCUMENT CHECK LIST	Yellow	v
PART T2 RE	TURNABLE DOCUMENTS	Yellow	T2.1
T2.1 For	ms, Certificates and Schedules required for Evaluation		
Of	Tender Responsiveness	Yellow	T2.2
T2.1.1	Tender Briefing / Site Inspection Attendance Certificate	Yellow	T2.3
T2.1.2	Certificate of Authority for Signatory	Yellow	T2.4 - T2.6
T2.1.3	Registration Certificates / Agreements / Identity Documents	Yellow	T2.7
T2.1.4	Joint Venture Consortium / Disclosure Form	Yellow	T2.8-T2.16
T2.1.5	CSD/Tax Compliance Requirements	Yellow	T2.17
T2.1.6	Proof of Registration with CIDB	Yellow	T2.18
T2.1.7	Proof of Workmen's Compensation Registration	Yellow	T2.19

BID NO: 16/FY/24– CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

T2.2	Oth			
	Inc	orporated into the Contract	Yellow	T2.20
	T2.2.1	Record of Addenda to Tender documents	Yellow	T2.21
	T2.2.2	Local Employment Generation	Yellow	T2.22
	T2.2.3	Unemployment Insurance Fund (UIF) – Registration		
		Certificate (Act 4 of 2002)	Yellow	T2.23
	T2.2.4	Form Concerning Fulfilment of the Construction		
		Regulations, 2003	Yellow	T2.24-T2.25
	T2.2.5	Form of Required Information	Yellow	T2.26
	T2.2.6	Bidders Disclosure (SBD 4)	Yellow	T2.27-T2.30
	T2.2.7	Preferential Point Declaration (SBD 6.1)	Yellow	
	T2.2.8	Local Content Declaration (SBD 6.2)		
T2.3	Do	cumentation, Forms and Schedules Required for		
	Те	nder Evaluation Purposes	Yellow	T2.36
	T2.3.1	Related Experience of Tender	Yellow	T2.37-T2.38
	T2.3.2	List of Key Personnel	Yellow	T2.39-T2.45
	T2.3.3	Schedule of Plant and Equipment	Yellow	T2.46-T2.47
	T2.3.4	Schedule of Proposed Sub-Contractors	Yellow	T2.48-T2.49
	T2.3.5	Provisional Programme and Method Statement	Yellow	T2.50
T2.4	Oth	ner Documentation, Forms and Schedules required		
	for	Tender Evaluation Purposes	Yellow	T2.52
	T2.4.1	Form of Intent to provide a Performance Guarantee	Yellow	T2.53

Contractor	Witness 1	Witness 2	Employer İ	Witness 1	Witness 2

BID NO: 16/FY/24– CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

3. CONTRACT

THE C	CONTRAC	ст	White	C1.1
PART	C1: AG	REEMENT AND CONTRACT DATA	White	C1.2
C1.1	Fo	rm of Offer and Acceptance	Yellow	C1.3-C1.7
C1.2	Co	ntract Data	White	C1.8
	C1.2.1	Conditions of Contract	White	C1.9-C1.14
	C1.2.2	Contract Specific Data	White/Yellow	C1.15-C1.18
	C1.2.3	Pro-Forma Performance Guarantee	White	C1.19-C1.21
	C1.2.4	Pro-Forma Retention Money Guarantee	White	C1.22-C1.24
	C1.2.5	Transfer of Rights of Materials on Site	White	C1.25
	C1.2.6	Proof of Ownership of Materials On site	White	C1.26
PART	C2: PRI	CING DATA	White	C2.1
C2.1	Pri	cing Instructions	White	C2.1-C2.4
C2.2	Pro	ovisional Bills of Quantities	Yellow	C2.5 C2.3
	An	nendments, Qualifications and Alternatives by Tenderer Yello	w	
C2.6	PART C3	SCOPE OF WORK	Blue	C3.1
C3.1	Sta	andard Specifications	Blue	C3.2-C3.12
C3.2	Pro	oject Specifications	Blue	C3.13-C3.18
C3.3	Pa	rticular Specifications	Blue	C3.19-C3.57
C3.4	Dra	awings	White	C3.58
	C3.4.1	Locality Plan	White	C3.59
	C3.4.2	Tender Drawings	White	C3.60
	C3.4.3	Contract Board Layout Detail	White	C3.61
DADT				

PART C4: SITE INFORMATION

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
			ii		

BID NO: 16/FY/24– CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

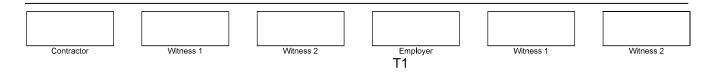
TENDER SUMMARY PAGE

NAME OF TENDERER	
DETAILS OF CONTACT PERSON:	
NAME	
TELEPHONE NUMBER	
FAX NUMBER	
E-MAIL ADDRESS	
ADDRESS OF TENDERER	
VAT REGISTRATION NO.	
SPECIFIC GOALS CLAIMED	(Max. 20 points)
CONSTRUCTION PERIOD OFFERED*	(Max. 8 months)
*(Measured from date of official Site Hand Over	·)
DATE OF TENDER	
TENDERER 'S SIGNATURE	
(Person authorised to sign the TENDER)	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
			III		

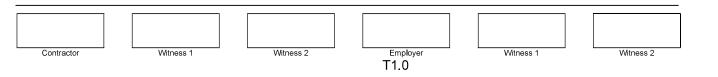
BID NO: 16/FY/24– CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

1: TENDER



BID NO: 16/FY/24– CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

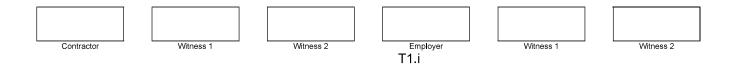
PART T1: TENDERING PROCEDURES



PART T1: TENDERING PROCEDURES

INDEX

Section	Description	Page No
T1.1	TENDER NOTICE AND INVITATION TO TENDER English Version	T1.1.1
T1.2	TENDER DATA	T1.2.1
T1.3	STANDARD CONDITIONS OF TENDER	T1.3.1



T1.1 TENDER NOTICE AND INVITATION TO TENDER

BID NO: 16/FY/24

CONSTRUCTION OF 4 BED STAFF HOUSE AND CAMPSITE KITCHEN/ABLUTION AND ABATTOIR IN COMMANDO DRIFT NATURE RESERVE.

Tenderers should have a CIDB contractor grading designation of 5GB. Contractors with grading designation greater or lower than 5GB will not be considered.

Tenderers will be evaluated on three stages. In Stage 1 bids will be evaluated on compliance with bid requirements. Bidders who comply with all the requirements of Stage 1 will proceed for evaluation on Stage 2 for Price and Specific Goals utilizing 80/20 preference point system. In Stage 3 bids will be assessed for risk.

The Tender documents will only be obtainable as from the **29th of September 2023** and should downloaded from the following websites: <u>www.visiteasterncape.co.za/procurement/tenders;</u> <u>www.ectreasury.gov.za;</u>

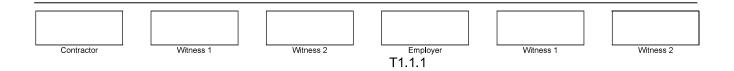
A <u>COMPULSORY TENDER CLARIFICATION MEETING</u> will be held in respect of this tender on the 11th of October 2023 at 12:00 noon at Commando Drift Nature Reserve Site; Co-ordinates: S 32,11628 E 026, 04515. Tenderers should already be in possession of the tender document and be familiar with the contents thereof.

The lowest or any tender will not necessarily be accepted, and the agency reserves the right to accept the Tender as a whole or in part. Bids must remain valid for a period of **150 days** after the closing date for the submission of bids, during which period a tender may not be amended or withdrawn and may be accepted at any time by the Department.

The closing date and time for receipt of bids is **31**st **of October 2023 at 11:00am.** Bids must be enclosed in a sealed envelope bearing the name of the Tenderer as well as the applicable tender heading, reference number, closing time and due date and must be addressed to, **The Chief Executive Officer,** and must be submitted in the tender box located at, 17-25 Oxford Street, Corner Oxford and Fleet Street East London, before the closing time and date.

TECHNICAL ENQUIRIES

- 1. Ms M. Lawana, Project Manager: Tel: 043 705 4400, Fax: 043 742 5566, E-mail: Mandilakhe.Lawana@ecpta.co.za
- 2. Mr. M Sandi, Supply Chain Management: Tel: 043 705 4400, Fax 086 206 0595, E-mail: Mcebisi.Sandi@ecpta.co.za



T1.2 TENDER DATA

The conditions of bid are the Standard Conditions of Bid as contained in Annex F of Board Notice 136 of 2015 in Government Gazette No. 30960 of 10 July 2015, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement as is available from the CIDB website (see www.cidb.co.za)

The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender to which it mainly applies.

F.1.1 Actions

The Employer for this Contract will be the instance named in the Contract Data.

F.1.2 Tender Documents

(a) **The Tender Document** issued by the Employer comprises of the following:

THE TENDER		
Part T1	:	Tender Procedures
T1.1	:	Tender Notice and Invitation to Tender
T1.2	:	Tender Data
Appendix	:	Standard Conditions to Tender
Part T2		Returnable Documents
T2.1		Forms, Certificates and Schedules required for Evaluation of Tender Responsiveness
T2.2		Other Forms, Certificates and Schedules that will be Incorporated into the Contract
T2.3		Documentation, Forms and Schedules Required for Tender Evaluation Purposes
T2.4		Other Documentation, Forms and Schedules required for Tender Evaluation Purposes

Contractor

Witness 1

Witness 2

Witness 1

Witness 2

THE CONTRACT (Part3)						
Part C1	Agreements and Contract Data					
C1.1	Form of Offer and Acceptance					
C1.2	Contract Data					
Part C2	Pricing Data					
C2.1	Pricing Instructions					
C2.2	Provisional Bills of Quantities					
C2.3	Amendments, Qualifications and Alternatives by Tenderer					
Part C3	Scope of Work					
C3.1	Standard Specifications					
C3.2	Project Specifications					
C3.3	Particular Specifications					
C.4	Drawings					
Part C4	Site Information					
C4.1	Geotechnical Information of Site					

The Tender Document and the drawings shall be obtained from the Employer or his authorized representative at the physical address stated in the Tender Notice.

The following documents are relevant to this Tender and Tenderers are advised to obtain their own copies thereof:

- (a) **"JBCC Principal Building Agreement (Edition 6.2 of May 2018)**" issued by the Joint Building Contracts Committee Inc. (including amendments).
- (b) "Standardized Specifications for Civil Engineering Construction" SANS 1200.
- (c) "Code of Practice for the application of the National Building Regulations" SABS 0400-1990
- (d) The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations 2003 (Government Gazette

Contractor	Witness 1	Witness 2	Employer T1.2.2	Witness 1	Witness 2

No 25207 of 18 July 2003, Notice No R1010).

- (e) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations and standards referred to in the this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies and participation of targeted enterprise and labour.
 - The Construction Industry Development Board Act No 38 of 2000 and the Regulations in terms of the CIDB Act 38/2000, Government Gazette Notice No 33239 of 28 May 2010,
 - (ii) SANS 1921:2004 Construction and Management
- Part 1: General Engineering and Construction Works.

Part 2: Accommodation of Traffic on Public Roads occupied by the Contractor Part 3: Structural Steelwork

- Part 5: Earthworks Activities which are to be performed by hand
 - (iii) Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000) and its Regulations as published in the Government Gazette No. 34350 of 8 June 2011

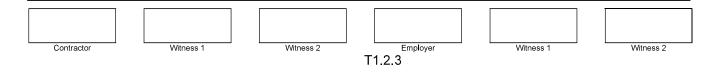
F.1.4 Communication and Employer's Agent

The Employer's agent is	:	Mr. Dunmore Tirivanhu
Address	:	115 Western Avenue
		Vincent
		East London, 5247
Contact Number	:	072 076 2318

F.2.1 Eligibility

A Tenderer will not be eligible to submit a Tender if:

- (a) the Contractor submitting the Tender is under restrictions or has principals who are under restriction to participate in the Employer's procurement due to corrupt of fraudulent practices;
- (b) the Tenderer does not have the legal capacity to enter into the contract;
- (c) the Contractor submitting the Tender is insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of the foregoing;
- (d) The Tenderer does not comply with the legal requirements stated in the Employer's procurement policy;
- (e) The Tenderer cannot demonstrate that he possesses the necessary professional and technical qualifications and competent, financial resources, equipment and other physical facilities, managerial capability, personnel, experience and reputation to perform the contract.



(f) The Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract.

The following Tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their Bids evaluated:

(a) Contractors who have a Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the Tender sum, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 5 GB class of construction work; and

Joint ventures are eligible to submit Bids provided that:

(a) every member of the joint venture is registered with the CIDB

F.2.7 Site visit and clarification meeting

The arrangements for the clarification meeting and site inspection, which is **compulsory** for this contract, are as follows:

Site Inspection and Clarification Meeting -

Location/venue:	Commando Drift Nature Reserve, Tarkastad				
Date:	11 th of October 2023				
Starting time:	12:00				
GPS Co-ordinates:	S 32,11628	E 026, 04515			

F.2.12 Alternative Tender offers

No alternative offers will be considered, but the original tender document needs to be completed and submitted as well.

F.2.13 Submitting a Tender Offer

Tender offers shall be submitted as an original only. All three volumes of the tender document must be printed and neatly ring bound. All three documents must be submitted on the tender closing date with all the relevant information completed and pages signed. All the required information and documentation required for the evaluation of the tender must be bound into the document. The Provisional Bills of Quantities must be completed by hand.

F.2.13.1 Delivery of Tender

The Employer's address for delivery of Tender offers and identification details to be shown on each Tender offer package are:

Location of Tender boxes: London	At Reception in the offices of Eastern Cape Parks & Tourism, East
Physical address:	(1) 17-25 Oxford Street, Corner Oxford and Fleet, East London

Identification Details:

Contractor	Witness 1	Witness 2	Employer T1.2.4	Witness 1	Witness 2

F.2.15 Closing time

The closing time for submission of Tender Offers is 11:00am .

Telephonic, telegraphic, telex, facsimile, electronic or e-mailed Bids will not be accepted.

F.2.16 Tender offer validity

The Tender offer validity period is 150 days from the closing time for submission of Bids.

F.2.17 Clarification of Tender Offer after submission

For this contract the employer may, after clarification with the Tenderer, agree to amend the total of the prices stated by the Tenderer in his Tender offer.

F.2.19 Inspections, tests and analyses

Access shall be provided for inspections and testing by personnel acting on behalf of the Employer.

F.2.22 Return of Tender Documents

Where a Tenderer who received a Tender document does not submit a Tender, the Tender documents issued to him must be returned to the Employer within 14 days after the closing date for submission of Bids.

F2.23 Certificates

The following documentation must be provided with the Tender:

- 1. A Full Copy of the Central Supplier Database (CSD) Report for the month of October 2023
- 2. Proof of Contractor Registration with the CIDB (CRS number to be provided).
- 3. A Valid Copy of the Tenderer's Workmen's Compensation Certificate, Act 4 of 2002.
- 4. A Valid Copy of the Tenderer's Unemployment Insurance Certificate, Act 4 of 2002.
- 5. A signed Joint Venture Agreement (if Tenderer is a Joint Venture)

F.3.4 Opening of Tender Submissions

Bids will be opened in public at the date and time stipulated in the tender advert.

F.3.5 One envelope system

The One envelope system will be followed for this Tender.

F.3.9 Arithmetical Errors, omissions and discrepancies

• Add to clause F.3.9.1 the following:

"If it is found obvious that a bona-fide mistake was made in writing out the Tender amount, or if the total Tender amount is corrected according to the prescripts of **F.3.9.2 to F3.9.4** below, the amount in words shall be amended".

• Replace clauses F.3.9.2, F3.9.3 and F3.9.4 with the following:

"Check responsive Tender offers for arithmetical errors, correcting them in the following manner:

	(a) If	a Bills of	Quantities	(or schedule	of quantities	s or schedule	of rates) applies
Contractor	Witness 1		Witness 2	Employ	yer	Witness 1	Witness 2
				T1 2 5			
				I I.Z.J			

and there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the **unit rate as quoted shall govern** and the **line item total shall be corrected.**

However, in exceptional cases where, in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in either the unit rate or line total, or where the error was obviously not a result of incorrect arithmetic but rather the result of a writing error, the Employer reserves the right to correct either the Tendered rate or the line total as the case may be, subject to clarification in terms of Clause F.2.17.

(b) Where there is an error in the total of the prices, either as a result of corrections required by this checking process or in the Tenderer's addition of prices, the total of the prices shall be adjusted to obtain the correct Tender value."

F.3.11 Evaluation of Tender Offers

Before evaluating Tender offers, the Bids will be in accordance with Method **2** of the CIDB Standard Tender Evaluation in Three stages, namely:

- Stage 1: Compliance Requirements
- Stage 2: Financial Offer and Specific Goals
- Stage 3: Risk Assessment

Stage 1: Compliance with bid requirements

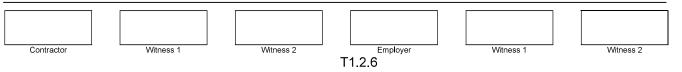
Bidders must comply with the set of compliance requirements listed below. Failure to comply with Any of the below requirements will lead to immediate rejection of the bid.

- (i) **Compulsory Briefing:** Bidders must attend the compulsory briefing meeting on site.
- (ii) CIDB: Bidders must be registered with CIDB with a contractor grading designation equal to 5GB Only. Contractors with designation of (6GB or higher) and (4GB or lower) will not be considered.
- (iii) Company Experience: Bidders MUST provide evidence of completion of at least two
 (2) building projects (GB). Proof will be accepted in the form of Practical Completion certificates and or final completion certificate ONLY. Only projects with a rand value of <u>R2,000,000.00</u> and above will be considered for evaluation.

(iv) Methodology

The bidder shall submit a project proposal highlighting the methodology to be used in the project. The proposal submitted must demonstrate the bidder's level of understanding of the project scope and should include the following sections;

- Preliminary program
- Methodology and approach
- Project Organogram



- Quality Plan and approach
- Occupational Health and Safety Plan for the project
- Environmental Management Plan for the project
- Cash-flow projections

Bidders must take note of the following factors which will be used in evaluating responsiveness of submissions.

- a. The Preliminary Programme submitted must include the full scope of work as described in the work specification and schedule of quantities. It should highlight all the planned activities, the sequence of executing the works and the completion timeframes of the activities. The logic of the sequencing of construction activities and correlation with the cash flow shall be considered together with practicality of the completion timeframes provided for the respective activities.
- b. The Methodology submitted must demonstrate the approach to be used in carrying out construction activities and must be inclusive of the methodology for construction work in line with the scope of work.
- c. The Occupational Health & Safety Plan and Environmental Management Plan submitted must be project specific and should highlight the bidder's awareness and commitment to compliance with all relevant regulations i.e. (Construction Regulations, 2014; OHS ACT 1993; National Environmental Management Act, 1998; Environmental Conservation Act, 1989 etc.).
 - (v) **Team Capability:** Bidders must provide CV's and copies of qualifications (where applicable) for the following team members.

Resources	Qualifications	No of years'
		Experience
Contracts Manager	BTech/ National Diploma or	8 or Higher
	higher in Civil/Building or	
	Professional Registration as	
	Construction Manager with	
	SACPCMP (Pr. CM)	
Site Agent	BTech/ National Diploma or higher in Civil/Building	5 or Higher
Foreman	N/A	8 or Higher
Electrician	Trade test/ Wireman's Licence with Department of labour	5 or Higher

T1.2.7

Plumber	Trade test with Department of labour	5 or higher
Occupational Health and Safety Officer	NOSA Certification or any other NQF 5 qualification or higher in OHS	1 or Higher
Environmental Control Representative/ Officer	Relevant Certification/Qualification	1 or higher

NB: Failure to comply with any of the above requirements will lead to immediate rejection of the bid.

Stage 2: Price and Specific Goals

Criteria	Points
Price	80
Specific Goals	20
Total	100

Price and specific goals points will be calculated as described in the Preferential Procurement Regulations of 2022. SBD 6.1 form must be used to claim points for specific goals for the company. A copy of CSD report, Medical Certificate and Proof of Address must be submitted as proof of specific goals. When the above documentation is not provided as proof the company will automatically score zero points for specific goals.

Price and Specific Goals points will be calculated as described in the Preferential Procurement Regulations of 2022. SBD 6.1 form must be used to claim points for specific goals of the company.

Specific Goals Category	Weighting (of 20 Points)	Number of points	Acceptable evidence
Local Production and Content	40%	8	 DTI Local Content Declaration Form (SBD 6.2) DTI Local Content Declaration Form (Annexure C)
 >51% Historically Disadvantaged Individuals Ownership (South African citizen - who, had no franchise in national elections prior to the introduction of the Constitution of the Republic of South Africa, 1983 (Act 110 of 1983) or the Constitution of the Republic of South Africa, 1993, (Act 200 of 1993)) 	20%	4	 CSD Report CIPRO Certificate ID Copies
Contractor Witness 1 Witness 2	Employer	Witness 1	Witness 2

Specific Goals Category	Weighting (of 20 Points)	Number of points	Acceptable evidence
10-50% HDI Ownership		2	
<10% HDI Ownership		0	
Locality (Enterprises located in the Eastern Cape	10%	2	Municipal Account,
Province) Enterprise located outside the Eastern Cape		0	 Proof of Address
>51% Youth Ownership	15%	3	CSD Report
10-50% Youth Ownership		1.5	CIPRO CertificateID Copies
<10% Youth Ownership		0	
>51% Women Ownership	10%	2	CSD Report
10-50% Women Ownership		1	CIPRO CertificateID Copies
<10% Women Ownership		0	
>51% Disability Ownership	5%	1	Medical Certificate
10-50% Disability Ownership		0.5	
<10% Disability Ownership		0	
TOTAL	100%	20	

Stage 3: Risk Analysis

In addition to the evaluation of Responsiveness, a risk analysis will be performed on the Tenderers having the highest ranking / number of points to ascertain if any of the following, as relevant, present an unacceptable commercial risk to the employer in terms of:

- a) Clause F.3.13 of the Standard Conditions of Tender
- b) Unduly high or unduly low Tendered rates or amounts in the Tender offer. In this regard, a financial risk analysis will be performed to verify that the rates entered in the Bill of Quantities are reasonable and balanced. Bids may be disqualified if Tendered rates are found to be distorted. Such evaluation will include "Rate Only" items;
- c) Contract data provided by the contractor; and
- d) The contents of the Tender Returnables which are to be included in the contract

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
			T120		
			11.2.9		

Stage 3 : Risk Assessment

In addition to the evaluation of Responsiveness, a risk analysis will be performed on the Tenderers having the highest ranking / number of points to ascertain if any of the following, as relevant, present an unacceptable commercial risk to the employer in terms of:

- a) Clause F.3.13 of the Standard Conditions of Tender below (Annexure F);
- b) Unduly high or unduly low Tendered rates or amounts in the Tender offer. In this regard, a financial risk analysis will be performed to verify that the rates entered in the Bill of Quantities are reasonable and balanced. Bids may be disqualified if Tendered rates are found to be distorted. Such evaluation will include "Rate Only" items;
- c) Contract data provided by the contractor; and
- d) The contents of the Tender Returnables which are to be included in the contract.

Cancellation and re-invitation of Bids

The employer may, prior to the award of a Tender, cancel the Tender if -

- (a) due to changed circumstances, there is no longer a need for the goods or services specified in the invitation
- (b) funds are no longer available to cover the total envisaged expenditure;
- (c) no acceptable Bids are received; or
- (d) there is material irregularity in the tender process

If the Tender is cancelled, it shall be published in the Government Tender Bulletin or the media in which the original Tender invitation was advertised and all invited tenderers will be informed.

The following conditions shall apply:

- (i) Any discounts offered unconditionally shall be taken into account when calculating comparative prices.
- (ii) Although discounts offered conditionally shall not be taken into account for evaluation purposes, such discounts shall be implemented when payment is effected (should the Tender prove to be successful).
- (iii) Points scored shall be rounded off to the nearest 2 decimal places.

Declarations

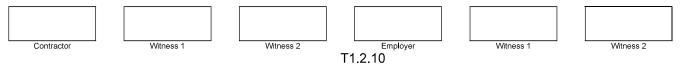
A Tender must, in the manner stipulated in the Tender document, declare that:

- (a) the information provided is true and correct;
- (b) the signatory to the Tender document is duly authorised; and
- (c) documentary proof regarding any Tendering issue will, when required, be submitted to the satisfaction of the relevant organ of state.

The employer shall act against the Tenderer or person guilty of such misconduct.

In addition to any other remedy the employer may have against such person(s), the employer may also:

- (a) disqualify the person from the Tendering process;
- (b) recover all 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 Tenderer 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.

Tax Clearance

- a) It essential to ensure that persons conducting business with the State are tax compliant at the awarding of bids as no bid may be awarded to persons who are not tax compliant
- b) In order to comply with the provisions of tax, bidders must utilize the Standard Bidding Document (SBD1) issued with this bid
- c) Bidders must submit their tax compliance status PIN together with the bid
- d) The Central Supplier Database and tax compliance PIN are the approved methods that will be utilized to verify tax compliance as the South African Revenue Services does not issue Tax Clearance Certificates but has made an online provision available, via eFiling, for bidders to print their own Tax Clearance Certificates which they can submit with their bids
- e) Printed copies of Tax Clearance Certificates will be accepted and verified on the eFiling.

F.3.13.1 Acceptance of Tender Offer

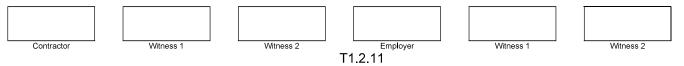
Tender offers will only be accepted if:

- (a) the Tenderer has submitted with his Offer all relevant documentation as stated in F2.23
- (b) the Tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;
- (c) the Tenderer or any of its directors 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; and
- (d) the Tenderer has not:
 - (i) abused the Employer's Supply Chain Management System or
 - (ii) failed to perform on any previous contract.
- (e) the Tenderer has achieved the minimum score for quality as stated in F.3.11.

F3.17 Copies of contract

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

The Standard Conditions of Tender to follow is obtained from Annexure F of CIDB Standard for Uniformity in Construction Procurement (28 May 2010), which contains references to the Tender Data for details that apply specifically to the Tender.



T1.3 STANDARD CONDITIONS OF TENDER

F.1 General

F.1.1 Actions

F1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly, and transparently, comply with all legal obligations, and not engage in anticompetitive practices.

F.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents, and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

- Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
 - 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

F.1.1.3 The employer shall not seek, and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

F.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

F.1.3 Interpretation

F.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

F.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

F.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

- (a) **conflict of interest** means any situation in which:
 - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially.
 - ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.
- (b) **comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis

Contractor		Witness 1		Witness 2		Employer		Witness 1	Witness 2
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- (c) **corrupt practice** means the offering, giving, receiving, or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
- (d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- (e) **organization** means a company, firm, enterprise, association, or other legal entity, whether incorporated or not, or a public body
- (f) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be read, copied, and recorded. Writing shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

F.1.5 The employer's right to accept or reject any tender offer

F.1.5.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection but will give reasons for such action upon written request to do so.

F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all tender offers, re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.

F.1.6 Procurement procedures

F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for bids.

F.1.6.2 Competitive negotiation procedure

F.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

F.1.6.2.2 All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that bids be clarified, specified, and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

F.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

Contractor	Witness 1	 Witness 2		Employer	Witness 1	Witness 2
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F.1.6.2.4 The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.

F.1.6.3 Proposal procedure using the two stage-system

F 1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

F.1.6.3.2 Option 2

F.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

F.1.6.3.2.2 The employer shall evaluate bids received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

F.2 TENDERER'S OBLIGATIONS

F.2.1 Eligibility

F.2.1.1 Submit a tender offer only if the tenderer complies with the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

F.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for bids.

F.2.2 Cost of tendering

Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

F.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

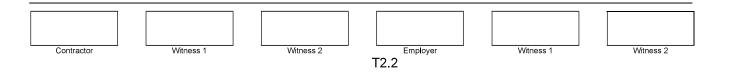
F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

F.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

F.2.6 Acknowledge addenda



Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

F.2.7 Site visit and clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

F.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) may not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the tender offer

F.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.

F2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

F.2.11 Alterations to documents

Not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 Alternative tender offers

F.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

F.2.13 Submitting a tender offer

F.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

F.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.

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F.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

F.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

F.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

F.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

F.2.13.8 Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

F.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

F.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept the proof of posting shall not be accepted as proof of delivery.

F.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

F.2.16 Tender offer validity

F.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

F.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

F.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for bids that a tender is to be withdrawn or substituted.

F.2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

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Contractor		Witness 1		Witness 2		Employer		Witness 1		Witness 2
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F.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

F.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

F.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

F.2.23 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

Contractor	Witness 1	Witness 2		Employer	Witness 1	Witness 2
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F.3 THE EMPLOYER'S UNDERTAKINGS

F.3.1 Respond to requests from the tenderer

F.3.1.1 Unless otherwise stated in the Tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

F.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date of the Tender Notice until seven days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, will then notify it to all tenderers who drew documents.

F.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

F.3.4 Opening of tender submissions

F.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened, and where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 Two-envelope system

F.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid bids in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

F.3.5.2 Evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation above the minimum number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for quality.

Contractor	Witness 1	 Witness 2		Employer	Witness 1	Witness 2
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F.3.6 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

F.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

F.3.8 Test for responsiveness

F.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

F.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive bids, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

F.3.9 Arithmetical errors, omissions, and discrepancies

F.3.9.1 Check responsive bids for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

F.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
 - i) line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - ii) the summation of the prices.

F.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

F.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

a) If bills of quantities or pricing schedules apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total shall govern and the rate shall be corrected.

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item total as quoted shall govern, and the unit rate shall be corrected.

b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern, and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

F.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 Evaluation of tender offers

F3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate it using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the Tender Data.

F.3.11.2 Method 1: Financial offer

In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.
- b) Recommend the highest ranked tenderer for the award of the contract unless there are compelling and justifiable reasons not to do so.
- c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.
- b) Calculate the total number of tender evaluation points (T EV) in accordance with the following formula: $T_{EV} = N_{FO} + N_{P}$
 - where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7. N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

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- a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T EV) in accordance with the following formula: $T_{EV} = N_{FO} + N_Q$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7. N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so. Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F.3.11.5 Method 4: Financial offer, quality and preferences

In the case of a financial offer, quality, and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula, unless otherwise stated in the Tender Data:

 $T_{EV} = N_{FO} + N_{P} + N_{Q}$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

 N_{P} is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

 $N_{\mbox{\scriptsize Q}}$ is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.6 Decimal places

Score financial offers, preferences, and quality, as relevant, to two decimal places.

F.3.11.7 Scoring Financial Offers

Score the financial offers of remaining responsive tender 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. W₁ is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data. A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

Table F.1: Formulae for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a				
1	Highest price or discount	$A = (1 + (\underline{P - P_m}))$ P_m	A = P / P _m				
2	Lowest price or percentage commission / fee	$A = (1 - (\underline{P - P_m}))$ P_m	A = P _m / P				
 P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration. 							

F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences. Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F.3.11.9 Scoring quality

Score each of the criteria and sub-criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

 $N_Q = W_2 \times S_0/M_s$

where: So is the score for quality allocated to the submission under consideration;

- Ms is the maximum possible score for quality in respect of a submission; and
- W₂ is the maximum possible number of tender evaluation points awarded for the quality as stated in the Tender data.

F.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

F.3.13 Acceptance of tender offer

Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,

	í I									
Contractor		Witness 1		Witness 2		Employer		Witness 1		Witness 2
T2.10										
					I	2.10				

- e) complies with the legal requirements, if any, stated in the tender data, and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.14 Prepare contract documents

F.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents, and
- c) other revisions agreed between the employer and the successful tenderer.

F.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

F.3.16 Notice to unsuccessful tenderers

F.3.16.1 Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data or agreed additional period.

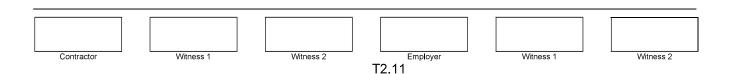
F.3.16.2 After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

F.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

F.3.18 Provide written reasons for actions taken

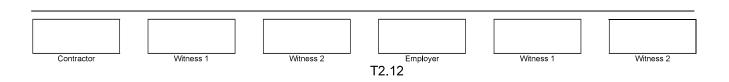
Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.



CONTRACT NO.: 16/FY/24

CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

PART T2: RETURNABLE DOCUMENTS



RETURNABLE DOCUMENT CHECKLIST

Tenderers to complete this checklist to ensure that all information in the Tender Document is completed included and read by the Tenderer.

Page	Ref	Description	Completed/ Included/ Read
		All pages requiring signatures signed by the Tenderer (Authorised Person)	
1		Correct Tender Offer Amount on BOQ's carried forward to Tender Summary (Page iv) and Form of Offer (Page C1.3)	
T2.3	T2.1	Forms, Certificates and Schedules required for evaluation of Tender responsiveness	
T2.4	T2.1.1	Compulsory Tender Briefing / Site Inspection Certificate	
T2.5- T2.7	T2.1.2	Certificate of Authority for Signatory	
T2.8	T2.1.3	Registration Certificates / Agreements / Identity Documents	
T2.9- T2.17	T2.1.4	Joint Venture / Consortium Disclosure Form	
T2.18	T2.1.5	CSD REPORT/ Compliance PIN	
T2.19	T2.1.6	Proof of Registration with CIDB	
T2.20	T2.1.7	Proof of Workmen's Compensation Registration	
T2.21	T2.2	Other Forms, Certificates and Schedules that will be incorporated into the contract	
T2.22	T2.2.1	Record of Addenda to Tender Documents	
T2.23	T2.2.2	Local Employment Generation	
T2.24	T2.2.3	Unemployment Insurance Fund (UIF) – Registration Certificate (Act 4 of 2002)	
T2.25- T2.26	T2.2.4	Form Concerning Fulfilment of the Construction Regulations, 2003	
T2.27	T2.2.5	Form of Required Information	
T2.28- T2.31	T2.2.6	Bidders Disclosure	
T2.32- T2.33	T2.2.7	SBD 6.1 (Preferential Procurement Claim Form)	
T2.37	T2.2.8	Local Content Declaration (SBD 6.2)	

Contractor

Witness 1

Witness 2

Employer T2.xiii Witness 1

Witness 2

Page	Ref	Description	Completed/ Included/ Read
T2.37	T2.3	Documentation, Forms and Schedules required for Tender evaluation purposes (Functionality Evaluation)	
T2.38- T2.39	T2.3.1	Related Experience of Tenderer	
T2.40- T2.51	T2.3.2	List of Key Personnel	
T2.52- T2.53	T2.3.3	Schedule of Plant and Equipment	
T2.54- T2.55	T2.3.4	Schedule of Proposed Sub-Contractors	
T2.56	T2.3.5	Provisional Programme and Method Statement	
T2.60	T2.4	Other Documentation, Forms and Schedules required for Tender evaluation purposes	
T2.61	T2.4.1	Form of Intent to provide a Performance Guarantee	
T1.2.6	F.3.11	Compliance Requirements	
		compulsory briefing	
		 Proof of CIDB contractor grading designation equal to 5GB Only 	
		 Evidence of execution or completion of at least two (2) General Building projects (GB). 	
		Team Capability	
		Methodology	
C1.18	C1.2.2	Part 2: Data Provided by the Contractor (Contract Specific Data)	
C2.5	C2.2	Pricing Data (Provisional Bills of Quantities)	
BOQ's	C2.2	Sign and date Final Summary	
BOQ's	C2.2	Completed in BLACK INK only and corrections crossed out and initialed	
C2.6	C2.3	Amendments, Qualifications and Alternatives by Tenderer	

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 T2.xiV

PART T2: RETURNABLE DOCUMENTS

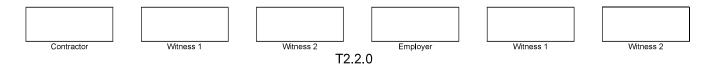
Notes:

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

All forms must be duly completed in **black ink** as required.

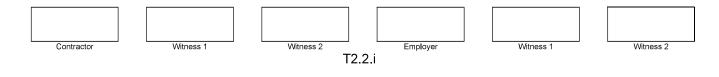
The list of returnable documents, which consists of forms and schedules to be completed and company specific certificates and information pages to be attached, comprise the following:

TABL <u>E OF C</u>	ONTENTS	Page
T2.1	Forms, Certificates and Schedules required for evaluation of Tender responsiveness	T2.3 – T2.19
T2.2	Other forms, certificates and schedules that will be incorporated into the contract	T2.20-T2.35
T2.3	Documentation, forms, and schedules required for Tender evaluation purposes (Functionality Evaluation)	T2.36-T2.51
T2.4	Other documentation, forms and schedules required for Tender evaluation purposes	T2.52-T2.59



T2.1 FORMS, CERTIFICATES AND SCHEDULES REQUIRED FOR EVALUATION OF TENDER RESPONSIVENESS

		Page No.
T2.1.1	Tender Briefing / Site Inspection Attendance Certificate	T2.1
T2.1.2	Certificate of Authority for Signatory	T2.2-T2.5
T2.1.3	Registration Certificates/Agreements/Identity Documents	T2.6
T2.1.4	Joint Venture/Consortium Disclosure Form	T2.7-T2.16
T2.1.5	CSD/Tax Compliance Requirements	T2.17
T2.1.6	Proof of Registration with CIDB	T2.18
T2.1.7	Proof of Workmen's Compensation Registration	T2.19



T2.1.1 <u>TENDER BRIEFING / SITE INSPECTION ATTENDANCE</u> CERTIFICATE

This	is	to	certify	that	(Tenderer).	 	 	 	 of
Addre	ess.					 	 	 	
Telep	hon	ie n	umber .			 	 	 	 Fax
numb	er					 	 	 	 E-mail
addre	SS .					 	 	 	

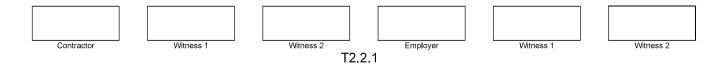
Was represented by the person(s) named below at the compulsory meetings held for all Tenderers as per the Tender Data (T1.2 - F.2.7)

I/We hereby acknowledge that I/We visited the site and acquainted ourselves with the conditions likely to influence the work and all aspects that could influence either the cost or the construction of the services prior to determining our rates and prices.

I/We further certify that I/we are satisfied with the description of the work and explanations given at the meeting and that I/We understand perfectly the work to be done, as specified and implied, in the documentation and information provided.

TENDERER'S REPRESENTATIVE(S):

Name:	Signature	••
Capacity:		
Name:	Signature	
Capacity:		
EMPLOYER'S REPRESENTATIVE:		
Name:	Signature	
Capacity:	Date	



T2.1.2 CERTIFICATE OF AUTHORITY FOR SIGNATORY

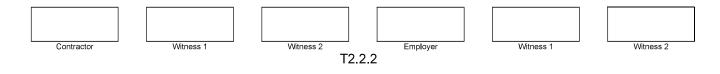
Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for the relevant category.

(I) COMPANY	(II) CLOSE CORPORATION	(III) PARTNERSHIP	(IV) JOINT VENTURE	(V) SOLE PROPRIETOR

Signatories for Companies, Close Corporations, Partnerships, Joint Ventures or Sole Proprietors must establish their authority thereto by attaching a copy of the relevant resolution of their Board of Directors, Members or Partners duly signed and dated. Examples are shown below.

(I) <u>CERTIFICATE FOR COMPANY</u>

I,			chairperson c	of the	Board	of Direc	tors of	
		I	nereby confirm	that by	resolut	ion of the	Board (c	ору
attached)	taken on	20.	, Mr/Ms			,	acting in	the
capacity of	of		was	authoriz	zed to	sign all	documents	; in
connectior	n with the tender for Ten	ider No. 10	6/FY/24 and any	y contra	ct result	ing from i	t, on beha	lf of
the compa	ny.							
Chairman:								
Chairman	:							
	As Witness:	1.						
		2.						
Date:								

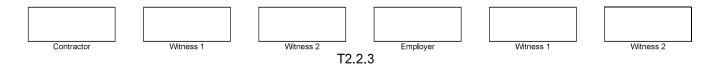


(II) CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as authorise hereby Mr/Ms, acting the capacity of in to sign all documents in connection with the tender for Tender No.16/FY/24 and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note: this certificate is to be completed and signed by all of the key members upon whom rests the directions of the affairs of the Close Corporation as a whole.



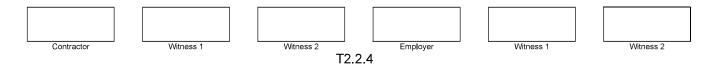
(III) CERTIFICATE FOR PARTNERSHIP

We, undersigned, the being the key partners in the business trading as, hereby authorize Mr/Msacting in the capacity of, to sign all documents in connection with the tender for Tender No.16/FY/24 and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE
Lead partner			

behalf.

Note: This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of Partnership as a whole.



(IV) <u>CERTIFICATE JOINT VENTURE</u>

We, the undersigned, are submitting this Tender offer in Joint Venture and hereby authorize Mr/Ms, authorized signatory of the company...... acting in the capacity of lead partner, to sign all documents in connection with the tender for **Tender No.16/FY/24** and any contract resulting from it, on our behalf.

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

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead Partner		Signature
		Name
CIDB Registration No.		Designation
Lead Partner		Signature
		Name
CIDB Registration No.		Designation
Lead Partner		Signature
		Name
CIDB Registration No.		Designation

Note : This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.



(V) <u>CERTIFICATE FOR SOLE PROPRIETOR</u>

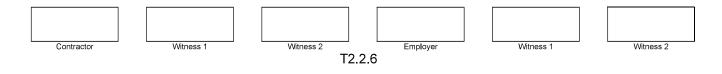
I, hereby confirm that I am the sole owner of the business trading as

Signature of Sole Owner:

As Witnesses:

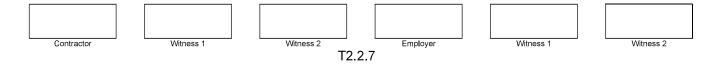
1.	
2.	

Date:



T2.1.3REGISTRATION CERTIFICATES/AGREEMENTS /IDENTITY DOCUMENTS

Attach hereto certified copies of Registration Certificates for Companies and Closed Corporations and certified copies of Identity Documents for Partnerships and Sole proprietors as well as signed Agreements and Powers of Attorney for Joint Venture / Consortium if applicable.



T2.1.4 JOINT VENTURE/CONSORTIUM DISCLOSURE FORM

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

GENERAL

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

1. JOINT VENTURE PARTICULARS

a)	Name	
b)	Postal address	
c)	Physical address	
d)	Telephone	

Contractor	Witness 1	Witness 2		Employer	Witness 1	Witness 2
			2.2.8			

e)	Fax	
2.	IDENTITY OF E	ACH NON-AFFIRMABLE JOINT VENTURE PARTNER
2.1(a)	Name of Firm	
Postal	Address	
Physic	al Address	
Teleph	ione	
Fax		
Contac	ct person for matters	pertaining to Joint Venture Participation Goal requirements
2.2(a)		
Name	of Firm	
Postal	Address .	
Physic	al Address .	
Teleph	ione .	
Fax		
Contac	ct person for matters	pertaining to Joint Venture Participation Goal requirements.
	(Continue as requi	red for further non-Affirmable Joint Venture Partners)

3. IDENTITY OF EACH AFFIRMABLE JOINT VENTURE PARTNER

3.1(a) Name of Firm	
Postal Address	
Physical Address	
Telephone	
Fax	
Contact person for matte	ers pertaining to Joint Venture Participation Goal requirements
3.2(a) Name of Firm	
Postal Address	
Physical Address	
Telephone	

							1	
Contractor	Witness 1	Witness 2	•	Employer	•	Witness 1	•	Witness 2
		т	220					
			Z.Z.S	1				

.....

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

.....

3.3(a) Name of Firm	
Postal Address	
Physical Address	
Telephone	
Fax	
Contact person for matters per	taining to Joint Venture Participation Goal requirements.

.....

(Continue as required for further Affirmable Joint Venture Partners)

Fax

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

.....

5. OWNERSHIP OF THE JOINT VENTURE

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

- c) Affirmable Joint Venture Partner percentages in respect of: *
 - (i) Profit and loss sharing.....
 - (ii) Initial capital contribution in Rands.....

.....

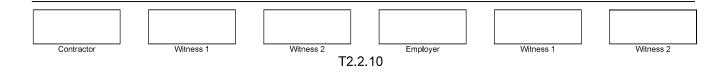
.....

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

(iii) Anticipated on-going capital contributions in Rands

.....

.....



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

.....

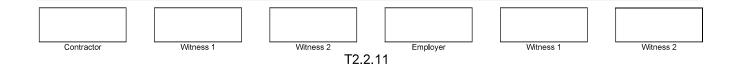
6. RECENT CONTRACTS EXECUTED BY PARTNERS IN THEIR OWN RIGHT AS PRIME CONTRACTORS OR AS PARTNERS IN OTHER JOINT VENTURES

	NON-AFFIRMABLE JOINT VENTURE PARTNERS	PARTNER NAME
a)		
b)		
c)		
d)		
e)		

	AFFIRMABLE JOINT VENTURE PARTNERS	PARTNER NAME
a)		
b)		
c)		
d)		
e)		

7. CONTROL AND PARTICIPATION IN THE JOINT VENTURE

(Identify by name and firm those individuals who are, or will be, responsible for, and have authority to engage in the relevant management functions and policy and decision making,



indicating any limitations in their authority e.g., co-signature requirements and Rand limits).

(a)	Joint Venture cheque signing
(b)	Authority to enter into contracts on behalf of the Joint Venture
(c)	Signing, co-signing and/or collateralizing of loans
(d)	Acquisition of lines of credit
(e)	Acquisition of performance bonds
(f)	Negotiating and signing labour agreements

8. MANAGEMENT OF CONTRACT PERFORMANCE

.....

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

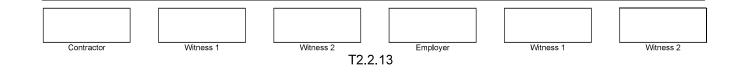
(a) Supervision of field operations

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		ТО	0 1 1 1		
		12			

	(b)	Major purchasing
	(c)	Estimating
	(d)	Technical management
	9.	MANAGEMENT AND CONTROL OF JOINT VENTURE
	(a)	Identify the "managing partner", if any,
	(b)	What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, subcontractors and/or other parties participating in the execution of the contemplated works?
····· ····		
	(0)	Describe the management structure for the Joint Venture's work under the
	(c)	Describe the management structure for the Joint Venture's work under the contract.

MANAGEMENT FUNCTION / DESIGNATION	NAME	PARTNER*

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



10. PERSONNEL

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

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

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

- (b) Number of operative personnel to be employed on the Contract who are currently in the employ of partners.
- (i) Number currently employed by Affirmable Joint Venture Partners

.....

(ii) Number currently employed by the Joint Venture

.....

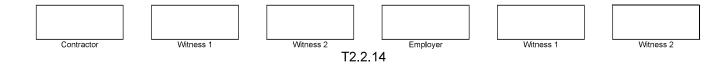
(c) Number of operative personnel who are not currently in the employ of the respective partner and will be engaged on the project by the Joint Venture

.....

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

.....

.....



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

.....

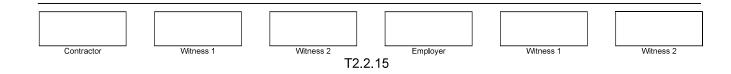
11. CONTROL AND STRUCTURE OF THE JOINT VENTURE

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

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

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

Signature		
Duly authoris	ed to sign on behalf of	
Name		
Address		
Telephone		
Date		
Signature		
Duly authoris	ed to sign on behalf of Name	



Address	
Telephone	
Date	

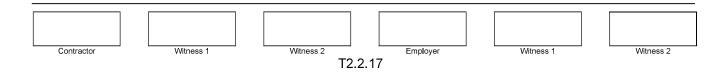
f Name

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

Signature		
Duly authorised to	sign on behalf of N	lame
Address		
Telephone		
Date		

	Contractor	Witness 1	Witness 2 T2.2	Employer 16	Witness 1	Witness 2
--	------------	-----------	-------------------	----------------	-----------	-----------

Signature		
Duly authorised to	sign on behalf of Name	3
Address		•
Telephone		•
Date		



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

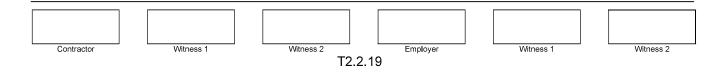
Tenderers' Full CSD report for the month of October 2023 / Tax compliance PIN must be attached hereto.



T2.1.6 CIDB CERTIFICATE

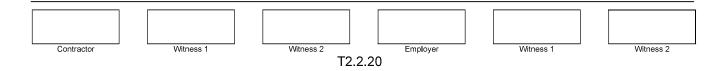
The Tenderer shall attach hereto the Contractors proof of valid registration certificate with CIDB. CRS number(s) also to be provided.

In the case of Consortium/Joint Venture Bids, each partner shall provide their own valid CIDB registration certificate.



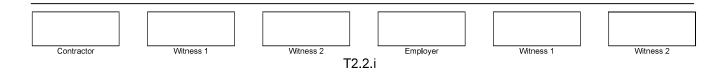
T2.1.7 PROOF OF WORKMEN'S COMPENSATION REGISTRATION

The Tenderer shall attach hereto valid proof of workmen's compensation registration or proof of payment of contributions in terms of the compensation of occupational injuries and diseases (Act No. 4 of 2002).



T2.2 OTHER FORMS, CERTIFICATES AND SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT

Page No.
T2.21
T2.22
T2.23
T2.24-T2.26
T2.27-T2.28
T2.29-T2.32
T2.33-
T2.37



T2.2.1 RECORD OF ADDENDA TO TENDER DOCUMENTS

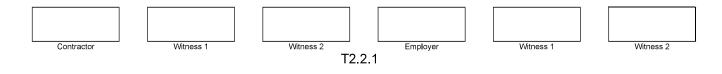
I/We confirm that the following communications amending the Tender documents, received from the Employer or his representative before the closing date of submission of this Tender offer, have been taken into account in this Tender offer.

ADD NO.	DATE	TITLE OR DETAILS
1.		
2.		
3.		
4.		
5.		

SIGNATURE:

_DATE: _____

(of Authorised Person)



T2.2.2 LOCAL EMPLOYMENT GENERATION

The Contractor must submit with his Tender, on the table below, his anticipated component of local personnel that will be employed on the Contract both in terms of number of persons and total person days for each category provided. The number of local personnel should include the local personnel employed by sub-contractors.

The contractor will not be allowed to import skilled personnel if the required skills exist within the local community. The contractor will however be allowed to make use of his own permanently employed machine operators and drivers.

Current policy requires that the female and youth labour components be maximized and that females should take up not less than 5% of the employment generated.

The specific employment goals, which are to be met for this project, are as follows:

- (a) A minimum of 10 local labour employment (residing in the area where the office is built.
- (a) A minimum of 5% of the local labour employed on the project is required to be females.
- (b) A minimum of 20% of the local labour employed on the project is required to be youth (18 – 35 years of age); and
- (c) A minimum of 1% of the local labour employed on the project is required to be disabled persons.

Non-compliance with the above requirements could be grounds for disqualifying the Tender.

Number of persons planned to be employed														
	Total		Adult			Youth				Disabled				
Occupational Category			Female		Male		Female		Male		Female		Male	
5,	Persons	Person Days	Persons	Person Days	Persons	Person Days		Person Days	Persons	Person Days		Person Days	Persons	Person Days
Clerical				ļ										
Labourer														
Managerial														
Semi skilled														
Skilled														
Supervisor														
Total														
Please note: - The o - Each person may - Must include all o	/ only be c	ounted o	nce. If a pe	erson falls	s into more	e than one	e category	, disablec			rence, the	n youth, t	hen adults	. <u>.</u>
SIGNATU (Authoris		son)							DA ⁻	TE:				
Contra	actor		Witness 1		With	ess 2 T	2.2.2	Employer		Wit	ness 1		Witness 2	

T2.2.3 UNEMPLOYMENT INSURANCE FUND (UIF) REGISTRATION CERTIFICATE (ACT 4 OF 2002)

A valid Tenderer's Unemployment Insurance Fund (UIF) Registration Certificate to be inserted here.



T2.2.4FORM CONCERNING FULFILMENT OF THECONSTRUCTION REGULATIONS, 2003

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

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

YES	
NO	

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

Own resources, competent in terms of the Regulations (refer to 3 below)	
Own resources, still to be hired and/or trained (until competency is achieved)	
Specialist sub-contract 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 (CV's to be attached).

.....



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

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

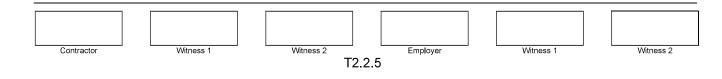
6. I have fully included in my Tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period.

(Tick)

YES	
NO	

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

1.	 Date
2.	 Date



T2.2.5 FORM OF REQUIRED INFORMATION

THE FOLLOWING PARTICULARS MUST BE FURNISHED (FAILURE TO DO SO MAY RESULT IN YOUR TENDER BEING DISQUALIFIED)

NAME OF TENDERER
POSTAL ADDRESS
STREET ADDRESS
TELEPHONE NUMBER CODE NUMBER
CELLPHONE NUMBER
FACSIMILE NUMBER CODE NUMBER
VAT REGISTRATION NUMBER
HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN ATTACHED? (MBD 2) YES/NO
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR
THE GOODS/SERVICES/WORKS OFFERED?YES/NO(IF YES ENCLOSE PROOF)YES/NO
SIGNATURE OF TENDERER:
DATE:
CAPACITY IN WHICH THIS TENDER IS SIGNED:

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 T2.2.6	Contractor	Witness 1	то о	6	Witness 1	Witness 2
--	------------	-----------	------	---	-----------	-----------

T2.2.6 BIDDER'S DISCLOSURE (SBD4)

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

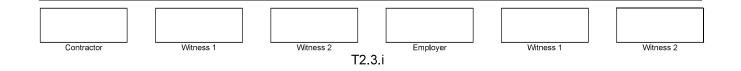
2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise, employed by the state? YES/NO
- 2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

- 2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**
- 2.2.1 If so, furnish particulars:

.....



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

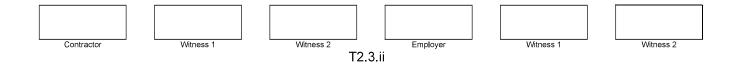
.....

3 DECLARATION

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

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium1 will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

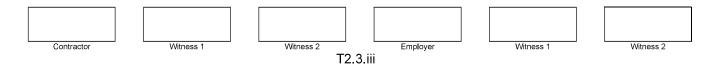
¹ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.



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

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

Signature	Date		
Position	Name of bidder		



SBD 6.1

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

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

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

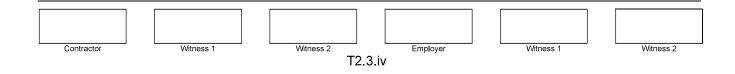
- a) The applicable preference point system for this tender is the 80/20 preference point system.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

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



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

2. DEFINITIONS

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20

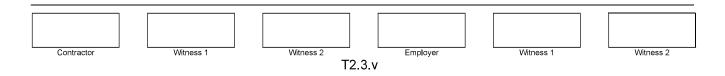
$$Ps = 80 \left(1 - \frac{Pt - P\min}{P\min}\right)$$

Where

Pt Price of tender under consideration =

Pmin = Price of lowest acceptable tender

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



PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

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

80/20

$$Ps = 80\left(1 + \frac{Pt - Pmax}{Pmax}\right)$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

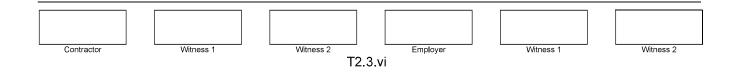
4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

The 80/20 preference point system is applicable, corresponding points must also be indicated as such. Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)



Specific Goals Category	Weighting (of 20 Points)	Number of points	Acceptable evidence
Local Production and Content	40%	8	 DTI Local Content Declaration Form (SBD 6.2) DTI Local Content Declaration Form (Annexure C)
 >51% Historically Disadvantaged Individuals Ownership (South African citizen - who, had no franchise in national elections prior to the introduction of the Constitution of the Republic of South Africa, 1983 (Act 110 of 1983) or the Constitution of the Republic of South Africa, 1993, (Act 200 of 1993)) 10-50% HDI Ownership <10% HDI Ownership 	20%	4 2 0	 CSD Report CIPRO Certificate ID Copies
Locality (Enterprises located in the Eastern Cape Province) Enterprise located outside the Eastern Cape	10%	2 0	 Municipal Account, or Proof of Address
>51% Youth Ownership 10-50% Youth Ownership <10% Youth Ownership	15%	3 1.5 0	 CSD Report CIPRO Certificate ID Copies
>51% Women Ownership 10-50% Women Ownership <10% Women Ownership	10%	2 1 0	 CSD Report CIPRO Certificate ID Copies
>51% Disability Ownership 10-50% Disability Ownership <10% Disability Ownership	5%	1 0.5 0	Medical Certificate
TOTAL	100%	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

- 4.4. Company registration number:
- 4.5. TYPE OF COMPANY/ FIRM
 - Derthership/Joint Venture / Consortium
 - One-person business/sole propriety
 - Close corporation

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 T2.3.vii

- Public Company
- Personal Liability Company
- □ (Pty) Limited
- □ Non-Profit Company
- □ State Owned Company
- [TICK APPLICABLE BOX]
- 4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
 - i) The information furnished is true and correct;
 - ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
 - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
 - iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

	SIGNATURE(S) OF TENDERER(S)			
SURNAME AND NAME:				
DATE:				
ADDRESS:				
Contractor	Witness 1 Witness 2 Employer Witness 1 Witness 1 Witness 1 T2.3.viii	s 2		

T2.2.9 LOCAL CONTENT DECLARATION (SBD 6.2)

This Standard Bidding Document (SBD) 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, 2017, 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, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8. (2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders 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 - x / y] * 100

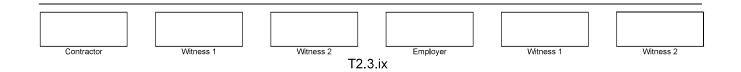
Where

- 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 South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial development/ip.jsp at no cost.

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;



2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

Description of services, works or goods	Stipulated minimum threshold
High tensile steel	100%
Standard 3-tier steel locker (300 x 450 x 1800 mm high)	100%
Steel PPE locker 790 x520 x 1800 mm high	100%
100 mm diameter rainwater pipes	100%
100 mm downpipes, including bends and shoes	100%
Cement	100%
Re-enforcing wire	100%

3. Does any portion of the goods or services offered have any imported content?

(Tick applicable box)

YES	NO	

3..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 SARB for the specific currency at 12:00 on the date of advertisement of the bid.

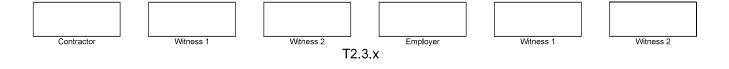
The relevant rates of exchange information are accessible on www.reservebank.co.za

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.

4. 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 AO/AA 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 Institution):

 •

- 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 <u>http://www.thdti.gov.za/industrial</u> <u>development/ip.jsp</u>. 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	
	(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
- (c) The local content percentage (%) 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	

O a sata a sta a	
Contractor	

Witness 1

Employer

Witness 2

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

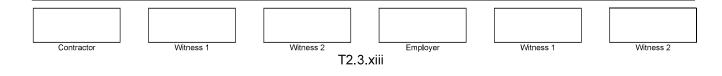
given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Institution 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 / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:	DATE:
WITNESS No. 1	DATE:
WITNESS No. 2	DATE:



T2.2.9 ANNEXURE C – LOCAL CONTENT DECLARATION – SUMMARY SCHEDULE



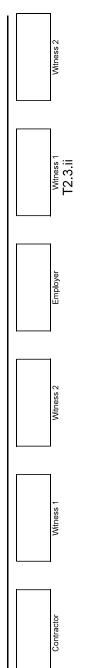
						Annex C						
					Local Content Decla	aration - S	ummary Sche	edule				
Bid No. Bid description: Designated proc	luct(s)		O COMMANDO DI	RIFT NATURE RESI	ERVE						<u>Note:</u> VAT to be exc calculations	uded from all
Tender Authorit Bid Entity name Bid Exchange Ra	: : :te:	ECPTA Pula		EU		GBP]				
Bid item no's			Bid price - each (excl VAT)	Exempted imported value	Calculation of local Bid value- net of exempted imported content	content Imported value	Local value	Local content % (per item)	Bid Qty	Bit Total Bid value	d summary Total exempted imported content	Total Imported content
	High tensile steel reinforcement bar	s							5,53			
21									4,00			
22		90 x 520 x							1,00			
23	Steel PPE locker 790 x 520 x 1800mm high Hazardous steel locker 900 x 450 x 1800mm high Sloping roof back to front, 4 stainless steel drip trays, hasp and staple for padlock facility with perforated panels								2,00			
24	steel workt splashback, stainl	op with ess steel legs							2,00			
25	nge Rate: Put local content % Put no's List of items High tensile steel reinforcement bars Put Standard 3-tier steel locker 30 x 450 x 1800mm high Steel PPE locker 790 x 520 x 1800mm high Hazardous steel locker 900 x 450 x 1800mm high Steel ppi locker 900 x 50 ping roof back to front, 4 stainless steel drip trays, hasp and staple for padlock facility with perforated								1,00			

26	1850X670X900mm stainless steel double bowl sink with two sides working space. Bowl size 500x500x250mm deep			1,0	10	
27	2400x670x900mm stainless steel single sink with work space on one side. Bowl size 600x500x300mm deep			1,0	0	
28	2850x720x900mm stainless steel triple sink . Bowl size 600x500x300mm deep			1,0	0	
1	Movable double flight stair with balustrades 2655x1225mm on plan x 2550 mm high			1,0	0	
4	Galvanised steel powder coated roller shutters with 76mm slats (18kg/m ²), fixed to brickwork Motor operated slatted roller shutter for 1500 x 2440mm high opening			1,0	0	
5	Galvanised steel powder coated roller shutters with 76mm slats (18kg/m ²), fixed to brickwork Motor operated slatted roller shutter for 3000 x 2440mm high opening			1,0	0	
6	500x500mm Stainless Steel Blood, Fat and Water Trap and Overflow			3,0	0	

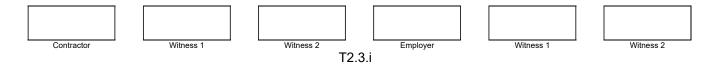
11	0,5mm Galvanised sheet steel Stainless Steel Butchers Tray				6,00			
3	0,6mm Galvanised sheet steel				35,00			
6	1600x670x900mm stainless steel single sink with work space on one side. Bowl size 600x500x300mm deep				1,00			
	100mm Diameter rainwater pipes				62,00			
	100mm Downpipes, including bends and shoes				12,00			
	Cement							
				Tot	tal bid value			
Signature of Bid	<u>lder</u>				Total Exem	pt imported content		
				Total bid value	net of exem	pt imported content	R	
						Tota	al Imported content	
							Total local content	
Date:						Average local	content % of tender	

	Annex C	<u>Note:</u> VAT to be excluded from	all calculations				Calculation of imported content	Freight costs to port of entry All locally Freight costs to and ing costs Total landed R duties Cost excl VAT			Total exempt imported value	This total must correspond with Annex C -	Calculation of imported content	All locally All locally Le of Freight costs to incurred Total landed ts port of entry and times cost excl VAT	(D27) (D28) (D29) (D30) (D31)			(D32) Total imported value by tenderer R 0	
ex D	ation - Supporting Schedule to Annex					GBP	Calculatio	Forign currencyTender Local value of tvalue as per CommercialLocal value of importsCommercialRateInvoiceInvoice					Calculatio	Forign currency value as per Commercial of Exchange imports Invoice	(D24) (D25) (D26)				
Annex D	Imported Content Declaration -							Overseas Supplier						Overseas Supplier	(D23)				
	Importe					te: Pula	A. Exempted imported content	Description of imported content Local supplier					B. Imported directly by the Tenderer	Description of imported content measure	(D21) (D22)				
		Bid No.	Bid description: Designated Draducts:	Bidders Authority:	Bidder Entity name:	Bidder Exchange Rate:	A. Exempted in	Tender item D no's					B. Imported di	Tender item D no's	(D20)		,		

Summary	Total imported value	(D44)			R 0	Summary of payments	Local value of payments	(D51)				R 0	This total must correspond with	Annex C - C 23	
Sı	Quantity T imported	(D43)			e by 3rd party					/or 3rd party	•	(<i>D52</i>) above	This total mus	Anney	
	Total landed cost excl VAT	(D42)			(D45) Total imported value by 3rd party					bv tenderer and		- (D32), (D45) <u>8</u>			
nt	All locally incurred landing costs & duties	(D41)			(<i>D45</i>) Tota					nents declared		ency payments			
Calculation of imported content	Freight costs to port of entry	(D40)								(D52) Total of foreign currency payments declared by tenderer and/or 3rd party		(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above			
alculation of i	Local value of imports	(D39)								() Total of fore		imported conte			
C	Tender Rate of Exchange	(D38)								(D52		(D53) Total of i			
	Forign currency value as per Commercial Invoice	(D37)				foreign currency ments	Tender Rate of Exchange	(D50)							
nderer	Overseas Supplier	(D36)				Calculation of foreig payments	Foreign currency value paid	(D49)							
d to the Ter	Local supplier	(D35)					Overseas beneficiary	(D48)							
y and supplie	Unit of measure	(D34)				payments	Local supplier making the payment	(D47)							
C. Imported by a 3rd party and supplied to the Tenderer	Description of imported content	(D33)				D. Other foreign currency payments	Type of payment	(D4C)			Signature of tenderer from Annex B			Date:	



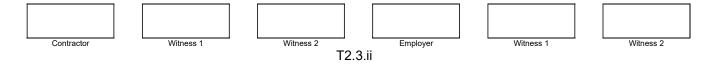
			Annex E			
	Local	Content Decla	ration - Support	ing Schedule to Annex C		
Bid No.				Note: VAT to be excluded from	n all	
Bid descript	Varia Varia			calculations		
Designated						
Bidder Auth			-			
Bid Entity n	ame:					
	Local Products (Goods, Services and Works)	Description	n of items purchased	Local suppliers	Value	%ad
			Total local pro	ducts (Goods, Services and Works)		
	Manpower costs	(Tenderer's manpow	ver cost)			
	Factory overheads	(Rental, depreciation	& amortisation, utility c	osts, consumables etc.)		
	Administration overh	eads and mark-up	(Marketing, insurance, f	inancing, interest etc.)		
				Total local content		
				This total must correspond v	vith Annex C -	
Signature o	f tenderer from Annex B					



T2.3 DOCUMENTATION, FORMS AND SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES (PRE-REQUISITES)

Page No.

Refer Section F.3.11 – Stage 1: Compliance Requirements



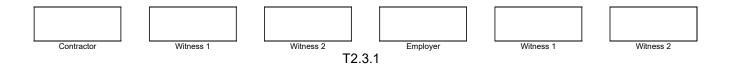
T2.3.1 RELATED EXPERIENCE OF TENDERER

(NB: This schedule is used in evaluating Pre-requisites)

The Tenderer shall list below or in a separate schedule a statement of those works/services of similar nature which they have satisfactorily completed in the past five years. Information must be provided in the format provided below. It is essential that telephone contact details of references be supplied. Present commitments and their due dates for completion shall also be listed. Where applicable, the project value can be adjusted to reflect the impact of inflation, using the Consumer Price Index (CPI) with the completion date being taken as the base date for the calculation (**Refer Section F.3.11 – Stage 1: Compliance requirements**)

1. PREVIOUS PROJECTS UNDERTAKEN:

EMPLOYER/ CONTACT	LOYER CONSULTING ENGINEER/ CONTACT PERSON/ TEL. NO.	DESCRIPTION AND NATURE OF WORKS/ SERVICES	VALUE OF WORK (INCL. VAT)	DATE COMPLE- TED

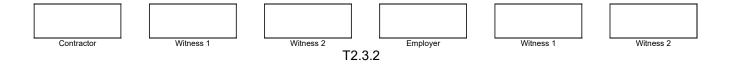


EMPLOYER/ CONTACT PERSON/ TEL. NO.	LOYER CONSULTING ENGINEER/ CONTACT PERSON/ TEL. NO.	DESCRIPTION AND NATURE OF WORKS/ SERVICES	VALUE OF WORK (INCL. VAT)	DATE COMPLE- TED

CURRENT PROJECTS UNDERTAKEN: 2.

DATE:______SIGNATURE OF TENDERER: ______

(Authorized Person)

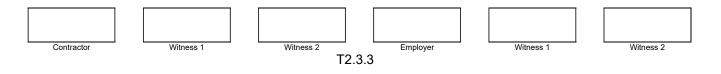


T2.3.2 LIST OF KEY PERSONNEL

For purpose of evaluating functionality, the Tenderer shall attach hereto a shortened CV for each key member available to work on the project in the Categories listed below Project Manager, Site Foreman and Plant Operators/Artisans personnel (using the template provided). (Refer Section F.3.11 – Stage 2: Functionality (ii)).

NAME	JOB	RESPONSIBILITIES AND AVAILABILITY TO PROJECT	QUALIFICATIONS (ATTACHED COPY)	EXPERIENCE
		Contracts Manager		
		Site Agent		
		Foreman		
		Electrician		
		Plumber		
		Occupational Health and Safety Officer		
		Environmental Control Representative/ Officer		

The Tenderer shall list below the key personnel to be used on this project.



CURRICULUM VITAE OF KEY PERSONNEL

NB: BIDDERS MUST SUBMIT CV's OF KEY PERSONNEL

This form should be completed for each key person listed in the table in section T 2.3.2.

Responsibility or role on the project (as per	Contracts Manager				
table T2.3.2)					
Name:	Date of birth:				
Profession:	Nationality:				
Qualifications:					
Professional membership:					
Name of employer (firm):					
Current position:	Years with firm:				
Employment record: (List of chronological orde experience) Experience record pertinent to required service:	r starting with earliest work				
Certification:					
I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience and that I will be available to execute the work for which I have been nominated.					
(Signature of Person named in schedule)	Date				

Attach additional pages if more space is required

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		T2	2.3.4		

Responsibility or role on the project (as per	Site Agent
table T2.3.2)	
Name:	Date of birth:
Profession:	Nationality:
Qualifications:	L
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (List of chronological orde experience)	r starting with earliest work
Experience record pertinent to required service:	
Certification:	
I, the undersigned, certify that to the best of my knowle describes me, my qualifications and my experience execute the work for which I have been nominated.	• • •
(Signature of Person named in schedule)	Date

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2	
T2.3.5						

Responsibility or role on the project (as per	Foreman
table T2.3.2)	
Name:	Date of birth:
Profession:	Nationality:
Qualifications:	1
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (List of chronological orde experience)	r starting with earliest work
Experience record pertinent to required service:	
Certification:	
I, the undersigned, certify that to the best of my knowle describes me, my qualifications and my experience execute the work for which I have been nominated.	.
(Signature of Person named in schedule)	Date

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		T2.3			

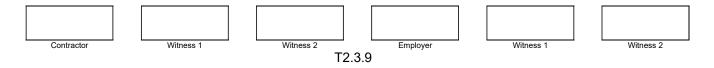
Responsibility or role on the project (as per	Electrician
table T2.3.2)	
Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (List of chronolog experience)	vical order starting with earliest work
Experience record pertinent to required serv	rice:
Certification:	
I, the undersigned, certify that to the best of r describes me, my qualifications and my e execute the work for which I have been nom	experience and that I will be available to
(Signature of Person named in schedule)	Date

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 T2.3.7

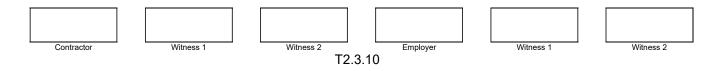
table T2.3.2) Name: Date Profession: Nati Qualifications: Professional membership: Name of employer (firm): Current position: Yea Employment record: (List of chronological order sta	nber e of birth: ionality: ars with firm: arting with earliest work
Profession: Nati Qualifications: Professional membership: Name of employer (firm): Current position: Yea	ionality:
Profession: Nati Qualifications: Professional membership: Name of employer (firm): Current position: Yea Employment record: (List of chronological order sta	ionality:
Qualifications: Professional membership: Name of employer (firm): Current position: Employment record: (List of chronological order sta	ars with firm:
Professional membership: Name of employer (firm): Current position: Employment record: (List of chronological order sta	
Name of employer (firm): Current position: Employment record: (List of chronological order sta	
Current position: Employment record: (List of chronological order sta	
Employment record: (List of chronological order sta	
	arting with earliest work
Experience record pertinent to required service:	
Certification:	
I, the undersigned, certify that to the best of my knowledge describes me, my qualifications and my experience an execute the work for which I have been nominated.	
(Signature of Person named in schedule)	Date

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 T2.3.8

Responsibility or role on the project (as per	Occupational Health and Safety
table T2.3.2)	Officer
Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (List of chronolog experience)	gical order starting with earliest work
Certification:	
I, the undersigned, certify that to the best of describes me, my qualifications and my e execute the work for which I have been nom	experience and that I will be available to
(Signature of Person named in schedule)	Date

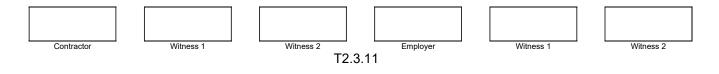


Responsibility or role on the project (as per	Environmental Control Representative/ Officer	
table T2.3.2)	onicer	
Name:	Date of birth:	
Profession:	Nationality:	
Qualifications:		
Professional membership:		
Name of employer (firm):		
Current position:	Years with firm:	
Employment record: (List of chronological orde experience)	r starting with earliest work	
Experience record pertinent to required service:		
Certification:		
I, the undersigned, certify that to the best of my knowled describes me, my qualifications and my experience execute the work for which I have been nominated.		
(Signature of Person named in schedule)	Date	



SUPPLEMENTARY INFORMATION

Please attach any supporting documentation, CV, Copies of qualifications/ certificates and any other supplementary information to this page.



T2.3.3 SCHEDULE OF PLANT AND EQUIPMENT

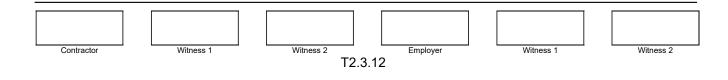
(NB: This schedule is used in evaluating Functionality)

The following are lists of major items of relevant equipment that the Tenderer 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 and immediately available for this
	contract.

DESCRIPTION (type, size, capacity etc.)	YEAR OF MANUFACTURE

Attach additional pages if more space is required.



	HOW ACQUIRED	
DESCRIPTION (type, size, capacity, etc.)	HIRE/ BUY	SOURCE

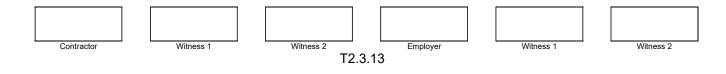
Details of major equipment that will be hired, or acquired for this contract if (b) Tender is accepted. Contact details of plant hire company to be provided.

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

DATE: _______SIGNATURE OF TENDERER: ______

(Authorized Person)



T2.3.4 SCHEDULE OF PROPOSED SUB-CONTRACTORS

In terms of Clause 4.4 of the Conditions of Contract for Construction, the Tenderer shall enter below the names of sub-contractors he intends to employ for work on this contract, as well as the portion and value of the work to be executed by such sub-contractors.

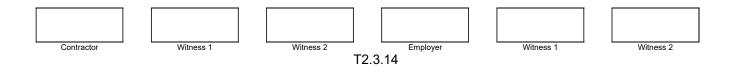
Based on the definition of SMME provided below the Tenderer should indicate in which category, i.e. Medium, Small, Very Small or Micro, the intended sub-contractor is categorized if applicable.

DESCRIPTION OF PORTION OF WORK	APPROX. VALUE (EXCL. VAT)	TELEPHONE	SMME (YES / NO)	SMME CATEGOR Y MEDIUM/ SMALL/ VERY SMALL/ MICRO	% HDI OWNERSHIP OF SUB- CONTRAC- TOR

* According to the national Small Business Amendment Act, 2003 (Act No. 26 of 2003) small business (i.e. SMME) is defined as follows:

A separate and distinct business entity, including co-operative enterprises and non- governmental organizations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy as mentioned in column 1 of the Schedule and which can be classified as a micro, a very small, a small or a medium enterprise by satisfying the criteria mentioned in columns 3, 4 and 5 of the Schedule opposite the smallest relevant size or class as mentioned in column 2 of the Schedule.

(Schedule for Construction Sector given on the following page).



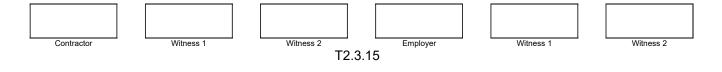
SCHEDULE (ONLY CONSTRUCTION SECTOR SHOWN)

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Sector or Sub- sectors in accordance with the Standard Industrial Classification	Size or Class	Total full-time equivalent of paid employees: Less than:	Total annual turnover: Less than:	Total gross asset value (fixed property excluded): Less than:
	Medium	200	R 26 million	R 5 million
Construction	Small Very	50	R 6 million	R 1 million R0,50
Construction	Small Micro	20	R 3 million	million R0,10
		5	R0,20 million	million

It is to be noted that an entity awarded a contract may not sub-contract more than 25% of the value of the contract.

DATE:______SIGNATURE OF TENDERER: ______

(Authorized Person)



T2.3.5 CONSTRUCTION METHODOLOGY AND PROGRAMME

Eligibility criteria: The respondent should be able to demonstrate its capability to bring a contract to a satisfactory conclusion by describing the methodology of approach and programme to accomplish the project's required outcomes.

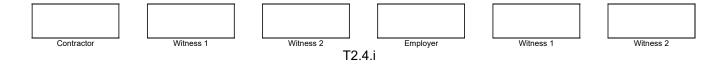
The respondent must explain its understanding of the requirements for successful planning and implementation of infrastructure on nature reserves.

The approach paper should explain the methodologies which are to be adopted under these conditions and demonstrate the compatibility of those methodologies.

The approach should further include a top-quality project plan which outlines processes, procedures and associated resources, applied by whom and when with relevant reporting systems, indicate how risks will be managed, what quality assurance measures are to be put in place. Special emphasis should be placed on key performance indicators as well as innovative procedures to be used.

The successful Tenderer shall submit a detailed programme within 14 days after the commencement date. The Tenderer need to submit a high-level programme in the table provided below to illustrate a comprehensive understanding of the work required as well as a pragmatic approach in performing the work required:

DESCRIPTION OF PHASE AND SECTION OF THE WORKS			FINISHING WEEK NO.
Site handover	1	1	1
Site establishment			

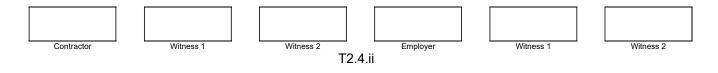


DESCRIPTION OF PHASE AND SECTION OF THE WORKS		FINISHING WEEK NO.

* The execution of the Works should start within 14 days from the Site Handover Date.

DATE: ______SIGNATURE OF TENDERER _____

(Authorized Person)



T2.4OTHER DOCUMENTATION, FORMS AND SCHEDULESREQUIRED FOR TENDER EVALUATION PURPOSES

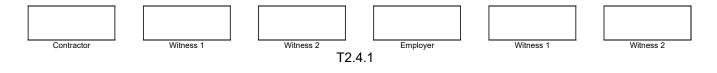
Page No.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		T2.4.	iii		

T2.4.1	Form of Intent to provide a Performance Guarantee	T2.54

T2.4.1 FORM OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE

The Tenderer must attach hereto a letter from the bank or institution with whom he has made the necessary arrangements, to the effect that the said bank or institution will be prepared to provide the required performance guarantee when asked to do so.



T2.1 LIST OF RETURNABLE DOCUMENTS

THE TENDERER MUST SUBMIT THE FOLLOWING DOCUMENTS WITH THIS TENDER. IF THE DOCUMENTS ARE NOT INCLUDED IN THE DOCUMENT, THE DEPARTMENT WILL NOT CONSIDER THIS TENDER. (MANDATORY REQUIREMENTS)

Clause referred to in	Document							
Standard Conditions of								
Tender								
2.1	Tenderers should provide their CRS Number of registered Contractor as well as JV Partner*. CRS Number of Tenderers or JV Partners needs to be filled in below: <u>Tenderer/Leading JV Partner</u>							
	CRS Number:							
	Name of Company:							
	JV Partner							
	CRS Number:							
	Name of Company:							
	JV Partner							
	CRS Number:							
	Name of Company:							
	IB: Recent printout from CIDB website indicating the CRS number will also be accepted.							
2.13.4	Letter of authorization to sign the Form of Offer and where required in tender document. (See Item T2.2.9 Form I page T2.2.15)							
2.25	CSD Report/ Tax Compliance Pin. See Item T2.2.20 Form T page T2.2.33)							
	In Bids where Consortia/Joint Venture/ Sub-contractors are involved each party must submit a separate and full CSD reports							
2.7	Attendance of the Compulsory Tender Clarification meeting as stipulated.							
F.2.11	Tampering with or taking the documents apart is strictly prohibited, this will lead to the tender being considered as non-responsive. All documentation must be stapled into the tender document or attached in a separate file.							

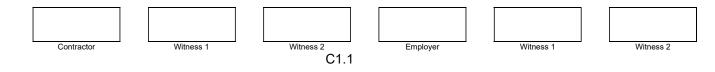
O transform		14/24-2 4		14/34-2 0		Faralaria		Mite A	 \\ <i>\</i> !!t== = = 0
Contractor		Witness 1		Witness 2		Employer		Witness 1	Witness 2
				T2 /	~				
12.4.2									
				12.1					

EASTERN CAPE PARKS & TOURISM AGENCY

CONTRACT NO.: 16/FY/24

CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

PORTION 2: CONTRACT



EASTERN CAPE PARKS & TOURISM AGENCY

CONTRACT NO.: 16/FY/24

CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

PART C1: THE CONTRACT



PART C1: THE CONTRACT

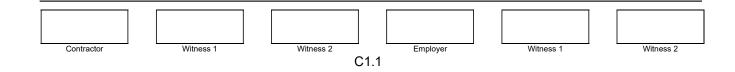
Notes:

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

All forms must be duly completed in **black ink** as required.

The list of returnable documents, which consists of forms and schedules to be completed and company specific certificates and information pages to be attached, comprise the following:

TAB <u>LE OF Co</u>	ONTENTS	Page		
C1:	AGREEMENT AND CONTRACT DATA	C1.1		
C1.1	FORM OF OFFER AND ACCEPTANCE	C1.1-C1.8		
C1.2.1:	CONDITIONS OF CONTRACT	C1.9-C1.14		
C1.2.2:	CONTRACT SPECIFIC DATA	C1.15-C1.18		
C1.2.3:	PRO-FORMA PERFORMANCE GUARANTEE	C1.19-C1.22		
C1.2.4:	ADJUDICATOR APPOINTMENT	C1.23-C1.25		
C2:	PRICING DATA	C2.1		
C2.1:	PRICING INSTRUCTIONS	C2.1-C2.2		
C2.2:	PROVISIONAL BILLS OF QUANTITIES	C2.3		
C3:	SCOPE OF WORK	C3.1		
C3.1:	PROJECT SPECIFICATIONS	C3.1-C3.11		
C3.2:	PARTICULAR SPECIFICATIONS	C3.12-C3.58		
C3.3:	TENDER DRAWINGS	C3.59		
C3.4	CONTRACT BOARD LAYOUT DETAIL	C3.60		
C4:	SITE INFORMATION	C4.1		
C4.1:	GEOTECHNICAL INFORMATION OF SITE	C4.1		
C5:	ANNEXURES	C5.1		



C1. AGREEMENT AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE

A. OFFER

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

TENDER No. 16/FY/24- CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN & ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda hereto 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 authorized, signing of this part of this Form of Offer and Acceptance, the Tenderer offers to perform all 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:

R_____(in words)_____

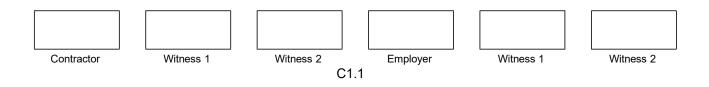
This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in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

Signature: (of person authorized to sign the Tender):

Name: (of signatory in capitals: _____

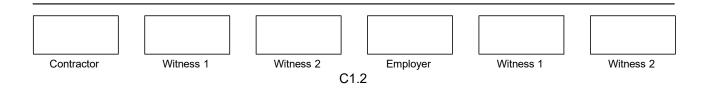
Capacity: (of Signatory):

Name of Tenderer: (organization):



Address:	
Telephone number:	
Witness:	
Signature:	
Name: (In capitals:	
Date:	

(Failure of a Tenderer to sign this form will invalidate the Tender)



B. ACCEPTANCE

By signing this part of the 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 Condition of Contract as set out in the general and Special Conditions of Contract and identified in the Contract Data. Acceptance of the Tenderer upon the terms and conditions and contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in -

Part 1 Agreement, and Contract Data, (which include this Agreement) Part 2

Pricing Data, including the bill of Quantities.

Part 3 Scope of Work Part 4

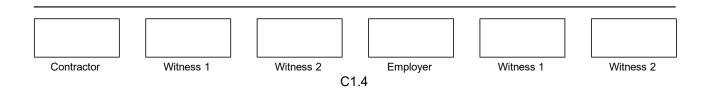
Site Information

and the schedules, forms, drawing and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

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

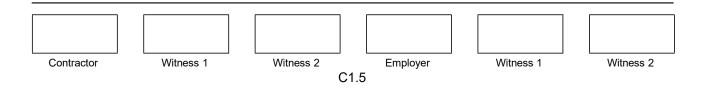
The Tenderer shall deliver the security in terms of Clause 14 of the JBCC PBA Edition 6.2 May 2018 within the period stated in the contract Data, and he shall, immediately after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contract the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any other bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data, within 14 days of the date on which this Agreement comes into effect. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt notified 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.



Signature:

Name: (in capitals)		
Capacity:		
Name of Employer: (organization)		
Address:		
Witness:		
Signature:	Name:	
Date:		



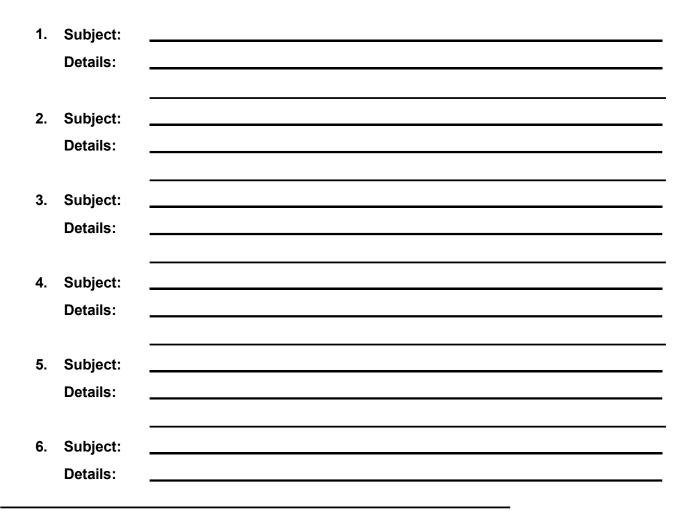
C. SCHEDULE OF DEVIATIONS

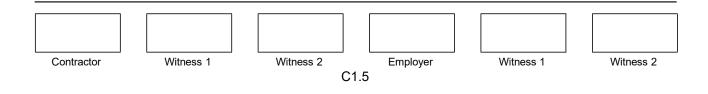
The extent of deviations from the Tender documents issued by the Employer prior to the Tender closing date is limited to those permitted in terms of the Tender Data and the Conditions of Tender.

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

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 and obligation of the contract shall also be recorded here.

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.



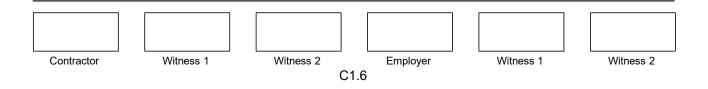


By the duly authorized representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from the amendments to the documents listed in the Tender Data and addend thereto as listed in the Tender Schedules,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

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

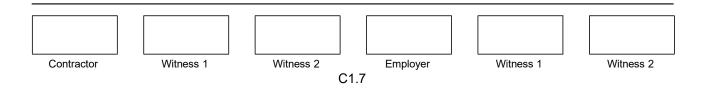
FOR THE TENDERER:

Signature:
Name:
Capacity:
Tenderer (Name and address of organization):
Witness:
Signature:
Name:
Date:

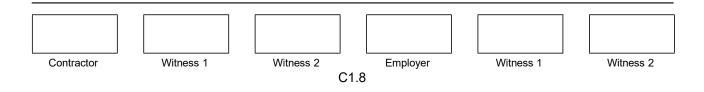


FOR THE TENDERER:

Signature:			
Name:			
Capacity:			
Witness:			
Signature:			
Name:			
Date:			



Part 1:		General Conditions of Contract	C1.9
Part 2:		Special Conditions of Contract	C1.9
	1.	General	C1.9
	2.	Amendments to the General Conditions of Contract	C1.9



PART 1: GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract are clauses 1 to 41 of the **JBCC Principal Building Agreement (Edition 6.2 of May 2018)** published by the Joint Building Contracts Committee.

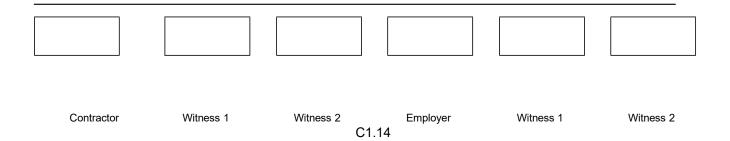
Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors (011-3154140), Master Builders Association (011-205-9000; 057- 3526269) South African Association of Consulting Engineers (011-4632022) or South African Institute of Architects (051-4474909; 011-4860684; 053-8312003;)

The JBCC Principal Building Agreement makes several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the JBCC Principal Building Agreement.

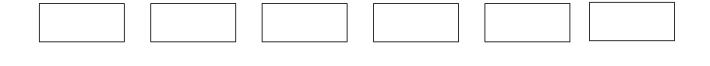
Each item of data given below is cross-referenced to the clause in the JBCC Principal Building Agreement to which it mainly applies.

The Conditions of Contract make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Specific Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Conditions of Contract or the Special Conditions of Contract.

The Contract Specific Data, General and Special Conditions of Contract shall have precedence over the Drawings, Scope of Work and Standardized Specifications in the interpretation of any ambiguity or inconsistency.



C 1.1 CONTRACT DATA



EASTERN CAPE PARKS AND TOURISM AGENCY

BID FOR THE UPGRADES TO COMMANDO DRIFT NATURE RESERVE

C1.1 Contract Data

The Joint Building Contract Committee Principal Building Agreement (JBCC 2018 Edition 6.2 May 2018) published by the Joint Building Contract Committee, is applicable to this contract. Copies of these conditions of contract may be obtained from the Joint Building Contract Committee (Tel 011-482 3102).

The Contract Data and JBCC shall have precedence over the Drawings, Scope of Work and Standardised Specifications in the interpretation of any ambiguity or inconsistency.

The following contract specific data, referring to the Joint Building Contract Committee Agreement, Edition 6.2 May 2018, are applicable to this Contract:

The Joint Building Contracts Committee[®] - NPC CONTRACT DATA For use by ORGANS OF STATE and other PUBLIC SECTOR BODIES Principal Building AgreementEdition 6.2 -May 2018

A PROJECT INFORMATION

A 1.0 Works [1.1]

Project name	UPGRADES TO COMMANDO DRIFT NATURE RESERVE
Reference number	Tender No : 16/FY/24
	Refer to more detailed scope of works described in Tendering Procedures Part T1.1 of the tender document.
	As a rough guide only to Tenderers, the work embodied in this contract comprises the construction of:
Werke description	Refurbishment of Existing Abattoir
Works description	Construction of 4-Bedroom Housing

A 2.0 Site [1.1]

Erf / stand number	Commando Drift Nature Reserve
Township / Suburb	Tarkastad
	Commando Drift Nature Reserve
Site address	
Local authority	Enoch Mgijima Local Municipality

CONTRACTOR	WITNESS 1	WITNESS 2	EMPLOYER	WITNESS 1	WITNESS 2

A 3.0 Employer [1.1]

Official Name of Organ of State / Public Sector Body	Eastern Cape Parks and	Fourism Agency	
Business registration number	Public Entity	NPO	Ν
VAT/GST number	VAT Exempt	No	
Country	South Africa		
Employer's representative:Name	Ms. Mandilakhe Lawana		
E-mail	<u>Mandilakhe.Lawana@ecpt</u> <u>a.co.za</u>	Telephone number	043 492 0881
Mobile number	082 901 8096		
	Private Bag X 11235		
Postal address	Southernwood	Postal code	5201
	17-25 Oxford Street		
Physical address	East London	Postal code	5201

A 4.0 Principal agent [1.1]

Name	DGIT Architects		
Legal entity of above	DGIT Architects	Contact person	Nathan Sundayi
Practice number	PrArch 7074	Telephone number	082 819 4952
		Mobile number	082 819 4952
Country	South Africa	E-mail	nathan@dgitbep.co.za
	PO Box 13697		
Postal address	Vincent, East London	Postal code	5241
	115 Western Avenue		
Physical address	Vincent, East London	Postal code	5241

A 5.0 A	Agent	Discipline	Architect

Name	DGIT Architects		
Legal entity of above	DGIT Architects	Contact person	Dunmore Tirivanhu
Practice number	PrArch 7074	Telephone number	072 076 2318
		Mobile number	072 076 2318
Country	South Africa	E-mail	dunmore@dgitbep.co.za
PO Box 13697			
Postal address	Vincent, East London	Postal code	5205
	115 Western Avenue		
Physical address	Vincent, East London	Postal code	5247



CONTRACTOR

WITNESS 1

A 6.0 Agent [1.1; 6	5.2]
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Discipline | Quantity Surveyor

Name	Project Metrics		
Legal entity of above	Project Metrics (Pty) Limited	Contact person	Anathi Nomnganga
Practice number	PrQS 4673	Telephone number	011 022 4042
		Mobile number	061 939 4455/062 990 5692
Country	South Africa	E-mail	themba.moyo@projectmetrics.co.zai
Postal address	PO Box 13697		
Postal address	Vincent, East London	Postal code	5205
Physical address	115 Western Avenue		
	Vincent, East London	Postal code	5247

- A 7.0 Agent [1.1; 6.2] Discipline **Civil & Structural Engineer** MBSA Consulting Name Legal entity of above MBSA Consulting Contact person Kwezi Luvo Mpuhlu ECSA: Practice number 043 726 6513 Telephone number Mobile number 083 299 9988 South Africa E-mail kwezi@mbsaconsultants.com Country PO Box 13697 Postal address 5205 Postal code Vincent, East London 115 Western Avenue Physical address 5247 Postal code Vincent, East London
- A 7.0 Agent [1.1; 6.2] Discipline Electrical & Mechanical Engineer

Name	MBSA Consulting				
Legal entity of above	MBSA Consulting	Contact person	Kwezi Luvo Mpuhlu		
Practice number	ECSA:	Telephone number	043 726 6513		
		Mobile number	083 299 9988		
Country	South Africa	E-mail	kwezi@mbsaconsultants.com		
Postal address	PO Box 13697				
Postal address	Vincent, East London	Postal code	5205		
Physical address	115 Western Avenue				
	Vincent, East London	Postal code	5247		

A 9.0 Agent [1.1; 6.2]

Discipline Health & Safety

Name	DGIT Architects		
Legal entity of above	DGIT Architects	Contact person	Tigere Mhiti
Practice number	PrArch 7074	Telephone number	081 726 7395
		Mobile number	081 726 7395
Country	South Africa	E-mail	tigere@chartway.co.za
	PO Box 13697		
Postal address	Vincent, East London	Postal code	5205
Physical address	115 Western Avenue		
Filysical address	Vincent, East London	Postal code	5247

В **CONTRACT INFORMATION**

B 1.0 Definitions [1.1]

Bills of quantities: System/Method of	Seventh Edition 2015 of the Standard System of
measurement	Measuring Builder's Work

B 2.0 Law, regulations and notices [2.0]

Law applicable to the works, state country[2.1]	Republic of South Africa
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B 3.0 Offer and acceptance [3.0]

Currency applicable to this agreement [3.2]	South African Rands
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B 4.0 Documents [5.0]

The original signed agreement is to be held by the principal agent [5.2], if not, indicate by whom	Employer
Number of copies of construction information issued to the contractor at nocost [5	^{5.6]} 2

Documents comprising the agreement	Page numbers
The JBCC [®] Principal Building Agreement, Edition 6.2 May 2018	1 to 30
The JBCC [®] Principal Building Agreement - Contract Data for Organs of Stateand other Public Sector Bodies, Edition 6.2 May 2018	1 to 14
The JBCC [®] General Preliminaries for use with the JBCC [®] Principal Building Agreement, Edition 6.2 May 2018	1 to 7
Bills of Quantities	Refer to index
Additional documentation as stated in Procurement document	

Contract drawings – description	Number	Revision	Date
Refer to drawings included in tender document annexures			

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Employer's agents [6.0] B 5.0

Authority is delegated to the following agents to issue contract instructions and perform duties for specificaspects of the works [6.2] **Nolwandle Quantity Surveyors**

Principal agent's and agents' interest or involvement in the works other than a professional interest [6.3] N/A

Insurances [10.0] B 6.0

Insurances	by employer		Amount including tax	Deductible amount including tax
Yes	s/no? No			
Contract work	s insurance:			
	New works [10.1.1] (contract sum or amount	t)		
or	Works with practical con (contract sum or amour	mpletion in sections [10.2] ht		
or	Works with alterations ar (reinstatement value of ex including new works)	kisting structures with or		
	Direct contractors [10.1 to be included in the cont	.1; 10.2] where applicable, ract works insurance		
	Free issue [10.1.1; 10.2] included in the contract w			
	Escalation, professional for costs if not included above			
Total of the ab	oove contract works insurance	amount		
Supplementar	ry insurance [10.1.2; 10.2]			
Public liability	insurance [10.1.3; 10.2]			
Removal of la	teral support insurance [10.1.4	; 10.2]		
Other insuran	ces [10.1.5]			
Yes/no?	If	yes, description 1	-	
Yes/no?	If	yes, description 2		
			_	

CONTRACTOR	WITNESS 1	WITNESS 2	EMPLOYER	WITNESS 1	WITNESS 2

and/or

Insurances by contractor		Amount including tax	Deductible amoun		
Yes	s/no?	Yes			including tax
I		works [10.1.1 1] (contract s unt)		Contract Sum	
or		with practic stract sum or a	al completion in sections [10.2] amount)	N/A	
or	(reins		ons and additions [10.3] e of existing structures with or s)	N/A	
			[10.1.1; 10.2] where applicable, to ontract works insurance	N/A	
			10.2] where applicable, to be ract works insurance	N/A	
	Escalation, professional fees and reinstatement costs if not included above			N/A	
Total of the ab	ove contr	act works insu	rance amount	Sum of above	
Supplementar	y insuran	ce [10.1.2]		Contract works insurance value	
Public liability	insurance	e [10.1.3]		R5,000,000.00	
Removal of lat	teral supp	ort insurance [10.1.4]	N/A	
Other insurance	ces [10.1.	5]: Refer B17	0	N/A	
Yes/no?			If yes, description 1		
Guarantee for	Construc	tion 10% of the	e Contract Sum [11.1.1]		
Yes/no?			If yes, description 2		
Contract Sum a ertificate	ind a pay	ment reduction	of 5% of the value of each payment	t	

a) **B 7.0** Obligations of the employer [12.1]

Existing premises will be in use and occupied [12.1.2]			No
If yes, description	Existing Nature Reserve Facilities, located on the same site, will remain in operation during the construction period, the operation of which must not be hindered in any way by the construction activities		
Restriction of working hours [12.1.2] Yes/no? No			No

CONTRACTOR	WITNESS 1	WITNESS 2	EMPLOYER	WITNESS 1	WITNESS 2

If yes, description	Contractor to utilise and spend much time on site to ensure the completion of works within the schedule of works.				
Natural features and known	services to be preserved by the contractor [12.1.3]	Yes/no?	No		
If yes, description	No indigenous trees on the site	i	-		
Restrictions to the site or are	eas that the contractor may not occupy [12.1.4]	Yes/no?	Yes		
If yes, description	Commando Drift Nature Reserve is a clean rese will need to stay within the demarcated building will need to be approved by the Employer's ag	construction site. N	laterials used		
Supply of free issue [12.1.1	0]	Yes/no?	No		
If yes, description					

B 8.0 Nominated subcontractors [14.0]

Yes/no?	No	If yes, description of specialisation
Specialisation 1		
Specialisation 2		
Specialisation 3		
Specialisation 4		
Specialisation 5		

B 9.0 Selected subcontractors [15.0]

Yes/no?	If yes, description of specialisation	
-		
Specialisation 1		
Specialisation 2		
Specialisation 3		
Specialisation 4		
Specialisation 5		

B 10.0 Direct contractors [16.0]

Yes/no?	If yes, description of extent of work
Extent of work [12.1.11]	

CONTRACTOR	WITNESS 1	WITNESS 2	EMPLOYER	WITNESS 1	WITNESS 2

Refer to Scope of Works described elsewhere in the tender document for more detailed description of sections

Sections	N/A
Section	Remainder of the works

B 12.0 Possession of site [12.1.5], practical completion [19.0; 20.0] and penalty [24.0]

Practical completion for the works as awhole	Intended date of possession of the site Refer B17.0 [12.1.5; 12.2.22]	Period for inspection by the principal agent [19.3]	The date for practical completion shall be the period as indicated below from the date of possession of the site by the contractor [12.2.7; 24.1]	Penalty for late completion [24.1]
		working days	Period in months	Penalty amount per calendar day (excl. tax)
				R3000.00

or where sections are applicable (N/A)

Practical completion of a section of the works	Intended date of possession of a section Refer B17.0 [12.1.5; 12.2.22]	Period for inspection by the principal agent [19.3]	The date for practical completion shall be the period as indicated below from the date of possession of the site by the contractor [12.2.7; 24.1]	Penalty for late completion [24.1]
		working days	Period in months	Penalty amount per calendar day (excl. tax)
Sections		N/A	N/A	N/A
Remainder of the works		N/A	N/A	N/A

B 13.0 Defects liability period [21.0]

Extended defects liability period: Refer B17.0 [21.13]		Yes/no?	
If yes, description ofapplicable elements			

B 14.0 Payment [25.0]

Date of month for issue of regular payment certificates [25.2]	25 th		
Contract price adjustment / Cost fluctuations[25.3.4; 26.9.5]	Yes/no? No		
If yes, method to calculate			
Employer shall pay the contractor within:[25.10]	Thirty (30) calendar days		

CONTRACTOR



WITNESS 1

B 15.0 Dispute resolution [30.0]

Adjudication [30.6.1; 30.10]Name of nominating body	Association of Arbitrators (Southern Africa)
Applicable rules for adjudication [30.6.2]	JBCC rules of Adjudication
Arbitration [30.7.4; 30.10] If Yes, name of nominating body * If No, then dispute will be referred to litigation	Yes/no? * Yes Association of Arbitrators (Southern Africa)
Applicable rules for arbitration [30.7.5]	

B 16.0 JBCC[®] General Preliminaries - selections

Water	By contractor	Yes/no?	No		
Services - known - specific requirements [P4.6]		Refer to Bill	No. 1 Prelimi	naries	
Existing premises occupied - details [P4.5]		Refer to Bill No. 1 Preliminaries		naries	
Geotechnical and other investigations - specific requirements [P4.3]		DONE			
Enclosure of the works - specific requirements [P4.2]		Refer to Bill	No. 1 Prelimi	naries	
Handover of site in stages - specific req	N/A				
Inspection of adjoining properties - detail	s [P3.3]	N/A			
Previous work - defects - details of prev [P3.2]	ious contract(s)	N/A			
Previous work - dimensional accuracy - contract(s) [P3.1]	details of previous	N/A	N/A		
Availability of construction information [P	2.3]	Yes/no?	No		
Provisional bills of quantities [P2.2]		Yes/no?	Yes		
Provisional bills of quantities [P2.2]		Yes/no?	Yes		



CONTRACTOR WITNESS 1

[P8.1]	By employer	Yes/no?	No		
	By employer – metered	Yes/no?	Yes		
	By contractor	Yes/no?	No		
Electricity[P8.2]	By employer	Yes/no?	No		
	By employer – metered	Yes/no?	Yes		
Ablution and welfare facilities [P8.3]	By contractor	Yes/no?	Yes		
	By employer	Yes/no?	No		
Protection of the works - s pecific requirements[P11.1]		Refer to Bill No. 1 Preliminaries			
Protection / isolation of existing work s occupied in sections - specific require		Refer to Bil	l No. 1 Preli	minaries and OHS Spec	
	ements [P11.2]		l No. 1 Preli I No. 1 Preli		

A TENDERER'S SELECTIONS

C 1.0 Securities [11.0]

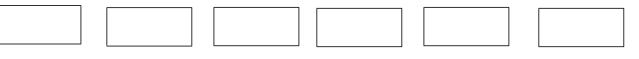
Guarantee for construction: Select Option A or B

 Option A
 Guarantee for construction (variable) by contractor [11.1.1]

 Option B
 Guarantee for construction (fixed) by contractor [11.1.2]

 Guarantee for payment by employer [11.5.1; 11.10]
 Not applicable

 Advance payment, subject to a guarantee for advance payment [11.2.2; 11.3]
 Not applicable



CONTRACTOR

WITNESS 1

WITNESS 2

EMPLOYER

WITNESS 2

WITNESS 1

C 2.0 Contractor's annual holiday periods during the construction period

Year 1 contractor 's annual holiday period	start date	end date	
Year 2 contractor 's annual holiday period	start date	end date	
Year 3 contractor 's annual holiday period	start date	end date	

C 3.0 Payment of preliminaries [25.0]

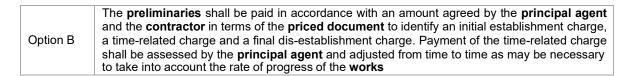
1.1.1. Contractor's selection

Select Option A or B

Where the contractor does not select an option, Option A shall apply

Payment methods

Option A	The preliminaries shall be paid in accordance with an amount prorated to the value of the works executed in the same ratio as the amount of the preliminaries to the contract sum , which
	contract sum shall exclude the amount of preliminaries . Contingency sum(s) and any provision for cost fluctuations shall be excluded for the calculation of the aforesaid ratio



Lump sum contract

Where the amount of preliminaries is not provided it shall be taken as 7.5% (seven and a half per cent) of the contract sum, excluding contingency sum(s) and any provision for cost fluctuations

C 4.0 Adjustment of preliminaries [26.9.4]

Contractor's selection

Select Option A or B

Where the contractor does not select an option, Option A shall apply

Provision of particulars

The **contractor** shall provide the particulars for the purpose of the adjustment of **preliminaries** in terms of his selection. Where completion in **sections** is required, the **contractor** shall provide an apportionment of **preliminaries** per **section**



CONTRACTOR

WITNESS 1

WITNESS 2

EMPLOYER

WITNESS 1 WITNESS 2

Option A	An allocation of the preliminaries amounts into Fixed, Value-related and Time-related amounts as defined for adjustment method Option A below, within fifteen (15) working days of the date of acceptance of the tender

Option B	A detailed breakdown of the preliminaries amounts within fifteen (15) working days of possession of the site . Such breakdown shall include, inter alia, the administrative and
	supervisory staff, the use of construction equipment , establishment and dis-establishment
	charges, insurances and guarantees, all in terms of the programme

Adjustment methods

The amount of preliminaries shall be adjusted to take account of the effect which changes in time and/or value have on preliminaries. Such adjustment shall be based on the particulars provided by the contractor for this purpose in terms of Options A or B, shall preclude any further adjustment of the amount of preliminaries and shall apply notwithstanding the actual employment of resources by the contractor in the execution of the works

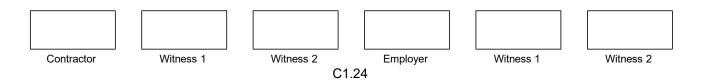
Option A	 The preliminaries shall be adjusted in accordance with the allocation of preliminaries amounts provided by the contractor, apportioned to sections where completion in sections is required Fixed - An amount which shall not be varied. Value-related - An amount varied in proportion to the contract value as compared to the contract sum. Both the contract sum and the contract value shall exclude the amount of preliminaries, contingency sum(s) and any provision for cost fluctuations. Time-related - An amount varied in proportion to the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]
Option B	The adjustment of preliminaries shall be based on the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4] The adjustment shall take into account the resources as set out in the detailed breakdown of the preliminaries for the period of construction during which the delay occurred

Failure to provide particulars within the period stated.

	Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply:
Option A	Fixed - Ten per cent (10%) Value-related - Fifteen per cent (15%) Time-related - Seventy-five per cent (75%)
	Where the apportionment of the preliminaries per section is not provided, the categorized amounts shall be prorated to the cost of each section within the contract sum as determined by the principal agent
	When the detailed has also an afranching and a superior and for Outland Dispeters with d. Outland
Option B	Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply

Lump sum contract

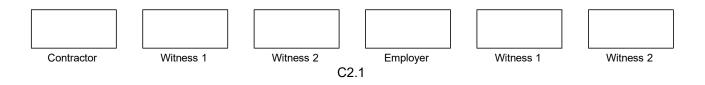
Where the amount of preliminaries is not provided it shall be taken as 7.5% (seven and a half per cent) of the contract sum, excluding contingency sum(s) and any provision for cost fluctuations.



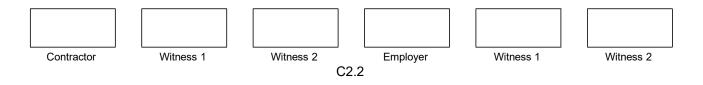
C.2 PRICING DATA

C.2.1 PRICING INSTRUCTIONS

- 1 The Provisional Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Sixth Edition (Revised)), 1999. Where applicable the:
 - a) civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardized Specifications for Civil Engineering Works.
 - b) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- 2 The agreement is based on the JBCC Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 6.2, May 2018. The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables are as stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Provisional Bills of Quantities are recited.
- 3 Preliminary and general requirements are based on the various parts of SANS 1921, Construction and management requirements for works contracts. The additions, deletions and alterations to the various parts of SANS 1921 as well as the contract specific variables are as stated in the Specification Data in the Scope of Work. Only the headings and clause numbers for which allowance must be made in the Provisional Bills of Quantities are recited.
- 4 It will be assumed that prices included in the Provisional Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for bids. (Refer to <u>www.stanza.org.za</u> or <u>www.iso.org</u> for information on standards).
- 5 The drawings listed in the Scope of Works used for the setting up of these Provisional Bills of Quantities are kept by the Principal Agent or Engineer and can be viewed at any time during office hours up until the completion of the works.
- 6 Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
- 7 Where any item is not relevant to this specific contract, such item is marked N/A (signifying "not applicable")

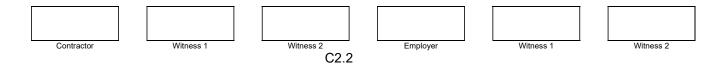


- 8 The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminaries) of the Provisional Bills of Quantities
- 9 The Provisional Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Provisional Bills of Quantities, is at the Contractor's risk.
- 10 The amount of the Preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract.
- 11 Where the initial contract period is extended, the monthly charge shall be calculated on the basis as set out in 10 but taking into account the revised period for completing the works.
- 12 The amount or items of the Preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:
 - a) an amount which is not to be varied, namely Fixed (F)
 - b) an amount which is to be varied in proportion to the contract value, namely Value Related (V); and
 - c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the contractor is not entitled to in terms of the contract, namely Time Related (T).
- 13 Where no provision is made in the Bills of Quantities to indicate which of the three categories in 12 apply or where no selection is made, the adjustments shall be based on the following breakdown:
 - a) 10 percent is Fixed;
 - b) 15 percent is Value Related
 - c) 75 percent is Time Related.
- 14 The adjustment of the Preliminaries shall apply notwithstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminaries shall exclude any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.



C2.2 <u>BILLS OF QUANTITIES</u>

The priced Provisional Bill of Quantities (BOQ's), following hereafter will form an integral part of the "Contract" between the successful appointed Contractor and the Employer.



ltem No		Quantity	Rate	Amount
	SECTION 1 - PRELIMINARIES & GENERAL			
	BILL NO. 1			
	PRELIMINARIES & GENERAL			
	<u>Disclaimer</u>			
	While the ASAQS aims to ensure that its publications represent best practice, the ASAQS does not accept or assume any liability or responsibility for any events or consequences which derive from the use of the Preliminaries Model Bill. Such Model Bill is not exhaustive and is therefore only intended to provide general guidance to those who wish to make use of it. This publication is provided "as is" without warranty of any kind, either expressed or implied including but without limitation to warranties of merchantability, fitness for a particular purpose and non-infringement			
	<u>User note</u>			
	<i>Delete the above "Disclaimer" when preparing this Bill</i> <i>No. 1 for tender or contract purposes</i>			
	Hereinafter edit all text, etc but even more specifically text within "??" to ensure that such text applies to the specific building agreement			
	BUILDING AGREEMENT AND PRELIMINARIES			
	The JBCC Principal Building Agreement (Edition 6.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described			
	The JBCC Principal Building Agreement contract data form an integral part of this agreement			
	The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these bills of quantities , amended as hereinafter described			
	The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

R

Brought Forward

The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only

Where any item is not relevant to this **agreement** such item is marked N/A signifying "not applicable"

Where standard clauses or alternatives are not entirely applicable to this **agreement** such amendments, modifications, corrections or supplements as will apply are given under each relevant clause heading and such amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents

PREAMBLES FOR TRADES

User note

The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated descriptions utilised in these bills of quantities by inter alia referring to SANS construction standards. Where such preambles are not applicable (eq where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion). users are to ensure that the abbreviated descriptions when read in conjunction with the Standard System of Measuring Building Work (seventh edition) for works within South Africa or the Standard Method of Measuring Building Work for Africa 2015 (first edition) for works elsewhere in Africa, represent the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications

Note that the text of the Standard System of Measuring Building Work (seventh edition) and that of the Standard Method of Measuring Building Work for Africa 2015 (first edition) is the same

The latest version of the General Preambles for Trades should be referred to should the General Preambles for Trades 2017 be revised in future

Carried Forward

Section No. 1 Bill No. 1 Preliminaries & General R

	Brought Forward	R	
	The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained		
	Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles		
	The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications		
	STRUCTURE OF THIS PRELIMINARIES BILL		
	Section A : A recital of the headings of the individual clauses in the aforementioned JBCC Principal Building Agreement		
	Section B : A recital of the headings of the individual clauses in the aforementioned JBCC General Preliminaries		
	Section C : Any special clauses to meet the particular circumstances of the project		
	PRICING OF PRELIMINARIES		
	Should the contractor select Option A in the contract data for the adjustment of preliminaries , the amounts entered against the relevant items in these preliminaries are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)		
	SECTION A: PRINCIPAL BUILDING AGREEMENT		
	Interpretation (A1-A7)		
1	Clause 1.0 - Definitions and interpretation		
	Pricing of bills of quantities		
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	Carried Forward Section No. 1 Bill No. 1 Preliminaries & General	R	

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	The contractor is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement . Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities		
	Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the contractor's omission to price any item will be entertained		
	Prices for all construction equipment , temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary		
	Abbreviated descriptions		
	The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the principal agent , failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice		
	Legal status of contractor		
	If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:		
	 These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement 		
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	Section No. 1 Bill No. 1 Preliminaries & General		

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	 These persons shall notify the employer of their leader who has assigned authority to bind the contractor and each of these persons 			
	 The contractor shall not alter its composition or legal status without the prior written consent of the employer 			1
	F: V:			
	Τ:	Item		
2	Clause 2.0 - Law, regulations and notices			
	<u>User note</u>			
	Insert the following for residential developments only			
	The cost to the employer of the NHBRC levies mentioned below is to be conveyed to the employer in order to present an overall building cost			
	? NHBRC levies			
	The employer shall allow for and pay any levies required by the National Home Builders Registration Council (NHBRC). The contractor warrants that he is registered and will maintain registration with the NHBRC for the duration of this agreement [2.1] ?			
	F: V:			1
	Т:	ltem		
3	Clause 3.0 - Offer and acceptance			
	F: V:			
	Τ:	ltem		
4	Clause 4.0 - Cession and assignment			
	F: V:	14		
	Т:	ltem		
5	Clause 5.0 - Documents			
	Value Added Tax			
	Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT)			
				_
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	Section No. 1 Bill No. 1			
	Preliminaries & General			
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	? Priced document as specification			
	Clause 5.4 is deemed to be deleted			
	The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any ?			
	<u>User note</u>			
	Insert the following where applicable			
	? Electronic issue of drawings			
	All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically [5.6] ?			
	F: T:	ltem		
6	Clause 6.0 - Employer's agents			
	<u>User note</u>			
	Delegated authority may be dealt with in B 5.0 of the contract data. Insert in the contract data "Refer to Bill No. 1 (Preliminaries)" should it be dealt with in Bill No. 1			
	? Delegated authority			
	The authority of the principal agent to issue contract instructions [17.1] and perform duties for specific aspects of the works is delegated to agents as follows [6.2]. This does not preclude the principal agent from issuing such contract instructions : ?			
	<u>User note</u>			
	Add delegated authority as may be required for other relevant consultants not listed hereinafter			
	? 1. <u>Architect</u>			
				-
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not rele the con <u>with the</u>	the following but remove where the consultant is vant to this agreement. Edit both the duties and tract instructions of the consultant <u>in keeping</u> wishes of the principal agent		
	at the contract instructions hereinafter are d from those listed in clause 17.1 of the JBCC		
1.1 Dut	ies [6.2] :		
	hitect is responsible for the architectural design, al design and quality inspection of the works		
1.2 Co r	ntract instructions [6.2; 17.1] :		
1.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement		
1.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works		
1.2.3	The site [13.0]		
1.2.4	Compliance with the law , regulations and bylaws [2.1]		
1.2.5	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works		
1.2.6	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]		
1.2.7	Removal or re-execution of work		
1.2.8	Removal or substitution of any materials and goods		
1.2.9	Protection of the works		
1.2.10	Making good physical loss and repairing damage to the works [23.2.2]		
Section Bill No. Prelimir		R	

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1.2.11	Rectification of defects [21.2]		
	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion		
1.2.13	Expenditure of budgetary allowances , prime cost amounts and provisional sums		
1.2.14	Appointment of a subcontractor [14.0; 15.0]		
1.2.15	Work by direct contractors [16.0]		
1.2.16	On suspension or termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0] ?		
? 2. <u>Qı</u>	antity surveyor		
<u>User no</u>	ote		
not rele the cor	he following but remove where the consultant is evant to this agreement. Edit both the duties and atract instructions of the consultant <u>in keeping</u> e wishes of the principal agent		
2.1 Dut	ties [6.2] :		
measu	antity surveyor is responsible for all rements, valuations, financial assessments and er quantity surveying and cost control functions of rks		
2.2 Co	ntract instructions [6.2; 17.1] :		
	o contract instructions delegated to the y surveyor ?		
? 3. <u>Ci</u>	vil and structural engineer		
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Section Bill No. Prelimit			

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<u>User note</u>			
not relevant to the contract in	wing but remove where the consultant is this agreement. Edit both the duties and estructions of the consultant <u>in keeping</u> as of the principal agent		
	contract instructions hereinafter are those listed in clause 17.1 of the JBCC		
3.1 Duties [6.2	2] :		
aspects of civi	structural engineer is responsible for all il and structural engineering design and tion of the works		
3.2 Contract i	instructions [6.2; 17.1] :		
descri the ag	ication of discrepancies, errors in iption or quantity or omission of items in greement other than in the JBCC Principal ng Agreement		
works instru	tion to design, standards or quantity of the s provided that such contract actions shall not substantially change the e of the works		
3.2.3 The s	ite [13.0]		
3.2.4 Comp bylaws [2.1]	liance with the law , regulations and		
and g	sion and testing of samples of materials oods and/or of finishes and assemblies of ents of the works		
	ing up of work for inspection, removal or ecution [23.2.4; 26.4.2]		
3.2.7 Remo	val or re-execution of work		
3.2.8 Remo goods	val or substitution of any materials and		
3.2.9 Protec	ction of the works		
Section No. 1 Bill No. 1 Preliminaries {		R	

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3.2.10 Making good physical loss and repairing damage to the works [23.2.2]		
3.2.11 Rectification of defects [21.2]		
3.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion		
3.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums ?		
? 4. <u>Mechanical engineer</u>		
<u>User note</u>		
Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant <u>in keeping</u> with the wishes of the principal agent		
Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA		
4.1 Duties [6.2] :		
The mechanical engineer is responsible for all aspects of mechanical engineering design and quality inspection of the works ? and, where appointed by the employer for quantity surveying services in respect of the mechanical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions		
4.2 Contract instructions [6.2; 17.1] :		
4.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement		
4.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works		
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Section No. 1 Bill No. 1 Preliminaries & General		

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4.2.3 bylaws	Compliance with the law , regulations and [2.1]		
4.2.4	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works		
4.2.5	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]		
4.2.6	Removal or re-execution of work		
4.2.7 goods	Removal or substitution of any materials and		
4.2.8	Protection of the works		
4.2.9	Making good physical loss and repairing damage to the works [23.2.2]		
4.2.10	Rectification of defects [21.2]		
4.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion		
4.2.12	Expenditure of budgetary allowances , prime cost amounts and provisional sums ?		
? 5. <u>Ele</u>	ctrical engineer		
<u>User no</u>	<u>te</u>		
not rele the con	ne following but remove where the consultant is vant to this agreement. Edit both the duties and tract instructions of the consultant <u>in keeping</u> wishes of the principal agent		
	at the contract instructions hereinafter are d from those listed in clause 17.1 of the JBCC		
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5.1 Du	ties [6.2] :		
electric the wo quantit installa assess	ectrical engineer is responsible for all aspects of al engineering design and quality inspection of rks ? and, where appointed by the employer for y surveying services in respect of the electrical tions, for all measurements, valuations, financial ments and all other quantity surveying and cost functions		
5.2 Co	ntract instructions [6.2; 17.1] :		
5.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement		
5.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works		
5.2.3 bylaws	Compliance with the law , regulations and [2.1]		
5.2.4	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works		
5.2.5	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]		
5.2.6	Removal or re-execution of work		
5.2.7 goods	Removal or substitution of any materials and		
5.2.8	Protection of the works		
5.2.9	Making good physical loss and repairing damage to the works [23.2.2]		
5.2.10	Rectification of defects [21.2]		
5.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion		
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	5.2.12	Expenditure of budgetary allowances , prime cost amounts and provisional sums ?			
	? 6. <u>We</u>	t services engineer			
<u> </u>	User no	<u>ote</u>			
	not rele the con	ne following but remove where the consultant is vant to this agreement. Edit both the duties and tract instructions of the consultant <u>in keeping</u> wishes of the principal agent			
		at the contract instructions hereinafter are d from those listed in clause 17.1 of the JBCC			
	6.1 Dut	ies [6.2] :			
	of wet s	t services engineer is responsible for all aspects ervices engineering design and quality on of the works			
	6.2 Cor	ntract instructions [6.2; 17.1] :			
	6.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement			
	6.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
	6.2.3 bylaws	Compliance with the law , regulations and [2.1]			
	6.2.4	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works			
	6.2.5	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]			
	6.2.6	Removal or re-execution of work			
	6.2.7 goods	Removal or substitution of any materials and			
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	Section Bill No. Prelimir				
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6.2.8	Protection of the works		
6.2.9	Making good physical loss and repairing damage to the works [23.2.2]		
6.2.10	Rectification of defects [21.2]		
6.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion		
6.2.12	Expenditure of budgetary allowances , prime cost amounts and provisional sums ?		
? 7. <u>Fi</u>	re consultant		
<u>User n</u>	ote		
not rele the cor	the following but remove where the consultant is evant to this agreement. Edit both the duties and ntract instructions of the consultant <u>in keeping</u> e wishes of the principal agent		
	nat the contract instructions hereinafter are ad from those listed in clause 17.1 of the JBCC		
7.1 Du	ties [6.2] :		
	e consultant is responsible for all aspects of I fire design and quality inspection of the works		
7.2 Co	ntract instructions [6.2; 17.1] :		
7.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement		
7.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works		
7.2.3 bylaws	Compliance with the law , regulations and [2.1]		
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Bill No.	n No. 1 . 1 naries & General		

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7.2.4	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works			
7.2.5	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]			
7.2.6	Removal or re-execution of work			
7.2.7 goods	Removal or substitution of any materials and			
7.2.8	Protection of the works			
7.2.9	Making good physical loss and repairing damage to the works [23.2.2]			
7.2.10	Rectification of defects [21.2]			
7.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
7.2.12	Expenditure of budgetary allowances , prime cost amounts and provisional sums ?			
? 8. <u>He</u>	alth and safety consultant			
<u>User n</u>	ote			
not rele the con	he following but remove where the consultant is evant to this agreement. Edit both the duties and tract instructions of the consultant <u>in keeping</u> e wishes of the principal agent			
8.1 Dut	ies [6.2] :			
aspects deroga safety of function	alth and safety consultant is responsible for all s of health and safety of the works . Without ting from the generality thereof, the health and consultant will perform the following specific as and duties in respect of the health and safety s of the works . He shall:			
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Section Bill No. Prelimi	No. 1			

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	8.1.1 Act as the employer's agent in terms of the Construction Regulations issued in terms of the Occupational Health and Safety Act,1993 as amended				
	8.1.2 Prepare and update the health and safety specification for the works				
	8.1.3 Agree with the contractor the health and safety plan for the works				
	8.1.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the act and regulations				
	8.1.5 Stop the execution of the works where the agreed specification or plan is not adhered to?				
	F: V: T:	Item			
7	Clause 7.0 - Design responsibility				
	F: V: T:	Item			
	Insurances and securities (A8-A11)				
8	Clause 8.0 - Works risk				
	F: T:	Item			
9	Clause 9.0 - Indemnities				
	F: T:	ltem			
10	Clause 10.0 - Insurances				
	F: V: T:	Item			
11	Clause 11.0 - Securities				
	<u>User note</u>				
	If it is deemed advisable, the <u>extent</u> of any guarantee for payment may be stated and whether it is required of the contractor to waive his lien. Edit the following clause:				
	Carried Forward		R		
	Section No. 1 Bill No. 1 Preliminaries & General				
		1			

	Brought Forward		R	
	? Guarantee for payment			
	The employer shall provide to the contractor a guarantee for payment in the amount of ?Rand (R)? [11.5.1]. The contractor shall consequently waive his lien or right of continuing possession of the works [11.10]?			
	<u>User note</u>			
	Where it is expected of the contractor to waive his lien in terms of clause 11.10, the waiver of lien may be extended to subcontracts as follows:			
	? Extension of waiver of lien			
	The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10] ?			
	F: T:	Item		
	Execution (A12 - A17)			
12	Clause 12.0 - Obligations of the parties			
	? Office accommodation			
	The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site . Such offices shall be kept clean and fit for use at all times [12.2.18] ?			
	? Notice board			
	The contractor shall erect in a position approved by the principal agent , maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer , the contractor and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for such notice boards to be erected [12.2.18] ?			
	Carried Forward Section No. 1 Bill No. 1 Prolimentaria & Canonal		R	
	Preliminaries & General			

	Brought Forward		R	
	Statutory and other notices			
	The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor . The contractor shall pay all deposits or fees in this regard			
	It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto			
	F: T:	Item		
13	Clause 13.0 - Setting out			
	F: T:	Item		
14	Clause 14.0 - Nominated subcontractors			
	F: T:	ltem		
15	Clause 15.0 - Selected subcontractors			
	F: T:	ltem		
16	Clause 16.0 - Direct contractors			
	Attendance on direct contractors			
	In respect of direct contractors the contractor shall:			
	 Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials 			
	2. Allow the use of personnel welfare facilities, where provided			
	3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R		
	 Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [16.1] 				
	F: T:	Item			
17	Clause 17.0 - Contract instructions				
	? Site instructions				
	Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor ?				
	F: V:				
	Τ:	Item			
	Completion (A18 - A24)				
18	Clause 18.0 - Interim completion	N/A			
19	Clause 19.0 - Practical completion				
	F: V:				
	Τ:	Item			
20	Clause 20.0 - Completion in sections				
	F: V:				
	Τ:	Item			
21	Clause 21.0 - Defects liability period and final completion				
	F: V:	14			
	Т:	ltem			
22	Clause 22.0 - Latent defects liability period				
	F: T:	ltom			
	1	ltem			
	• • • • •				
	Carried Forward Section No. 1		R		
	Bill No. 1				
	Preliminaries & General				
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	Brought Forward		R	
23	Clause 23.0 - Revision of the date for practical completion			
	Substitution of materials and goods			
	The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8; 23.1 & 2]			
	F: V:			
	T:	Item		
24	Clause 24.0 - Penalty for late or non-completion			
	F: V:			
	T:	Item		
	Payment (A25 - A27)			
25	Clause 25.0 - Payment			
	Prices submitted			
	Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate , there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion , it shall be in writing			
	F: T:	Item		
26	Clause 26.0 - Adjustment of the contract value and final account			
	? Fluctuations in costs			
	All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [26.9.5] ?			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

Brought Forward		R	
<u>User note</u>			
Insert the following or similar clause where tenant installation/user requirements may be delayed or omitted			
? Tenant installation/user requirements delayed			
There is a possibility that certain works related to tenant installation/user requirements may have to be delayed and may consequently not be executed prior to practical completion			
Should the contractor be instructed to do so he shall execute this work under the conditions pertaining to this agreement on the basis that a separate amount for preliminaries appurtenant to this work (if applicable) is agreed to between the contractor and the principal agent and on condition that instruction to proceed with such work is given to him within a period of three (3) calendar months after the date of practical completion of the works			
The employer reserves the right to omit such work without compensation to the contractor for loss of profit or any other loss which the contractor may suffer as a result of such omission ?			
Cost of claims			
All costs incurred by the contractor in the preparation of claims shall be borne by the contractor . This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [30.6 & 7] from making a determination on costs			
Claims from subcontractors			
The contractor shall review, assess and adjudicate any claims received by him from any subcontractor and thereafter submit same to the principal agent with a recommendation in order to assist the principal agent in adjudicating the claim [26.6]			
F: T:	ltem		
Carried Forward		R	
Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R	
27	Clause 27.0 - Recovery of expense and/or loss			
	F: T:	ltem		
	Suspension and termination (A28 - A29)			
28	Clause 28.0 - Suspension by the contractor			
20				
	F: V: T:	ltem		
29	Clause 29.0 - Termination			
	F: T:	ltem		
		nem		
	Dispute resolution (A30)			
30	Clause 30.0 - Dispute resolution			
	F: V: T:	ltem		
31	Agreement			
	The required information of the parties and the amount of the contract sum shall be inserted in the agreement for signature of the agreement by the parties			
	F: V:			
	Τ:	ltem		
32	Contract data			
	<u>User note</u>			
	Insert under the above heading, with suitable sub- headings, any amendments, modifications, corrections or supplements to the contract data			
	Tenderer's selections			
	Before submission of his tender the contractor is to complete the tenderer's selections in the contract data			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R		
	<u>User note</u>				
	All information for the above requires consultation with the contractor. The principal agent should not pre-select any of the alternatives available to the contractor				
	F: T:	ltem			
	SECTION B: GENERAL PRELIMINARIES				
	<u>User note</u>				
	Amendments, modifications, corrections or supplements to the General Preliminaries in Section B should be recorded in the contract data				
	Should it be necessary to expand on any of the General Preliminaries clauses, the user should list the appropriate General Preliminary clause number and heading and insert the relevant provision under a suitable heading in bold as may be necessary				
	Definitions and interpretation (B1)				
33	Clause 1.1 - Definitions				
	F: T:	Item			
34	Clause 1.2 - Interpretation				
	F: T:	ltem			
	Documents (B2)				
35	Clause 2.1 - Checking of documents				
	F: T:	ltem			
36	Clause 2.2 - Provisional bills of quantities				
	<u>User note</u>				
	Check "wet trades" included in the bills of quantities and edit the following clause as may be necessary				
					-
	Carried Forward Section No. 1 Bill No. 1 Preliminaries & General		R		
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	Brought Forward		R	
	? Multiple procurement			
	These bills of quantities are in multiple procurement format ie the "wet trades" - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally (fully?) measured and the subsequent trades are budgetary allowances and/or provisional sums ?			
	F: T:	ltem		
37	Clause 2.3 - Availability of construction information			
	F: V: T:	Item		
38	Clause 2.4 - Ordering of materials and goods			
	F: V: T:	ltem		
	Previous work and adjoining properties (B3)			
39	Clause 3.1 - Previous work - dimensional accuracy			
	F: T:	ltem		
40	Clause 3.2 - Previous work - defects			
	F: T:	ltem		
41	Clause 3.3 - Inspection of adjoining properties			
	F: T:	ltem		
	<u>The site (B4)</u>			
42	Clause 4.1 - Handover of site in stages			
	F: T:	Item		
43	Clause 4.2 - Enclosure of the works	ltem		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R		
	<u>User note</u>				
	Describe any specific hoarding requirements, other than already described in clause 4.2 or in the contract data				
	F: T:				
44	Clause 4.3 - Geotechnical and other investigations				
	F: T:	ltem			
45	Clause 4.4 - Encroachments				
	F: T:	ltem			
46	Clause 4.5 - Existing premises occupied				
	F: T:	ltem			
47	Clause 4.6 - Services - known				
	F: V: T:	ltem			
	Management of contract (B5)				
48	Clause 5.1 - Management of the works				
	F: V: T:	ltem			
49	Clause 5.2 - Progress meetings				
	F: T:	ltem			
50	Clause 5.3 - Technical meetings				
	F: T:	ltem			
	Carried Forward		R		
	Section No. 1 Bill No. 1 Preliminaries & General		ĸ		

	Brought Forward		R		
	Samples, shop drawings and manufacturer's instructions (B6)				
51	Clause 6.1 - Samples of materials				
	F: T:	ltem			
52	Clause 6.2 - Workmanship samples				
	F: T:	ltem			
53	Clause 6.3 - Shop drawings				
	F: T:	ltem			
54	Clause 6.4 - Compliance with manufacturer's instructions				
	F: T:	ltem			
	Deposits and fees (B7)				
55	Clause 7.1 - Deposits and fees				
	F: V: T:	ltem			
	<u>Temporary services (B8)</u>				
56	Clause 8.1 - Water				
	F: T:	ltem			
57	Clause 8.2 - Electricity				
	F: T:	ltem			
58	Clause 8.3 - Ablution and welfare facilities				
	F: T:	ltem			
	Carried Forward		R		
	Section No. 1 Bill No. 1 Preliminaries & General				

	Brought Forward		R	1
59	Clause 8.4 - Communication facilities			
	F: V:			I
	Т:	Item		I
	Prime cost amounts (B9)			I
60	Clause 9.1 - Responsibility for prime cost amounts			1
	<u>User note</u>			I
	Where details of materials included in prime cost amounts <u>are not</u> readily available and it is therefore not possible for the contractor to price for waste, the relevant prime cost amount shall be inserted in the bills of quantities as a lump sum with the contractor being given the opportunity to separately price his overheads and profit and for taking delivery, etc as called for in this clause 9.1 of the preliminaries. In such case the fixing only or installation only of the relevant materials shall be provisionally measured for the contractor to price and shall be re-measured upon completion			
	Where details of materials for which prime cost amounts are to be allowed <u>are</u> readily available, the quantity surveyor may elect to insert the relevant prime cost amounts in measured items, which measured items shall contain sufficient detail for the contractor to price for fixing and installation, waste, etc			
	F: T:	ltem		
61	Attendance on subcontractors (B10) Clause 10.1 - General attendance			I
0.	User note			
	General attendance is defined as being the duties of the contractor in terms of clause 12.2 of the JBCC n/s subcontract agreement			
	F: T:	Item		
62	Clause 10.2 - Special attendance			I
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R	
	<u>User note</u>			
	Insert details after the provisional sums (nominated or selected subcontract amounts) for any special attendance where specifically required for each n/s subcontractor separately			
	It is important to note that general attendance only requires the contractor to "permit the subcontractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right while it remains erected on the site" (refer to 12.2.13 of the JBCC n/s subcontract agreement). Many n/s subcontractors qualify their tenders to exclude scaffolding and/or hoisting facilities. Especially scaffolding could be an expensive item and it may be necessary in order to avoid claims to require the contractor to provide for the extended use of scaffolding for specific subcontracts within a description of "special attendance" in the applicable bill			
	F: V: T:	ltem		
	General (B11)	nom		
63	Clause 11.1 - Protection of the works			
	F: V:			
	T:	Item		
64	Clause 11.2 - Protection/isolation of existing works and works occupied in sections			
	F: V: T:	Item		
65	Clause 11.3 - Security of the works			
	F: V: T:	ltem		
66	Clause 11.4 - Notice before covering work			
	F: V: T:	ltem		
67	Clause 11.5 - Disturbance			
			_	
	Carried Forward Section No. 1 Bill No. 1 Preliminaries & General		R	

	Brought Forward		R	
	<u>User note</u>			
	The following clause may be used should "disturbance" [11.5] need to be extended			
	Disturbance			
	? All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever ?			
	F:T:	ltem		
68	Clause 11.6 - Environmental disturbance			
	? Controlling all forms of pollution			
	The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due inter alia to noise, artificial light, wind-blown sand, dust, deposits of mud, etc			
	The contractor is to ensure that all roads which border the site and are used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works ?			
	<u>User note</u>			
	Insert the following clause if an environmental management plan (EMP) is available and insert the EMP in an annexure			
	? Environmental management plan			
	The employer has prepared an environmental management plan (EMP) (refer to Annexure ? for a copy of the relevant plan). The contractor shall price opposite this item for compliance with all the requirements of such EMP ?			
	F:T:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R		
69	Clause 11.7 - Works cleaning and clearing				
	F: T:	ltem			
70	Clause 11.8 - Vermin				
	F: T:	ltem			
71	Clause 11.9 - Overhand work				
	F: T:	ltem			
72	Clause 11.10 - Tenant installations				
	F: T:	ltem			
73	Clause 11.11 - Advertising				
	F: T:	ltem			
	SECTION C: SPECIFIC PRELIMINARIES				
	<u>User note</u>				
	Users shall avoid inserting in Section C items which may be construed as amending, modifying, correcting or supplementing the provisions of the JBCC Principal Building Agreement. Such amendments, modifications, corrections or supplements should be kept to the absolute minimum and should be inserted in Section A under the recited clause headings of the JBCC Principal Building Agreement in this Bill No. 1 Selected examples of typical clauses are provided to				
	indicate ways of describing such clauses. Users must delete, adapt or add to these examples to suit their particular circumstances				
	Carried Forward		R		
	Section No. 1 Bill No. 1 Preliminaries & General				

Brought Forward		R	
Warranties for materials and workmanship			
Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer , from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract			
The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so			
The warranty will not be enforced if the work is damaged by defects in the execution of the works , in which case the responsibility for replacement shall rest entirely with the contractor			
F: T:	Item		
Overtime			
Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer			
F:T:	Item		
Cooperation of the contractor for cost management			
It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the contract value does not exceed the budget			
F:T:	ltem		
Carried Forward		R	
Section No. 1 Bill No. 1 Preliminaries & General			
	Warranties for materials and workmanship Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor F:	Warranties for materials and workmanship Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor Item F:	Warranties for materials and workmanship Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor Item P:

	Brought Forward		R	
77	Overloading			
	The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense			
	F:T:	Item		
78	Propping of floors below			
	The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor			
	F:T:	Item		
79	Testing of flat roof waterproofing for watertightness Flat roof waterproof areas shall be flooded and kept "ponded" for at least forty eight (48) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing			
	F:T:	Item		
	<u>User note</u>			
	Insert the following where a health and safety specification is <u>not</u> yet available. Note that there is an obligation on the employer to ensure that the contractor has priced opposite this item for the compliance with the act and the regulations and the reasonable provisions of the health and safety specification			
80	Health and safety			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

R

Brought Forward

Without limiting the generality of the provisions of clause 2.0, the **contractor's** attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the **employer** shall prepare a documented health and safety specification for the **works** and that the **employer** shall ensure that the **contractor** has made provision for the cost of health and safety measures during the execution of the **works**. The **contractor** shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [2.1]

User note

Insert the following where a health and safety specification <u>is</u> available. Note that there is an obligation on the employer to ensure that the contractor has priced opposite this item for the compliance with the act and the regulations and the reasonable provisions of the health and safety specification

Health and safety

Without limiting the generality of the provisions of clause 2.0, the **contractor's** attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the **employer** shall prepare a documented health and safety specification for the **works** (refer to Annexure ? for a copy of the relevant specification) and that the **employer** shall ensure that the **contractor** has made provision for the cost of health and safety measures during the execution of the **works**. The **contractor** shall price opposite this item for compliance with the act and the regulations and the provisions of the aforementioned health and safety specification [2.1]

Carried Forward

Section No. 1 Bill No. 1 Preliminaries & General R

	Brought Forward		R	
	The contractor shall:			
	 Comply with the health and safety specification for the works 			
	2. Prepare and agree with the health and safety consultant the health and safety plan for the works			
	3. Cooperate with the health and safety consultant in all respects			
	 Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification 			
	 Conform to the conditions contained in the employer's health and safety specification 			
	F: T:	ltem		
81	Green star building certification			
	<u>User note</u>			
	Insert the provisions called for by the relevant green star consultant should it be a requirement that the project be submitted for green star certification			
	F:T:	ltem		
82	Broad based black economic empowerment (BBBEE)			
	Tenders submitted will be evaluated taking into account their empowerment rating			
	The employer will be monitoring the broad based black economic empowerment (BBBEE) status of the contractor throughout the execution of the works			
	The contractor is to submit to the principal agent on an annual basis a schedule of spend, split into vendors engaged as subcontractors and suppliers indicating their BBBEE rating including proof of the said rating			
	F:T:	Item		
				-
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries & General			

	Brought Forward		R	
83	Advertising rights			
	The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. The position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in meeting his obligations under this agreement			
	F:T:	Item		
84	Confidentiality			
	The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works			
	No information regarding this project shall be published or disclosed without the prior written consent of the employer			
	F:T:	Item		
85	Media releases			
	All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer			
	The contractor together with his subcontractors shall not, without the prior written consent of the employer , cause any statement or advertisement connected with this project to be printed, screened or aired by the media			
	F:T:	Item		
	SUMMARY OF CATEGORIES			
	Category : Fixed R			
	Category : Value R			
	Category : Time R			
	Carried to Final Summary		R	
	Section No. 1		r.	
	Bill No. 1 Preliminaries & General			

	Quantity	Rate	Amount
SECTION 2 - ABATTOIR			
BILL NO. 1			
DEMOLITIONS & ALTERATIONS			
SUPPLEMENTARY PREAMBLES			
<u>View site</u>			
Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
Explosives			
No explosives whatsoever may be used for demolition purposes unless otherwise stated			
General			
The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent			
Doors, lights, windows, fittings, frames, linings and cold room which are to remain the property of the employer shall be carefully taken out, temporarily stored and when necessary be handed over to the employer			
Carried Forward Section No. 2 Bill No. 1 Demolitions & Alterations		R	

Brought Forward	R	
Doors, fanlights, windows, fittings, frames, linings and cold room which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately		
Prices for taking out of doors and windows shall include for removal of all beads, architraves, ironmongery		
Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, and all other accessories		
With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork		
Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary		
The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows and fittings)		
Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent		
Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site		
REMOVAL OF EXISTING WORK		
Carried Forward	R	
Section No. 2 Bill No. 1 Demolitions & Alterations		

	Brought Forward			R	
	Breaking up and removing				
1	Reinforced mass concrete surface beds				
	Refer to Drawing Com.wd.002, Rev C. Tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished	m2	25		
	Taking down and removing				
2	Structural steel components including columns, trusses and beams.				
	Refer to Drawing Com.wd.002, Rev C		ltem		
3	Corrugated iron roof covering and steel purlins.				
	Refer to Drawing Com.wd.002, Rev C. Tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished		Item		
4	Old store.				
	Refer to Drawing Com.wd.002, Rev C. Tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished		ltem		
	Demolishing and removing				
5	Half brick walls 500mm high	m	20		
6	Excavation in earth not exceeding 2m deep to remove foundations (Provisional)	m3	33		
	Taking out and removing sundry metalwork				
7	Cold room to carefully taken out, temporarily stored and when necessary be relocated inside the abattoir		Item		
8	Deduct: Allowance of credit for materials salvaged from the demolitions		Item		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 1 Demolitions & Alterations			R	

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
BILL NO. 2				
EARTHWORKS (PROVISIONAL)				
SUPPLEMENTARY PREAMBLES				
General				
The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
Nature of ground				
The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"				
A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"				
Subterranean water				
No subterranean water is expected				
Carting away of excavated material				
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
Carried Forward Section No. 2 Bill No. 2 Earthworks (provisional)			R	

	Brought Forward			R	
	Filling and layer work materials				
	Notwithstanding the reference to prescribed multiple handling in the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.				
	<u>Testing</u>				
	Prices for filling are to include for all necessary density and other tests				
	SITE CLEARANCE				
	<u>Site clearance</u>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth	m2	178		
	REMOVAL OF TREES				
	Taking out and removing, grubbing up roots, filling in holes and compacting to ?% Mod AASHTO density				
2	Tree stump not exceeding 1m high, not exceeding 200mm girth	No	6		
	EXCAVATION & FILLING				
	EXCAVATIONS				
	<u>Digging up topsoil</u>				
3	Digging up topsoil to an average depth of 100mm and preserving for use as filling	m2	178		
	Open face excavation in earth over sloping site				
4	Open face excavation	m3	68		
	Excavation in compacted earth not exceeding 2m deep				
5	Trenches	m3	64		
	Extra over for excavation in earth in				
6	Soft rock	m3	2		
					-
	Carried Forward Section No. 2 Bill No. 2 Earthworks (provisional)			R	

	Brought Forward			R	
7	Hard rock	m3	3		
	Extra over all excavations for carting away				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	6		
	Risk of collapse of excavations				
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	160		
	Keeping excavations free of water				
10	Keeping excavations free of water other than subterranean water		ltem		
	FILLING				
	Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to ?% Mod AASHTO density				
11	Over site to make up levels	m3	68		
12	Backfilling to trenches and holes	m3	58		
	Compaction of surfaces				
13	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	244		
	TESTS				
	Prescribed tests to determine degree of compaction or other properties of ground or filling				
14	"Modified AASHTO Density" test	No	2		
	WEED KILLERS, INSECTICIDES, ETC				
	Carried Forward Section No. 2 Bill No. 2 Earthworks (provisional)			R	

	Brought Forward			R	
	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/mý				
15	Under floors	m2	178		
	Soil insecticide in accordance with SANS 5859				
16	Under floors including forming and poisoning shallow furrows against foundation walls, filling in furrows and ramming	m2	178		
17	To bottoms and sides of trenches	m2	226		
	Carried Forward to Summary of Section No. 2 Section No. 2			R	_
	Bill No. 2 Earthworks (provisional)				

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
<u>BILL NO. 3</u>				
CONCRETE, FORMWORK AND REINFORCEMENT				
SUPPLEMENTARY PREAMBLES				
<u>General</u>				
The Concrete works shall be in accordance with the Engineer's specifications.				
The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.				
The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials				
The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
Components cast against excavated surfaces have not been measured or described separately and the Contractor is to ensure adequate allowance for casting against excavated surfaces are made within the relevant items.				
Cost of tests				
The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)				
			_	
Carried Forward Section No. 2 Bill No. 3 Concrete, formwork and reinforcement			R	

	Brought Forward			R	
	<u>Formwork</u>				
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use				
	Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described				
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa concrete				
1	Strip footings	m3	17		
	REINFORCED CONCRETE CAST ON/IN FORMWORK				
	25MPa concrete				
2	Surface beds	m3	18		
3	Ramps	m3	1		
	TEST CUBES				
4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	5		
	SUNDRIES				
	Carried Forward Section No. 2 Bill No. 3 Concrete, formwork and reinforcement			R	

	Brought Forward			R	
	Finishing top surfaces of concrete smooth with a steel trowel				
5	Surface bed	m2	178		
6	Sloping and splayed tops	m2	11		
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough formwork to sides				
7	Lintels propped up not exceeding 1,5m high	m2	4		
8	Lintels propped up exceeding 1.5m and not exceeding 3m high	m2	2		
	Formwork to steeply sloping top surfaces				
9	Ramps	m2	11		
	MOVEMENT JOINTS				
	Isolation joints formed of 20 x 12mm deep silicone sealant, backing rope and closed cell polyurethane joint former				
10	Between concrete surface bed and brick walls.	m	111		
	FORMWORK SUNDRIES				
	<u>Floor drain box out</u>				
11	Forming floor drain box-out size 300 x 300mm deep in accordance with Engineer's design and specifications, complete.	No	2		
12	Forming floor drain box-out size 500 x 500mm deep in accordance with Engineer's design and specifications, complete.	No	2		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
13	Varying diameters bars in bases and structural concrete work	t	1,86		
	Carried Forward Section No. 2 Bill No. 3			R	
	Concrete, formwork and reinforcement				

	Brought Forward			R	1
	Fabric reinforcement				1
14	Type 245 fabric reinforcement in concrete surface beds etc	m2	178		
					L
	Carried Forward to Summary of Section No. 2			R	L
	Section No. 2 Bill No. 3 Concrete, formwork and reinforcement				

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No	

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
BILL NO. 4				
MASONRY				
SUPPLEMENTARY PREAMBLES				
BRICKWORK				
General				
The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
Sizes in descriptions				
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
Face bricks				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
Pointing				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing				
BLOCKWORK				
Concrete masonry units				
Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa				
Carried Forward Section No. 2 Bill No. 4 Masonry			R	

	Brought Forward			R	
	Wall ties for blockwork				
	Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other				
	Blockwork				
	Blockwork shall comply with SANS 10145 "Concrete Masonry Construction"				
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole				
	Standard complementary blocks				
	Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three- quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary				
	DECORATIVE BLOCKS				
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour				
	BRICKWORK				
	FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar				
1	Half brick walls	m2	16		
2	One brick walls	m2	131		
	<u>SUPERSTRUCTURE</u>				
	Carried Forward			R	
	Section No. 2 Bill No. 4 Masonry				

	Brought Forward			R		I
	Brickwork of NFP bricks in class II mortar					
3	Half brick walls	m2	25			
4	One brick walls	m2	173			
5	Beamfilling	m2	19			
	BRICKWORK SUNDRIES					
	2,5mm Galvanised brick reinforcement					
6	75mm Wide reinforcement built in horizontally	m	79			
7	150mm Wide reinforcement built in horizontally, circular on plan	m	289			
	Prestressed fabricated concrete lintels including necessary temporary supports					
8	Lintels in lengths not exceeding 3m	m	29			
	FACE BRICKWORK					
	Face bricks pointed with flush horizontal and vertical joints					
9	Extra over brickwork for face brickwork	m2	32			
	WINDOW SILLS					
	<u>Window sills in single lengths bedded in class II mortar</u> including metal fixing lugs					
10	Window sills set sloping and slightly projecting	m	19			
	Carried Forward to Summary of Section No. 2			R		
	Section No. 2 Bill No. 4					F
	Masonry					

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em lo		Unit	Quantity	Rate	Amount	
	SECTION 2 - ABATTOIR					
	<u>BILL NO. 5</u>					
	WATERPROOFING					
	SUPPLEMENTARY PREAMBLES					
	General					
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.					
	Waterproofing					
	Waterproofing of roofs shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs					
	DAMPPROOFING OF WALLS AND FLOORS					
	One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)					
1	In walls	m2	18			
	One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape					
2	Under surface bed	m2	178			
	WATERPROOFING TO FLOOR AND WALL SURFACES					
	Carried Forward Section No. 2 Bill No. 5 Waterproofing			R		

	Brought Forward			R	ĺ
	Cementitious waterproofing system (suitable for tiling) comprising primer coat plasticised modified acrylic (PMA) (consisting of 5I PMA, 5 litres water and 16,5kg cement (32,5N), one layer pre-cut polypropylene fabric fully saturated in PMA slurry and two full coats PMA slurry				
3	On shower floors	m2	2		
4	On walls	m2	24		
	WATERPROOFING TO WINDOWS AND EDGES				
	Approved silicon sealant:				
5	Under window cills in accordance with the Architect's drawings and specifications.	m	19		
6	Sealing edges to brickwork	m	55		
	Testing				
7	Allow for flood testing of the waterproofing installation		Item		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 5				
	Waterproofing				

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n		Unit	Quantity	Rate	Amount	
	SECTION 2 - ABATTOIR					
	BILL NO. 6					
	ROOF COVERINGS & CLADDINGS					
	SUPPLEMENTARY PREAMBLES					
	The Contractor is to provide and allow in his price for the provision of a 10 years "weathering and non-peeling warranty" as well as a 20 years "Non-perforation warranty".					
	The Contractor is to confirm the sizes for flashings and accessories and to ensure that their rates are for flashings and accessories that are in accordance with the manufacturer's requirements.					
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.					
	All flashing finish to match sheeting finsh					
	PROFILED METAL SHEETING AND ACCESSORIES					
	IBR profiled sheets Galvanised steel beams and purlins to engineer's detail. Roof structure to be stayed onto steel columns					
1	Roof covering with a 5 degree pitch	m2	7			
2	Roof covering with a 10 degree pitch	m2	238			
3	Side cladding to gables	m2	111			
4	Close cut and mitred ridge	m	62			
	ROOF AND WALL INSULATION					
	Carried Forward			R		
	Section No. 2 Bill No. 6 Roof coverings & claddings					

	Brought Forward			R	
	50mm Thick aluminium foil faced fibreglass blanket				
5	Insulation blanket laid taut over purlins and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	238		
	SHEET METAL FLASHINGS & LININGS				
	0,6mm Galvanised sheet steel				
6	Flashings	m2	44		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 6 Roof coverings & claddings				

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
BILL NO. 7				
CARPENTRY AND JOINERY				
SUPPLEMENTARY PREAMBLES				
General				
The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
<u>Fixing</u>				
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
<u>Joinery</u>				
Descriptions of frames shall be deemed to include frames and rails				
Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
Fire doors				
Fire doors are to be in accordance with SANS 1253				
DOORS				
Carried Forward Section No. 2			R	
Bill No. 7 Carpentry and joinery				

	Brought Forward			R		
	<u>Heavy duty hardwood single leaf door semi-solid flush</u> doors, hung to steel frames.					
1	813x2032x44mm door ready to receive ironmongery and painting (measured elsewhere), complete	No	5			
	Light duty hardwood single leaf door semi-solid flush doors, hung to steel frames.					
2	813x2032x44mm door ready to receive ironmongery and painting (measured elsewhere), complete	No	2			
	BUDGETARY ALLOWANCES					
	Joinery fittings					
3	Allow the amount of R 25'000.00 for joinery fittings to be expended as the Principal Agent may direct or deduct in whole or in part, if not required.					
			Item		25.000,	00
	Carried Forward to Summary of Section No. 2			R		
	Section No. 2 Bill No. 7					
	Carpentry and joinery					
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	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
BILL NO. 8				
CEILINGS, PARTITIONS AND ACCESS FLOORING				
SUPPLEMENTARY PREAMBLES				
General				
The relevant SABS standards of work must be applied to all aspects and components of the works				
Fixing				
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
<u>Ceilings</u>				
Unless otherwise described ceilings shall be deemed to be horizontal				
Bulkheads				
Unless otherwise described bulkheads shall be deemed to be horizontal along the length				
Steel components				
All steel components for ceilings and partitions are to be galvanised in accordance with SANS 121				
NAILED-UP CEILINGS				
SUPPLEMENTARY PREAMBLES				
Carried Forward			R	
Section No. 2 Bill No. 8 Ceilings, partitions and access flooring				

	Brought Forward			R	
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	6,4mm Gypsum plasterboard				
1	On ceilings	m2	29		
	4,6mm Fibre-cement plain ceiling boards				
2	On ceilings	m2	29		
	Gypsum plasterboard cornices				
3	75mm Coved cornices	m	43		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2				
	Bill No. 8 Ceilings, partitions and access flooring				

m S		Unit	Quantity	Rate	Amount	
-	SECTION 2 - ABATTOIR					
	<u>BILL NO. 9</u>					
	FLOOR COVERINGS					
	SUPPLEMENTARY PREAMBLES					
	General					
	The relevant SABS standards of work must be applied to all aspects and components of the works					
	<u>Fixing</u>					
	Floor coverings, wall linings shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings					
	<u>SKIRTINGS</u>					
	80mm skirtings					
1	PVC 20x80mm skirting fixed to brickwork	m	102			
	Carried Forward to Summary of Section No. 2			R		
	Section No. 2 Bill No. 9					—
	Floor coverings					
				l	II I	

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
<u>BILL NO. 10</u>				
IRONMONGERY				
SUPPLEMENTARY PREAMBLES				
General				
The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
The Contractor is to ensure that ironmongery not measured in this section are priced with the doors and/or windows measured elsewhere and as detailed on the Architect's drawings.				
Note: Aluminium windows and all ironmongery is included with the windows in the Metalwork bill,				
Proprietary items				
Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items				
Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures clarifying the features of the products/articles offered				
On request returnable samples are to be provided to the principal agent for consideration				
Carried Forward Section No. 2 Bill No. 10 Ironmongery			R	

	Brought Forward			R	
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AN Anodised natural AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	HINGES & BOLTS				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
1	JH-BB-STD-2-SS SS 2BB Butt Hinge EN1935GRD13	No	14		
	LOCKS				
	<u>Keys</u>				
	Unless otherwise described locks shall have two keys each				
	"EN-SUITE" LOCKS				
	The following locks are to be suitable for master and grand master key operation				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
2	L-22315-76SS 1 EA Union 315 Doorlock SS	No	2		
3	2X18SC 1 EA CYLINDER PROFILE STD Euro Profile Double Cylinder door lock	No	5		
	HANDLES				
	Carried Forward			R	
	Section No. 2 Bill No. 10 Ironmongery				

	Brought Forward			R	
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
4	SS6163-05SS New Handle On Plate Profile Tubular Stainless Steel 6003 handle on 150mm X 75mm S/S backplate; profile piercing	No	7		
	PUSH PLATES AND KICK PLATES				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
5	SS5089-200W Kick Plate 200X800MM WORKS Doors to be measured on site prior to ordering of plates	No	5		
	DOOR STOP				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
6	87001SS Floor Door Stop Satin SS	No	7		
	LETTERS & NAMEPLATES				
	Manufactured by Geze				
	In accordance with Ironmongery Schedule				
7	1.2mm stainless steel engraved and painted letters: FEMALE CHANGE	No	1		
8	1.2mm stainless steel engraved and painted letters: MALE CHANGE	No	1		
9	1.2mm stainless steel engraved and painted letters: MANAGER'S OFFICE	No	1		
10	1.2mm stainless steel engraved and painted letters: SALTING ROOM	No	1		
	PHOTOLUMINESCENT SIGNS				
	Carried Forward Section No. 2 Bill No. 10 Ironmongery			R	

	Brought Forward			R	
	SUPPLEMENTARY PREAMBLES				
	Signs are to comply with SANS 1186-1 to 5 and to be to the approval of the local authority. Signs are to have anodised aluminium frames				
	Prices are to include for fixing by approved methods. The use of double sided tape will not be permitted. Surface mounted signs are to be concealed fixed and ceiling mounted signs are to be hung with 2mm diameter stainless steel cables				
	Single sided ceiling mounted signs are to have 2mm satin chrome anodised aluminium back panels				
	Samples, specifications, literature, etc of materials and fabricated articles the tenderer proposes to use shall be submitted with the tender				
	A ten year guarantee on materials and workmanship shall be submitted by the successful tenderer				
	References at the end of the item descriptions are to the relative items on drawings annexed to (issued separately with?) these bills of quantities				
	<u>Wall mounted photoluminescent statutory signs in 150 x</u> 150mm modules				
11	150 x 150mm Sign with one pictogram	No	5		
12	380 x 190mm Sign with EXIT sign	No	2		
	SUNDRIES				
	In accordance with Ironmongery Schedule				
13	Sanitary Towel and Disposal Bin for wall mounting, S/Steel, Satin Finished, 0.8mm thick, Approx. 6 Liter Capacity, with integrated bag holder, self closing lid, with integrated storage for paper hygiene bags, cylinder lock with franke standard key, dimensions $350 \times 469 \times 130 \text{ mm}$ (w x h x d)				
		No	2		
14	Code: 169191 stainless steel hat and coat hook with Rubber Buff	No	5		
	Carried Forward			R	
	Section No. 2 Bill No. 10 Ironmongery				

	Brought Forward			R
	Knife Sterilizer			
5	Knife Sterilizer Wall Mounted SS Gr 304	No	1	
	Condemn Bins			
6	Wheely lockable bin for condemned meat	No	2	
	Boot Wash			
,	Bootwash 2-Station Foot Mounted S/S	No	2	
	BATHROOM FITTINGS			
	In accordance with Ironmongery Schedule			
3	Steiner Hygiene or equal similar approved 140x125x275mm lockable, two-tier tissue roll holder, plugged.			
	Colour: stainless steel.	No	2	
9	Steiner Hygiene or equal similar approved soap dish, plugged Colour: stainless steel.			
		No	2	
)	EW Volkem 133x117x212mm lockable 1200ml liquid top up soap dispenser , stainless steel or similar approved	No	10	
	STEEL LOCKERS			
	Metal steel lockers with standard baked enamel finish			
	Standard 3-tier steel locker 300 x 450 x 1800mm high Colour TBC	No	4	
	Steel PPE locker 790 x 520 x 1800mm high Colour TBC	No	1	
}	Hazardous steel locker 900 x 450 x 1800mm high Sloping roof back to front, 4 stainless steel drip trays, hasp and staple for padlock facility with perforated			
	panels Colour TBC	No	2	
	STEEL SINKS & WORKTOPS			
	Carried Forward			R
	Section No. 2 Bill No. 10 Ironmongery			

	Brought Forward			R	
	Stainless Steel worktops, plugged			P	
24	1600x700x900mm stainless steel worktop with splashback, stainless steel legs and bottom shelf	No	2		
25	1630X670X900mm stainless steel trolley	No	1		
26	1850X670X900mm stainless steel double bowl sink with two sides working space. Bowl size 500x500x250mm deep	No	1		
27	2400x670x900mm stainless steel single sink with work space on one side. Bowl size 600x500x300mm deep	No	1		
28	2850x720x900mm stainless steel triple sink . Bowl size 600x500x300mm deep	No	1		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 10 Ironmongery				

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No

m c		Unit	Quantity	Rate	Amount	
-	SECTION 2 - ABATTOIR					
	<u>BILL NO. 11</u>					
	STRUCTURAL STEELWORK					
	SUPPLEMENTARY PREAMBLES					
	Descriptions					
	Descriptions of bolts shall be deemed to include nuts and washers					
	Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete					
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete					
	BUDGETARY ALLOWANCES					
	Structural Steel					
1	Allow the amount of R 100 000.00 for structural steel to be expended as the Principal Agent may direct or deduct in whole or in part, if not required.		Item		100.000,00)
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 11 Structural steelwork			R		=

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
<u>BILL NO. 12</u>				
METALWORK				
Descriptions of bolts, anchors, etc				
Descriptions of bolts shall be deemed to include nuts and washers				
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres				
Aluminium doors, windows, etc				
Doors and windows shall comply with AAAMSA design criteria				
Glazing shall comply with SAGGA regulations. Glass shall be type ? laminated performance glass as shown on the window schedules/drawings appended to these bills of quantities (as described in the headings to window descriptions?). Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings				
Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed				
For purpose made windows and doors, refer to drawings annexed to (issued separately with?) these bills of quantities				
Carried Forward			R	
Section No. 2 Bill No. 12 Metalwork				

		Brought Forward			R	
	The following certificat commencement of site	es shall be provided prior to work:				
	1 A copy of the Test Certificate manufacturer/contracte architectural aluminium	or supplying the				
	anodising or p	f Conformance confirming that owder coating has been lance with SANS 999 and SANS				
		antee of not less than 15 years bowder manufacturer. The				
		ons contained in this guarantee of the powder coating process				
	glazing has be SANS 0137, e materials have areas and that	f Conformance confirming that en installed in accordance with nsuring that safety glazing been installed in the mandatory each individual pane of safety als has been permanently marked				
	laminated safe sealed glazing against delam	m the manufacturer of the ty glass and/or hermetically units guaranteeing the products nation and colour degredation for ess than five years				
	STEEL STAIRS					
	GALVANISED STEE	EL STAIRS				
	Movable double flight 2655x1225mm on plan					
1	Movable double flight	stair	No	1		
	PRESSED STEEL D	OOR FRAMES				
	GALVANISED PRE	SSED STEEL DOOR FRAMES				
	1,2mm Rebated frame	s suitable for half brick walls				
2	Frame for door 813 x 2	2032mm high	No	2		
		Carried Forward			R	
	Section No. 2 Bill No. 12 Metalwork					
			1			

	Brought Forward			R		
	1,2mm Rebated frames suitable for one brick walls					
3	Frame for door 813 x 2032mm high	No	5			
	STEEL ROLLER SHUTTERS ETC					
	<u>Galvanised steel powder coated roller shutters with</u> <u>76mm slats (18kg/m²), fixed to brickwork</u>					
4	Motor operated slatted roller shutter for 1500 x 2440mm high opening	No	1			
5	Motor operated slatted roller shutter for 3000 x 2440mm high opening	No	1			
	ALUMINIUM WINDOWS					
	OUTWARD OPENING ALUMINIUM WINDOWS					
	Note					
	Refer to attached window schedules for details of windows					
	Powder coated tilt and turn window units as per system complete with subframes, ironmongery, glass, sealing and fixing to brickwork or concrete					
6	Standard window 600X900mm high	No	22			
7	Standard window 900x900mm high	No	1			
	SHOWER CUBICLE DOORS					
	<u>"Showerflex" epoxy powder coated aluminium shower</u> <u>cubicle doors with sliding gear, cleats, stops, etc and</u> 4mm toughened obscure safety glass, fixed to tiled walls					
8	Fixed panel 1000 x 1800mm high	No	2			
	ALUMINIUM LOUVRE UNITS					
	Removal powder coated aluminium fixed louvre units fixed to brickwork or concrete					
9	1000 x 1800mm high	No	2			
10	1800 x 1800mm high	No	1			
	Carried Forward to Summary of Section No. 2			R		
	Section No. 2 Bill No. 12 Metalwork					
					I	1

	Unit	Quantity	Rate	Amount
SECTION 2 - ABATTOIR				
BILL NO. 13				
PLASTERING				
SUPPLEMENTARY PREAMBLES				
General				
The relevant SABS standards of work must be applied to all aspects and components of the works				
GRANOLITHIC				
Method				
The method to be used shall be either the monolithic method or the bonded method				
Preparation				
For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic				
Mix				
Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic				
Carried Forward Section No. 2 Bill No. 13 Plastering			R	
69				

Brought Forward	R	
Panels		
Granolithic shall be laid in panels not exceeding 14m ² for monolithic finishes, not exceeding 9,5m ² for bonded finishes and not exceeding 6m ² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width		
Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints		
Laying		
Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels		
Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be throughly compacted and lightly wood floated to the required levels		
After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated		
Curing, seasoning and protection		
Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying		
<u>Colour</u>		
Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of ? kg pigment per pocket of cement, of uniform appearance and consistent colour throughout		
BLINDING		
Carried Forward	R	
Section No. 2 Bill No. 13 Plastering		
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	Brought Forward			R	
	Sand blinding				
1	50mm Thick on floors and landings	m2	178		
	<u>SCREEDS</u>				
	Epoxy on floors				
2	Polyscreed RT four component polyurethane rake and trowel floor screed ight textured, non-slip, protective floor finish ideal for applications in the health environments where performance and durability are required. It is also HACCP compliant with an antimicrobial silver ion technology which eliminates germs that may come in contact with the floor. *Concrete substrate conditions to be followed prior to installation of system*	m2	196		
	Cement plaster screeds wood floated, on concrete				
3	50mm Thick on floors and landings	m2	178		
	INTERNAL PLASTER				
	Cement plaster steel trowelled (for paint), on brickwork				
4	On walls	m2	249		
	Cement plaster wood floated for tiles, on brickwork				
5	On walls	m2	24		
	EXTERNAL PLASTER				
	Cement plaster steel trowelled (for paint), on brickwork				
6	On walls	m2	118		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 13 Plastering			R	

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		Unit	Quantity	Rate	Amount	
	SECTION 2 - ABATTOIR					
	<u>BILL NO. 14</u>					
	<u>TILING</u>					
	SUPPLEMENTARY PREAMBLES					
	General					
	The relevant SABS standards of work must be applied to all aspects and components of the works					
	Patterns					
	Unless otherwise described, tiles shall be laid with continuous joints in both directions					
	Fixing					
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding					
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat					
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles					
	WALL TILING					
	200 x 200 x 5mm White matt ceramic tiles on brickwork including cement plaster backing					
1	On walls	m2	24			
	FLOOR TILING					
	Carried Forward Section No. 2 Bill No. 14 Tiling			R		

	Brought Forward			R	
	200 x 200 x 5mm White matt ceramic tiles on brickwork including cement plaster backing				
2	On floors and landings	m2	22		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 14				
	Tiling				

ı		Unit	Quantity	Rate	Amount
	SECTION 2 - ABATTOIR				
	<u>BILL NO. 15</u>				
	<u>PLUMBING AND DRAINAGE</u> (PROVISIONAL)				
	<u>Wire gratings</u>				
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings				
	Stormwater channels				
	Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site				
	French drains				
	Descriptions of french drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, "?" geofabric filter blanket over stone, 300mm earthfilling over and disposal of surplus material on site				
	Septic tanks				
	Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site				
	Carried Forward Section No. 2 Bill No. 15 Plumbing and drainage			R	

Brought Forward		R	
<u>Stainless steel basins, sinks, wash troughs, urinals, etc</u>			
Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0)			
Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8)			
Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8)			
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable			
Sealing of edges			
Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone			
PVC-U pipes and fittings			
Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings			
Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings			
PVC-U pressure pipes and fittings			
Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings			
Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints			
High density polyethylene (HDPe) pipes and fittings			
Pipes shall be type IV and of the class specified with compression fittings			
			┢
Carried Forward Section No. 2 Bill No. 15 Plumbing and drainage		R	

Brought Forward	R	
Polypropylene pipes		
Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings		
Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions		
Copper pipes		
Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "?" type. Capillary solder fittings shall comply with ISO 2016		
Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition		
Reducing fittings		
Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained		
Fixing of pipes		
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level		
Carried Forward	R	
Section No. 2 Bill No. 15 Plumbing and drainage		

Brought Forward	R	
Paper wrapping to pipes		
Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings		
Disinfection of water pipework		
Water pipework is to be disinfected at completion		
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with ?% overlaps		
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions		
Prices for wrapping of pipes shall include for all work as described to couplings in the length		
Laying, backfilling, bedding, etc of pipes		
Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled		
Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001		
<u>General</u>		
Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately)		
Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends		
Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of ?% Mod AASHTO density and disposal of surplus material on site		
Carried Forward	R	
Section No. 2 Bill No. 15 Plumbing and drainage		

	Brought Forward			R		
	Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)					
	Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)					
	As-built drawings					
	Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)					
	RAINWATER DISPOSAL					
	<u>0,6mm Galvanised sheet steel gutters and rainwater</u> pipes					
1	100mm Diameter rainwater pipes	m	62			
2	100mm Downpipes, including bends and shoes	m	12			
	SANITARY FITTINGS					
	Manufactured by Vaal Sanitaryware					
3	Vaal "Hibiscus" WC Close Coupled 90° outlet open rim front single flush suite complete with lid and fitments (CODE 772654)					
	(0002 112004)	No	2			
4	Vaal 702803 Cameo Drop in white vanity hand wash basin. 595x455x205mm with 53mm chrome bottle trap and waste union and other necessary accessories	No	8			
	TRAPS					
	Polyflor 50 X 50mm Stainless Steel Shower Trap and Overflow					
5	Shower	No	2			
	Carried Forward			R		
	Section No. 2 Bill No. 15 Plumbing and drainage					

	Brought Forward			R		
	500x500mm Stainless Steel Blood, Fat and Water Trap and Overflow				r i	
6	Floor trap	No	3			
	TAPS & VALVES					
	Manufactured by Cobra					
7	Metering Taps - Chrome COB-KM2-102 NOTES: Metering pillar tap, chrome. Includes: self-closing, non- hold open, flow controller with flow cycle of 1-20 seconds, 1/2" male inlet, backnut, washer, & streamline outlet for flow aesthetics. Excellent water-saving product. SANS 1808-9. 115mm	No	4			
8	Medical Foot Action - COB-503-21B NOTES: medical					
0	elbow-action pillar tap, chrome. Includes: 1/4" turn ceramic disc head part, blue indice, 1/2" bsp male inlet, and flanged backnut. Ideal for medical, kitchen and industrial installations. SANS 226 TYPE 2.	No	4			
	Manufactured by Franke					
9	FRANKE highrise swivel sink mixer with aerated swivel outlet. Includes: 1/2" BSP male inlets, and wide sweep S-connections with wall flanges for easy retrofit. DZR BRASS, SANS 226 TYPE 2.	No	2			
	Testing					
10	Testing waste pipe system		Item			
	DRIP TRAYS & TANKS					
	0,5mm Galvanised sheet steel					
11	Stainless Steel Butchers Tray	No	6			
	Polyethylene drinking water tanks with black lining internally					
12	5000 Litre circular tank, approximately 400mm above ground level	No	2			
	Carried Forward Section No. 2 Bill No. 15 Plumbing and drainage			R		
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HOSE REELS Image: Contract of the problem is a per Structural Enginee's detail No 3 AS-BUILT DRAWINGS Image: Contract of the problem is a per Structural Enginee's detail No 3 14 Provision of as-built drawings Image: Contract of the problem is a per Structural Enginee's detail Image: Contract of the problem is a per Structural Enginee's detail Image: Contract of the problem is a per Structural Enginee's detail 14 Provision of as-built drawings Image: Contract of the problem is a per Structural Enginee's detail Image: Contract of the problem is a per Structural Enginee's detail 14 Provision of as-built drawings Image: Contract of the problem is a per Structural Enginee's detail Image: Contract of the problem is a per Structural Enginee's detail 14 Provision of as-built drawings Image: Contract of the problem is a per Structural Enginee's detail Image: Contract of the problem is a per Structural Enginee's detail 14 Provision of as-built drawings Image: Contract of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detail of the problem is a per Structural Enginee's detailore's detail of the problem is a per Structural Enginee'	
Enginee's detail No 3 AS-BUILT DRAWINGS Image: Comparison of the second	
14 Provision of as-built drawings Item 14 Item Item 15 Item Item 16 Item Item 17 Item Item 18 Item Item 19 Item Item	
Carried Forward to Summary of Section No. 2	۲
Section No. 2 Bill No. 15 Plumbing and drainage	

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		Unit	Quantity	Rate	Amount	
lo	SECTION 2 - ABATTOIR					
	<u>BILL NO. 16</u>					
	PAINTWORK					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with "?" specifications unless otherwise described					
	<u>COLOURS</u>					
	<u>User note</u>					
	Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards					
	PAINTWORK TO NEW WORK					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats PVA emulsion paint for interior use					
1	Walls	m2	249			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	<u>One coat alkali resistant primer and two coats superior</u> <u>quality acrylic emulsion paint for exterior use</u>					
2	Walls	m2	118			
	ON PLASTERBOARD SURFACES					
	One coat alkali resistant primer and two coats PVA emulsion paint for interior use					
3	Ceilings and cornices ("White" colour group)	m2	29			
	ON FIBRE-CEMENT BOARD SURFACES					
	Carried Forward Section No. 2 Bill No. 16 Paintwork			R		

	Brought Forward			R	
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use			<u>1</u> 2	
4	Fascias and barge boards, including priming metal jointing strips	m2	29		
	ON METAL SURFACES				
	One coat alkyd based zinc phosphate primer and two coats premium quality polyurethane enamel paint, on steel				
5	Door frames	m2	98		
6	Roller shutter boxes	m2	11		
7	Eaves gutters	m2	19		
8	Rainwater downpipes	m2	3		
	ON WOOD SURFACES				
	Three coats superior quality polyurethane suede varnish				
9	Doors	m2	12		
	Carried Forward to Summary of Section No. 2			R	F
	Section No. 2 Bill No. 16				 ╞
	Paintwork				

	SECTION SUMMARY - SECTION 2 - ABATTOIR			
Bill No		Page No		Amount
1	Demolitions & Alterations	38		
2	Earthworks (provisional)	42		
3	Concrete, formwork and reinforcement	46		
4	Masonry	49		
5	Waterproofing	51		
6	Roof coverings & claddings	53		
7	Carpentry and joinery	55		
8	Ceilings, partitions and access flooring	57		
9	Floor coverings	58		
10	Ironmongery	64		
11	Structural steelwork	65		
12	Metalwork	68		
13	Plastering	71		
14	Tiling	73		
15	Plumbing and drainage	80		
16	Paintwork	82		
	Carried to Final Summary Section No. 2		R	

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	BILL NO. 1				
	EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Nature of ground				
	The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"				
	A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"				
	<u>Subterranean water</u>				
	No subterranean water is expected				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
	Carried Forward			R	
	Section No. 3 Bill No. 1 Earthworks (provisional)				

	Brought Forward			R	
	Filling and layer work materials				
	Notwithstanding the reference to prescribed multiple handling in the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.				
	Testing				
	Prices for filling are to include for all necessary density and other tests				
	SITE CLEARANCE				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth	m2	144		
	EXCAVATION & FILLING				
	EXCAVATIONS				
	Digging up topsoil				
2	Digging up topsoil to an average depth of 100mm and preserving for use as filling	m2	144		
	Excavation in compacted earth not exceeding 2m deep				
3	Trenches	m3	70		
	Extra over for excavation in earth in				
4	Soft rock	m3	2		
5	Hard rock	m3	4		
	Extra over all excavations for carting away				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	7		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	175		
	Carried Forward Section No. 3			R	
	Bill No. 1 Earthworks (provisional)				

	Brought Forward			R	
	Keeping excavations free of water				
8	Keeping excavations free of water other than subterranean water		ltem		
	<u>FILLING</u>				
	Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to ?% Mod AASHTO density				
9	Backfilling to trenches and holes	m3	63		
	Compaction of surfaces				
10	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to ?% Mod AASHTO density	m2	216		
	<u>TESTS</u>				
	Prescribed tests to determine degree of compaction or other properties of ground or filling				
11	"Modified AASHTO Density" test	No	2		
	WEED KILLERS, INSECTICIDES, ETC				
	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/mý				
12	Under floors	m2	80		
	Soil insecticide in accordance with SANS 5859				
13	Under floors including forming and poisoning shallow furrows against foundation walls, filling in furrows and ramming	m2	80		
14	To bottoms and sides of trenches	m2	247		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	 ╞
	Bill No. 1 Earthworks (provisional)				
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ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 2</u>				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The Concrete works shall be in accordance with the Engineer's specifications.				
	The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials				
	The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Components cast against excavated surfaces have not been measured or described separately and the Contractor is to ensure adequate allowance for casting against excavated surfaces are made within the relevant items.				
	Cost of tests				
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)				
	Carried Forward Section No. 3 Bill No. 2 Concrete, formwork and reinforcement			R	

	Brought Forward			R	1
	<u>Formwork</u>				1
	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use				[
	Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described				
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	20MPa concrete				1
1	Strip footings	m3	18		1
	REINFORCED CONCRETE CAST ON/IN FORMWORK				
	25MPa concrete				1
2	Surface beds	m3	14		1
	TEST CUBES				1
3	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	CONCRETE SUNDRIES				1
	Carried Forward Section No. 3 Bill No. 2 Concrete, formwork and reinforcement			R	

[Brought Forward			R		
	Finishing top surfaces of concrete smooth with a steel trowel					
4	Surface bed	m2	144			
	ROUGH FORMWORK (DEGREE OF ACCURACY III)					
	Rough formwork to sides					
5	Lintels propped up not exceeding 1,5m high	m2	3			
6	Lintels propped up exceeding 1.5m and not exceeding 3m high	m2	2			
	MOVEMENT JOINTS					
	Isolation joints formed of 20 x 12mm deep silicone sealant, backing rope and closed cell polyurethane joint former					
7	Between concrete surface bed and brick walls.	m	133			
	REINFORCEMENT					
	High tensile steel reinforcement to structural concrete work					
8	Varying diameters bars in bases and structural concrete work	t	2,16			
	Fabric reinforcement					
9	Type 245 fabric reinforcement in concrete surface beds etc	m2	144			
	Carried Forward to Summary of Section No. 3			R		
	Section No. 3 Bill No. 2 Concrete, formwork and reinforcement					
					I	

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	BILL NO. 3				
	MASONRY				
	SUPPLEMENTARY PREAMBLES				
	BRICKWORK				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	Pointing				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing				
	BLOCKWORK				
	Concrete masonry units				
	Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa				
	Carried Forward			R	
	Section No. 3 Bill No. 3 Masonry				

	Brought Forward			R	
	Wall ties for blockwork				
	Wall ties shall be polypropylene ties complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other				
	<u>Blockwork</u>				
	Blockwork shall comply with SANS 10145 "Concrete Masonry Construction"				
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole				
	Standard complementary blocks				
	Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three- quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary				
	DECORATIVE BLOCKS				
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour				
	BRICKWORK				
	FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar				
1	Half brick walls	m2	10		
2	One brick walls	m2	68		
	SUPERSTRUCTURE				
	Carried Forward			R	
	Section No. 3 Bill No. 3 Masonry				

	Brought Forward			R
	Brickwork of NFP bricks in class II mortar			
3	Half brick walls	m2	28	
4	One brick walls	m2	201	
5	Beamfilling	m2	19	
	BRICKWORK SUNDRIES			
	2,5mm Galvanised brick reinforcement			
6	75mm Wide reinforcement built in horizontally	m	46	
7	150mm Wide reinforcement built in horizontally, circular on plan	m	307	
	Prestressed fabricated concrete lintels including necessary temporary supports			
8	Lintels in lengths not exceeding 3m	m	19	
	WINDOW SILLS			
	Window sills in single lengths bedded in class II mortar including metal fixing lugs			
9	Window sills set sloping and slightly projecting	m	12	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3 Bill No. 3 Masonry			

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 4</u>				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	<u>Waterproofing</u>				
	Waterproofing of roofs shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)				
1	In walls	m2	19		
	One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape				
2	Under surface bed	m2	287		
	WATERPROOFING TO ROOFS				
	Carried Forward Section No. 3 Bill No. 4 Waterproofing			R	

	Brought Forward			R	ĺ
	Cementitious waterproofing system (suitable for tiling) comprising primer coat plasticised modified acrylic (PMA) (consisting of 5I PMA, 5 litres water and 16,5kg cement (32,5N), one layer pre-cut polypropylene fabric fully saturated in PMA slurry and two full coats PMA slurry				
3	On shower floors	m2	4		
4	On walls	m2	46		
	WATERPROOFING TO WINDOWS AND EDGES				
	Approved silicon sealant:				
5	Under window cills in accordance with the Architect's drawings and specifications.	m	18		
6	Sealing edges to brickwork	m	55		
	Testing				
7	Allow for flood testing of the waterproofing installation		ltem		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 4				
	Waterproofing				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 5</u>				
	ROOF COVERINGS & CLADDINGS				
	SUPPLEMENTARY PREAMBLES				
	The Contractor is to provide and allow in his price for the provision of a 10 years "weathering and non-peeling warranty" as well as a 20 years "Non-perforation warranty".				
	The Contractor is to confirm the sizes for flashings and accessories and to ensure that their rates are for flashings and accessories that are in accordance with the manufacturer's requirements.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	All flashing finish to match sheeting finsh				
	PROFILED METAL SHEETING AND ACCESSORIES				
	IBR profiled sheets Galvanised steel beams and purlins to engineer's detail. Roof structure to be stayed onto steel columns				
1	Roof covering with a 26 degree pitch	m2	166		
	ROOF AND WALL INSULATION				
	50mm Thick aluminium foil faced fibreglass blanket				
2	Insulation blanket laid taut over purlins and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	166		
	SHEET METAL FLASHINGS & LININGS				
	Carried Forward Section No. 3 Bill No. 5 Roof coverings & claddings			R	

ĺ	Brought Forward			R		
	0,6mm Galvanised sheet steel					
3	Flashings	m2	35			
	Carried Forward to Summary of Section No. 3			R		
	Section No. 3 Bill No. 5					
	Roof coverings & claddings					
				1	a	1

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	BILL NO. 6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	Joinery				
	Descriptions of frames shall be deemed to include frames and rails				
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	Fire doors				
	Fire doors are to be in accordance with SANS 1253				
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	Carried Forward			R	
	Section No. 3 Bill No. 6 Carpentry and joinery				

	Brought Forward			R	
	SUPPLEMENTARY PREAMBLES				
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	BUDGETARY ALLOWANCES				
	Structural Roof Trusses				
1	Allow the amount of R 50 000.00 for structural steel to be expended as the Principal Agent may direct or deduct in whole or in part, if not required.		ltem		50.000,00
	DOORS				
	<u>Heavy duty hardwood single leaf door semi-solid flush</u> doors, hung to steel frames.				
2	813x2032x44mm door ready to receive ironmongery and painting (measured elsewhere), complete	No	5		
	Light duty hardwood single leaf door semi-solid flush doors, hung to steel frames.				
3	813x2032x44mm door ready to receive ironmongery and painting (measured elsewhere), complete	No	4		
	BUDGETARY ALLOWANCES				
	Joinery fittings				
4	Allow the amount of R50'000.00 for joinery fittings to be expended as the Principal Agent may direct or deduct in whole or in part, if not required.				
			Item		50.000,00
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 6 Carpentry and joinery				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING			<u>-</u>	
	<u>BILL NO. 7</u>				
	CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<u>Ceilings</u>				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	<u>Bulkheads</u>				
	Unless otherwise described bulkheads shall be deemed to be horizontal along the length				
	Steel components				
	All steel components for ceilings and partitions are to be galvanised in accordance with SANS 121				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	Carried Forward			R	
	Section No. 3 Bill No. 7 Ceilings, partitions and access flooring				

	Brought Forward			R	
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	Nutec 6mm Fibre-cement plain ceiling boards				
1	On ceilings	m2	144		
	Gypsum plasterboard cornices				
2	75mm Coved cornices	m	133		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 7 Ceilings, partitions and access flooring				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 8</u>				
	FLOOR COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	<u>Fixing</u>				
	Floor coverings, wall linings shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings				
	<u>SKIRTINGS</u>				
	80mm skirtings				
1	PVC 20x80mm skirting fixed to brickwork	m	69		
				_	
	Carried Forward to Summary of Section No. 3			R	
	Bill No. 8 Floor coverings				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	BILL NO. 9				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	General				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	The Contractor is to ensure that ironmongery not measured in this section are priced with the doors and/or windows measured elsewhere and as detailed on the Architect's drawings.				
	Note: Aluminium windows and all ironmongery is included with the windows in the Metalwork bill,				
	Proprietary items				
	Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	Carried Forward Section No. 3 Bill No. 9 Ironmongery			R	

	Brought Forward			R	
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AN Anodised natural AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	HINGES & BOLTS				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
1	JH-BB-STD-2-SS SS 2BB Butt Hinge EN1935GRD13	No	18		
	LOCKS				
	<u>Keys</u>				
	Unless otherwise described locks shall have two keys each				
	"EN-SUITE" LOCKS				
	The following locks are to be suitable for master and grand master key operation				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
2	L-22315-76SS 1 EA Union 315 Doorlock SS	No	4		
3	2X18SC 1 EA CYLINDER PROFILE STD Euro Profile Double Cylinder door lock	No	5		
	HANDLES				
	Carried Forward			R	
	Section No. 3 Bill No. 9 Ironmongery				

	Brought Forward			R	
	Manufactured by Assa Abloy			je	
	In accordance with Ironmongery Schedule				
4	SS6163-05SS New Handle On Plate Profile Tubular Stainless Steel 6003 handle on 150mm X 75mm S/S backplate; profile piercing	No	9		
	DOOR STOP				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
5	87001SS Floor Door Stop Satin SS	No	5		
	STEEL SINKS				
	Stainless Steel worktops, plugged				
6	1600x670x900mm stainless steel single sink with work space on one side. Bowl size 600x500x300mm deep	No	1		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 9 Ironmongery				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	BILL NO. 10				
	<u>METALWORK</u>				
	Descriptions of bolts, anchors, etc				
	Descriptions of bolts shall be deemed to include nuts and washers				
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
	Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres				
	Aluminium doors, windows, etc				
	Doors and windows shall comply with AAAMSA design criteria				
	Glazing shall comply with SAGGA regulations. Glass shall be type ? laminated performance glass as shown on the window schedules/drawings appended to these bills of quantities (as described in the headings to window descriptions?). Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings				
	Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed				
	For purpose made windows and doors, refer to drawings annexed to (issued separately with?) these bills of quantities				
	Carried Forward			R	
	Section No. 3 Bill No. 10 Metalwork				

		Brought Forward			R	1
		llowing certificates shall be provided prior to encement of site work:				
		A copy of the relevant AAAMSA Performance Test Certificate from the facturer/contractor supplying the ectural aluminium product				
	2 proces 1796	A Certificate of Conformance confirming that anodising or powder coating has been ssed in accordance with SANS 999 and SANS respectively				
	3	A powder guarantee of not less than 15 years issued by the powder manufacturer. The				
		specific conditions contained in this guarantee shall form part of the powder coating process				
	4	A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked				
	5 a	A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degredation for period of not less than five years				
	PRES	SED STEEL DOOR FRAMES				
	<u>GAL\</u>	ANISED PRESSED STEEL DOOR FRAMES				
	<u>1,2mn</u>	n Rebated frames suitable for half brick walls				
1	Frame	e for door 813 x 2032mm high	No	4		
	<u>1,2mn</u>	n Rebated frames suitable for one brick walls				
2	Frame	e for door 813 x 2032mm high	No	5		
	<u>ALUN</u>	<u>/INIUM WINDOWS</u>				
	<u>OUTV</u>	WARD OPENING ALUMINIUM WINDOWS				
	Sectio Bill No Metalv				R	

	Brought Forward			R	
	<u>Note</u>				
	Refer to attached window schedules for details of windows				
	Powder coated tilt and turn window units as per system complete with subframes, ironmongery, glass, sealing and fixing to brickwork or concrete				
3	Standard window 600 x 900mm high	No	4		
4	Standard window 900 x 900mm high	No	1		
5	Standard window 900 x 1500mm high	No	8		
6	Standard window 1500 x 1500mm high	No	1		
	SHOWER CUBICLE DOORS				
	<u>"Showerflex" epoxy powder coated aluminium shower</u> <u>cubicle doors with sliding gear, cleats, stops, etc and</u> 4mm toughened obscure safety glass, fixed to tiled walls				
7	Fixed panel 1000 x 1800mm high	No	4		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 10 Metalwork				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 11</u>				
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	<u>GRANOLITHIC</u>				
	<u>Method</u>				
	The method to be used shall be either the monolithic method or the bonded method				
	<u>Preparation</u>				
	For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic				
	Mix				
	Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic				
	Carried Forward Section No. 3			R	
	Bill No. 11 Plastering				

Brought Forward	R	
Panels		
Granolithic shall be laid in panels not exceeding 14m ² for monolithic finishes, not exceeding 9,5m ² for bonded finishes and not exceeding 6m ² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width		
Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints		
Laying		
Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels		
Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be throughly compacted and lightly wood floated to the required levels		
After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated		
Curing, seasoning and protection		
Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying		
<u>Colour</u>		
Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of ? kg pigment per pocket of cement, of uniform appearance and consistent colour throughout		
BLINDING		
Carried Forward	R	
Section No. 3 Bill No. 11 Plastering		

	Brought Forward			R		
	Sand blinding					
1	50mm Thick on floors and landings	m2	144			
	FLOOR COVERINGS					
	Granolithic screed on floors					
2	Granolithic screed 30mm thick laid directly and bonded to hardened concrete slab	m2	86			
	<u>SCREEDS</u>					
	Cement plaster screeds wood floated, on concrete					
3	50mm Thick on floors and landings	m2	144			
	INTERNAL PLASTER					
	Cement plaster steel trowelled (for paint), on brickwork					
4	On walls	m2	177			
	Cement plaster wood floated for tiles, on brickwork					
5	On walls	m2	46			
	EXTERNAL PLASTER					
	Cement plaster steel trowelled (for paint), on brickwork					
6	On walls	m2	143			
	Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 11 Plastering			R		

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 12</u>				
	<u>TILING</u>				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	Patterns				
	Unless otherwise described, tiles shall be laid with continuous joints in both directions				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles				
	WALL TILING				
	200 x 200 x 5mm White matt ceramic tiles on brickwork including cement plaster backing				
1	On walls	m2	46		
	FLOOR TILING				
	Carried Forward Section No. 3 Bill No. 12 Tiling			R	

	Brought Forward			R		
	<u>200 x 200 x 5mm White matt ceramic tiles on brickwork</u> including cement plaster backing					
2	On floors and landings	m2	4			
	Carried Forward to Summary of Section No. 3			R		
	Section No. 3 Bill No. 12					
	Tiling					
						I

ltem No		Unit	Quantity	Rate	Amount
	SECTION 3 - 4 BED STAFF HOUSING				
	<u>BILL NO. 13</u>				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	<u>Wire gratings</u>				
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings				
	Stormwater channels				
	Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site				
	French drains				
	Descriptions of french drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, "?" geofabric filter blanket over stone, 300mm earthfilling over and disposal of surplus material on site				
	Septic tanks				
	Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site				
	Carried Forward Section No. 3			R	
	Bill No. 13 Plumbing and drainage				

Brought Forward		R	
<u>Stainless steel basins, sinks, wash troughs, urinals, etc</u>			
Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0)			
Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8)			
Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8)			
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable			
Sealing of edges			
Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone			
PVC-U pipes and fittings			
Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings			
Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings			
PVC-U pressure pipes and fittings			
Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings			
Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints			
High density polyethylene (HDPe) pipes and fittings			
Pipes shall be type IV and of the class specified with compression fittings			
			_
Carried Forward Section No. 3 Bill No. 13 Plumbing and drainage		R	1

Brought Forward	R	
Polypropylene pipes		
Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings		
Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions		
Copper pipes		
Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "?" type. Capillary solder fittings shall comply with ISO 2016		
Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition		
Reducing fittings		
Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained		
Fixing of pipes		
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level		
Carried Forward Section No. 3 Bill No. 13 Plumbing and drainage	R	

Brought Forward	R	
Paper wrapping to pipes		
Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings		
Disinfection of water pipework		
Water pipework is to be disinfected at completion		
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with ?% overlaps		
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions		
Prices for wrapping of pipes shall include for all work as described to couplings in the length		
Laying, backfilling, bedding, etc of pipes		
Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled		
Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001		
<u>General</u>		
Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately)		
Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends		
Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of ?% Mod AASHTO density and disposal of surplus material on site		
Carried Forward	R	
Section No. 3 Bill No. 13 Plumbing and drainage		

	Brought Forward			R	
	Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)				
	Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)				
	<u>As-built drawings</u>				
	Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)				
	RAINWATER DISPOSAL				
	0.6mm Galvanised sheet steel gutters and rainwater pipes				
1	100mm Diameter rainwater pipes	m	59		
2	100mm Downpipe, including bends and shoes	m	11		
	SANITARY FITTINGS				
	Manufactured by Vaal Sanitaryware				
3	Vaal "Hibiscus" WC Close Coupled 90° outlet open rim front single flush suite complete with lid and fitments (CODE 772654)				
	(No	4		
4	Vaal 702803 Cameo Drop in white vanity hand wash basin. 595x455x205mm with 53mm chrome bottle trap and waste union and other necessary accessories	No	4		
	<u>TRAPS</u>				
	Polyflor 50 x 50 Stainless Steel Shower Trap and Overflow				
5	Shower	No	2		
	TAPS & VALVES				
	Carried Forward			R	
	Section No. 3 Bill No. 13 Plumbing and drainage				

	Brought Forward			R	
	Manufactured by Cobra			P	
6	Metering Taps - Chrome COB-KM2-102 NOTES: Metering pillar tap, chrome. Includes: self-closing, non- hold open, flow controller with flow cycle of 1-20 seconds, 1/2" male inlet, backnut, washer, & streamline outlet for flow aesthetics. Excellent water-saving product. SANS 1808-9. 115mm	No	4		
	Manufactured by Franke				
7	FRANKE highrise swivel sink mixer with aerated swivel outlet. Includes: 1/2" BSP male inlets, and wide sweep S-connections with wall flanges for easy retrofit. DZR BRASS, SANS 226 TYPE 2.	No	1		
	AS-BUILT DRAWINGS				
8	Provision of as-built drawings		Item		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 13 Plumbing and drainage				

ltem No		Unit	Quantity	Rate	Amount	
	SECTION 3 - 4 BED STAFF HOUSING			<u></u>		
	<u>BILL NO. 14</u>					
	PAINTWORK					
	PAINT SPECIFICATIONS					
	All painting shall be done in accordance with "?" specifications unless otherwise described					
	COLOURS					
	<u>User note</u>					
	Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards					
	PAINTWORK TO NEW WORK					
	ON INTERNAL FLOATED PLASTER SURFACES					
	One coat alkali resistant primer and two coats PVA emulsion paint for interior use					
1	Walls	m2	177			
	ON EXTERNAL FLOATED PLASTER SURFACES					
	<u>One coat alkali resistant primer and two coats superior</u> <u>quality acrylic emulsion paint for exterior use</u>					
2	Walls	m2	143			
	ON FIBRE-CEMENT BOARD SURFACES					
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use					
3	Ceilings and cornices, including priming metal cover strips and nailheads ("White" colour group)	m2	144			
	Carried Forward Section No. 3 Bill No. 14 Paintwork			R		

	Brought Forward			R	
	ON METAL SURFACES				
	One coat alkyd based zinc phosphate primer and two coats premium quality polyurethane enamel paint, on steel				
4	Door frames	m2	91		
5	Eaves gutters	m2	18		
6	Rainwater downpipes	m2	21		
	ON WOOD SURFACES				
	Three coats superior quality polyurethane suede varnish				
7	Doors	m2	15		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 Bill No. 14 Paintwork				

	SECTION SUMMARY - SECTION 3 - 4 BED STAFF HOUSING			
Bill No		Page No		Amount
1	Earthworks (provisional)	86		
2	Concrete, formwork and reinforcement	89		
3	Masonry	92		
4	Waterproofing	94		
5	Roof coverings & claddings	96		
6	Carpentry and joinery	98		
7	Ceilings, partitions and access flooring	100		
8	Floor coverings	101		
9	Ironmongery	104		
10	Metalwork	107		
11	Plastering	110		
12	Tiling	112		
13	Plumbing and drainage	118		
14	Paintwork	120		
	Carried to Final Summary		R	
	Section No. 3			

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 1</u>				
	EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Nature of ground				
	The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"				
	A soils investigation has been carried out on the site by the engineer and the report is annexed to these bills of quantities. The soils report indicates that the ground varies between silty sand, reworked soil of mixed origin and residual shale, all of which will be deemed as "earth". All very hard unweathered shale, ironstone, etc, the removal of which necessitates the use of explosives or heavy duty hydraulic percussion hammers (peckers), will be classified as "hard rock"				
	<u>Subterranean water</u>				
	No subterranean water is expected				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
	Carried Forward Section No. 4 Bill No. 1 Earthworks (provisional)			R	

ĺ	Brought Forward			R	
	Filling and layer work materials				
	Notwithstanding the reference to prescribed multiple handling in the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any necessary multiple handling of material.				
	<u>Testing</u>				
	Prices for filling are to include for all necessary density and other tests				
	SITE CLEARANCE				
	<u>Site clearance</u>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth	m2	62		
	EXCAVATION & FILLING				
	EXCAVATIONS				
	Digging up topsoil				
2	Digging up topsoil to an average depth of 100mm and preserving for use as filling	m2	62		
	Excavation in compacted earth not exceeding 2m deep				
3	Trenches	m3	70		
	Extra over for excavation in earth in				
4	Soft rock	m3	2		
5	Hard rock	m3	4		
	Extra over all excavations for carting away				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	7		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	175		
	Carried Forward Section No. 4			R	
	Bill No. 1 Earthworks (provisional)				

	Brought Forward			R	
	Keeping excavations free of water				
8	Keeping excavations free of water other than subterranean water		Item		
	<u>FILLING</u>				
	Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to ?% Mod AASHTO density				
9	Backfilling to trenches and holes	m3	44		
	Compaction of surfaces				
10	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to ?% Mod AASHTO density	m2	112		
	<u>TESTS</u>				
	Prescribed tests to determine degree of compaction or other properties of ground or filling				
11	"Modified AASHTO Density" test	No	3		
	WEED KILLERS, INSECTICIDES, ETC				
	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/mý				
12	Under floors	m2	62		
	Soil insecticide in accordance with SANS 5859				
13	Under floors including forming and poisoning shallow furrows against foundation walls, filling in furrows and ramming	m2	62		
14	To bottoms and sides of trenches	m2	173		
	Carried Forward to Summary of Section No. 4 Section No. 4			R	
	Bill No. 1 Earthworks (provisional)				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 2</u>				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The Concrete works shall be in accordance with the Engineer's specifications.				
	The Contractor is to notify the Principal Agent immediately if a conflict between the Engineer's Specification, Architectural Drawings and/or these Bills of Quantities are found.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials				
	The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Components cast against excavated surfaces have not been measured or described separately and the Contractor is to ensure adequate allowance for casting against excavated surfaces are made within the relevant items.				
	Cost of tests				
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)				
	Carried Forward Section No. 4 Bill No. 2 Concrete, formwork and reinforcement			R	

			R	
Formwork				
Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use				
Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described				
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
20MPa concrete				
Strip footings	m3	13		
REINFORCED CONCRETE CAST ON/IN FORMWORK				
25MPa concrete				
Surface beds	m3	6		
TEST CUBES				
Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	4		
CONCRETE SUNDRIES				
Carried Forward Section No. 4 Bill No. 2 Concrete, formwork and reinforcement			R	
	Descriptions of formwork shall be deemed to include us and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use. Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m ligh unless otherwise described Formwork to sides of bases, pile caps, ground beams, et will only be measured where it is prescribed by the ngineer for design reasons. Formwork necessitated by regularity or collapse of excavated faces will not be sausered and the cost thereof shall be deemed to be olduded in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" 20MPa concrete Stip footings ELIFORCED CONCRETE CAST AGAINST 20MPa concrete Surface beds 215 CONCRETE SUNDRIES Making and testing 150 x 150 x 150mm concrete terength test cube (Provisional) CONCRETE SUNDRIES CARTER SUNDRIES CARTER SUNDRIES CARTER SUNDRIES	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" ZDMPa concrete Strip footings m3 REINFORCED CONCRETE CAST ON /IN CONCRETE SUNDRIES m3 Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) No CONCRETE SUNDRIES No CONCRETE SUNDRIES Carried Forward Section No. 4 Bill No. 2 Section No. 4	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1.5m and not exceeding 3.5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 20MPa concrete Strip footings m3 13 REINFORCED CONCRETE CAST ON /IN CONCRETE Surface beds m3 6 TEST CUBES Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) ConCRETE SUNDRIES Carried Forward Section No. 4 Bill No. 2	Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1.5m and not exceeding 3.5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" 13 REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 20MPa concrete m3 13 Strip footings m3 6 TEST CUBES Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) No 4 CONCRETE SUNDRIES No 4 Section No. 4 Bill No. 2 R R

	Brought Forward			R	
	Finishing top surfaces of concrete smooth with a steel trowel				
4	Surface bed	m2	62		
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough formwork to sides				
5	Lintels propped up not exceeding 1,5m high	m2	2		
6	Lintels propped up exceeding 1.5m and not exceeding 3m high	m2	1		
	MOVEMENT JOINTS				
	Isolation joints formed of 20 x 12mm deep silicone sealant, backing rope and closed cell polyurethane joint former				
7	Between concrete surface bed and brick walls.	m	68		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
8	Varying diameters bars in bases and structural concrete work	t	1,51		
	Fabric reinforcement				
9	Type 245 fabric reinforcement in concrete surface beds etc	m2	62		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 2				
	Concrete, formwork and reinforcement				
		l			II

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 3</u>				
	MASONRY				
	SUPPLEMENTARY PREAMBLES				
	BRICKWORK				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	Pointing				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing				
	BLOCKWORK				
	Concrete masonry units				
	Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa				
	Carried Forward			R	
	Section No. 4 Bill No. 3 Masonry				

R	
	R

	Brought Forward			R	
	Brickwork of NFP bricks in class II mortar				
3	Half brick walls	m2	49		
4	One brick walls	m2	113		
5	Beamfilling	m2	11		
	BRICKWORK SUNDRIES				
	2,5mm Galvanised brick reinforcement				
6	75mm Wide reinforcement built in horizontally	m	74		
7	150mm Wide reinforcement built in horizontally, circular on plan	m	173		
	Prestressed fabricated concrete lintels including necessary temporary supports				
8	Lintels in lengths not exceeding 3m	m	14		
	WINDOW SILLS				
	Window sills in single lengths bedded in class II mortar including metal fixing lugs				
9	Window sills set sloping and slightly projecting	m	10		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 3				
	Masonry				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 4</u>				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	Waterproofing				
	Waterproofing of roofs shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)				
1	In walls	m2	63		
	One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape				
2	Under surface bed	m2	62		
	WATERPROOFING TO ROOFS				
	Carried Forward Section No. 4 Bill No. 4 Waterproofing			R	

	Brought Forward			R	
	Cementitious waterproofing system (suitable for tiling) comprising primer coat plasticised modified acrylic (PMA) (consisting of 5I PMA, 5 litres water and 16,5kg cement (32,5N), one layer pre-cut polypropylene fabric fully saturated in PMA slurry and two full coats PMA slurry				
3	On shower floors	m2	4		
4	On walls	m2	44		
	WATERPROOFING TO WINDOWS AND EDGES				
	Approved silicon sealant:				
5	Under window cills in accordance with the Architect's drawings and specifications.	m	10		
6	Sealing edges to brickwork	m	68		
	Testing				
7	Allow for flood testing of the waterproofing installation		ltem		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 4				
	Waterproofing				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 5</u>				
	ROOF COVERINGS & CLADDINGS				
	SUPPLEMENTARY PREAMBLES				
	The Contractor is to provide and allow in his price for the provision of a 10 years "weathering and non-peeling warranty" as well as a 20 years "Non-perforation warranty".				
	The Contractor is to confirm the sizes for flashings and accessories and to ensure that their rates are for flashings and accessories that are in accordance with the manufacturer's requirements.				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	All flashing finish to match sheeting finsh				
	PROFILED METAL SHEETING AND ACCESSORIES				
	IBR profiled sheets Galvanised steel beams and purlins to engineer's detail. Roof structure to be stayed onto steel columns				
1	Roof covering with a 5 degree pitch	m2	18		
2	Roof covering with a 26 degree pitch	m2	62		
	ROOF AND WALL INSULATION				
	50mm Thick aluminium foil faced fibreglass blanket				
3	Insulation blanket laid taut over purlins and fixed concurrent with roof covering with stapled longitudinal flap joints, including fixing at top and bottom edges to purlins with and including hoop iron straps	m2	62		
	Carried Forward Section No. 4 Bill No. 5 Roof coverings & claddings			R	
	I		I		

	Brought Forward			R	
	SHEET METAL FLASHINGS & LININGS				
	0,6mm Galvanised sheet steel				
4	Flashings	m2	22		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 5				 -
	Roof coverings & claddings				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS			<u>1</u> 2	
	BILL NO. 6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	Joinery				
	Descriptions of frames shall be deemed to include frames and rails				
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	Fire doors				
	Fire doors are to be in accordance with SANS 1253				
	PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC				
	Carried Forward			R	
	Section No. 4 Bill No. 6 Carpentry and joinery				

	Brought Forward			R	
	SUPPLEMENTARY PREAMBLES		ļ		
	References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered ? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes				
	Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences				
	BUDGETARY ALLOWANCES				
	Structural Roof Trusses				
1	Allow the amount of R 50 000.00 for structural steel to be expended as the Principal Agent may direct or deduct in whole or in part, if not required.		Item		50.000,00
	DOORS				
	<u>Heavy duty hardwood single leaf door semi-solid flush</u> doors, hung to steel frames.				
2	813x2032x44mm door ready to receive ironmongery and painting (measured elsewhere), complete	No	3		
	Light duty hardwood single leaf door semi-solid flush doors, hung to steel frames.				
3	813x2032x44mm door ready to receive ironmongery and painting (measured elsewhere), complete	No	3		
	BUDGETARY ALLOWANCES				
	Joinery fittings				
4	Allow the amount of R50'000.00 for joinery fittings to be expended as the Principal Agent may direct or deduct in whole or in part, if not required.				
			Item		50.000,00
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 6				
	Carpentry and joinery				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 7</u>				
	CEILINGS, PARTITIONS AND ACCESS FLOORING				
	SUPPLEMENTARY PREAMBLES				
	General				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<u>Ceilings</u>				
	Unless otherwise described ceilings shall be deemed to be horizontal				
	Bulkheads				
	Unless otherwise described bulkheads shall be deemed to be horizontal along the length				
	Steel components				
	All steel components for ceilings and partitions are to be galvanised in accordance with SANS 121				
	NAILED-UP CEILINGS				
	SUPPLEMENTARY PREAMBLES				
	Carried Forward			R	
	Section No. 4 Bill No. 7 Ceilings, partitions and access flooring				

	Brought Forward			R	
	<u>Openings</u>				
	Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc				
	Nutec 6mm Fibre-cement plain ceiling boards				
1	On ceilings	m2	80		
	Gypsum plasterboard cornices				
2	75mm Coved cornices	m	92		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 7 Ceilings, partitions and access flooring				

ltem No		Unit	Quantity	Rate	Amount	
	SECTION 4 - KITCHEN & ABLUTIONS					
	BILL NO. 8					
	FLOOR COVERINGS					
	SUPPLEMENTARY PREAMBLES					
	<u>General</u>					
	The relevant SABS standards of work must be applied to all aspects and components of the works					
	Fixing					
	Floor coverings, wall linings shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings					
	<u>SKIRTINGS</u>					
	80mm skirtings					
1	PVC 20x80mm skirting fixed to brickwork	m	92			
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 8 Floor coverings			R		_

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	BILL NO. 9				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.				
	The Contractor is to ensure that ironmongery not measured in this section are priced with the doors and/or windows measured elsewhere and as detailed on the Architect's drawings.				
	Note: Aluminium windows and all ironmongery is included with the windows in the Metalwork bill,				
	Proprietary items				
	Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items				
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures clarifying the features of the products/articles offered				
	On request returnable samples are to be provided to the principal agent for consideration				
	Carried Forward Section No. 4 Bill No. 9 Ironmongery			R	

	Brought Forward			R	
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AN Anodised natural AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	HINGES & BOLTS				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
1	JH-BB-STD-2-SS SS 2BB Butt Hinge EN1935GRD13	No	12		
	LOCKS				
	<u>Keys</u>				
	Unless otherwise described locks shall have two keys each				
	"EN-SUITE" LOCKS				
	The following locks are to be suitable for master and grand master key operation				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
2	L-22315-76SS 1 EA Union 315 Doorlock SS	No	3		
3	2X18SC 1 EA CYLINDER PROFILE STD Euro Profile Double Cylinder door lock	No	3		
	HANDLES				
	Carried Forward			R	
	Section No. 4 Bill No. 9 Ironmongery				

	Brought Forward			R	
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
4	SS6163-05SS New Handle On Plate Profile Tubular Stainless Steel 6003 handle on 150mm X 75mm S/S backplate; profile piercing	No	6		
	DOOR STOP				
	Manufactured by Assa Abloy				
	In accordance with Ironmongery Schedule				
5	87001SS Floor Door Stop Satin SS	No	3		
	STEEL SINKS				
	Stainless Steel worktops, plugged				
6	1600x670x900mm stainless steel single sink with work space on one side. Bowl size 600x500x300mm deep	No	2		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 9 Ironmongery				
					1

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	BILL NO. 10				
	<u>METALWORK</u>				
	Descriptions of bolts, anchors, etc				
	Descriptions of bolts shall be deemed to include nuts and washers				
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
	Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres				
	Aluminium doors, windows, etc				
	Doors and windows shall comply with AAAMSA design criteria				
	Glazing shall comply with SAGGA regulations. Glass shall be type ? laminated performance glass as shown on the window schedules/drawings appended to these bills of quantities (as described in the headings to window descriptions?). Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings				
	Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed				
	For purpose made windows and doors, refer to drawings annexed to (issued separately with?) these bills of quantities				
	Carried Forward			R	
	Section No. 4 Bill No. 10 Metalwork				

		Brought Forward			R	
		lowing certificates shall be provided prior to encement of site work:				
		A copy of the relevant AAAMSA Performance Test Certificate from the acturer/contractor supplying the ctural aluminium product				
	2 proces 1796	A Certificate of Conformance confirming that anodising or powder coating has been sed in accordance with SANS 999 and SANS respectively				
	3	A powder guarantee of not less than 15 years issued by the powder manufacturer. The				
		specific conditions contained in this guarantee shall form part of the powder coating process				
	4	A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked				
	5 a	A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degredation for period of not less than five years				
	PRES	SED STEEL DOOR FRAMES				
	<u>GALV</u>	ANISED PRESSED STEEL DOOR FRAMES				
	<u>1,2mm</u>	Rebated frames suitable for half brick walls				
1	Frame	for door 813 x 2032mm high	No	3		
	<u>1,2mm</u>	Rebated frames suitable for one brick walls				
2	Frame	for door 813 x 2032mm high	No	3		
	ALUM	INIUM WINDOWS				
	<u>OUTW</u>	ARD OPENING ALUMINIUM WINDOWS				
	Sectior Bill No. Metalw				R	

	Brought Forward			R	
	<u>Note</u>				
	Refer to attached window schedules for details of windows				
	Powder coated tilt and turn window units as per system complete with subframes, ironmongery, glass, sealing and fixing to brickwork or concrete				
3	Standard window 600 x 900mm high	No	6		
4	Standard window 900 x 1500mm high	No	4		
	SHOWER CUBICLE DOORS				
	<u>"Showerflex" epoxy powder coated aluminium shower</u> <u>cubicle doors with sliding gear, cleats, stops, etc and</u> 4mm toughened obscure safety glass, fixed to tiled walls				
5	Fixed panel 1000 x 1800mm high	No	4		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 10 Metalwork				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 11</u>				
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	<u>GRANOLITHIC</u>				
	<u>Method</u>				
	The method to be used shall be either the monolithic method or the bonded method				
	Preparation				
	For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic				
	Mix				
	Granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic				
	Carried Forward Section No. 4 Bill No. 11 Plastering			R	
	-146-		I		I I

Brought Forward	R	
Panels		
Granolithic shall be laid in panels not exceeding 14m ² for monolithic finishes, not exceeding 9,5m ² for bonded finishes and not exceeding 6m ² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width		
Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints		
<u>Laying</u>		
Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels		
Bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be throughly compacted and lightly wood floated to the required levels		
After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated		
Curing, seasoning and protection		
Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying		
<u>Colour</u>		
Coloured granolithic shall be tinted with an approved colouring pigment mixed into the granolithic in the proportion of ? kg pigment per pocket of cement, of uniform appearance and consistent colour throughout		
BLINDING		
Carried Forward Section No. 4 Bill No. 11 Plastering	R	

	Brought Forward			R	
	Sand blinding				
1	50mm Thick on floors and landings	m2	80		
	<u>SCREEDS</u>				
	Cement plaster screeds wood floated, on concrete				
2	50mm Thick on floors and landings	m2	62		
	INTERNAL PLASTER				
	Cement plaster steel trowelled (for paint), on brickwork				
3	On walls	m2	114		
	Cement plaster wood floated for tiles, on brickwork				
4	On walls	m2	44		
	EXTERNAL PLASTER				
	Cement plaster steel trowelled (for paint), on brickwork				
5	On walls	m2	167		
	Carried Forward to Summary of Section No. 4 Section No. 4			R	<u> </u>
	Bill No. 11 Plastering				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	BILL NO. 12				
	<u>TILING</u>				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The relevant SABS standards of work must be applied to all aspects and components of the works				
	Patterns				
	Unless otherwise described, tiles shall be laid with continuous joints in both directions				
	<u>Fixing</u>				
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding				
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat				
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles				
	WALL TILING				
	200 x 200 x 5mm White matt porcelain tiles on brickwork including cement plaster backing				
1	On walls	m2	44		
	FLOOR TILING				
	200 x 200 x 5mm White matt porcelain tiles on brickwork including cement plaster backing				
2	On floors and landings	m2	4		
	Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 12 Tiling			R	

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 13</u>				
	<u>PLUMBING AND DRAINAGE</u> (PROVISIONAL)				
	<u>Wire gratings</u>				
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings				
	Stormwater channels				
	Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site				
	French drains				
	Descriptions of french drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, "?" geofabric filter blanket over stone, 300mm earthfilling over and disposal of surplus material on site				
	Septic tanks				
	Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site				
	<u>Stainless steel basins, sinks, wash troughs, urinals, etc</u>				
	Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0)				
	Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8)				
	Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8)				
	Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable				
	Carried Forward			R	
	Section No. 4 Bill No. 13 Plumbing and drainage				

Brought Forward	R	
Sealing of edges		
Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone		
PVC-U pipes and fittings		
Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings		
Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings		
PVC-U pressure pipes and fittings		
Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings		
Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints		
High density polyethylene (HDPe) pipes and fittings		
Pipes shall be type IV and of the class specified with compression fittings		
Polypropylene pipes		
Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings		
Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions		
Carried Forward Section No. 4 Bill No. 13	R	
Plumbing and drainage		
	I	I I

Brought Forward	R	
Copper pipes		
Pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "?" type. Capillary solder fittings shall comply with ISO 2016		
Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition		
Reducing fittings		
Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained		
Fixing of pipes		
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level		
Paper wrapping to pipes		
Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings		
Disinfection of water pipework		
Water pipework is to be disinfected at completion		
Carried Forward	R	
Section No. 4 Bill No. 13 Plumbing and drainage		

Brought Forward	R	
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with ?% overlaps		
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions		
Prices for wrapping of pipes shall include for all work as described to couplings in the length		
Laying, backfilling, bedding, etc of pipes		
Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled		
Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001		
General		
Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately)		
Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends		
Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of ?% Mod AASHTO density and disposal of surplus material on site		
Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)		
Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)		
Carried Forward	R	
Section No. 4 Bill No. 13 Plumbing and drainage		

	Brought Forward			R		
	<u>As-built drawings</u>					
	Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)					
	RAINWATER DISPOSAL					
	0,6mm Galvanised sheet steel gutters and rainwater pipes					
1	100mm Diameter rainwater pipes	m	34			
2	100mm Downpipes, including bends and shoes	m	6			
	SANITARY FITTINGS					
	Manufactured by Vaal Sanitaryware					
3	Vaal "Hibiscus" WC Close Coupled 90° outlet open rim front single flush suite complete with lid and fitments (CODE 772654)					
	(0002 112001)	No	4			
4	Vaal 702803 Cameo Drop in white vanity hand wash basin. 595x455x205mm with 53mm chrome bottle trap and waste union and other necessary accessories	No	4			
	TRAPS					
	Polyflor 150 X 150mm Stainless Steel Shower Trap and Overflow					
5	Shower	No	2			
	TAPS & VALVES					
						L
	Carried Forward			R		
	Section No. 4 Bill No. 13 Plumbing and drainage					

	Brought Forward			R	
	Manufactured by Cobra				
6	Metering Taps - Chrome COB-KM2-102 NOTES: Metering pillar tap, chrome. Includes: self-closing, non- hold open, flow controller with flow cycle of 1-20 seconds, 1/2" male inlet, backnut, washer, & streamline outlet for flow aesthetics. Excellent water-saving product. SANS 1808-9. 115mm	No	4		
	Manufactured by Franke				
7	FRANKE highrise swivel sink mixer with aerated swivel outlet. Includes: 1/2" BSP male inlets, and wide sweep S-connections with wall flanges for easy retrofit. DZR BRASS, SANS 226 TYPE 2.	No	2		
	AS-BUILT DRAWINGS		_		
8	Provision of as-built drawings		ltem		
•					
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 13 Plumbing and drainage				

ltem No		Unit	Quantity	Rate	Amount
	SECTION 4 - KITCHEN & ABLUTIONS				
	<u>BILL NO. 14</u>				
	PAINTWORK				
	PAINT SPECIFICATIONS				
	All painting shall be done in accordance with "?" specifications unless otherwise described				
	COLOURS				
	<u>User note</u>				
	Unless otherwise described paintwork on ceilings shall be deemed to be in the "White" colour group and paintwork on all other components shall be deemed to be in the "Pastel" colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards				
	PAINTWORK TO NEW WORK				
	ON INTERNAL FLOATED PLASTER SURFACES				
	One coat alkali resistant primer and two coats PVA emulsion paint for interior use				
1	Walls	m2	158		
	ON EXTERNAL FLOATED PLASTER SURFACES				
	One coat alkali resistant primer and two coats superior guality acrylic emulsion paint for exterior use				
2	Walls	m2	167		
	ON FIBRE-CEMENT BOARD SURFACES				
	One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use				
3	Ceilings and cornices, including priming metal cover strips and nailheads ("White" colour group)	m2	80		
	ON METAL SURFACES				
	Carried Forward			R	
	Section No. 4 Bill No. 14 Paintwork				

	Brought Forward			R	
	<u>One coat alkyd based zinc phosphate primer and two</u> coats premium quality polyurethane enamel paint, on steel				
4	Door frames	m2	61		
5	Eaves gutters	m2	24		
6	Rainwater downpipes	m2	2		
	ON WOOD SURFACES				
	Three coats superior quality polyurethane suede varnish				
7	Doors	m2	10		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 Bill No. 14				
	Paintwork				

	SECTION SUMMARY - SECTION 4 - KITCHEN & ABLUTIONS				
Bill No		Page No		Amount	
1	Earthworks (provisional)	124			
2	Concrete, formwork and reinforcement	127			
3	Masonry	130			
4	Waterproofing	132			
5	Roof coverings & claddings	134			
6	Carpentry and joinery	136			
7	Ceilings, partitions and access flooring	138			
8	Floor coverings	139			
9	Ironmongery	142			
10	Metalwork	145			
11	Plastering	148			
12	Tiling	149			
13	Plumbing and drainage	155			
14	Paintwork	157			
					[
	Corried to Final Summary		Р		
	Carried to Final Summary Section No. 4		R		

ltem No		Unit	Quantity	Rate	Amount
	SECTION 5 - PROVISIONAL SUMS				
	<u>BILL NO. 1</u>				
	PROVISIONAL SUMS				
	SUPPLEMENTARY PREAMBLES				
	<u>General</u>				
	The following Provisional Amounts are for work to be done by firms of specialists and will, unless expressly stated otherwise, be regarded as Selected Sub- contractors to the Contractor.				
	The Contractor must assist in obtaining tenders and/or quotations from approved firms and submit them to the Agent/Representative for his approval.				
	The tenderer's attention is drawn to Section 1: Preliminaries for further amplification of Provisional- and Prime Cost Amounts.				
	Note: All provisional sums are "NETT".				
	The profit and attendance on Nominated/Selected Subcontract allowances will be adjusted to take the of actual Final Account values of the respective Subcontracts into account. The adjustment factor will be the percentages calculated with reference to the BoQ allowances.				
	<u>Profit</u>				
	Where listed the contractor may allow for profit if required. The profit will be adjusted in the same ratio as the adjusted value of the subcontract.				
	<u>Attendance</u>				
	Without in any way limiting the meaning and interpretation, "general attendance" on sub-contractors shall include free of charge to the sub-contractor the following services for the purpose of the relative sub- contract works:				
	Carried Forward Section No. 5 Bill No. 1 Provisional Sums			R	

Brought Forward		R	
 access to the site and to the places where the work is to be carried out, including the use of any temporary personnel hoists erected by the Contractor for his own use; 			1
2) the provision of water and lighting and of single and/or three phase electric power to a position within 50 metres of the place where work is to be carried out, but excluding water, fuel and power for commissioning of the installation for which the Contractor shall be responsible;			
 the provision of an area for office accommodation, temporary workshops and for the storage of plant and materials; 			
 the use of erected scaffolding belonging to the Contractor, in common with others having the like right whilst it so remains erected upon the site; 			
5) the use of messrooms, latrine, health and welfare facilities, and the like, where provided;			
 the use of the site telephone (if provided) subject to the payment by the sub-contractor for all his outgoing calls; 			
temporary casing and/or other protection of the work;			
8) site security measures;			
 hoisting of the sub-contractor's material in loads not exceeding the available hoisting loads of cranes of the contractor; 			
10) repairs and making good in all trades and final cleaning down on completion.			
Fuel, power and water for commissioning plant			
The cost of fuel, power and water for the commissioning of plant shall be borne by the sub-contractor appointed for the relevant sub-contract works in terms of the conditions under which they have/are contracted for the specialist work involved. The contractor shall allow opposite this item or under the relevant attendance items for the recovery of such costs via the installation of the necessary meters			
Carried Forward		R	
Section No. 5 Bill No. 1 Provisional Sums			
	I I		I

	Brought Forward		R		
	Work executed by direct contractors				
	Work listed under the heading "Work executed by direct contractors" shall be executed before and during this contract and the tenderer must allow free access to the site for such other contractors.				
	These contractors shall be directly paid by the client and the tenderer must allow for programming in conjunction with them to complete the project successfully within the contract period.				
	The estimated values of these contracts are listed to enable the tenderer to determine the extent of the attendance if required. Profit on these contracts shall not be allowed.				
	Budgetary allowances				
	Budgetary allowances shall be re-measured and valued on the same pricing structure as the rest of the contract or shall be omitted in full if so required.				
	PROVISIONAL SUMS FOR SELECTED SUBCONTRACT WORKS				
	Electrical Installation				
1	Provide a sum for Electrical Installation to be expended as the Principal Agent may direct or deducted in whole or in part, if not required	ltem		727.056,9	94
2	Allow for Profit if required		%		
3	Allow for Attendance if required		%		
	Carcass Chiller and HVAC Installation				
4	Provide a sum or Mechanical Installation to be expended as the Principal Agent may directed or deduct in whole or in part, if not required.	Item		1.520.000,0	00
5	Allow for Profit if required		%		
6	Allow for Attendance if required		%		
	Carried Forward		R		
	Section No. 5 Bill No. 1				
	Provisional Sums				

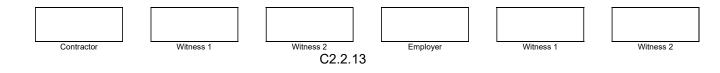
1	Brought Forward		R	
	Wet Services Installation			
7	Provide a sum for Wet Services Installation to be expended as the Principal Agent may direct or deducted in whole or in part, if not required.	ltem		20.000,00
8	Allow for Profit if required		%	
9	Allow for Attendance if required		%	
	Fire Protection Installation			
10	Provide a sum for Fire Protection to be expended as the Principal Agent may direct or deducted in whole or in part, if not required.	Item		50.000,00
11	Allow for Profit if required		%	
12	Allow for Attendance if required		%	
	Abattoir Equipment			
13	Provide a sum for Abattoir Equipment to be expended as the Principal Agent may direct or deducted in whole or in part, if not required.	ltem		170.000,00
14	Allow for Profit if required		%	
15	Allow for Attendance if required		%	
	Carried to Final Summary Section No. 5 Bill No. 1 Provisional Sums		R	

	FINAL SUMMARY			
Section No		Page No		Amount
1	SECTION 1 - PRELIMINARIES & GENERAL	35		
2	SECTION 2 - ABATTOIR	83		
3	SECTION 3 - 4 BED STAFF HOUSING	121		
4	SECTION 4 - KITCHEN & ABLUTIONS	158		
5	SECTION 5 - PROVISIONAL SUMS	162		
	Subtotal		R	
	<u>CONTINGENCIES</u>			
	Provide for 2.5% contingencies to be used at the discretion of the Principal Agent and which will be measured and valued in accordance with clause 32 of the Principal Building Agreement or deducted in whole or in part if not required		R	
	Sub-Total		R	
	Value Added Tax			
	ADD: Value added Tax at 15%		R	
	Subtotal		R	
	Carried to Form of Tender		R	

SUMMARY OF SCHEDULES

SCHEDULE	DESCRIPTION	TOTALS BROUGHT FORWARD
SUB-TOTAL A		R
ADD: 10% CONTIN	GENCIES	R
SUB-TOTAL B		R
PLUS: 15% VAT		<u>R</u>
TOTAL [*]		R

<u>Note:</u> *Total to be carried forward to the "Form of Offer"

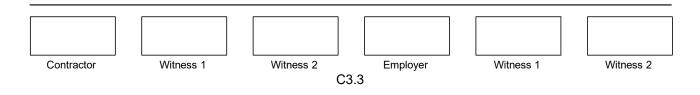


EASTERN CAPE PARKS & TOURISM AGENCY

CONTRACT NO: 16/FY/24

CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

2. PART C3: SCOPE OF THE WORKS



C.3 SCOPE OF WORK

CONSTRUCTION OF STAFF ACCOMMODATION, ABATTOIR, KITCHEN AND ABLUTION FACILITY AT COMMANDO DRIFT NATURE RESERVE

C.3.1 PROJECT SPECIFICATIONS

1 DESCRIPTION OF THE WORKS

1.1 Employer's objectives

The employer's objectives is to construct Upgrades to Commando Drift Nature Reserves

1.2 Overview of the works

The work comprises of

Commando Drift Nature Reserve

- Construction of New Abattoir
- Construction of 4-Bedroom Housing
- Construction of Kitchen and Ablution Facilities
- Demolition of Existing skinning shed

Extent of the works

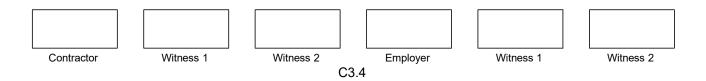
The works comprise the following main activities:

- Preliminary and General which includes site establishment establish all plant and equipment, offices, etc. to carry out the works as described below, shown on the drawings and listed in the Bill of Quantities.
- Site Clearance which will involve removal of vegetation and the stockpiling of topsoil for later use.
 - Construction of New Abattoir
 - Construction of 4-Bedroom Housing
 - Construction of Kitchen and Ablution Facilities
 - Demolition of Existing skinning Shed

1.3 Location of the works

The proposed site is located at the following co-ordinated reference points:

NAME	CO-ORDINATES	
Commando Drift Nature Reserve	32°10'80.1"S	26°03'95.8"E



1.4 Temporary works (Decanting)

Not applicable

1.5 Occupational Health and Safety

The contractor needs to study the following documents:

- Occupational Health and Safety Act, 1993 Asbestos Regulations, 2001
- Occupational Health and Safety Act, 1993 Construction Regulations, 2003
- SITE OHS Doc

2 DRAWINGS

The drawings used for setting up the Provisional Bills of Quantities are as follows:

As per Engineers' and Architects' Drawing Schedules

3 PROCUREMENT

3.1 Preferential procurement procedures

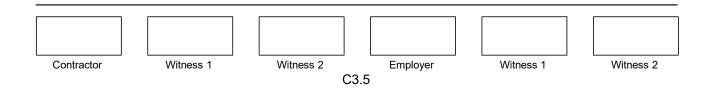
The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the referencing schedule.

Competitive bids shall be invited in respect of each of the above portions of the works in accordance with the relevant provisions of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the JBCC Principal Building Agreement 6.2 Edition May 2018 / CIDB Standard subcontract (labor only) / JBCC Nominated / Selected Subcontract Agreement with minimal project specific variations and amendments that do not change their intended usage.

The Employer together with the Contractor shall evaluate the bids received in accordance with the provisions of the Standard Conditions of Tender contained in Annex F of Standard for Uniformity in Construction Procurement. The evaluation panel shall comprise equal representatives from the Employer and from the Contractor.

The Contractor shall without delay enter into contract with the successful tendering subcontractor based on their accepted tender submission. The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

The Contractor shall indicate within the list of proposed sub-contractors the names and copies of the registration documents of the proposed sub-contractor registered with the necessary council to be an approved asbestos removal specialist.



4 CONSTRUCTION

4.1 Applicable SANS 2001 standards for construction works.

The following parts of SANS 2001 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 2001BE1
- 2) SANS 2001BS1
- 3) SANS 2001CC2
- 4) SANS 2001CG1
- 5) SANS 2001CM1
- 6) SANS 2001CS1
- 7) SANS 2001CT2
- 8) SANS 2001DP1
- 9) SANS 2001DP2
- 10) SANS 2001DP3
- 11) SANS 2001DP4
- 12) SANS 2001DP5
- 13) SANS 2001DP6
- 14) SANS 2001EM1



The abovementioned South African National Standards make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

4.2 Applicable national and international standards

- Standardized Specifications for Civil Engineering Construction SANS 1200
- The National Building Regulations SABS0400
- Construction and Management Requirements for Works Contracts
 SANS1921-1
- Targeted Construction Procurement SANS1914-4

4.3 General Clause

- 4.3.1. The C o n t r a c t o r shall endeavour to ensure that the expenditure on the employment of temporary workers (local) is in the following proportions:
 - i) 10 % women;
 - ii) 50% youth who are between the ages of 18 and 25; and
 - iii) 1% on persons with disabilities.

4.4. Certification by recognized bodies

CIDB Certificate

4.6. Plant and materials provided by the employer

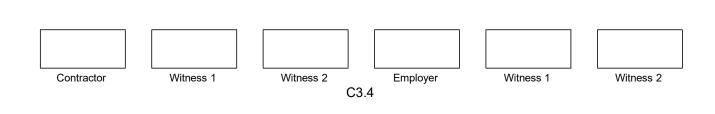
Not Applicable

4.7. Services and facilities provided by the employer

Not Applicable

4.8. Plant and equipment

The plant and equipment used on the site shall not be inferior to that described in the Schedule of Plant and Equipment.



5 Management

5.1 SANS 1921 standards

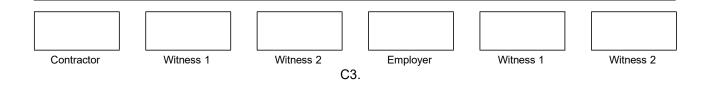
The SANS 1921 Construction works standards and associated specification data are applicable to the works:

The abovementioned South African National Standards make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

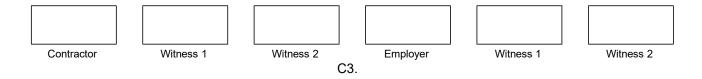
Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

SANS 1921-1, Construction and management requirements for works contracts – Part 1: General engineering and construction works				
Clause	Specification data			
Essential d	lata			
4.1.7	There are no requirements for drawings, information and calculations for which the contractor is responsible			
4.2.1	The responsibility strategy assigned to the contractor for the works is A.			
4.2.2	The structural engineer is MBSA Consulting			
4.3.1	The planning, programme and method statements are to comply with the following:			
	1) Program to be submitted in Microsoft Project format			
	2) Gantt chart to indicate critical path and progress			
	3) Gantt chart to be updated before monthly site meeting			
4.3.3	The notice period for inspection is 2 Days			
4.9.3	The trees and shrubs which are not to be disturbed are to be identified on site. Where possible, the disturbance of trees should be avoided.			

The associated Specification Data is as follows:



4.14.3	The office accommodation, equipment, accommodation for site meetings and other facilities for use by the employer and his agents are:
	1) Site office which shall be used for site meetings and for the contractor's use. Such an office shall comprise a minimum of 20m2 in area and 3 m high, be ventilated, have good lamination, must be reasonably soundproof, and have a hard floor construction. It shall be furnished with a desk on which drawings can be rolled open and on which there is sufficient writing space and sufficient temporary chairs or benches to accommodate all persons present at site meetings. (Minimum 10-seater)
	2) The following facilities will be supplied to the employers' representatives:
	- 15 Hardhats for employer's representatives visiting the site
	- 15 Safety (High visibility) jackets for employer representatives visiting the site
4.14.5	The Contractor is required to provide latrine and ablution facilities for the exclusive use of the professional team and client
4.14.6	The requirements for the provision and erection of separate sign boards for consultants and subcontractors are:
	 The boards must comply with the official standard type of signboard of the Employer and be at least 2750 x 1800 mm high.
	2) The boards must be constructed with a firm flat exposed face using suitable material of firm construction, painted and lettered according to the standard drawings available from the Employer on request and mounted on sturdy pipe-standards at a height of 1800 mm above natural ground level.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are:
	1) none
4.17.3	Services which are known to exist on the site are:
	1) Water network.
	2) Electricity reticulation

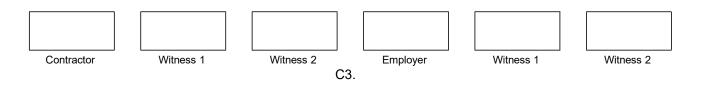


Additional clauses

1 Site meetings and procedures

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.



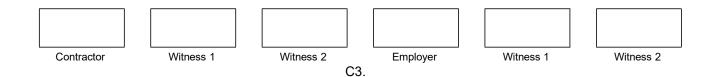
2 Water and electricity

The Employer does not warrant that any water supply or electricity supply that may exist is adequate for the proper execution of the works. The responsibility strategies in terms of the tabulation below that will apply to the contract is:

- a) water : A
- b) electricity: A

Service	Option				
	A	С			
	Contractor responsibility	Employer responsibility			
Water	The Contractor is to provide, and remove and make good upon completion, all the necessary temporary plumbing connections and purchase water from the local authority for the works at his own cost.	The Contractor shall make, and upon completion remove, all the necessary connections to the Employer's water supply at designated points and make use of water free of charge for construction purposes only.	The Contractor shall make, and upon completion remove, all the necessary connections and water meters to the Employer's water supply at designated points and be responsible for costs associated with all water consumed.		
Electricity	The Contractor is to provide, and remove and make good upon completion, all the necessary temporary electrical connections and installations and purchase electricity from the local authority / ESKOM for the works at his own cost.	The Contractor shall make, and upon completion remove, all the necessary electrical connections to the Employer's electrical supply at designated points and make use of electricity free of charge for construction purposes only.	The Contractor shall make, and upon completion remove, all the necessary connections and meters to the Employer's electrical supply and be responsible for cost associated with all electricity consumed.		

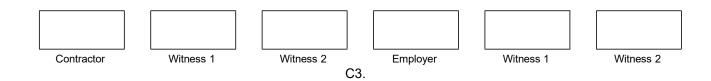
- Security
- Sewer services in the form of temporary toilets •
- Waste disposal facility •



SANS 1921-5, Construction and management requirements for works contracts – Part 5: Earthworks activities which are to be performed by hand.			
Clause	Specification Data		
Essential Data:			
5.1	The depth of trenches which are to be excavated by hand is 1,2 metres.		
Additional c	auses:		
1	Stone pitching and rubble concrete masonry		
	All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, shall be collected, loaded, off loaded, and placed by hand.		
	Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.		
	Grout shall be mixed and placed by hand.		
2	Manufactured Elements		
	Elements manufactured or designed by the Contractor, precast concrete planks and pipes, masonry units shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.		
	6, Construction, and management requirements for works contracts //AIDS awareness.		
4.2.1(a)	A qualified service provider is a service provider that is one that is accredited or provisionally accredited training service provider in the HIV/AIDS field.		
	A list of accredited service providers can be obtained from the Construction SETA (CETA) (Tel 011-265 5900), Health and Welfare SETA (HWSETA) (011-622 6852) or on the Health and Welfare SETA website: <u>www.hwseta.org.za</u> .		
4.2.1(a)	The HIV/AIDS awareness programme is to be repeated at four month intervals throughout the duration of the contract. (Four times in total, including the initial one at the start of the contract.)		
Additional c	auses		
	The duration of each workshop is not to be less than $2\frac{1}{2}$ hours.		
5 2 1	- Departing of weather		

5.2 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such a book shall be handed to the employer's representative for his signature no later than 1 day after rain that is considered to justify an extension of time occurs.



5.3 Unauthorized persons

The Contractor shall always keep unauthorized persons from the works. Under no circumstances may any person except guards be allowed to sleep on the building site.

5.4 Management meetings

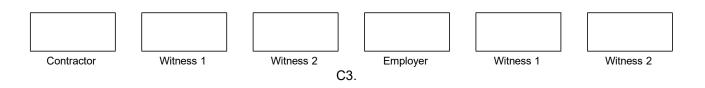
A schedule of meetings will be agreed with the contractor.

5.5 Daily records

The Contractor is instructed to keep a set of signed off daily diaries with specific detail relating to EPWP requirements.

5.6 Payment certificates

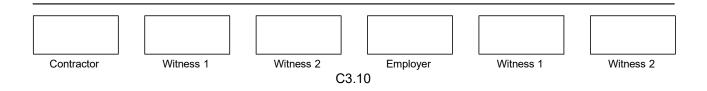
Monthly valuations of completed work, including materials on site, is to be completed and presented by to the client representative by no later than the 15th of each month to be assessed for payments. The payment certificate will be issued no later than the 25th of each month (Including Contractor's tax invoice) to the Principal Agent for payment within 30 calendar days.



C3.2 PARTICULAR SPECIFICATIONS

In a d d i t i o n t o t h e S t a n d a r d i z e d and Project Specifications the following Particular Specifications shall apply to this contract and are bound in hereafter.

PARTICULAR SPECIFICATION		PAGE NO.
POHS:	HEALTH AND SAFETY SPECIFICATIONS	C3.12-C3.49





HEALTH AND SAFETY SPECIFICATIONS

THE CLIENT'S OCCUPATIONAL HEALTH AND SAFETY

SITE SPECIFIC SAFETY SPECIFICATION

FOR

COMMANDO DRIFT NATURE RESERVE

MANAGED ON BEHALF OF ECPTA

BID NO: _____ Closing Date:_____

A Tender for Category CIDB _5GB_____

Name of Tenderer : _____

3.	Co	ntents	
	EAST	ERN CAP PARKS & TOURISM AGENCY	
1.	INT	RODUCTION	13
2.	The	Purpose of Construction Health and Safety Specification	14
	2.1.	Implementation of the Construction Health and Safety Specification	
	2.2.	Health and Safety Specifications Statutory Compliance	
	2.3.	Confidentiality Agreement	
	2.4.	Definitions	
3.		pe of Work	-
	3.1.	Scope of Work	10
	3.2.	Project Location	
	-	ONTRACTORS AND SUB-CONTRACTORS	
	4.1.	Principle Contractor and Contractors' Requirements Construction Regulations 7.	
	4.1.	Costs for OHS- Compliance	
		INIMUM ADMINISTRATIVE REQUIREMENTS	
	5. IV	Permit or Notification of Construction Work	
	5.1.	Occupational Health and Safety Policy	
	5.2. 5.3.	Legal Appointments on Site	
	5.3. 5.4.	Health and Safety Organogram	
	5.4. 5.5.	Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA)	
	5.5. 5.6.	Medicals	
	5.6. 5.7.	Mandatory Agreement 37.2	
	5.7. 5.8.	POPI Act Compliance	
	5.8. 5.9.	Preliminary Hazard Identification and Risk Assessments	
	5.9. 5.10.	Record Keeping	
	5.10.	Inspection and checklist	
	5.11. 5.12.	Injury/ incident Reporting and Investigation	
	5.12. 5.13.	Safe Work Procedure & Method statements	
	5.14.	Preparation of Health & Safety Documentation	
	5.14.	Emergency Procedures	
	5.16.	Personal Protective Equipment (PPE) and Clothing	
	5.17.	Security	
6.		OPERATIONAL REQUIREMENTS	
	6.1.	Competency of employees of PC	26
	6.1. 6.2.	Construction Health & Safety Officer (CR 8.5)	
	6.2. 6.3.	Construction Health & Safety Officer (CR 8.5)	
	6.3. 6.4.	Health and Safety Representatives(s) (Section 17)	
	6.5.	Health and Safety Training	
		Construction Welfare and Facilities	
	6.6. 6.7.	Health & Safety Audits, Monitoring and Reporting	
	6.8.	First Aid Boxes and First Aid Equipment	
	6.9.	Public and Site Visitor Health & Safety	
		-	
	6.10.	Access to Site	
	6.11. 6.12.	Traffic and Diversions	
	-	Housekeeping	
	6.13.	Stacking & Storage (Construction Regulations 28)	
	6.14.	Fire Extinguishers and Fire Fighting Equipment's	
	6.15.	Severe Weather Plan	
	6.16.	Excavations, Shoring, Dewatering or Drainage	
	6.17.	Barricading and Demarcation	
	6.18.	Transport of Workers	30

7.	6.19. PLA	Environmental Management NT, MACHINERY AND EQUIPMENT	
	7.1.	Hired Plant and Machinery	. 32
	7.2.	General Machinery	32
8.	000	CUPATIONAL HEALTH and SAFETY CONTROLS	. 32
	8.1.	Health Hazards	. 32
	8.2.	Noise induced Hearing Loss	.32
	8.3.	Ergonomics	.33
	8.4.	Hazardous Chemical Substances (HCS)	.33
	8.5.	Diseases Control Measures	.33
	8.6.	Alcohol and other Drugs	.35
	8.7.	Dust Control	. 35
	8.8.	Asbestos Works	36
	8.9.	Electrical Works	36
	8.10.	Concrete works (construction Regulations 20)	. 36
	8.11.	Working at Heights (Construction Regulations 10)	. 37
	8.12.	Excavation Works (Construction Regulations 13)	. 37
	8.13.	Lock Out Procedures (General Machinery Regulations)	37
	8.14.	Permit to Work	. 38
	8.15.	Confined Spaces (General Safety Regulations 5)	. 38
	8.16.	Paving	. 38
	9.	ANNEXURE - A Legal Appointments	
	10.	ANNEXURE – B	
	11.	ANNEXURE-C-Budget Error! Bookmark not define	
	12.	Annexure D	46

1. INTRODUCTION

In terms of the Construction Regulation 5(1) (b) of the Occupational Health and Safety Act, No.85 of 1993 and Construction Regulation 2014, Eastern Cap Parks & Tourism Agency , as the Client and/ or its Agent on its behalf,

shall be required to compile a Health & Safety Baseline Specification for any intended project and provide such specification to any prospective contractor who is making a bid or appointed to perform construction work for the Client and/or its Agent on its behalf with the same.

2. The Purpose of Construction Health and Safety Specification

This Health and Safety Specifications document is governed by the Occupational Health and Safety Act, 1993, (Act No. 85 of 1993), hereinafter referred to as "The Act. Furthermore, although the definition of Health and Safety Specifications, stipulated a documented specification, of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of person, it is required that the entire scope of the Labour Legislation, including the Basic Conditions of Employment Act, be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

2.1. Implementation of the Construction Health and Safety Specification

This specification forms an integral part of the contract, and the Contractor is required to use it at pre-tender phase when drawing up its project-specific construction phase health and safety plan. The Principal Contractor shall forward a copy of this specification to all Sub-Contractors at their bidding stage so that they can in turn prepare health and safety plans relating to their operations.

The Health and Safety Specifications does not replace the Construction Regulations, 2014, 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 important or are not applicable.

The Principal Contractor is, at all times required to and will remain responsible to fully address all requirements and standards of the Occupational Health and Safety Act, the full Construction Regulations and the implementation thereof.

The client is committed to ensuring that the highest standards of health and safety prevail, and this Construction Health and Safety Specifications may contain standards which are more onerous than the statutory standards. The Construction Regulation of 2014 requires a client to stop any contractor form executing construction which is not in accordance with the approved Principal Contractor's Health and safety plan for the site or works that poses a threat to the health and safety of persons. This Health & Safety Specification may be supplemented during the project with further specific Construction Health & Safety Specifications which will be annexures of the specification contract agreement that deal with health & safety issues as these arise.

The client has appointed an OHS Agent who will (inter alia) be responsible for the approval of all Principal Contractors' H&S Plan and will be assessing the Principal Contractors' OHS plan, implementation thereof, and for suitable system and tools in place to commence construction, and more-so Site Establishment. The OHS Agent will do monthly assessments to ensure the Principal Contractor maintain the documentation associated with the Construction Health and Safety Specifications.

This Construction Health and Safety Specifications forms an integral part of the Contract, and Principal Contractors are required to make it a fundamental part of their contracts with subcontractors and suppliers. The Principal Contractor shall ensure that the H&S plan contains sufficient evidence of:

- a) Adequate provision for the cost of health and safety measures.
- b) The principal contractor's access to and intention to appoint persons with the necessary competencies to carry out the construction work safely.
- c) The principal contractor's access to the necessary resources to carry out the construction work safely and without risk to the health of the workers.
- d) The principal contractors' planning of construction activities within the special requirements emanating from workers, traffic- and time constraints, SMME's and local labour.

The Contractor shall confirm in writing that he has familiarised himself with the content of the Construction Health and Safety Specification and that he will comply with all obligations in respect thereof (see annexure G) Each contractor and sub-contractor shall confirm in writing that he has familiarised himself with the content of the Construction Health and Safety Specification and that he will comply with all obligations in respect thereof.

2.2. Health and Safety Specifications Statutory Compliance

This document is a legal compliance document drawn up in terms of the OHS Act and are therefore binding. The approval of any document required by thus Health and safety Specification, such as hazard identification and risk assessment, or any other form of communication from the Client or its representatives, shall be construed as acceptance by the Client of any obligation that absolves the Principal Contractor from achieving the required level

of performance and compliance with legal requirements. All Contractors entering into a Contract shall, as a minimum, comply with the.

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). A current, up to-date copy of the OHS Act and Construction Regulations must be available on site at all times.
- Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993). The principal Contractor will be required to submit a letter of Registration and "good-standing" from the Compensation Insurer before being awarded the Contract.
- All Contractors shall comply with the "Integration Labour Law " and regulations.
- All relevant Municipal bylaws and National Building Regulations
- The Immigrations Act 2002 as amended and shall further ensure that no illegal persons are employed on the construction site.
- All Contractors shall comply with the National Environmental Management Act (Act 107 of 1998).
- Traffic accommodation as stated by the South African Road Traffic Signs Manual (SARTSM), Volume 2, Chapter 13,
- Protection of Personal Information Act, 2013 (POPI) amended 01 July 2020.
- Disaster Management Act, 2002 Regulations Issued in Terms Of Section 27(2) Of The Disaster Management Act, 2002 see Government Gazette No. 43257 dated 29 April 2020 For Covid-19 Occupational Health And Safety Measures In Workplaces Covid-19 (C19 OHS), 2020

2.3. Confidentiality Agreement

Information obtained from the contractor in the course of the duration of this project will be treated as confidential. It will not be used for any purpose other than those associated with on this project and shall further be scrutinized as such.

2.4. Definitions

- Act: means the OH&S Act (85 /1993)
- Accident/Incident: A Sudden, uncontrollable, unplanned, undesirable occurrence which disrupts the normal functioning of persons and causes or has a potential to produce or cause unintended injury, death, property damage or business interruption.
- Client: means any person for whom construction work is being performed
- "building" includes -
- any structure attached to the soil;
- any building or such structure or part thereof which is in the process of being erected; or
- any prefabricated building or structure not attached to the soil;
- "Chief executive officer", in relation to a body corporate or an enterprise conducted by the State, means the person who is responsible for the overall management and control of the business of such body corporate or enterprise;
- "danger" means anything which may cause injury or damage to persons or property;
- "employer" means, subject to the provisions of subsection (2), any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him, but excludes a labour broker as defined in section 1(1) of the Labour Relations Act, 1956 (Act No. 28 of 1956);
- "hazard" means a source of or exposure to danger;
- "Health and safety equipment" means any article or part thereof which is manufactured, provided or installed in the interest of the health and safety of any person;
- **Hazard**: The inherent potential of an activity, substance or situation to cause injury or damage to people's health or result in loss of property.
- Health & Safety Specification: a documented specification of all health & safety requirements pertaining to the associated works on a specific construction site, so as to ensure the health & safety of persons
- **Health & Safety File**: a file or other record in permanent form containing the information as contemplated in the regulations and health and safety specifications.

- **Health & Safety Plan:** a documented plan that addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.
- "incident" means an incident as contemplated in section 24 (1);
- "mandatary" includes an agent, a contractor or a subcontractor for work, but without derogating from his status in his own right as an employer or a user;
- "Occupational health practitioner" means an occupational medicine practitioner or a person who holds a qualification in occupational health recognised by the South African Medical and Dental Council as referred to in the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act No. 56 of 1974), or the South African Nursing Council as referred to in the Nursing Act, 1987 (Act No. 50 of 1978);
- "risk" means the probability that injury or damage will occur. The combination of the likelihood of a hazardous event and the severity of the injury or damage that the event causes to the health of people or property Safe Working Procedure: Work activities highlighted in the risk assessments as "High Risk" will require safe work procedures (SWP) "safe" means free from any hazard;
- "Certificate of competency" or "certificate" means certificate of competency as a mechanical or an electrical engineer, as the case may be, issued in terms of regulation 2 (1);
- "agent" means a competent person who acts as a representative for the client;
- "client" means any person for whom construction work is performed;
- "competent person" means a person who—has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act;
- "Contractor" means an employer who performs construction work;
- "fall prevention equipment" means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment;
- "fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment such as body harness, lanyards, deceleration devices, lifelines or similar equipment.;
- "Fall protection plan" means a documented plan, which includes and provides for-
 - all risks relating to working from a fall risk position, considering the nature of work undertaken;
 - the procedures and methods to be applied in order to eliminate the risk of falling; and
 - a rescue plan and procedures;
- "Hazard identification" means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed;
- "Health and safety file" means a file, or other record containing the information in writing required by these Regulations;
- "Health and safety plan " means a site, activity or project specific documented plan in accordance with the client's health and safety specification;
- "Health and safety specification" means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work;
- "Medical certificate of fitness" means a certificate contemplated in regulation 7(1)(8);
- **Occupational safety:** A condition or state of being resulting from the medication of human behavior, and/or designing of the physical environment to reduce the possibility of hazards, thereby reducing accidents.

- "**personal information**" means personal information as defined in the Protection of Personal Information Act adopted by the Republic of South Africa on 26 November 2013
- "principal contractor" " means an employer appointed by the client to perform construction work;
- "risk assessment" means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard;
- "structure" means-
 - 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, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
 - any false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
 - any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling.

Abbreviations:

EMS	Emergency Medical Services
CV	Construction Vehicle
FPP	Fall Protection Plan
HSF	Health & Safety File
HSS	Health & Safety Specification
MP	Mobile Plant
MSD	Material Safety Data Sheet
OH&S	Occupational Health & Safety
OSHACT	Occupational Health and Safety Act 85 of 1993
PC	Principal Contractor
PPE	Personal Protective Equipment
SABS	South Africa Bureau of Standards
SWP	Standard Working Procedures

3. Scope of Work

3.1. Scope of Work

The scope of this Occupational Health, Safety and Environmental (SHE) Specification is to address the reasonable and foreseeable aspects of occupational health, safety and environmental management, which will be affected by the contract work.

The specification will provide the requirements that the Principal Contractor and other Contractors shall comply with in order to reduce the risks associated with the contract work, and that may lead to incidents causing injury and/or ill health or degradation of the environment, to a level as low as reasonably practicable and possible.

Eastern Cape Parks & Tourism through the DEDEAT- Economic Stimulus Fund will do construction works as follow:

The Scope of Works are as follows:

Commando Drift Nature Reserve

- Construction of New Abattoir
- Construction of 4-Bedroom Housing
- Construction of Kitchen and Ablution Facilities
- Demolition of Existing skinning shed

Scope of Works	Potential Hazards of Scope		
Establishment of Site	Site Entrance, Fencing, Security, housekeeping, vehicle and equipment movement and off loading		
Electrical Works	High Mask Working At heights Installation of DB Board Installation of new light fittings		
Bulk Excavation	Excavation of new light littings Excavation, Plant, Equipment, Operators, Underground cables and pipes Manual Labour Ergonomics Diseases Open trenches Brick works, Excavation, Working at heights, Concrete works, plastering, Working at Heights Ergonomics Cuts from Roof sheets Fall and trips. Ladder work Weather Conditions Lifeline (stability) Scaffolding		
Installation of new sanitation and water pipes and repair of septic tank			
New Building Works			
Install new Roof Sheets			
Paving	Dust, Ergonomics, Manual Labour, Cutting of paving blocks		
Installation of Steel Security Bars	Welding Cutting Galvanized. Steelwork		
Concrete Works	Hazardous Chemicals Dust Ergonomics Spillage of Concrete Flow of Concrete works waste Eye injuries		
Mechanical Works	Pool Pump Installation Cable Installations		

Road Works

Swimming Pool

Heavy Duty Plant Dust Traffic Control

Bulk Excavation Concrete works Tiling Grouting Water pipe works Ergonomics

3.2. Project Location

Commando Drift Nature Reserve is situated in Tarkastad, Eastern Cape. Roughly 35 km from Tarkastad.



4. CONTRACTORS AND SUB-CONTRACTORS

4.1. Principal Contractor and Contractors' Requirements Construction Regulations 7

Eastern Cap Parks & Tourism Agency must ensure that all Contractors appointed by them comply with these Specifications as well as the OHS Act, Construction Regulations (July 2014), and other relevant legislation that may relate to the activities directly or indirectly. The Principal Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance as if it was The Principal Contractor.

Eastern Cap Parks & Tourism Agency, may only allow a Contractor to begin work on site after approving The Principal Building Contractor's health & safety plan in writing required by the Construction Regulation 7, the Principle Contractor shall keep and maintain a Site Health and Safety file where all relevant health and safety records will be kept, including site specific OHS plan, COVID-9 plan and the risk assessments conducted by the PC. Evidence of monitoring the Contractors OHS system must be kept on file. The Principal Contractor must audit each of its contractors on a monthly basis, with audit reports filed in the health & safety file on site. The audit must include an administrative assessment as well as a physical inspection of the site Activities.

Under the Construction Regulations [7(1)(a)], Principal Contractor is required to develop the Health and Safety Plan, due to new Disaster Management Declaration the OHS plan will include COVID-19 safe work procedures for each site before work commences on site and to keep it up to date throughout the Construction Phase. The Principal Contractor shall ensure compliance to the Act and its Regulations and document each record in the Health and Safety File. The Principal Contractor (CR 7 (1) (vi) must take reasonable steps to ensure that each contractor's health and safety plan contemplated in CR sub-regulation (2)(a) is implemented and maintained on the construction site;

CR 7(1) (viii) stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons

*See requirement of a health and safety file but not limited to (Annexure B)

The Following will be adhered to:

- Principle Agent shall take all reasonable steps necessary to ensure co-operation between all contractors to enable each of those contractors to comply with the provisions of these regulations; There for a mandatory agreement as per section 37(2) will be compiled and signed before any contractor commence work on site.
- Principle Contractor shall take all reasonable steps to ensure that each contractor's health and safety plan 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 contractors, but at least once every month;
- Principle Contractor must ensure that where changes are brought about to the design and construction, that sufficient health and safety information and appropriate resources are made available to contractors to allow them to execute the work safely;
- Principle Contractor must ensure that every contractor is registered and in good standing with a recognized compensation fund or with a licensed compensation insurer prior to work commencing on site;
- Principle Agent must ensure that potential contractors submitting tenders have made provision for the cost of health and safety as well as COVID-19 measures during the construction process;
- Principle Contractor shall discuss and negotiate with Principal Contractor the contents of the health and safety plan (OHS Plan must include COVID-19 Procedures) and shall finally approve that plan for implementation.
- The Principal Contractors shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure.
- Eastern Cape Parks & Tourism Agency shall only appoint a contractor to perform construction work when the CLIENT is reasonably satisfied that Principal Contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely.
- The Construction Regulations 7 (c)(ii) states that the Principal Contractor ensure that potential contractors submitting tenders have made sufficient provision for health and safety, as well as COVID-19 measures during the construction process.
- Construction Regulations 7 (c)(iii) states that Principal Contractor ensure that no contractor is appointed to
 perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or
 she intends to appoint, has the necessary competencies and resources to perform the construction work
 safely.

The Contractors must therefore submit the following documentation for perusal and verification by the Client,

- Management Structure as envisaged at tender (organogram).
- Current Letter of Good Standing
- Proof of management training on the Occupational Health & Safety Act and other related training.

• Competency Profile of company. (Construction Manager, OHS Officer, First Aider, etc)

4.2. Costs for OHS- Compliance

All parties bidding to work on this construction project must ensure that they have made provision for the cost of complying with these specifications as well as with the OHS-Act 1993 and incorporated Regulations as a minimum requirement in their tender documentation. It must also be taken into consideration that time is money. That implies that sufficient time must be allowed for the implementation of the minimum OHS standards as well as the Disaster Management Act (implementation of COVID-19 procedures). No additional claims will be entertained at a later stage if a compliance requirement was prescribed in the OHS Act, 1993 and incorporated regulations as well as the Disaster Management Act in terms of Regulations 4(10) Gazette 43400 or this specifications document.

5. MINIMUM ADMINISTRATIVE REQUIREMENTS

5.1. Permit or Notification of Construction Work

5.1.1. Notification of Construction Work

The principal contractor shall notify the local relevant Provincial Director of the Department of Labour, before commencing with construction work of the intended work in the form of Annexure 2 of the Construction Regulations of 2014.

A Copy of the Completed Annexure 2 of the Construction Regulations, as well as proof of notification shall be included on the Health and Safety File.

A Copy of the Completed Annexure 2 is to be kept on site by the Principal Contractor.

5.2. Occupational Health and Safety Policy

The Principal Contractor and all other Contractors shall submit to the Client and to the Engineer, a copy of their organisation's Health and Safety Policy signed by their Chief Executive Officer. Each policy must include a description of the organisation and state the Health and Safety objectives and how they will be achieved and implemented by the organisation. Copies of these policies shall be attached to the Health and Safety plan and communicated to all workers. The Health and Safety policy will be displayed on site.

5.3. Legal Appointments on Site

5.3.1. Competency for Contractor's Appointed Competent Persons

Contractor's competent persons for the various risk management portfolios shall fulfil the criteria as stipulated under the definition of Competent in accordance with the Construction Regulations (February 2014). Proof of competence for the various appointments must be included in the health and safety plan. Definition of "competent person" (expressed by Construction Regulations, 2014:)

means a person who-

(a) has in respect of the work or task to be performed the required knowledge, training, and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training,"

All Legal appointments will be signed with commencing date and end date of appointment, all appointments will be on file and stored on site. See **Annexure A** of this document for a guideline on Appointments needed, the list is only an example. Appointments must be updated when applicable.

5.4. Health and Safety Organogram

Principal Contractor and all contractors must prepare an organogram, outlining the site health & safety management structure and appointed competent persons. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram must be updated when there are changes in the Site Management Structure and dated accordingly. Organogram is to be displayed on site notice board.

5.5. Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

Principle Contractor and Contractors must also hold proof of workman's compensation assurance registration in the form of a letter of good standing and forward a copy to CLIENT before they begin work on site. A copy should also be available on site.

5.6. Medicals

All employees that will work on the project must be declared fit to do the work. The Medical certificate as prescribed in the New Construction Regulations (2014) must be done through an Occupational Health Practitioner. Proof of the Medical surveillance certificates (Annexure 3 from Construction Regulation 2014) must be available in the Health and Safety File. Failing to submit the medical on the prescribed form, will result in work not to commence / or be temporarily suspended.

Any other activities that require medicals will be sewer works and working at heights, ensuring that medicals will be for all employees according to the task they perform.

5.7. Mandatory Agreement 37.2

The OHS Act of 1993 states in section 37. ACTS OR OMISSIONS BY EMPLOYEES OR MANDATARIES (2) The provisions of subsection (1) shall mutatis mutandis apply in the case of a mandatory of any employer or user except if the parties have agreed in writing to the arrangements and procedures between them to ensure compliance by the mandatory with the provisions of this Act.

Section 37(2), on the other hand, deals with the conduct of contractors, and states that the above provisions of section 37(1) will apply unless the parties agree in writing to the arrangements between them with respect to compliance by the contractor, to the OHS Act. As per the OHS Act, this arrangement is known as the 37.2 Agreement. The purpose of the 37.2 Agreement is:

- to confirm that the contractor will be regarded as an employer in their own right;
- stipulate the obligations of the contractor in terms of the OHS Act and applicable Regulations;
- that the contractor must comply with all of the on-site health and safety rules.

Section 37 (3)

(3) Whenever any employer or mandatory of any employer or user does or omits to do an act which it would be an offence in terms of this Act for the employer or any such user to do or omit to do, he shall be liable to be convicted and sentenced in respect thereof as if he were the employer or user.

5.8. POPI Act Compliance

As per the POPI Act the company must appoint a person that will be the responsible person for all personal information gathered by the organization. The PC must have policy, procedures, training, and a control plan in place in-line with the POPI Act. Evaluate all data being processed in your organisation – this starts with, whereby individuals complete the COVID Register (don't forget all the different areas of information being gathered, how this is captured (by whom, how, when), how is this stored? Now, ensure that all your policies and procedures are in place, staff are well aware of consequences in NOT complying – start implementation immediately. The PC must monitor, Review and update all employees' information and store it save with limited access. No personal information must be given to other people without the consent of the employee itself.

5.9. Preliminary Hazard Identification and Risk Assessments

Every Contractor performing Construction work shall, before the commencement of any Construction work or work associated with the aforesaid Construction work and during such work, cause a Risk Assessment to be performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the Health and Safety Plan and be implemented and maintained as contemplated in the Construction Regulations 9(1). The Risk Assessment shall include, at least:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified.
- A documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified.
- A monitoring plan and
- A documented review plan Based on the Risk Assessments.

- Principle Contractor must develop a Site Specific OHS rules that will be applied to regulate the Health and Safety aspects of the Construction Works
- Hazard identification will be done daily by completing a daily site task instruction (DSTI) and updated to the HIRA INDEX risk assessment to note what has been assessed.

The client's baseline risk assessment provided with this specification aims to provide the framework within which the risk must be assessed for the construction phase of the project, and to highlight any reasonably foreseeable risk which may be inherent to the project based on its current scope of works. (CR 5.1). The baseline risk assessment included in the specifications is a guideline in conduction the construction site specific risk assessment. Reference from CR.9

*See Annexure E for Baseline Risk assessment.

5.10. Record Keeping

Principle Contractor and all Contractor must keep and maintain Health and Safety records to demonstrate compliance with these Specifications, with the OHS Act 85/1993, and with the Construction Regulations (February 2014). The Client must also ensure that all records of incidents/injuries, emergency procedures, training, planned maintenance inspections, monthly contractor audits, etc. are kept in the health & safety file(s) held in the site office. The P.C. must ensure that every Contractor keeps its own health & safety file, maintains the file. Such Contractor safety files must be audited by the appointed Principal Contractors OHS officer and will be approved by the OHS Agent.

5.11. Inspection and checklist

Checklist and inspections list are a monitoring method to ensure the PC adhere to OHS policy, OHS plan and OHS system is maintained and reviewed. Inspections help management make key decisions, control costs, and protect the company. Inspections help prevent accidents and provide evidence of due diligence for liability protection. Safety inspection checklists are paper-based or digitized forms used by safety officers to inspect and identify workplace hazards that can cause potential harm to people, processes, and the environment. Checklist can be used as an aid in assessing and reviewing the management of health and safety in your workplace. The checklist is not an exhaustive list of items to be addressed and will not necessarily be comprehensive for all work situations. Ensure All Checklist are completed and stored on file. Checklist/Registers are evidence of compliance and maintenance on Plant and Equipment.

5.12. Injury/ incident Reporting and Investigation

Injuries are to be categorized into first aid; medical; disabling (lost day); and fatal. When reporting injuries to the Client, these categories shall be used.

All contractors must investigate **all** injuries, with an annexure 1 report being completed and filed. All Contractors must report on the categories of injuries to the CLIENT at least monthly. Contractors must investigate injuries and incidents involving their employees and forward a copy of the annexure 1 investigation report to the CLIENT forthwith. Principle Contractor and all contractors must report all injuries to the Client in the form of an injury report, at least monthly.

All incidents reportable in terms of the provisions of Section 24 of the OHS Act, 1993 must be reported to the local Dept. of Labour in the prescribed manner. All Contractors must report all incidents where an employee is injured on duty to the extent that he/she

- Dies
- Becomes unconscious.
- Loses a limb or part of limb.

• Is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed.

Or where:

- A major incident occurred.
- The health or safety of any person was endangered.
- Where a dangerous substance was spilled
- The uncontrolled release of substance under pressure took place.
- Machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects.
- Machinery ran out of control.

Principle contractor is required to provide the client with copies of all internal and external accident/incident investigation reports including the reports contemplated above within 7 days of the incident occurring.

5.13. Safe Work Procedure & Method statements

The following Safe Work Procedures are to form part of the HSE file and **must be compiled for all the below**identified activities, and that is:

- Brick Building Works
- Plastering
- Roof Work
- Electrical Works
- Tiling
- Working at Heights
- Installation of Steel Security Bars
- Internal Wall finishing's,
- Waste management
- Aluminium Windows
- Earthworks
- Road Works

- > Painting
- Ablutions Facilities
- Demolition Work
- Fencing
- Concrete Works
- Bulk Excavation
- Ceiling
- > Paving
- Removal of Asbestos
- Pool Pump installation
- > Asbestos Works
- Plant & Equipment

The safe work procedures must address the following elements:

- The work method to be followed to conduct work safely.
 - Control measures implemented to mitigation & reduce the risks.
 - Responsibilities of competent persons
 - Required personal protective equipment.
 - Correct equipment/tools/machinery to be used.
 - Completed Risk Assessment
 - Signed by Competent Person
 - Completed Risk Assessments
 - Must be communicated to workers conducting task and proof of communication must be filed.

5.14. Preparation of Health & Safety Documentation

It is the duty of Principle Contractor to ensure that all documentation that is required during the project life cycle are kept safely and updated at all times, during the construction process and must be consolidated into one set of documents that must be handed over to the Client upon completion of the construction work. This should include instructions from the design team that will be required for the continued safe operation and maintenance of this new structure(s), COC's, Drawings, Concrete Results, Lab Results on Materials, Medical Records, Audit Reports, Site Inspection Reports, Incident Investigation Reports, All Registers and Checklist, Method statement, Policies and procedures, Covid-19 screening, Stats, labour records, copy of ID documents, etc.

5.15. Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to the commencement on site. The procedure shall detail the response plan including the following key elements:

- i.List of key competent personnel
- ii.Details of Emergency services
- iii.Actions or steps to be taken in the event of the specific type of emergencies.
- iv.Information on hazardous material / situations
- v.Covid-19 emergency Procedures

Emergency procedures shall include, but shall not be limited to fire, spills, accidents, Covid-19, use of hazardous substances, bomb threats, major accidents / incidents, political events, weather etc.

The Principal Contractor shall advise the Client in writing forthwith of any emergencies, together with a record of actions taken. A contact list of all service providers (Fire department, Ambulance, Police, Medical and Hospital, COVID-19 helpline etc.) must be maintained and available to site personnel.

The Principal Contractor must develop a **Site Emergency Evacuation Plan** detailing specifications for the appropriate appointments for the firefighting team, bulk first aid and the emergency coordinating team. In addition to which, assembling points must be identified and depicted using the appropriate symbolic signage (SANS Approved).

The Site Manager must conduct an emergency identification exercise and establish what emergencies could possibly develop. He / she must then develop a detailed contingency plan and emergency procedure, considering any emergency plans that may in place. The Contractors must hold regular practice drills of the contingency plans and emergency procedures to test them and to familiarize employees with them. The Principal Contractor must appoint a competent person to act as Emergency Controller / Coordinator.

A contact list of all emergency providers (Fire Department, Ambulance, Police Medical and Hospital) must be maintained and available to all site personnel. An emergency situation which is likely to require outside emergency assistance, may attract mass circulation written media or electronic media attention ad be harmful to the Client's reputation. No person may comment on the incident on site without prior approval of the Client.

The Emergency Evacuation Plan must be approved by Client's OHS Agent. Project is in an open area and distant from any emergency facilities.

5.16. Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all workers are issued and wear hard hats, safe footwear, overalls and cloth mask (during COVID-19 pandemic) or any other Personal Protective Equipment that may be required due to the nature of the work. The Principal Contractor and all Sub – Contractors shall make provisions and keep adequate quantities of SANS approved PPE on site at all times. The Principal Contractor shall clearly outline disciplinary procedures to be taken when PPE or clothing is:

- Lost or stolen.
- Worn out or damaged.
- Not worn by employee
- Mandatory cloth mask during Covid-19 Pandemic

The above procedure also applies to Sub – Contractors and their contractors, as they are all Employers in their own right.

The Principal Contractor and Sub – Contractor are to train all employees on how to use PPE on site. Training records of these sessions should be kept on file.

Employees must sign for all PPE issued to them.

5.17. Security

The Contractor and his employees shall enter and exit the premises only through the main gate(s) and or checkpoint(s) designated by the Principal Contractor on both sites. The Principal Contractor shall ensure that employees and Sub – Contractors observe that security rules at all times and shall not permit any person who is not directly associated with the work from entering the premises.

Each of the Contractor's employees will be issued with a company identification card which must be displayed on his / her person at all times whilst on duty or on the premises.

Should any of the employees of the Contractor:

- Tamper or otherwise interfere with the principal's equipment, plant or other assets.
- Steal or otherwise engage in acts of dishonesty
- Appears to be under the influence of alcohol and drugs
- Ignore any security, safety or occupational health rule, or engage in unsafe conduct.

The Contractors or employer's representative shall have the right to immediately remove such a person or have him withdrawn from the premises, and if appropriate, charge at law such relevant offence(s). The principal Contractor and Sub – Contractor and their employees shall not enter any area of the premises that is not directly associated with the work. The Principal Contractor and Sub – Contractor and S

materials, machinery plant and equipment on the premises are recorded at the main gate(s) and / or checkpoint(s). Failure to do this may result in a refusal by the Principal Contractor to allow the materials, machinery or equipment to be removed from the premises.

The Contractor acknowledges that its employees and vehicles may be subject to search at any time and that the Contractor shall ensure that its employees co-operate fully with such arrangements.

The Principal Contractor shall ensure a written acknowledgment from each agent, Sub – Contractor and service provider that its employees and vehicles will be subject to search at any time and the Principal Contractor shall ensure that its agent, Sub – Contractor and service providers co-operate fully with the arrangements.

6. SITE OPERATIONAL REQUIREMENTS

6.1. Competency of employees of PC

The PC, CEO appointment as per OHS Act Section 16.1 shall be responsibility for the appointment of the competent workers for full duration of this project. The CEO may delegate his responsibilities to the project manager assistant that's responsible for all duties and project management on site (Section 16.2 appointment). The Construction Regulations 8.1 appointed as the Construction Manager will be permit on site. All management must have a knowledge of legal liabilities concerning the OHS Act and its regulations. Proof of Competency must be kept on file CV's and Certificates. Each of the above appointments must have a competency certificate with reference to the OHS Act. All appointments shall be done in writing and duties with responsibilities. All appointments must be site specific and signed and have a contract commencement date and end of period date.

Organogram with hierarchy must be done and communicated to all employees, thus must be displayed on site. In the event of cancellation contracts of workers, the OHS Agent must be notified and all new appointments must first be approved by the OHS agent.

The PC will ensure that all employees on site will be competent. The most mandatory appointments must have at least 5 years' experience in their specific field:

- i. Risk Assessor (CR9)
- ii. Incident Investigator
- iii. First Aider
- iv. Plant Operators
- v. Assistant Construction Manager
- vi. Emergency Co-ordinator

6.2. Construction Health & Safety Officer (CR 8.5)

Full time OHS Officer with more than 5 years relevant experience in the building environment, which is registered with SACPCMP will be on site due to High-Risk Project.

6.3. Construction Manager (CR 8.1)

The Principal Contractor's CEO (16.1) or the assistant CEO (16.2) shall appoint (in writing) one full time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate must be appointed by the principal contractor. The construction manager must (in writing) appoint construction supervisors responsible for construction activities and ensuring health and safety compliance on the construction site. Construction Manager (CR 8.1) must have knowledge of the OHS Acts and Regulations, legal Liability, competency certificate must be presented with appointment.

6.4. Health and Safety Representatives(s) (Section 17)

Principle Contractor and all Contractors must ensure that Health and Safety Representative(s) are appointed under consultation with the employees and trained/informed to carry out their functions. The appointments must be in writing. The Health and Safety Representatives could carry out monthly inspections, keep records and report all findings to the Responsible Person or safety officer forthwith and at monthly health & safety meetings. As per this specification the Health and Safety Representative will be a mandatory appointment by the PC.

6.5. Health and Safety Training

6.5.1. Induction

The principal must ensure that all site personnel undergo a site-specific health & safety induction training session before any worker starts work. The induction must include the General duties of the employer and the employees. A record of attendance shall be kept in the health & safety file, as well as a copy of the contents of the said induction. Principle Contractor will be required to induct all contractors' employees. Workers must carry some sort of proof of inductions on their persons.

6.5.2. Awareness

Principle Contractor must ensure that, on site, periodic toolbox health & safety talks take place at least once a week. These talks should deal with risks relevant to the construction work at hand. Records of attendance must be kept in the health & safety file.

6.5.3. Competence

All competent persons must have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, and carry out. This must to be assessed on a regular basis e.g. training, evaluation, and periodic audits by the Client, progress meetings, etc. Principle Contractor is responsible to ensure that Competent Contractors are appointed to carry out construction work.

6.6. Construction Welfare and Facilities

On each site where existing facilities are not present, at least one sanitary facility shall be erected for every 30 male workers, at least one sanitary facility one shall be erected for every 30 female workers, shower for every 15 workers, a changing facility for each sex and sheltered eating areas.

If mobile toilets are installed at the site, cleaning of buckets shall be arranged with the Client. Chemical toilets shall be used where applicable.

Eating facilities shall be made available in the form of a shaded net, table and chairs or acceptable eating facilities. This will take COVID-19 regulations into account.

6.7. Health & Safety Audits, Monitoring and Reporting

6.7.1. Monthly Audits by Client

OHS Agent, appointed by the client, will be conducting a monthly Audit to comply with Construction Regulation 2014 to ensure that Principal Contractor has implemented, and is maintaining the agreed and approved Health and Safety Plan as well as approved COVID-19 procedures. Principle Contractor is obligated to conduct monthly audits on all Contractors appointed by him and keep audit reports in its health & safety file. Contractors scoring less than 85% will have to stop work until deviations are closed out. Principle Contractor is required to withhold payment if the minimum safety standard is not maintained.

6.8. First Aid Boxes and First Aid Equipment

Principle Contractor and all Contractors shall appoint First Aiders in writing. Principle Contractor must appoint at 2 First Aider (one for each site on the Project) who must be certificated. Copies of valid certificates are to be kept on site. Principle Contractor must provide a first aid box for each site, adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box. Contractors with more than 10 employees must have their owned trained, certified first aider on site at all times.

The Emergency Plan of the Principal Contractor must include the arrangements for speedily and promptly transporting injured persons to a medical facility or securing emergency medical help to persons that may require it.

6.9. Public and Site Visitor Health & Safety

The principal contractor, Sub-Contractor, delivery vehicles and visitors are not allowed to disturb or roam around on the grounds during construction stage. The Principal Contractor will be held responsible and liable for disturbance and unrest, caused by any sub-contractor or delivery vehicles during the construction period. Public walkways and roadways must be kept clean and free of excessive construction materials to prevent a negative impact on the public.

Roadways and walkways must be cleaned on a regular basis – daily inspections to be conducted by the P.C. with action to be taken without delay.

Site visitors must be briefed on the hazards they may be exposed to as well as what measures are in place or should be taken to control these hazards. As per the Construction Regulations, a record of these 'inductions' must be kept on site. It is advised that a visitor book with site rules leaflet be kept at the gate or at reception/site office and all visitors to be directed to such point where they must read through the site safety information and sign the visitor book.

With employees, site visitors and others coming to site from unknown origins, it is imperative that the Covid-19 plan is drafted with the identification of the care/support visitors. Screening protocols will be done as well as visitors information register must be completed.

6.10. Access to Site

The Construction site must be fenced off with entrance and security at entrance. Where any permits are necessary from the SAPS and local authorities, this will be the responsibility of the P.C. Any road signage must be inspected by a designated person on a daily basis and the required cleaning and maintenance of signs will be the responsibility of this designated person. The road surface of all public and private roadways and pavements/pedestrian walkways must remain in a reasonably clean state, free of excessive sand, stone, water or other construction related materials.

6.11. Traffic and Diversions

Provision by means of a method statement must be made for any traffic diversions to conduct your construction activities as well as any loading and off- loading of materials and waste.

The method statement must include a drawing indicating traffic signage and the like.

The Principal Contractor shall ensure that all persons in its employment, all subcontractors, and all those that are visiting the site are aware and comply with the site speed restriction(s). Separate vehicle and pedestrian access routes shall be provided, maintained, controlled and enforced.

6.12. Housekeeping

All Contractors are to ensure that:

- Housekeeping is continuously implemented.
- Scrap, waste & debris are removed regularly.
- Ensure Covid-19 waste are discarded off correct according to Hazardous Biological Agents
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to free movement of pedestrian and vehicle traffic.
- Waste & debris not to be removed by disposing from heights, but by chute or crane.
- Where practicable, Construction sites are fenced off to prevent access of unauthorized persons.
- An unimpeded work space is maintained for every employee
- Every workplace is kept clean, orderly and free of tools etc. that are not required for the work being done.
- All offices and storage facilities as well as tools gets washed and sanitized daily.

6.13. Stacking & Storage (Construction Regulations 28)

THE PRINCIPAL CONTRACTOR must ensure that a competent person is appointed in writing to supervise all stacking and storage on a construction site.

- Adequate storage areas are provided and demarcated.
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack
- The items in the lower layers can support the weight exerted by the top layers.
- Cartons and other containers that may become unstable due to wet conditions are kept dry
- Pallets and containers are in good condition and no material is allowed to spill out.
- Stability of stacks are not threatened by vehicles or other moving plant and machinery.
- Stacks are built in a header and stretcher fashion and that corners are securely bonded.
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations.

6.14. Fire Extinguishers and Fire Fighting Equipment's

Principle Contractor and relevant Contractors shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. A minimum of four 9kg dry chemical powder fire extinguishers must be available in and around the site office establishment and stores. Wherever 'hot work' is taking place, additional fire extinguishers must be on hand. Contractors are responsible for ensuring compliance with hot work procedures and must be in possession of method statements detailing the safe working procedures. 'Hot work' includes all work that generates a spark or flame and may therefore result in a fire.

6.15. Severe Weather Plan

- 6.15.1. When high wind creates a hazard to craftsmen or work being performed, i.e., instability in elevated areas, limited visibility due to dust or particles in the air, unmanageable materials, etc., supervision will stop work activities, re-assign work and area, properly store and secure material which might blow away, injure or damage.
- 6.15.2. When rain creates a hazard to workers at work being performed, i.e., un-stable footing conditions due to slippery, muddy, and flooded work environments, unstable trenches or excavations, poor visibility due to rain or eye protection, supervision will stop specific work due to hazard, re-assign work duties and/or areas, and obtain further instructions from Project Management.
- 6.15.3. A Severe weather plan must be done on procedures for workers during hot/cold or other weather conditions.

6.16. Excavations, Shoring, Dewatering or Drainage

The Principal Contractor and any relevant Subcontractors shall make provisions in their tender for shoring, dewatering or drainage of any excavation as per this specification The Contractor shall make sure that excavations are inspected before every shift, each occurrence of rain, or change to the excavation / shoring and a record is kept.

6.17. Barricading and Demarcation

The construction site shall be fenced completely to prevent pedestrians and vehicles to enter the construction area.

Protection around the site must be in the form of a physical barrier and appropriate signage, to prevent public from entering the area.

A physical barrier will be a fence at least 1.8 meter high. Danger tape is not considered a physical barrier. Danger tape is considered as a signage only.

It is advised to use 1.2m high Day-Glo Mesh (barrier netting) to prevent pedestrians on pavements to enter the construction area.

6.18. Transport of Workers

The Principal Contractor and other subcontractors shall not:

- a) Transport persons together with goods or tools unless there is an appropriate area or section to store them
- b) Transport persons in a non-enclosed vehicle e.g. truck, there must be a proper canopy (properly covering in the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.
- c) All vehicles will be sanitised daily all COVID-19 protocols will be followed. See updated on COVID-19 protocols on website <u>https://www.gov.za/covid-19/resources/regulations-and-guidelines-coronavirus-covid-19</u>.

6.19. Environmental Management

Management will commit to safety work procedures. Environmental and Waste Management Policy will be review annually and signed by management.

6.19.1. Dumping

- a) Receipts for hazardous waste disposal shall be copied to the Clients, OHS Agent.
- b) Any proposal to dispose of building waste products such as rubble or concrete or similar such products as part of backfill or landscape shaping shall require a Method Statement.

6.19.2. Litter and refuse

- a) Waste and litter shall be disposed of into scavenger- and weatherproof bins. Principle Contractor shall then remove the refuse collected from the working areas, from site at least once a week.
- b) Refuse must be disposed at a site approved by the Environmental Manager.
- c) Principal Contractor shall make provision for workers to clean up Principal Contractor's camp and working areas at least once a week.

6.19.3. Recycling

- a) Whatever possible, materials used or generated by construction shall be recycled?
- b) Containers for glass, paper, metals, and plastics shall be provided. Office and camp areas are particularly suited to this form of recycling process.
- c) Where possible and practical, such as at stores and offices, waste shall be sorted for recycling purposes. Recycling protocols shall sort materials into the following categories:
 - i. Paper / Cardboard
 - ii. Aluminium
 - iii. Metals (other than Aluminium)
 - iv. Organic waste
 - v. Glass

6.19.4. Wastewater management

- a) A surface water management plan has been prepared and approved before construction commences. It has considered the following:
- b) Appropriate cut-off drains to separate potentially contaminated flows from the open drainage system.
- c) Containment of polluted flows.
- d) Settling ponds/sludge dams/evaporation ponds for water with high suspended solids (e.g., batching, crusher, and sand washing areas).
- e) Principle Contractor should take precautions to minimise water pollution as shall be required.

- f) All wastewater should comply with pre-determined standards as set out in the National Water Act, Act 36 of 1998, Government Notice No 398 and No 399 DWAF General Authorisations in terms of Section 39 of the National Water Act, Act 36 of 1998 and the South African Water Quality Guidelines for Fresh Water Second Edition, 1996, before it can be released into the environment.
- g) Water quality monitoring shall be undertaken as described in the relevant section of this CEMP.P
- h) Principle Contractor shall notify the Environmental Manager immediately of any pollution incidents on site.

6.19.5. Washing areas

- a) Wash areas shall be placed and constructed in such a manner to ensure that the surrounding areas, which include groundwater, are not polluted.
- b) A Method Statement shall be required for all wash areas where hydrocarbon and hazardous materials, and pollutants are expected to be used. This includes, but is not limited to, vehicle washing, workshop wash bays, paint wash and cleaning.
- c) Wash areas for domestic use shall ensure that the disposal of contaminated "grey" water is sanctioned by the Environmental Manager.

6.19.6. Sanitised areas

Principle contractor will follow COVID-19 protocols.

- a) Before entering the site, all persons must sanitise.
- b) There are adequate facilities for the washing of hands with soap and clean water.
- c) Sanitisers will have a 70% alcohol content.
- d) Only paper towels are provided to dry hands after washing (fabric towelling must not be used).
- e) surfaces that workers and members of the public come into contact, including reception desks, are routinely cleaned and disinfected and industrially sanitised, where appropriate.
- f) Common areas and ablution facilities are sanitised more regularly;
- g) workers are provided with the necessary tools and equipment required to perform their job to avoid sharing of workers' tools and equipment, in so far as it is reasonable and practicable to do so;
- h) there are sufficient quantities of hand sanitizer (with at least 70% alcohol content) having regard to the number of workers or other persons who access the workplace at the entrance of, and in, the workplace which the workers or other persons are required to use;
- i) Every worker who works away from the workplace, other than at home, should be provided with an adequate supply of hand sanitizer;
- j) If a worker interacts with the public, the employer should provide the worker with sufficient supplies of handsanitizer at that worker's workstation for both the worker and the person with whom the worker is interacting; and
- k) The workplace is sufficiently ventilated.

6.19.7.Spillages:

The PC and Sub-Contractors will adhere to the NEMA Act

- a) Streams, rivers and dams and underground water will be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials, and bituminous products.
- b) In the event of a spillage during the construction phase, the responsibility for spill treatment will lie with Principal Contractor will be liable to arrange for competent assistance to clear the affected area.
- c) Principle Contractor will compile and maintain environmental emergency procedures, to ensure that there will be an appropriate rapid response to unexpected or accidental environment-related incidents throughout the life cycle of the project.
- d) The individual responsible for, or who discovers a hazardous waste spill must report the incident to the Environmental Manager.
- e) The Environmental Manager will assess the situation in consultation with Principal Contractor and act as required. In all cases, the immediate response will be to contain the spill. The exact treatment of polluted soil/water will be determined By Principal Contractor in consultation with the Environmental Manager. Areas cleared of hazardous waste will be re-vegetated according to the Environmental Manager's instructions.
- f) Should water downstream of the spill be polluted, and fauna and flora show signs of deterioration or death, specialist hydrological or ecological advice must be sought for appropriate treatment a remedial procedure to be followed. The requirements for such input will be agreed with the Environmental Manager. The costs of the containment and rehabilitation will be for Principal Contractor's account, including the costs of specialist input.
- g) No person shall be allowed to approach a spill unless he/ she is equipped with the personal protective clothing.
- h) The risk involved shall be assessed before anyone approaches the scene of the incident with the emergency response plan.

i) Any known or discovered spillage of toxic substances into a stream or river should be followed by immediate monitoring of the receiving streams and rivers.

6.19.8. Fuels/Flammables/ Hazardous Materials stores

Fuels stores are kept as low in volume as practicable.

- There are no leaks.
- The outlet is secure and locked.
- The bund is empty.
- Fire extinguishers are serviced and accessible.
- The area is secure from accidental damage through vehicle collision & the like.
- Emergency and contact numbers are available and displayed.
- There is adequate ventilation in enclosed spaces.
- There are no stores or containers within the 1:50 year flood line.

7. PLANT, MACHINERY AND EQUIPMENT

7.1. Hired Plant and Machinery

The Contractor shall ensure that any hired plant and machinery used on site is safe for use and complies with the minimum legislated requirements. The necessary requirements as stipulated by the OHS Act and Construction Regulations (July 2014) shall apply.

The Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file.

Any load test requirements and inspections in terms of legislation must be complied with and copies of load test certificates and inspections must be kept in the health & safety file. All relevant contractors must ensure the same.

7.2. General Machinery

The Contractor and relevant contractors must ensure compliance with the Driven Machinery Regulations and General Machinery Regulations, which includes carrying out risk assessments on the machines, inspecting machinery regularly appointing a competent person to inspect and ensure maintenance, issuing PPE and relevant clothing, and training those who use machinery.

8. OCCUPATIONAL HEALTH and SAFETY CONTROLS

8.1. Health Hazards

Health hazards include chemical hazards (solvents, adhesives, paints, toxic dusts, etc.), physical hazards (noise, radiation, heat, etc.), biological hazards (infectious diseases), and ergonomic risk factors (heavy lifting, repetitive motions, vibration). Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction.

Occupational exposure is a major problem, and all Contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, and adsorption through the skin of hazardous chemicals substances. Conduct regular inspections of all operations, equipment, work areas and facilities. Have workers participate on the inspection team and talk to them about hazards that they see or report.

Be sure to document inspections so you can later verify that hazardous conditions are corrected. Take photos or video of problem areas to facilitate later discussion and brainstorming about how to control them, and for use as learning aids.

8.2. Noise induced Hearing Loss

Noise induced hearing loss is a highly underrated occupational condition. Occupational noise emitted by construction machinery and power tools must be controlled as far as possible by implementing engineering solutions such as noise dampening, regular maintenance, servicing and inspection, screening off the noise, and reducing the number of persons exposed.

It is generally accepted that all employees on a construction site will be exposed to varying degrees of noise. In view of this, Principal Contractor shall ensure full compliance with the above- mentioned regulation; furthermore, provide proof of assessment of noise levels. Those noise zones must be clearly marked with appropriate PPE

signs. Principle Contractor is advised to pay particular attention to section 12 of the "Noise Induced Hearing Loss Regulation."

8.3. Ergonomics

Ergonomics is the study of how workers relate to their workstations. We advise Principal Contractor and Contractors to take this into consideration when conducting risk assessments, thereby improving the worker-task relationship, which will in turn improve productivity and reduce chronic conditions such as back strains, joint problems and mental fatigue, amongst others.

8.4. Hazardous Chemical Substances (HCS)

Principle Contractor must ensure that the use, transport, and storage of HCS are carried out as prescribed in the HCS Regulations. The P.C. and contractors must ensure that all hazardous chemicals on site have Material Safety Data Sheets (MSDS) on site and the users are made aware of the hazards and precautions that need to be taken when using the chemicals.

The First Aiders must be made aware of the MSDS's and how to treat HCS incidents appropriately. Copies of the MSDS's must be kept in the first aid box and in the store. All containers must be clearly labelled.

Flammable substances must be stored separately, away from other materials, and in a well-ventilated area (appropriate cross ventilation). A competent person should be appointed to be in control of this portfolio. Spill Kit must be available on site in case of any chemical spillage. Fuel storage tanks must conform to the general environmental legislation and Environmental Management Plan. The necessary safety signage must to be posted up on the tanks – 'no naked flames', 'no smoking'. Two 9kg DCP fire extinguishers must be placed near to fuel tanks, but not within 5m of the tanks. These extinguishers are over and above the minimum four required for the offices and stores.

All sanitised containers will have the correct labels and MSDS's will be made available. Protocols will be followed with storage of huge quantities of sanitisers. All Sanitiser must have a minimum of 70% alcohol base. Full risk assessment regarding sanitizer must be on file.

8.5. Diseases Control Measures

All employees may be at risk of infection, or of spreading infection, especially if their role brings them into contact with blood or bodily fluids like urine, faeces, vomit, or sputum. Such substances may contain micro-organisms such as bacteria and viruses which can be spread if staff do not take adequate precautions. In order to restrict and reduce the risk of infection in the workplace. According to the recent SA stats the PC must have knowledge concerning HIV/Aids, TB, legionella bacteria, Hepatitis A and Coronavirus. The PC will:

- have systems in place that assess the risk of and prevent, detect, and control the risk of infection
- designate a lead for infection prevention and control
- ensure sufficient resources are available to secure effective prevention and control of infection
- ensure employees, contractors and other persons who directly or indirectly provide work are provided with suitable information, instruction, training, and supervision in the precautions to follow
- Information is obtained from and shared with other businesses
- · Audits are carried out to ensure policies and procedures are being implemented
- · A suitable and sufficient risk assessment is carried out with respect to prevention and control of infection
- ensure an appropriate standard of cleanliness and hygiene is maintained throughout the premises and that the premises are maintained in good physical repair and condition
- ensure appropriate standards of cleanliness and hygiene are maintained in relation to equipment
- ensure that a suitable cleaning schedule is in place and followed
- ensure there is suitable and sufficient hand washing facilities and antimicrobial hand rubs where appropriate
- ensure the supply and provision of linen and laundry is appropriate
- ensure suitable information on infections is provided to visitors, including the importance of hand washing by visitors
- · ensure information regarding infection is passed on to any other person, as necessary
- ensure individuals who develop an infection are identified promptly and that they receive the appropriate treatment and care
- · inform the local health protection unit of any outbreaks or serious incidents relating to infection
- ensure all staff co-operate with our control of infection procedures
- provide regular suitable training, including induction training to all staff on the prevention and control of infection

8.5.1. Coronavirus Controls

The Contractor shall establish a care/support team which can handle the process of cross contamination and infection on-site. The team should also be available / referred for answering workers' concerns and communicating

accurate media updates etc. The PC will ensure a COVID-19 Compliance Manager and Compliance Officer is appointed in writing. This employee taking on this role is responsible for developing the company COVID-19 OHS plan and Risk Assessment

The OHS Act also imposes a duty on employees to take reasonable care for their own health and safety and that of their fellow employees. This reason every employer has to develop a COVID-19 Policy sign, dated and review date. The Principal Contractor is expected to compile his Provisional Costing's and Budgets expected to derive from this Health & Safety Specification and his plan, with the Health & Safety Covid-19 plan.

Based on all recommended COVID 19 Protocols the contractor shall develop and submit their BOQ to the appointed Safety Agent or Principal Agent for this project which shall be checked and verified for ECPTA This provisional budget and / or costing requirement relates to **Construction Regulation 5(1) (g)**, and is not a guarantee to Contingency Claims, a Variation Order that may be deemed due to Covid-19. Such Claims or variations must be dealt with the Principal Agent accordingly thereafter approval obtained from ECPTA. As a normal part of Health and Safety Systems, it is a known factor that PPE is key to the prevention of most Injuries, Accidents, Diseases, Contaminations, and Incidents. The Covid-19 outbreak proves this again.

Personal Protective Equipment (PPE) – while engineering and administrative controls are considered more effective in minimizing exposure to SARS-CoV-2, PPE is also be needed to prevent exposures, contamination, and cross-contamination.

The Following, but not limited to, will be required, and expected to be Displayed, and with Key Personnel:

- An isolation area / space / facility on-site including the Disinfecting Management of this Facility ON-SITE.
- External Emergency Contacts List of Facilities identified for Covid-19 Management.
- Call Centre Contacts Lists Information for the Covid-19 Hotline, Local GP, WHO, NICD, Local Dept Labour, CDC etc.
- Emergency Plan to deal with Covid-19 screening, infection, contamination including the process of all employees when one is found to be infected (its deemed an emergency).
- Inclusion of PPE Resource Plan in the Covid-19 Emergency Plan

Training and Awareness of the Covid-19 must be included into your approved Health & Safety Plan, and part of the Implementation of the Contractors System. Employees need to be informed and education with accurate information. The Contractor is to outline Safe Work Procedures pertaining to the compiled system to manage and alleviate the Covid-19 disease.

Ensure that the participant is not discriminated against on grounds of having tested positive for COVID-19 in terms of section 6 of the Employment Equity Act, 1998 (Act No.55 of 1998).

The Principal Contractor is required to record all systems implemented, controlled, and handled.

The Principal Contractor shall record all screening processes, hygiene maintenance, medical reports, suspected and infected cases etc.

The Contractor shall amend, where applicable, and add, where applicable, suitably designed registers for the additional systems, protocols and resources needed to be recorded.

The contractor shall include Covid-19 matters in his monthly report including statistics.

Reporting of incidents for regulatory purposes

- a) Participants must be informed to alert their contractor or Focal point immediately, if they suspect they have been exposed to COVID – 19 (symptoms: body aches, loss of smell or loss of taste, nausea, vomiting, diarrhoea, fatigue, weakness or tiredness);
- b) If a participant is diagnosed with COVID 19, the Responsible Manager must investigate the cause including any control failure and review its risk assessment to ensure that the necessary controls and PPE requirements are in place;
- c) An incident investigation reports shall be completed, indicating all possible causes and corrective actions taken or proposed.
- d) Reporting for purposes of public health, contact tracing, screening, testing and surveillance

Where workplace meetings cannot be conducted virtually, strict protocols should be implemented in respect to inperson meetings:

- i. the maximum occupancy of the workplace meeting room should be determined having regard to social distancing standards above and excess seats should be removed from the room;
- ii. the layout of workplace meeting rooms should conform with social distancing principles in so far as possible;

- iii. the number of attendees that may attend a workplace meeting should be limited to the prescribed occupancy requirements of the room;
- the number of workplace meetings and the duration of workplace meetings should be reduced; iv.
- attendees should avoid social protocols such as shaking of hands and hugging; V.
- all attendees should wear a face mask with nose and mouth covered; vi.
- vii. All Pens must be sanitise or each person must use own pen to sign attendance register.
- viii. all attendees should wash hands / hand sanitizer before entering and exiting the workplace meeting room;
- doors to be left open during and between workplace meetings to avoid touching handles; ix.
- desks / equipment / seat handles in meeting room should be sanitised immediately before and after х. meetings;
- xi. Meeting refreshments are permitted where the coffee cups are disposable, beverages are sealed, and food is wrapped.

8.5.2. Diseases from Sewer Works

A health risk management plan shall be defined for work on the active sewer line and the biological and chemical hazards associated with this. The risk assessment and method statement shall include the safe work processes for a. The plugging and unplugging of active sewer pipes.

- b. The over pumping of sewer materials; this method statement shall conform to the controls defined in the Hazardous Biological Agent Regulations and shall cover the entire time-span of such over-pumping, including, where applicable, over pumping during the night and over week-ends.

Contractor must ensure the company provide or support occupational immunisations on a risk basis. Where workers are at significant occupational risk of acquiring a vaccine-preventable disease, the employer should implement a comprehensive occupational vaccination program, which includes a vaccination policy, current staff vaccination records, provision of information about the relevant vaccine-preventable diseases, and the management of vaccine refusal (e.g., reducing the risk of a healthcare worker transmitting disease to vulnerable persons). Employers should take all reasonable steps to encourage non-immune workers to be vaccinated. A vaccination program should be in place where there is a significant risk of exposure to Hepatitis A or Tetanus (e.g., workers in regular contact with sewage)

Ensure the provision of hand washing facilities, showers, change rooms, equipment storage areas and eating facilities. Each first aid box shall include an eye wash bottle, for use with accidental sewer splash incidents.

8.5.3. Legionella Disease

If the PC use JoJo tanks and hosepipes as per this draught period. The PC must have a written Control Plan and risk assessment for purification of Jojo Tanks for drinking water and use of hosepipes for dust and usage on site. This will be to prevent Legionella disease or cholera.

8.6. Alcohol and other Drugs

No alcohol and drugs will be allowed on site. An Alcohol Abuse policy will be signed by CEO and Review annually. Policy must be communicated to all workers. No person may be under the influence of alcohol or any drug while on the construction site. Any person on prescription medication must inform his/her superior, who shall in turn report this to the Client's Agent forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her /anyone else's health or safety performance must report this to his/her superior. Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately.

8.7. Dust Control

Principle Contractor shall be solely responsible for the control of dust arising from Principal Contractor operations.

- Principle Contractor shall take all reasonable measures to minimise the generation of dust as a result of a) construction activities to the satisfaction of the Environmental Manager.
- Excavation, handling, and transport of erodible materials shall be avoided under high wind conditions or when b) a visible dust plume is present.
- During high wind conditions, the Environmental Manager will evaluate the situation and make c) recommendations as to whether dust-damping measures are adequate, or whether working will cease altogether until the wind speed drops to an acceptable level.
- Where possible, soil stockpiles shall be located in sheltered areas where they are not exposed to the erosive d) effects of the wind. Where erosion of stockpiles becomes a problem, erosion control measures shall be implemented at the discretion of the Environmental Manager.
- Vehicle speeds shall not exceed 40km/h along dirt roads or 20km/h. e)

f) Appropriate dust suppression measures shall be used when dust generation is unavoidable, e.g., dampening with water, particularly during prolonged periods of dry weather in winter. Such measures may also include the use of temporary stabilising measures (e.g., chemical soil binders, straw, brush packs, chipping

*Principal Contractor should prepare and submit a Dust Control Method Statement.

8.8. Asbestos Works

The inhalation of airborne asbestos fibres can cause serious lung diseases including asbestosis, cancer of the lungs and mesothelioma. These diseases usually become apparent only some years after exposure to asbestos and sometimes not until 40 or more years after the first exposure. **Cigarette smokers who are occupationally exposed to asbestos exhibit a marked increase in the incidence of lung cancer when compared to non-smokers.**

Exposure to asbestos may result from:

Inhalation

Asbestos can be breathed in as raw fibre or as dust that contains regulated fibres also known as respirable fibres. Inhalation is the most common source of exposure to asbestos.

• Ingestion

Asbestos can be swallowed in the dust form if it gets on hands, clothing, a beard or moustache. Asbestos fibres can also be taken into the body if food or beverage is contaminated with asbestos. Smoking contaminated cigarettes is particularly risky because asbestos particles can be breathed in and swallowed.

The old Asbestos Regulations were repealed and the Asbestos Regulations, 2001 were published on 10 February 2002 in Government Gazette No. 23108 with the aim of protecting employees against the adverse effects of asbestos on human health.

A qualified and registered service provider must remove asbestos and discard of all asbestos as per the Asbestos Regulations. All contractors appointed for asbestos work will first be approved by the OHS agent before they start work on site. The service Provider must be approved by the OHS Agent before performing work on site.

8.9. Electrical Works

Only Competent person will work on electrical task. Identify all sources of energy to the equipment using drawings, diagrams, and identification tags and field verification. Utilize an approved energy control procedure (ECP). Lockout systems and signboards must be used at all times.

Ensure that the following:

- Provide qualified or licensed (where required) personnel.
- Assist with program administration, implementation, and verification of compliance with regulatory requirements and the requirements in this procedure.
- Assess program status and verify that procedures comply with regulatory requirements, site needs and observations.
- COC for all works must be provided.
- No fuses and no safety protection equipment may be bridged out.
- If circuit breaker or contractor is replaced it must be a permanent job.
- Harness must be worn when working above 2 meters from ground level.
- Safety goggles must be worn when working with, electrical cleaning solvents and grinders.
- The zero adjustment on a generator may not be moved without permission form Foreman / Engineer.
- Overload protection on switchgear must be according to motor specs.
- All covers on motors must be secured.

8.10. Concrete works (construction Regulations 20)

Competent person will be appointed in writing to supervise this task work. The following procedures will be following regarding Batch Plant as per the Construction Regulations 2014.

- Concrete must be mixed only in an area demarcated for this purpose, ideally on an impervious surface (e.g., cement mixing pit).
- All concrete spilled outside this area, must be promptly removed by the Contractor and taken to a permitted waste disposal site.
- After all concrete mixing is complete; all waste concrete must be removed from the batching area and disposed of at an approved dumpsite.
- Ensure separation of clean and dirty water from batching plant.

- Storm water must not be allowed to flow through the batching area. Water laden with cement must be collected in a retention area for evaporation and not allowed to escape the batching area.
- Operators must wear suitable safety clothing.
- Wastewater from batching operations to be suitably disposed of.
- Waste concrete and cement sludge to be removed on a regular basis (to prevent overflowing) and to be disposed of at a suitable facility.
- Unused cement bags will be stored in an area not exposed to the weather and packed neatly to prevent hardening or leakage of cement.
- Used cement bags will be stored so as to prevent windblown dust and potential water contamination. Used bags will be disposed of adequately at a licensed waste disposal facility.
- Ready mix concrete transportation will not result in spillage.
- Cleaning of equipment and flushing of mixers will not result in pollution, with all contaminated wash water entering the waste water collection system.
- Concrete mixing strength test records will be kept on file.

8.11. Working at Heights (Construction Regulations 10)

The implementation and maintenance of a safe work environment is the collective responsibility of all employees, contractors, and visitors to the jobsite. Contractor will submit working at heights policy. Policy will be communicated to all persons working at heights. All employees must go for special medical assessment for working at heights. All employees working at heights must be provide prompt medical treatment when a worker is injured on the jobsite. To do this, workers may have to perform a working at heights rescue to bring down a worker who has fallen and is suspended in a safety harness.

Contractor may use ladders, scaffolding to perform their duties according to task. A Clear Safe Work Procedure and Method statement will be done. Signed by contractor construction manager and competent working at heights supervisor.

A fall protection plan with a rescue plan will be submitted with the OHS File. A competent person with qualification (unit standard -229994 NQF lever 4) Fall protection plan developer will sign of the FPP appointment letter. All employees working at heights must have medical examination done and training on working at heights. FPP and FAS must be communicated to all worker and evidence of such must be on file.

Fall arrest equipment will be inspected on site daily as well as all harnesses, lanyards, safety line, etc.

8.12. Excavation Works (Construction Regulations 13)

Excavation work is hazardous. Competent person will be appointed in writing. This guideline provides information on the potential hazards involved in excavation work so that workers and employers can work together to create a safe, injury and fatality free work site.

Bulk excavation for pool area must have a method statement to ensure all risk has a mitigation factor and are communicated. Ensure escape routes out of deep excavations and ensure employees medicals are updated on task work as per the depth of the excavation.

8.13. Lock Out Procedures (General Machinery Regulations)

A lockout, tag and test procedure describes the requirements to ensure that all machinery or equipment with the potential for unexpected operation, movement, release of energy or the release of hazardous materials, have been locked out prior to work being performed on it. The Contractor shall familiarise himself with the procedure and shall at all times adhere to its requirements. The Responsible Representative of the Municipality must first be notified and approval granted before any equipment that comprises part of the finished work can be put into operation or energised.

Lock-out and tag-out procedures will be applied for the servicing and maintenance of machines and equipment in which the unexpected energising or start-up of the machines or equipment or the release of stored energy could cause injury or death to any personnel. An energy source includes any source of electrical, mechanical, hydraulic, chemical, thermal, stored, ionising and non-ionizing, or other energy.

The Responsible Representative of the Client is to identify all sources of energy which need to be locked out and communicate this to the Contractor Supervisor.

The unauthorised removal of Lock-out locks is considered a serious safety violation and will be regarded as a breach of contract.

No work shall be performed on electrical equipment that is energised. Such equipment must be "locked out" prior to working on it. Only grounded equipment shall be used for power supply. Plugs and cords shall be maintained in good repair. Where conditions dictate a ground fault interruption protection power supply shall be used.

Under no circumstance shall a connection be made to any power outlet except through an approved plug. Insertion of bare wires into any power outlet is strictly prohibited.

8.14. Permit to Work

A Permit to Work system will be authorized by Client, Contractor and Municipality. All requests for Permits to Work shall be channelled through the Responsible Representative appointed in writing. The Contractor must ensure that all Permits to Work are properly completed and duly authorised by the appropriate signatories before commencing with the work in question. All requirements stated in the Permit must be fully complied with. Activities that require a permit to work include but are not limited to: hot work.

- working in confined spaces.
- working at heights.
- excavation work.
- site clearing.

8.15. Confined Spaces (General Safety Regulations 5)

A "confined space" may be generally defined as any area which has limited means of egress and is subject to oxygen deficient atmosphere or to the accumulation of toxic or flammable gases or vapours. A Competent person will be appointed to work in areas defined as confined space. Medicals will be done for all workers performing task in confined spaces. Safe Work Procedures will be done with Confined space checklist and lock-out procedures. High Risk task and must be supervised.

8.16. Paving

Preparation of paving will effect dust. Preparation must be done to safely prepare for working with sand and crusher dust. Appropriate PPE must be worn. A method statement must be done before work start and communicated to all employees. Ergonomics must be taken into account for repetitive movements during bending and laying of paving bricks.

9. ANNEXURE A - Legal Appointments

Assignment of duties by Principal Contractor and Contractors' responsible persons. The Contractor must make all the Management appointments as set out below (Further appointments could become necessary as the project progresses).

No	OHS Act Ref.	Appointment	Name of Appointee
1	Section 16. (1)	Overall Authority and Accountability	
2	Section 16. (2)	Delegation of assignment of Duties	
3.	CR 8 (1)	Construction Manger	
4	CR 8 (5)	Health and Safety Officer	
5.	CR 8 (2)	Construction Assistant manager	
6	DM Act	COVID-19 Officer	
7	CR 8. (7)	Construction Supervisor	
8	CR 8. (8)	Subordinate Construction Supervisor	
9	GMR 2(1)	Supervision of Machinery (not for construction sites)	
10	Section 17	Health and Safety Representative	
11	CR 16. (1))	Scaffold Erector, Inspector (separate appointments)	
12	CR 13(1)	Excavation Inspector	
13	GSR 3(4)	First Aiders	
14	CR 29(h)	Fire Equipment Inspector	

15	EMR 9	Portable Electrical Tool Inspector	
16	CR 17(8)(a)	Materials Hoist Inspector	
17	DMR 18(5)	Lifting Machinery and Equipment Inspector	
18	HSC Reg	Hazardous Chemical Substances Inspector	
19	GSR 3	Emergency Procedure Coordinator	
20	CR 23(j)	Construction Vehicle and Mobile Plant Inspector	
21	CR 28(a)	Stacking and Storage Supervisor	
22	CR 10	Fall Protection Plan Developer	
23	CR 10	Fall Protection Supervisor	
24	GSR 5	Confined Space Supervisors	
25	GMR	Lock-out and Tag-Out Representative	
26	CR 18	Rope Access Work Inspector	
27	CR 20	Batch Plant Supervisor	
28	CR27	Housekeeping Supervisor	
29	GSR 13a	Ladder Supervisor	
30	FR	Facilities Supervisor	
31	EIR - MR	Electrical and Mechanical Supervisor	
32	CR 9	Risk assessor	
33	GAR 9	Incident Investigator	
34	Asbestos Reg.	Asbestos Inspector	

CR	=	Construction Regulations
ER	=	Environmental Regulations
GSR	=	General Safety Regulations
HSC	=	Hazardous Chemical Substances Regulations
GMR	=	General Machinery Regulations
FR	=	Facilities Regulations
DM	=	Disaster Management Act

10. ANNEXURE – B GENERAL COMPLIANCE REQUIREMENTS

Principle Contractor and Contractors must comply with but not be limited to the requirements tabled below:

OHS Act Section/Regulation	Subject	Requirements
Construction. Regulation 4(1)	Notice of carrying out Construction work	Department of Labour notified. Site Notification of Intention to Commence Construction Work or Construction Work Permit application (done by OHS Agent)
General Admin. Regulation 4	Copy of Health and Safety Act (Act 85 of 1993)	Updated copy of Act & Regulations on site. Readily available for perusal by employees.
COID Act Section 80	Registration with Compensation Insurer	Written proof of registration/Letter of good standing available. Site Compensation for Occupational Injuries and Diseases – proof of registration
Construction. Regulation 5 (b)	Health and Safety Specification	Health and Safety Specifications received from Client and/or its Agent on its behalf
	Company Policies	Signed Policies: OHS Policy Alcohol abuse policy, Fall protection Policy, Disciplinary Procedures, Environmental Policy, PPE Policy. Quality Policy, HIV/Aids Policy. Hazchem Policy, Pandemic Policy
Construction Regulations 2(a)	Health & Safety Plan (Health and Safety plan)	Under the Construction Regulations [7(1)(a)], Principal Contractor is required to develop the Health and Safety Plan, due to new Disaster Management Declaration the OHS plan will include COVID-19 safe work procedures for each site before work commences
Section 16. (1)	Overall Authority and Accountability	Overall Responsibility
Section 16. (2)	Assignment of Duties	Responsible for Contract management of the project CV on file Legal Liability and HIRA training on file
Construction Regulation 8(1)	Construction Manager	Responsibility of complying with the Health and Safety Act assigned to other person/s by S 16.2. CV, Competency CV on file OHS Legal Liability and HIRA training on file
Construction. Regulation 8 (7)	Designation of Person Responsible on Site	Competent person appointed in writing as Construction Supervisor with job description CV on file
Construction Regulation 8(5)	Safety Officer	Competent person appointed in writing as Registered with SACPCMP / barcoded letter from SACPCMP. CV on file

A (1) (- A (-		
Section 17 & 18 General Administrative	Designation of Health & Safety Representatives	More than 20 employees - one Health and Safety Representative, one additional Health and Safety Rep. for each 50 employees or part thereof.
Regulations 6 & 7		Designation in writing, period and area of responsibility specified in terms of GAR 6 & 7
		Safety Representatives name to be displayed on site notice board.
		Meaningful Health and Safety Rep. reports.
		Reports actioned by Management.
Section 19 & 20	Health & Safety	Health and Safety Committee/s established.
General Administrative	Committee/s	All Health and Safety Reps shall be members of Health and Safety Committees
Regulations 5		Additional members are appointed in writing.
		Meetings held monthly; Minutes kept.
		All safety meeting schedules are to be displayed on site notice board.
		Actioned by Management.
	Health and Safety Organogram showing all safety management portfolios and positions	Updated Organogram Displayed
Section 37(1) & (2)	Agreement with	Written agreement with (Sub-)Contractors
	Mandatories/	List of Sub Contractors displayed.
	(Sub-)Contractors	Proof of Registration with Compensation Insurer/Letter of
Construction	Principle Contractor	Letter of Good Standing (COIDA Compliance)
Regulation		Identify the hazards in the workplace.
		Evaluate the risks. Do whatever needs to be done to protect the worker from
		injury or health problems. If anything is unsafe, your employer must take action to make it safe.
		The employer must train the workers properly. The employer must make sure the workers obey safety rules and the law
Section 8(2)(d)	Hazard Identification	Hazard Identification carried out/Recorded.
Construction.	&Risk Assessment	Risk Assessment and – Plan drawn up/Updated.
Regulation 9(1)		Risk assessor to have HIRA Training RA Plan available on Site
		Risk assessments to be signed off by risk assessor and
		Contract manger
		Method statement to be done for each activity which is taking
		place on site. All risk assessments to be done as per method statements. Employees/Sub-Contractors informed/trained
Section 24	Reporting of Incidents (Dept. of Labour)	Incident Reporting Procedure and man-hours to be displayed on site notice board.
		All incidents in terms of Sect. 24 reported to the Provincial Director, Department of Labour, within 3 days. (Annexure 1) (WCL 1 or 2) and to the Client and/or its Agent on its behalf
		Copies of Reports available on Site
		Record of First Aid injuries kept
	<u> </u>	1

General Admin. Regulation 9 Construction.	Investigation and Recording of Incidents Stacking & Storage	All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing. Appointed person to have formal incident investigator training. Copies of Reports (Annexure 1) available on Site Tabled at Health and Safety Committee meeting Competent Person/s with specific knowledge and experience
Regulation 28 General Safety Regulation 8(1)(a)	Supervisor.	designated to supervise all Stacking & Storage Written Proof of Competence of above appointee available on Site
Construction. Regulation 29 Environmental Regulation 9	Designation of a Person to Co-ordinate Emergency Planning And Fire Protection	 Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures. Emergency Evacuation Plan developed: Drilled/Practiced Plan & Records of Drills/Practices available on-Site Fire Risk Assessment carried out. All Fire Extinguishing Equipment identified and on register. Inspected weekly. Inspection Register kept. Serviced annually
General Safety Regulation 3	First Aid	Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed) First Aid freely available Equipment as per the list in the Health and Safety Act. One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed) List of First Aid Officials and Certificates Name of person/s in charge of First Aid box/es displayed. Location of First Aid box/es clearly indicated. Signs instructing employees to report all Injuries/illness including first aid injuries
General Safety Regulation 2	Personal Safety Equipment (PSE)	Items of PSE prescribed/use enforced. Records of Issue kept. PPE matrix to be displayed. Undertaking by Employee to use/wear PSE. PSE remain property of Employer, not to be removed from premises GSR 2(4)
Hazardous Chemical Substances (HCS) Regulations Construction Regulation 25	Control of Storage & Usage of HCS and Flammables	Competent Person/s with specific knowledge and experience designated to Control the Storage & Usage of HCS (including Flammables) Hazardous chemical surveillance to be conducted. Risk Assessment carried out. Register of HCS kept/used on Site
Electricity Act of 1984 no 41 Electrical Installation Regulations	Electrical and Mechanical Installation	Competent Person appointed in Writing. All competency Certificates on file Scheduled log book of installations and wiring Medical Report of Fitness Daily inspections of tools and electrical equipment COC must be submitted after each new installation. Calibration Certificate must be submitted after each installation

Construction. Regulation 23	Construction Vehicles &Earth Moving Equipment	 Operators/Drivers appointed to: Carry out a daily inspection prior to use. Drive the vehicle/plant that he/she is competent to operate/drive. All plant to be fitted with revolving lights. Plant to be fitted with Fire extinguishers. Written Proof of Competence of above appointee available on Site.
Construction Regulations 10	Working at Heights	 Medical Report available for each operator available on site Record of Daily inspections kept. Competent Fall protection Plan Developer Fall protection plan communicated to all employees. Fall Arrest Plan communicated to everyone. All Harness to be 1.2m building is 4.2 meter high. All people working on heights must have medicals approved. Risk assessment done
OHS Act 1993	OHS Budget COVID-19 Budget	OHS Cost Estimate must be submitted before construction commence. Must be approved by OHS agent and QS.

11. ANNEXURE – F Budget

alth and Safety File as per OHS Specifications alth and Safety Plan inclusive of Fall Protection Plan (Full alth and Safety File) Inclusive of Covid-19 Specifications RSONAL PROTECTIVE EQUIPMENT eralls rd hats fety boots / shoes oves (take note of different task) r plugs or Ear Muffs	R R R R R R R R R R R
alth and Safety File) Inclusive of Covid-19 Specifications RSONAL PROTECTIVE EQUIPMENT eralls rd hats fety boots / shoes oves (take note of different task)	R R R R
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oves (take note of different task)	
· · ·	R
r plugs or Ear Muffs	
spiratory Equipment	R
sk (Construction Work)	R
ggles / Safety Glasses	R
fety Harness	R
scue Equipment	R
zchem Spill Kit	R
eld helmet (welding)	R
rtified Chain slings	R
th Mask or disposable mask per employee	R
ner	R
	ggles / Safety Glasses ety Harness scue Equipment zchem Spill Kit eld helmet (welding) tified Chain slings th Mask or disposable mask per employee

ITEM	S COSTED	ESTIMATED COST
3	FIRE FIGHTING EQUIPMENT	
	Fire extinguishers (take note of different risk)	R
	Other	R
	AL (NO COST TO BE INSERTED HERE) T/PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SECT	ION –

ITEMS COSTED ESTIMATED COST 4. HEALTH AND SAFETY PERSONNEL R Safety Manager R Full time safety officer COVID-19 Compliance Officer Full time safety representative R First aider R R Hazchem Supervisor Fall Protection Planner R Fall Protection Supervisor R TOTAL (NO COST TO BE INSERTED HERE) COST/PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SECTION -

ITEM	S COSTED	ESTIMATED COST
5.	LIFTING MACHINERY AND EQUIPMENT	
	Annual inspections and load testing as per legal requirement	R
	Certification of all lifting gear during the course of the project	R
	Third party inspection	R
	AL (NO COST TO BE INSERTED HERE) T /PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SE C	CTION -

ITEM	S COSTED	ESTIMATED COST
6.	INSURANCES	
	COID cover for the project	R
	Liability insurance	R
	AL (NO COST TO BE INSERTED HERE) T/PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SE	CTION – SEE ITEMS
ITEM	S COSTED	ESTIMATED COST
7.	TRAINING	
	Health and safety representatives	R
	H & S Supervisory training	R
	First aid training	R
	Fire fighting	R
	Legal liability training	R
	Risk assessment training	R
	Working at Heights Training	R
	HAZCHEM Training	R

TOTAL (NO COST TO BE INSERTED HERE) COST/PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SECTION

ITEM	S COSTED	ESTIMATED COST
8.	SIGNAGE	
	All signage as required by law: regulatory, warning and information	R
	Posters for awareness health and safety	R
	Posters on COVID-19 for site A3,A5	R
	AL (NO COST TO BE INSERTED HERE) T/PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL S	
ITEM	S COSTED	ESTIMATED COST
ITEM 9.		-
	S COSTED	-
	S COSTED ELECTRICAL	ESTIMATED COST
	S COSTED ELECTRICAL Locks required for lockouts	ESTIMATED COST R

ITEM	S COSTED	ESTIMATED COST
10.	COVID-19	
	Provision of Non-Contract Infrared Thermometer	R
	Hand Sanitiser Foot Petal Stand	R
	Cleaning Materials COVID-19	R
	Hand Sanitiser	R
	Paper Towels	R
	Daily Cleaning and Disinfecting of facilities& Vehicles	R
	AL (NO COST TO BE INSERTED HERE) T/ PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL S I	ECTION - SEE BOO

SEE BOQ 'KI CTION

1		Γ
ITEM	S COSTED	ESTIMATED COST
11.	Legal Requirements	
	Medicals for all employees	R
	Working at heights medicals	R
	Sewer Inoculations	R
12.	Environmental	
	Water for Drinking and Washing hands mobile stations throughout the site	R
	Hand soap	R
	Toilet Paper	R
	Ablution Facilities	R
	Other	R
	AL (NO COST TO BE INSERTED HERE) T/PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SI	ECTION - SEE BOQ
ITEM	S COSTED	ESTIMATED COST
		1

ITEM	S COSTED	ESTIMATED COST
13.	ASBESTOS Removal	
	Registered Contractor	R

Medicals of Employees	R
Disposal of Waste	R
Disposable PPE	R
AL (NO COST TO BE INSERTED HERE) T/ PRICE TO BE INCLUDED IN PRELIMINARY & GENERAL SE	CTION – SEE BOQ

This list is not exhaustive, and contractors may expand all levels to include all relevancy H & S expenditure

The Clients Principal Agent Approval:

Name: ______ Date: _____ Date: _____

FOR PRINCIPAL CONTRACTOR

Principal Contractor Representatives Acceptance: Name:

Signature: _____

Date: _____

12. Annexure G- Contents and Numbering

CONTENTS AND NUMBERING SYSTEM FOR THE HEALTH AND SAFETY FILE

1.	Index of OHS File
2.	Letter of good standing COIDA
3.	Department Of Labour Notification of Construction Work
4.	Occupational Health and Safety Policy signed by CEO, dated as well as review provision. Other policies must be signed. All policies must be communicated to worker and evidence there off on file.
5.	PC Appointment Letters and Organogram with competency and statutory registrations.
6.	Medical Assessment records: OHS pre-medical fitness for work (CR annexure 3).ID documents of all workers. Surveys: Working at heights, Ergonomics, COVID-19 screening
7.	PC Letter of approval of OHS plan and file
8.	Health and Safety Plan must include Covid-19 management plan
9.	Mandatory Agreement 37(2) between Client and the Principal Contractor
10.	Client Health and Safety Specifications and Baseline Risk Assessment + COVID-19 OHS Specifications and Baseline Risk Assessment
11.	Audit Reports (external and internal)
12.	Organogram and All Signed Legal Appointments with Evidence of Competency (CV's + Certificates) with Duties and Responsibilities with Medical Certificates of Fitness of all employees
13.	Induction Programme for employees, visitors and Sub-contractors
14.	Risk Assessments and Risk Matrix and Review Process and Evidence of Facilitation Inclusive of COVID-19
15.	Updated list of Sub-Contractors and 37(2) Agreement between Principle Contractor and Sub-Contractor
16.	PPE Procedure, PPE Matrix and Evidence of Control
17.	Principal Contractor H&S management processes (method statements or operating procedures)
18.	Safe Work Procedures and Evidence of Facilitation

19.	Emergency Procedure and Evidence of Facilitation with Detail emergency contact numbers
20.	Hazardous Chemical Management with list of MSDS (updated regularly)
21.	Fall Protection Plan (must be done by a competent person)
22.	Environmental Management system
23.	Waste Control Plan
24.	Incident and Accident Procedures and Evidence of Facilitation (Inclusive of COIDA forms (WCI.2 and WCI3), Annexure 1)
25.	Security Process and procedures with Evidence
26.	Sub-Contractor Management (include Sub-Contractor Audits)
27.	Training and Tool Box Talk Programme and Evidence of Facilitation
28.	OHS Act no 85 of 1993 and Construction Regulations 2014
29.	Safety Inspections/ Safety Registers (example: ladder checklist, Hand tools, first aid box, fire extinguishers, Incident register, Power tools register, concrete mixer register, generator, facilities checklist etc.)

PROJECT NAME: UPGRADES TO COMMANDO DRIFTA NATURE RESERVE **BASELINE RISK ASSESSMENT**

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Health Risk Potential	0-No Health Risk	1- Minor health Risk (fixed immediately)	2- Medium health Risk (short term disability & effect)	3- Serious health Risk (Long term disability & effect)		4- Major health Risk (Permanent disability & effect)	Risk Rating/ Priority Factor	6 R Potentially Catastrophhic/Action need immediately	H Potentially Major/Action to be taken within 24 hours	M Potentially Serious/Action to be taken within 48 hours	1-4 L Potentially Minor/Action to be taken within 7 days
Environment	0- No Effect	1- Minor Effect	2- Serious Effect	J-very Serious Effect	4- Catastrophic	Effect	Risk	13-16	9-12	5-8	1-4
Frequency of Occurrence	0- No Occurrence	1- Occurs very seldom	2- Occurs occasionally	3- Occurs Often	4- Could/Has	happened/Fatality					
Injury Potential	0- No Injury	1-Minor Injury(First aid) 2-Medical Injury requiring hospital or Dr. (no Lost	time) 3 Modical Initiation	bespital or Dr. (Lost time)	Fatal or permanent	disablement					

RISK EVALUATION

			•	•						
ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Iniurv/Damage/Loss)	POSSIBLE RESULT	Injury Potential	Frequency of occurrence	Health Risk	Environmental	Rating	Priority Rating	PREVENTATIVE MEASURE	RESPONSIBLE PERSON FOR MITIGATION OF RISK
Site Establishment	•									
1										
File Approval as per OHS Requirements and Client Specification	Work commencing prior to file being available and approved.	DOL closing site						25	No Work Commencement until approval has been signed off.	OHS AGENT
	No valid registartion on COID.	Injured person has not insurance.							Baseline Risk Assessment	
	Expired Documentation(•							
	eg. Competencies, equipment load test, medicals, work permits)	Higher injury rate	4	4	4	. 16	<u>к</u>		Client Health and Safety Specification.	
	Documentation not available or approved as									
	per require Clien Spec and OHS act.							S	Site Conditions evaluation.	
in the second	Employees appointed not in possession of required or vaild							25	No Work Commencement until approval has been signed off.	
ведагарроппиненся ани сопретенсу	competencies as per Client Spec and OHS Act.	Compromise on construction work	4	4	4	. 16	۳ ۳			Principal Contractor
	Appointment not as per legal requirements							В	Baseline Risk Assessment	
	Lack of experience for appointed position.							0	Client Health and Safety Specification.	
Required legal documentation as per OHS act	Documentation not Site Specific.	Site Safety compromise						25	No Work Commencement until approval has been signed off.	Principal Contractor
	Policies and Procedure not in place and approved.		4	4	4	16	۳ ۵		Client Health and Safety Specification must be adhere to	
	Employees not trained in Policies and Procedures and legal requirements.							ΰ	Baseline Risk Assessment will guide contractor	

								Training Needs analysis to be conducted by Contractor.	to be	
Risk Identification	Method of works not site specific	Hazards not identified and not communicated						No Work Commencement until approval has been signed off.	nt until approval	Principal Contractor
	Risk identification not in place or conducted.							Baseline Risk Assessment	ent	
	Risk identification not site specific		1		-	(,	ſ	Client Health and Safety Specification.	' Specification.	
	Risk controls not sufficient		4	4	4	0	r	Method Statement of Tasks	sks	
	Risk Assessor not competent							Site Conditions evaluation.	.uo	
1	Continues Risk evaluation not	Hiaher iniury rate								
Induction & Medical certificate of fitness	Employees entering the site not being inducted.							Site induction can only be done with an employee if the require up to date	be done with an up to date	Principal Contractor
	Visitors entering site not being inducted/ signing visitor's induction form.	Injuries to workers and damage to property						medical is presented at the induction.	the induction.	
	Visitors not being provided with the necessary personal protective equipment.	Pollution of environment		t				Medical fitness certificates must be validated by the principle contractor to ensure adherence to the minimum requirements and validity of the	es must be e contractor to e minimum v of the	
	Induction being conducted on employees without them being in possession of a valid medical certificate					:		document.		
1	of fitness in the form of an Annexure 3. The medical must be conducted by a registered Occupational	Employees not	0 4	ო 	4	<u>6</u>	r			
	Health Practitioner. Construction vehicles and mobile plant operators entering the site without being	Employees not						Each person's ID or valid work permit must be inspected before induction can be allowed on the site for the individua	d work permit e induction can er the individua	
	Driver of delivery vehicles not made aware of the specific site conditions.									

List of employees and Contractors	Number of employees on site not listed in employee lists.	Contractors not respecting each	4	4	2	5	12	т	Enforce OHS Culture. Signed agreement by all Subcontractors.	Principal Contractor
	Number of contractors on site not listed on contractor list.	Unce workspace. No Health and safety Culture can lead to Disaster on Site							List all Sub-Contractors and PC must have competent supervision to manage the Contractors.	
	Employee and contractor list not being updated as required.	All contractors must have Letter of Good standing from DOL							No Contractors may enter site without an approved OHS file and Signed 37.2 agreement.	
	Contractor not submitting notification to the DOL as required by legal requirement.	Closing of site by DOL	4	4	2	2	12	н	Contractor to provide the DOL with the required Notification or permit as legislated.	Principal Contractor
Application for Notification of Construction or Permit application	Notification not containing the correct information as required by the DOL. Or the Permit not done by a Professional Agent	Delays in work/ Financial Constraint	4	4	ε	ო	4	R	Notification to contain the minimum required information and to be submitted as legislated to prevent work stoppages from DOL.	
	Notification of construction or application for Permit not submitted in the prescribed timeframe.	Safety and environmental issues will not be dealt with intime	4	4	3	3	14	Я	Permit to contain the minimum required information and to be submitted as legislated to prevent work stoppages from DOL.	OHS Agent
Client and Designer Duties	Client not following requirements as stipulated in the regulations.		4	4	4	4	16	т	Client to follow legal requirements as stipulated in the regulations before and during the construction process.	Client
	Designer not appointed in writing and not made aware of their duties.	Environmental Impact on site and Financial Disaster	4	4	4	4	16	т	Designers on the project to sign agreement in acknowledgement of their duties on the project.	
	Designer not following their legal duties throughout the project.	High accident rate	4	4	4	4	16	т	Designers to conduct the required inspections and review the required documentation as stipulated in the regulations.	
Site preparation										
Inspecting the Site by conducting walkthrough	Uneven surfaces, Open Holes, environmental disturbance, snake or any other creatures habitat	snake bites, fall and trip	4	с С	5	0	ത	Σ	Communication of required documentation.	Principal Contractor

Obtain the exact site office location from client. Check Site conditions	Hitting existing services	Financial lost, Environmental concern	4	۳ س		თ 	Σ	Communication of required documentation.	
clearing and grubbing of vegetation with grader/loader or excavator	Dust, Trees and Shrubs hurting employees, Stones letting employees slip or fall. Snakes	snake bites, Foot injury. Lung disease.	4	۳ ۳	0	10	Σ	Supervision and proper PPE. Give toolbox talk on safety. Mark boundaries and mark areas with existing service.	
Loading and offloading of Office Containers; Changing facilities; ablution facilities; mobile plant and equipment	Hand injuries when handling chains to tie the plant/Equipment on the lowbed or rollback.	Body injury	4	3	0	თ 	Σ	Training on proper use of PPE. Work under supervision of site supervisor, Use trained lowbed and rollback operator with drivers license and PDP. Checking if equipment is tightly tied before moving, Ensure all slings and chains are certified for correct load mass. Ensure that area to off load is stable.	
Access to be a main consideration when positioning offices, stores and parking areas on site during planning stage. Possible one-way traffic to be introduced	Restricted access to parking and delivery areas to storage areas.	Damage to transport and plant	4	0	0	7	Σ	Proper layout of site by Construction Manager and Site Agent taking into consideration all transport plant and material movements and storage on site.	
Parking of vehicles and visitors									
Demarcated parking area for plant on site	Traffic colliding with the plant and equipment	Financial implications	4	3	-	11	Σ	Proper layout of site by Construction Manager and Site Agent taking into consideration all transport plant and material movements and storage on site.	
Demarcated narking area for visitors on site	Traffic colliding with the plant and equipment	Financial Implications	4	ო 		5		Parking area must be made safe with poles or hindrance for cars to move forward because of slop. Proper signage with parking areas and report to reception must be done. Cars will not be allowed to park in road or side of street	
Traffic Accommodation		-							
Planting temporary road signs	Workers/ Visitors Run over by vehicles traveling on the road	Fatality, broken body parts	4	0	0	2	Σ	Temporary safety signs to be put in place to warn approaching traffic of the Construction work ahead. All workers to wear high visible reflective vest, overalls, etc.	Principal Contractor

Delivery of Concrete Works Induction	Big Heavy trucks could cause traffic hold up.	Car Accidents, Huge environmental hazard	4	4	4	4	9	۲	Communication with residence will be made when delivery is made, for all concrete trucks and heavy vehicles to site. Supervision will be on high alert during delivery times. Prior planning will be done before any delivery on site to prevent incidents and chaos.	Principal Contractor
Induction and training	injuries due to employees not aware of danger in work area	injury disability and property damage	Ю	4	m		თ	Σ	Inductions- Employees to be informed to all hazards, policies and Risk, SWP and Method statements in the work area as well as the recommended precautionary measures Site specific induction to be conducted to all employees, subtractors and visitors employees to trained on all tools and equipment	Principal Contractor
									All appointment letters and competency will be on safety file as organogram of site staff	
Signs Posted										
Installation of safety signs and notice boards	uninformed employees, inadequate signage,	injury disability and property damage	5	4	с С	5	11	Т	Legal signage must be displayed to be clearly visible at all time. All required signage to be available. Signs must be clear and if working at night signs must be visible at nighttime (specific signs required)	Principal Contractor
			р	4	ю	7	1	т	Signage should be maintained and monitored daily. Supervisor must have knowledge of required signage that must be displayed at all times.	
Emergency preparedness										
Fire fighting equipment	Insufficient fire fighting equipment and inedaquate trained employees	Injury to employee and visitors and property damage	N	m	m	N	10	Σ	Trained fire Marshalls must be appointed in writing. Fire fighting equipment must be placed in accordance to survey conducted during site establishment. All relevant equipment to be inspected and all registers to be filled in.	Principal Contractor

First Aid	Inadequate medical assistance and untreated injuries	untreated injuries onsite could lead to loss time on site		33	3	10	M	First aider trained and first aid box clearly mark will be on site. With appropriate signage installed.	Principal Contractor
Emergency Plan and accident procedures	miss informed staff and visitors on site	Injuries or fatalities	4	4	4	16	٢	Emergency plan and incident procedures will be discussed and facilitated to all staff and visitors. Everyone will know what procedures to follow. A site Drill will be done to make sure the staff is aware of there commitment to safety and preparedness on site	Principal Contractor
Facilities									
Toilet Facilities on site	Inadequate toilet facilities will have environemental impact and hygiene disaster on site	Diseases and unhygienic conditions	4	4	4	16	Ľ	Separate toilet for construction staff, both gender must be available and clearly identified. All facilities to be kept clean and a registered must be kept on site	
Drinking water	Inadequate drinking water will have environemental impact and hygiene disaster on site	Diseases and unhygienic conditions	4	4	4	16	۲	Facilities to be ensured from start of site establishment Clean drinking water must be available. Signage to be installed to all drinking and non-drinking water cans	0 -
Eating areas	Poor hygiene conditions on site and this could lead to diseases	Diseases and unhygienic conditions	4	4	4	16	Ľ	Adequate, clean and shaded eating area to be ensured. With running water and soap to wash their hands	
Waste	Poor hygiene conditions on site and this could lead to diseases and bad housekeeping could lead to incidents	Diseases and unhygienic conditions	4	4	4	16	Ľ	Separate waste bins for different waste categories to be available and identified. Waste disposal plan and schedule must be maintained. Skips must have lids. Proper supervision and waste control plan	Principal Contractor
Environmental Control									
			0	5	5	4	لـ 8	Ensure all waste areas controlling hazardous waste is kept clear. Ensure Construction area are well demarcated and screened off.	Principal Contractor
Environmental risk	Environmental Impact on site	Environmental Impact on site	0	7	2	4	۲ 8	Ensure all spills are reported immediately. Ensure drip trays are used when the risk to spillage is high	
			0	7	5	4	بــ 8	Ensure the waste storage area has sufficient capacity. Ensure that all loose materials are covered and tied down to prevent wind picking the loose items out of the storage area or facility	

			0	2		8	_	Ensure all hazardous waste is removed to an approved dumping site/facility	
Concrete work spillages	Flow of run of concrete works	zero plant regrowth, change to environmental surroundings.	0	4	4	6	۲	All Concrete works will be done with careful planning to avoid spillage. Only small concrete works will be done on site. Bund wall with catchment area were made to accommodate for contaminated flow concrete. Big concrete works will be delivered by ready mix concrete truck. Supervision and DSTI will be done with all concrete works on site. This will ensure workers and environment are protected at all times. All cement bags will be discarded of safely in waste bins.	Principal Contractor
Fencing off Construction work									
Temporary hoarding to separate public and construction work. Exisiting boundary fences.	The erector must follow the specific position as required.	Environmental Impact on site	3 1	7	3	6	Σ	The site must be fenced off as a minimum with diamond mesh fence 1,8 meters in height.	Principal Contractor
	When digging for fence poles, services can be damaged.	Injuries to workers and other services	3 1	5	3	6	Σ	Fence installation areas to be demarcated with netting when posts and fence is being installed.	
	When posts get knocked in, it can damage services.	Damage of services	3 1	2	3	თ		Supervision and Information from Civil Engineers	
Ctonning on once tranches	E Coct	Leg injury sprains and	۲ ۲	۰ ۲	~	~	۶	Dug holes to be covered with a board, be barricaded and marked with a danger tape. Poles for fence to be planted the same dav.	Principal Contractor
		fractures		- ,	-	-	Ξ	All workers will be informed of the danger of leaving open hole without covering it. Warning signs to be put in place.	
Constant bending and twisting whilst digging trenches	Muscle injury	Back Injury	3 1	5	~	7	Z	All workers to be trained on proper handling of hand tools used when digging holes.	Principal Contractor
Security	Theft of plant & equipment on property. Access to unauthorised persons	Financial lost	ε	-	0	ນ	L	Security guards to be appointed to keep watch. Supervisor to put proper control measures in place	
,	No security in place at entrances to construction site.							The principal contractor must appoint full time security personnel to control the access onto site at all times.	

	Unauthorized entry to site.								
	Theft of materials and equipment.						م ت	Dedicated access control sign books to be available for visitor sign ins.	
Storage of Hazardous chemicals									
Oxygen and acetylene store to be a minimum distance of five metres away from other buildings. It needs to be well ventilated and have a roof to keep direct exposure to the sun	Fire explosion leaking gas may spread if to close to other buildings.	Damage to property and plant. Health of employees	4	, 3	4	14 H		Site Agent to check layout Drg. To compare with OHS Act requirements and whether they are according to standards.	Principal Contractor
Stacking and storage						 			
Placing Pipes, bricks and other materials used on site	Employees not inducted.	Injury on body	2		2 3	8	a M	All workers and visitors to be inducted before entering the site	Principal Contractor
Clear delivery to site office sign	Employees being struck by delivery vehicles.	Injury to body; Disabling and even fatal	4	-	4	 10	H Fia <	Walkways and roads clearly indicted and correct safety signs posted. Speed limit 20km/h	
Off loading of materials	Material falling onto employees while offloading by hand or crane truck	Injury to body; Disabling and even fatal	4	-	4 3	 12 H		Supervisor to coordinate and supervise offloading.	
Stacking of materials	Stacks collapsing or falling over onto employees	Injury to body; Disabling and even fatal	4	• ~	4 	5 I		Adequate storage areas shall be provided that are demarcated and kept neat and under control. The base of storage areas shall be level and capable of sustaining the weight exerted on it by its stack. Pallets and containers are in good condition and the stacks are stable and do not overhang.	
Fetching materials at demarcated area	Loss of materials, tripping over materials	Injury to body or feet, hands	4	- -	4	10 H		Demarcate storage area of brick, reinforcement steel, etc	
OFF LOADING OF MATERIAL FROM TRUCKS									
	Rock could fall on vehicle of oncoming traffic.	financial damage to vehicle: insurance claim	4	3	0	7 M		Supervisor to assist loading of materials and keep the area clean at all times, Trained and competent operators to fulfil these duties.	Principal Contractor
Loading of Spoil/ rock material	Rocks or materials could fall on road surface.	financial damage to vehicle: insurance claim	4	с С	0	7 M		Supervisor to assist loading of materials and keep the area clean at all times	
	Damage of motor vehicle through stone chips	financial damage to vehicle: insurance claim	4	с г	0	7 M		Supervisor assisting loading of materials on trucks	

WORKING AT HEIGHTS: Ladders										
	Incorrect use of ladders.	Fatality, broken body parts	4	4	4	0	12	т	Ensure anchorage point is of sufficient strength, to prevent an employee from falling.	Principal Contractor
	Ladder not supported at the top and bottom.	Fatality, broken body parts	4	4	4	0	12	т	Ladder to be supported at the top and bottom ends, to ensure stability during performing of task.	
Use of ladders	No anti-skid devices fitted at the bottom.	Fatality, broken body parts	4	4	4	0	12	т	Anti-skid devices to be fitted at the bottom of ladder, numbered and on register.	
	Use of Ladder longer than 4 meters	Fatality, broken body parts	4	4	4	0	12	т	Where reasonably practical, employees to wear safety harnesses when working from ladder. Lanyards to be secured to an anchorage point other than the ladder.	
	Climbing of high ladder higher than 4 meters	Fatality, broken body parts	4	4	4	0	12	т	Always connect lanyard to suitable anchorage point above you.	
Use of scaffolding										
	Employees working from unsafe scaffold.		4	4	4	0	12	Т	Competent appointed scaffold erector.	
	Erecting Scaffolding	lineafa collance	4	4	4	0	12	н	Ensure stable ground area for erection of scaffolding. Scaffold to be tagged when safe for use or not. Scaffold tag to show maximum load ability scaffolding	Principal Contractor
		equipment Hurting of employees,							to be inspected on a daily basis by a competent person	
	Use of damaged safety harnesses.	zero protection, head injury , fatality	4	4	4	0	12	н	Always check PPE daily and get adequate PPE for task	
Use of scaffolding	Employees working at different heights without using safety harnesses.	Fatality, broken body parts	4	4	4	0	12	т	Base area of scaffold building or dismantling, to be barricaded.	
	Lanyards not hooked onto anchorage point of sufficient strength.	Fatality, broken body parts	4	4	4	0	6	т	Life lines to be fitted onto steel beams, to allow for safer movement or a scaffolding is to be erected to accommodate employees working on structural steal beams. Employees to 'straddle walk' beams, no walking on beams will be tolerated.	
	Climbing with tools and equipment, Housekeeping	Slip and fall, fatality, broken body parts	4	4	4	0	12	т	Ensure working surfaces for example scaffold is kept clear of any obstructions, which could lead to someone tripping and falling.	

s to be barricaded by means of ng handrails or similar and es to follow correct changeover e, one lanyard to be secured at n time. Im handgrip whilst climbing. Im handgrip whilst climbing. Ing on wet surfaces will be a. This includes scaffold and l steel beams. surfaces to be kept clean and n excess tools and equipment, n cause to be tripping hazards. at heights will be restricted clement weather conditions. orking at night, ensure that t lighting is provided for es who will be working from e aware of others working of d equipment. Ing material, employees ed on the walkway above, must ed up onto existing handrail, rest part of it is to be removed, to e access for material. Informated appropriately. Interated approved by the OHS fore Roof Work Starts. All Fall unipment will be approved by ant before the roof work starts. must be secured and all PPE approved before roof work				 				Nobody is permitted to walk on cable racks, scaffold to be used for this purpose.	
Chronic in the second at any grown time. Enclose to flow correct changeore is any grown time. Chronic in an any and to be second at any grown time. Enclose to an any and to be second at any grown time. Chronic in an any and the second and any grown time. Enclose to the second and any grown time. Chronic in an any grown time. Enclose to the second and any grown time. Sip and fail, fatality. 4				 	-			Openings to be barricaded by means of scaffolding handrails or similar and covered.	
Cirrupting and vorking on Stip and fall, fatality, set in the node of the set of the narded or while table of the set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or well set of the narded or the vorking or the vorking or the narded				 				Employees to follow correct changeover procedure, one lanyard to be secured at any given time.	
Image: Sign and working on Sign and fail, fatality, scaffold and brocken body parts. A A B Powering on wet surfaces will be apprindent. Cimbing and working on Sign and fail, fatality, scaffolding A </th <th></th> <th></th> <th></th> <th> </th> <th></th> <th></th> <th></th> <th>Ensure firm handgrip whilst climbing.</th> <th></th>				 				Ensure firm handgrip whilst climbing.	
Climbing and working on scaffolding Silp and fall, fatality, scaffolding 4 4 0 12 H Working and expired than earlier working an expiration. Climbing and working on scaffolding Noken body parts 4 4 0 12 H Working and expired. Scaffolding Noken body parts Noken body parts 4 4 0 12 H Working and expired. Manual Noken body parts Noken body parts 4 4 0 12 H Working and expired. Manual Noken body parts No No No No No No No Manual No No No No No No No No No No								No working on wet surfaces will be permitted. This includes scaffold and structural steel beams.	
The second field of the second sec		Climbing and working on	Slin and fall fatality					Working surfaces to be kept clean and free from excess tools and equipment, which can cause to be tripping hazards.	
Tools or items could fail off roof Men working at roit, resure that when working is provided for employees who will be working from heights. Men work is a met of there working is provided for employees who will be working from heights. Men work is a ware of there working is provided for employees who will be working from heights. Men work is a met of the working is provided for employees who will be working it met of the working is provided for the working is provided for the working is provided if the molecular is a method. Men willing material, employees working is provided for the working is provided in the working is provided in the working is provided if the molecular is a method. Men working is provided if the molecular is a method. Men willing material, employees working is pratein. Men working is provided if the molecular is a method. Men willing material, employees working is the molecular is a method. Man could fall off roof Man seriously injured. Men will be done and approved by the OHS Man could fall off roof Man seriously injured. Men will be done and approved by the OHS Tools or items could fall off roof Men sector work taffs. Men will be approved by the OHS Tools or items could fall No or damaged item Men will be approved by the OHS Tools or items could fall No or damaged item Men will be approved by the ord work staffs. Tools or items could fall No or damaged item Men will be approved before root work staffs.		scaffolding	broken body parts	 	0	12	т	Working at heights will be restricted during inclement weather conditions.	
Marking Always be aware of others working below you, who might be affected by you with might be affected by positioned on the walkway above, must positioned approved by the OHS positiented								When working at night, ensure that sufficient lighting is provided for employees who will be working from heights.	
Men Iffing material, employees Positioned on the wakway above, must be hooked up onto existing material, employees Men Iffing material, employees Positioned on the wakway above, must be hooked up onto existing material, menever part of it is to be removed, to allow safe access for material. Man could fall off roof Poston mease of where lifting is to take place, to be barricaded appropriately. Man could fall off roof Man seriously injured, fatal Man could fall off roof Poston mease of where lifting is to take place, to be barricaded appropriately. Man could fall off roof Poston mease of where lifting is to take place, to be barricaded appropriately. Man could fall off roof Poston mease of where lifting is to take place, to be barricaded approved by will be done and approved by the OHS agent before the roof work starts. All Fall protection plan with fall arrest plan will be done and approved by the fore the roof work starts. All Fall place, to be arricaded and all PFE Tools or items could fall No or damaged item P P P P P Tools or items could fall No or damaged item P P P P P P Tools or items could fall No or damaged item P P P P P P P P P P P P <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Always be aware of others working below you, who might be affected by your actions for example dropping of tools and equipment.</td><td></td></td<>								Always be aware of others working below you, who might be affected by your actions for example dropping of tools and equipment.	
Man could fall off roofMan seriously injured, fatalMan could fall off roofMan seriously injured, in the construction plan with fall arrest plan will be done and approved by the OHS agent before Roof Work Starts. All Fall arrest equipment will be approved by OHS agent before Roof Work Starts. All Fall arrest equipment will be approved by froof, etcA fall protection plan with fall arrest plan will be done and approved by the OHS agent before Roof Work Starts. All Fall arrest equipment will be approved by of noof, etcTools or items could fallNo or damaged item44012HAll Tools must be secured and all PPE must be approved before roof work starts.								When lifting material, employees positioned on the walkway above, must be hooked up onto existing handrail, whenever part of it is to be removed, to allow safe access for material.	
Man could fall off roofMan seriously injured, fatalMan seriously injured, fatalMan seriously injured, inted,Man seriously injured, inted,Man seriously injured, inted,Man seriously injured, inted integration plan with fall arrest plan will be done and approved by the OHS agent before Roof Work Starts. All Fall agent before Roof Work Starts. All Fall arrest equipment will be approved by OHS agent before Roof Work Starts. All Fall arrest equipment will be approved by OHS agent before the roof work starts.Tools or items could fall off roof, etcNo or damaged itemAAAAAAAAAAATools or items could fall off roof, etcNo or damaged itemAAA<								Bottom areas of where lifting is to take place, to be barricaded appropriately.	
Man could fall off roofMan seriously injured, fatalA fall protection plan with fall arrest plan will be done and approved by the OHS agent before Roof Work Starts. All Fall agent before Roof Work Starts. All Fall arrest equipment will be approved by OHS agent before the roof work starts.Tools or items could fallNo or damaged item444072NAll Tools must be secured and all PFETools or items could fallNo or damaged item444072NAll Tools must be secured and all PFEoff roof, etcor tool12HstartsAll Tools must be approved by the ord work starts.	ROOF WORK								
No or damaged item 4 4 0 12 H No or damaged item 4 4 4 0 12 H	Man working on roof	Man could fall off roof	Man seriously injured, fatal					A fall protection plan with fall arrest plan will be done and approved by the OHS agent before Roof Work Starts. All Fall	Principal Contractor
No or damaged item 1 or tool 4 4					0	12	Н	arrest equipment will be approved by OHS agent before the roof work starts.	
		Tools or items could fall off roof, etc		 	0	12	I	All Tools must be secured and all PPE must be approved before roof work starts	

lifting roof trusses to top of building	Trusses could fall, injure person below or push employee over the roof	Damage to trusses, fractures or bruises or fatal injuries	4	4	4	0	12	т	Securely fasten trusses to prevent falling. Use proper certified slings or rope	
	If not secured properly; trusses could fall; tools falling down	Damage to trusses. Fracture or bruises or fatal injuries	4	4	4	0	12	т	securely brace trusses Prevent falling. Erect one truss at a time. Tie tools to rope	
Erect trusses	Correct Levels	Damage to trusses. Fracture or bruises or fatal injuries	4	4	4	0	12	т	Competent supervision on site while roof work is done. Life line must be done before any installation starts. Ensure all rules are implemented and discipline is on par.	
	Correct levels alignment	Damage to trusses. Fracture or bruises or fatal injuries	4	4	4	0	12	т		
Daily in spection of workplace to take place before production starts	Objects on floor might cause tripping machine not functioning properly	Injury to hands, arms, legs. Tiles not to specification causing loss in production	4	4	4	0	12	т		
Damage Tiles not to be used and pointed out to supervisor	Tiles not to specifications	Loss in material and production	4	4	4	0	12	т		
Concrete mix										
Placing concrete from bucket/Wheel Barrow/ TLB bucket	Concrete bucket hitting the workers	Injury to employee; Lost time injury even fatal	8	L.	2	1	7	Σ	Wear PPE supervisor to check and control	Principal Contractor
Handling the concrete bucket	Handling of equipment. Spillage of concrete	Injury to hands and the body	2	1	1	-	5	Σ	Supervisor to check and control	
Lifting Concrete with TLB bucket	Workers getting hurt, damage to existing structures or services	Property Damage/ Head or body injury	2	-	2	1	6	Σ	Workers to be advised to stand clear of the path of the bucket	
Caring concrete distances/heights	Wheelbarrow may slip/ concrete spill	Workers fall of slope, hand & arm injury	2	1	2	-	9	Σ	Safe distance traveling as well as good control with wheelbarrow/bucket	
Vibrating concrete	Concrete splash from vibrating. Operating the poker	Eye injuries/Hand Injuries	L	ſ	2	1	5	Σ	Safety gloves, goggles and proper working space	
	Workers falling due to: not using safety belt, insufficient scaffold planks, workers	Injury to body;							Provide safety belts. Use correct	
Casting concrete for the walls	receiving concrete whilst standing on rebar	Disabling and even fatal	4	~	4	~	10	т	scaffolding. Provide planks and handrails on rebar	
Casting concrete for the floors	Concrete coming in contact with the skin	Injury to the feet and legs	2	.	2		9	Σ	Wear long rubber boots	
Ready mix Concrete Delivery										

Deliver of ready-mix concrete to site	Preparation for concrete needs to be signed of and ready for inspection before concrete mix arrive on site	Financial loss implication/ Environmental disaster	4	4	4	4	۲	Competent person to do quality checks before concrete mixture arrives. Method statement, SWP must be developed and followed.	
	Concrete mix test cubes		4	4	4	4 16	Ж	Quality management checks must be	
	Quality Strength of Concrete mixure could be incorrect	Proof Strength of Concrete is important for quality checks	4	4	4	4 16	œ	top priority for the Construction manager to ensure lab test gets done and filed. All concrete approval must be signed by engineers appointed on the project	
	Untrained banksman	Fatality of employees or any pedestrian while delivery of concrete	4	4	4	4 16	۲	Appoint Competent banksman on site. Ensure all SWP are adhere to	
Brick Work									
Stacking and handling of bricks	Inadequate stacking and storage of materials.	Injury to hands and fingers	-	7		0	۶	Safety boots and helmets compulsory on site. Nails must be removed when formwork is done.	Principal Contractor
Movement and stacking and handling of bricks and formwork as well as working at heights	Workers getting injured by falling objects protruding nails, etc.	Injury to all parts of the body	1	2	5	0	۶	The necessary personal protective equipment must be worn on site. And SWP must discussed in toolbox talk	
Use of plant machinery to transport or bricks to specific height or work area	Accident- construction vehicles hitting worker.	Injury to body; Disabling and even fatal	4	-	- 	8	۶	High visibility vest must be work at all times. Worker induction to be done to all new workers before entering the site.	
Handling of bricks	Hand injuries	Injury to body, head	2	, , , , , , , , , , , , , , , , , , , 	5	0	Σ	PPE must be worn when required and toolbox talks to be held with work force weekly and the registers kept on file. Gloves must be worn at all times.	
Handling of bricks, cement and dust	Air borne contaminants exposing workers, dust.	Injury to body, health hazard	7	-	3	1 7	Σ	Dust mask must be worn as last resort, Workers must be made aware in toolbox talks when working in dusty area. Supervision needed in this regard.	
Handling of bricks and cement and other material	Materials and rubble obstructing walkways and area of works.	Injury to body; bruises to hands, health hazard	7	-	с г	1 7	Σ	The supervisor to make sure that area are cleaned up and stored in demarcated. Housekeeping must be exercised regularly.	
Cutting of Bricks	Use an angle grinder	Injury to fingers - eyes, bruises to fingers/ hands	N		5	ئ 0	Σ	Competent person to use the grinder. Cutting of bricks must be done by competent person. Gloves, goggles and ensure safe working procedure with machinery.	
Ceiling & Partitions									

							ļ			
	Defective trucks & trucks can cause accidents	fatalities, serious iniuries and damage	4	~	4	m	12	т	All drivers must have licence and PDP. Truck must be equipped with sitting area and not have tools with	Principal Contractor
Transport Equipment and Employees to site	resulting	to plant, equipment							employees.	
Off loading equipment and material on site by hand	Equipment and material	Injuries to the hands, arms, feet, back and leas	ო	ო		0	5	т	Supervisor to ensure that the equipment and material is not to big and to heavy to pick up and off load by hand. Ensure proper PPE	
Install Partitions at ground as well as elivated levels	Fall of equipment or	2 2	4	ო	4	0	5	т	Proper supervision with inspections done on all slings and lifting equipment. Competent persons doing installation of	
Installing Ceiling hangers and Grid work and boards	 partition boards. Workers may fall from heights 	ratality or persons. Serious head or foot injuries	с	3	2	-	6	Σ	ceiling and erection or scanoloning and working on ladders will follow strict SWP	
Roof Trusses										
	Person trip and fall. Falling from heights	fatality, bodily harm	4	<i>т</i>	4	2	13	Ľ	Persons must be competent and fully medical assess for working at heights	Principal Contractor
	Harness or fall arrest	fatality, bodily harm	4	κ	4	5	13	R	Fall prevention and fall arrest equipment must be attached to a secure structure and where this is not possible, a secure lifeline is to be installed	
working at elevated position	equipment failure	fatality	4		4	0	13	۲	Fall prevention and fall arrest equipment will be visually inspected before use and the findings recorded on a register	
	Slip, fall and visuality not good	fatality and Drown	4	3	4	2	13	R	Employees will not be allowed to work at elevated heights during inclement weather conditions	
Wearing fall arrest equipment like harness	Fall arrest equipment not fastened correctly or not hooked on to life line correctly as well as care and use of equipment	fatality and Drown	4	ε	4	3	4	R	Training on all fall arrest equipment on how to use it and take care of the equipment	
Working with tools at elevated position with people at the bottom	Tools could fall on someone or something and could injure or have a great financial lost	Injury or financial damage	ŝ	κ	4	ε	13	R	Always assess and scan working area communicate on what work will be done that day and make sure safe working with procedures are in place for working with tools	
Working at heights	Falling down	Fractures, bruises, cuts, fatal injury	4	ς	4	r r	14	Ľ	Safety belts, life lines required	

Lift roof trusses to top of building	Trusses could fall, injure persons below or push employee over the roof	Damage to trusses, fractures or bruises or fatal injuries	4	m	4		14	۲	Securely fasten trusses to prevent falling. Use proper sling or rope	
Erect trusses	If not secured properly, trusses could fall;tools falling down	Damage to trusses, fractures or bruises or fatal injuries	r	ю	4	з	13	R	Securely brace trusses- prevent falling. Erect one truss at a time. Tie tools(spanners) to a rope	
Line up trusses	Correct levels; sagging of roof or ceiling	Poor quality	с	ъ	З	ъ	12	Н	Engineering and architecture drawings	
Position and fix purlins for sheeting	Correct levels alignment	Poor quality of work	3	с	3	с	12	т	to ensure QMS of levels of Trusses.	
Roof Sheeting Installation										
Arrival on site	Parking of Public roads, weather conditions, breach of site safety	Bump by vehicles, slip.	7	ო	7	0	7	L	Do not park on busy road, concentrate on safely accessing the site. Use proper PPE. Liaise with site office, Plant task, be aware of weather forecast.	Principal Contractor
	Injury from unloading and setting up of metal sheets	Lacerations, Bruising, Legs getting cut, fall and slip	r	ю	2	0	8	_	Establish clear zone, Identify trip hazards, do daily task inspection checklist with workers.	
	Faulty incomplete frame	Wet might fall	3	3	2	0	8	_	Do not commence work if frame is faulty or unbraced	
Setting up of Roof Sheets for installation	Muscle injury	sprains and strains of muscle	2	ς	5	0	7	Ļ	stretching up exercises are recommended upon arrival to site. Use lifting techniques.	
	Power lines	electrical shock to body	4	4	4	0	12	н	check and identify all power lines get authority to work close to power line	
	Tools fall	head injuries, foot injuries	3	2	7	0	7		tool bag or holder must be proper strapped onto body or safety line	
Lifting of Sheeting	Falls	injury to body parts	4	ო	с м	0	0	Þ	do DTI with staff, use only competent staff, frequently clean sole of footwear, do good housekeeping. Scaffolding must be done by qualified person. Use gutter guard to secure ladder. Be aware of weather conditions. Beware of cut edges, do not place off cuts close to thoroughfares. See working at heights and risk assessment and train staff.	
	Fall from scaffolding	injury to body parts	4	4	с	0	11	т	Make sure all staff have harness	
	Cutting hand of finger with grinder	hand injuries	4	4	c v	0	11	т	Trained staff to use grinder with proper PPE and measure and cut sheets before lifting sheets on to roof	

-		-	-	-	-	-	_			_
									Handle off cuts with care, wear gloves as required and place materials in bins. Ensure all off cuts and rubbish are dispose of according to waste plan. Remove all signage. Leave site in safe	
Ilsage of Handtools	Housekeeping of off cuts	hand injuries	7	7	~	0	5		condition.	
Collecting tools from the store.	Tools in poor condition.	Possible injury.	7		-		6	т	Tools well maintained and checked by a competent person.	Principal Contractor
Checking of collected tools.	Taking away tools which have the potential to cause injury.	Possible injury.	2	ო	-		თ	т	Trained competent persons using the tools must be able to identify when something is not right.	
Ensure tools are in good order before using them.	Not being able to do the job properly and taking chances.	Substandard work and possible damage to plant and equipment.	7	ო			თ	т	Substandard tools cause substandard work. Use the correct tools in good condition. The issue of PPE hard hats, safety shoes, safety glasses, leather gloves, (dust mask), overall. Workers trained on the correct use of issued PPE.	
Understand your instructions.	Working in the wrong area.	Possible damage to plant and equipment and maybe other services could be damaged.	7	ε	-	3	റ	т	Ensure that instructions are clear and well understood.	
Painting										
Paint and thinners are always to be drawn from stores in quantities sufficient for use	spillage of Paint on body	Injury to body, burns	ю	3	4	3	13	R	Storeman to be instructed only to issue quantities that are sufficient for painting operation of one day only	Principal Contractor
during one-day painting only		Blindness caused of chemical	3	3	4	3	13	Ľ	Procedure to be explained to all employees working in the paint section	
t formation of of anomality have taken a second to	Allowing access to other	Employee injury	2	3	4	3	12	Н		
Lettover paint and unimers to be returned to the store after the day's shift together with empty containers	enproyees or uangerous substances. Possible ignition by flame or smoking	Damage to property in the event of explosion or fire	7	°.	4	3	12	т	Employees must be trained in the use of material data sheets	
	Incorrect handling	Injury to hands, eyes, lungs	ю	3	3	с С	12	т	Employees must be trained in the use of material data sheets	
Material safety data sheets to be available for paint and thinners used in case of an	Contact with other materials that not compatible	Damage to property	2	3 S	3	3	11	т	Trained level 2 first aiders on site	
emergency, Indicates the conditions required in storing the materials	Painters exposure to materials	bodily harm, skin disease, eye contact	с	с С	e e	с С	12	т		
	Lack of knowledge of first aid/medical treatment		ς	e	e		12	т	Proper PPE (mask) will be worn by all painters	

		him humo to hody								
	Without sufficient		ε	e E	e E	3	12	т	Ventilation of the utmost importance	
Check if sufficient ventilation is taking place	ventilation a build-up of	Possible fatality	3	3	3	3	12	Н	and should be brought to attention of all	
work area and be aware of it at all times while painting	may occur and cause an	Damage to property	3	3	3	3	12	Н	painters. Super visor to monitor on a	
	explosion	Loss in production	С	3	3	3	12	т	ually basis	
	Increase of vapour in area	Explosion – fire	3	3	3	3	12	Н	Employees to be inducted to close all	
Always replace the lids on the paint or	Spillage of paint or thinners	Loss of material	3	3	3	3	12	Н	boundaments after use. Do good housekeeping and wear proper PPE.	
		Polluting the environment	3	3	3	3	12	т	make sure an own regarding ure painting team are facilitated to all employees.	
		Damage to material	З	e	з	с	12	т	Employees to be inducted to close all	
Ensure that the overspread will not	Unauthorised people in	Injury to eyes, lungs	3	3	3	3	12	Н	containers after use. Do good housekeeping and wear proper PPE.	
contaminate anything or other employees	the working area	Polluting the environment	ю	ო	n	n	12	т	Make sure all SWP regarding the painting team are facilitated to all employees.	
		Gravity of injury increases	3	3	°	3	12	Н	The correct type of fire extinguisher for the products used is to be close to work	
Check if fire extinguishers are at hand and in working order	Absence of fire extinguishers	Property damage increases	ო	ო		ო	5	т	work or have knowledge of fire extinguishers. Train the painters as well. Discuss SWP. Registers must be done for fire extinguisher.	
	Light fittings that are not	Explosion injury	e	r r	r r	r r	12	т		
Ensure that lights used are flame proof and	read the proot may cause a spark or vapours may	Possible fatality	3	3	3	3	12	Н	Unly nameproor light nittings to be used by paint section. All lights will be switch	
positioned as far as is practical from the painting operation	penetrate the fitting and cause a short which will in turn cause an explosion	Damage to property	r	ς	r	m	12	т	off inside building while painting. Ventilation while working with paint will be high priority risk mitigator	
	Flame and sparks might	Explosion causing injury	ю	ო	ო	ო	12	т	SWP will be facilitated to all workers. Signs will be posted to make sure no	
Welding-grinding should never be permitted	ignite the vapours	Possible fatalities	3	3	3	3	12	Н	weraing or nign itammable and nign risk f task will be done while painting is in	
close to where painting is being done	caused by paint and thinners	Damage to property	ო	ო	ю	ю	12	т	process. No smoking signs must be posted and strict controls by supervision	
First aid box is to have large burn shield available in stock	Incorrect treatment of burns	Could change results of incident from injury to fatal	т	с С	с С	ო	12	т	First aid box to be readily at hand and not too far from painting workplace. Level 2 first aider must work in area close to painters at all times	

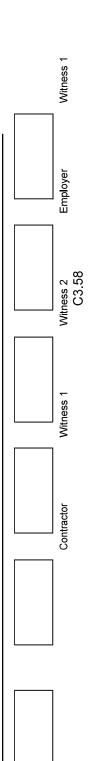
Tiling									
Induct personnel into task / site	People unaware of task & hazards. Personal injury / equip. damage	Personal injury, muscle and finger injuries	ი ო	3	۳ ۳	5	т	All persons to be OHS industry inducted / site inducted. Consulted / toolbox talk on SVMNS. Ensure work area clearly identified Contr	Principal Contractor
Unloading equipment	Equipment falling from vehicle. Manual handling injuries. Being struck by equipment. Crush hands, cuts. Slips, trips & falls	Crush hands and fingers cuts, Slips trips and falls		N	3 3 3	11	т	Training employees in manual handling. Use two-person lift when required. Use a trolley or pallet jack to move tiles, adhesive and tools to work area. Use PPE such as riggers gloves. Team lifting where required. Unload equipment on clear, level area	
Setting Up	Crush hands, cuts. Sline trine & falle			2 3	3		т :	Use riggers gloves when moving sharp objects.	
Mixing adhesive	Electrocution.	Lung, skin and eye irritation from exposure to silica dust.	າ ກ			= = =	: т	Ensure mixing drill has current test tag. Ensure RCD protection at the power source. All leads to have current test tags and to be elevated using insulated stands. Open containers of adhesive in a well-ventilated area. Wear dust mask and safety glasses	
	Electrocution.	Lung, skin and eye irritation from exposure to silica dust.	ო ო	0 N	۳ ۳	7	т	Ensure cutting equipment has current test tag. Ensure RCD protection at the power source. All leads to have current test tags and to be elevated using insulated stands.	
	Lung, skin and eye irritation from exposure to silica dust.	Lung, skin and eye irritation from exposure to silica dust.	e e e e e e e e e e e e e e e e e e e	3	3	11	т	Use wet-cutting where possible. Ensure enough water/coolant is supplied to the work area to suppress dust. Ensure P2 respirators are provided where there is still a likelihood of exposure.	
Cutting tiles	Cuts & other injuries from blade / cutting wheel	Lung, skin and eye irritation from exposure to silica dust.		3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		I	Check for smooth sliding operation of cutter. Ensure the cutting blade is not loose. Ensure that the tile is properly supported and won't slide or move. Ensure the cut-off will fall safely or will be supported. Check floor is clear of obstructions and debris. Remove any off cuts at the end of the working day. Operator position must be comfortable, no reaching or working off balance. Keep hands/fingers well clear of cutting blade.	

Plumbing									
Installation of Taps	Incorrect tools used could get hurt	injury on hands or feet	3	3	2	3 1	11 H	Use correct tools. All make sure your tools are in good working conditions. Do checklist on tools daily. Report Faulty tools	Principal Contractor
	Water not switched or valve not closed could lead to burns	Skin burns or hot water	3	3	5	3	11 H	make sure valves is closed before attending to plumbing or geyser problem	
	Hands could get hurt installation of small materials	hand and finger injury	4	3	5	3	12 H	Us correct hand gloves for plumbing	
Installation of Toilet Cistern	Long term disease		4	3	2	3	12 H	 All workers must be vaccinated for working at sewers	
	working with human waste and sewer	hepatitis B and A	4	ო	 N		12 H	Use trained and competent workers to do the job. Ensure clean water and soap on site to wash hands	
			4	3	5	3	12 H	must do vaccination. Use gloves and mask at all times. Trained staff to do the work	
			4	3	2	3 1	12 H	Work with bucket to put all waste in and dispose of all waste according to policy	
			4	3	N	3	12 H	 Avoid touching face, mouth while doing waste and sewer work.	
			4	ς	о П	۳ ۲	12 H	Avoid touching face, mouth, eyes, nose, or open sores and cuts while handling human waste or sewage.	
Cleaning of blocked Sink and Waste and to to the tot	Long term disease working with human waste and sewer	hepatitis B and A	4	r v	0 N	3	12 H	 After handling human waste or sewage, wash your hands with soap and water before eating or drinking.	
			4	с С	2	3	12 H	 After handling human waste or sewage, wash your hands with soap and water before and after using the toilet.	
			4	ო	5	3	12 H	Before eating, removed soiled work clothes and eat in designated areas away from human waste and sewage- handling activities.	
			4	ю	2	3	12 H	Do not smoke or chew tobacco or gum while handling human waste or sewage.	
Installation of geyser									
Working at heights	Falling from heights	Injuries	ო	7	5	3	10 H	Always follow working at heights procedures	Principal Contractor

Hand Tools	Loss of materials, tripping over materials using incorrect tools	Injuries	ς	m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ო	11	т	PPE to be worn all times. Hand tools procedures to be. Developed SWP and implement it on site.	
Electricity Connection	Electrocution.	Shock, Fatality	4	4	7	ო	13	т	Always switch off electricity. Only competent person can install geyser. Implement SWP on Geyser.	
Manual Handling	Handling heavy objects, geyser	Back Pain and muscle injury	ო	2	N	ო	10	Σ	Observe proper lifting techniques follow ergonomics procedures	
Hot Water	Contact of Hot water	Burns on all parts of body. Damage to plant and property.	4	4	4	з	15	۲	Maintenance of geyser must have full method statement with SWP	
	Burn with flame	Hand or body burns	4	4	4	4	16	۲	Fully competent person must only do brazing. Proper PPE to be worn.	
Brazing of copper pipe			4	4	4	4	16	۲	See SWP for working in small spaces with brazing	
	burn space to small to work oin	Body injury	4	4	4	4	16	Ľ	Small spaces is very complicated and good planning must be done with SWP before attempting to do work	
Electrical Works										
The legend of DB board to be kepts up to date	Electrocution and fire to people. Damage to property	Fatality injury to body parts	4	3	3	5	12	۲	Supervisor to control visual check and fill in checklist and do risk assessment before working on DB Box	Principal Contractor
The earth of electricity are governed by switches which are fully functional	Faulty swithces could cause electrocution and fire	Injury to people and damage to property	4	3	3	2	12	۲	Qualified electrician to do connections and checklist	Principal Contractor
Cables Installations should be in good condition, no exposed wires and damage cables and plugs. Check all wires that rodents not eat it	Electrocution and fire to people. Damage to property	Injury to people and damage to property	4	m	n	m	13	۲	Qualified electrician to do connections and checklist. No faulty equipment. Do visual check. Toolbox talks before every job	Principal Contractor
Wiring to be near connections to be twisted or lugged as per good wiring practices standards	Bad wiring may cause wires to touch or getting loose	Fires or injury of employees and damage to property	4	4	4	ო	15	۲	Make sure you read the electrical transformer manufacturer instruction provided to do detailed torque requirements. Do faulty equipment check. Do visual check. Toolbox talks before every job	Principal Contractor
Make sure all DB boxes are switched off doing connections to houses from poles	Electrocution and fire to people. Damage to property	Injury to people and damage to property	4	r	°	2	12	۲	Communication with all involve especially community to be carefully and stay clear	Principal Contractor
Installation of temporary electrical supply	Electrocution	Injury to body parts	4	4	4	r	15	۲	Permit to work system of other suitable means of control to be used when work on live systems is foreseen. Operations will only be permitted to work alone on live system	Principal Contractor

			4	4	4	e	15	۲	Only competent electricians ae authorised to install or modify temporary supplies	
			4	4	4	e	15	۲	CoC will be obtained for the installation of before being brought into use and after many modifications	
			4	4	4	<i>с</i>	15	R	Office stores and distribution boards will be regarded as permanent installations and use a 220V and EIR will apply	
			4	4	4	e	15	R	All Cables will be routed so as to prevent their damage and avoid tripping hazards	
	Fire	3rd degree burns, skin cancer	4	4	4	3	15	R	Fire extinguishers will be available on site in vicinity of Distribution units. Level 3 first aider on site always	
	Fall from heights	Fatality	4	4	4	ę	15	<u>د</u>	Provide platforms and fall arrest system. Make sure all supervisors and working at heights staff understands the fall protection plan and fall arrest rescue plan. Only competent person may work at heights	
Cable Pulling	Injury from part of overstressed cables	Injury to body parts	4	4	4	ო	ז ג	۲	Survey of cable run prior to work commencing to ensure route is clear of obstacles	principal Contractor
	Injury from contact with winches and pulleys	Injury to body parts	4	4	4	3	15	R	Only competent person to do the work. Do not work without supervision. All equipment must be inspected before work is done	
	Contact with live electrical cables	electrocution	4	4	4	e	15	Ľ	Work permit to be in place where work near live service is to take place	
Protest and civil unrest										
Project may become a 'target of opportunity' for politically motivated attack. ·	Locked in or outside the premises	vulnerable workers/emotional stress/ financial loss	4	4	4	с	15	۲		
Threat of injury as a bystander; rocks thrown by protesters/anti riot measures by police: baton rounds, water cannon etc.	Workers could get injured by rocks or being attacked by protestors	Injury to body/ fatality/ financial loss	4	4	4	3	15	R	A protest and civil unrest policy, training and SWP must be done by PC. Emergency procedures must include protest. Employees must be trained in unrest of worker or	principal Contractor
	Police : gas attacks, water cannons, rubber bullets hurt workers/visitors	Injury to body/ fatality/ financial loss	4	4	4	n	15	۲	community. Competent supervisor/ Construction manager/ OHS officer in Civil unrest and vulnerable workers	
Fire on site										

Fire due to construction work	Employees of PC and	Bodily harm/ emotional distress	<i>с</i>	4	ო	4	41	۲	Emergency procedures must include fire	Principal Contractor
Fire due to natural disaster	Subcontractors as well as police staff members and visitors in danger	Financial disaster/ property damage	ю	4	э	4	14	R	rescue and natural disaster. Competent manager with fire rescue training. Drills must be implemented as soon as site starts	
Working in extremeTemperature										
extreme summer/Wind/ cold/ rain/	Employee in danger of extreme heat/cold	Bodily harm/ emotional distress	ŝ	4	ς	4	41	R	Policy and SWP must be done regarding all extreme weather conditions.	Principal
	Working at height with extreme weather conditions.	Bodily harm/ emotional distress	m	4	ო	4	4	Ľ	Fall protection plan must include weather conditions and fall arrest plan.	Contractor
Drinking water										
Draught Area must have water tankers and water cans			ო	4	ო	4	4	Ľ		
Treatment of Water Tankers	Disease/ virus from contaminated water	Sick, fatality of bacteria	ო	4	ო	4	4	Ľ	Policy and SWP regarding drinking water on site. How will water be filtered or treated. Chemical procedures for treatment of water. All procedures will be monitored daily and test will be done to ensure water quality is correct for drinking purpose	Principal Contractor
Asbestos Removal			-							
Removal of Roof Tiles and Gutters	inhale of fibres of asbestos	Disease/ Long infection	4	4	4	4	16	۲	Approved Qualified and competent Asbestos Removal company will be appointed. Company must be approved by OHS Agent before work commence.	Principal Contrad



Witness 2

C4 SITE INFORMATION

C4.1 <u>GEOTECHNICAL INFORMATION OF SITE</u>

The quantities for material presented in the Provisional Bills of Quantities are estimated values and will be subject to final/actual measurements.