

MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE



BID NUMBER: MAPSEZ002/2026 (T)

BID NAME: REQUEST FOR TENDERS FOR THE APPOINTMENT OF APPROPRIATELY SKILLED CONTRACTORS FOR THE CONSTRUCTION OF AN APPLE JUICE PLANT TOP STRUCTURE INCL ALL RELATED EXTERNAL WORKS AND SERVICES AT THE MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE IN TSHIAME, HARRISMITH SOUTH AFRICA

ADVERT DATE: 10 September 2026

VIRTUAL BRIEFING SESSION DATE: 18 September 2026

Bidders must register with MAPSEZ by 09:00am on Friday 18 September 2026 to be on the list of registered participants for the meeting. The Microsoft Teams link will be provided only to bidders who have registered by the deadline (See Tender Notice and Invitation).

CLOSING DATE: 25th September 2026

BIDDERS DETAILS	
Bidding Structure	Sole Bidder ☐ JV ☐
Company Name:	
Completed By:	
CSD Supplier Number:	
CIDB CRS Number:	
Email:	
Telephone:	
Mobile Number:	
Date:	

Enquiries

Procurement inquiries related to this RFQ can be forwarded by email to MAPSEZ procurement office at thapelom@mapsez.co.za

Technical inquiries related to this RFQ can be forwarded by email to MAPSEZ PMU office at thobaniguma@gmail.com

VERY IMPORTANT NOTICE ON DISQUALIFICATION

A Bid not complying with the unconditional requirements stated hereunder will be regarded as being a “not Acceptable Bid” and as such will be rejected.

“Acceptable Bid” means any bid which, in all respects, complies with the specifications, conditions and requirements of the bid document and satisfies the criteria stipulated in the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000), the Preferential Procurement Regulations, 2022, the Public Finance Management Act, 1999 (Act No. 1 of 1999), applicable National Treasury Instructions, the Construction Industry Development Board Act, 2000 (Act No. 38 of 2000), where applicable, and any other relevant legislation governing public procurement

Bidders are expected to:

- a. Submit bid on or before closing date and time
- b. Fill in the required information in all Forms/Bills
- c. Complete all Forms/Bills in black ink. Do not use pencils or correction fluid to make corrections
- d. Make corrections, if necessary, only by placing a line across the words/numbers to be corrected and initial next to the amended text. Do not scratch out, write over rates, paint over rates or use correction fluid
- e. Ensure that witnesses sign where required
- f. Attend the compulsory site/clarification meetings (if applicable)
- g. Attach to the bid documents a copy of a signed Joint Venture agreement (if applicable)
- h. Ensure that only the person authorised to do so may sign the quote/offer
- i. Submit a valid Tax Clearance Certificate and a unique Tax Compliance Status PIN issued by the South African Revenue Service, with the bid document on or before closing date and time. Where the bidder is a joint venture, this applies to each partner in the joint venture.
- j. Be registered with the Central Supplier Database
- k. Be registered with the Construction Industry Development Board (if applicable)

Furthermore, the bid will be considered as not acceptable if:

There are attempts by the bidder to influence, the evaluation and / awarding of the quote

- a. The bidder or any of his directors is listed on the Register of Bid Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004
- b. The bidder has abused the MAPSEZ's Supply Chain Management System
- c. Irrespective of the procurement process followed, no award may be given to a person-
 - o Who is in the service of the state, or
 - o If that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or
 - o who is an advisor or consultant contracted with the FDC or the MAPSEZ in respect of contract that would cause a conflict of interest
- d. The bidder may only submit a quote on the documentation provided by the MAPSEZ

Bidder: Initial of authorised signatory/ies

MAPSEZ: Initial _____
 Witness: Initial _____
 Bidder: Initial _____
 Witness: Initial _____
 Initial of authorised signatory/ies

IN THIS DOCUMENT AND OTHER DOCUMENTS REFERRED TO BUT NOT ATTACHED, THE FOLLOWING WORDS ARE SYNONYMOUS WITH EACH OTHER

1. CLIENT, EMPLOYER, MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE
2. BIDDER, CONTRACTOR, SERVICE PROVIDER
3. QUOTATION AND BID AND VARIATIONS THEREOF
4. JOINT VENTURE / CONSORTIUM

TENDER		PAGE NO
Part T1: Bid/Tendering Procedures		
T1.1	Tender Notice and Invitation to tender	5
T1.2	Tender Data	6
	Standard Conditions of Tender	
Part T2: Returnable documents		
T2.1	List of Returnable Documents	24
T2.2	Returnable Schedules	26
CONTRACT		
Part C1: Agreement and Contract Data		
C1.1	Form of Offer and Acceptance	52
C1.2	Contract Data	54
Part C2: Pricing Data		
C2.1	Pricing Instructions	63
C2.2	Bills of Quantities	66
	Annexures to Bills of Quantities	188-248
Part C3: Scope of Work		
C3.1	Project Background	249
C3.2	Project Technical Background	250
C3.3	Project Scope	251
Part C4: Site Information		
C4.1	Geotechnical Investigation Report	
C4.2	MAPSEZ Health and Safety Specification (to be provided)	
C4.3	Construction Environmental Management Plan (CEMP)	
C4.4	Drawings (issued electronically) and Specifications	

TENDER

PART T1: BIDDING PROCEDURES

T1.1 – Tender Notice and Invitation to Tender

T1.1 Tender Notice and Invitation to Tender

Tender No: MAPSEZ 002/2026(T)

Description CONSTRUCTION OF AN APPLE JUICE PLANT TOP STRUCTURE INCLUDING ALL RELATED EXTERNAL WORKS AND SERVICES AT THE MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE IN TSHIAME, HARRISMITH SOUTH AFRICA

It is estimated that tenderers must have a CIDB contractor grading of **8GB CIDB Grading or higher**.

Bids that satisfy all mandatory, administrative and technical requirements will be evaluated in accordance with the 90/10 preference point system, as detailed below:

Price	90 points
Development Goals	10 points

SUBMITTED BIDS SHALL BE COMPLETED IN ACCORDANCE WITH THE CONDITIONS OF TENDER AND BID RULES CONTAINED IN THIS DOCUMENT.

Tenderers shall submit bids only on the official MAPSEZ tender documentation issued for this tender.

Tenderers shall submit:

- A tenderer may submit only **one (1) original tender offer**, together with **one (1) electronic copy on a flash drive**, for the whole of the works, whether as a single tendering entity or as a member of a joint venture, unless otherwise expressly provided in the Tender Data.
- JV/Consortium bidders must submit a signed JV/Consortium Agreement and other required information as per the mandatory requirements stipulated in tender data below.
- The submission must be in an envelope clearly marked with the Tender Number and Project Description.
- All returnable documents **MUST** be properly indexed and neatly bound.

The tender document shall be completed as follows:

- All entries must be completed in black ink.
- Corrections shall be made by crossing out the incorrect information and initialling next to the amendment. The use of correction fluid, erasures or overwriting shall not be permitted.
- The tender document must be signed by a person duly authorised through a Board Resolution (format attached) or Power of Attorney.

The following tender conditions shall apply:

- Tenderers must comply with all mandatory and administrative requirements in order for their tenders to be considered responsive (See Section T1.2 Tender Data).
- No two-envelope system shall be followed.
- **Attendance of the virtual/online clarification meeting is mandatory**. Bidders **MUST** register with Ms. N. Sekaja via telephone (058) 635 1120/1134 and/or via e-mail at nneheng@mapsez.co.za before 09:00am on the 18th of September 2026 to be registered on the list of clarification meeting attendees. A link will be provided upon successful registration.
- **Bidders are encouraged to familiarise themselves with the bid documents and submit any questions in advance of the clarification meeting to allow the Employer's agent to respond to them.**
- Tenderers shall demonstrate how a minimum of thirty percent (30%) of the contract value will be spent within the Maluti-a-Phofung region through subcontracting, procurement of goods and services, labour utilisation, or other approved local economic participation initiatives, as detailed in the Tender Data and Scope of Works. This is compulsory.
- Telegraphic, telephonic, facsimile, electronic and late submissions will not be accepted.
- The closing date and time for submission of tenders is 11:00am on 25th September 2026.

For contact details, contact persons and tender submission requirements, refer to the Tender Data below.

PART T1: BIDDING PROCEDURES

T1.2 - Tender Data and Standard Conditions of Tender

The Conditions of Tender are the Standard Conditions of Tender as contained in Annexure C of the Construction Industry Development Board's (CIDB) Standard for Uniformity in Engineering and Construction Works Contracts August 2019. The Tender Data contained herein supplements, varies and, where applicable, amends the Standard Conditions of Tender. In the event of any ambiguity or inconsistency, the Tender Data shall prevail.

Clause Reference	Heading	Tender Data
C.1 GENERAL		
C.1.1	Actions	The Employer is the Maluti-a-Phofung Special Economic Zone Ltd, situated at Corner Amanda and De Lange Streets, Tshiame, Harrismith, Free State. - The Employer and each tenderer shall comply with the Conditions of Tender and shall conduct the tender process with integrity, fairness, honesty and transparency and in compliance with all applicable legal obligations. - The Employer, tenderer and all agents, employees and representatives involved in the tender process shall avoid conflicts of interest and shall declare any actual, potential or perceived conflict of interest.
C.1.2	Tender Documents	The tender documents comprise the following: - T1.1 Tender Notice and Invitation to Tender - T1.2 Tender Data - T2.1 List of Returnable Documents - T2.2 Returnable Schedules - C1 Agreements and Contract Data - C2.1 Pricing Assumptions - C2.2 Pricing Schedule/ Bills of Quantities - C3 Scope of Work - C4 Site Information. The Employer intends to appoint a single contractor through an open competitive bidding process. The pages of the issued Bills of Quantities should not be removed from the procurement document.

Clause Reference	Heading	Tender Data
C.1.3	Interpretation	The Tender Data and any additional requirements contained in the tender schedules included in the Returnable Documents shall be deemed to form part of these Conditions of Tender and shall be read together with the Scope of Work contained in C3.
C.1.4	Communication and Employer's Agent	Clarification Meeting Registration: Nneheng Sekaja Tel: 058 635 1120 Email: Nneheng@mapsez.co.za Procurement Enquiries: Thapelo Moloi Tel: 058 635 1120 Email: thapelom@mapsez.co.za Technical Enquiries: Mr. Thobani Guma Tel: 058 635 1120 Email: thobane@mapsez.co.za and copy yusmuzi@mapsez.co.za
C1.6	Procurement Procedure	The procurement procedure is an open competitive tender for the appointment of a single contractor.
C.2 TENDERER'S OBLIGATIONS		
C.2.1	Eligibility	Tenderers may submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his/her principals, is not under any restriction to do business with the Employer. A tender will be eligible for evaluation only if it complies with all applicable mandatory requirements, which include submission of the following: 1 Valid CIPC Full Disclosure Certificate / Profile, obtainable electronically from the CIPC website and dated not more than three (3) months prior to the bid closing date. 2 Valid SARS Tax Compliance Status (TCS) PIN. 3 Valid Central Supplier Database (CSD) registration 4 Joint Venture / Consortium Bidders must submit: • a signed JV/Consortium Agreement; • CIDB profiles (individual) reflecting an active CIDB status at the bid closing date and the applicable grading CIDB Registration at the appropriate grading (8GB or higher); • CSD profiles for each individual member; • individual CIPC Full Disclosure Certificates/Profiles for each JV member; • certified Directors'/Members' IDs for each member (certified within the last 6 months)and • any other tender-required documentation on an individual or consolidated JV basis, as applicable. 5 Fully completed and signed Standard Bidding Documents (SBDs)

Clause Reference	Heading	Tender Data
		6 Certified Copies of Directors' / Members' Identification Documents certification not older than 6 months. 7 Attendance of compulsory virtual clarification meeting on 18th September 2026 at 11:00am Link closes at 11:10. Bidders must register with Ms M. Sekaja by 09:00am to receive the link. See bid document for details. Failure to comply with any of the above mandatory requirements may render the tender non-responsive and result in disqualification. Tenderers are referred to Clause C.3.8 for further detail on eligibility, responsiveness, mandatory and disqualifying criteria.
C.2.2.	Cost of Tendering	Tenderers accept that 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 the aspects of the offer satisfy requirements.
C.2.3	Check documents	Tenderers shall check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission. The Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the Tenderer must apply to the Employer's agent at once to have the same rectified, as no liability will be admitted by the Employer in respect of errors in any tender due to the foregoing.
C.2.4.	Confidentiality	Tenderers shall 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.
C.2.6.	Acknowledge Addenda	Tenderers shall acknowledge all addenda issued by the Employer and shall take the amendments into account in the tender offer.
C.2.7	Clarification Meeting	A compulsory clarification meeting will be held virtually Friday 18th September 2026 at 11:00am via Microsoft Teams. Attendance of the virtual/online clarification meeting is mandatory and bidders MUST register with Ms. N. Sekaja via telephone (058) 635 1120/1134 and / or via e-mail at nneheng@mapsez.co.za before the 9:00 am on Friday 18th September 2026 to be registered on the list of clarification meeting attendees; a link will be provided upon successful registration. The meeting will commence at 11:00am, at which time the Microsoft Teams link will be opened. Admission will close at 11:10am after which no further attendees will be admitted. The 10-minute admission period is intended to allow for possible network or connectivity issues. As attendance at the compulsory briefing session is a pre-qualification

Clause Reference	Heading	Tender Data
		requirement , all attendees will be required to introduce themselves and state the company they represent. Attendance will be verified for audit, record-keeping and bid evaluation purposes using the Microsoft Teams attendance register together with the introductions made during the session. Bidders not confirmed as having attended the session on behalf of the bidding entity will be disqualified at the pre-qualification stage.
C.2.8.	Clarification	Tenderers may seek clarification of the tender documents, if necessary, by notifying the Employer in writing at least two (2) days before the closing date and time stated herein. <i>Bidders are encouraged to familiarise themselves with the bid documents and submit any questions in advance of the clarification meeting to allow the Employer's agent to respond to them.</i>
C.2.9.	Insurance	The successful tenderer shall, at its own cost, obtain and maintain all insurance required in terms of the Conditions of Contract and applicable legislation for the duration of the contract and shall furnish proof thereof to the Employer upon request. Tenderers are referred to the Contract Data for further detail on project insurance. For tendering purposes, the principal insurances required are: - Contract Works Insurance for the contract sum plus 20% (including professional fees at 15% of the insured value); - Public Liability Insurance of R20,000,000 for each and every claim; and Supplementary Insurance for the contract sum plus 20%. - Policy deductibles which are to the Contractor's account as set out in the Contract Data.
C.2.10	Pricing the Tender Offer	- This is a fixed price contract. The contract value will NOT be adjusted for "escalation" costs or CPAP (Contract Price Adjustment Provision). - The rates and prices shall be stated in South African Rand (ZAR), the currency applicable to this agreement. - Value Added Tax (VAT) shall be shown separately as an addition to the tendered total of the prices. - Pricing assumptions Detailed measurement rules, preambles and Bills of Quantities requirements are contained in C2.1 and C2.2
C.2.11	Alterations to documents	Bidders are not to 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, overwriting and the use of correction fluid is prohibited.
C.2.13	Submitting of Tender Offer	Tenderers shall submit only one (1) original tender offer, together with one (1) electronic copy on a flash drive, for the whole of the works, whether as a single tendering entity or as a member of a joint venture,

Clause Reference	Heading	Tender Data
		unless otherwise expressly provided in the Tender Data. - Tenderers shall return all returnable documents listed in T2.1 and T2.2.tothe employer after completing them in their entirety by writing legibly in non-erasable ink. - Tenderers shall sign the original and all copies of the tender offer where required in terms of the tender data. The Employer will hold all authorised 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. - Tender offers shall be submitted in sealed envelopes clearly marked with the tender number and tender description and deposited in the tender box situated at the tender box at Corner Amanda and De Lange Streets, Tshiame, Harrismith 9880 (coordinates are - 28.275784, 29.018561) before the closing date and time. - Tender offers submitted by e-mail, facsimile or other electronic transmission will not be accepted.
C.2.15	Closing Date and Time	- The closing date and time for the submission of tenders is Friday 25th September 2026 at 11:00am. - Late tenders will not be accepted under any circumstances. - Tenderers are solely responsible for ensuring that their tender submissions are deposited in the official MAPSEZ tender box before the closing date and time. The Employer shall not be responsible for tenders delivered to security personnel, reception staff or any other employee and not deposited in the tender box. - Proof of delivery to the MAPSEZ premises shall not constitute proof of submission. Where a bidder uses a courier or third party to deliver the tender, it remains the bidder's responsibility to ensure that the tender is deposited in the official tender box before the closing time. - Tenderers 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.
C.2.16	Tender Offer Validity	Tender offers shall remain valid for a period of 90 calendar days from the closing date.
C.2.20.	Securities, Bonds, Policies etc.	If requested, Tenderers shall 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.

Clause Reference	Heading	Tender Data
C.2.22.	Return of Other Documents	If so, instructed by the employer, Tenderers shall return all retained tender documents within twenty eight (28) days after the expiry of the validity period stated in the tender data.
C.2.23	Certificates	Tenderers shall submit all administrative, technical and statutory returnable documents listed in T2.1 Returnable Documents. • CIPC Disclosure Certificate (Profile), issued or obtained not more than three (3) months before the tender closing date, reflecting the Enterprise Name, Registration Number, Enterprise Status and Active Members/Directors. • Valid SARS Tax Compliance Status (TCS) PIN. • Proof of registration on the National Treasury Central Supplier Database (CSD). • Valid CIDB registration reflecting the required active grading designation. • Certified identity documents of directors, members or trustees, with certification not older than six (6) months. • Any other certificate or statutory evidence expressly identified as mandatory in T2.1.
C.3 THE EMPLOYER'S UNDERTAKINGS		
C.3.1	Respond to Requests from the Tenderer	The Employer shall respond to requests for clarification submitted in writing to the Employer's Agent not later than two (2) days before the closing date.
C.3.2	Issue Addenda	If necessary, the Employer may issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until two (2) 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 then notify all tenderers who collected tender documents. Any addenda issued by the Employer shall form part of the tender documents and shall be binding on tenderers. Where Addenda have been issued which amend the Bills of Quantities, then the Tenderer's printed Bills of Quantities shall take these into account.
C.3.3	Return Late Tender Offers	Tender offers received after the stipulated closing date and time shall not be considered and may be returned unopened to the tenderer.
C.3.4	Opening of Tender Submissions	• Tender submissions shall be opened at the time and place stated in the Tender Data. • At the opening, the Employer will announce the name of each tenderer whose tender offer is opened. • Points for specific goals will not be announced at the tender opening and will be determined during the evaluation process after verification of the applicable claims and supporting documentation submitted by the tenderer.

Clause Reference	Heading	Tender Data
C.3.6.	Non-disclosure	The Employer shall not disclose to tenderers or any other person not officially concerned with the tender evaluation process any information relating to the evaluation and comparison of tender offers, the final evaluation price, or the recommendation for the award of a contract until after the successful tenderer has been notified of the award.
C.3.7	Grounds for Rejection and Disqualification	A tenderer will be disqualified where: - it is established that the tenderer attempted to influence the procurement process or engaged in corrupt, fraudulent, collusive or other prohibited conduct. - the tenderer fails to comply with any of the mandatory requirements stipulated in the tender documents, including those set out below under Responsiveness and any other mandatory requirements specified elsewhere in the tender documents.
C.3.8	Test for Responsiveness	A tender will be eligible for evaluation only if it complies with all applicable mandatory requirements, which are the following: a) CIPC Disclosure Certificate (Profile) - The tenderer must submit a CIPC Disclosure Certificate (Profile), issued or obtained not more than three (3) months before the tender closing date, reflecting the Enterprise Name, Registration Number, Enterprise Status and Active Members/Directors. b) Central Supplier Database (CSD) Profile - The tenderer must submit a valid CSD Registration Report/Profile. The tenderer must also clearly state its CSD MAAA number in the space provided on the first page of the tender document. c) CIDB Registration Profile - Tenderers must meet the applicable CIDB contractor grading requirements for the class and value of work. The estimated grading for this tender is 8GB or higher. d) Valid SARS Tax Compliance Status (TCS) PIN. e) JV / Consortium Requirements - CIDB profiles (individual) reflecting an active CIDB status at the bid closing date and the applicable grading CIDB Registration at the appropriate grading (8GB or higher); - CSD profiles, individual for each member - individual CIPC Full Disclosure Certificates/Profiles for each JV member;

Clause Reference	Heading	Tender Data
		- certified Directors'/Members' IDs for each member (certified within the last 6 months) - and any other tender-required documentation on an individual or consolidated JV basis, as applicable. The following SBD forms must be fully completed and signed, where applicable: - SBD 1 – Invitation to Bid - SBD 4 – Bidder's Disclosure - SBD 6.1 – Preference Points Claim Form in terms of the Preferential Procurement Regulations f) Certified Copies of Directors' / Members' Identification Documents - The tenderer must submit certified copies of the identification documents of all directors/members, certified not more than 6 months prior to the bid closing. Attendance of compulsory virtual clarification meeting on 18th September 2026 at 11:00am Link closes at 11:10am. Bidders must register with Ms M. Sekaja by 09:00am to receive the link. See bid document for details. Failure to comply with any of the above mandatory requirements will render the tender non-responsive and result in disqualification. Tenders will be considered unresponsive and not eligible for evaluation if: • The tender is submitted after the closing date and time. • The tenderer does not meet the applicable CIDB grading requirements. • The tender is not submitted on the official MAPSEZ tender documentation. • The Form of Offer or any other document expressly requiring signature is not duly signed by an authorized person. • The tenderer fails to attend the compulsory clarification meeting. • A returnable schedule expressly identified as mandatory at closing is omitted, incomplete, invalid or expired to the extent that the omission makes the tender materially non-responsive.

Clause Reference	Heading	Tender Data
		The tenderer is restricted from doing business with the State, or fails to make a required conflict-of-interest or in-service-of-the-State declaration.
Clause Reference	Heading	Tender Data
C.3.11	Evaluation of Tender Offers	- Stage 1: Administrative, eligibility and responsiveness review (pass/fail). Compliance will be assessed against the mandatory requirements identified in T2.1 and in this Tender Data in sections C.2.23 and C.3.8. A materially non-responsive tender will not proceed. - Stage 2: Functionality (quality), scored out of 100 points. The minimum qualifying score is 60 out of 100. The project-specific functionality criteria, weightings, scoring methodology and evidence requirements is set out in the functionality evaluation schedule contained under Annexure T1.2A , with the corresponding bidder response schedules in T2.2. - Stage 3: Price and Specific Goals. Only tenders that meet the functionality threshold will proceed. Where the 90/10 preference point system applies, price will count 90 points and Specific Goals 10 points in accordance with the applicable preferential procurement framework and MAPSEZ policy. Evidence submitted for functionality evaluation must be verifiable. MAPSEZ reserves the right to verify any submission by contacting the referenced employer or client directly. Fraudulent or misrepresented submissions will result in immediate disqualification and may result in blacklisting. Tenderers must submit all supporting documentation required to claim functionality points, including, where applicable, certificates, curricula vitae, reference letters, financial statements, plans and other prescribed evidence. JV/Consortium bidders must, where applicable, submit evidence separately for each member and consolidated evidence where the requirement relates to the JV/Consortium as a whole. All supporting documents must be clearly labelled and cross-referenced to the applicable functionality criterion. Failure to complete the schedules or provide the required supporting documentation may result in a score of zero (0) being awarded for the relevant functionality criterion. Fraudulent or materially misrepresented information will result in disqualification and may lead to further action in accordance with applicable legislation and MAPSEZ policy.
C.3.13	Acceptance of Tender Offer	Tender offers will only be accepted if the tenderer complies with the eligibility criteria and adheres to all mandatory requirements.

Annexure T1.2A: FUNCTIONALITY CRITERIA

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
1	RELEVANT EXPERIENCE	1.1.1 Food-Grade / Agro-Processing Facilities	Evidence of completed construction, refurbishment or upgrading of food-grade, agro-processing, beverage, juice, food-processing or similar. - Examples may include food-processing facilities, supermarkets, commercial kitchens, packhouses, cold-storage facilities, restaurants, shopping centres/malls with food-related works, or similar facilities. - For every point claimed, the bidder must submit the following evidence for the relevant project: 1. Appointment evidence: an appointment letter or contract or similar proof of appointment (<i>must be signed and, where applicable, stamped; must clearly reflect the name of the appointed contractor/tenderer; must identify the project; and must state the contract/project value</i>). 2. Completion evidence: a final or practical completion certificate of the same project.	20	3 or more qualifying completed projects = 20 points 2 qualifying completed projects = 10 points 1 qualifying completed projects = 5 points - No qualifying completed project / insufficient evidence = 0 points

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
			3.Relevant period: the project and supporting evidence must relate to work undertaken and completed between 2015 and 2025. NOTE: Each project claimed will only be considered for scoring where both the appointment evidence and the corresponding completion evidence are submitted and clearly relate to the same project and contractor.		
1	RELEVANT EXPERIENCE	1.1.2 Similar Technical / Process Facilities	• Evidence of completed industrial or process facilities containing significant technical elements comparable to food-processing plants. - Qualifying examples may include pharmaceutical plants, chemical process plants, cold-storage warehouses, clean-room facilities, or other industrial buildings with extensive process services, hygienic construction, controlled or cleanable environments, and/or specialised flooring and finishes. • For every point claimed, the bidder must submit the following evidence for the relevant project: 1.Appointment evidence: an appointment letter or contract or similar proof of appointment (must be signed and, where applicable, stamped; must	10	• 3 or more qualifying completed projects = 10 points • 2 qualifying completed projects = 5 points • No qualifying completed project / insufficient evidence = 0 points

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
			clearly reflect the name of the appointed contractor/tenderer; must identify the project; and must state the contract/project value). 2. Completion evidence: a final or practical completion certificate of the same project. 3. Relevant period: the project and supporting evidence must relate to work undertaken and completed between 2015 and 2025. NOTE: Each project claimed will only be considered for scoring where both the appointment evidence and the corresponding completion evidence are submitted and clearly relate to the same project and contractor.		
1	RELEVANT EXPERIENCE	1.1.3 General Building or Construction elements Experience	- Evidence of completed general building works. - Projects may include commercial buildings and other comparable general building works. - The projects completed must be above R 10m for the whole project provided. For every point claimed, the bidder must submit the following evidence for the relevant project:	15	3 or more elements = 15 points 2 or more elements = 10 points 1 or more elements = 5 points - No element = 0 points

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
			1. Appointment evidence: an appointment letter or contract or similar proof of appointment (must be signed and, where applicable, stamped; must clearly reflect the name of the appointed contractor/tenderer; must identify the project; and must state the contract/project value). 2. Completion evidence: a final or practical completion certificate of the same project. 3. Relevant period: the project and supporting evidence must relate to work undertaken and completed between 2015 and 2025. NOTE: Each project claimed will only be considered for scoring where both the appointment evidence and the corresponding completion evidence are submitted and clearly relate to the same project and contractor.		
2	KEY PERSONNEL	2.1 Site Agent	• CV not exceeding two (2) pages. Only the first two pages will be evaluated. • Certified copy of a relevant qualification: minimum B.Tech or equivalent in Construction Management or a relevant construction field.	12	• Full evidence: two-page CV, certified relevant qualification, required experience and applicable professional registration = 12 points

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
			• Proof of valid professional registration, where applicable, with SACPCMP (e.g. Professional Construction Manager) and/or another recognised statutory/professional body relevant to the qualification and role, including ECSA where applicable. • The CV must demonstrate at least ten (10) years' relevant site-management experience on building/construction projects and clearly state the project name, role performed and period of involvement. • All qualifications and certificates submitted in support of the CV must be certified copies.		• Partial evidence: CV, certified relevant qualification and required experience provided, but applicable registration or other supporting evidence is incomplete/not provided = 6 points • Does not meet the minimum qualification/experience requirements, or no acceptable CV/supporting evidence = 0 points
	KEY PERSONNEL	2.2 Project Manager	• CV not exceeding two (2) pages. Only the first two pages will be evaluated. • Certified copy of a relevant qualification: minimum B.Eng or B.Tech in Civil/Structural Engineering, or an equivalent relevant qualification. • Proof of valid professional registration, where applicable, with SACPCMP (e.g. Professional Construction Project Manager) and/or ECSA (appropriate professional engineering category), or	10	• Full evidence: two-page CV, certified relevant qualification, required experience and applicable professional registration = 10 points • Partial evidence: CV, certified relevant qualification and required experience provided, but applicable registration or other supporting evidence is incomplete/not provided = 5 points

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
			another recognised statutory/professional body relevant to the role. - The CV must demonstrate at least eight (8) years' relevant project/construction management experience and clearly state the project name, role performed and period of involvement. - All qualifications and certificates submitted in support of the CV must be certified copies.		Does not meet the minimum qualification/experience requirements, or no acceptable CV/supporting evidence = 0 points
2	KEY PERSONNEL	2.3 Construction Health & Safety Officer	- CV not exceeding two (2) pages. Only the first two pages will be evaluated. - Certified copy of SAMTRAC or an equivalent recognised construction health and safety qualification. - Proof of valid SACPCMP registration as a Construction Health and Safety Officer. - The CV must demonstrate at least five (5) years' relevant construction health and safety experience and clearly state the project name, role performed and period of involvement. - All qualifications and certificates submitted in support of the CV must be certified copies.	8	- Full evidence: two-page CV, certified relevant H&S qualification, required experience and valid SACPCMP registration = 8 points - Partial evidence: CV, certified relevant H&S qualification and required experience provided, but professional registration or other supporting evidence is incomplete/not provided = 4 points - Does not meet the minimum qualification/experience requirements, or no acceptable CV/supporting evidence = 0 points

No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution																																										
3	FINANCIAL CAPACITY	3.1 Financial Resources / Capacity	- Verifiable evidence demonstrating the bidder's ability to finance and sustain the works. Acceptable evidence includes: - Audited financial statements for the last two financial years, confirming annual turnover of at least R30million in each year. - Banker's Letter of Available Credit confirming available credit / overdraft facility. Not older than 3 months. - Latest management accounts if most recent audit is older than 12 months.	15																																											
		<table><tr><th>Component</th><th>Threshold</th><th>Points</th></tr><tr><td colspan="3">Annual Turnover — 8 points</td></tr><tr><td>Turnover</td><td>R60m+ per annum (3-year average)</td><td>8</td></tr><tr><td>Turnover</td><td>R40m to R59.9m per annum (3-year average)</td><td>5</td></tr><tr><td>Turnover</td><td>R30m to R39.9m per annum (3-year average)</td><td>3</td></tr><tr><td>Turnover</td><td>Below R30m per annum</td><td>0</td></tr><tr><td colspan="3">Banker's Letter — 4 points</td></tr><tr><td>Credit facility</td><td>R8,000,000 or above available</td><td>4</td></tr><tr><td>Credit facility</td><td>R4,000,000 to R7,999,999 available</td><td>2</td></tr><tr><td>Credit facility</td><td>Below R4,000,000 or no letter submitted</td><td>0</td></tr><tr><td colspan="3">Current Ratio — 3 points</td></tr><tr><td>Current ratio</td><td>1.5 or above (from most recent audited AFS)</td><td>3</td></tr><tr><td>Current ratio</td><td>Below 1.5 or not determinable from AFS</td><td>0</td></tr><tr><td>TOTAL</td><td>Maximum 15 points out of 100 for Criterion 3</td><td>15</td></tr></table>				Component	Threshold	Points	Annual Turnover — 8 points			Turnover	R60m+ per annum (3-year average)	8	Turnover	R40m to R59.9m per annum (3-year average)	5	Turnover	R30m to R39.9m per annum (3-year average)	3	Turnover	Below R30m per annum	0	Banker's Letter — 4 points			Credit facility	R8,000,000 or above available	4	Credit facility	R4,000,000 to R7,999,999 available	2	Credit facility	Below R4,000,000 or no letter submitted	0	Current Ratio — 3 points			Current ratio	1.5 or above (from most recent audited AFS)	3	Current ratio	Below 1.5 or not determinable from AFS	0	TOTAL	Maximum 15 points out of 100 for Criterion 3	15
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No.	Criterion	Sub-Criterion	Evidence Required	Weight	Points Distribution
4	LOCAL ECONOMIC DEVELOPMENT PLAN	4. Local Economic Development Plan Submit a brief, project-specific Local Economic Development Plan indicating: • how local labour will be sourced and utilised; • how local subcontractors, SMMEs and service providers will be utilised; • proposed procurement from local hardware stores and suppliers; and • skills development, training and/or skills transfer. The Plan itself will serve as bid-stage evidence. Named SMMEs, letters of intent, beneficiary lists and detailed training schedules are not required at bid stage.		10	Harrismith & immediate surrounding townships/communities – up to 10 points • 2points geographic focus • 2 points labour sourcing • 2 points labour utilisation • 2 points local subcontractors/SMMEs/service providers • 2 points local hardware stores/suppliers Greater Maluti-a-Phofung – up to 8 points • 2 points geographic focus • 1.5 points labour sourcing • 1.5 points labour utilisation • 1.5 points local subcontractors/SMMEs/service providers • 1.5 points local hardware stores/suppliers Thabo Mofutsanyana District – up to 6 points • 2 points geographic focus • 1 points labour sourcing • 1 points labour utilisation • 1 points local subcontractors/SMMEs/service providers

					• 1 point local hardware stores/suppliers • Other Free State areas – up to 3points • 1 point geographic focus • 0.5 point labour sourcing • 0.5 point labour utilisation • 0.5 point local subcontractors/SMMes/service providers • 0.5 point local hardware stores/suppliers • No acceptable Plan / no meaningful local commitment – 0 points. • Only the highest applicable geographic band will be scored; scores are not cumulative.
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Part T2: Returnable documents

T2.1 - List of Returnable Documents

MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE	
TENDER NO:	MAPSEZ002/2026 (T)
TENDER DESCRIPTION:	CONSTRUCTION OF AN APPLE JUICE PLANT STUCTURE INCLUDING ALL RELATED EXTERNAL WORKS AND SERVICES AT THE MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE IN TSHIAME, HARRISMITH SOUTH AFRICA
T2.1	LIST OF RETURNABLE DOCUMENTS
The tenderer must complete the following returnable documents:	
A. List of Returnable Documents required (Mandatory)	
Returnable Document	Submitted (✓)
1. Annexure A: Record of addenda to tender documents	
2. Annexure B: Proposed amendments and qualifications	
3. Annexure C: Status of Concern Submitting Tender	
4. Annexure D: Compulsory Declaration	
5. Annexure E: Duly Signed and Completed Invitation to Tender (SBD 1)	
6. Annexure F: Bidders Declaration (SBD 4)	
7. Annexure G: Preferencing schedule: Development Goals (SBD 6.1.)	
B. Additional required Documentation	
Returnable Document	Submitted (✓)
1. Schedule of Proposed Subcontractors (Local Sub-Contractors)	
2. Schedule of Plant and Equipment	
3. Schedule of the Tenderer's Experience (Particulars of Tenderers Projects)	
4. Functionality Criteria Schedules (Criterion 1, Criterion 2,	
5. Certificate of Resolution of Board of Directors.	
6. Certificate of Resolution of Board of Directors to enter into a Consortia or Joint Venture.	
7. Certificate of Special Resolution of Consortia or Joint Venture	

8.	Proposal on achieving the target local labour / suppliers / subcontractors spend	
C. Administrative Compliance Documentation		
	Returnable Document	Submitted (✓)
1.	CIPC Disclosure Certificate (Profile), issued or obtained not more than three (3) months before the tender closing date, reflecting the Enterprise Name, Registration Number, Enterprise Status and Active Members/Directors.	
2.	CIDB registration certificate reflecting an active Contractor Grading Designation of 8GB or higher	
3.	Valid SARS Tax Compliance Status (TCS) PIN	
4.	Certified copy of VAT Registration Certificate (if VAT number not reflected on the TCS)	
5.	Valid proof of registration on the National Treasury Central Supplier Database (CSD); separate registration for each JV / consortium / subcontractor party	
6.	Certified ID copies of all directors / members / trustees (not older than 6 months)	
7.	Proof of registration with statutory bodies as applicable (e.g. COIDA letter of good standing)	
D. Contract Documentation		
	Returnable Document	Submitted (✓)
1.	C1.1 Form of Offer and Acceptance (offer portion signed by the tenderer)	
2.	C2 Pricing Data / Bills of Quantities (fully priced).	

Part T2: Returnable documents

T2.2 - Returnable Schedules

Annexure A: Record of Addenda

We confirm that the following communications received from the Employer before the submission of this quotation offer, amending the quotation documents, have been considered in this quotation offer:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
Signed		Date
Name		Position
Tenderer Name:		

Annexure B: Proposed amendments and qualifications

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

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

Page	Clause or item	Proposal

Signed.....

Date.....

Name.....

Position.....

Bidder

ANNEXURE C: STATUS OF CONCERN SUBMITTING TENDER

Please indicate the status of the concern submitting this tender by ticking the appropriate box and attaching the supporting documentation listed below.

☐ **COMPANY (PTY) LTD / LIMITED COMPANY**

Attach:

- Certified copy of the Company's Registration Certificate issued by CIPC.
- Resolution of the Board of Directors authorising the signatory to submit the tender and sign all contractual documents.

☐ **CLOSE CORPORATION (CC)**

Attach:

- Certified copy of the Founding Statement (CK Document).
- Resolution authorising the signatory to submit the tender and sign all contractual documents.

☐ **PARTNERSHIP**

Attach:

- Partnership Agreement.
- Full names and identity numbers of all partners.
- Resolution signed by all partners authorising the signatory to submit the tender.

☐ **SOLE PROPRIETOR / ONE-MAN CONCERN**

Attach:

- Certified copy of the Owner's Identity Document.
- Proof of business registration, where applicable.
- VAT Registration Certificate (if registered for VAT).

☐ **TRUST**

Attach:

- Copy of the Trust Deed.
- Letters of Authority issued by the Master of the High Court.
- Resolution authorising the signatory to submit the tender.

☐ **JOINT VENTURE / CONSORTIUM⁴**

Attach:

- Signed Joint Venture / Consortium Agreement.
- Company Registration Documents or Founding Documents of each Joint Venture member.
- Resolutions of each Joint Venture member authorising participation in the Joint Venture.
- Resolution appointing the Lead Partner and authorised signatory.
- CIDB Registration details of each Joint Venture member (where applicable).
- CSD Registration details of each Joint Venture member.

VAT REGISTRATION

If registered for Value Added Tax (VAT), attach a certified copy of the VAT Registration Certificate and provide the VAT Registration Number below:

VAT Registration Number: _____

DECLARATION

I/We hereby declare that the information furnished above is true and correct and that all supporting documentation relevant to the status of the concern submitting this tender has been attached.

Tenderer's Name: _____

Authorised Signatory: _____

Capacity: _____

Signature: _____

Date: _____

Annexure D: Compulsory Declaration		
The following particulars must be furnished. In the case of a joint venture, separate declarations in respect of each partner must be completed and submitted.		
Section 1: Enterprise details		
Name of enterprise		
Contact person		
Email		
Telephone		
Cell		
Fax		
Physical address		
Postal address		
Section 2: Particulars of companies and close corporations		
Company / Closed Corporation registration number		
Section 3: SARS information		
Tax reference number		
VAT registration number	(state Not Registered if not registered for VAT)	
Section 4: CIDB registration number		
CIDB Registration number (if applicable)		
Section 5: Particulars of principals		
principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporations Act, 1984, (Act No. 69 of 1984).		
Full name of principal	Identity number	Personal tax reference number

Attach separate page if necessary																												
Section 6: Record in the service of the state Indicate, by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following: ☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Provinces ☐ a member of the board of directors of any Municipal entity ☐ an official of any municipality or municipal Entity ☐ an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament of a provincial legislature If any of the above boxes are marked, disclose the following: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 30%;">Name of principal</th> <th rowspan="2" style="width: 40%;">Name of institution, public office, board or organ of state and position held</th> <th colspan="2" style="width: 30%;">Status of service (tick appropriate column)</th> </tr> <tr> <th style="width: 15%;">Current</th> <th style="width: 15%;">Within last 12 months</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>			Name of principal	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)		Current	Within last 12 months																				
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		Current	Within last 12 months																									
Attach separate page if necessary																												
Section 7: Record of family member in the service of the state family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption Indicate, by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months in the service of any of the following: ☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Provinces ☐ a member of the board of directors of any Municipal entity ☐ an official of any municipality or municipal Entity ☐ an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament of a provincial legislature																												

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

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

Attach separate page if necessary

Section 8: Record of termination of previous contracts with an organ of state

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

☐ Yes ☐ No (tick appropriate box)

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

Section 9: Declaration

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

- i) neither the name of the tendering entity, nor any of its principals, appears on:
 - a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004); or
 - b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)
- ii) the tendering entity or any of its principals has not been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa) within the last five years;
- iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);
- iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers;
- v) the tendering entity has not engaged in any prohibited restrictive horizontal practices, including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract, etc.) or intention to not win a tender;
- vi) the tendering entity has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- vii) neither the tenderer nor any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity, and are not in arrears for more than three months;
- viii) SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and, when called upon to do so, obtain the written consent of any subcontractors who are

subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by National Treasury, for SARS to do likewise.

Signed.....

Date.....

Name.....

Position.....

Enterprise name.....

NOTE 1: The Standard Conditions of Tender contained in SANS 10845-3 prohibits anticompetitive practices (clause 3.1) and requires that tenderers avoid conflicts of interest, only submit a tender offer if the tenderer or any of his principals is not under any restriction to do business with the Employer (4.1.1) and submit only one tender either as a single tendering entity or as a member in a joint venture (clause 4.13.1). Clause 5.7 also empowers the Employer to disqualify any tenderer who engages in fraudulent and corrupt practice. Clause 3.1 also requires tenderers to comply with all legal obligations.

NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. municipalities and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in municipalities, from conducting business with the State or to be a director of a public or private company conducting business with the State. The offence for doing so is a fine or imprisonment for a period not exceeding five years, or both. It is also a serious misconduct which may result in the termination of employment by the employer.

NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that municipalities and municipal entities should not award a contract to a person who is in the service of the State, a director, manager or principal shareholder in the service of the State or who has been in the service of the State in the previous twelve months.

NOTE 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the annual statements particulars of any award made to a close family member in the service of the State.

NOTE 5: Corrupt activities which give rise to an offence in terms of the Prevention and Combating of Corrupt Activities Act of 2004, include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other moneys stipulated or otherwise provided for in any contract, and the manipulating by any means of the award of a tender.

ANNEXURE E: SBD1					
YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE					
QUOTE NO:	MAPSEZ 002/2026(T)	CLOSING DATE:	25 th September 2026	CLOSING TIME:	11:00
DESCRIPTION	REQUEST FOR TENDERS FOR THE APPOINTMENT OF APPROPRIATELY SKILLED CONTRACTORS FOR THE CONSTRUCTION OF AN APPLE JUICE PLANT TOP STRUCTURE INCL ALL RELATED EXTERNAL WORKS AND SERVICES AT THE MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE IN TSHIAME, HARRISMITH SOUTH AFRICA				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
MAPSEZ Head Office Corner Amanda and De Lange Streets Tshiame Harrismith 9880			Via email at to: thapelom@mapsez.co.za		
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON		CONTACT PERSON			
TELEPHONE NUMBER		TELEPHONE NUMBER			
FACSIMILE NUMBER		FACSIMILE NUMBER			
E-MAIL ADDRESS		E-MAIL ADDRESS			
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN: _____	OR	CENTRAL SUPPLIER DATABASE No: MAAA_____		
PRICE IN RANDS	R				
PRICE IN WORDS	only				

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?	☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS			
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO IF THE ANSWER IS “NO” TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.			

ANNEXURE F: SBD 4: BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

- 1.1 Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa, 1996 (Constitution), and further expressed in the various applicable legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.
- 1.2 If a person is 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. DECLARATION ON EMPLOYMENT BY ORGAN OF STATE

- 2.1 Is the bidder, or any of the directors / trustees / shareholders / members / partners of the bidder employed by an organ of state, as defined in section 239 of the Constitution? **YES/NO**
- 2.2 If YES, furnish particulars of the names, individual identity numbers, in the table below:

Full Name	Identity Number	Name of organ of state

- 2.3 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.3.1 If so, furnish particulars:

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

2.4 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

2.4.1 If so, indicate all companies registered in the CSD in the table below:

Supplier registration number (MAAA)	Status (active/inactive/deleted)

Failure to disclose all CSD-registered active companies linked to all Directors will lead to disqualification.

3 GENERAL DECLARATION

I,, the undersigned, 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 to be false.

3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor.

3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

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

3.6 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to

provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

- 3.7 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act, 1998 (Act No. 89 of 1998) and or may be referred to law enforcement agencies for criminal investigation and or may be restricted from conducting business with the state for a period not exceeding 10 years in terms of the Prevention and Combating of Corrupt Activities Act, 2004 (Act No. 12 of 2004) or any other applicable legislation.

I CERTIFY THAT THE ABOVE IS CORRECT.

I ACCEPT THAT THE PROCURING INSTITUTION MAY REJECT THE BID OR TAKE APPROPRIATE ACTION
AGAINST ME IF THIS DECLARATION IS FALSE.

.....

Signature

.....

Date

.....

Designation

.....

Name of bidder

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 The applicable preference point system for this quotation is the **90/10** preference point system.

1.3 Points for this quotation (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals

1.4 The maximum points for this tender are allocated as follows:

	POINTS
Price	90
Specific goals	10
Total Points for Price and Specific Goals	100

1.2 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.

1.3 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated 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 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20	or	90/10
$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$	or	$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$

Where

P_s = Points scored for price of tender under consideration
 P_t = Price of tender under consideration
 P_{min} = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20	or	90/10
$P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$	or	$P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$

Where

P_s = Points scored for price of tender under consideration
 P_t = Price of tender under consideration
 P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

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

The specific goals allocated points in terms of this tender	Required Proof	No. of points allocated (90/10 system)	No. of points claimed (90/10 system)	Proof provided
Enterprise located in the Free State Province OR within the Thabo Mofutsanyana District OR Maluti-A-Phofung jurisdiction.	Municipal Accounts (not older than 3 months); Lease Agreement; Permission to occupy land signed/authorized by the relevant traditional authority; Affidavit confirming business address signed by Commissioner of Oath; Title deed	4		
Enterprise owned by historically disadvantaged person(s): <i>Black African (one; more or all directors)</i>	Directors IDs; Company Profile; CIPC Registration Documents	2		
Youth owned enterprises (one; more or all directors)	Directors IDs; Company Profile; CIPC Registration Documents	4		

DECLARATION WITH REGARD TO COMPANY/FIRM

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

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;

- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

Schedule of Proposed Subcontractors (Local Sub-Contractors)

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the Names of proposed Subcontractors in accordance with requirements in the contract for such appointments.

If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

No	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience Of the Subcontractor.	Indicate the value of work to be sub-contracted as % of Total Value of the contract	BEE Contributor Level of the subcontractor

Signed _____

Date _____

Name _____

Position _____

Tenderer _____

T2.2t: TAX CLEARANCE REQUIREMENTS

IT IS A CONDITION OF BIDDING THAT -

1. The taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with the Receiver of Revenue to meet his / her tax obligations.
2. In bids where Consortia / Joint Ventures / Sub-contractors are involved each party must submit a separate Tax Clearance Certificate. Copies of the Application for Tax
3. Clearance Certificates are available at any Receiver's Office.

SCHEDULE OF PLANT AND EQUIPMENT

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

(a) Details of major equipment that is owned by and immediately available for this contract.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

(b) Details of major equipment that will be hired or acquired for this contract if my / our tender is acceptable.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed.....

Date.....

Name.....

Position.....

Tenderer.....

TESTIMONIALS/FUNCTIONALITY EVIDENCE FORMS

Bidders must complete the following tables and submit supporting evidence for the claiming of functionality points. Failure to provide sufficient evidence may result in a score of zero (0) for the relevant criterion.

Relevant Company Experience List (Criterion 1)

List qualifying projects completed in the last 10 years. Attach signed completion certificates, Principal Agent sign-off letters, or letters of award (dated 2015 or later).

RELEVANT PREVIOUS EXPERIENCE (PAST PERFORMANCE)

PROJECT NAME	EMPLOYER / CLIENT NAME	CLIENT REFERENCE & CONTACT DETAILS	ORDER / APPOINTMENT LETTER DATE	CONTRACT VALUE & PERIOD	COMPLETION DATE	TYPE OF ACTIVITIES UNDERTAKEN	EVIDENCE ANNEXURE
				R			
				R			
				R			
				R			
				R			
				R			

KEY PERSONNEL AND TEAM CONTINUITY (CRITERION 2)	
Key Personnel and Team Continuity (Criterion 2) Complete one block per key person and attach the CV, qualifications and professional registration. Each named person must also personally sign the availability declaration below.	
Site Agent (12 pts)	
Full name	
Qualification(s)	
Professional registration & no.	
Years of relevant experience	
Minimum requirement	B.Tech or equivalent in Construction Management or relevant field; registration with a recognised professional body; ≥10 years site management experience on similar projects.
Qualifying project(s) from Company List worked on (project, role, period)	
CV annexure ref.	
Project Manager / Contracts Manager (10 pts)	
Full name	
Qualification(s)	
Professional registration & no.	
Years of relevant experience	
Minimum requirement	B.Eng or B.Tech Civil/Structural; ≥8 years' experience.
Qualifying project(s) from Company List1 worked on (project, role, period)	
CV annexure ref.	
Construction Health & Safety Officer (8 pts)	
Full name	
Qualification(s)	
Professional registration & no.	
Years of relevant experience	
Minimum requirement	SACPCMP registration as Construction H&S Officer; SAMTRAC or equivalent; ≥5 years site H&S experience.

Qualifying project(s) from Company List 1 worked on (project, role, period)	
CV annexure ref.	
Team Continuity Declaration The bidder must select ONE option and have it signed by a director or authorised signatory: - Option A: The key personnel named above were employed on the qualifying projects listed in Schedule 1, as evidenced in the CVs submitted. - Option B: The proposed team is newly assembled. Each member's individual qualifying experience is set out in their CV and does not rely on the company's project portfolio. Option selected (A or B): _____	

DIRECTOR / AUTHORISED SIGNATORY	SIGNATURE	DATE
Name (print):		
Each key person must personally sign below to confirm they are nominated for this project, are available from the Date of Commencement until Practical Completion, are not committed elsewhere in a way that prevents availability and understand their commitment forms part of the contract.		
SITE AGENT	SIGNATURE	DATE
Name (print):		
PROJECT / CONTRACTS MANAGER	SIGNATURE	DATE
Name (print):		
CONSTRUCTION HEALTH & SAFETY OFFICER	SIGNATURE	DATE
Name (print):		
Financial Capacity (Criterion 3) Complete the table and attach audited financial statements for the last two financial years; Banker's Letter of available credit (not older than 3 months); and latest management accounts if the most recent audit is older than 12 months.		
ITEM	BIDDER'S FIGURE	EVIDENCE ATTACHED YES/NO
Annual turnover – most recent year (R)		
Annual turnover – prior year (R)		
Available credit / overdraft facility (R)		
Date of Banker's Letter		
Current ratio (latest audited AFS)		

Local Economic Development and MAPSEZ Alignment (Criterion 4)

Attach a Local Labour and Procurement Plan demonstrating a credible route to 30% local spend from Free State suppliers, subcontractors and labour. Summarise named local firms by trade below; confirm the CLO appointment and the unskilled labour recruitment plan within 20km of Harrismith.

TRADE / PACKAGE	NAMED FREE STATE COMPANY	PROJECTED LOCAL SPEND (R)

CLO appointment confirmed (Y/N): _____

Unskilled labour recruitment plan within 20km of Harrismith attached (Y/N): _____

Local Labour and Procurement Plan annexure ref.: _____

Bidder Certification

I/we certify that the information in these returnable schedules is true and correct, that all evidence submitted is verifiable, and that MAPSEZ may verify any submission by contacting the referenced employer or client directly. I/we understand that fraudulent or misrepresented submissions will result in immediate disqualification and may result in blacklisting.

AUTHORISED SIGNATORY (PRINT)	SIGNATURE	DATE
CAPACITY		
NAME OF BIDDER / FIRM		

RESOLUTION OF BOARD OF DIRECTORS

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of: _____

(legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ *(place)*

on _____ *(date)*

RESOLVED that:

1. The Enterprise submits a Quotation to the Maluti-A-Phofung Special Economic Zone, Free State Province in respect of the following project _____

(Project description as per Quotation Document)

Quotation Number: _____ *(Quotation Number as per Quotation Document)*

2. *Mr/Mrs/Ms: _____ in *his/her Capacity as _____
and who will sign as follows: _____ be, and is hereby, authorised to sign the Quote, and any and all other documents and/or correspondence in connection with and relating to the Quote, as well as to sign any Contract, and any and all documentation, resulting from the award of the Quotation to the Enterprise mentioned above.

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			

Note:

1. * Delete which is not applicable.

3. **NB.** This resolution must be signed by all the Directors / Members / Partners of the Quoting Enterprise.

ENTERPRISE STAMP

RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

held at: _____ on: _____
(date)

RESOLVED that: The Enterprise submits a Quote, in consortium/joint venture with the following Enterprises:

(List all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the consortium/joint venture)
to the Maluti-A-Phofung Special Economic Zone in respect of the following project:

(Project description as per Quotation Document)

Quotation Number: _____ *(Quotation Number as per Quotation Document)*

2 *Mr/Mrs/Ms : _____

in *his/her Capacity as: _____ *(Position in the Enterprise)*

and who will sign as follows: _____

be, and is hereby, authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the project described under item 1 above.

3 The Enterprise accept joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the MAPSEZ in respect of the project described under item 1 above.

4 The Enterprise choose as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and the Contract with the MAPSEZ in respect of the project under item 1 above:

Physical address: _____

Code : _____

Physical address: _____

Code: _____

Telephone No.: _____

Code: _____

Facsimile No.: _____

Code: _____

Attach additional pages if more space is required.

THE CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA

C1.1 - Form of Offer and Acceptance

C1.1 Form of Offer and Acceptance	
Offer	
The employer, identified in the acceptance signature block, has solicited offers to enter a contract for the: Request for quotations for the appointment of a contractor to carry out construction of an apple juice plant top structure incl all related external works and services at the Maluti-A-Phofung Special Economic Zone The bidder, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender. By the representative of the bidder, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.	
THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS: Rand (in words); R. (in figures)	
This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data. Signature Name Capacity	
for the Bidder: (Name and address of organization) Name and signature of witness Date:	

Acceptance

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1: Agreements and contract data, (which includes this agreement)
- Part C2: Pricing data
- Part C3: Scope of work.
- Part C4: Site information

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as 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.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature Date

Name(s) **M. MOSOLA**

Capacity **CHIEF EXECUTIVE OFFICER**

for the Employer MALUTI-A-PHOFUNG SPECIAL ECONOMIC ZONE

Name and

Signature of witness

Date

CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA

C1.2 – Contract Data

A PROJECT INFORMATION

Clause	Item	Project-specific data
A 1.0 [1.1]	Works	Project name: TOP STRUCTURE CONSTRUCTION-APPLE JUICE PLANT Reference number: MAPSEZ002/2026 (T) Works description: Construction of top structure for a new apple juice concentrate facility including all related external works, services, etc., per the architect and structural drawings accompanying this document at the Maluti-A-Phofung Special Economic Zone in Tshiame, Harrismith.
A 2.0 [1.1]	Site	Erf / stand number: Erf 108, Industriqwa Township / Suburb: Harrismith Site address: Maluti-A-Phofung Special Economic Zone, Tshiame, Harrismith. Local authority: Maluti-A-Phofung
A 3.0 [1.1]	Employer	Official name of Organ of State / Public Sector Body: Business registration number: VAT/GST Number: Country: South Africa

Clause	Item	Project-specific data	
		Employer's representative:	Dr M. Mosola
		E-mail:	Telephone:
		Physical address:	Cnr de Lange & Amanda Streets, Harrismith, 9880
		Postal address:	
A 4.0 [1.1]	Principal agent	Name:	MED Projects
		Legal entity:	Private Company
		Business Registration No: |	2016/293973/07
		VAT:	4600274973
		Contact person:	Wiekus Venter
		Tel:	021 868 1652
		E-mail:	wiekus@med-automation.com
		Country:	South Africa
		Physical:	30 Donkervliet Street, Paarl, 7646 | Postal: PO Box 3014, Paarl
A 5.0 [1.1; 6.2]	Agent Discipline: Quantity Surveyor	Name:	Route62QS (Pty) Ltd
		Legal entity:	Private Company
		Business Registration No:	2020/584021/07
		VAT:	4630297633
		Contact: Reynard Smith	
		Tel:	074 418 6822
		E-mail:	reynard@r62qs.co.za
		Physical:	46 Joubert Street, Montagu, 6720
		Postal:	PO Box 188, Montagu
A 6.0 [1.1; 6.2]	Agent	Nolte Engineers	

Clause	Item	Project-specific data
	Discipline: Structural & Civil Engineer	
A 7.0 [1.1; 6.2]	Agent Discipline: Architect	Kube Architecture CC
A 8.0 [1.1; 6.2]	Agent Discipline: Electrical Engineer	DSV Consulting Engineers (Pty) Ltd
A 9.0 [1.1; 6.2]	Agent Discipline: Mechanical & Fire Engineer	DSV Consulting Engineers (Pty) Ltd
A 10.0 [1.1; 6.2]	Agent Discipline: Health & Safety Consultant	To be appointed
B CONTRACT INFORMATION		
Clause	Item	Project-specific data
B 1.0 [1.1]	Definitions Bills of quantities: System/Method of measurement	Standard System of Measuring Building Work, Seventh Edition (2015), published by the ASAQs, unless otherwise described
B 2.0 [2.0]	Law applicable to the works (state country)	Republic of South Africa
B 3.0 [3.0]	Currency applicable to this agreement [3.2]	South African Rand (ZAR)
B 4.0 [5.0]	Documents	Original signed agreement held by: Employer Number of copies of construction information issued to contractor at no cost [5.6]: Documents comprising the agreement:

Clause	Item	Project-specific data
		- JBCC PBA Ed 6.2 May 2018 (pp 1–30); - JBCC PBA Contract Data for Organs of State Ed 6.2 May 2018; (pp 1–14) - JBCC General Preliminaries Ed 6.2 May 2018 (pp 1–7); - ASAQS General Preambles for Trades (2017); - Priced Bills of Quantities; - this Procurement Document - Contract drawings: per the Drawings & Specifications issued herewith (list number / revision / date) Zero (0) hard copies All drawings and documentation for this project will be issued electronically, and the contractor shall be deemed to have received such drawings on the date the drawings are emailed and/or loaded onto the project Dropbox folder. The contractor will be responsible for printing of all drawings and documents required, including those for all domestic and selected subcontractors. It is therefore recommended that a dedicated plotter capable of printing A0 drawings are on site for the duration of the contract.
B 5.0 [6.0]	Employer's agents	Authority delegated to issue contract instructions [6.2]: The Principal Agent
		Principal agent's / agents' non-professional interest in the works [6.3]: Not applicable
B 6.0 [10.0]	Insurances	Insurances by Employer YES [10.1]: Contract works insurance (CWI) (including materials and goods, temporary works) Contract sum + 20% New works [10.1.1] (contract sum or amount):

Clause	Item	Project-specific data	
		Escalation, professional fees & reinstatement:	professional fees at 15% of insured value
		Supplementary insurance [10.1.2; 10.2]:	contract sum + 20%
		Public liability insurance [10.1.3]:	R20,000,000 (each & every claim)
		Removal of lateral support [10.1.4]:	Not applicable
		Other insurances [10.1.5]:	none required
		Deductibles (by Contractor):	Works ZAR20,000; Surrounding property ZAR20,000; Public liability ZAR10,000; Supplementary ZAR20,000; Lateral support ZAR20,000
		Insurances by Contractor:	Not applicable
B 7.0 [12.1]	Obligations of the employer	Existing premises in use and occupied [12.1.2]:	NO
		Restriction of working hours [12.1.2]:	NO
		Natural features & known services preserved by contractor [12.1.3]:	YES
		Restrictions to site / areas contractor may not occupy [12.1.4]:	NO
		Supply of free issue [12.1.10]:	Not applicable
B 8.0 [14.0]	Nominated subcontractors	Refer to Subcontract Amounts of the Bills of Quantities (specialisations per BQQ)	
B 9.0 [15.0]	Selected subcontractors	Refer to Subcontract Amounts of the Bills of Quantities	
B 10.0 [16.0]	Direct contractors	Juice Plant equipment; Boilers, piping, etc.; Refrigeration; Gas/Compressed Air	
B 11.0 [20.1]	Description of	Section 1: Juice Plant structure, floors, temporary water &	

Clause	Item	Project-specific data
	sections	electrical supply, etc., sufficient for commencement of specialist plant & equipment Section 2 (Remainder of the works): Balance of the work
B 12.0 [12.1.5; 19.0; 20.0; 24.0]	Possession of site, practical completion & penalty	Practical completion of the works as a whole: Not applicable Intended date of possession of the site: 12 October 2026 Period for inspection by principal agent [19.3]: to be agreed with successful contractor Sectional completion dates: Section 1: 1 March 2027; Section 2: 11 April 2027 Penalty per calendar day (excl. tax): Section 1: R25,000.00; Section 2: R20,000.00 Criteria to achieve practical/sectional completion not covered in the definition. The earlier occupation/access by client direct contractors does not automatically entitle the contractor to sectional completion; work must be complete to a state allowing juice-plant equipment installation to continue in a dust-free environment per the Principal Agent's programme
B 13.0 [21.0]	Defects liability period: extended period [21.13]	Standard defects liability period applies unless extended
B 14.0 [25.0]	Payment	Date of month for issue of regular payment certificates [25.2]: to be agreed with Contractor Contract price adjustment / cost fluctuations [25.3.4; 26.9.5]: NO — fixed-price contract; value will NOT be adjusted for escalation / CPAP Employer shall pay the contractor within [25.10]: 30 calendar days

Clause	Item	Project-specific data																					
B 15.0 [30.0]	Dispute resolution	Adjudication nominating body [30.6.1; 30.10]: Association of Arbitrators Applicable rules for adjudication [30.6.2]: as advised by the Association of Arbitrators Arbitration [30.7.4; 30.10] name of nominating body: Association of Arbitrators Applicable rules for arbitration [30.7.5]: as advised by the Association of Arbitrators																					
B 16.0	JBCC General Preliminaries — selections	<table><tr><td>Provisional bills of quantities [P2.2]:</td><td>YES</td></tr><tr><td>Availability of construction information complete? [P2.3]: compensation for loss of profit</td><td>NO — drawings serve as a guide only for tendering; budgetary allowances measured & valued per clause 26 PBA, deducted in whole/part if not required without</td></tr><tr><td>Previous work — dimensional accuracy [P3.1]:</td><td>no previous work</td></tr><tr><td>Previous work — defects [P3.2]:</td><td>no previous work</td></tr><tr><td>Inspection of adjoining properties [P3.3]:</td><td>applies to adjoining roads, services, buildings & improvements; check levels & photographs required; contractor responsible for present condition & liable for repair/replacement of construction damage</td></tr><tr><td>Handover of site in stages [P4.1]:</td><td>Not applicable</td></tr><tr><td>Enclosure of the works [P4.2]:</td><td>Not applicable</td></tr><tr><td>Geotechnical & other investigations [P4.3]:</td><td>Yes, included in tender document</td></tr><tr><td>Existing premises occupied [P4.5]:</td><td>Not applicable</td></tr><tr><td>Services — known [P4.6]:</td><td>contractor to inform Principal Agent</td></tr></table>		Provisional bills of quantities [P2.2]:	YES	Availability of construction information complete? [P2.3]: compensation for loss of profit	NO — drawings serve as a guide only for tendering; budgetary allowances measured & valued per clause 26 PBA, deducted in whole/part if not required without	Previous work — dimensional accuracy [P3.1]:	no previous work	Previous work — defects [P3.2]:	no previous work	Inspection of adjoining properties [P3.3]:	applies to adjoining roads, services, buildings & improvements; check levels & photographs required; contractor responsible for present condition & liable for repair/replacement of construction damage	Handover of site in stages [P4.1]:	Not applicable	Enclosure of the works [P4.2]:	Not applicable	Geotechnical & other investigations [P4.3]:	Yes, included in tender document	Existing premises occupied [P4.5]:	Not applicable	Services — known [P4.6]:	contractor to inform Principal Agent
Provisional bills of quantities [P2.2]:	YES																						
Availability of construction information complete? [P2.3]: compensation for loss of profit	NO — drawings serve as a guide only for tendering; budgetary allowances measured & valued per clause 26 PBA, deducted in whole/part if not required without																						
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Geotechnical & other investigations [P4.3]:	Yes, included in tender document																						
Existing premises occupied [P4.5]:	Not applicable																						
Services — known [P4.6]:	contractor to inform Principal Agent																						

Clause	Item	Project-specific data
		immediately on encountering services Water [P8.1]: By contractor Electricity [P8.2]: By contractor Ablution & welfare facilities [P8.3]: By contractor — for all direct contractors for full project duration Communication facilities [P8.4]: Telephone YES; Email YES Protection of the works [P11.1]: contractor to protect all work not yet certified for practical/sectional completion Protection / isolation of existing & occupied works [P11.2]: YES Disturbance [P11.5]: no specific requirements Environmental disturbance [P11.6]: The appointed contractor shall comply with the approved Construction Environmental Management Plan. The CEMP forms part of the works information.
B 17.0	Changes made to JBCC documentation	Changes detailed under the relevant clauses in this document. Reference may be made to other documents forming part of this agreement.

CONTRACT

PART C2: PRICING DATA

C2.1 – Pricing Instructions/Assumptions

PRICING INSTRUCTIONS

- 1) Bills of Quantities covering broad scope of work is attached. The Contractor is expected to price each item provided, except where instructed otherwise. The rates provided by the bidder will be verified for their reasonableness. The employer reserves the right to adjust the final prices once the tenderer has been found to have complied with other tender conditions.
- 2) The Bills of Quantities have been drawn up in accordance with the "Standard System of Measuring Building Work Seventh Edition (Revised 2015)" published by the South African Association of Quantity Surveyors
- 3) 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 Agreement as well as the contract specific variables are as stated in the Contract Data. Only the heading and clause numbers for which allowance must be made in the Bills of Quantities are recited.
- 4) The ASAQS Preliminaries Revision 1, February 2016 compiled by the Association of South African Quantity Surveyors forms part of the overall Preliminaries Bill of Quantities and the preliminaries specific variables are stated within the Preliminaries Bill of Quantities.
- 5) Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the "General Preambles for Trades 2017".
- 6) Unless otherwise stated, items are measured net in accordance with the drawings and no allowance is made for waste. The tenderer's price or rate shall allow for such waste where deemed necessary.
- 7) The prices and rates to be inserted in the Bills of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- 8) A price or rate is to be entered against each item in the Bills of Quantities whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill.
- 9) Except where rates only are required, insert all amounts to be included in the total tendered price in the "Amount" column and show the corresponding total tendered price.
- 10) The rates and prices offered by the tenderer must be physically written into the pricing schedule or Bills of Quantities of this tender document, completed in full and signed. Failure to do so could disqualify the tender.
- 11) All items in the Pricing Schedule / Bills of Quantities must be priced, subject to the following: a) Where pricing for any item is intentionally included in the rate or Price of another item, this must always be clearly indicated so and cross-referenced to the item in question in the Pricing Schedule / Bills of Quantities. Tenders showing unpriced items without due reference to where the omitted prices are included in other items in the Pricing Schedule / Bills of Quantities, could result in the disqualification of the tender.
- 12) Summarising parts or sections of the Pricing Schedule / Bills of Quantities into single lump sums or rates without providing the breakdown of pricing of items as per the Pricing Schedule / Bills of Quantities is not acceptable and could result in disqualification of the tender.
- 13) Where an item is encountered against which no Price or rate is entered and it can be reasonably attributed to error on the part of the tenderer that item will be treated as covered by other Prices or rates in the Pricing Schedule/Bills of Quantities.
- 14) Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words will govern. **cidb** inform practice notes (#5) on procedures of dealing with errors and discrepancies will apply.

Where there is an error in the line items total resulting from the product of the unit rate, the rate shall govern and the line item total shall be corrected. **cidb** inform practice notes (#5) on procedures of dealing with errors and discrepancies will apply.
- 15) For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit	:	The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of work at which the Tenderer tenders to do the work
Amount	:	The quantity of an item multiplied by the tendered rate of the (same) item
Sum	:	An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

- 16) Excel copies of the tender document will be included with the tender. Should there be any discrepancies in the notes, descriptions, quantities, etc between the PDF bills of quantities issued for tender and any issued excel version thereof, then those in the PDF bills of quantities shall take preference

<u>CONTRACT</u>
<u>PART C2: PRICING DATA</u>
<u>C2.2 – Bills of Quantities</u>

	Page No
SECTION 1 — PRELIMINARIES & GENERAL	
Section A Principal Building Agreement	69
Section B Preliminaries	74
Section C Specific Preliminaries	78
SECTION 2 — BUILDING WORKS	
Bill No 1 Earthworks	85
Bill No 2 Concrete, Formwork and Reinforcement	90
Bill No 3 Masonry	97
Bill No 4 Waterproofing	102
Bill No 5 Roof Coverings	105
Bill No 6 Carpentry and Joinery	109
Bill No 7 Ceilings, Partitions and Access Flooring.....	112
Bill No 8 Floor Coverings	116
Bill No 9 Ironmongery.....	117
Bill No 10 Structural Steelwork	120
Bill No 11 Metalwork	126
Bill No 12 Plastering	132
Bill No 13 Tiling	137
Bill No 14 Plumbing and Drainage	140
Bill No 15 Paintwork	149
Bill No 16 Builder's Work in Connection with Specialist Installations.....	152
SECTION 3 — SITE WORKS	
Bill No 1 External Work (All Trades)	156
Bill No 2 Site Services	164
SECTION 4 — ELECTRICAL, MECHANICAL & FIRE	
Bill No 1 Electrical Work	175
Bill No 2 Mechanical Work	176
SECTION 5 — PROVISIONAL ALLOWANCES	
Bill No 1 Subcontract Amounts	179
Bill No 2 Budgetary Allowances	183
ANNEXURES	
Annexure A Electrical Bills of Quantities	188
Annexure B Mechanical Bills of Quantities	235
Annexure C Fire Bills of Quantities.....	243

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Item No		Quantity	Amount
	SECTION 1 BILL NO 1 PRELIMINARIES ----- BUILDING AGREEMENT AND PRELIMINARIES The JBCC® Principal Building Agreement (May 2018 edition 6.2) prepared by the Joint Building Contracts Committee ® - NPC shall be the applicable building agreement, amended as hereinafter described, together with the associated documentation as prepared by the Joint Building Contracts Committee (JBCC) The JBCC® General Preliminaries (May 2018 edition 6.2) prepared by the Joint Building Contracts Committee ® shall be the applicable building agreement, amended as hereinafter described, together with the associated documentation as prepared by the Joint Building Contracts Committee (JBCC) The Contractor is deemed to have referred to the above-mentioned documents for the full intent and meaning of each clause thereof These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above-mentioned documents Where any item is not relevant to this specific contract, such item is marked N/A, signifying "not applicable" The Bills of Quantities have been drawn up in accordance with the "Standard System of Measuring Building Work Seventh Edition (Revised 2015)" published by The South African Association of Quantity Surveyors The quantities or specifications contained in these bills of quantities are not to be used for the calculation or ordering of materials PREAMBLES FOR TRADES The General Preambles for Trades (2017 edition) as 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 Model Preambles will be entertained		
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
	Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles Where Architect's or Engineer's specifications or drawings (where issued) are in conflict with the General Preambles for Trades 2017 or any Supplementary Preambles, the Architect's or Engineer's specification and drawings, as the case may be, are to take preference. Where the drawings and Architect's or Engineer's specifications are in conflict, the Contractor is to obtain written clarification from the Principal Agent prior to the closing of tenders. The Contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles, drawings and/or specifications PRICING OF PRELIMINARIES Should the Contractor select Option A in terms of clause 26.9.4 in the Contract Data for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided, namely: - F - An amount which shall not be varied (Fixed) - V - An amount which shall be varied in proportion to the contract value as compared with the contract sum (Value) - T - An amount which shall be varied in proportion to the construction period as compared to the initial construction period excluding revisions to the construction period for which the Contractor is not entitled to adjustment of the contract value in terms of the agreement (Time)		
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
	SECTION A: PRINCIPAL BUILDING AGREEMENT		
	INTERPRETATION		
8	1.0 Definitions and Interpretation F: V: T:	Item	
9	2.0 Law, Regulations and Notices Occupational Health and safety Act 1993 Without limiting the generality of the provisions of clause 2.0 of the agreement, the Contractor's attention is drawn to the provisions of the Construction Regulations, 2003 issued in terms of the Occupational Health and Safety Act, 1993 in which 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 Principal Agent shall, on behalf of the Employer, issue such health and safety specification and 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, provided such provisions are reasonable in terms of the act and the regulations F: V: T:	Item	
10	3.0 Offer an Acceptance F: V: T:	Item	
11	4.0 Assignment and Cession F: V: T:	Item	
12	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) F: V: T:	Item	
13	6.0 Employer's Agents F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
14	7.0 Design Responsibility F: V: T:	Item	
INSURANCE AND SECURITY			
15	8.0 Works Risk F: V: T:	Item	
16	9.0 Indemnities F: V: T:	Item	
17	10.0 Insurances F: V: T:	Item	
18	11.0 Security Add the following Clause 11.1.3 "A security held by the Employer shall be for the due fulfilment of the Contractor's obligations in terms of this agreement " Clause 11.5 - OMITTED F: V: T:	Item	
EXECUTION			
19	12.0 Obligations of the Parties F: V: T:	Item	
20	13.0 Setting out The Contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments F: V: T:	Item	
21	14.0 Nominated Subcontractors F: V: T:	Item	
Carried Forward to Trade Summary			
Section 1 - Preliminaries & General Bill No. 1 Preliminaries			

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Item No		Quantity	Amount
30	23.0 Revision of Date for Practical Completion The removal and replacement of materials and/or workmanship which do not conform to specifications and / or contract drawings and / or Contract Instructions [17.0] shall not constitute grounds for the extension of the construction period [23.0] nor for the adjustment of the contract value [26.0] Clause 23.1.1 is amended by adding the following: An allowance of (5) five working days of the construction period is to be included in this agreement for the adverse affect of weather conditions. The allowed days are accumulated over the construction period and all claims granted in respect of the adverse affect of weather shall be deducted from the above allowance. Furthermore, any other claims for delays in terms of 23.1, 23.2 and 23.3 once awarded shall be offset against any surplus days accumulated in terms of this clause F: V: T:	Item	
31	24.0 Penalty for Late or Non-completion F: V: T:	Item	
	PAYMENT		
32	25.0 Payment Add the following Clause 25.14.4 "Terminate the agreement [29.14.7] where the listed options [25.14.1-3] have failed" Materials and goods prematurely on site Materials and goods brought onto the site prematurely without authorisation by the principal agent shall not be authorised for payment [25.3.2] Materials and goods stored off site Materials and goods stored off site without authorisation by the principal agent shall not be authorised for payment [25.3.2]. Authorisation will also be subject to an advance payment guarantee issued by a approved guarantor being provided to the employer F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
33	26.0 Adjustment to the Contract Value and Final Account This is a fixed price contract and therefore the Contract Value WILL NOT be adjusted according to CPAP 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 [25.3.4] 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 Tenant installations/users requirements delayed Where works related to tenant installations/users requirements may have to be delayed and / or not be executed prior to practical completion, 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. 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: V: T:		
34	27.0 Recovery of Expense and/or Loss F: V: T:	Item	
	SUSPENSION AND TERMINATION		
35	28.0 Suspension by the Contractor F: V: T:	Item	
36	29.0 Termination F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
	DISPUTE RESOLUTION		
37	30.0 Dispute Resolution F: V: T:	Item	
	AGREEMENT The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the contractual agreement for signature of the agreement by the contracting parties		
38	Post tender information agreed with the Contractor F: V: T: -----	Item	
	SECTION B: PRELIMINARIES		
	1.0 INTERPRETATION		
39	1.1 Definitions F: V: T:	Item	
40	1.2 Interpretation F: V: T:	Item	
	2.0 DOCUMENTS		
41	2.1 Checking of documents The tenderer shall inspect the drawings at the Principal Agent's office prior to submission of the tender and thoroughly acquaint himself with the nature and degree of complexity of the works. F: V: T:	Item	
42	2.2* Provisional bills of quantities F: V: T:	Item	
43	2.3* Availability of construction documentation F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
44	2.4 Ordering of materials and goods The quantities or specifications contained in these bills of quantities are not to be used for the ordering of materials and goods F: V: T: 44.0PREVIOUS WORK AND ADJOINING PROPERTIES		
45	3.1* Previous work - dimensional accuracy F: V: T:	Item	
46	3.2* Previous work - defects F: V: T:	Item	
47	3.3* Inspection of adjoining properties F: V: T: 47.0THE SITE	Item	
48	4.1* Handover of site in stages F: V: T:	Item	
49	4.2* Enclosure of the works F: V: T:	Item	
50	4.3* Geotechnical and other investigations F: V: T:	Item	
51	4.4 Encroachments F: V: T:	Item	
52	4.5* Existing premises occupied F: V: T:	Item	
53	4.6* Services - known F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
	5.0 MANAGEMENT OF CONTRACT		
54	5.1 Management of the works F: V: T:	Item	
55	5.2 Progress meetings F: V: T:	Item	
56	5.3 Technical meetings F: V: T:	Item	
	6.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURER'S INSTRUCTIONS		
57	6.1 Samples of materials F: V: T:	Item	
58	6.2 Workmanship samples F: V: T:	Item	
59	6.3 Shop drawings F: V: T:	Item	
60	6.4 Compliance with manufacturers' instructions F: V: T:	Item	
	7.0 DEPOSITS AND FEES		
61	7.1 Deposits and fees F: V: T:	Item	
	8.0 TEMPORARY SERVICES		
62	8.1* Water F: V: T:	Item	
63	8.2* Electricity F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
64	8.3* Ablution and welfare facilities F: V: T:	Item	
65	8.4* Communication facilities F: V: T:	Item	
9.0 PRIME COST AMOUNTS			
66	9.1 Responsibility for prime cost amounts F: V: T:	Item	
10.0 ATTENDANCE ON SUBCONTRACTORS			
67	10.1 General attendance F: V: T:	Item	
	10.2 Special attendance F: V: T:		
11.0 GENERAL			
68	11.1* Protection of the works F: V: T:	Item	
69	11.2* Protection/isolation of existing/sectionally occupied works F: V: T:	Item	
70	11.3 Security of the works F: V: T:	Item	
71	11.4 Notice before covering work F: V: T:	Item	
72	11.5* Disturbance F: V: T:	Item	
73	11.6* Environmental disturbance F: V: T:	Item	
Carried Forward to Trade Summary			R
Section 1 - Preliminaries & General Bill No. 1 Preliminaries			

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Item No		Quantity	Amount
	C1: CONFIDENTIALITY		
79	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: V: T:	Item	
	C2: CONTRACT INSTRUCTIONS		
80	Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the Contractor . F: V: T:	Item	
	C3: SITE LEVELS		
81	Before commencement of the works the Contractor shall carry out and provide the Principal Agent for approval a survey of the existing site levels in sufficient detail to enable the preparation of a final account. F: V: T:	Item	
	C4: UNAUTHORISED PERSONS ON SITE		
82	The Contractor shall not permit unauthorised persons onto and workmen to lodge on the site. F: V: T:	Item	
Carried Forward to Trade Summary		R	
Section 1 - Preliminaries & General Bill No. 1 Preliminaries			

Item No		Quantity	Amount
	C5: GUARANTEES		
83	Where guarantees are called for, the Contractor shall obtain a written guarantee, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent no later than the works completion date. The gurantee shall state that workmanship, materials and installation are guaranteed for a specified period from the final completion date and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the Principal Agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor. The Principal Agent shall be the sole judge of the cause responsible for defect of the works and his decision shall be final and binding in terms of clause 40.2 of the agreement F: V: T:	Item	
	C6: WARRANTIES FOR MATERIAL AND WORKMANSHIP		
84	Where warranties for materials and/or workmanship are called for, the Contractor shall obtain a written warranty, addressed to the Employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on the certified completion of the contract. The warranty shall state that workmanship, materials and installation are guarenteed for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm 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 construction of the building in which case the responsibility for replacement shall rest entirely with the Contractor F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
	C7: OVERTIME		
85	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the Contractor unless the Principal Agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the Employer F: V: T:	Item	
	C8: REINSTATEMENT OF DAMAGED AREAS ON THE SITE OR EMPLOYERS' PROPERTIES IN GENERAL CAUSED BY CONSTRUCTION OPERATIONS, ETC		
86	Before commencing with the works and/or moving on to site, the Contractor shall arrange with the Principal Agent to inspect, among others, existing buildings, structures, roads, pavings, kerbs, channels and fences on and around the site and the Contractor's "site yard" The Contractor shall compile a report, noting all conditions that the works could affect, paying particular attention to cracks, defects and existing levels related to structures, roads, pavings, kerbs, channels and fences, which later could be claimed to have been caused or disturbed by the construction operations. The report shall also include levels and/or photographs taken by the Contractor Certified copies of the report shall be lodged with the Principal Agent before the work commences and site establishment, who shall within five (5) working days of receipt of the report inspect the areas of concern and confirm in writing acceptance or rejection thereof noting reasons for the rejection <i>The cost associated with the compilation of the report shall be for the Contractor's account</i> The Contractor will be held responsible for maintaining the above in its present condition during execution of the works and will be liable for all costs relating to the repairing or replacing of damaged areas caused by the construction operations F: V: T:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

Item No		Quantity	Amount
	C9: CO-OPERATION OF CONTRACTOR FOR COST MANAGEMENT		
87	It is specifically agreed that the Contractor accepts the obligation of assisting the agents in implementing proper cost management on this project. The Contractor will be advised by the Principal Agent of all cost management procedures which will be implemented to ensure that the final account does not exceed the budget F: V: T:	Item	
	C10: PLANT AND LABOUR RECORD		
88	At the end of every second week the Contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day and the number, type and capacity of all plant, excluding hand tools, currently used on the works. F: V: T:	Item	
	C11: LOCAL LABOUR, SUPPLIERS & SUBCONTRACTORS		
89	The minimum spend on local subcontractors, suppliers and labour within the Freestate Province is 30% of the contract value. The contractor will have to appoint a CLO at their cost for the duration of the project. ALL unskilled labourers will have to be recruited from within a 20km radius of the Harrismith area. The successful contractor is to submit a detailed plan outlining how the targets will be reached prior to appointment. The contractor will be required to submit monthly reports detailing the local spend to date. Failure to reach the required targets will result in penalties which will be calculated as follows: $P = (0.15 \times (D - Do) \times CA) / 100$ P = penalty payable D = contract target local spend Do = actual local spend CA = contract amount F: T: V:	Item	
	Carried Forward to Trade Summary	R	
	Section 1 - Preliminaries & General Bill No. 1 Preliminaries		

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Section 1 - Preliminaries & General

Bill No. 1

Preliminaries

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

Amount

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

Carried Forward to Final Summary

R

Section 1 - Preliminaries & General
Bill No. 1
Preliminaries

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO 1			
	EARTHWORKS			

	PREAMBLES			
	The General Preambles for Trades (2017 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be included 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground:			
	The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock"			
	Should the Contractor encounter any "soft" or "hard" rock in the excavations, he shall immediately notify the Engineer who shall be the sole arbiter as to what constitutes "soft" or "hard" rock for final account purposes			
	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 to Trade Summary			
	Section 2 - Building Works			
	Bill No. 1			
	Earthworks			
			R	

Item No	Quantity	Rate	Amount
Filling: Notwithstanding the reference to prescribed multiple handling in clause 1 of 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: <i>Prices for backfilling to trenches and holes only are to include for all necessary density tests in accordance with SANS 1200D</i> Formwork: 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" ----- EXCAVATION, FILLING, ETC Excavation in earth not exceeding 2m deep: 1 Trenches m3 127 2 Holes m3 829 Excavation in earth exceeding 2m not exceeding 4m deep: 3 Holes m3 289 Excavation in earth exceeding 4m not exceeding 6m deep: 4 Holes m3 18			
Carried Forward to Trade Summary			
Section 2 - Building Works Bill No. 1 Earthworks			

Item No		Quantity	Rate	Amount
	Extra over trench and hole excavations in earth for excavation in:			
5	Soft rock	m3	80	
6	Hard rock	m3	65	
	Extra over trench and hole excavations in earth for breaking up and removing:			
7	Brickwork	m3	10	
8	Unreinforced concrete	m3	8	
9	Reinforced concrete	m3	7	
	Back excavation of vertical sides of excavations in earth for working space including backfilling compacted to 97% Mod AASHTO density:			
10	Not exceeding 1,5m deep for placing and removing formwork to walls, etc against excavated face	m2	216	
11	Exceeding 1,5m and not exceeding 3m deep for placing and removing formwork to walls, etc against excavated face	m2	216	
12	Exceeding 3m and not exceeding 4,5m deep for placing and removing formwork to walls, etc against excavated face	m2	44	
	Extra over all excavations for carting away:			
13	Surplus material from excavations and/or stock piles on site to a dumping site located by the contractor	m3	1,064	
	Risk of collapse of excavations:			
14	Sides of trench and hole excavations not exceeding 1,5m deep	m2	744	
15	Sides of trench and hole excavations exceeding 1,5m deep	m2	476	
	Keeping excavations free of water:			
16	Keeping excavations free of all water other than subterranean water	Item		
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 1			
	Earthworks			
			R	

Item No		Quantity	Rate	Amount
	FILLING, ETC			
	Earth filling with selected suitable material obtained from the excavations and/or prescribed stock piles on site, compacted to 98% Mod AASHTO density:			
17	Backfilling to trenches, holes, etc	m3	199	
	Coarse river sand filling supplied by the Contractor:			
18	Under floors, etc	m3	41	
	G8 filling material supplied by the Contractor, compacted to 98% Mod AASHTO density (100% for sand):			
19	Under floors, steps, pavings, etc	m3	203	
	C3 cement stabilised material supplied by the Contractor, compacted to 97% Mod AASHTO density:			
20	Under floors, steps, pavings, etc	m3	216	
21	Extra over C3 for cement stabilization with "PPC Sureroad"	t	13.52	
	Compaction of surfaces:			
22	Compaction of ground surface under surface beds, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO density	m2	1,352	
	Prescribed density tests on filling:			
23	"Modified AASHTO Density" test	No	60	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 1			
	Earthworks			
			R	

Section 2 - Building Works

Bill No. 1

Earthworks

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

85

86

87

88

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 1
Earthworks

R

Item No		Quantity	Rate	Amount
	SECTION 2 BILL NO 2 CONCRETE, FORMWORK AND REINFORCEMENT ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES Cost of tests: The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SANS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Principal Agent. (Test cubes are measured separately) 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			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 2 Concrete, Formwork and Reinforcement		R	

Item No		Quantity	Rate	Amount
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself 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" ----- UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 15MPa/19mm concrete:			
1	Surface blinding under footings and bases	m3	10	
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 25MPa/19mm concrete:			
2	Strip footings	m3	20	
3	Bases	m3	64	
	30MPa/19mm concrete:			
4	Surface beds cast in panels on waterproofing	m3	207	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 2			
	Concrete, Formwork and Reinforcement			
			R	

Item No		Quantity	Rate	Amount
	30MPa/19mm concrete with "Penetron" or "Xypex" admixture as per supplier's specification:			
5	Surface beds (silo and mill pits)	m3	82	
	REINFORCED CONCRETE CAST ON/IN FORMWORK			
	25MPa/19mm concrete:			
6	Sub columns in foundations	m3	11	
	30MPa/19mm concrete:			
7	Slabs including beams and inverted beams	m3	8	
8	Walls	m3	12	
9	Plinths	m3	55	
	30MPa/19mm concrete with "Penetron" or "Xypex" admixture as per supplier's specification:			
10	Retaining walls (silo and mill pits)	m3	127	
	TEST CUBES			
11	Making and testing sets of three 150 x 150 x 150mm concrete strength test cubes (Provisional)	Sets	3	
	CONCRETE SUNDRIES			
	Finishing top surfaces of concrete smooth with a power float:			
12	Surface beds, slabs, etc	m2	1,466	
13	Surface beds (silo and mill pits)	m2	309	
	Finishing top surfaces of concrete smooth with a wood float:			
14	Tops walls	m2	46	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 2			
	Concrete, Formwork and Reinforcement			
			R	

Item No		Quantity	Rate	Amount
	Grooves, channels, mortices, sinkings, etc in concrete:			
15	400mm Wide x average 550mm deep sloping channels in silo floors with rounded bottom, including all necessary excavation, formwork, etc (Refer Silo foundation layout and section for further details)	m	46	
16	Extra over for bend	No	2	
17	Extra over for end	No	2	
18	Extra over for junction	No	2	
	30MPa non-shrink grout:			
19	Bedding approximately 25mm thick under 200 x 300mm base plates, including chamfered edges all round	No	9	
20	Ditto, but 200 x 350mm	No	32	
21	Ditto, but 250 x 500mm	No	11	
	ROUGH FORMWORK (DEGREE OF ACCURACY III)			
	Rough formwork to sides:			
22	Strip footings	m2	125	
23	Bases	m2	180	
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)			
	Smooth formwork to sides:			
	NOTE: The external face formwork to the sides of the raised floor retaining walls is measured to the top of the new surface bed. No additional formwork to edges of surface beds will be measured to these areas, so it is up to the Contractor to decide the construction methodology and sequence.			
24	Rectangular stub columns in foundations	m2	83	
25	Retaining walls (silo and mill pits)	m2	644	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 2			
	Concrete, Formwork and Reinforcement			
			R	

Item No			Quantity	Rate	Amount
26	Retaining walls with total height exceeding 3m and not exceeding 4,5m above bearing level (silo and mill pits)	m2	307		
27	Walls	m2	151		
28	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	349		
29	Sloping and stepped outer edges of stairs not exceeding 300mm high extreme	m	9		
	Smooth formwork to soffits:				
30	Slabs	m2	54		
	Boxing in smooth formwork to form:				
31	25 x 25mm Horizontal chamfers at corners	m	348		
	MOVEMENT JOINTS, ETC				
	Expansion joints with "Sondor Jointex" polyethylene expansion joint filler with tear-off strips in floors:				
32	10mm Joints not exceeding 300mm high	m	66		
	Saw-cut joints:				
33	6 x 40mm Saw-cut joints in top of concrete	m	476		
	Horizontal construction joints through concrete including thick cement slurry to one face:				
34	Surface beds not exceeding 300mm thick	m	40		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
35	Mild steel bar reinforcement (8 to 40mm diameter bars)	t	7.57		
	High tensile steel reinforcement to structural concrete work:				
36	High tensile steel bar reinforcement (8 to 40mm diameter bars)	t	17.83		
	Carried Forward to Trade Summary			R	
	Section 2 - Building Works				
	Bill No. 2				
	Concrete, Formwork and Reinforcement				

Item No		Quantity	Rate	Amount
	High tensile steel dowel bars, sleeves, etc:			
37	Diamond dowel sleeves and plate dowels in construction joints	No	101	
	Fabric reinforcement:			
38	Type 311 fabric reinforcement in concrete surface beds etc	m2	122	
39	Type 395 fabric reinforcement in concrete surface beds etc	m2	1,600	
Carried Forward to Trade Summary				R
Section 2 - Building Works				
Bill No. 2				
Concrete, Formwork and Reinforcement				

Section 2 - Building Works

Bill No. 2

Concrete, Formwork and Reinforcement

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

90
91
92
93
94
95

Amount

Carried Forward to Section Summary

Section 2 - Building Works

Bill No. 2

Concrete, Formwork and Reinforcement

R

Item No		Quantity	Rate	Amount
	SECTION 2 BILL NO 3 MASONRY ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES BRICKWORK 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 Hollow walls: Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole Face bricks : Bricks shall be ordered timeously to obtain uniformity in size and colour All face brickwork shall be regularly cleaned down as the work proceeds and shall be protected as necessary by an approved method			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 3 Masonry		R	

Item No		Quantity	Rate	Amount
	Pointing:			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include smooth floated square recessed, hollow recessed, weathered pointing, etc			

	BRICKWORK			
	FOUNDATIONS			
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:			
1	280mm Solid walls of two half brick skins including wire ties and with cavity filled solid with and including 15Mpa/19mm concrete as the work proceeds	m2	25	
2	330mm Solid walls of two half brick skins including wire ties and with cavity filled solid with and including 15Mpa/19mm concrete as the work proceeds	m2	21	
	SUPERSTRUCTURE			
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:			
3	Half brick walls	m2	52	
4	Half brick walls for building in concealed cisterns and brackets	m2	2	
5	Half brick linings to concrete	m2	16	
6	One brick walls	m2	333	
7	280mm Hollow walls of two half brick skins including wire ties	m2	65	
	BRICKWORK SUNDRIES			
8	Splayed mortar fillets one course high in 50mm cavities	m	23	
9	Splayed mortar fillets one course high in 100mm cavities	m	17	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 3			
	Masonry			
			R	

Item No			Quantity	Rate	Amount
10	Closing 50mm cavities of hollow walls vertically with brickwork one brick wide	m	38		
11	Closing 50mm cavities of hollow walls horizontally with one course of brickwork	m	40		
Joint forming material in movement joints:					
12	10mm "Sondor Jointex " polyethylene joint filler with tear-off strip built in vertically between brickwork and steel not exceeding 300mm wide or high	m	126		
13	Ditto, but between brickwork and concrete	m	56		
2,5mm Galvanised brick reinforcement:					
14	75mm Wide reinforcement built in horizontally	m	1,672		
15	150mm Wide reinforcement built in horizontally	m	980		
Prestressed fabricated concrete lintels, including necessary temporary supports:					
16	110 x 75mm Lintels in lengths not exceeding 3m	m	3		
17	Ditto, but exceeding 3m and not exceeding 4,5h	m	18		
18	150 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5h	m	4		
Galvanised hoop iron cramps, ties, etc:					
19	30 x 1,2mm Wall tie 860mm long with one end shot pinned to steel and other end built into brickwork	No	371		
20	Ditto, but with one end shot pinned to concrete and other end built into brickwork	No	165		
FACE BRICKWORK					
"Corobrick Silvergrey Travertine" face bricks pointed with recessed horizontal and vertical joints:					
21	Extra over brickwork for face brickwork	m2	320		
22	Extra over brickwork for 220mm Wide sills set level and slightly projecting	m	14		
Carried Forward to Trade Summary				R	
Section 2 - Building Works					
Bill No. 3					
Masonry					

Item No		Quantity	Rate	Amount
23	Extra over brickwork for 1600mm diameter bullseye arch in 280mm brick wall of one brick-on-edge header ring	No	1	
24	Extra over brickwork for 1600mm diameter bullseye arch in 220mm brick wall of one brick-on-edge header ring	No	2	
25	220mm Brick-on-edge header course copings on top of one brick walls pointed with recessed joints on all exposed faces	m	24	
Carried Forward to Trade Summary				
Section 2 - Building Works				
Bill No. 3				
Masonry				

Section 2 - Building Works

Bill No. 3

Masonry

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

97

98

99

100

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 3
Masonry

R

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO 4			
	WATERPROOFING			

	PREAMBLES			
	The General Preambles for Trades (2017 edition) as 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	Waterproofing:			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets, etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			

	DAMPPROOFING OF WALLS AND FLOORS			
	One layer 375 micron polyethylene waterproof sheeting:			
1	In walls	m2	28	
	One layer 250 micron waterproof sheeting sealed at laps with PVC self-adhesive tape:			
2	Under surface beds	m2	1,352	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 4			
	Waterproofing			
			R	

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Section 2 - Building Works

Bill No. 4

Waterproofing

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

102

103

Amount

Carried Forward to Section Summary

Section 2 - Building Works

Bill No. 4

Waterproofing

R

Item No	Quantity	Rate	Amount
SECTION 2 BILL NO 5 ROOF COVERINGS ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES Profiled metal roof sheeting and accessories shall be supplied with a 5 year guarantee and be installed by an approved installer All fixing holes shall be drilled and not punched Roof covering accessories shall be manufactured from the same material as used for roof covering -----			
Carried Forward to Trade Summary Section 2 - Building Works Bill No. 5 Roof Coverings, Claddings Etc			R

Item No		Quantity	Rate	Amount
ALUMINIUM ROOF COVERINGS				
0,53mm "Klip-tite" Zinalume AZ150 interlocking roof sheeting, in single lengths and fixed to steel purlins at approximately 1750mm centres (purlins elsewhere measured) including flashings, accessories, etc:				
1	Roof covering with pitches not exceeding 25 degrees	m2	1,227	
2	Roof covering with a 45 degree pitch	m2	326	
Accessories:				
3	Ridge cappings 550mm girth	m	40	
4	Gable flashings 385mm girth	m	133	
5	Headwall flashings 310mm girth	m	36	
6	Sidewall flashings 310mm girth	m	28	
7	Broad flute closers	m	117	
0,53mm "Nu-Rib" AZ150 interlocking roof sheeting with "Colorbond" finish to one side, in single lengths and fixed to steel purlins at approximately 1200mm centres (purlins elsewhere measured) including flashings, accessories, etc:				
8	Side cladding with broad-flute face to the weather side	m2	1,280	
Accessories:				
9	External corner trims 462mm girth	m	75	
10	Internal corner trims 462mm girth	m	11	
11	Drip flashings 154mm girth	m	164	
12	Flashing around pipe not exceeding 100mm diameter	No	8	
13	Ditto, but pipe exceeding 100mm and not exceeding 200mm diameter	No	10	
ROOF INSULATION				
Carried Forward to Trade Summary				R
Section 2 - Building Works				
Bill No. 5				
Roof Coverings, Claddings Etc				

Item No		Quantity	Rate	Amount
	4mm "Alucushion®" FR (fire retardant grade) white polyethylene coated single-sided aluminium foil insulation:			
14	Insulation laid taut over steel purlins and fixed concurrently with roof covering including white PVC coated straining wires	m21,553		
Carried Forward to Trade Summary				R
Section 2 - Building Works				
Bill No. 5				
Roof Coverings, Claddings Etc				

Section 2 - Building Works

Bill No. 5

Roof Coverings, Claddings Etc

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

105

106

107

Amount

Carried Forward to Section Summary

Section 2 - Building Works

Bill No. 5

Roof Coverings, Claddings Etc

R

Item No	Quantity	Rate	Amount
SECTION 2			
BILL NO 6			
CARPENTRY AND JOINERY			

PREAMBLES			
The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
SUPPLEMENTARY PREAMBLES			
Fixing:			
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 separately elsewhere			
Sizes:			
Sizes are nominal and the Contractor shall make allowance in his prices for minor variances in stated finished sizes of timber doors, door members, door frames, architraves, etc			

Carried Forward to Trade Summary			R
Section 2 - Building Works			
Bill No. 6			
Carpentry and Joinery			

Item No		Quantity	Rate	Amount
DOORS, ETC				
Hollow core flush doors:				
1	Type HBSTDLIO internal door	No 2		
2	Extra over for undercutting door by 150mm	No 2		
FRAMED FRAMES, ETC				
Wrought meranti:				
3	Type SK1 meranti door frame	No 2		
FLOORS, ETC				
Sawn softwood:				
4	19 x 70mm Skirting, plugged	m 83		
Carried Forward to Trade Summary				R
Section 2 - Building Works				
Bill No. 6				
Carpentry and Joinery				

Section 2 - Building Works

Bill No. 6

Carpentry and Joinery

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

109

110

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 6
Carpentry and Joinery

R

Item No		Quantity	Rate	Amount
	SECTION 2 BILL NO 7 CEILINGS, PARTITIONS AND ACCESS FLOORING ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES 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 separately elsewhere Ceilings: Unless otherwise described, ceilings shall be deemed to be horizontal			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 7 Ceilings, Partitions and Access Flooring		R	

Item No		Quantity	Rate	Amount
	Bulkheads: Bulkheads are defined as those portions of ceilings which are stepped down from the general ceiling level in a particular room or area and which generally occur along the perimeter. Their purpose is either to conceal services or to create architectural features Bulkheads have only been described as such where they conform to the above definition and where the horizontal, vertical or sloping dimensions do not exceed 1200mm. Where these dimensions are more than 1200mm such portions of ceilings have been included in the appropriate general items of ceilings Unless otherwise described, bulkheads shall be deemed to be horizontal along the length Openings: Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc Steel components: All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121 - - - - - INSULATION "Isotherm" or similar approved insulation:			
1	100mm Insulation closely fitted and laid on top of branderling between roof timbers, etc	m2	85	
	Carried Forward to Trade Summary		R	
	Section 2 - Building Works Bill No. 7 Ceilings, Partitions and Access Flooring			

Item No		Quantity	Rate	Amount
	SUSPENDED CEILINGS			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Flush plastered gypsum plasterboard suspended ceilings:			
	Ceilings shall comprise 6,4mm (9,5mm?/12,5mm?) gypsum plasterboard boards screwed to and including screw-up suspension grid consisting of main tees at 1200mm centres and galvanised steel capped cross tees at 400mm centres and with tape fixed over joints and the whole finished with gypsum plaster trowelled to a smooth polished surface			
	The grid shall be suspended by means of galvanised steel L-section hangers at suitable centres, securely shot-pinned or screwed to concrete, steel or wood			
	6,4mm Gypsum plasterboard on screw-up tee suspension grid including hangers, etc with tape fixed over joints and the whole finished with gypsum plaster trowelled to a smooth polished surface:			
2	Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres	m2	85	
3	Extra over ceiling for opening for sprinkler head	No	12	
4	Extra over ceiling for opening for 75mm diameter downlighter	No	16	
	Cornices, perimeter trims, etc to ceilings:			
5	"Donn" pre-painted shadow line perimeter trims fixed to timber battens	m	83	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 7			
	Ceilings, Partitions and Access Flooring			
			R	

Section 2 - Building Works

Bill No. 7

Ceilings, Partitions and Access Flooring

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

112

113

114

Amount

Carried Forward to Section Summary

Section 2 - Building Works

Bill No. 7

Ceilings, Partitions and Access Flooring

R

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO 8			
	FLOOR COVERINGS			

	PREAMBLES			
	The General Preambles for Trades (2017 edition) as 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	Fixing:			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			

	FLOOR COVERINGS			
	3mm "Tal Screedmaster" or similar approved self-levelling screed applied by an approved specialist:			
1	On floors	m2	85	
	Woodplank vinyl tiles (Allow a Prime Cost Amount of R250/m2 delivered to site) applied by an approved specialist with adhesive to screeds:			
2	On floors	m2	85	
	Carried Forward to Section Summary			
	Section 2 - Building Works			
	Bill No. 8			
	Floor Coverings			
			R	

Item No		Quantity	Rate	Amount
	SECTION 2 BILL NO 9 IRONMONGERY ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES 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. Should 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, etc clarifying the features of the products/articles offered On request, returnable samples are to be provided to the Principal Agent for consideration Locks: Notwithstanding Clause 2, Item 3 of the "Ironmongery" trade of the "Standard System of Measuring Building Work, Seventh Edition", descriptions of locks shall be deemed to include two keys per lock			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 9 Ironmongery		R	

Item No		Quantity	Rate	Amount

	HINGES, BOLTS, ETC			
	Take delivery of and fix only the following ironmongery to timber doors and frames, unless otherwise described:			
1	Ball barrel butt hinge	No 4		
	LOCKS			
	Take delivery of and fix only the following ironmongery to timber doors, unless otherwise described:			
2	Bathroom indicator bolt	No 2		
	DOOR STOPS			
	Take delivery of and fix only the following ironmongery to timber doors and frames, unless otherwise described:			
3	Door stops, plugged	No 2		
	BATHROOM FITTINGS			
	Take delivery of and fix only the following ironmongery to walls:			
4	Disabled grab rails, plugged	No 2		
5	Toilet roll holder, plugged	No 2		
	SUPPLY OF IRONMONGERY:			
6	Prime Cost Amount of Ten Thousand for supplying ironmongery to timber doors	Item		10,000. 0
7	Profit & attendance		%	
	Carried Forward to Trade Summary		R	
	Section 2 - Building Works			
	Bill No. 9			
	Ironmongery			

Section 2 - Building Works

Bill No. 9

Ironmongery

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

117

118

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 9
Ironmongery

R

Item No		Quantity	Rate	Amount
	SECTION 2 BILL NO 10 STRUCTURAL STEELWORK ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES Specification: All structural steel must comply with SANS 1200H (Degree of Accuracy II) All hot rolled structural steel sections must comply with SANS 1431 grade 300W, unless otherwise specified on the drawings Unless otherwise designated, all bolts and nuts will be grade 4.6 to SANS 135 and BS 916. 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 All connections must be welded all round with a 6mm fillet weld, unless otherwise specified on the drawings			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 10 Structural Steelwork		R	

Item No		Quantity	Rate	Amount
	Drawings and shop details: The Contractor shall be responsible for preparing shop drawings and details which must be submitted to the Principal Agent for approval prior to commencement of fabrication. Before commencing any fabrication, the steel fabricator must check the accessibility of the site and design the sizes of individual parts accordingly Hot-dipped galvanizing: After fabrication and prior to delivery to site, all steelwork described as hot-dipped galvanized, is to be descaled and thoroughly cleaned by pickling, after which it is to be hot dip galvanized in accordance with the requirements of SANS 121/1501461 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 Priming steelwork: Priming non-galvanised steel shall comprise abrasive blast cleaned to Grade SA 2 1/2 and applying Jotun QD zinc phosphate primer as per paint manufacturer's specification, before delivery to site ----- PRIMED STEEL COLUMNS AND BEAMS Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete:			
1	254 x 146 x 31kg/m I-section columns (In No.9)	t	2.66	
	Carried Forward to Trade Summary		R	
	Section 2 - Building Works			
	Bill No. 10			
	Structural Steelwork			

Item No		Quantity	Rate	Amount
2	305 x 165 x 41kg/m I-section columns (In No.32)	t	15.27	
3	457 x 191 x 67kg/m I-section columns in heights exceeding 13m and not exceeding 18m (In No.11)	t	11.91	
	Welded beams in single lengths with flat bearer and connection plates, bolted to steel:			
4	356 x 171 x 51kg/m I-section beams (In No.2)	t	0.73	
5	203 x 133 x 25kg/m I-section rafters (In No.4)	t	0.49	
	PRIMED STEEL TRUSSES			
	Welded and bolted roof trusses of angle rafters, tie beams, rails, struts, braces, cleats, etc and flat bearer, gusset and connection plates, bolted to steel:			
	<u>Juice Building:</u>			
6	Truss Type 1, 20m long x 3.3m high extreme (In No.4)	t	5.15	
7	Truss Type 2, 25m long x 4m high extreme (In No.5)	t	7.74	
8	Truss Type 3, 5m long x 1.1m high extreme (In No.5)	t	0.57	
9	Truss Type 4, 20m long x 3.3m high extreme (In No.4)	t	5.15	
	GALVANISED STEEL PURLINS, GIRTS, BRACING, ETC			
	Purlins and girts, bolted to steel:			
10	125 x 65 x 20 x 2.5mm Thick cold-formed lipped channel purlins	t	5.26	
11	125 x 65 x 20 x 2.5mm Thick cold-formed lipped channel girts	t	4.84	
	PRIMED STEEL PURLINS, GIRTS, BRACING, ETC			
	Welded bracing, anti-sag rails, etc with flat connection plates, bolted to steel:			
12	Angle cleats and splice plates	t	1.05	
	Carried Forward to Trade Summary			R
	Section 2 - Building Works			
	Bill No. 10			
	Structural Steelwork			

Item No			Quantity	Rate	Amount
13	Angle bracing	t	2.54		
14	Angle sag rails	t	1.00		
15	Angle false rafters	t	0.39		
16	76 x 3mm CHS struts	t	1.16		
3CR12 GUTTERS					
2.5mm Welded plate gutters:					
<u>Juice Building:</u>					
17	Box gutters 950mm girth, 4 times bent along length including necessary collared and sealed expansion joints (bearers elsewhere) (Juice Type 5)	m	15		
18	Ditto, but 900mm girth, 4 times bent (Juice Type 2)	m	25		
19	Ditto, but 900mm girth, 4 times bent (Juice Type 3)	m	40		
20	Ditto, but 850mm girth, 4 times bent (Juice Type 1)	m	16		
21	Ditto, but 850mm girth, 4 times bent (Juice Type 4)	m	20		
BOLTS, FASTENERS, ETC					
22	High tensile bolts (class 8.8)	t	0.80		
23	Anchor bolt of 20mm diameter grade 8.8 threaded bolt 800mm long with 70 x 70 x 16mm thick anchor plate embedded in top of concrete	No	230		
24	M10 grade 8.8 insulation panel fixing nut welded against column	No	268		
25	Insulation panel fixing bolt of 10mm diameter grade 8.8 threaded bolt 150mm long with two nuts of which one welded against column	No	268		
BIRD PROOFING					
Carried Forward to Trade Summary					R
Section 2 - Building Works					
Bill No. 10					
Structural Steelwork					

Item No		Quantity	Rate	Amount
	'Vitex' or similar approved mesh:			
26	Type 30-2R birdproofing mesh 270mm wide with one end fixed to sheeting rail and other end to insulation panel, fixed horizontally (fixing detail to be designed by contractor)	m	139	
	PAINTING			
	Touch-up primer and two coats "Jotun Jotafloor Rapid Dry" finishing coats, each coat to 40 micron dry film thickness, on:			
27	Structural steel columns, beams, etc	m2	1,066	
28	Structural steel lattice columns, beams, trusses, etc	m2	671	
Carried Forward to Trade Summary				R
Section 2 - Building Works				
Bill No. 10				
Structural Steelwork				

Section 2 - Building Works

Bill No. 10

Structural Steelwork

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

120

121

122

123

124

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 10
Structural Steelwork

R

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO 11			
	METALWORK			

	PREAMBLES			
	The General Preambles for Trades (2017 edition) as 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	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			
	Fixing:			
	Unless otherwise described, descriptions of items shall be deemed to include for fixing to brickwork or concrete			
	Where items are described as "bolted", the bolts are measured elsewhere as stated in clause N.7 of the Model Preambles			
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 11			
	Metalwork			
			R	

Item No		Quantity	Rate	Amount
	----- ALUMINIUM WINDOWS, DOORS, ETC Aluminium windows, doors, etc: The successful tenderer shall be responsible for the complete design work including determining required section sizes and fixing details, all subject to the Principal Agent approval Doors, windows, etc shall be designed and constructed to withstand wind pressures of 1,1kn/m2 (unfactored) and 1,5kn/m2 (factored) All calculations shall be submitted to the Principal Agent for approval Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass thicknesses shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic which shall be removed only once surrounding trades have been completed The following certificates shall be provided prior to commencement of site work: 1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively 3 A copy of the relevant Performance Compliance Report from the system suppliers 4 A copy of the relevant Safiera Energy Rating Certification			
	Carried Forward to Trade Summary		R	
	Section 2 - Building Works Bill No. 11 Metalwork			

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Item No		Quantity	Rate	Amount
	References: References in descriptions of windows, doors, etc refer to the respective types of windows, doors, etc detailed on the Architect's drawings and accompanying these bills of quantities Tenderers are to price the following items in conjunction with the above Architect's drawings, etc and no claim arising from brevity of descriptions in these bills of quantities, of items shown on the Architect's drawings, etc shall be entertained ALUMINIUM WINDOWS Powder coated casement units, complete with subframes, ironmongery, glass, coverstrips and sealing all round on both sides with approved polysulphide or similar approved sealant: <u>Single glazing</u>			
1	Window 3721 x 1496mm high (GW003)	No	1	
2	Window 4822 x 496mm high (GW002)	No	1	
3	Window 4822 x 2250mm high (GW102, 103)	No	2	
4	Window 1600mm diameter (GW104)	No	1	
	ALUMINIUM DOORS, FRAMES, ETC Powder coated door units complete with coupling mullions, glass and glazing, pvc gaskets, woolpile draught seals, packing pieces, coverstrips, ironmongery and sealing all round on both sides with polysulphide or similar approved sealant: <u>Single glazing</u>			
5	Single door 900 x 2596mm high including toplight (GW004)	No	1	
6	Single door 900 x 2850mm high including toplight (GW006, 007)	No	2	
	<u>Aluminium slats</u>			
7	Single door 900 x 2100mm high (GF001-003)	No	3	
	Carried Forward to Trade Summary			
	Section 2 - Building Works Bill No. 11 Metalwork			
			R	

Item No		Quantity	Rate	Amount
8	Single door 900 x 2850mm high including glazed toplight (GW005)	No	1	
ALUMINIUM SHOPFRONTS				
Powder coated shopfronts, complete with subframes, ironmongery, glass, coverstrips and sealing all round on both sides with polysulphide or similar approved sealant:				
<u>Single glazing</u>				
9	Shopfront 4822 x 2596mm high including door (GW001)	No	1	
<u>Double glazing</u>				
10	Shopfront 4621 x 3000mm high including door (GW101)	No	1	
STEEL ROLLER SHUTTERS, ETC				
Powdercoated aluminium slatted roller shutter with push button control, bottom rail with overhead box, guides, ancillary components including end plates, guide rails, etc, fixed to steel columns and beams, the shutter controlled by security mounted key switch with light beams:				
11	Electrically operated slatted roller shutter for 3 x 6m high opening, including electrical connection and commissioning (electrical isolator by others) (RSD01, 02, 03)	No	3	
12	Ditto, but 8 x 6m high (RSD04)	No	1	
Carried Forward to Trade Summary				
Section 2 - Building Works				
Bill No. 11				
Metalwork				

Section 2 - Building Works

Bill No. 11

Metalwork

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

126

127

128

129

130

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 11
Metalwork

R

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO 12			
	PLASTERING			

	PREAMBLES			
	The General Preambles for Trades (2017 edition) as 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	Moisture tests:			
	Before any finishes, coverings, etc are applied to screeds, plastering, etc or any other in-situ finish, moisture tests are to be carried out to the complete satisfaction of the Principal Agent to ensure that these surfaces have the correct moisture content for the finish to be applied			
	Labours, etc			
	Labours such as fair, rounded and chamfered edges, trowel cuts, throats, V-joints, angles, etc shall be deemed to be included in the descriptions			
	Sample Panels			
	A sample panel size 1m x1m, of each of the various plaster type wall and floor finishes in this contract, shall be prepared for the approval of the Principal Agent and the cost of the sample panel(s) shall be deemed to be included in the overall costs of the <u>relevant</u> wall and floor finishes			
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 12			
	Plastering			
			R	

Item No		Quantity	Rate	Amount
	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: Unless otherwise described, 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 Panels: Granolithic shall be laid in panels not exceeding 14m² for monolithic finishes, not exceeding 9,5m² for bonded finishes and not exceeding 6m² 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			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 12 Plastering		R	

Item No		Quantity	Rate	Amount
	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 thoroughly 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 CEMENT PLASTER Unless otherwise described, cement plaster shall be taken to mean Class 1 cement plaster i.e. 1:4 cement:sand plaster (common cement) ----- GRANOLITHIC Untinted granolithic, on concrete:			
1	Average 40mm thick in silo and mill pit floors with upper surface to falls	m2	309	
	SCREEDS Screeds wood floated, on concrete:			
2	30mm Thick on floors and landings	m2	85	
	INTERNAL PLASTER			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 12 Plastering			
			R	

Item No		Quantity	Rate	Amount
Cement plaster steel trowelled, on brickwork:				
3	On walls	m2449		
4	On narrow widths	m215		
Carried Forward to Trade Summary				R
Section 2 - Building Works				
Bill No. 12				
Plastering				

Section 2 - Building Works

Bill No. 12

Plastering

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

132

133

134

135

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 12
Plastering

R

Item No	Quantity	Rate	Amount
SECTION 2 BILL NO 13 TILING ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES 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 cement 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 from the "Tal Goldstar" or similar approved range of products as recommended by the manufacturer of the tiles ----- WALL TILING			
Carried Forward to Trade Summary Section 2 - Building Works Bill No. 13 Tiling			R

[illegible]

Section 2 - Building Works

Bill No. 13

Tiling

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

137

138

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 13
Tiling

R

Item No	Quantity	Rate	Amount
SECTION 2 BILL NO 14 PLUMBING AND DRAINAGE ----- PREAMBLES The General Preambles for Trades (2017 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES Wire gratings: 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			
Carried Forward to Trade Summary Section 2 - Building Works Bill No. 14 Plumbing and Drainage			R

Item No		Quantity	Rate	Amount
	Stainless steel basins, sinks, wash troughs, urinals, etc: 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 mildew resistant silicone sealant and prices must include therefor uPVC 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 uPVC pressure pipes and fittings: Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC 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 uPVC 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 "Plasson" or "Alprene" compression fittings			
	Carried Forward to Trade Summary		R	
	Section 2 - Building Works			
	Bill No. 14			
	Plumbing and Drainage			

Item No		Quantity	Rate	Amount
	"Polycop" polypropylene pipes: Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or where so described "Polylock" 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 "Maksal" 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 "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground 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". In the case of pipes with diameters not exceeding 60mm, 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. In the case of pipes with diameters exceeding 60mm, all sizes are given and no claims for extra bushes, reducers, etc will be entertained			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 14 Plumbing and Drainage		R	

Item No		Quantity	Rate	Amount
	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 in accordance with SANS 1200L (provision for disinfection elsewhere) "Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.: Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with suitable overlaps Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including mastic, tape, "Layflat" sheeting, securing of same, etc 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			
	Carried Forward to Trade Summary Section 2 - Building Works Bill No. 14 Plumbing and Drainage		R	

Item No		Quantity	Rate	Amount
	Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following: SANS 1200L : Medium-pressure pipelines SANS 1200LD : Sewers SANS 1200LE : Stormwater drainage Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200LB : Bedding (Pipes) Unless otherwise described, bedding of rigid pipes shall be Class B bedding 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 98% 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) and shall have straight or side outlets and "P" or "S" traps as necessary Description of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.			
	Carried Forward to Trade Summary		R	
	Section 2 - Building Works			
	Bill No. 14			
	Plumbing and Drainage			

Item No		Quantity	Rate	Amount
	All plumbing to be done by a certified plumber registered in good standing with IOPSA			
	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			
	Class 34 uPVC rainwater pipes:			
1	200mm Diameter rainwater pipes	m	144	
2	Extra over rainwater pipe for bend	No	13	
3	Extra over rainwater pipe for shoe	No	13	
	FLOOR DRAINS:			
	"Vincosteel" or similar approved grade 304 stainless steel strip drain as per drawing 25002/S60 Rev5:			
4	Strip drain of varying depths, including concrete levelling pads, threaded bars, lugs, etc cast in position complete	m	78	
5	Extra over for stainless steel floor drain / catchpit	No	9	
	Heavy duty (Class 34) uPVC sewer and drain pipes:			
6	110mm Pipes laid in and including trenches not exceeding 1m deep	m	104	
	Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings:			
7	110mm Bend	No	9	
8	110mm Long radius bend	No	9	
9	110mm Junction	No	8	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 14			
	Plumbing and Drainage			
			R	

Item No			Quantity	Rate	Amount
10	110mm Rodding eye	No	4		
SANITARY FITTINGS AND BRASSWARE					
Take delivery, store, protect and install the following sanitary fittings:					
11	Stand pipe	No	3		
12	Wall hung WC pan including flush valve, seat, etc	No	2		
13	Wash hand basin bolted to wall, including tap, waste, trap, etc	No	2		
14	Double bowl sink, including mixer, waste, trap, etc on cupboard (cupboard elsewhere)	No	1		
15	16mm Stopcock	No	3		
16	20mm Stopcock	No	2		
SANITARY PLUMBING					
Design, supply and installation of the complete sanitary plumbing installation, inclusive of pipes, fittings, traps, cowls, etc up to and including connecting to the civil services (refer civil drawings indicating nearest point) - measured per sanitary fitting point:					
17	Wall hung WC pan	No	2		
18	Wash hand basin	No	2		
19	Double bowl sink	No	1		
Testing:					
20	Testing waste pipe system		Item		
WATER SUPPLIES					
Carried Forward to Trade Summary					R
Section 2 - Building Works					
Bill No. 14					
Plumbing and Drainage					

Item No			Quantity	Rate	Amount
	Design, supply and installation of the internal water supply (cold water only) installation inclusive of pipes, fittings, safety valves, stopcocks, etc up to and including connecting to the civil services (refer civil drawings indicating nearest point) - measured per sanitary fitting point:				
21	Stand pipe	No	3		
22	Wall hung WC pan including cistern	No	2		
23	Wash hand basin, including mixer	No	2		
24	Double bowl sink including mixer	No	1		
	Design, supply and installation of the internal water supply (hot water) installation inclusive of pipes, fittings, safety valves, stopcocks, etc up to and including connecting to the civil services (refer civil drawings indicating nearest point) - measured per sanitary fitting point:				
25	Wash hand basin, including mixer	No	2		
26	Double bowl sink including mixer	No	1		
	Testing:				
27	Testing water pipe system		Item		
	AS-BUILT DRAWINGS				
28	Provision of as-built drawings in CAD format		Item		
	SUPPLY OF SANITARY FITTINGS AND ACCESSORIES:				
29	Prime Cost Amount of Twenty Five Thousand for supplying sanitary fittings and accessories		Item		25,000. 0
30	Profit & attendance			%	
	Carried Forward to Trade Summary				
	Section 2 - Building Works			R	
	Bill No. 14				
	Plumbing and Drainage				

Section 2 - Building Works

Bill No. 14

Plumbing and Drainage

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

140

141

142

143

144

145

146

147

Amount

Carried Forward to Section Summary

Section 2 - Building Works

Bill No. 14

Plumbing and Drainage

R

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO 15			
	PAINTWORK			

	PREAMBLES			
	The General Preambles for Trades (2017 edition) as 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	PAINT SPECIFICATIONS			
	All painting shall be done in accordance with "Plascon" specifications, unless otherwise described			

	ON INTERNAL FLOATED PLASTER SURFACES			
	One coat alkali resistant primer and two coats low odour premium quality highly washable and stain resistant acrylic emulsion paint for interior use, on:			
1	Walls	m2	445	
	ON FACE BRICKWORK SURFACES			
	Scrub down walls and apply two coats Brickseal, on:			
2	Walls	m2	320	
	Carried Forward to Trade Summary			
	Section 2 - Building Works			
	Bill No. 15			
	Paintwork			
			R	

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Section 2 - Building Works

Bill No. 15

Paintwork

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

149

150

Amount

Carried Forward to Section Summary

Section 2 - Building Works
Bill No. 15
Paintwork

R

Item No	Quantity	Rate	Amount
SECTION 2			
BILL NO 16			
BUILDER'S WORK IN CONNECTION WITH SPECIALIST INSTALLATIONS			

PREAMBLES			
The General Preambles for Trades (2017 edition) as 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			
The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
SUPPLEMENTARY PREAMBLES			
Prices for chases, holes, openings, sleeves, etc through or into brickwork, concrete, etc must include for making good same as well as any disturbed work or finishes in all other trades, unless otherwise described			
Making good finishes:			
Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary			

Carried Forward to Trade Summary			
Section 2 - Building Works			R
Bill No. 16			
Builder's Work in connection with Specialist Installations			

Item No		Quantity	Rate	Amount
SLEEVES				
PVC sleeves for pipes not exceeding 100mm diameter:				
1	Sleeve not exceeding 250mm long and built through one-brick wall	No	6	
PVC sleeves for pipes exceeding 100mm and not exceeding 200mm diameter:				
2	Sleeve not exceeding 250mm long and built through one-brick wall	No	4	
3	Ditto, but sleeve exceeding 250mm and not exceeding 500mm long	No	4	
CORE DRILLING, ETC				
Core drilling through reinforced concrete :				
4	100mm Diameter hole through not exceeding 300mm wall	No	5	
5	Ditto, but 150mm diameter hole	No	4	
6	Ditto, but 200mm diameter hole	No	3	
Carried Forward to Trade Summary				
Section 2 - Building Works				
Bill No. 16				
Builder's Work in connection with Specialist Installations				

Section 2 - Building Works

Bill No. 16

Builder's Work in connection with Specialist Installations

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

152

153

Amount

Carried Forward to Section Summary

Section 2 - Building Works

Bill No. 16

Builder's Work in connection with Specialist Installations

R

Section 2 - Building Works

SECTION SUMMARY

Bill No		Page No	Amount	
1	Earthworks	89		
2	Concrete, Formwork and Reinforcement	96		
3	Masonry	101		
4	Waterproofing	104		
5	Roof Coverings, Claddings Etc	108		
6	Carpentry and Joinery	111		
7	Ceilings, Partitions and Access Flooring	115		
8	Floor Coverings	116		
9	Ironmongery	119		
10	Structural Steelwork	125		
11	Metalwork	131		
12	Plastering	136		
13	Tiling	139		
14	Plumbing and Drainage	148		
15	Paintwork	151		
16	Builder's Work in connection with Specialist Installations	154		
Carried Forward to Final Summary			R	
Section 2 - Building Works				

Item No		Quantity	Rate	Amount
	SECTION 3 BILL NO 1 EXTERNAL WORK (ALL TRADES) ----- PREAMBLES The Model Preambles for Trades (2008 edition) as 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 The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles SUPPLEMENTARY PREAMBLES Nature of ground: The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock" or "hard rock" Should the Contractor encounter any "soft" or "hard" rock in the excavations, he shall immediately notify the Engineer who shall be the sole arbiter as to what constitutes "soft" or "hard" rock for final account purposes Subterranean water: No subterranean water is expected			
	Carried Forward to Trade Summary Section 3 - Site Works Bill No. 1 External Work		R	

Item No		Quantity	Rate	Amount
	Excavation for working space in rock: Notwithstanding clause 11 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be 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 Filling: Notwithstanding the reference to prescribed multiple handling in Clause 1 of 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: <i>Prices for backfilling to trenches and holes only are to include for all necessary density tests in accordance with SANS 1200D</i> Maintenance period: The maintenance period to civil works such as roads, parking and related earthworks shall be twelve calendar months ----- SITE CLEARANCE, ETC Site clearance:			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth and depositing material at a dumping site located by the contractor	m2	17,000	
2	Stripping average 150mm thick layer of top soil and depositing material at a dumping site located by the contractor	m3	1,940	
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 1			
	External Work			
			R	

Item No		Quantity	Rate	Amount
	BULK EXCAVATION, FILLING, ETC			
	EXCAVATIONS, ETC			
	Open face excavation in earth over sloping site:			
3	Open face excavation to fill (fill elsewhere measured)	m3	1,250	
4	Open face excavation to spoil (spoil elsewhere measured)	m3	7,500	
	Extra over bulk excavations in earth for excavation in:			
5	Soft rock	m3	875	
6	Hard rock	m3	350	
	Extra over all excavations for carting away:			
7	Surplus material from excavations and/or stock piles on site to a dumping site situated maximum 500m from the building site	m3	7,500	
	Keeping excavations free of water:			
8	Keeping excavations free of water other than subterranean water		Item	
	FILLING, ETC			
	Earth filling obtained from the excavations, compacted to 95% Mod AASHTO density:			
9	Over site to make up levels from cut (cut elsewhere measured)	m3	1,250	
	G8 filling material supplied by the Contractor, compacted to 93% Mod AASHTO density (100% for sand):			
10	Over site to make up levels	m3	7,250	
	Additional tests if required by the Engineer:			
11	"Modified AASHTO Density" test	No	30	
12	"DCP" probe test	No	25	
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 1			
	External Work			
			R	

Item No		Quantity	Rate	Amount
13	"Troxler" test	No	5	
	ROADWORK, PARKING AREAS AND PAVING			
	SUPPLEMENTARY PREAMBLES			
	Testing of material and filling:			
	Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required, in accordance with the SABS 1200 series			
	Precast concrete block road surfacing:			
	Paving shall be laid in accordance with SABS 1200 MJ, SANS 1058 and the Concrete Masonry Association's specifications			
	Paving shall be laid to herringbone pattern on 20mm thick (thickness after final compaction) clean river sand (preparation of ground or filling elsewhere)			
	Clean sand shall be swept into joints between roadstones at completion			
	ROADWORKS, ETC			
	Earth filling from commercial sources supplied by the Contractor under parking areas, roadways, etc:			
14	Sub-grade course G8 material in accordance with SABS 1200 DM, compacted to 98% Mod AASHTO density (100% for sand)	m3	823	
15	Sub-grade course G7 material in accordance with SABS 1200 DM, compacted to 98% Mod AASHTO density (100% for sand)	m3	54	
16	Sub-base course G5 material in accordance with SABS 1200 DM, compacted to 95% Mod AASHTO density	m3	40	
17	Sub-base course G2 material in accordance with SABS 1200 DM, compacted to 98% Mod AASHTO density	m3	21	
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 1			
	External Work			

Item No		Quantity	Rate	Amount
18	Sub-base course of cement stabilised C3 material in accordance with SABS 1200 ME and compacted to 97% Mod AASHTO density	m3	892	
19	Extra over C3 for cement stabilization with "PPC Sureroad"	t	55.69	
	Compaction of surfaces:			
20	Compaction of ground surface under pavings, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	5,847	
	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/m2:			
21	Under paving, etc	m2	360	
	Bituminous premix road surfacing:			
22	40mm Thick paving to parking areas, roadways, etc including bitumen spray to base course	m2	140	
	25MPa/19mm reinforced concrete:			
23	To walkways, etc	m3	4	
	30MPa/19mm reinforced concrete:			
24	To parking areas, roadways, etc in panels between construction joints, etc	m3	871	
	Finishing top surfaces of concrete smooth with a power float:			
25	Paving to parking areas, roads, etc to falls	m2	5,487	
	"Sika Antisol-15" or similar approved curing compound at a minimum thickness of 0,2L/m2:			
26	External concrete surfaces	m2	5,487	
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 1			
	External Work			
			R	

Item No		Quantity	Rate	Amount
	Rough formwork to sides:			
27	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	42	
28	Ditto, but circular-on-plan	m	18	
	Saw-cut joints:			
29	6 x 30mm Saw-cut joints in top of concrete	m	1,483	
	Horizontal construction joints through concrete including thick cement slurry to one face:			
30	Surface beds not exceeding 300mm thick	m	403	
	Expansion joints with "Sondor Jointex" polyethylene expansion joint filler with tear-off strips in paving:			
31	10mm Joints not exceeding 300mm high	m	216	
	Fabric reinforcement:			
32	Type 193 fabric reinforcement in concrete paving, etc	m2	44	
33	Type 311 fabric reinforcement in concrete paving, etc	m2	5,442	
	Paving of 200 x 100 x 50mm Charcoal cement paving bricks with butt joints, on 20mm thick river sand bed with sand-and-cement mixture swept into joints and hosed down, including preparation of ground or filling:			
34	Paving to parking areas, etc to falls	m2	220	
35	Fair circular cutting	m	13	
	Precast concrete finished smooth on exposed surfaces, including excavation, backfilling, concrete haunching behind joints, bedding, jointing and pointing:			
36	Figure 3 kerb	m	441	
37	Ditto, but circular-on-plan	m	128	
38	Figure 3 dropped kerb	m	30	
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 1			
	External Work			
			R	

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Section 3 - Site Works

Bill No. 1

External Work

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

156

157

158

159

160

161

162

Amount

Carried Forward to Section Summary

R

Section 3 - Site Works

Bill No. 1

External Work

Item No		Quantity	Rate	Amount
	SECTION 3			
	BILL NO 2			
	SITE SERVICES			

	PREAMBLES			
	The Model Preambles for Trades (2008 edition) as 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			
	The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said General Preambles			
	SUPPLEMENTARY PREAMBLES			
	Stormwater channels:			
	Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc and disposal of surplus material on site			
	uPVC 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			
	uPVC pressure pipes and fittings:			
	Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC 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 uPVC and all other fittings shall be cast iron, all with similar push-in type joints			
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 2			
	Site Services			
			R	

Item No		Quantity	Rate	Amount
	High density polyethylene (HDPE) pipes and fittings: Pipes shall be type IV and of the class specified with "Plasson" or "Alprene" compression fittings Reducing fittings: Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm, 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. In the case of pipes with diameters exceeding 60mm, all sizes are given and no claim for extra bushes, reducers, etc will be entertained Disinfection of water pipework: Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere) "Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.: Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with suitable overlaps Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including mastic, tape, "Layflat" sheeting, securing of same, etc 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			
	Carried Forward to Trade Summary Section 3 - Site Works Bill No. 2 Site Services		R	

Item No		Quantity	Rate	Amount
	Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium-pressure pipelines SABS 1200LD : Sewers SABS 1200LE: Stormwater drainage Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes) Unless otherwise described, bedding of rigid pipes shall be Class B bedding General: 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 98% 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) 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) ----- STORMWATER DRAINAGE			
	Carried Forward to Trade Summary		R	
	Section 3 - Site Works			
	Bill No. 2			
	Site Services			

Item No			Quantity	Rate	Amount
	Class 100D concrete pipes with spigot and socket joints with rubber rings:				
1	300mm Pipes laid in and including trenches not exceeding 1m deep	m	45		
2	Ditto, but exceeding 1m and not exceeding 2m deep	m	28		
3	375mm Pipes laid in and including trenches not exceeding 1m deep	m	39		
4	Ditto, but exceeding 1m and not exceeding 2m deep	m	86		
5	450mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	55		
6	600mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	155		
7	675mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	10		
	Heavy duty (Class 34) uPVC stormwater pipes:				
8	110mm Pipes laid in and including trenches not exceeding 1m deep	m	55		
9	160mm Pipes laid in and including trenches not exceeding 1m deep	m	33		
10	Ditto, but exceeding 1m and not exceeding 2m deep	m	21		
	Sumps, catchpits, inspection chambers, etc including concrete kerbs or precast concrete cover slabs (gratings and covers elsewhere):				
11	300 x 300mm Brick catchpit not exceeding 1000mm deep internally	No	4		
12	410 x 1400mm Brick catchpit not exceeding 1000mm deep internally including lintol over centre	No	2		
13	Kerb catchpit/inlet 1500mm long not exceeding 1000mm deep internally including transition kerb, in-situ cover, steel, mesh, etc complete	No	3		
14	Ditto, but 2500mm long	No	3		
	Carried Forward to Trade Summary				R
	Section 3 - Site Works				
	Bill No. 2				
	Site Services				

Item No			Quantity	Rate	Amount
15	1000mm Diameter precast concrete circular inspection chamber not exceeding 1000mm deep internally with lower portion around haunching built in 220mm brickwork, complete	No	7		
16	Ditto, but exceeding 1000mm and not exceeding 2000mm deep internally	No	3		
	Cast iron gratings, covers, etc:				
17	300 x 300mm Light duty dished grating and frame	No	4		
18	450 x 600mm Heavy duty dished grating and frame	No	4		
19	600 x 600 EN124 D400 Manhole cover and frame	No	10		
	Sundries:				
20	Carefully excavate for and cutting into side of existing 675mm drain pipe for building a manhole over, including connecting pipe to new manhole (manhole elsewhere measured)	No	1		
	Testing:				
21	Testing stormwater drainage system		Item		
	SLEEVES FOR ELECTRICAL AND TELEPHONE CABLES, ETC				
	Class 6 uPVC pipes:				
22	110mm pipes laid in and including trenches not exceeding 1m deep	m	55		
23	Set of two 110mm pipes laid side-by-side in and including trenches not exceeding 1m deep	m	40		
24	Ditto, but set of six	m	25		
25	Set of two 160mm pipes laid side-by-side in and including trenches not exceeding 1m deep	m	20		
	Extra over Class 6 uPVC pipes for fittings:				
26	110mm Long radius bend	No	25		
27	160mm Long radius bend	No	13		
	Carried Forward to Trade Summary			R	
	Section 3 - Site Works				
	Bill No. 2				
	Site Services				

Item No			Quantity	Rate	Amount
	Draw wires:				
28	1,6mm Galvanised steel draw wires in pipes	m	325		
	Inspection chambers:				
29	600 x 600mm Brick inspection chamber not exceeding 1000mm deep internally, including precast concrete cover slab (cover elsewhere)	No	4		
30	450 x 450mm Medium duty manhole cover and frame	No	4		
	SOIL DRAINAGE				
	Heavy duty (Class 34) uPVC sewer and drain pipes:				
31	110mm Pipes laid in and including trenches not exceeding 1m deep	m	96		
32	160mm Pipes laid in and including trenches not exceeding 1m deep	m	5		
33	Ditto, but exceeding 1m and not exceeding 2m deep	m	44		
34	Ditto, but exceeding 2m and not exceeding 3m deep	m	207		
	Extra over heavy duty (Class 34) uPVC sewer and drain pipes for fittings:				
35	110mm Bend	No	20		
36	110mm Slow bend	No	12		
37	160mm Bend	No	15		
38	110mm Junction	No	9		
39	160mm Junction	No	5		
40	110mm Rodding eye	No	5		
	Precast concrete circular inspection chambers including precast concrete cover slabs (cast iron covers and frames elsewhere) and channels in benching:				
41	1000mm Diameter inspection chamber exceeding 1m and not exceeding 2m deep	No	2		
	Carried Forward to Trade Summary				
	Section 3 - Site Works				
	Bill No. 2				
	Site Services				
				R	

Item No			Quantity	Rate	Amount
42	Ditto, but exceeding 2m and not exceeding 3m deep	No	2		
	Cast iron covers, etc:				
43	600 x 450mm EN124 D400 manhole cover and frame	No	4		
	Testing:				
44	Testing soil drainage system		Item		
	WATER SUPPLIES				
	Class 12 uPVC pressure pipes with rubber ring joints:				
45	75mm Pipes laid in and including trenches not exceeding 1m deep	m	135		
	Extra over class 12 uPVC pressure pipes for uPVC pressure fittings with rubber rings:				
46	50mm Bend	No	5		
47	75mm Bend	No	1		
	Extra over class 12 uPVC pressure pipes for cast iron pressure fittings:				
48	75mm Flanged valve	No	1		
	Sundries:				
49	Unreinforced concrete in thrust blocks in trenches at bends, tees, etc including extra excavation, formwork, etc	m3	0.4		
	Disinfecting:				
50	Disinfecting water pipe system		Item		
	Testing:				
51	Testing water pipe system		Item		
	FIRE APPLIANCES, ETC				
52	100mm 2500 KPa pressure gauge syphon and stopcock, including tapped hole in steel pipe	No	2		
	Carried Forward to Trade Summary			R	
	Section 3 - Site Works				
	Bill No. 2				
	Site Services				

Item No		Quantity	Rate	Amount
53	80 x 65mm Brass right-angle hydrant valve with cap and chain	No	5	
54	80 x 65mm Brass double booster pump connection and Y-piece, with caps and chains	No	1	
	Fire hydrant pedestals:			
55	Unreinforced concrete hydrant pedestal 900mm high, cast around vertical pipe with bottom 300mm below ground, 300 x 300mm square at base and tapering to 200 x 200mm overall octagonal shaped top, including excavation, formwork and two coats yellow paint to exposed surfaces	No	5	
	WATER SUPPLIES TO FIRE APPLIANCES			
	Class 16 uPVC pressure pipes with rubber ring joints:			
56	110mm Pipes laid in and including trenches not exceeding 1m deep	m	417	
	Extra over class 16 uPVC pressure pipes for uPVC pressure fittings with rubber rings:			
57	110mm Bend	No	3	
58	110mm Tee	No	1	
	Extra over class 16 uPVC pressure pipes for cast iron pressure fittings:			
59	110mm Hydrant reducing tee drilled to table 16, including connecting bolts, gaskets, etc	No	5	
60	80mm Bend	No	5	
	Sundries:			
61	Unreinforced concrete in thrust blocks in trenches at bends, tees, etc, including extra excavation, formwork, etc	m3	2	
	Testing:			
62	Testing fire water pipe system	Item		
	Carried Forward to Trade Summary			
	Section 3 - Site Works			
	Bill No. 2			
	Site Services			

R

Item No		Quantity	Rate	Amount
AS-BUILT DRAWINGS				
63	Provision of as-built drawings in CAD format	Item		
Carried Forward to Trade Summary				R
Section 3 - Site Works				
Bill No. 2				
Site Services				

Section 3 - Site Works

Bill No. 2

Site Services

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

164

165

166

167

168

169

170

171

172

Amount

Carried Forward to Section Summary

Section 3 - Site Works
Bill No. 2
Site Services

R

Section 3 - Site Works

SECTION SUMMARY

Bill No		Page No	Amount
1	External Work	163	
2	Site Services	173	
Carried Forward to Final Summary			R
Section 3 - Site Works			

[illegible]

[illegible]

[illegible]

Section 4 - Electrical, Mechanical & Fire

SECTION SUMMARY

Bill No		Page No	Amount
1	Electrical	175	
2	Mechanical	176	
3	Fire	177	
Carried Forward to Final Summary			R
Section 4 - Electrical, Mechanical & Fire			

Item No	Quantity	Rate	Amount
SECTION 5 BILL NO 1 SUBCONTRACT AMOUNTS ----- PREAMBLES General: Subcontract amounts are net. Subcontract amounts are for material and equipment supplied and installed complete by firms of specialists Each subcontract amount may comprise more than one element of work. Therefore, each subcontract amount may include for work to be carried out by more than one subcontractor Profit: Where stated, the Contractor may allow for profit if required General attendance on nominated/selected subcontractors: The item "General Attendance" which follows each subcontract amount for nominated/selected subcontractors' work, shall be deemed to cover all the Contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following: 1. Access to the site and places where the subcontract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the Contractor 2. The provision of water and lighting and of single phase electric power to a position within 50 metres of the place where the subcontract work is to be carried out but excluding water, fuel and power for commissioning of any installation			
Carried Forward to Trade Summary Section 5 - Provisional Allowances Bill No. 1 Subcontract Amounts		R	

[illegible]

Item No		Quantity	Rate	Amount
	STAIRS, WALKWAYS, ETC			
1	Subcontract amount of Eight Hundred and Twenty Thousand Rand for stairs, walkways, etc	Item		820,000 0
	BOLLARDS, GOALPOSTS, PROTECTION, ETC			
2	Subcontract amount of Two Hundred Thousand Rand for bollards, goalposts, protection, etc	Item		200,000 0
	PLANT ELECTRICAL			
3	Subcontract amount of Three Million Rand for plant electrical	Item		3,000,000 0
	SMOKE DETECTION			
4	Subcontract amount of One Hundred and Fifty Thousand Rand for smoke detection	Item		150,000 0
	COLD ROOM PANELLING, DOORS, ETC			
5	Subcontract amount of One Million Four Hundred Thousand Rand for cold room panelling, doors, etc	Item		1,400,000 0
	DRYWALLS, PARTITIONS, ETC			
6	Subcontract amount of Twenty Thousand Rand for drywalls, partitions, etc	Item		20,000 0
	POLYURETHANE / EPOXY FLOORING			
7	Subcontract amount of One Million Two Hundred Thousand Rand for polyurethane / epoxy flooring	Item		1,200,000 0
	JOINERY FITTINGS, TOPS, ETC			
8	Subcontract amount of One Hundred and Twenty Thousand Rand for joinery fittings, tops, etc	Item		120,000 0
	FENCING, GATES, BOOMS, ETC			
9	Subcontract amount of Nine Hundred Thousand Rand for fencing, gates, booms, etc	Item		900,000 0
	PROFIT & ATTENDANCE			
10	Profit & attendance		%	
	Carried Forward to Trade Summary		R	
	Section 5 - Provisional Allowances			
	Bill No. 1			
	Subcontract Amounts			

Section 5 - Provisional Allowances

Bill No. 1

Subcontract Amounts

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

179

180

181

Amount

Carried Forward to Section Summary

Section 5 - Provisional Allowances

Bill No. 1

Subcontract Amounts

R

Item No		Quantity	Rate	Amount
	SECTION 5			
	BILL NO 2			
	BUDGETARY ALLOWANCES			

	PREAMBLES			
	General:			
	A Budgetary Allowance is a sum of money included in the contract sum for work intended for execution by the Contractor, the extent of which is identified but not detailed			
	Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances			
	Each Budgetary Allowance may comprise more than one element of work			

	MIRRORS, ACCESSORIES, ETC			
1	Budgetary Allowance of Eight Thousand Rand for mirrors, accessories, etc	Item		8,000 0
	WATER METERS, ETC			
2	Budgetary Allowance of Eighty Thousand Rand for water meters, etc	Item		80,000 0
	ADDITIONAL PLUMBING, ETC			
3	Budgetary Allowance of Three Hundred Thousand Rand for additional plumbing, etc	Item		300,000 0
	BUILDER'S WORK IN CONNECTION WITH SPECIALIST INSTALLATIONS			
4	Budgetary Allowance of One Hundred and Thirty Thousand Rand for builders work in connection with specialist installations	Item		130,000 0
	Carried Forward to Trade Summary		R	
	Section 5 - Provisional Allowances			
	Bill No. 2			
	Budgetary Allowances			

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Section 5 - Provisional Allowances

Bill No. 2

Budgetary Allowances

TRADE SUMMARY

Total Brought Forward from Page No

Page
No

183

184

Amount

Carried Forward to Section Summary

Section 5 - Provisional Allowances
Bill No. 2
Budgetary Allowances

R

Section 5 - Provisional Allowances

SECTION SUMMARY

Bill No		Page No	Amount
1	Subcontract Amounts	182	
2	Budgetary Allowances	185	
Carried Forward to Final Summary			R
Section 5 - Provisional Allowances			

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ANNEXURE A - ELECTRICAL BOQ

PART 4

ELECTRICAL INSTALLATION

PROJECT TECHNICAL SPECIFICATION

1. SCOPE OF ELECTRICAL INSTALLATION WORK

References to the Contractor, Subcontractor, Electrical Contractor and/or Electrical Subcontractor in the specifications and drawings shall mean the Contractor for this Electrical Installation.

The project comprises a new Juice Plant.

The Electrical Installation includes the supply, delivery, off-loading, storage, installation, testing, commissioning and handing over in proper working order of the complete electrical installation as specified in this Specification, Schedules and on the Drawings.

The following broadly defined sections of work are included in this electrical installation:

- Acceptance, storage, installation & commissioning of free issue plant & materials.
- New Juice Plant LV Electrical
- Lighting & power in new office.
- Provisional Dayworks and Provisional Sums. (To be expended as directed by the Employer / Engineer).
- Liaison and arrangements with authorities (e.g. Electricity Supply Authority, Telkom, etc.)
- Electricity supply arrangements with the Electricity Supply Authority (Connection fee and deposit shall be paid directly by the Employer as arranged by the Electrical Contractor).
- Arrangements/Liaison with & attendance on Employer and Contractors / Specialists for installation of telephone cabling, outlets, etc.
- Arrangements/Liaison with and attendance on IT/Computers, Security, etc. contractors/specialists for installation of IT and electronic installations, cabling and equipment.
- Supply, installation and termination of the main supply cables and earth conductors from the Miniature Substation to the MDB (miniature substation supplied & installed by Eskom).
- Trenching for cables, backfilling in layers and compacting, removal of excess, cable markers and protection.
- Sealing of used and unused cable sleeves (at both ends) after installation of cables.
- Cable ladders/trays and supports, cables and earth conductors.
- Main distribution board (MDB).
- Distribution boards as per the DB schematics.
- Wireways, conduits, drawboxes, outlets, wiring, switches, switch sockets, luminaires, cover plates, isolators, etc.
- Electronic installations: telephone, IT/Computers, security, access control, fire alarm, TV and communication (electronics) boards, wireways, conduits, drawboxes and outlets.

- Drawwires in all telephone, IT/Computers, security, access control, fire alarm, TV, communication (electronic installations) and unused electrical conduits and sleeves.
- Site, area flood lighting with control/switching, cables, trenching, wiring, etc.
- Main earth, earthing and bonding.
- Lightning protection.
- Power supply cables and earth conductors to, and termination onto, main boards of other services: i.e. Refrigeration plant board.
- Power supplies, connections to and rotation /operation tests of electrical equipment, plant, machines, etc. supplied & installed by others e.g. water heaters, ac units, fans, etc. where local isolators and/or outlets are provided as part of the electrical installation.
- Chasing of brickwork where reasonably required to execute the installation.
- Pointing out and checking requirements for, positioning and correctness of Builder's work required for and related to this services installation, e.g. sleeves, manholes, making and closings openings, making good, etc., as well as checking thereof during construction so that it is correctly and timeously provided by the Builder.
- Submission of samples.
- Compiling, submission and resubmission of workshop and as-built drawings and information, operating and maintenance manuals. (NB: required in final approved format and content before final handover will be taken).
- Training of Employer / User staff.
- Carrying out of tests and submission of test records and certificates.
- One year comprehensive guarantee and repair period.
- All other materials and labour to complete, tests, commission and hand over the services installation in accordance with this specification and the accompanying documents, drawings and schedules.

Care shall be taken not to damage/disrupt any existing services/installations.

Any switching/switchover involving disruption of the power supply shall only be done outside normal hours as agreed with the Employer/User.

2. BUILDER'S WORK & WORK BY OTHERS

The following sections of work are not included in this Electrical Installation:

- Supply of the incoming MV Metering Unit.
- Supply of a 1000kVA transformer.
- Supply of a 3-way Ring Main Unit.
- Supply and installation of the following equipment:
 - o Geysers
 - o Ventilation fans
 - o Airconditioning units and fans
 - o Pumps
 - o Juice Plant / Process equipment distribution boards.
 - o Connection/plugs on process equipment for which SSO's are provided.
- Supply and installation of equipment and system cabling for :
 - o Telephones
 - o Computers/IT
 - o Communication
 - o CCTV
 - o Security & Access Control
 - o Fire detection and Alarm

- Builder's Work:
 - o As indicated on the drawings
 - o As requested during/with the tender
 - o Sleeves and manholes
 - o Making and closing openings as specified in steel structures, walls and ceilings, e.g. for power skirting, luminaires, power posts, etc.
 - o Making good of chasing as reasonably made in the normal course of the work

Should already plastered walls be chased without permission, the repair cost will be for the account of the Electrical Contractor.

Builder's work as specified shall be checked and verified by the Electrical Contractor:

- To be complete and sufficient, and point out any further requirements to the Engineer.
- During construction so that it is provided correctly and timeously by the Builder.

3. SITE AND EXISTING SERVICES

The site is situated in the Maluti-a-Phofung Special Economic Zone.

The Contractor shall liaise with authorities (e.g. Electricity Supply Authority, Telkom, Neotel, etc.) and the Employer / User regarding the existence, positions, pointing out, protection and/or relocation of existing services and, after informing the Employer / Engineer and having been instructed to proceed, arrange for and/or undertake the protection and/or relocation of affected existing services.

The cost of the protection and/or relocation of affected existing services do not form part of the contract at tender stage, unless specifically otherwise specified.

4. DRAWINGS

The Electrical Installation is specified on the drawings as listed in the attached SCHEDULE OF DRAWINGS.

The Contractor shall also consult the architectural, civil, structural, mechanical and other services drawings.

Workshop drawings shall be provided of the following:

- Distribution boards : electrical, telephone, IT/computers, security, access control, fire alarm, CCTV and communication
- Builder's works required for the services installation, e.g. plinths, holes, openings, etc.
- Powerskirting and fittings/accessories layouts and details
- Cable ladders/trays & fittings/accessories layouts and details
- Wiring trunking/ducting layouts and details

These must be submitted timeously to permit enough time for scrutiny, adjustment and resubmission and such that no delivery problems are caused.

The Engineer's scrutiny of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of this Contract, unless the Contractor has informed the Engineer in writing of such deviations at the time of submission of shop drawings or samples and the Engineer has given written approval for the specific deviation, nor shall this relieve the Contractor of responsibility for errors or omissions in the shop drawings or samples.

As-built drawings of all drawings for which workshop drawings were submitted, as well as of the cable routes in the ground with location dimensions, shall be provided.

5. SAMPLES AND ALTERNATIVES

Samples or catalogues are required of all the electrical materials/equipment, e.g. luminaires, light switches, dimmers, photocell, socket outlets, isolators, coverplates, powerskirting, standard power skirting colours, floor duct and pedestals, fixings, power posts, etc.

Should alternatives be offered, then a sample of the specified and alternative units, as well as the price implication per unit and the entire installation/project, shall be submitted.

These must be submitted timeously to permit enough time for scrutiny, adjustment and resubmission and such that no delivery problems are caused.

The Engineer's scrutiny of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of this Contract, unless the Contractor has informed the Engineer in writing of such deviations at the time of submission of shop drawings or samples and the Engineer has given written approval for the specific deviation, nor shall this relieve the Contractor of responsibility for errors or omissions in the shop drawings or samples.

6. ELECTRICITY SUPPLY

The electricity supply is a new MV 1000KVA connection point from Eskom.

The Electrical Contractor must allow for liaison with Eskom for the installation of the Miniature Substation on site as indicated on the site plan.

The LV cables from the Miniature Substation forms part of this project.

Work on and changes to existing infrastructure which will require the existing power supply, or any other service, to be switched off, shall be scheduled/carried out outside normal working hours as agreed with the Employer/User.

7. COMPLIANCE WITH THE REGULATIONS, STANDARDS AND CODES

The entire installation shall be carried out in accordance with the latest revisions and amendments of the following:

- National Building Regulations and SANS 10400.
- The Code of Practice for the Wiring of a Premises (SANS 10142).
- The Occupational Safety and Health Act.
- The Municipal Bye-Laws and any special requirements of the local and supply authorities of the area.
- Telkom regulations and requirements.
- Fire Office/Officer.
- The applicable SANS Specifications and Codes of Practice or, where no SANS Specification or Code exists, the relevant BS or IEC Specifications or Codes of Practice shall apply.

The Contractor shall work safely and in accordance with the provisions of the OSH Act. Should any hazardous situation arise during construction and/or from the work being performed/undertaken, the Contractor shall immediately inform the Employer/Architect/Engineer of such situation, as well as what action he is taking to rectify this situation, alternatively what assistance/action he may require from the Employer/ Architect/ Engineer in this regard. The Employer/ Architect/ Engineer reserves the right to take whatever action as may be required to enforce safety standards should the Employer/ Architect/ Engineer discover that the Contractor is working unsafely.

The Contractor is required to appoint a full time safety co-ordinator on site who shall take responsibility for safety on site and liaise with the Building Contractor/Employer on matters relating to safety.

No claims for extras in respect of failure by the Contractor to comply with any of the above regulations will be considered.

8. NOTICES, FEES AND LOCAL AUTHORITY

The Contractor shall arrange and pay the necessary inspection, testing and retesting fees where and as applicable.

The Contractor shall submit the necessary application forms to the local supply authority for the inspection, testing and final approval of the installation.

9. COMPLIANCE CERTIFICATE

The work shall not be considered complete until the applicable test and/or compliance certificates have been issued by the Electrical Contractor to the responsible Authority and copies of these have been submitted to the Employer/Architect/Engineer by the Contractor.

Where it is required that the Engineer should also sign a certificate, the Contractor shall firstly complete and sign such certificate before submission to the Engineer for his signature.

10. ACCEPTANCE TESTS & COMMISSIONING

After completion, either in a part or as a whole, the complete installations shall be subject to acceptance tests by the Employer/Engineer. The Contractor shall assist the Employer/ Engineer during any test carried out and must supply and operate/handle equipment, tools, instruments and consumables for testing purposes.

All labour, power, fuel, dummy and test loads and all instruments and appliances that may be required for the tests and commissioning, shall be provided by the Contractor.

11. MATERIALS

All equipment and materials shall comply with a SANS code and have the SABS/SANS mark. Where no such code exists, the applicable BS or IEC code shall apply. It may at any time be required of the Contractor to provide proof hereof, without any additional cost or compensation to provide such proof and/or to comply herewith.

All materials, equipment and fixings must be corrosion resistant/proof.

Compatibility of equipment, materials and fixings with each other and the environment is vital. Where doubt exists regarding this aspect, it is the Contractor's responsibility to request, in writing, additional information from the Employer/Engineer.

Interchangeability of equipment: similar and equivalent equipment shall be identical in all respects and to the smallest detail such as contacts, fuses, coils, methods of wiring, wiring numbers, instruments, indicating lights and other accessories. It shall be possible to replace any piece of equipment with any similar and equivalent item of equipment under the same contract/subcontract.

Where a certain manufacturer's material or apparatus is mentioned/specified in the drawings or specifications, such materials or apparatus shall be provided as specified, except where an alternative to this condition is allowed in the specifications. Where a specification for material or apparatus is not provided, it shall be understood that all normal requirements for the use of such material or equipment shall apply.

The Contractor shall in all cases and at all times ensure that such equipment/materials comply with the SANS code and bear the SABS mark.

- **In wet/damp areas: Screws on faceplates of switch sockets, outlets, switches, etc. shall be plastic with plastic covers (or stainless steel but not chromed steel).**

12. DISTRIBUTION BOARDS

Standard, approved manufacture, SABS/SANS approved and type tested as per SANS/SABS distribution boards, complete with doors where specified, shall be used.

Distribution boards of 150A and larger shall be certified. Certificates are required with the workshop drawings and again on delivery of the boards and for the record/as-built documents/manual. Type tests are not required, unless specifically specified.

All distribution boards shall comply with the requirements of the Electricity Supply Authority and shall have the necessary space and/or equipment per their normal requirements, e.g. for metering, pre-payment meters, current demand circuit breakers, as well as space for the necessary equipment for the switching of water heating equipment by means of ripple relay, etc.

Workshop drawings of distribution boards must be submitted timeously for comment.

All distribution boards shall be equipped with minimum 5kA circuit breakers/equipment.

All telephone, data, security, access control, fire alarm, TV, communication, etc. boards and drawboxes larger than 100 x 100 shall be labelled as such.

Telephone, IT/computers, security, access control, fire alarm, CATV, CCTV, communication, etc. boards shall be manufactured to the same standard as for electrical distribution boards, to Telkom/Neotel requirements, with hinged doors with handles and Telkom/Neotel approved locking, soft wood backing, interconnection openings between compartments and name labels. Location, sizes, surface/recessed and compartments specified on the drawings.

13. CABLES AND ACCESSORIES

Unless otherwise specified, all cables shall be PVC armoured with copper conductors and separate earth conductors.

Where exposed cables may be subject to mechanical damage, they must be protected in galvanised kickpipe.

All cable routes shall be confirmed on site prior to excavation and cutting of cables.

All cables shall be labelled at both ends with a Hellerman Tyton cable identification system or similar indicating the size of the cable what is it feeding.

14. EARTHING AND BONDING

Main earth, earthing and bonding of electrical systems and equipment and structure by Electrical Contractor.

Earthing and bonding shall be carried out in accordance with the Wiring Code and as specified.

All cables and circuits wiring shall have a separate earth conductor: Refer DB-SCHEMATIC and DB-SYMBOLS A4 size drawings.

A common earth may be installed in cable ducts, cable trays, wiring channels, power skirtings and floor ducts T-ing off from this to DB's, outlets, etc. when more than one cable/circuit are drawn in together.

D-Pin socket outlets circuits are "dedicated clean power" circuits for computers: no earth leakage protection and separate PVC insulated earth conductor.

The entire installation shall be properly and effectively earthed and bonded as prescribed in the SABS/SANS Code of Practice for wiring of Premises, Code SANS 10142.

Self-tapping screws are not acceptable as means of securing earth conductors. All equipment shall be earthed at the earthbars which in turn shall be connected to the main earth system.

Cable armouring's shall be earthed via cable glands.

All luminaires shall be earthed.

Earth conductors shall loop into the kiosks and shall be connected in such a way that disconnection from the earth busbar or terminal does not break the continuity of the earth conductor.

Jointing and T-off's of lengths of earth conductor shall be performed by means of suitable line taps Cadwelding or Silbralloy welding. An overlap of minimum three times the width of the conductor shall be used : Refer CONNECTION OF EARTH CONDUCTORS A4 size drawings.

Where lugs are used for terminating stranded earth conductors, the lugs shall be crimped with an approved type of crimping tool. The lug stud size shall correspond to the fixing bolt and the lug shall be so positioned that the full contact area of the lug is utilised.

All bolts and screws used for the earthing shall be high tensile steel, brass or cadmium plated mild steel bolts.

The cable armour shall be bonded to earth at all terminations of cables.

15. CONDUITS AND ACCESSORIES

All conduits and accessories may be PVC, and shall be recessed in offices and ablutions but shall be Bosal/Heavy duty galvanised on surface in the Parkhouse/Store areas, unless otherwise specified or approved.

IT/Computers conduits and trunkings as indicated on the drawings/Bill of Quantities.

No mixed runs of PVC/steel conduit are permitted unless fitted with separate full-length earth conductors and all equipment earthed with it.

Where conduits are chased in, the Electrical Contractor shall apply a scratchcoat (plaster) to hold the conduits in position and minimise the making good plaster/skin required.

Conduits shall be installed in a neat and workmanlike fashion and at right angles to the building elements.

IT/Computers, Telephone & Electronic Services conduits and cables/conductors shall NOT be run parallel & directly adjacent to electrical conduits or cables. A clear gap of 200mm minimum shall be left between these and electrical conduits and cables/conductors where these are installed near or parallel to each other.

Drawwires shall be installed in all: telephone, IT/Computers, communication, CATV, CCTV, radio, access control, fire alarm, security (electronic services) and unused electrical conduits and sleeves.

All conduits in ceiling to be surface mounted, properly fixed to the underside of the slab.

16. OUTLET BOXES, DRAW BOXES AND COVER PLATES

All outlet boxes, draw boxes and inspection boxes shall match the conduits installed and comply with the requirements of SABS 162 and shall be provided with metal cover plates and rust free screws.

All cover plates shall be White to SANS 1091.

Telephone and IT outlets shall be provided with coverplates and cradles, which can accommodate a RJ11 and RJ45 outlet.

Install blank cover plates on the unused electrical drawboxes and outlets and on telephone,

IT/Computers, security, access control, fire alarm, CATV, CCTV, communication and other electronic services outlets and drawboxes.

Use oversize coverplates on all round outlet boxes.

All conduits in ceiling to be surface mounted, properly fixed to the underside of the slab/structure.

- ☐ **In wet/damp areas: Screws on faceplates of switch sockets, outlets, switches, etc shall be plastic with plastic covers (or stainless steel but not chromed steel).**

17. CONDUCTORS

All conductors shall be stranded copper PVC insulated for 660/1000 volts. Conductors shall comply with SABS 150 and shall bear the SABS/SANS mark.

The conductors must be installed as per the A4 size DB-SCHEMATIC and DB-SYMBOLS drawings.

A separate copper earth conductor shall be drawn in with every cable and circuit and all outlets and equipment earthed to it.

A common earth may be installed in wireways and T-ing off to outlets, etc. where more than one circuit is pulled into a wiring channel/powerskirting.

Dedicated clean power circuits (D-pin outlets) shall have a separate PVC insulated earth conductor(s).

18. LUMINAIRES AND PHOTOCELLS AND SENSORS

The Contractor must supply, install, connect and commission all luminaires complete with lamps, poles and accessories as specified in the SCHEDULE OF LUMINAIRES.

Unused light outlet points shall be blanked off with the wiring terminated in a connector block.

Circuit wiring shall not be run in or through luminaires, but shall enter and leave at the entry point nearest the luminaire connection terminals.

Flood, area, street, exterior and feature lighting shall be subjected to night tests in the presence of the Employer/Engineer to ensure that the settings, coverage, etc. are adequate and acceptable.

Emergency lighting shall be fed via a 5000VA Pure Sine Wave inverter with 2x5.5kWh Sunsync or similar approved lithium batteries.

19. POWERSKIRTING

The powerskirting shall be 3 compartment Type 2 tier 3 channel powerskirting

The colour shall be from the standard range to the Employer/Architect/Engineer's choice: submit samples for selection.

Full-length common earth conductors shall be installed in the powerskirting and earthing of outlets shall be T'd-off with an own earth conductor; as specified on the drawings: 4mm² BCE for power and separate 4mm² insulated for dedicated clean power circuits.

Every length/butt/joint in metal skirting/trunking shall be bonded/bridged together with minimum 4mm² earth conductor screwed/bolted to the metal and every 4th length/butt/joint shall be bonded to the common earth conductor in the skirting/trunking.

20. WIRING TRUNKING

Wiring trunking shall be:

- Similar to Cabstruct size as specified on the drawings, or as required (where not specified).
- Full length common earth conductors shall be installed in the trunking and earthing of the circuits shall be T'd off from this each with its own earth conductor, as specified on the drawings: 4mm² BCE for power and a separate 4mm² insulated earth for dedicated clean power circuits.
- Wiring shall be held in place in trunkings by means of Z-clips at maximum 1,2m spacing's.
- Every length/butt/joint in metal skirting/trunking shall be bonded/bridged together with minimum 4mm² earth conductor screwed/bolted to the metal and every 4th length/butt/joint shall be bonded to the common earth conductor in the skirting/trunking.

21. CABLE TRAYS

Cable trays/ladders shall be of the heavy duty cable ladder heavy duty hot dipped galvanised type.

Cable trays/ladders shall have minimum 75mm turn-up (side rails).

Each cable shall have a PVC Copper earth conductor, as specified.

22. INSTALLATION AND CONNECTION OF ELECTRICAL APPLIANCES AND EQUIPMENT

Electric Water Heaters: supplied and installed by others, unless otherwise specified.
The Contractor shall be responsible for the final connections to the water heater terminals.

Electric Cooking Appliances: supplied and installed by others, unless otherwise specified.
The Contractor shall be responsible for the final connections to the appliances.

Machine or Motor Outlet Points: Supplied and installed by others, unless otherwise specified.

Air-conditioning Units: supplied and installed by others, unless otherwise specified. The Contractor shall be responsible for the final connections to the appliances.

Extract Fans: supplied and installed by others, unless otherwise specified. The Contractor shall be responsible for the final connections to the appliances.

Security: supplied and installed by others, unless otherwise specified. The Contractor shall be responsible for the final connections of the power supply.

Fire detection and alarm: supplied and installed by others, unless otherwise specified. The Contractor shall be responsible for the final connections of the power supply.

Telephones/PABX: supplied and installed by others. The Contractor shall be responsible for pointing out conduit routes.

CCTV: supplied and installed by others. The Contractor shall be responsible for pointing out conduit routes.

Communication/Intercom: supplied and installed by others. The Contractor shall be responsible for pointing out conduit routes.

IT/Computers: supplied and installed by others. The Contractor shall be responsible for pointing out conduit routes.

23. POWER SUPPLIES TO AND CONNECTION OF SWITCHBOARDS FOR OTHER SERVICES

General: The Contractor shall provide power supplies to equipment, switchboards and control panels as specified and shall terminate these onto the main switch of the applicable boards or equipment & the equipment electrical is by others but the trunkings and dedicated sockets on the conveyors is part of this contract

24. PLANT/FIELD-MOUNTED CONTROL AND SWITCHING EQUIPMENT

Plant/Field-mounted equipment shall be mounted:

- As recommended by the Supplier, and/or
- As specified, and/or
- As approved by the Engineer.

Equipment housings, mounting and fixing materials shall be selected for the environment they will be required to operate in.

All circuits, equipment and mountings shall be earthed.

All equipment shall be identified by means of labels.

The Contractor shall submit workshop drawings of mounting details for scrutiny by the Engineer.

25. SPECIFICATIONS & DRAWINGS

The specifications, schedules and drawings shall be read together and as a whole.

26. SCHEDULES OF INFORMATION / BILLS OF QUANTITIES

The Schedules of Information and Bills of Quantities shall be completed in full and submitted at tender stage.

All rates and prices shall exclude VAT.

PART 5

SCHEDULES OF QUANTITIES

GENERAL NOTES

1. These schedules of quantities contain sequentially numbered pages as indicated in the contents list. Tenderers are required to check that the pages in their schedules of quantities are complete. If any pages are duplicated or omitted, or if any quantity or typing is unclear or if the schedules of quantities contain any obvious errors, the tenderer shall immediately notify the engineer so that the problem may be rectified. No responsibility for any errors arising from any of the above shall be accepted by the engineer.
2. The schedules of quantities form part of and shall be read in conjunction with the specification, which contains full description of the work required to be performed and the materials and equipment to be supplied and used in the execution of the works. Tenderers shall refer to the specification for the full meaning and description of work to be executed and materials and equipment to be supplied or used in the execution of the work.
3. Tenders shall be submitted with schedules of quantities completed in full. Non or partial completion of the schedules of quantities shall render tenders liable for disqualification.
4. The total tender price as carried forward to the tender form, after correction for arithmetic extension errors, etc shall be the contract price as awarded to the successful tenderer. Tenderers are requested to check multiplication and addition of the schedules of quantities. The rate submitted shall be regarded as the price offered per item.
5. No changes, additions or omissions to the contents of the schedules of quantities shall be permitted. If any changes, additions or omissions are made these shall not be recognised and the original wording of the schedules of quantities shall apply.
6. The priced schedules of quantities of tender shall be checked by the engineer. The engineer reserves the right to request adjustments to one or more individual tender prices and to rectify contradictions and thereby alter the total tender price as submitted. The acceptance of this tender does not preclude the engineer from querying or requesting of the contractor to adjust the rates at any stage during the contract period or any extension thereto.
7. The responsibility of the accuracy of the quantities included in the schedules, remains with the person who prepared the schedules. The tenderer is relieved from the responsibility of the measurement of quantities at tender stage and the tender amounts shall be for the quantities as listed in the schedules. It is however expected from the tenderer to include for minor construction items such as would be required for the complete execution of works in accordance with the specification.
8. The successful tenderer and the client or his agent may agree that the total of an individual list or lists, inclusive of any variations such as additions to or omissions from the list, form an accurate description of the work required for the execution of a part, or the whole of the works and as such shall form the total final payment of a part or the whole of the works. The agreed total for one or more lists, inclusive of any agreed variations to the list, shall be considered a lump sum total for the part or whole of the works with any subsequent additions to and omissions from part or whole of the works calculated on the basis of the rates as tendered.

9. The quantities in these schedules of quantities shall not be used for the ordering of materials.
10. Changes in the scope of works included in the schedule of quantities shall be permitted and shall be measured and priced at the tariffs as included in the schedules of quantities and shall form an addition to or omission from the total of the schedule of quantities. Any changes not covered by any rates in the schedules of quantities shall be agreed and priced as non schedule items in accordance with the conditions of contract.
11. The extent and value of variations shall be in accordance with the conditions of contract. Variations to the works prior to the execution thereof shall be priced as above. Variations to work already executed shall not necessarily be priced in accordance with the schedule of quantities and shall be judged individually on merit. Except where the separate rate for the material and labour components of any item is specifically called for, the unit price of such item shall be deemed to include the supply and installation of that item.
12. The description of any items shall, except where otherwise specified, allow for the purchase, delivery, off-loading, storage, packing, lifting, placing, positioning and fixing in position, cutting and wastage, dies and patterns, models and equipment, temporary work, return of packing material, fixing costs, profit or other obligations of the contract arising out of the conditions of contract.
13. All items prices shall exclude VAT but include any other tax or levy as applicable.
14. All items are measured to the net final quantity as indicated on the drawings with the completed work in the position as indicated on the drawing. All prices and rates shall allow for wastage for whatever reason, irrespective of any other standard measurement which may be currently used elsewhere.
15. Should the contractor identify any additional issues or items which in his opinion are necessary for the complete and proper execution of the works, he shall identify such items in a covering letter attached to his tender and submit rates for these items. Mistakes in the physical measurement of items in the schedules of quantities shall be rectified but no claim shall be considered for the non-measurement of doubtful or minor items or claims resulting of criticism of method of measurement used or descriptions given. The priced schedule of quantities shall not be adjusted on the grounds of the items which in the opinion of the tenderer should have been brought into account unless so detailed in the accompanying letter.
16. The schedule of quantities shall be adjusted to reflect the quantities of materials used on completion of whole or part of the works as a result of remeasurement, qualification or variations. The remeasured quantities shall form the basis for the calculation of payment certificates. The schedules of quantities are not intended for the ordering of materials, etc. and the contractor is advised to extract the quantities for the ordering of materials directly from the drawings and specification. Any order placed directly from the schedules of quantities shall be solely at the contractor's risk.
17. The unit rates as entered in the schedule of quantities with the exclusion of dayworks items shall in all cases include any present and applicable sales tax or similar statutory duties.

18. DAYWORKS

- 18.1 The quantities and rates for daywork shall form part of the tender price. The tenderer's attention is drawn to the fact that these quantities shall be considered to be preliminary quantities. Payments against dayworks shall only be made as and when required and a written instruction for the work to be performed on dayworks is issued by the engineer.

18.2 LABOUR

The unit rates for labour shall allow for all payments and obligations in terms of the various labour agreements in force during the period of contract, as well as any or all transport allowances and all transport costs, lodging or site allowances and any other remuneration or allowances payable to the workers at tender submission date.

The rates for labour and dayworks shall be applied to the time worked and shall include for labour costs, supervision, overheads, transport, profit, full levies, bonuses, leave payments and shall in all cases exclude VAT but include any other present and applicable statutory duties and levies not covered under preliminary and general costs.

Time sheets with the time spent during each day on the specific day of work undertaken in dayworks including the names of the workmen and the material used in execution of dayworks shall be submitted weekly to the engineer or his representative, as agreed and in accordance with the conditions of contract.

18.3 MATERIALS

The cost of materials in dayworks shall be based on the rates in the schedules of quantities and where the suitable rates for these materials do not exist the costs shall be based on the nett costs which shall be substantiated by means of invoices.

The unit rates for materials as indicated shall be the nett rates after deduction of applicable discounts. VAT shall be excluded but any other applicable levies shall be included. Quantities of material used shall be inclusive of any reasonable and unavoidable wastage of material.

18.4 PERCENTAGE MARK-UP

The percentage mark-up which is added to labour and materials only, shall be considered to cover all costs inclusive of contractor's profit, administration, insurance, establishment, supervision (with the exception of time spent by the applicable artisan, team leader, or leader artisan as allowed by the engineer), the use of hand tools and all other non-mechanical equipment and any other costs already covered in the preliminary and general section of schedules.

18.5 MECHANICAL EQUIPMENT AND MACHINERY

The rates submitted for mechanical machinery and equipment shall include for the hiring or use of machinery exclusive of VAT but inclusive of any other applicable taxes, the machine operators time (exclusive of time spent by helpers and artisans, separately detailed), insurance, consumables, fuel, lubrication, repairing, service and maintenance, transport to and from the site (unless specifically brought to site on the instruction and with the agreement of the engineer) and all other overheads and profit.

18.6 TOWING AND HAULAGE

The rates submitted for towing and haulage shall include for the hire or use of the vehicle, drivers time, fuel and oil, repair, service, maintenance, insurance and any applicable taxes or levies excluding VAT and shall include for all overheads and profits. Towing shall only be paid for vehicles used exclusively for dayworks and only with the prior approval of the engineer.

18.7 EQUIPMENT

The rates for non-mechanical equipment and supplies shall include for usage, wear, maintenance, repair and/or replacement to and from the site and all landing and overhead costs and profit. Only equipment specifically brought to site for the execution of dayworks and used exclusively on dayworks shall be paid.

18.8 STANDING/WAITING TIME

Standing time for mechanical equipment or hauling vehicles will only be paid in periods of inactivity during normal working hours while it is necessary to be fully prepared for the execution of the specific daywork.

18.9 UNSCHEDULED ITEMS

Prior to the application of any labour, equipment, material of any nature to dayworks the contractor shall be required to submit rates to the engineer for approval of any unscheduled items.

PRELIMINARY AND GENERAL

18.10 Tenderers should place preliminary and general under one or all of the following groups:

- A. a fixed amount
- B. an amount adjustable in proportion with the final contract period in comparison with the originally specified contract period.

All sub-divisions of preliminary and general of the above categories shall be realistic and the contractor may be requested to justify the cost allocations submitted. Attention is specifically drawn to the rights reserved in accordance with clause 6.

18.11 GENERAL ALLOWANCES

Items relating to the entire project are prices on a lump sum basis and including the following:

a CONDITIONS OF CONTRACT

Allow for all items and contingencies in the conditions of contract and special conditions of contract which are not specifically allowed for elsewhere.

b. INSURANCE

Allow for the payment of all premiums of all insurance and guarantees as required by the contract documents with the exception of any items specifically allowed for and priced elsewhere.

c. ESTABLISHMENT

Allow for establishment on site.

d. CLEANING

Allow for the cleaning of the external services of buildings and structures, removal of marks on tar surfaces, removing of stains, cleaning of paving and floors, etc., removal of refuse and rubble and all other work required to leave the works clean and in a complete condition.

e. SAMPLES

Allow for the supply of samples of materials as may be requested by the engineer and for the erection of test panels as described in the standard and project specifications.

18.12 ESTABLISHMENT ON SITE

Items shall be priced on the basis of initial erection and use and maintenance and disassembly and removal on completion of contract which will include the following:

a. FENCING AND PROTECTION

Allow for the protection and fencing between the site, adjacent properties and public areas including the supply and installation of all necessary fences and protection, scaffolding, supports, protective screens, barriers, fences, false pavement, temporary curbs including the modifications and adjustments required from time to time and for the procurements of all necessary permits and the payment of all deposits, rents, etc. during the contract period.

b. SITE OFFICE STORAGE, ACCOMMODATION, ETC.

Allow all necessary site offices, temporary workshops, living accommodations, mess facilities, storage areas, cleaning and recreation facilities, etc., including suitable furniture, fences for temporary camps and any necessary moving of facilities during the course of the project. (Lighting and cleaning etc shall be allowed for elsewhere).

c. SITE FACILITIES:

No site facilities are required by the engineer unless otherwise specified in the project specification.

18.13 SITE ADMINISTRATIVE COSTS

The following items shall be priced on the assumption that they shall mainly be proportional to the full contract period and will include the following:

A SITE PERSONNEL SALARIES AND LOANS

Allow for all salaries, loans and related costs in respect of supervisory and other unproductive personnel including general foreman, site engineers, site surveyors, section foreman, costing clerks, time clerks, office and store personnel, night watch, etc.

b. TELEPHONE

Allow for all necessary telephone services including radio and telephone intercommunication systems and for the payment of all installation and connection fees, rental, telephone call unit costs and any other costs for the moving of the telephone as necessary and for the removal of system at contract completion.

c. GENERAL

Allow for the necessary stationary, first aid stores, office cleaning including materials and any other necessary expenses.

18.14 SITE ON COSTS AND EXPENSES

Items shall be priced relating to specific overheads which may be continuous, intermittent or of varying duration including the following:

a. MECHANICAL MACHINERY AND EQUIPMENT

Allow for all costs including the erection, installation, repairing, maintenance, accessories, fuel, lubrication, operators, etc. And any movement of machinery and the removal of machinery on contract completion (transport to and from site shall be allowed in sub-clause (d) below).

b. SCAFFOLDING

Allow for all scaffolding, supports, boards, etc., for internal or external use, inclusive of erection, hiring, repair and replacement, etc. and any requirements on site and the eventual demounting and removal thereof (transport to and from site shall be allowed in sub-clause (d) below).

c. NON MECHANICAL EQUIPMENT AND MACHINERY

Allow for non-mechanical and contractors machinery and also for any loose tools, consumables, protective clothing, etc. (Transport to and from site will be allowed in the sub-clause (d) below).

d. TRANSPORT

Allow for all transport related to the works to or from the site including the transport of employees, materials, machinery and equipment (excluding the removal of rubbish and rubble).

e. SAFETY MEASURES

Allow the necessary safety measures for the protection of the public and workers against

damage or injury, including the provision of temporary safety railings or barriers and warning boards, etc.

f. ATTENDANCE ON ENGINEER

Allow for the provision of all attendance (labourers or any other attendance) required by the engineer or any other person or persons nominated by the engineer for the purposes of the preparation of records or measurement of any of the details of the work executed and for the exposing work for inspection or any similar obligation of task, for the preparation of an account and finalising of design details on the site.

g. RUBBISH REMOVAL

Allow for the cleaning of all rubbish and off-cuts as required from time to time (final cleaning shall be allowed under sub-clause (d) in 17.2.

h. PROTECTION OF THE WORKS

Allow for the covering and protection of the section of the work liable to be damaged by any cause and for the removal of coverings at completion of the contract.

i. ELECTRICAL AND WATER COSTS

Allow for all cost in respect of electricity and water usage required for the execution of the works, whether this be supplied by means of a main connection supply or any means.

19. All provisional amounts shall be expended on written instruction by the engineer and the remaining balance of provisional amounts shall be omitted from the contract sum.
20. All items described as provisional shall be measured and executed and shall be paid in accordance with the prices in the Schedule of Quantities and any unused amounts shall be deducted from the final contract value. Items designated as provisional shall be undertaken only on written instruction from the engineer.
21. All rates shall allow for the testing and commissioning procedures required for equipment and systems.
22. All quantities are net except where otherwise specified and tenderers shall make allowances in their rates for all wastage.
23. 5% has been added to all underground cable lengths to take into account the effect of gradient and waviness and weaving around agreed obstacles. One joint per 300m of cable allowed for.
24. The purchasing and fitting of permanent locks for kiosks, transformers etc shall be included in the rates for these items.
25. Earth conductors include running joints.
26. Excavation classifications as per SABS 1200. Cable trenching and all other excavations shall include stabilisation, keeping the trenches free of wind-blown sand, backfilling and compacting in layers and the removal, spreading and compacting of excess soil.
27. Cable marker installation includes excavation to install cable marker.
28. Workshop drawings shall be submitted in quadruplicate, delivered to the engineer's office.
29. As-built drawings and test reports and records shall be delivered to the engineer's office.
30. Samples shall be delivered to the engineer's office.
31. Terminations and joints are measured per cable end & per joint.

Item	Description	Amount
	<u>SUMMARY</u>	
1	Bill no 1 : P&G	
2	Bill no 2 : Medium Voltage Supply	
3	Bill no 3 : Low Voltage Supply	
4	Bill no 4 : Juice Plant Lighting and Power	
5	Bill no 5 : Office/Ablutions: Lighting, Power and IT	
6	Bill no 6 : Provisional Sums / Contingecy Allowance	R 660 000,00
7	Bill no 7 : Provisional Dayworks	
SUBTOTAL		
VAT @ 15%		
TOTAL		

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
1	<u>BILL NO.1 : PRELIMINARY & GENERAL</u>				
1.1	Allow for PRELIMINARY & GENERAL Costs : (Site establishment and overheads)	-	Sum	-	
1.2	Safety plan and measures	-	Sum	-	
1.3	Scanning for and marking out of existing 11kV electricity supply cables	-	Sum	-	
1.4	<u>OTHER : To be specified by the Tenderer</u>				
1.4.1					
1.4.2					
1.4.3					
1.4.4					
SUBTOTAL : Carried forward to Summary					R -

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
2	<u>BILL NO.2 : MEDIUM VOLTAGE SUPPLY</u>				
2.1	<u>CABLES</u> <u>Supply, deliver and install the following</u> <u>XLPE/SWA aluminium cables</u>				
2.1.1	95mm ² Aluminium XLPE 3-core cable				
	MATERIAL :	m	260		
	LABOUR :	m	260		
2.1.2	Trenching in pickable earth, backfill, and compacting in layers including soft soil fill and danger tape				
	MATERIAL :	m	250		
	LABOUR :	m	250		
2.1.3	Trenching in non-pickable earth, backfill, and compacting in layers including soft soil fill and danger tape				
	MATERIAL :	m	50		
	LABOUR :	m	50		
2.2	<u>CABLE TERMINATIONS</u> <u>Cable glands including the terminations,</u> <u>making off lugs, etc. of the cable</u>				
2.2.1	95mm ² Aluminium XLPE 3-core cable				
	MATERIAL :	No.	3		
	LABOUR :	No.	3		
2.3	<u>CABLE JOINTS</u> <u>Joining of existing Municipal electricity supply</u> <u>cables with new 95mm² Aluminium XLPE</u> <u>3-core cable</u>				
2.3.1	95mm ² Aluminium XLPE 3-core cable				
	MATERIAL :	No.	2		
	LABOUR :	No.	2		
2.4	<u>MEDIUM VOLTAGE EQUIPMENT</u> <u>Supply, rigging, and installation of 11kV</u> <u>equipment</u>				
2.4.1	11kV Metering unit in outdoor-rated kiosk complete with meter to electricity supply authority specifications and protection relay as indicated in drawing CE0770/D51				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
2.4.2	1000kVA 11kV/400V Outdoor-rated miniature substation				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
2.4.3	Pre-cast concrete plinth for 2.4.1 above including supply, rigging and installation				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
2.4.4	Pre-cast concrete plinth for 2.4.2 above including supply, rigging and installation				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
2.4.5	Earthing for 2.4.1 above including 1000mm x 1000mm earth mat, bonding, testing etc.				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
2.4.6	Earthing for 2.4.2 above including 1000mm x 1000mm earth mat, bonding, testing etc.				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
2.5	<u>TESTING</u>				
2.5.1	Testing and commissioning of MV installation including liaison and testing with local electricity supply authority	-	Sum	-	
2.6	<u>OTHER : To be specified by the Tenderer</u>				
2.6.1					
2.6.2					
2.6.3					
2.6.4					
SUBTOTAL : Carried forward to Summary				R	-

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
3	<u>BILL NO.3 : LV SUPPLIES</u>				
3.1	<u>CABLES</u> <u>Supply, deliver and install the following</u> <u>PVC/PVC/SWA/PVC and</u> <u>XLPE/PVC/SWA/PVC cables</u>				
3.1.1	300mm ² 4-core XLPE SWA (Aluminium)				
	MATERIAL :	m	160		
	LABOUR :	m	160		
3.1.2	120mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	50		
	LABOUR :	m	50		
3.1.3	70mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	360		
	LABOUR :	m	360		
3.1.4	50mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	475		
	LABOUR :	m	475		
3.1.5	25mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	180		
	LABOUR :	m	180		
3.1.6	6mm ² 4-core PVCA (Copper)				
	MATERIAL :	m	100		
	LABOUR :	m	100		
3.2	<u>CABLE TERMINATIONS</u> <u>Cable glands including the terminations,</u> <u>making off lugs, etc. of the cable</u>				
3.2.1	300mm ² 4-core XLPE SWA (Aluminium)				
	MATERIAL :	m	8		
	LABOUR :	m	8		
3.2.2	120mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	2		
	LABOUR :	m	2		
3.2.3	70mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	14		
	LABOUR :	m	14		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
3.2.4	50mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	16		
	LABOUR :	m	16		
3.2.5	25mm ² 4-core PVCA (Aluminium)				
	MATERIAL :	m	4		
	LABOUR :	m	4		
3.2.6	6mm ² 4-core PVCA (Copper)				
	MATERIAL :	m	2		
	LABOUR :	m	2		
3.2.7	600mm wide x 1000mm deep cable trench in hard soil with 150mm soft sand fill	m	20		
3.3	EARTHING <u>Stranded copper earth conductors installed with cables, excluding terminations</u>				
3.3.1	95mm ² PVC BLACK EARTH (Copper)				
	MATERIAL :	m	160		
	LABOUR :	m	160		
3.3.2	70mm ² BCE				
	MATERIAL :	m	310		
	LABOUR :	m	310		
3.3.3	25mm ² BCE				
	MATERIAL :	m	130		
	LABOUR :	m	130		
3.3.4	16mm ² BCE				
	MATERIAL :	m	285		
	LABOUR :	m	285		
3.3.5	4mm ² BCE				
	MATERIAL :	m	100		
	LABOUR :	m	100		
3.3.6	Bonding of roof structure to column				
	MATERIAL :	No.	8		
	LABOUR :	No.	8		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
3.3.7	Earthing of structure complete with 3,6m earth rod and 70mm ² BCE to structure				
	MATERIAL :	No.	8		
	LABOUR :	No.	8		
3.3.8	2x2m earth mat installed 2 meter deep at MDB				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
3.3.9	Hole for a 2x2m LV earth mat 2m below ground level with 3 x 70mm ² to earth in MDB room	No.	1		
3.3.10	800mm long Earth Bar mounted on insulators in MDB room				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
3.4	EARTH CONDUCTOR TERMINATIONS				
3.4.1	95mm ² PVC BLACK EARTH (Copper)				
	MATERIAL :	m	4		
	LABOUR :	m	4		
3.4.2	70mm ² BCE				
	MATERIAL :	m	12		
	LABOUR :	m	12		
3.4.3	25mm ² BCE				
	MATERIAL :	m	4		
	LABOUR :	m	4		
3.4.4	16mm ² BCE				
	MATERIAL :	m	8		
	LABOUR :	m	8		
3.4.5	4mm ² BCE				
	MATERIAL :	m	2		
	LABOUR :	m	2		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
3.5	<u>TESTING</u>				
3.5.1	Test and commision the installation included in this section:	-	Sum	-	
2.6	<u>OTHER : To be specified by the Tenderer</u>				
2.6.1					
2.6.2					
2.6.3					
2.6.4					
SUBTOTAL : Carried forward to Summary					R -

Item	Description	Unit	Quantity	Rate	Amount
4	<u>BILL NO.4 : JUICE PLANT</u>				
4.1	<u>LV ELECTRICAL INSTALLATIONS : LIGHTING</u>				
4.1.1	<u>CONDUITS</u>				
4.1.1.1	<u>Conduits in ceiling space/on surface</u>				
4.1.1.1.1	25mmØ PVC				
	MATERIAL:	m	-		Rate Only
	LABOUR:	m	-		Rate Only
4.1.1.1.2	20mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
4.1.1.1.3	25mmØ Galvanized				
	MATERIAL:	m	-		Rate Only
	LABOUR:	m	-		Rate Only
4.1.1.1.4	20mmØ Galvanized				
	MATERIAL :	m	380		
	LABOUR :	m	380		
4.1.2	<u>CONDUIT BOXES</u>				
4.1.2.1	<u>Outlet boxes without covers</u>				
4.1.2.1.1	100x50x50 deep PVC in brick or concrete (Recessed)				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.2.1.2	100x50x50 deep galvanized onto brick, concrete surface or in roof space				
	MATERIAL :	No.	8		
	LABOUR :	No.	8		
4.1.2.1.3	50mmØ x 25 galvanized on trunking.				
	MATERIAL :	No.	65		
	LABOUR :	No.	65		
4.1.2.1.4	50mmØ x 25 galvanized with lid surface on concrete/steel column				
	MATERIAL :	No.	23		
	LABOUR :	No.	23		
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.1.2.1.5	100x50 surface box with lid for connecting flood lights complete with 3x20mm holes for cable glands.				
	MATERIAL :	No.	11		
	LABOUR :	No.	11		
4.1.2.1.6	P2000 Galvanised wiring trunking for lights complete with grey PVC lids, average 3m hangers, etc.				
	MATERIAL :	m	380		
	LABOUR :	m	380		
4.1.2.1.7	P2000 galvanised 90° Bend section				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.1.2.1.8	P2000 galvanised T-section				
	MATERIAL :	No.	10		
	LABOUR :	No.	10		
4.1.2.1.9	P2000 galvanised Cross over				
	MATERIAL :	No.	10		
	LABOUR :	No.	10		
4.1.2.1.10	P8000 galvanised trunking for supply from DB to P2000 trunking.				
	MATERIAL :	No	50		
	LABOUR :	No	50		
4.1.2.1.11	Connection between P8000 / P2000 grid.				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.1.2.1.12	P8000 slow bend 90° at DB.				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.1.2.1.13	Connection of P8000 into DB.				
	MATERIAL :	No.	2		
	LABOUR :	No.	2		
4.1.3	<u>CONDUCTORS</u>				
4.1.3.1	<u>PVC insulated copper conductors drawn into conduit/trunking</u>				
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.1.3.1.1	2,5mm ²				
	MATERIAL :	m	5510		
	LABOUR :	m	5510		
4.1.3.2	<u>PVC insulated copper conductors</u> <u>terminations</u>				
4.1.3.2.1	2,5mm ²				
	MATERIAL	m	332		
	LABOUR	m	332		
4.1.4	<u>LUMINAIRES</u> <u>(including Tubes & Lamps)</u>				
4.1.4.1	<u>Supply & Install Luminaires</u>				
4.1.4.1.1	Type F1				
	MATERIAL :	No.	22		
	LABOUR :	No.	22		
4.1.4.1.2	Type F2				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.3	Type F3				
	MATERIAL :	No.	18		
	LABOUR :	No.	18		
4.1.4.1.4	Type F4				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.1.4.1.4	Type F4E				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.1.4.1.6	Type F5				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.6	Type F5E				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.1.4.1.7	Type F6				
	MATERIAL :	No.	15		
	LABOUR :	No.	15		
4.1.4.1.7	Type F6E				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.8	Type F7				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.9	Type F7E				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.10	Type F8				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.11	Type F8E				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.12	Type FL1				
	MATERIAL :	No.	11		
	LABOUR :	No.	11		
4.1.4.1.13	Type FL2				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.14	Type FL2E				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
4.1.4.1.15	Type D1				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.16	Type D2				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
4.1.4.1.17	Type B1				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.18	Type B1E				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.19	Type J1				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.4.1.20	Type E1				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.1.5	<u>FITTINGS AND ACCESSORIES</u>				
4.1.5.1	Surface-mounted switch units(s) with coverplate(s) (boxes measured elsewhere)				
4.1.5.1.1	16A single lever light switch weatherproof				
	MATERIAL :	No.	8		
	LABOUR :	No.	8		
4.1.5.1.2	5A sockets				
	MATERIAL :	No.	49		
	LABOUR :	No.	49		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
4.2	LV ELECTRICAL INSTALLATIONS : POWER AND IT				
4.2.1	CONDUITS				
4.2.1.1	Conduits surface bosal				
4.2.1.1.1	25mmØ Bosal				
	MATERIAL :	m	555		
	LABOUR :	m	555		
4.2.1.1.2	20mmØ Bosal				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
4.2.1.2	Conduits surface PVC				
4.2.1.2.1	32mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
4.2.1.2.2	25mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
4.2.1.2.3	20mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.2.1.3	<u>Connection into trunking for SSO conduits</u>				
4.2.1.3.1	25mmØ hole				
	MATERIAL :	No	26		
	LABOUR :	No	26		
4.2.1.3.2	20mmØ hole				
	MATERIAL :	No	-		Rate Only
	LABOUR :	No	-		Rate Only
4.2.2	<u>CONDUIT BOXES AND ACCESSORIES</u>				
4.2.2.1	<u>Outlet boxes without covers</u>				
4.2.2.1.1	100x100x50 deep bosal in brick or concrete				
	MATERIAL :	No.	13		
	LABOUR :	No.	13		
4.2.2.1.2	100x50x50 deep PVC in brick or concrete				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.2.1.3	100x100x50 deep bosal surface onto brick, concrete surface or in roof space				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.2.1.4	50mmØ x 25 surface bosal onto brick, concrete surface or in roof space				
	MATERIAL :	No.	28		
	LABOUR :	No.	28		
4.2.2.1.5	50mmØ bosal lids				
	MATERIAL :	No.	28		
	LABOUR :	No.	28		
4.2.2.1.6	100x100 bosal Lid				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.3	<u>WIRING TRUNKING & CABLE TRAY</u>				
4.2.3.1	<u>Heavy duty galvanised cable ladder including hangers,cantilever brackets etc.</u>				
4.2.3.1.1	1000mm Wide cable ladder				
	MATERIAL :	m	15		
	LABOUR :	m	15		
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.2.3.1.2	1000mm Bend below / above DB				
	MATERIAL :	No.	2		
	LABOUR :	No.	2		
4.2.3.1.3	1000mm T-piece				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.4	1000mm to 800mm Reducer				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.5	1000mm to 200mm Reducer				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.6	800mm Wide cable ladder				
	MATERIAL :	m	10		
	LABOUR :	m	10		
4.2.3.1.7	800mm T-piece				
	MATERIAL :	No.	2		
	LABOUR :	No.	2		
4.2.3.1.8	800mm Bend below / above DB				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.3.1.9	800mm to 400mm Reducer				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.3.1.10	800mm to 200mm Reducer				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.3.1.11	400mm Wide cable ladder				
	MATERIAL :	m	35		
	LABOUR :	m	35		
4.2.3.1.12	400mm Bend below / above DB				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.2.3.1.13	400mm T-piece				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.14	400mm Bend section				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.3.1.15	400mm to 200mm Reducer				
	MATERIAL :	No.	2		
	LABOUR :	No.	2		
4.2.3.1.16	400mm to 100mm Reducer				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.17	200mm Wide cable ladder				
	MATERIAL :	m	70		
	LABOUR :	m	70		
4.2.3.1.18	200mm Bend below/above DB				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.3.1.19	200mm T-piece				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.20	200mm bend section				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
4.2.3.1.21	200mm to 100mm Reducer				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.3.1.22	100mm Wide cable ladder				
	MATERIAL :	m	105		
	LABOUR :	m	105		
4.2.3.1.23	100mm Bend below/above DB				
	MATERIAL :	No.	10		
	LABOUR :	No.	10		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
4.2.3.1.24	100mm Bend section				
	MATERIAL :	No.	3		
	LABOUR :	No.	3		
4.2.3.1.25	100mm Wire mesh tray				
	MATERIAL :	m	230		
	LABOUR :	m	230		
4.2.3.1.26	100mm Wire mesh tray bend				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.3.1.27	100mm Wire mesh tray T-piece				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
4.2.3.1.28	100mm Wire mesh tray dropper				
	MATERIAL :	No.	9		
	LABOUR :	No.	9		
4.2.3.1.29	P8000 cable droppers from cable ladder to DB, 3m long				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
4.2.4	<u>CONDUCTORS</u>				
4.2.4.1	<u>PVC insulated copper conductors drawn into conduit (Live, Neutral, Earth)</u>				
4.2.4.1.1	6mm ²				
	MATERIAL :	m	405		
	LABOUR :	m	405		
4.2.4.1.2	4mm ²				
	MATERIAL :	m	1110		
	LABOUR :	m	1110		
4.2.4.1.3	2.5mm ²				
	MATERIAL :	m	455		
	LABOUR :	m	455		
4.2.4.1.3	Drawwire				
	MATERIAL :	m	650		
	LABOUR :	m	650		
4.2.4.2	<u>Terminations for PVC insulated copper conductors</u>				
4.2.4.2.1	6mm ²				
	MATERIAL :	No	6		
	LABOUR :	No	6		
4.2.4.2.2	4mm ²				
	MATERIAL :	No	26		
	LABOUR :	No	26		
4.2.4.2.3	2,5mm ²				
	MATERIAL :	No	13		
	LABOUR :	No	13		
4.2.4.3	<u>Black surfix for plugs in roof space</u>				
4.2.4.3.1	4mm ² x 2core surfix fixed to structure				
	MATERIAL : (Provisional)	m	-		Rate Only
	LABOUR : (Provisional)	m	-		Rate Only
4.2.4.3.2	4mm ² x 4core surfix fixed to walkway structure				
	MATERIAL : (Provisional)	m	-		Rate Only
	LABOUR : (Provisional)	m	-		Rate Only
4.2.4.3.3	Ends for 4mm ² 2 core surfix				
	MATERIAL : (Provisional)	No	-		Rate Only
	LABOUR : (Provisional)	No	-		Rate Only
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.2.4.3.4	Ends for 4mm ² 4 core surfix				
	MATERIAL : (Provisional)	No	-		Rate Only
	LABOUR : (Provisional)	No	-		Rate Only
4.2.5	<u>FITTINGS AND ACCESSORIES</u>				
4.2.5.1	16 Amp switched socket outlet with cover installed in outlet box (boxes measured elsewhere)				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.5.2	16 Amp double switched socket outlet with cover installed in outlet box (boxes measured elsewhere)				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.5.3	16 Amp switched socket industrial outlet complete with box colour orange (SA + Euro).				
	MATERIAL :	No.	8		R -
	LABOUR :	No.	8		R -
4.2.5.4	16 Amp dedicated switched socket outlet with cover installed in outlet box (boxes measured elsewhere)				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
4.2.5.5	16 Amp Three phase & Neutral socket outlet with cover installed on outlet box (boxes measured elsewhere)				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.5.6	16 Amp 5pin plug top.				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
4.2.5.7	<u>Connection of the following appliances</u>				
4.2.5.7.1	Hot water hydro boil				
	MATERIAL : (Provisional)	No.	-		Rate Only
	LABOUR : (Provisional)	No.	-		Rate Only
4.2.5.7.2	Connect to 3ph equipment electric doors with Isolator				
	MATERIAL : (Provisional)	No.	-		Rate Only
	LABOUR : (Provisional)	No.	-		Rate Only
(Continued on next page)					

Item	Description	Unit	Quantity	Rate	Amount
4.2.5.7.3	Connect to 3ph equipment extract fan				
	MATERIAL : (Provisional)	No.	-		Rate Only
	LABOUR : (Provisional)	No.	-		Rate Only
4.2.6	<u>DISTRIBUTION BOARDS</u> <u>Complete with all accessories as specified</u> <u>including CoC for each DB / DB Zone</u>				
4.2.6.1	MDB				
	MATERIAL :	-		-	
	LABOUR :	-		-	
4.2.6.2	DB OJ				
	MATERIAL :	-		-	
	LABOUR :	-		-	
4.2.7	<u>TESTING</u>				
4.2.7.1	Testing and commission the installation included in this bill	-		-	
4.2.7.2	Provide CoC for the section in MDB	-		-	
4.2.7.3	Provide CoC for the section in DB OJ	-		-	
4.2.8	<u>ATTENDANCE:</u>				
4.2.8.1	Attendance on Contractor installing pipes, sleeves and manholes for electrical, telephone & electronic / IT installations	-	Sum	-	
4.2.8.2	Attendance on Telkom/PABX cable installation by client & specialist equipment for the telephone installation	-	Sum	-	
4.2.8.3	Attendance on I.T. cable installation by Client and Specialists	-	Sum	-	
4.2.8.4	Attendance on Making & Sealing of holes in Walls for cable tray & trunkings entering IT room.	-	Sum	-	
4.2.9	<u>OTHER : To be specified by the Tenderer</u>				
4.2.9.1					
4.2.9.2					
4.2.9.3					
SUBTOTAL : Carried forward to Summary					R -

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5	<u>BILL NO.5 : OFFICE / STAFF /MEETING ROOM / RESTROOMS / ETC.</u>				
5,1	<u>LV ELECTRICAL INSTALLATIONS : LIGHTING</u>				
5.1.1	<u>CONDUITS</u>				
5.1.1.1	<u>Conduits in ceiling space/on surface</u>				
5.1.1.1.1	25mmØ PVC				
	MATERIAL:	m	-		Rate Only
	LABOUR:	m	-		Rate Only
5.1.1.1.2	20mmØ PVC				
	MATERIAL :	m	600		
	LABOUR :	m	600		
5.1.1.2	<u>Conduits in slab</u>				
5.1.1.2.1	25mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.1.1.2.2	20mmØ PVC				
	MATERIAL :	m	100		
	LABOUR :	m	100		
5.1.1.3	<u>Conduits recessed in brickwork</u>				
5.1.1.3.1	25mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.1.1.3.2	20mmØ PVC				
	MATERIAL :	m	20		
	LABOUR :	m	20		
5.1.2	<u>CONDUIT BOXES</u>				
5.1.2.1	<u>Outlet boxes without covers</u>				
5.1.2.1.1	100x50x50 deep PVC onto brick, concrete surface or in roof space				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5.1.2.1.2	50mmØ x 25 PVC with lid deep onto brick, concrete surface or in roof space				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
5.1.3	<u>CONDUCTORS</u>				
5.1.3.1	<u>PVC insulated copper conductors drawn into conduit</u>				
5.1.3.1.1	2.5mm ²				
	MATERIAL :	m	450		
	LABOUR :	m	450		
5.1.3.2	<u>PVC insulated copper earth conductors drawn into conduit</u>				
5.1.3.2.1	2,5mm ²				
	MATERIAL	m	225		
	LABOUR	m	225		
5.1.4	<u>LUMINAIRES</u> <u>(including Tubes & Lamps)</u>				
5.1.4.1	<u>Supply & Install Luminaires</u>				
5.1.4.1.1	Type F4				
	MATERIAL :	No.	2		
	LABOUR :	No.	2		
5.1.4.1.2	Type F4E				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
5.1.4.1.3	Type F7				
	MATERIAL :	No.	9		
	LABOUR :	No.	9		
5.1.4.1.4	Type F7E				
	MATERIAL :	No.	3		
	LABOUR :	No.	3		
4.1.4.1.15	Type D1				
	MATERIAL :	No.	4		
	LABOUR :	No.	4		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5.1.5	<u>FITTINGS AND ACCESSORIES</u>				
5.1.5.1	Surface-mounted switch units(s) with coverplate(s) (boxes measured elsewhere)				
5.1.5.1.1	16A single lever, one-way light switch				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
5.1.5.1.2	16A single lever, two-way light switch				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
5.1.5.1.3	16A three lever, one way light switch				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
5.1.5.1.4	Presence detector, light switch				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
5.1.5.1.5	16 Amp LED Dimmer Switch				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
5.2	<u>LV ELECTRICAL INSTALLATIONS : POWER AND TELEPHONE</u>				
5.2.1	<u>CONDUITS</u>				
5.2.1.1	<u>Conduits fixed on ceiling & surface</u>				
5.2.1.1.1	32mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.2.1.1.2	25mmØ PVC				
	MATERIAL :	m	50		
	LABOUR :	m	50		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5.2.1.1.3	20mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.2.1.2	<u>Conduits in brickwork</u>				
5.2.1.2.1	25mmØ PVC				
	MATERIAL :	m	100		
	LABOUR :	m	100		
5.2.1.2.2	20mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.2.1.3	<u>Conduits in slab</u>				
5.2.1.3.1	32mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.2.1.3.2	25mmØ PVC				
	MATERIAL :	m	10		
	LABOUR :	m	10		
5.2.1.3.3	20mmØ PVC				
	MATERIAL :	m	-		Rate Only
	LABOUR :	m	-		Rate Only
5.2.2	<u>CONDUIT BOXES AND ACCESSORIES</u>				
5.2.2.1	200x2000x2000 Surface IT Drawbox with wood				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
5.2.2.2	<u>Outlet boxes without covers</u>				
5.2.2.2.1	100x100x50 deep PVC in brick or concrete				
	MATERIAL :	No.	25		
	LABOUR :	No.	25		
5.2.2.2.2	100x50x50 deep PVC in brick or concrete				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
5.2.2.2.3	100x100x50 deep PVC surface onto brick, concrete surface or in roof space				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5.2.2.2.4	50mmØ x25 surface PVC onto brick, concrete surface or in roof space				
	MATERIAL :	No.	25		
	LABOUR :	No.	25		
5.2.2.2.5	50mmØ PVC lids				
	MATERIAL :	No.	25		
	LABOUR :	No.	25		
5.2.3	<u>Powerskirting & Recessed Floor Outlets</u>				
5.2.3.1	<u>PVC Powerskirting complete with covers fixing outlets as indicated</u>				
5.2.3.1.1	3 compartment 2 cover powerskirting				
	MATERIAL :	m	50		
	LABOUR :	m	50		
5.2.3.1.2	Corner piece				
	MATERIAL :	No.	5		
	LABOUR :	No.	5		
5.2.3.1.3	End Caps				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
5.2.3.1.4	Outlets complete with covers for powerskirting/				
5.2.3.1.5	16 Amp SSO for powerskirting				
	MATERIAL :	No.	10		
	LABOUR :	No.	10		
5.2.3.1.6	16 Amp D-pin SSO for powerskirting				
	MATERIAL :	No.	9		
	LABOUR :	No.	9		
5.2.3.1.7	Tel/IT Cover Plate for powerskirting				
	MATERIAL :	No.	8		
	LABOUR :	No.	8		
5.2.3.1.8	Back box for powersteering				
	MATERIAL :	No.	6		
	LABOUR :	No.	6		
5.2.3.1.9	Floor box outlet complete with SSO's (recessed 2xSA & 2xEuro with 2xIT/Data outlets)				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5.2.3.1.10	TV outlet				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
5.2.4	<u>CONDUCTORS</u>				
5.2.4.1	<u>PVC insulated copper conductors drawn into conduit</u>				
5.2.4.1.1	4mm ²				
	MATERIAL :	m	1000		
	LABOUR :	m	1000		
5.2.4.2	<u>PVC insulated copper earth conductors drawn into conduit</u>				
5.2.4.2.1	2,5mm ²				
	MATERIAL :	m	500		
	LABOUR :	m	500		
5.2.4.2.2	Drawwire				
	MATERIAL :	m	500		
	LABOUR :	m	500		
5.2.5	<u>FITTINGS AND ACCESSORIES</u>				
5.2.5.1	16 Amp switched socket outlet with SA & Euro with cover installed in outlet box (boxes measured elsewhere)				
	MATERIAL :	No.	13		
	LABOUR :	No.	13		
5.2.5.3	16 Amp dedicated switched socket outlet with cover installed in outlet box (boxes measured elsewhere)				
	MATERIAL :	No.	13		
	LABOUR :	No.	13		
5.2.5.4	25A double pole isolator surface including box and cover (weatherproof)				
	MATERIAL :	No.	5		
	LABOUR :	No.	5		
5.2.5.5	30A Three phase isolator recessed including box and cover (weatherproof)				
	MATERIAL :	No.	-		Rate Only
	LABOUR :	No.	-		Rate Only
(Continued on next page)					

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
5.2.5.6	<u>Connection of the following appliances</u>				
5.2.5.6.1	Connect to extract fan for bathroom				
	MATERIAL :	No.	1		
	LABOUR :	No.	1		
5.2.7	<u>TESTING</u>				
5.2.7.1	Testing and commission the installation included in this bill	-	Sum	-	
5.2.8	<u>ATTENDANCE:</u>				
5.2.8.1	Attendance on Contractor installing pipes, sleeves and manholes for electrical, telephone & electronic / IT installations	-	Sum	-	
5.2.8.2	Attendance on Telkom/PABX cable installation by client & specialist equipment for the telephone installation	-	Sum	-	
5.2.8.3	Attendance on I.T. cable installation by Client and Specialists	-	Sum	-	
5.2.9	<u>OTHER : To be specified by the Tenderer</u>				
5.2.9.1					
5.2.9.2					
5.2.9.3					
5.2.9.4					
SUBTOTAL : Carried forward to Summary					R -

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
6.	<u>BILL NO.8 : PROV SUMS & CONTINGENCY</u>				
6.1	Additional earthing should it be required get the correct earth reading at the MDB.			R	20 000,00
6.2	Power supply for ventilation in the office block.			R	30 000,00
6.3	Additional wireways required by the IT department			R	20 000,00
6.4	Additional emergency fire foam supply			R	60 000,00
6.5	Decorative light fittings in office areas once layout is finalised			R	20 000,00
6.6	Fire Detection conduits in office / canteen area			R	10 000,00
6.7	Contingency Sum			R	500 000,00
SUBTOTAL : Carried forward to Summary					R 660 000,00

CE0770/D.01

Item	Description	Unit	Quantity	Rate	Amount
7	<u>BILL NO.7 : PROVISIONAL DAYWORKS</u> (Provisional : as allowance only) (Exclusive of VAT) Provisional dayworks allowed for : Making safe of and work on and alterations to the existing installations not already included in the specification Work shall only be carried out on Dayworks where specifically agreed to or instructed by the Employer/ Architect/Engineer in advance. Generally the cost of additions and omissions shall be based on the scheduled rates in Part 5				
7.1	Labour The rates for labour in Dayworks are to be applied to the hours worked and they are to include for the cost of labour, supervision, overheads, transport, <u>profit, all levies, bonuses, leave pay, etc.</u> not already covered by the P&G in the contract sum.				
a	Electrician	hr		.....	.....
b	Operator (semi-skilled)	hr		.....	.....
c	Labourer	hr		.....	.....
	Time sheets specifying the workers involved, the time spent daily upon the work and the materials employed in Dayworks shall be delivered to the Employer/Architect/Engineer or his representative weekly				
7.2	Materials the cost of materials in Dayworks shall be based on the net cost and shall be substantiated with invoices and, where no rates exist in the Schedules for such material, shall be based on the net cost and shall be substantiated with invoices				
a	Provisional Sum for materials in Dayworks.			.....	.....
b	Add for supervision, insurances, profit, transport, establishment changes, etc. not already covered by the P&G in the contract sum. (.....%)			.....	.....
7.3	Plant, etc. The cost of mechanically operated plant and transport, etc. in Dayworks are to be based on the net costs and shall be substantiated with invoices and/or audited statements.				
a	Provisional sum for hire of mechanical plant, etc. in Dayworks.			.....	.....
b	Add for supervision, insurances, profit, transport, establishment changes, etc. not already covered by the P&G. (.....%)			.....	.....
SUBTOTAL : Carried forward to Summary					

ANNEXURE B - MECHANICAL BOQ

Page 236 of 253

CM-0770-R1000

Bill 1 : PRELIMINARY & GENERAL

Item	Description	Unit	Quantity	Rate	Amount
1	<u>BILL NO.1 : PRELIMINARY & GENERAL</u>				
1,1	Allow for PRELIMINARY & GENERAL Costs : (Site establishment and overheads)		Sum	R	-
1,2	Safety plan and measures	1	Sum	R	-
1,3	<u>OTHER : To be specified by the Tenderer</u>				
1,3,1					
1,3,2					
1,3,3					
1,3,4					
SUBTOTAL : Carried forward to Summary					R -

CM-0770-R1000

Bill 2 : EVAPORATIVE AIR COOLER

Item	Description	Unit	Quantity	Rate	Amount
	BILL NO.2: EAC (See Drawing CM0770-R2)				
	Inclusive of supply, installation, consumables, flexible ducting, electrical controls, wiring, etc for completion as per specification Note: All ducting connection joints to be sealed Allow for scaffolding to work at roof level All equipment as per SABS approved standards: All costs for connecting, delivery, fittings, connections, bends, junctions and hanging materials to be included.				
	EVAPORATIVE AIR COOLER				
2,1	KERUILAI KD18A rate of 4950L/s @ 185 Pa	No	1	R -	R -
	DUCTING				
2,2	800x800	m	5	R -	R -
2,3	ø600	m	15	R -	R -
2,4	ø400	m	16	R -	R -
	TRANSFORMATIONS				
2,5	Evaporative cooler to duct transformation	No	1	R -	R -
2,6	ø600 - ø400	No	2	R -	R -
	ANCILLARIES				
2,7	ø600 Spigot	No	2	R -	R -
2,8	600x300 GRILLE + OBD	No	8	R -	R -
2,9	ø400 Stop-end	No	2	R -	R -
2,10	Ø12,7mm shut off valve	No	1	R -	R -
2,11	ø12,7mm uPVC piping	m	50	R -	R -
SUBTOTAL :					R -

CM-0770-R1000

Bill 3 : JUICE PLANT EXTRACTION

Item	Description	Unit	Quantity	Rate	Amount
	BILL NO.3 :Juice Plant (See Drawing CM0770-R2)				
	Inclusive of supply, installation, consumables, flexible ducting, electrical controls, wiring, etc for completion as per specification Note: All ducting connection joints to be sealed Allow for scaffolding to work at roof level All equipment as per SABS approved standards: All costs for connecting, delivery, fittings, connections, bends, junctions and hanging materials to be included.				
	EXTRACT AIR FAN 1				
3,1	AMS TD800/200 SILENT SERIES c/w ON/OFF switch rate of 195 L/s @ 150 Pa	No	1	R -	R -
3,2	Weather louvre, natural anodised 350x300, including frame	No	1	R -	R -
3,3	350x300 wall sleeve	No	1	R -	R -
3,4	AMS Sound Attenuator SN020 060 600mm Long	No	2	R -	R -
	DUCTING				
3,5	Ø250	m	5	R -	R -
3,6	Ø200	m	5	R -	R -
	TRANSFORMATION				
3,7	Wall sleeve to fan tranformation	No	1	R -	R -
3,8	Fan to Duct transformation	No	1	R -	R -
3,9	Ø250 90° Bend	No	2	R -	R -
3,10	Ø250 - Ø200	No	1	R -	R -
	ANCILLARIES				
3,11	150x100 Grille + OBD	No	3	R -	R -
3,12	150x100 Spigot	No	3	R -	R -
3,13	Ø200 Stop-end	No	1	R -	R -
3,14	Ø250 Fire damper	No	1	R -	R -
SUBTOTAL :					R -

CM-0770-R1000

Bill 4 : JUICE PLANT AC

Item	Description	Unit	Quantity	Rate	Amount
	BILL NO.4 : JUICE PLANT AC (See Drawing CM0770-R2)				
	Inclusive of supply, installation, consumables, flexible ducting, electrical controls, wiring, etc for completion as per specification Note: All ducting connection joints to be sealed Allow for scaffolding to work at roof level All equipment as per SABS approved standards: All costs for connecting, delivery, fittings, connections, bends, junctions and hanging materials to be included.				
	AC G.01 - G.02 (Ground Floor)				
4,1	DAIKIN FCAG35B	No	2	R -	R -
4,2	Ø6,5 Liquid line (Incl. all fittings & bends)	m	40	R -	R -
4,3	Ø9,5 Gas line (Incl. all fittings & bends)	m	40	R -	R -
4,4	VP25(O.D32/I.D25) Drain pipe (incl. all fittings & bends)	m	40	R -	R -
4,5	Bluechem treatment	No	2	R -	R -
4,6	Controller	No	2	R -	R -
4,7	Cable tray	No	40	R -	R -
	AC 1.01 - 1.02 (First Floor)				
4,8	DAIKIN FCAG35B	No	2	R -	R -
4,9	Ø6,5 Liquid line (Incl. all fittings & bends)	m	40	R -	R -
4,10	Ø9,5 Gas line (Incl. all fittings & bends)	m	40	R -	R -
4,11	VP25(O.D32/I.D25) Drain pipe (incl. all fittings & bends)	m	40	R -	R -
4,12	Bluechem treatment	No	2	R -	R -
4,13	Controller	No	2	R -	R -
4,14	Cable tray	No	40	R -	R -
SUBTOTAL :					R -

CM-0770-R1000

Bill 5 : SMOKE VENTILATION

Item	Description	Unit	Quantity	Rate	Amount
	BILL NO.5 : Smoke ventilation (See Drawing CM0770-R210 & R200)				
	Inclusive of supply, installation, consumables, flexible ducting, electrical controls, wiring, etc for completion as per specification Note: All ducting connection joints to be sealed Allow for scaffolding to work at roof level All equipment as per SABS approved standards: All costs for connecting, delivery, fittings, connections, bends, junctions and hanging materials to be included.				
	SMOKE EXTRACTION				
5,1	AMS SQ0714BA14/6 SQ SERIES rate of 7000 l/s @150 Pa	No	1	R -	R -
5,2	Weather Louver, natural anodised 1700 x 1650, including frame	No	1	R -	R -
5,3	1700 x 1650 wall sleeve	No	1	R -	R -
	TRANSFORMATION				
5,4	Wall sleeve to Fan transformation	No	1	R -	R -
	SMOKE MAKE-UP AIR FAN				
5,5	AMS SQ0714AA14/6 SQ SERIES rate of 5600 l/s @150 Pa	No	1	R -	R -
5,6	Weather Louver, natural anodised 1500 x 1500, including frame	No	1	R -	R -
5,7	1500 x 1500 wall sleeve	No	1	R -	R -
	TRANSFORMATION				
5,8	Wall sleeve to Fan transformation	No	1	R -	R -
SUBTOTAL :					R -

CM-0770-R1000

Bill 6 : GENERAL

Item	Description	Unit	Quantity	Rate	Amount
	<u>BILL NO.6 : GENERAL</u>				
6,1	Test & commission the installation as per SABS	-	Sum	R	-
6,2	Painting, labeling and identification as per SABS	-	Sum	R	-
6,3	Workshop drawings	-	Sum	R	-
6,4	Samples	-	Sum	R	-
6,5	Manuals & Instructions	No	3	R	-
6,6	Operator Training	-	Sum	R	-
6,7	1 Year Maintenance Contract and Guarantee (2 Inspections; 1 every 6 Months)	-	Sum	R	-
SUBTOTAL : Carried forward to Summary					R -

ANNEXURE C - FIRE BOQ

Page 244 of 253

CM-0770-R1000

Bill 1 : PRELIMINARY & GENERAL

Item	Description	Unit	Quantity	Rate	Amount
1	<u>BILL NO.1 : PRELIMINARY & GENERAL</u>				
1,1	Allow for PRELIMINARY & GENERAL Costs : (Site establishment and overheads)	-	Sum	-	
1,2	Safety plan and measures	-	Sum	-	
1,3	<u>OTHER : To be specified by the Tenderer</u>				
1,3,1					
1,3,2					
1,3,3					
SUBTOTAL : Carried forward to Summary					R -

Item	Description	Unit	Quantity	Rate	Amount
	BILL NO. 2: JUICE FACILITY FIRE SERVICES Including supply, installation, consumables, hangers, painting, electrical controls, wiring, etc and all associated costs for completion of works as per specification: All equipment as per SABS approved standards: All costs for supply, delivery, fittings, connections, bends, joints, junctions and hanging materials, etc to be included.				
	FIRE HOSE REEL Fire hose reel, c/w 30m hose to EN694 standard, incl. chromium plated stopcock, shut-off nozzle and wall bracket. Pressure gauge, 100mm diameter glycerine filled 1000kPA, incl. stopcock				
2,1		No	2	R -	R -
2,2		No	2	R -	R -
2,3	ø25mm Shut-off Valve (For Hose Reel)	No	2	R -	R -
	PORTABLE FIRE EXTINGUISHERS All extinguisher as per SABS approved standards. Extinguishers to be provided each with 25mm thick meranti backing board min. size 150 x 700mm, plugged and screwed to brickwork and all exposed edges bevelled, incl. 1 x coat primer and 2 x coats Signal Red enamel paint. Mounting brackets to be approved in accordance with SABS 810.				
2,4	Extinguisher 9kg DCP	No	12	R -	R -
2,5	Extinguisher 4,5kg DCP	No	4	R -	R -
	PHOTOLUMINESCENT (190 X 190)				
2,6	Running Man + Arrow	No	1	R -	R -
2,7	Fire Extinguisher + Fire Hose Reel + Arrow	No	2	R -	R -
2,8	Fire Extinguisher + Arrow	No	3	R -	R -
2,9	Exit Signage	No	5	R -	R -
	CUT-OFF SPRINKLERS				
2,10	Sprinkler Head VK3021 Quick response, K5.6 (cut off sprinklers)	No	12	R -	R -
2,11	Ø40 Steel piping	m	50	R -	R -
2,12	Ø32 Steel piping	m	10	R -	R -
2,13	Ø25 Steel piping	m	30	R -	R -
SUBTOTAL : Carried forward to Summary					R -

CM-0770-R1000

Bill 3 : HYDRANT PUMP AND TANK

BILL NO. 3: Hydrant Pump and Tank						
	Including supply, installation, consumables, hangers, painting, electrical controls, wiring, etc and all associated costs for completion of works as per specification:					
	All equipment as per SABS approved standards: All costs for supply, delivery, fittings, connections, bends, joints, junctions and hanging materials, etc to be included.					
	PUMP SET - ALL TRIMMINGS					
3,1	Diesel Hydrant pump set: - 4 Cylinder engine – 2400l/min @650kPa. Standalone panel.	No	1	R	-	R -
3,2	Jockey Pump - Lowara or similar	No	1	R	-	R -
3,3	Controller - Hydrant	No	1	R	-	R -
3,4	Jockey Controller - Hydrant	No	1	R	-	R -
3,5	Electrical Cabling	No	1	R	-	R -
3,6	Autostart arrangement - Hydrant	No	1	R	-	R -
3,7	Flow Meter	No	1	R	-	R -
	WATER REQUIREMENTS -SBS18/09 FIRE TANKS COMPLETE					
	Effective water capacity - 1160m ³					
3,8	Circular tanks - @ 1160m ³ Nominal water: 2 tanks. Include civils, ring beams per tank	No	2	R	-	R -
3,9	Tank Suction Line	No	1	R	-	R -
3,10	All ancillary piping and guages to be supplied, tank piping "bermad" valves, butterfly valves, level indicators, 300mm suction. Complete for both tanks	No	1	R	-	R -
3,11	Connection to munipicle line	No	1	R	-	R -
	Preliminary and General					
3,12	Site establishment and clearance	No	1	R	-	R -
3,13	Site supervision and contract management	No	1	R	-	R -
3,14	Testing, Balancing and commissioning	No	1	R	-	R -
3,15	As-built drawings	No	1	R	-	R -
3,16	12 Month Guarantee and maintenace	No	1	R	-	R -
3,17	Contract drawings	No	1	R	-	R -
3,18	Transport of materials to site	No	1	R	-	R -
3,20	Safety file, Safety Material	No	1	R	-	R -
SUBTOTAL : Carried forward to Summary					R	-

CM-0770-R1000

Bill 4 : GENERAL

Item	Description	Unit	Quantity	Rate	Amount
	<u>BILL NO.4 : GENERAL</u>				
4,1	Painting, labeling and identification as per SABS	-	Sum	-	R -
4,2	Workshop Drawings	-	Sum	-	R -
4,3	Samples	-	Sum	-	EXCL.
4,4	Liason with local Authority	-	Sum	-	R -
4,5	Painting of pipework	-	Sum	-	R -
4,6	Works test with Engineer	-	Sum	-	R -
4,7	Manuals & Instructions	-	Sum	-	R -
4,8	Operator Training	-	Sum	-	R -
4,9	Maintenance Contract and Guarantee	-	Sum	-	R -
SUBTOTAL : Carried forward to Summary					R -

CONTRACT

PART C3: SCOPE OF WORK

C3.1. PROJECT BACKGROUND

MAPSEZ BACKGROUND

The Maluti-a-Phofung Special Economic Zone (MAPSEZ) is a designated Special Economic Zone established in terms of the Special Economic Zones Act No. 16 of 2014, with a mandate to stimulate economic development, attract investment, create employment opportunities, and support industrialisation within the Free State Province and surrounding regions.

MAPSEZ is a subsidiary of the Free State Development Corporation (FDC), the licence holder of the zone, and is located at Site 108, 11th Street, Tshiame, Harrismith, in the Maluti-a-Phofung Local Municipality.

MAPSEZ seeks to facilitate industrial development through the provision of industrial infrastructure and investment support services aimed at promoting sustainable economic growth and enhancing regional competitiveness.

PROJECT CONTEXT

MAPSEZ periodically receives investor/tenant projects requiring specialised facilities and infrastructure which may not be adequately accommodated through conventional industrial facilities. Such projects often require customised technical investigations, design inputs, and specifications to ensure compliance with applicable legislation and operational requirements.

MAPSEZ's investor/tenant is establishing an apple juice concentrate production facility at Site 108, 11th Street, Maluti SEZ. The facility will produce export-quality apple juice concentrate for dispatch in food-grade tankers. The facility forms part of a larger planned agro-processing development that will ultimately include a packhouse and cold storage facility in a subsequent phase.

Apple juice concentrate is a high-value export commodity produced by pressing and concentrating fresh apple juice under controlled conditions. The facility must comply with international food safety standards. The building therefore has highly specific technical requirements for hygiene, drainage, temperature control, chemical resistance, and tanker loading that are materially different from a standard industrial facility.

MAPSEZ, as the developer of industrial infrastructure within the zone, is responsible for the procurement and construction of the top structure only. The investor/tenant will separately procure and install all process equipment, evaporators, pasteurisers, CIP (Clean-in-Place) systems, boilers, and related plant under direct contracts with specialist equipment suppliers.

This Terms of Reference relates to the appointment of a suitably qualified and experienced main contractor for the construction of the apple juice concentrate plant top structure only, in terms of the JBCC Principal Building Agreement Edition 6.2 (May 2018), with MAPSEZ as the Employer.

The main contractor appointed under this TOR will be required to coordinate with and provide general attendance to the investor/tenant's direct contractors as they progressively access completed areas of the top structure for equipment installation, in terms of a phased handover arrangement of areas described in the contract documents.

C3.2. TECHNICAL BACKGROUND

The project entails the construction of a new apple juice concentrate plant top structure at Maluti SEZ, Harrismith. This is a purpose-built industrial food processing facility designed to accommodate the pressing, concentration and dispatch of export-quality apple juice concentrate loaded into food-grade tankers. The building has significant technical requirements due to the food safety and hygiene environment involved.

Tenders must allow for builder's work in connection with all specialist and direct contractor installations as described in the BOQ but shall not supply or install the tenant's process equipment.

The top structure includes the following principal elements:

- Structural Works: reinforced concrete silo pits, foundations, ground floor slabs designed for heavy process equipment loads, and structural steel portal frame and mezzanine structure to accommodate elevated process equipment and walkways etc.
- Building Envelope: masonry perimeter walls with hygienic internal finish, industrial roof cladding, high-care processing areas as specified, wet processing areas, pest exclusion detailing.
- Food-Grade Floors and Drainage & Hygienic Wall Finishes
- Tanker Loading Bay
- Services: electrical reticulation; fire installation, water reticulation
- Builder's Work: builder's work for all specialist Process Equipment.
- External Works: paved access roads and hardstands for tanker circulation, perimeter security fencing, stormwater drainage, site services connections, security infrastructure

Process Equipment Implications for Top Structure Construction

The process equipment to be installed by the investor/tenant's direct contractors follows a sequence that directly determines the structural and construction requirements of the top structure.

The contractor must be aware that certain process equipment e.g. evaporators are of a height that requires their installation before the roof structure is completed. The contractor must demonstrate an understanding of

construction sequencing in a tall processing facility environment and must coordinate the construction programme with direct contractor to accommodate equipment installation sequencing requirements.

Failure to plan for this sequencing requirement could result in the roof having to be partially dismantled to allow equipment access, with consequential delay and cost will be for the contractor's account.

C3.3 SCOPE OF WORK

The appointed main contractor shall be responsible for the following (not exhaustive, as standard JBCC terms will apply in addition to the below, including updates made in the tender Preliminaries document):

- 1) Full execution of all building works as described in Sections 1 to 4 of the BOQ: earthworks, concrete, structural steel, masonry, roofing, cladding, waterproofing, internal finishes, external / site works, electrical and mechanical works. Annexure A of the Bills of Quantities provides more detail of the electrical installation work.
- 2) Assist with sourcing, appointing coordinating and supervising all subcontractors against the PC Sum amounts listed in Section 5.
- 3) Provision of general attendance on all nominated/selected subcontractors in accordance with the BOQ preambles (access, power, water, scaffolding use, temporary storage areas, and making good on completion).
- 4) Where specified, provision of special attendance items as described and priced separately in the BOQ.
- 5) Development, submission, and monthly updating of the master construction programme, incorporating all subcontractor activities and direct contractor access windows.
- 6) Providing timeous requests for information (RFI) to ensure that there is no information or clarification due by the professional team that may impact the execution of the works.
- 7) Coordination of, and reasonable facilitation for, any direct contractors appointed separately by the investor/tenant where applicable.
- 8) Full compliance with the Occupational Health & Safety Act (Act 85 of 1993) and Construction Regulations, 2014, including appointment of a Construction H&S Officer for the full duration.
- 9) Appointment of a Community Liaison Officer (CLO) at the contractor's own cost for the duration of the project.
- 10) Where possible, recruitment of all unskilled labour from within a 20km radius of Harrismith with the assistance of the CLO.
- 11) Submission of monthly local spend reports detailing expenditure on local Free State subcontractors, suppliers and labour that will constitute a minimum of 30% of the contract value.
- 12) Full responsibility for site security, welfare facilities, and temporary services during construction including providing for the employer's direct contractors while the main contractor is on site.

- 13) Printing of all drawings and documents required for construction, including those for all subcontractors (a dedicated A0-capable plotter on site is recommended).
- 14) Application for construction permit with the Department of Employment and Labour, if applicable
- 15) Coordination with the investor/tenant's equipment contractor on construction sequencing , specifically to accommodate the installation of process equipment that need to be craned into position before the roof structure is completed.

COORDINATING WITH PRINCIPAL AGENT

The contract will be administered by the Principal Agent, acting on behalf of MAPSEZ as Employer.

The main contractor must:

- Attend all site meetings convened by the Principal Agent and provide accurate programme and cost reporting.
- Treat all drawings and project information as confidential and obtain equivalent undertakings from all subcontractors.
- Submit all claims, variations, and subcontractor claims to the Principal Agent with a clear recommendation, to assist adjudication.
- Note that all drawings will be issued electronically, and main contractor must maintain at all times a complete project Dropbox folder or equivalent digital filing system as directed by the Principal Agent.
- The contractor shall have an A0 printer/plotter on site to allow printing of all drawings to scale.
- Attend coordination and technical meetings with the PA, direct contractors and sub-contractors as needed for the duration of the project

EXCLUDED FROM SCOPE

The following are expressly excluded from the contractor's scope and will be procured separately by the investor/tenant:

- Supply and installation of juice plant processing equipment
- Supply and installation of boilers and steam piping systems
- Supply and installation of refrigeration

The contractor shall however provide all builder's work, penetrations, supports, plinths, pits, and trenches required in connection with the above specialist installations, as measured in the Bills of Quantities.

PART C4: SITE INFORMATION

C4.1 Geotechnical Investigation Report

A geotechnical investigation of the site was undertaken. The report (Annexure C4-A) describes the subsurface conditions encountered at the investigation positions.

The geotechnical information is provided in good faith for the tenderer's general guidance. It represents conditions at the specific investigation points only and on the dates of investigation. The Employer does not warrant the accuracy, completeness or interpretation of the data, nor that conditions between or beyond the investigation points will be the same. Tenderers are deemed to have satisfied themselves as to the nature of the site and subsurface conditions, and must make their own interpretation and allowance for the geotechnical conditions in pricing the tender. No claim arising from a tenderer's own interpretation of, or reliance on, this information will be entertained, except as expressly provided for in the conditions of contract.

The Geotechnical Investigation Report is attached hereto and forms part of this tender document.

C4.2 MAPSEZ Health and Safety Specification

To be provided

C4.3 Construction Environmental Management Plan (CEMP)

The investor/tenant has prepared a Construction Environmental Management Plan (CEMP) for the project that has been approved by project funders and Department of Agriculture, Rural Development and Environmental Affairs (DARDEA). The CEMP addresses the environmental impacts and management measures applicable to the construction and operation of the facility.

The contractor's obligation is to comply fully with the approved CEMP.

Non-compliance with the approved CEMP or any environmental authorisation condition constitutes a material breach of contract. The Principal Agent may issue a written instruction requiring the contractor to remedy any non-compliance within 48 hours. Where the contractor fails to remedy the non-compliance within the required time, the Employer may appoint a third party to carry out the remediation at the contractor's cost. Repeated non-compliance may result in suspension or termination of the contract in accordance with the contract conditions.

The approved Construction Environmental Management Plan (CEMP) is attached hereto and forms part of this tender document (Annexure C4-C).