



BID NUMBER: LDPWRI- B/20150

**APPOINTMENT OF CONTRACTOR FOR COMPLETION OF TSHAULU
LIBRARY IN THE VHEMBE DISTRICT THROUGH THE FRAMEWORK
CONTRACT CATEGORY B**

For the

**THE DEPARTMENT OF SPORTS, ARTS AND CULTURE,
LIMPOPO PROVINCE**

Issued by:

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

Contact Person: General Queries

Name : Mr NJ Motsopye,
Tel No. : 015 284 7126
Email : motsopyen@dpw.limpopo.gov.za

Technical: Technical Queries

Name : Mr K Modjadji
Tel No. : 015 284 7347/083 673 5436
Email : ModjadjiM@dpw.limpopo.gov.za

Name of the Bidder :



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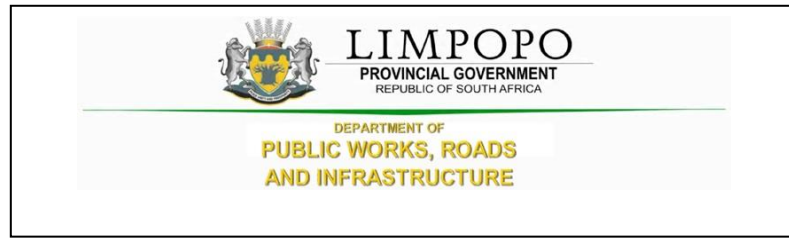
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PART T1: TENDERING PROCEDURE

T1.1 Tender Notice and Invitation to Tender

The Limpopo Department of Public Works, Roads and Infrastructure invites tenderers from contractors appointed on the framework agreement on category B for APPOINTMENT OF CONTRACTOR FOR COMPLETION OF TSHAULU LIBRARY IN THE VHEMBE DISTRICT FOR THE DEPARTMENT OF SPORTS, ARTS AND CULTURE IN LIMPOPO PROVINCE FOR A PERIOD OF 12 MONTHS

It is estimated that tenderers must have a CIDB contractor grading designation of **6 GB** or higher.

The conditions of the CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts **Gazette Notice No. 36190 of 25 February 2013** will be applicable on this project

Project Name	APPOINTMENT OF CONTRACTOR FOR COMPLETION OF TSHAULU LIBRARY IN THE VHEMBE DISTRICT FOR THE DEPARTMENT OF SPORTS, ARTS AND CULTURE IN LIMPOPO PROVINCE FOR A PERIOD OF 12 MONTHS	
Tender Number	LDPWRI- B/20150	
Tender documents availability	Limpopo Department of Public Works, Roads and Infrastructure website	
Address for submission of tenders	DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.	
Closing date of the tender	As per Tender invite	
Closing time of the tender	As per Tender invite	
Compulsory briefing meeting (<i>Tenderers must sign the attendance register in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance register</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
	Meeting venue	As per Tender invite
	Date	As per Tender invite
	Time:	As per Tender invite
Evaluation criteria	<ol style="list-style-type: none"> 1. Compliance with mandatory or compulsory requirements 2. Risk assessment on current projects 3. Price 4. Preference 	
Mandatory or Compulsory Requirements (<i>failure to submit or comply with these requirements will lead to automatic disqualification</i>)	Only tenderers who are appointed on category B registered with the Construction Industry Development Board (CIDB) with designation of 6 GB or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations are eligible to have their tenders evaluated	
	Completed and signed Form of Offer	
	Priced Bills of Quantities	
	Record of addenda to tender documents	
	Proposed amendments and qualifications	
	Declaration on the status of Administration compliance	
	CIDB grading certificate (Valid CIDB)	
	Declaration of current projects	

T1.2 Tender Data

Clause number	Tender Data
	<p>The conditions of tender are the Standard Conditions of Tender as contained in Annex C of Board Notice 423 of 2019 in Government Gazette No. 42622 of 08 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of tenderers as an Annexure to this Tender Data.</p> <p>The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.</p> <p>The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts Gazette Notice No. 36190 of 25 February 2013. In this case, contractor shall provide a minimum Contract Participation Goal (CPG) of 5% of the total project value and develop targeted enterprises stated under C3 of this document.</p> <p>The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender. Add the following to clauses in Standard Conditions of Tender:</p>
C.1.1	The Employer is the Department of Public Works, Roads and Infrastructure
C.1.2	<p>The Tender Part T1: Tendering procedures T1.1 Tender notice and invitation to tender T1.2 Tender data</p> <p>Part T2: Returnable documents T2.1 List of returnable documents T2.2 Returnable schedules</p> <p>The Contract Part C1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Joint Venture Agreement (If Applicable)</p> <p>The Contract Part C2: Pricing data C2.1 Pricing instructions C2.2 Bills of Quantities</p> <p>Part 3: Scope of work C3.1 Special Notes to Bidders C3.2 OHS Specifications</p> <p>Part 4: Site information C4 Drawings</p>

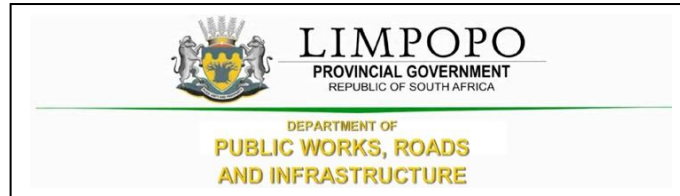
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C.1.4	<p>The employer's representative is:</p> <p>Name : Mr K Modjadji Tel No. : 083 673 5436 Email : ModjadjiM@dpw.limpopo.gov.za</p> <p>However, all communications related to this bid should be directed to the persons indicated under Enquires on this tender document.</p> <p>Attention is also drawn to the fact that verbal information, given by the Employer's agent during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer in writing to Tenderers will be regarded as amending the Tender Documents.</p>
C.1.5	The employer reserve to cancel the tender prior to the award of the tender.
C1.6.2	A competitive negotiation procedure will not be followed.
C1.6.3	A two-stage system will not be followed.
C.2.1	<p>Eligibility in respect of CIDB grading</p> <p>Only tenderers who are appointed on framework agreement category B and registered with the Construction Industry Development Board (CIDB) with designation of 6 GB or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, are eligible to have their tenders evaluated.</p>
C2.2	<p>Cost of tendering</p> <p>The tenderer accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.</p>
C.2.7	<p>Compulsory site briefing</p> <p>A compulsory briefing meeting will be held as per Tender invite</p> <p>Failure to attend the site briefing will result in the bidders not being considered for the project</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance list.</p>
C.2.11	<p>Alterations to the documents</p> <p>Bidders are required to not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations</p>
C.2.12	<p>Alternative tender offer</p> <p>No alternative tender offer is permitted in this tender.</p>
C.2.13.2	<p><i>Replace sub-clause C.2.13.2 with the following;</i> Return all returnable documents to the employer after completing them in by writing in non-erasable black ink (Black pen)</p>
C.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original
C.2.13.4	The tender shall be signed by a person duly authorized to do so.

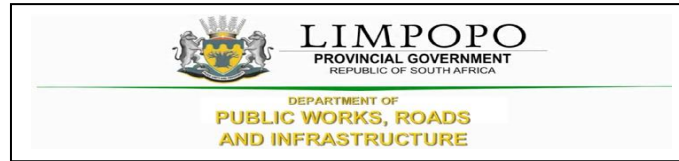
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C.2.13.5	<p>The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:</p> <p>Location of tender box: DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699 Identification details: Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.</p>
C.2.15.1	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.</p>
C.2.16.1	<p>The tender offer validity period is 120 days.</p>
C.2.16.2	<p>The tender accepts that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16.1 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).</p>
C.3.1	<p>The tenderer is required to indicate how they claim points for each preference point system and attached relevant supporting documents. The specific goals for claiming of preference points include the following:</p> <ul style="list-style-type: none"> - Persons who had no franchise in national elections prior to 1984 and 1994 - Women - Disabled persons - Promotion of SMMEs - Enterprises located in Limpopo Province - Promotion of youth - South African owned enterprises
	<p>CIDB Grading Certificate</p> <p>Tenders are required to provide proof of registration with the CIDB register of contractors indicating the category of registration, grading as well as the CRS number of the tenderer.</p> <p>Letter of Good Standing</p> <p>Tenderer's are required to submit, bound with the tender submission, a letter of good standing from the compensation commissioner indicating that the bidder is in good standing.</p>
C3.2	<p>Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.</p>
C.3.4.1	<p>Tenders will not be opened immediately after the closing time for tenders.</p>

C.3.11	<p>The tenderers will be evaluated in four stages</p> <ul style="list-style-type: none"> (i) Stage 1: Compliance with mandatory requirements as stated in Part T1.1 (ii) Stage 2: Risk assessment on current projects (iii) Stage 3: Price (iv) Stage 4: Preference <p>The technical capacity (functionality) of the contractors will not be evaluated any further during evaluation of the RFQ. However, the contractors will be required to declare the status of their key staff and any administrative compliance. In cases where there are changes in the key staff, the contractor should provide CVs and qualifications of the new staff to LDPWR&I. The new staff should have similar skills, qualifications and experience as the staff submitted during tender. Similarly, the contractors will be expected to provide an update on any changes in their administrative compliances – and should submit the required SBD document/forms in such cases.</p> <p>The award will only be issued to contractors with valid Tax Clearance certificates, active CIDB grading and the contractor who meets all the legislative requirement – this shall be verified by SCM in line with the departmental SCM Policy.</p> <p>The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade.¹</p> <ul style="list-style-type: none"> a) Stage 1: Administrative Compliance: The Compliance or compulsory documents and returnables are detailed in Section T.2.1 of this tender document. Failure to submit, complete or comply with these requirements will lead to automatic disqualification. b) Stage 2: Risk assessment on current projects <p>The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade. Should it exceed, the bidder will therefore not be appointed.</p>
	<p>Stage 3 and 4:</p> <p>The procedure for final evaluation of responsive tenders is Method 2 (Financial offer and preference). The total number of tender evaluation points (T_{EV}) shall be determined in accordance with the following formula.</p> $T_{EV} = N_{FO} + N_P$ <p>a) N_{FO} is the number of tender evaluation points awarded for the financial offer made. The score for financial offer is calculated using the following formula:</p> $P = A * \left(1 - \frac{(P_o - P_m)}{P_m} \right)$ <p>Where:</p> <p>A is 80 since the estimated financial value of works inclusive of VAT is equals or is less than R 50,000,000.00.</p> <p>P is the points awarded to the bid under consideration</p> <p>P_m is the lowest Comparative bid price</p> <p>P_o is the comparative price under consideration</p> <p>b) N_P is the number of tender evaluation points awarded for preferences claimed in accordance with the Preferencing Schedule in 3.18</p>



PART T2: RETURNABLE DOCUMENTS



T2.1 : LIST OF RETURNABLE DOCUMENTS

The following documents will form part of the documents submitted to the Contractors as part of the Request for Proposals:

A -- MANDATORY REQUIREMENTS

- 2.1 Fully completed Form of Offer (Fully Completed and Signed Form of Offer)
- 2.2 Bills of Quantities (the carried to final summary amounts in the Bill of Quantities should match amounts in the final summary as per bill section)
- 2.3 Record of Addenda to tender documents (Records of addendum must be captured in full, whether applicable or not)
- 2.4 Declaration on the status of Administration compliance (Fully completed, circled and signed)
- 2.5 CIDB grading certificate (Valid CIDB)
- 2.6 Declaration of current projects (Fully completed, circled and signed)

B – NON- MANDATORY REQUIREMENTS

- 2.7 SBD 1 (Fully Completed and Signed)
- 2.8 SBD 6.1 (Failure on the part of a bidder to complete and submit proof or documentation required in terms of this tender to claim points for specific goals with tender, will be interpreted to mean that preference points for specific goals are not claimed)

SPECIFIC GOALS	REQUIRED ATTACHMENT
Persons who had no franchise in national elections prior to 1984 and 1994	Attach certified copy of South African ID as proof
Women	Attach Director's certified copy of South African ID as proof + company registration documents
Disabled Persons	Bidder with disability must attach medical certificate completed by registered medical practitioner which is registered with Health Professions Council of South Africa (HPCSA) as proof
Promotion of SMMEs	Attach latest financial statement as proof
Enterprises located in Limpopo Province	N.B: The physical address given in the SBD 1 will be used and it should be consistent or the same as the preferred address in the Central Supplier Database Report a) A Title deed, Letter from a Traditional Authority or Municipal Statement which must not be older than three (3) months; or b) A Formal Lease Agreement together with Lessor's Municipal Account or Letter from Traditional Authority
Promotion of Youth	Attach Director's certified copy of South African ID as proof
South African owned enterprises	Attach Director's certified copy of South African ID as proof + company registration documents

2.09 Attach full CSD Report (For verification of the required attachments above)

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2.10 Proposed amendments and qualifications (Proposed amendments and qualifications must be captured in full, whether applicable or not)

Failure by the service provider to submit or complete item 2.1, 2.2, 2.3, 2.4, 2.5, and 2.6 will render their proposal not responsive and will not be considered.

The bidder should also not appear on the National Treasury's list of black listed entities.

C -- SPECIAL NOTES TO BIDDERS AND DEPARTMENTAL RIGHTS

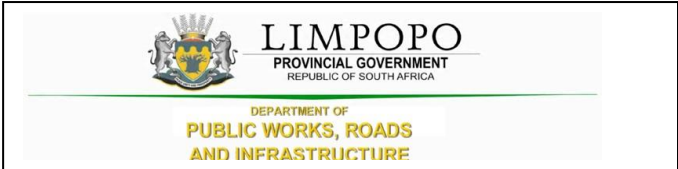
The following special conditions are for compliance and attention to bidders:

- I.1 LDPWR&I reserve the right to call interviews with short-listed bidders before final selection.
- I.2 LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.
- I.3 LDPWR&I reserves the right to appoint the bidder that proves to be fully capable and qualifies to handle and execute the job.
- I.4 The proposals submitted must be in line with the detailed specification.
- I.5 LDPWR&I reserve the right to cancel or withdraw this bid if:
 - i. Due to changed circumstances, there is no longer a need for these services; or
 - ii. Funds are no longer available to cover the total envisaged expenditure; or
 - iii. No acceptable bids are received; or
 - iv. There is a material irregularity in the Bid process.
- 1.6 In the case of sub-contracting or joint venture agreement, LDPWR&I will enter into a single contract with the principal bidder.
- 1.7 Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.
- 1.8 Any completion of the bid document in pencil or erasable ink will not be acceptable and will automatically disqualify the submitted bid.
- 1.9 Successful bidder will be required to sign and enter into a formal contract upon the award.
- 1.10 Notwithstanding shortcomings and/or inconsistencies, if any, in this specification, which is only a minimum specification, a bidder shall make provision for a complete solution that will deliver the required service efficiently and cost-effectively.
- 1.11 Bid documents must be submitted physically to the closing address as reflected on the Request for Quotation/Tender.
- 1.12 Quotations/Tenders received after the closing date and time will not be accepted for consideration.
- 1.13 This request for bid document contains confidential information about LDPWR&I, which has been provided to supply potential bidders with the data necessary to provide a holistic response.
- 1.14 No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of LDPWR&I.
- 1.15 Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.
- 1.16 References to LDPWR&I must not be made in any literature, promotional material, and brochures or sales presentations without the express written consent of LDPWR&I



T 2.2: RETURNABLE SCHEDULE

	Document Name	Returnable document
1.	Fully completed Form of Offer	<input type="checkbox"/> Yes <input type="checkbox"/> No
2.	Priced Bills of Quantities	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.	Record of Addenda to tender documents	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.	Proposed amendments and qualifications	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.	Proof of specific goals for award of the preference points	<input type="checkbox"/> Yes <input type="checkbox"/> No
6.	SBD 1. Invitation to Tender	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.	SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2022 or amended	<input type="checkbox"/> Yes <input type="checkbox"/> No
8.	Declaration on the status of Administration compliance.	<input type="checkbox"/> Yes <input type="checkbox"/> No
9.	Proof of CIDB class grading: 6GB or higher.	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.	Full CSD Report	<input type="checkbox"/> Yes <input type="checkbox"/> No
11.	Declaration of current projects	<input type="checkbox"/> Yes <input type="checkbox"/> No



Declaration on the status of administrative compliance

Please indicate, by circling either **Yes or No**, whether the administrative information submitted with the original framework tender documents have changed or not. If yes, kindly provide the particulars below with any supporting documents.

.....

.....

.....

.....

Signed Date

Name Position

Enterprise



Attach additional pages if more space is required.

Tenderer



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

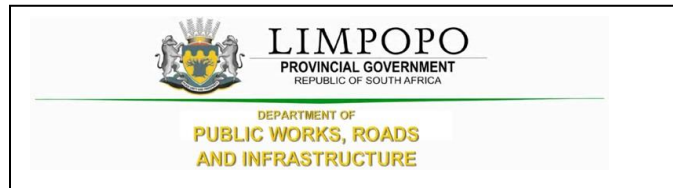
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Position

.....

Tenderer

.....



SBD 1

PART A: INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE

BID NUMBER:	LDPWRI-B/20150	CLOSING DATE	As per Tender Advert	CLOSING TIME:	As per Tender Advert
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DESCRIPTION **APPOINTMENT OF CONTRACTOR FOR COMPLETION OF TSHAULU LIBRARY IN THE VHEMBE DISTRICT FOR THE DEPARTMENT OF SPORTS, ARTS AND CULTURE IN LIMPOPO PROVINCE FOR A PERIOD OF 12 MONTHS.**

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.

Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO

CONTACT PERSON Mr. NJ Motsopye

TELEPHONE NUMBER 0152847126 **E-MAIL ADDRESS** motsopyen@dpw.limpopo.gov.za

CONTACT PERSON (TECHNICAL) Mr. K Modjadji

TELEPHONE NUMBER 083 673 5436 **E-MAIL ADDRESS** ModjadjiM@dpw.limpopo.gov.za

SUPPLIER INFORMATION

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER **CODE** **NUMBER**

CELLPHONE NUMBER

E-MAIL ADDRESS

VAT REGISTRATION NUMBER

SUPPLIER COMPLIANCE STATUS **TAX COMPLIANCE SYSTEM PIN:** **OR** **CENTRAL SUPPLIER DATABASE No:** MAAA

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED? ☐ Yes ☐ No **[IF YES ENCLOSE PROOF]**

ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED? ☐ Yes ☐ No **[IF YES, ANSWER THE QUESTIONNAIRE BELOW]**

QUESTIONNAIRE TO 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.

PART B: TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM.
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

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

SIGNATURE OF BIDDER:

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

DATE:

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

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

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

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest² in the enterprise,

employed by the state?

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of institution	State

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

2.2.1 If so, furnish particulars:

.....

² the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

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2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

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

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting

business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

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

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

.....
Signature	Date

.....
Position	Name of bidder



SBD 6.1

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

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

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

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

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

1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

- a) ~~The applicable preference point system for this tender is the 90/10 preference point system.~~
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/highest acceptable tender will be used to determine the accurate system once tenders are received.

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

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

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1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 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:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)} & \mathbf{or} & \mathbf{Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)} \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)} & \mathbf{or} & \mathbf{Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)} \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

4.3. (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

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(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 organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

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

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Persons who had no franchise in national elections prior to 1984 and 1994	6	
Women	3	
Disabled persons	2	
Promotion of SMMEs	2	
Enterprises located in Limpopo Province	4	
Promotion of youth	1	
South African owned enterprises	2	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.4. Name of company/firm.....

4.5. Company registration number:

4.6. 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]

4.7. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the

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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:

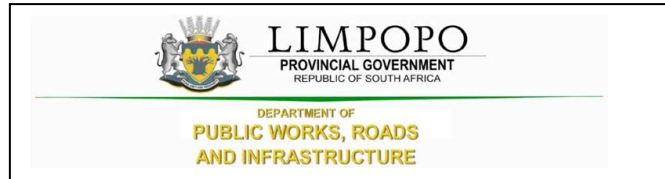
DATE:

ADDRESS:

.....

.....

.....



DECLARATION OF CURRENT PROJECTS

Current value refers to current value of projects for both General Building (GB) and Civil Engineering (CE).

Please list the current projects which your company is busy executing in the table below.

If no projects at the moment the bidder must indicate/write on this table.

Misrepresentation of facts will render your bid non-responsive.

Table 1 List of current projects executed by the bidder

1. Do you have the current projects being executed Yes/No? (circle the correct answer)
2. Please note that it is compulsory to answer the question above and if the answer is yes, complete the table below. Failure by the service provider/bidder to answer the question above or complete the table below will render their proposal not responsive and will not be considered.

Project Description	Project Value	Start date	Planned end date	Client Name	Contact Person number

Signed

Date

Name

Position

Enterprise

THE CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA



C1.1. FORM OF OFFER AND ACCEPTANCE

Offer

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

APPOINTMENT OF CONTRACTOR FOR COMPLETION OF TSHAULU LIBRARY IN THE VHEMBE DISTRICT FOR THE DEPARTMENT OF SPORTS, ARTS AND CULTURE IN LIMPOPO PROVINCE FOR A PERIOD OF 12 MONTHS

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the tender schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of the 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 PRICE INCLUSIVE OF VALUE ADDED TAX IS (CONTRACT PRICE)

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

.....

(in figures) R.....

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(s)

Name(s)

Capacity

For the tenderer:

Name & signature of **Date**
witness

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

By signing this part of this Form of Offer and Acceptance, the *Employer* identified below accepts the tenderer's Offer. In consideration thereof, the *Employer* shall pay the Consultant the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the *Employer* and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

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

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

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

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

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

For the Employer

Signature

Name

Capacity

Name and address of organization

Signature and Name of Witness

Signature

Name

Capacity

Schedule of Deviations

1 Subject

Details

.....

.....

.....

2 Subject

Details

.....

.....

.....

3 Subject

Details

.....

.....

.....

4 Subject

Details

.....

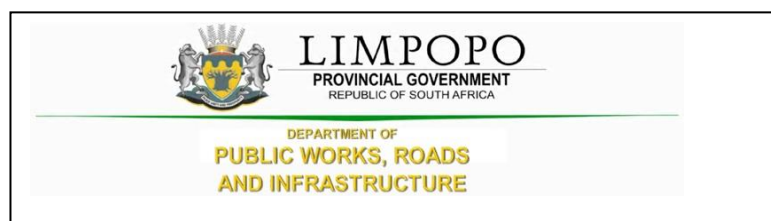
.....

.....

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

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

.....



C2.1 CONTRACT DATA

The Conditions of Contract are clauses 1 to 41 of the **JBCC Series 2000 Principal Building Agreement (Edition 4.1 of March 2005)** published by the Joint Building Contracts Committee.

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

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

The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the **CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts Gazette Notice No. 36190 of 25 February 2013.**"

PART C2: PRICING DATA

C2.1 Pricing instruction

- The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work in accordance with the provisions of the Model Bills of Quantities or Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- The agreement is under the JBCC N/S Subcontractor Agreement for use with the JBCC PBA (Edition 4.1 code 2101 March 2005) form of contract with Preliminaries (Code 2103 May 2005) incorporating the State Provisions of cl 41.0.
- It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders.
- The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
- An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
- The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminaries) of the Bills of Quantities.
- The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
- The bidder shall set aside a minimum of 5 % of the project value for sub-contractor/s and determine the amount to be paid for the Contract Participation Goal (CPG).

PART C2.2: BILLS OF QUANTITIES

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<u>SECTION NO 1</u>			
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>PRELIMINARIES</u>			
All prices/rates to be net, excluding Value Added Tax			
<u>General</u>			
i) The agreement is to be the JBCC Series 2000 Principal Building Agreement (Edition 4.1) prepared by the Joint Building Contracts Committee, March 2005			
ii) The preliminaries are to be the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, March 2005 edition and shall be deemed to be incorporated herein			
iv) 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			
iii) Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary			
v) Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable")			
Carried to Collection			R
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- vi) If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time
- vii) Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"

SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT

Definitions (A1)

1 Definitions and interpretation (clause 1)

Clause 1.1 Definition of "**Agreement**" is amended by replacing it with the following:

Agreement means the agreement arising from the signing of the Form of Offer and Acceptance by the parties.

Clause 1.1 Definition of "**Bills of Quantities**" is amended by adding the following:

"...and the Pricing Instructions contained in the Pricing Data" after the word measuring system.

Clause 1.1 Definition of "**Contract Documents**" is amended by adding the following:

".....this Agreement and all other documents referenced therein.." after the word this document"

Clause 1.1 Definition of "**Contract Drawings**" is amended by replacing it with the following:

Contract Drawings means the drawings upon which the tender was accepted and used in preparing the bills of quantities and are available for viewing at the offices of the Principal Agent at the time of tender

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Clause 1.1 Definition of "**Contract Sum**" is amended by replacing it with the following:

Contract Sum means the total of prices in the Form of Offer and Acceptance.

Clause 1.1 Definition of "**Schedule**" is amended by adding the following:

".....and in the **Contract Data**". at the end on the sentence ending with **agreement**

Clause 1.1 Definition of "**Commencement Date**" is added:

"Commencement date" means the date that the **agreement**, made in terms of the Form of Offer and Acceptance, comes into effect

Clause 1.1 Definition of "**Construction Guarantee**" is amended by replacing it with the following:

"Construction guarantee" means guarantee at call obtained by the **contractor** from an institution approved by the **employer** in terms of the **employer's** construction guarantee form as selected in the **schedule**

Clause 1.1 Definition of "**Construction Period**" is amended by replacing it with the following:

"Construction period" means the period commencing on the commencement date and ending on the date of practical completion

Clause 1.1 Definition of "**Corrupt Practice**" is added:

"Corrupt Practice" means the offering , giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution

Clause 1.1 Definition of "**Fraudulent Practice**" is added:

"Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer and includes collusive practice among tenderers (prior

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

to or after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition.

Clause 1.1 Definition of "**Interest**" is amended by replacing it with the following:

"**Interest**" means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999).

Clause 1.1 Definition of "**Principal Agent**" is amended by replacing it with the following:

"**Principal Agent**" means the person or entity appointed by the **employer** and named in the **schedule**. In the event of a **principal agent** not being appointed, then all the duties and obligations of a **principal agent** as detailed in the **agreement** shall be fulfilled by a representative of the **employer** as named in the **schedule**.

Clause 1.1 Definition of "**Security**" is amended by replacing it with the following:

Security" means the form of security provided by the **employer** or **contractor**, as stated in the **schedule**, from which the **contractor** or **employer** may recover expense or loss

Fixed

Item

Value Related

Item

Time Related

Item

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

<u>Objective and Preparation (A2 - A14)</u>					
2	Offer, acceptance and performance (clause 2)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
3	Documents (clause 3)				
	Clause 3.2.1 is amended by replacing "14.1" with "14.0"				
	Clause 3.7 is amended by the addition of the following:				
	The contractor shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the site , to which the employer, principal agent and agents shall have access at all times.				
	Clause 3.10 is amended by replacing the second reference to " principal agent " with the word " employer "				
		Fixed	Item		
4		Value Related	Item		
		Time Related	Item		
	Design responsibility (clause 4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

5	Employer's agents (clause 5)	Fixed	Item			
		Value Related	Item			
		Time Related	Item			
6	Contractor's site representative (clause 6)	Fixed	Item			
		Value Related	Item			
		Time Related	Item			
7	Compliance with laws and regulations (clause 7)					
		Note: A separate clause has been included in Section C: Specific Preliminaries of the bills of quantities for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification				
		Fixed	Item			
		Value Related	Item			
8	Works risk (clause 8)	Time Related	Item			
		Fixed	Item			
		Value Related	Item			
		Time Related	Item			
Carried to Collection				R		
Section No. 1						
Bill No 1 - Preliminaries						
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

9	<p>Indemnities (clause 9)</p> <p>Clause 9.0 is amended by adding Clause 9.1.4:</p> <p>The contractor indemnifies and holds harmless the employer against all liability, losses, claims, damages, penalties, actions, proceedings or judgements (collectively referred to as "Losses") arising from any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the contractor, but such indemnity shall not cover any use of the equipment of part thereof otherwise than in accordance with the provisions of the specification. All payments and royalties payable in one sum or by instalments or otherwise shall be included by the contractor in the price and shall be paid by him to those to whom they may be payable. The contractor shall reimburse the employer for all legal and other costs and expenses, including without limitation attorney's fees on attorney-client scale incurred by the employer in connection with investigation, defending or settling any Losses in connection with pending or threatening litigation in which the employer is a party.</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
10	<p>Works insurances (clause 10)</p> <p>Clause 10.0 is amended by the addition of the following clauses</p> <p>10.5 Damage to the Works</p> <p>(a) Without in any way limiting the contractor's obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the employer against any such damage. The contractor shall take such precautions and security measures and other steps for the</p> <p style="text-align: right;">Carried to Collection</p> <p>Section No. 1 Bill No 1 - Preliminaries LDPW-B/20150</p>			<p style="text-align: right;">Item</p> <p style="text-align: right;">Item</p> <p style="text-align: right;">Item</p> <p style="text-align: right;">R</p>

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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<p>protection and security of the works as the contractor may deem necessary</p> <p>b) The contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works</p> <p>(c) The employer shall carry the risk of damage to or destruction of the works and material paid for by the employer that is the result of the excepted risks as set out in 10.6</p> <p>(d) Where the employer bears the risk in terms of this contract, the contractor shall, if requested to do so, reinstate any damage or destroyed portions of the works and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof</p> <p>10.6 Injury to Persons or loss of or damage to Properties</p> <p>(a) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable</p> <p>(b) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person, arising out of or in the course of or by reason of the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable</p> <p>c) The contractor shall, upon receiving a contract instruction from the principal agent, cause the same to be made good in a perfect and</p>			
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workmanlike manner at his own cost and in default thereof the **employer** shall be entitled to cause it to be made good and to recover the cost thereof from the **contractor** or to deduct the same from amounts due to the **contractor**

- (d) The **contractor** shall be responsible for the protection and safety of such portions of the premises placed under his control by the **employer** for the purpose of executing the **works** until the issue of the **certificate of practical completion**
- (e) Where the execution of the **works** involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor** shall obtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the **works** has been completed
- (f) The **contractor** shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the **works**

10.7 High risk insurance

In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sink-holes or doline formation the following will apply:

10.7.1 Damage to the works

The **contractor** shall, from the commencement **date** of the **works** until the date of the **certificate of practical completion** bear the full risk of and hereby indemnifies and holds harmless the **employer** against any damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and security

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measures and other steps for the protection of the **works** as he may deem necessary

When so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works, at the contractor

10.7.2 Injury to persons or loss of or damage to property

The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above

The **contractor** shall be liable for and hereby indemnifies the **employer** against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract

10.7.3 It is the responsibility of the **contractor** to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the **contractor's** obligations in terms of the contract, the **contractor** shall, within twenty-one (21) **calendar days** of the **commencement date** but before commencement of the **works**, submit to the **employer** proof of such insurance policy, if requested to do so

10.7.4 The **employer** shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the **contractor's** default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the

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employer and the **contractor** and for this purpose all these contracts shall be considered one indivisible whole

Fixed

Item

Value Related

Item

Time Related

Item

11	Liability insurances (clause 11)
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Fixed

Item

Value Related

Item

Time Related

Item

12	Effecting insurances (clause 12)
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Fixed

Item

Value Related

Item

Time Related

Item

13	No clause (clause 13)
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Item

14	Security (clause 14)
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Clause 14.0 is amended by:-

i) The addition of the following clauses:-

Clause 14.7.3

"Hand the site over to the **contractor** subject to agreement that shall be made between the **employer** and the **contractor**"

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<u>Execution (A15 - A23)</u>				
15	<p>Preparation for and execution of the works (clause 15)</p> <p>Clause 15.1.1 is amended by replacing it with:</p> <p>No clause</p> <p>Clause 15.1.2 is amended by replacing it with:</p> <p>The security selected in terms of 14.0</p> <p>Clause 15.1 is amended by the addition of the following clause:</p> <p>15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) or latest edition, revision and amendments, within twenty-one (21) calendar days of commencement date</p> <p>Clause 15.2.1 is amended by replacing it with the following clause:</p> <p>Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1</p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
16	Access to the works (clause 16)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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17	Contract instructions (clause 17)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
18	Setting out of the works (clause 18) <i>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</i> <i>The contractor shall perform tolerance control checks regularly throughout the contract period and report on this at regular interval to the Principal Agent in the approved format. Should the contractor fail to comply with this requirement to the satisfaction of the Principal Agent, progressively as the structure is being constructed, the Employer will commission a Registered Land Surveyor to do so on the Contractor's behalf and at the Contractor's Expense.</i>	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
19	Assignment (clause 19)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
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23	Contractor's domestic sub-contractors (Clause 23)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
<u>COMPLETION</u>					
<u>Completion (A24-A30)</u>					
24	Practical completion (clause 24)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
25	Works completion (clause 25)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
26	Final completion (clause 26)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
27	Latent defects liability period (clause 27)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		

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28	Sectional completion (clause 28)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
29	Revision of date of practical completion (clause 29)				
	Clause 29.1.1 shall be deemed to be omitted and replaced by the following:				
	Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calendar month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project				
	It shall be deemed that the contractor has adequately allowed in his programme and tendered rates for expenses which might result from delays due to average or below rainfall as described above				
	Add Clause 29.9 as follows:				
	Revision to the date for practical completion shall only be considered when work on the critical path of the agreed programme for the works is delayed."				
	Add Clause 29.10 as follows:				
	Clause 29.10 - Acceleration				
	Clause 29.10.1 Irrespective of whether or not the principal agent rules that the contractor is entitled to an extension of time or a revision of the date for practical completion , the principal agent shall nevertheless, at any time, be entitled to instruct the contractor in writing to accelerate the progress of the remaining works to ensure that the works are completed by the original date for practical completion or revised date as the case may be.				
	Clause 29.10.2 Upon receipt of such instruction, the contractor				
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shall take all necessary steps to ensure that the **works** are completed timeously including the provision by him of additional resources, plant, manpower, etc and the working overtime or additional overtime beyond that contemplated at the time of tender (at all times adhering to the regulations and requirements of all authorities) and by all other adequate and proper means and methods. The **contractor** shall prove that such steps are being taken if called upon to do so.

Clause 29.10.3

The **contractor's** entitlement to compensation arising out of or in respect of any revision to the date for **practical completion** that may have been granted by the **principal agent** or alternatively where the **principal agent** has instructed the **contractor** to accelerate, shall be adjudicated strictly in terms of clause 32.

Fixed

Item

Value Related

Item

Time Related

Item

30 Penalty for non-completion (clause 30)

Clause 30 is amended by replacing reference to 36.3 at end of sentence with 36.0

Fixed

Item

Value Related

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Time Related

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Payment (A31 - A35)				
31	Interim payment to the contractor (clause 31)			
	Clause 31.9 is amended by replacing "seven (7) calender days" with "thirty (30) calender days" and by deleting the words "subject to the contractor giving the employer a tax invoice for the amount due			
	Clause 31.12 is amended by deleting the following			
	Payment shall be subject to the employer giving the contractor a tax invoice for the amount due			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
32	Adjustment to the contract value (clause 32)			
	Clause 32.0			
	Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:			
	"due to no fault of the contractor "			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
33	Recovery of expense and loss (clause 33)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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34 Final account and final payment (clause 34)

Clause 34.0

Clause 34.2 is amended by inserting # next to 34.2

Clause 34.13 is amended by replacing "seven (7) **calendar days**" with "thirty (30) **calendar days**" and deleting the words "subject to the **employer** giving the **contractor** a tax invoice for the amount due"

Fixed

Item

Value Related

Item

Time Related

Item

35 Payment to other parties (clause 35)

Fixed

Item

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Cancellation (A36-A39)

- 36 Cancellation by employer - contractor's default (clause 36)
- Clause 36.1 is amended by the additions of the following clauses:
- 36.1.3 refuses or neglects to comply strictly with any of the conditions of contract
- 36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa
- 36.1.5 in the judgement of the **employer**, has engaged in **corrupt** or **fraudulent practices** in competing for or in executing the contract
- Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "**principal agent**" with "**employer**"
- Clause 36.0 is amended by the addition of the following clause:
- 36.7 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **contractor**; or for any reason whatsoever, the **contractor** shall on written instruction, discontinue with the **works** on a date stated and withdraw himself from the **site**. The **contractor** shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

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37 Cancellation by employer - loss and damage (clause 37)

Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"

Clause 37.0 is amended by the addition of the following clause:

37.5 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **contractor**; or for any reason whatsoever, the **contractor** shall on written instruction, discontinue with the **works** on a date stated and withdraw himself from the **site**. The **contractor** shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

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38	<p>Cancellation by contractor - employer's default (clause 38)</p> <p>Clause 38.5.4 is amended by replacing "ninety (90) with "one-hundred and twenty (120)"</p> <p>Clause 38.0 is amended by the addition of the following clause:</p> <p>38.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>		
39	<p>Cancellation - cessation of the works (clause 39)</p> <p>Clause 39.3.5 is amended by the addition of the following at the end of the sentence: "within one-hundred and twenty (120) working days of completion of such report"</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>		
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Dispute Settlement (A40)

40 Disputes Settlement (clause 40)

Clause 40.2.2 is amended by replacing "one (1) year" with "three (3) years"

Clause 40.6 is amended by removing the reference to:

No clause

Clause 40.7.1 is amended by replacing "(10)" with "(15)" and by the addition of the following:

Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs.

Fixed

Item

Value Related

Item

Time Related

Item

State Provision (A41)

41 State Substitutions (clause 41)

Delete in the Substitute Provisions (41.0 State Clauses) clauses 40.2.1, 40.2.2, 40.3, 40.4, 40.5 and 40.6 and replace with the following:

40.1 Should any dispute between the **employer**, his **agents** or **principal agent** on the one hand and the contractors on the other arise out of this **agreement**, such dispute shall be referred to adjudication.

40.2 Adjudication shall be conducted in accordance with the edition of the JBCC Rules for Adjudication current at the time when the dispute is declared. The party, which raises the dispute, shall select three adjudicators from the panel of adjudicators published by the South African Institution of Civil Engineering or Association of Arbitrators (Southern Africa), determine their hourly fees and confirm that these adjudicators are available to adjudicate the dispute in

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question. The other party shall then select within 7 days one of the three nominated adjudicators, failing which the chairman for the time being of the Association of Arbitrators (Southern Africa) shall nominate an adjudicator. The **adjudicator** shall be appointed in terms of the Adjudicators Agreement set out in C1.4 .

40.3 If provided in the **schedule**, a dispute shall be finally settled by a single Arbitrator to be agreed on between the parties or, failing such agreement within 28 days after referring the dispute to Arbitration, an Arbitrator nominated by the chairman for the time being of the Association of Arbitrators (Southern Africa). Any such reference shall be deemed to be a submission to the arbitration of a single arbitrator in terms of the Arbitration Act (Act No 42 of 1965, as amended), or any legislation passed in substitution therefore. In the absence of any other agreed procedure, the arbitration shall take place in accordance with the Rules for the Conduct of Arbitrations issued by the Association of Arbitrators (Southern Africa) which are current at the time of the referral to arbitration. The Arbitrator shall, in his award, set out the facts and the provisions of the contract on which his award is based.

40.4 If the **schedule** provides for court proceedings to finally resolve disputes, disputes shall be determined by court proceedings.

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<u>Contract Variables (A41)</u>				
42	The Schedule (clause 42)			
	<i>Tenderers are referred to the Contract Data and Notes to Tenderers for variable pertaining to this contract</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
<u>SECTION B: PRELIMINARIES</u>				
<u>Definition and interpretation (B1)</u>				
43	Definition and interpretation			
	See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section			
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	Value Related	Item		
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	Documents (B2)			
44	Checking of documents (B2.1)			
	These bills of quantities:			
	(1) contain pages and annexes as indexed, and;			
	(2) are in multiple procurement format, i.e. all trades are fully measured with minor budgetary allowances			
	Items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades, 2008 edition, as recommended and published by the Association of South African Quantity Surveyors and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
45	Provisional bills of quantities (B2.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
46	Availability of construction documentation (B2.3)			
	The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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47	Interests of agents (B2.4)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
48	Priced documents (B2.5)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
49	Tender submission (B2.6)				
	<i>Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders</i>				
	<i>Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance C1.1"</i>				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<u>The site (B3)</u>				
50	Defined works area (B3.1)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
51	Geotechnical investigation (B3.2)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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52	Inspection of the site (B3.3)				
	<i>Tenderers are instructed to familiarise themselves before submission of their tender with regard to the relevant local site conditions, site accessibility, the nature of operations required, availability of labour and any conditions pertaining thereto, together with conditions relating to unloading, carting and storage of materials, equipment and tools required for the works.</i>				
	<i>No claims for extras arising from the contractor having failed to comply with this clause will be entertained</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
53	Existing premises occupied (B3.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
54	Previous work - dimensional accuracy (B3.5)				
	<i>Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
55	Previous work - defects (B3.6)				
	Fixed	Item			
	Value Related	Item			
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56	Services - known (B3.7)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
57	Services - unknown (B3.8)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
58	Protection of trees, etc (B3.9)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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59	Articles of value (B3.10)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
60	Inspection of adjoining properties, etc (B3.11)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<u>Management of contract (B4)</u>				
61	Management of the works (B4.1)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
62	Programming for the works (B4.2)				
	<p>Clause B4.2 is hereby amended by the addition of the following:</p> <p>Programme:</p> <p>The contractor and the principal agent shall agree to a Contract Programme for the control of the Works.</p> <p>The contractor shall submit a draft of the Contract Programme and method statement to the principal agent for approval together with the tender.</p> <p>The contractor shall ensure that the contract programme:</p> <ol style="list-style-type: none"> 1. Shall be prepared and drawn up to comply in all respects with the requirements of this Agreement. 2. shall be drawn up using logic developed during the tender period and complies with the planning requirements of the Client. 3. shall be in accordance with the dates given 				
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- herein for possession and practical completion;
and
4. shall be in sufficient and approved detail to ensure effective control of the work, including all items necessary to enable calculations to be made for the distribution of finance during the cash flow analysis.
 5. shall be accompanied by a full written method statement

The principal agent shall examine and comment on the contract programme and method statement within two weeks of its submission.

Following on these comments the contractor shall amend the contract programme and method statement as may be necessary and submit the final contract programme and method statement to the principal agent for approval within a further two weeks thereafter.

The contract programme shall be processed by computer and be presented to the principal agent in the form of logic charts and bar charts in such a way as to determine the critical path and the float on non-critical activities. All supporting printouts must be available to the principal agent on demand.

The acceptance by the principal agent of the contract programme, or any revision thereof, does not necessarily sanction the accuracy or validity of the network logic, the correctness of individual activities in terms of description or duration, the comprehensiveness of networks or the discrepancies between drawings and any other documents presented by the contractor, and in no way relieves the responsibility of the contractor to comply with the requirements of the Agreement.

No policy decisions other than the planning requirements, procedures and policies provided, will be enforced on the contractor regarding construction of the project and the contractor shall be responsible at all times for ensuring the accuracy, validity and reasonableness of programming information.

Documentation will not be available in complete detail at the date of award of the contract. Non-availability of information will not be deemed an excuse for non-presentation of programmes. In the event of inadequate information, the contractor shall estimate the predicted

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time applications on available information and quality the submission accordingly.

Development of the contract programme and method statement

Within two weeks of award of the contract, the contractor shall submit an updated contract programme and written method statement which shall include the latest information in sufficient detail to permit comprehensive monitoring.

Progress of the works will be monitored by the principal agent. The contractor shall liaise with the principal agent in order to provide whatever information is required to facilitate such monitoring.

Revisions to the contract programme

Revisions to the contract programme may be introduced periodically by the contractor subject to compliance with the contract completion and handover dates.

Providing the required consultation between the relevant parties has highlighted the implications of the required changes, the programming strategy on the project may be changed and the changes noted and specified on logic charts delivered to the principal agent. The changes to the programme will be recorded as firm and binding once the principal agent has sanctioned the said changes.

A revision to the programme will not invalidate the contractual completion dates and applications for extensions of time will be processed by the principal agent in accordance with the conditions of contract.

Should the contractor fail to submit a request for revision to the construction programme, progress monitoring shall be based on the latest revised programme sanctioned by the principal agent.

The contractor shall make all his necessary revisions on the approved network sheets clearly marking, inter-alia, the logic changes and duration changes. These will then be processed by the necessary parties and then approved in the normal manner

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The contractor shall provide regular progress reports showing actual and expected progress against the latest contract programme. Progress reports shall be submitted at each site progress meeting and shall outline the progress against key target dates and deviation which has occurred against the most recently updated control programme due to the progress reflected in the as-built construction programme.

The status of each activity must also be reported as follows:

Target - If the activity is not complete, the latest predicted completion date shall be supplied.

Start - If the activity has commenced, the actual date shall be supplied.

Finish - If the activity is complete, the actual completion date shall be supplied.

Problems which may occur during execution of the contract must be specifically identified in progress reports under a separate section of the contractor's report.

Should problems occur during the execution of the contract or the scope of work be increased or decreased, the contractor may be requested to increase the extent or the detail of the programme.

The principal agent may recommend action to be taken by the contractor, including the revision of resource levels, but this information will not be binding on the contractor unless the recommendations are enforced in terms of the conditions of contract by the principal agent and will in no way relieve the contractor's responsibility to comply with the requirements of the Agreement.

Extension of time

Any extension of time which is granted by the principal agent will be annotated to affect selected activities in the programme and the associated activities will be incorporated by revisions to the programme by the contractor. Should the additional activities or the extension of time on existing activities fall on a non-critical area of the programme, extension will be limited

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to the activities affected by the said additional activities or extensions and the contract dates shall not be affected. If, however, the additional activities fall on the critical path, the principal agent shall take this into account when granting any extension of time in terms of the conditions of contract.

The contractor agrees that the contract completion date (i.e. the date for practical completion) has been stipulated in the contract for the benefit of the employer, so that, without derogating from the generality of the afore going principle it is provide that:

1. The contractor shall not be entitled to deliver the site and the works to the employer prior to the contract completion date and
2. Should there for any reason be any float period indicated in the contract programme prior to the contractual completion date then this float period shall be utilized to absorb any delays or extensions of time without affecting the contract completion date.
3. The contractor shall, at all times, ensure that, notwithstanding the approval or sanctioning, reviewing or inspection of a programme or any revision of a programme by the principal agent in the afore going terms, practical completion and completion of the works shall take place strictly in accordance with this Agreement.

A defective or faulty programme, even if so sanctioned, approved, reviewed or inspected by the principal agent, shall therefore not constitute a cause for granting an extension of time for completion of the works or for entitling the contractor to the payment by the employer in terms of the contract of any loss, compensation or damage whatsoever.

The contractor acknowledges that the principal agent's afore going participation in the approval of development of, revisions to and updating of the Contract Programme shall take place in consultation with the principal agent. The contractor shall therefore provide the principal agent with such co-operation and/or information and/or access as they may reasonably require for such purposes.

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		Value Related	Item	
		Time Related	Item	
63	Progress meetings (B4.3)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
64	Technical meetings (B4.4)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
65	Labour and plant records (B4.5)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
	<u>Samples, shop drawings and manufacturer's instructions (B5)</u>			
66	Samples of materials (B5.1)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
67	Workmanship samples (B5.2)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
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68	Shop drawings (B5.3)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
69	Compliance with manufacturer's instructions (B5.4)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<u>Temporary works and plant (B6)</u>				
70	Deposits and fees (B6.1)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	</				

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71	Enclosure of the works (B6.2)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
72	Advertising (B6.3)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
73	Plant, equipment, sheds and offices (B6.4)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
74	Main notice board (B6.5)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
75	Subcontractors notice board (B6.6)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
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[illegible]

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	<u>Financial aspects (B10)</u>			
85	Statutory taxes, duties and levies (B10.1)			
	<i>Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
86	Payment of preliminaries (B10.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
87	Adjustment of preliminaries (B10.3)			
	Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) working days of taking possession of the site " with "when submitting his priced bills of quantities "			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
88	Payment certificate cash flow (B10.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>General (B11)</u>			
89	Protection of works (B11.1)			
	Fixed	Item		
	Value Related	Item		
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[illegible]

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96	Vermin (B11.8)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
97	Overhand work (B11.9)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
98	Instruction manuals and guarantees (B11.10)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
99	As built information (B11.11)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
100	Tenant installations (B11.12)	Fixed	Item		
		Value Related	Item		
		Time Related	Item		
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	<u>Schedule of variables (B12)</u>			
101	Pre-tender information (B12.1)			
	<p>This schedule contains all variables referred to in this document and is divided into pretender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries.</p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	12.1.1 Provisional bills of quantities (B12.1.1)			
	<p>The quantities are provisional:</p> <p style="text-align: right;">Yes</p>			
	12.1.2 Availability of construction documentation (B12.1.2)			
	<p>Construction documentation is complete:</p> <p style="text-align: right;">Yes</p>			
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12.1.3.1	Employer: Department of Public Works - Limpopo Provincial Government 43 Church Street, Polokwane, 0700 Private Bag X9490, Polokwane, 0700 Tel: (015) 284 7219 Fax: (015) 284 7030 Email: malulekev@dpw.limpopo.gov.za				
12.1.3.2	Principal Agent/Architect: LEMEG Architects 45 Bendor Drive, Polokwane, 0700 Postnet Suite 45, Private Bag X9676, Polokwane, 0700 Tel: (015) 296 4351 Fax: (015) 296 4359 Contact: Email: admin@lemeg.com ;				
12.1.3.3	Quantity Surveyor: MM Sakonda and Associates 15 Paul Kruger Str. Polokwane, 0700 PO Box 4785, Polokwane, 0700 Tel: (015) 291 5662 Fax: (015) 291 5740 Contact: Email: thembam@mm-sakonda.com				
12.1.3.4	Civil Engineers: SMEC Tiro House, 7 Rhodesdrift Str. Bendor, 0699 Tel: (015) 296 1138 Fax: (015) 296 0330 Contact: Email: erlo.dewaal@smec.com				
12.1.3.5	Structural Engineers: KTN Consulting Engineers and Project Managers Thornhill Office Park, Building 27, Suite F9 94 Bekker Road, Midrand, Midrand, 1686 Tel: (011) 805 0981 Fax: Contact: Email: ktn@ktnconsulting.co.za				
12.1.3.6	Mechanical Engineers: Superior Quality Engineering 60 Magazyn Str. Polokwane, 0700 Tel: (015) 295 5750 Fax: (086) 514 8513 Contact:				
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<p>Email: admin@superiorqengineers.com</p>			
<p>12.1.3.7 Geotechnical: Diges Group 98 Marshall Str. Polokwane, 0700 Tel: (015) 291 4151 Fax: Contact: Email: info@diges.co.za</p>			
<p>12.1.3.7 Geotechnical: Phathaxon Engineers 19 Mohlopi Str. Flora Park, Polokwane, 0700 Tel: (078) 476 3138 Fax: Contact: Email: mpatenit@yahoo.com</p>			
<p>12.1.4 Defined works area (B12.1.4)</p> <p><i>The works described in these Bills of Quantities comprises the Construction of New Library Building at Tshaulu In the Vhembe District.</i></p> <p><i>The buildings are single storey with bricks, face brick walls externally plastered and painted walls internally, ceilings and roof sheeting on steel trusses.</i></p> <p><i>The works also includes Electrical Installations, Mechanical Installation and Civil Works that includes Roadworks, water reticulation and sewer reticulation.</i></p>			
<p>12.1.5 Geotechnical investigation (B12.1.5)</p> <p>The geotechnical report is available for viewing at the offices of the Principal Agent</p> <p style="text-align: right;">Yes</p>			
<p style="text-align: right;">Carried to Collection</p>			
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12.1.6 **Existing premises occupied (B12.1.6)**

[3.4] Specific requirements:
The contractor shall execute the works with as little noise and disturbance as possible

12.1.7 Previous work - Dimensional accuracy (B12.1.7)

[3.5] Details:
No additional details

12.1.8 ***Previous work - defects***

[3.6] Details:
No additional details

12.1.9 Services - known (B12.1.9)

Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent

12.1.10 ***Protection of trees***

[3.9] Specific requirements:
No trees to be damaged or removed except those specifically designated in writing by the Architect

12.1.11 ***Inspection of adjoining properties***

[3.11] Specific requirements:
None

12.1.12 ***Enclosure of the works***

[6.2] Specific requirements:
Areas where work is taking place shall at all times be blocked off by appropriate means

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12.1.13 Offices

[6.4.3] Specific requirements:

The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4m x 3m x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.

The contractor to also provide a board room suitable for 15 people seated and his office site office(s) with suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.

12.1.14 Main notice board

[6.5] Specific requirements:

The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3m x 3m constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering.

12.1.15 Subcontractors' notice board

[6.6] A notice board is required (yes/no)

NO

Specific requirements:

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12.1.16 **Water**

[7.2] Option A (by **contractor**) (yes/no)
YES

12.1.17 **Electricity**

[7.3] Option A (by **contractor**) (yes/no)
YES

12.1.18 **Telecommunications**

[7.4] Telephone (yes/no)
YES

Facsimile (yes/no)
YES

E-mail (yes/no)
YES

12.1.19 **Ablution facilities**

[7.5] Option A (by **contractor**) (yes/no)
YES

Option B (by **employer**) (yes/no)
NO

12.1.20 **Protection of existing/sectionally occupied works**

[11.2] Protection is required (yes/no)
YES

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12.1.21 *Special attendance*

[9.2] Subcontractor (1) Details:

Subcontractor (3) Details:

[11.1] Specific requirements:

12.1.23 *Disturbance*

[11.5] Specific requirements:

12.1.24 *Environmental disturbance*

[11.6] Specific requirements:

102	Post-tender information (B12.2)
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Fixed

Item

Value Related

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	Time Related	Item
12.2.1 Payment of preliminaries		
[10.2]	Option A (prorated) (yes/no) YES	
	Option B (calculated) (yes/no) NO	
12.2.2 Adjustment of preliminaries		
[10.3]	Option A (three categories) (yes/no) YES	
	Option B (detailed breakdown) (yes/no) NO	
12.2.3 Additional agreed preliminaries items		
	Details: None	
Other post tender information (B12.3)		
All post-tender information for this section will be determined once tender is awarded		
	Fixed	Item
	Value Related	Item
	Time Related	Item
<u>SECTION C: SPECIFIC PRELIMINARIES</u>		
Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item		
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104	<p>Clause C1 - Contract drawings</p> <p>The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed</p> <p>Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>		
105	<p>Clause C2 - General Preambles</p> <p>The "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the trades is deemed to be included herein and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>		
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106 **Clause C3 - Site instructions**

All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only

Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book

Fixed

Item

Value Related

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Time Related

Item

107 **Clause C4 - Trade Names**

Wherever a trade name for any product has been described in the **bills of quantities**, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the **principal agent** being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

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Clause C5 - Overtime

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109	<p>Clause C6 - As-built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item		
110	<p>Clause C5 - Labour record</p> <p>At the end of each 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</p> <p>Labourers on site should have been properly appointed by the contractor and an appointment letter signed by both parties, Certified ID copies, Signed Payment Register should accompany Progress Payment Certificate each month. EPWP Data Tool Form must be signed by both the Community Liaising Officer (CLO) and Project Manager before submission for payment.</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item		
111	<p>Clause C6 - Plant record</p> <p>At the end of each calendar week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works</p> <p style="text-align: right;">Fixed</p>	Item		
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Value Related	Item	
Time Related	Item	
Clause C7 - Non-cession of monies		
The contractor shall not cede nor assign his rights or claims to any monies due or to become due to him under this contract		
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113 **Clause C8 - Occupational Health and Safety Act**

The **contractor** shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993).

It is required of the **contractor** to thoroughly study the **latest** Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the **bills of quantities / lump sum document**.

The **contractor** must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.

Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.

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114	<p>Clause C9 - Viewing of the Schoemansdal Museum areas</p> <p>The site is situated in a Schoemansdal Museum area and the tenderer must arrange with the Principal or other responsible Schoemansdal Museum staff to obtain permission to enter the site for tendering purposes</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item	Item	Item
115	<p>Clause C10 - Commencement of Works in Museum Areas</p> <p>As the works falls within a museum area the contractor must give the Principal or other responsible staff member notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item	Item	Item
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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116	Clause C11 - Entrance Permits to Schoemansdal Museum Areas			
	<p>As the works falls within a museum area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Principal, or chief security officer</p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
117	Clause C12 - Security Check of Personnel			
	<p>The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified</p>			
	<p>In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works</p>			
	Fixed	Item		
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118	Clause C13 - HIV/Aids Awareness			
	<p>It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained</p> <p>The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment</p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
119	Clause C13.1 - Awareness Champion			
	<p>Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification</p>			
	Fixed	Item		
	Value Related	Item		
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120	<p>Clause C13.2 - Awareness Workshop</p> <p>Selection and appointment of a competent Service Provider approved by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
		Item			
		Item			
121	<p>Clause C13.3 - Posters, booklets, videos, etc.</p> <p>Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
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122	<p>Clause C13.4 - Access to Condoms</p> <p>Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
123	<p>Clause C13.5- Monitoring</p> <p>Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
124	<p>Clause C13.6- Contractual Price Adjustment (CPAP)</p> <p>Contractual Price Adjustment (CPAP)</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	Item			
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PROVISIONS

Provision for Community Liaison Officer (CLO)

125	Provision for Community Liaison Officer (CLO)	Item	120 000.00
	Profit and Overheads	Item	
	<u>Provision for Training Allowance in terms of EPWP prescripts</u>		
126	Provision for Training of local labour	Item	200 000.00
	Profit and Overheads	Item	
127	Training Allowance paid to targeted labour in terms of formal training days	MAN-D 600	
	Extra over for the administration payment of training allowance to targeted labour.	Item	
	<u>Miscellaneous Items</u>		
128	Miscellaneous Items	Item	100 000.00
	Profit and Overheads	Item	

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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>(WORK GROUP 104)</u></p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Filling material (General)</u></p> <p>It will be, at all times, required from the Contractor to apply and execute strict quality control on all filling material used</p> <p>Samples of potential fill materials obtained from excavations, trench excavations, etc. are to be submitted to and approved by the Engineer prior the re-use thereof as "filling"</p> <p>All filling obtained from a commercial source should comply to a minimum G6 standard and to be approved by Engineer before haulage to site.</p> <p>Should any material be found unsuitable and the use thereof be disapproved, such material shall be disposed and approved material must be sourced and imported.</p> <p>Filling in general shall be compacted to the prescribed percentage Mod AASHTO density</p>			
	Carried to Collection			
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Filling to form earth mattresses, in sub-layers, under floors, etc

All filling in layers under surface beds, in sub-layers, to form earth mattresses, etc. shall be done with materials specified and according to methods prescribed by the SABS 1200ME Sub-base Specification.

The aforesaid specification was drawn up to cover activities normally encountered on civil engineering work, which is equally applicable on the filling details and requirements prescribed for this project

The said specification, although not issued with, shall be regarded to form part of these Bills of Quantities. The Contractor shall obtain a copy of the said specification from the South African Bureau of Standards and be kept on site at all times

CBR and Indicator tests

Density tests for monitoring filling shall be done at the minimum prescribed frequencies per each 150mm thick layer of filling placed.

The Contractor is to note that all necessary tests (i.e CBR and indicator tests, etc) are to be conducted for all filling material, whether obtained from the excavations or to be imported from an approved commercial source.

Results of these tests are to be submitted to and approved by Engineer prior commencement of any placement thereof and/or filling done therewith

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Density test

It will be required from the Contractor to execute density tests for monitoring filling at the following minimum frequencies per each filling layer placed:

- Filling under surface beds

1 Test per 25m² plan area per each 150mm thick layer

- Filling behind retaining walls:

1 Test per each 10m length of retaining wall

Results of density test executed are to be submitted to and approval obtained from the Engineer prior commencement of any subsequent fill layers and/or other work

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Carting away of excessive and/or unsuitable excavated material

Descriptions for "carting away excessive or unsuitable excavated material from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material to a suitable dumping site, which has to be located by the Contractor, off the hospital premises

The location of the intended dumping site will be subjected to the prior written approval of the local authority (Municipality)

All materials for excavations marked for caring away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

The contractor will also be liable to remove upon completion, rehabilitate all those areas of the dumping site used for dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the full satisfaction of the Engineer/Principal Agent

Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained

NOTE: All materials from excavations marked from carting away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

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EXCAVATIONS, FILLING, ETC,

**Excavate in earth below natural ground level,
reduced or made up ground level, not exceeding 2m
deep, for:**

1	Trenches	m3	23		
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**Extra over trench and hole excavations in earth for
excavation in**

2	Soft rock	m3	3		
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3	Hard rock	m3	9		
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Extra over all excavations for carting away

4	Surplus or unwanted excavated material to stock piles on site or to a dumping site to be located by the contractor	m3	13		
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Risk of collapse of excavations

5	Sides of trench excavations not exceeding 1,5m deep	m2	42		
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Keeping excavations free of water

6	Allow for bailing, pumping or otherwise keeping all excavations free from water			Item	
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	<u>Earth filling obtained from the excavations compacted to 93% Mod AASHTO density</u>				
7	In backfilling to trenches, holes, etc	m3	12		
8	Under floors, steps, pavings, etc	m3	6		
	<u>Approved earth filling supplied by the contractor, spread, levelled, watered, and compacted to 95% Mod AASHTO density in layers not exceeding 150mm thick (Rate/m3 shall be for compacted material and not loose material)</u>				
9	Under floors, steps, pavings, etc	m3	3		
10	Under floors to form ramps	m3	1		
	<u>Sand bed</u>				
11	50mm Thick dry, clean, washed riversand layer evenly spread over filling (elsewhere), levelled, watered and rammed to receive waterproofing membrane (elsewhere) under solid floors	m2	19		
	<u>Compaction of surfaces</u>				
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	19		
	<u>Prescribed density tests on filling (no payment for compaction shall be allowed until compaction results are produced, only results which have passed the test shall be paid for)</u>				
13	Modified AASHTO Density test	No	1		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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SOIL POISONING

Approved insecticide solutions shall be mixed on site in the presence of clerk of works/engineer/principal agent in strict accordance with the manufacturers/suppliers specifications

Soil insecticide under a 5 year guarantee by an approved firm of registered specialists

14	To bottom and sides of trenches, holes etc	m2	80
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	19

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<p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>(WORK GROUP 110)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p>			
<p style="text-align: right;">Carried to Collection</p> <p>Section No. 2 Bill No 2 - Concrete, formwork and reinforcement LDPW-B/20150</p>		R	

SUPPLEMENTARY PREAMBLES

Concrete test cubes

Descriptions and tendered rates for concrete strength test cubes, as required under clause 7, "Tests" of SABS 1200 G, shall be deemed to cater for all the cost of providing cube moulds necessary for the purpose, making, storing and sending thereof to an approved laboratory for testing, paying all charges in connection therewith and for submitting test results to Principal Agent

All concrete strength test cubes, each 150 x 150 x 150mm shall be prepared in a set of three

It will be required from the contractor to prepare concrete strength test cube sets for each section (radiology, dental etc) at the following minimum frequencies:

- One set of three cubes for every 20m³,
or part thereof, of concrete cast per day,

or

- One set of three cubes for each batch
of concrete cast per event as
directed by the Clerk Of Works.

All concrete strength test cubes shall be done on site regardless of ready mix and shall be labelled and the identity thereof (ie. date, concrete strength type, position where batch was cast relative to the area and section identity) shall be properly recorded for future reference.

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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 reconditioning as necessary before re-use

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 sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the Principal Agent for design reasons. Formwork necessitated by irregularities 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 which is made for in "Earthworks"

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<u>Test Blocks (Provisional)</u>					
1	Making of 150 x 150 x 150mm concrete strength test cube in sets of three, label and send to an approved laboratory for testing, including paying all charges and submit report to the Principal agent. (only successful tests will be paid for)	Sets	3		
<u>MASS CONCRETE</u>					
<u>CONCRETE</u>					
<u>REINFORCED CONCRETE</u>					
<u>Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 30MPa at 28 days</u>					
2	In surface beds cast in bays over waterproofing membrane (elsewhere)	m3	3		
3	In ramps	m3	1		
4	Beams and inverted beams	m3	4		
<u>SUNDRIES</u>					
<u>Finishing surfaces of concrete smooth with a woodfloat</u>					
5	Surface beds, slabs, etc	m2	19		
<u>Finishing top surfaces of concrete to form anti-skid finish</u>					
6	Ramp, etc	m2	3		
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FORMWORK

(WORK GROUP 111)

**SMOOTH FORMWORK (DEGREE OF
ACCURACY III)**

Rough formwork to

7	Sides of beams and inverted beams	m2	19		
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	54		

Sundries

9	300mm Hoop iron anchors shot pinned to concrete and built into brickwork	No	50		
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MOVEMENT JOINTS ETC

Movement joints

10	Movement joint formed of 15mm bitumen impregnated softboard not exceeding 300mm high built in vertically between brickwork and concrete and sealed with polysulphide sealing compound externally	m	37		
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Expansion joints

11	Movement joint not exceeding 300mm high formed of 20mm polystyrene placed vertically in position between concrete surfaces including approved sealant	m	160		
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REINFORCEMENT (PROVISIONAL)

(WORK GROUP 114)

**High tensile steel reinforcement to structural
concrete work**

12	High tensile steel rod reinforcement in all sizes	t	1.79	
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Fabric reinforcement

13	Type Ref 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	83	
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<p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p><u>(WORK GROUP 118)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Wall ties</u></p> <p>Descriptions and rates for cavity walls specified to include wire ties shall, unless otherwise specified, be deemed to include at least five metal wire ties, evenly spaced, per square metre brickwork. Metal wall ties shall:</p> <ul style="list-style-type: none"> - Comply with SABS 28 and of the butterfly or the modified PWD type - Of suitable lengths to ensure that ends are built at least 75mm deep into brickwork. 			
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SUBSTRUCTURE (PROVISIONAL)

Brickwork

**Brickwork of NFX bricks (14 MPa nominal
compressive strength) in class I mortar in
foundations**

1	One brickwall	m2	21
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SUPERSTRUCTURE

**Brickwork of NFP bricks (7 MPa nominal
compressive strength) in class II mortar**

2	Half brick walls	m2	19
3	Half brick walls in beamfilling	m2	1
4	Half brick walls above plate level	m2	50
5	One brick walls	m2	146
6	One brick walls in fire walls	m2	40
7	One brick walls above plate level	m2	56
8	One brickwall circular on plan	m2	23
9	One brick yard walls	m2	153
10	One brickwall in gables	m2	67

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SUNDRIES

Brick reinforcement in substructure (Provisional)

11	Brick reinforcement 150mm wide in foundation built into brick walls with sufficient laps at end joints, angles and intersections (measured net)	m	54		
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Brick reinforcement in superstructure

12	Brick reinforcement 75mm wide built into brick walls with sufficient laps at end joints, angles and intersections (measured net)	m	191		
13	Brick reinforcement 150mm wide built into brick walls with sufficient laps at end joints, angles and intersections (measured net)	m	431		

Prestressed fabricated lintels

14	100mm x 70mm Lintel not exceeding 3m long, hoisted into position and laid over opening in brick wall with ends bedded in class II mortar	m	152		
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Turning pieces

15	230mm Wide turning pieces to lintels etc	m	170		
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Movement joints

16	Movement joint formed of 20mm polystyrene built in vertically between brickwork	m2	95		
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Closing cavities

17	Closing 50mm cavity of hollow wall one course high, horizontally with mortar in foundations (<u>Provisional</u>)	m	30		
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Hoop iron

18	25 x 1mm thick Galvanised hoop iron 300mm Long shot pinned to concrete beams and built into brick work	No	312		
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Carried to Collection

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Section No. 2
Bill No 3 - Masonry
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

<u>FACE BRICKWORK</u>					
<u>"Capricorn Satin" or similar and approved by the Principal Agent pointed with recessed horizontal and vertical joints</u>					
19	Extra over brickwork for facing and pointing in foundation (Provisional)	m2	28		
20	Extra over one brickwall for face brickwork pointed in both sides	m2	134		
21	Extra over one brickwall for face brickwork in gables pointed in both sides	m2	58		
<u>Brick-on-edge header course copings, sills, etc of face bricks pointed with recessed joints on all exposed faces</u>					
22	Coping on top of one brick wall	m	81		
23	175mm Wide sill set sloping and slightly projecting	m	97		
24	Fair raking cutting	m	12		
25	Fair circular cutting for pipes not exceeding 100mm diameter	No	7		
26	Fair circular cutting for pipes exceeding 100mm and not exceeding 200mm diameter	No	14		
<u>FACE BRICKWORK</u>					
<u>"Onyx Satin" or similar and approved by the Principal Agent pointed with recessed horizontal and vertical joints</u>					
27	Extra over one brickwall for face brickwork pointed in both sides	m2	80		
28	Extra over one brickwall for face brickwork in gables pointed in both sides	m2	20		
29	Extra over one brickwall for face brickwork curved on plan in soldier course and pointed in both sides	m2	7		
Carried to Collection				R	
Section No. 2 Bill No 3 - Masonry LDPW-B/20150					

FIBRE-CEMENT WINDOW SILLS

**Fibre cement FC77 or equal and approved natural
grey sills in single lengths bedded in class I mortar
including metal fixing lugs etc**

30	15 x 150mm Wide cills set flat and slightly projecting	m	97	
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Carried to Collection

Section No. 2
Bill No 3 - Masonry
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	BILL NO. 4 <u>WATERPROOFING</u> (WORK GROUP 120) <u>PREAMBLES</u> For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u> <u>DAMPPROOFING OF WALLS AND FLOORS</u> <u>SUPPLEMENTARY PREAMBLES</u> Waterproofing to flat concrete roofs shall be installed by an approved firm of "Specialist Contractor" under a " ten year guarantee " all in accordance with the materials supplied and methods employed by Manufacturers			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u> <u>One layer of type 375 micron Consol Plastics Brikgrip DPC or equal and approved embossed damp proof course</u> 1 In walls m2 6			
	<u>One layer of 250 micron USB green medium density waterproof sheeting sealed at laps with pressure sensitive tape all in accordance with the Manufacturer's instruction</u> 2 Medium density damp-proof membrane laid loose on top of sand bed (elsewhere) under solid floors with pressure sensitive tape jointing in building m2 18			
	Carried to Collection		R	
	Section No. 2 Bill No 4 - Waterproofing LDPW-B/20150			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

JOINT SEALANTS ETC

**Silicone sealing compound including backing cord,
bond breaker, primer, etc**

3	Between timber fittings and plastered walls	m	30		
4	Between sanitary fittings and wall tiles	m	53		

Natural grey polysulphide sealing compound

5	20mm Deep in Expansion joints	m	15		
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Carried to Collection

Section No. 2
Bill No 4 - Waterproofing
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 5</u></p> <p><u>ROOF COVERING</u></p> <p><u>(WORK GROUP 124)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>General</p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Sizes</p> <p>All items are measured net unless otherwise described</p> <p>Flashing, trimming plates, etc</p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet roof covering where applicable</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 2 Bill No 5 - Roof Covering LDPW-B/20150</p>		R	

ROOF COVERINGS

SUPPLEMENTARY PREAMBLES

"Global Roofing Solution" or similar and approved

ArcelorMittal products to be all galvanised and installed strictly to manufacturer's specifications but colours to be to the Architect's approval

0.58mm Thick 900mm cover "klip-Tite profile chromadek Z200 spelter ISQ550 Dark Dolphin finish coat and Pebble Grey backing coat galvanised steel roof sheeting, fixed to steel intermediate purlins at MAX 2500mm centres and eaves and ridge purlins at MAX 2100mm centres using KL700 plus clips fixed with 10No. 16 x 16mm long self-drilling water haed PH2 screws,

1	Roof covering with pitches not exceedin 25 degrees	m2	1 098	
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INSULATION, ETC

Roof insulation "Owens" or similar and approved by the Principal Agent Corning Factorylite flexible, non-combustible lightweight industrial fibreglass insulation material (nominal density 12kg per m3), with reinforced kraft aluminium foil faced finish laid taut over purlins at centres and tied down top and bottom after tensioning with galvanized hoop iron ties, all strictly to the manufacturer's specifications

2	100mm Thick Insulation	m2	1 098	
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Carried to Collection

Section No. 2
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

**SHEET METAL FLASHING, LININGS,
COPING, ETC**

**Concealed fix 0,8mm thick "Global Roofing
Solution" or similar and approved by the Principal
Agent Chromadek Z200 spelter ISQ550 Charcoal
Grey finish top coat and Pebble Grey backing coat
galvanised steel sheeting flashing, three times bent
along girth and notched on site to suit roof profile,
complete with sealing strips**

3	Apex flashing 550mm girth 3 times bent and notched on site	m	50
4	Sidewall flashing 550mm girth 2 times bent and notched on site	m	34
5	Headwall flashing 462mm girth 2 times bent and notched on site	m	34
6	Ridge Cap 550mm girth 3 times bent and notched on site	m	50
<u>0,8mm Z275 "Brownbuilt" spelter galvanised steel sheeting</u>			
7	Fascia or barge angles 500mm girth with "Classicoat" finish on one side	m	324

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Bill No 5 - Roof Covering
LDPW-B/20150

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SKYLIGHTS

PREAMBLES

Notes:

ALUMINIUM WINDOWS, ETC.,

NOTE: Indicative schedules are attached at the end of the bills of quantities to assist the tenderer in pricing

Rates for the following aluminium windows are to include for supplying and building in of temporary templates

Design, supply, deliver to site and install the following skylights in accordance with the manufacturers instructions

Skylight with 8.38mm thick "SmartGlass" or similar and approved x 2 Pro, Double glazing "seren green", outer pane armourplate and inner pane clearvue, of visible light transmission to, solar heat gain co-efficient 0.52, u-value 2.8 and visible light reflection 13 and shading co-efficient 0.60. Skylight to have seamless glass and sides to be of approved standard.

Skylight glazed with 6mm thick PVB faidbrand laminated safety glass and plugged to brickwork

8	Skylight type 1 size 1000 x 600mm wide	No	6.00
9	"SUNPAL" Multi polycarbonate standing seam Architectural system or similar and approved by the Principal Agent to suite opening approximately 1000 x 600mm wide	No	6.00

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Section No. 2
Bill No 5 - Roof Covering
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>(WORK GROUP 126)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Fixing</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at maximum 600mm centres, and where described as "bolted" the bolts have been given elsewhere</p> <p>Sealing of all abutments</p> <p>All cupboards, counter tops, shelves, etc. abutting walls, tiled surfaces, etc. to be sealed watertight with an approved silicon sealant along all joints</p> <p>Unless described, tendered rates must make provision for this as no additional claims in this regard will afterwards be entertained</p>			
<p style="text-align: right;">Carried to Collection</p>			R
<p>Section No. 2 Bill No 6 - Carpentry and Joinery LDPW-B/20150</p>			

PREAMBLES

NOTE: Tenders are advised to study the "Department of public works specifications of material and method to be used" (PW371/OCTOBER 1993) before pricing this bill

NOTE: Unless otherwise stated herein all items in this bill shall be deemed to fall into Work Group No.126 for JBCC CPAP Purpose

TIMBER

All softwood to be South African Pine.

DESCRIPTION

The term "screwed on" shall mean the countersunk screwing of one timber member to another

The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete

Descriptions of floors, ceiling, joinery, etc. shall be deemed to include for all square cutting

Descriptions of items given in linear meter shall be deemed to include for mitres, stopped ends, fitted intersections, etc.

Descriptions of rounded angles, rebates, grooves, chamferes, moulded edges, etc, shall be deemed to include for angles, ends, etc.

ROOFS ETC

The following is applicable in respect of roof trusses

Trusses are at maximum 760mm centres

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Roof coverings are Double Roman Concrete Roof Tiles, laid on 38 x 38mm Sawn softwood brandering, at centres to suit the gauge of tiles and PVC translucent sheeting laid on 50 x 76mm timber purlins

NOTE:

Tiles to match existing in all respects. If there are challenges in matching the tiles, the Contractor to notify the Architect prior to procurement and installation. Works to roof covering are mostly in patchwork and the Contractor to take cognisance that skew views will not be tolerated in the name of what was existing. Rates will be deemed to include correcting discrepancies on existing work.

All prefabricated trusses are to be approved by the Structural Engineer and the Contractor to price for design, workshop drawings and certification by ITC approved manufacturer.

Upon completion of the roofing installation, the Contractor shall call upon own and independant Structural Engineer, who will certify the installation as compliant to design, and issue a roof guarantee certificate, with costs included in the rates.

Plate nailed mono pitch timber roof truss construction

All prices/rates to be net, excluding Value Added Tax

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Bill No 6 - Carpentry and Joinery
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

PREFABRICATED ROOF TRUSSES, ETC.

- 1 Allow for the issuing of all relevant roof truss design certificates as per SANS 0243: THE DESIGN, MANUFACTURE AND ERECTION OF TIMBER TRUSSES.

Item

Prefabricated timber trusses with not exceeding 15 degree pitch.

- 2 Roof truss approximately 7900 x 1200mm high of prefabricated trusses to Office Area and Server to Public Ablution areas.

No

46

- 3 Roof truss approximately 6900 x 1200mm high double pitch of prefabricated trusses to Guard House.

No

6

Sawn softwood

- 4 22 x 228mm Gang boarding (Provisional).

m

59

- 5 38 x 114mm Longitudinal bracing (Provisional).

m

32

- 6 50 x 76mm Cross bracing (Provisional).

m

20

- 7 38 x 114mm Wall plates

m

103

- 8 50 x 76mm Purlins

m

217

Wrought softwood

- 9 50 x 76mm Purlins

m

13

Sundries

- 10 Two coats ABE PROVONITE on exposed timbers

m2

5

- 11 Teco Hurricane galvanised mild steel purlin to rafter ties fixed in strict accordance with the manufacturers instructions

No

24

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Bill No 6 - Carpentry and Joinery
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

EAVES, VERGES, ETC

Everite medium density plain nutec-cement

12	12 x 225mm Fascia with plastic H-profile joint strips, screwed to timber with 14 x 40mm brass screws	m	14		
13	12 x 225mm Barge boards with plastic H-profile joint strips, screwed to timber with 14 x 40mm brass screws	m	13		

SKIRTINGS

Timber skirting

14	75 x 19mm Thick hardwood skirting with rounded top and complete with 25mm hardwood quadrant planted on and plugged and screwed to walls, all expansion joints in skirting to be formed with 10mm polysulphide filled joint	m	76		
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Hard wood board

15	200mm x 600mm x 22 mm Fire extinguisher backing board, chamfered all round and plugged to wall including varnish on all sides	No	11		
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DOORS, ETC

NOTE:

All framed and ledged batten doors and combination doors, where battens are utilised, shall only be of construction acceptable to the Department, i.e. mortice and tennon where the tennon is exposed on the outside edges of styles and where the tennon is wedged to form a dovetailed shape.

Paint backs of subframes one coat wood primer before building in all timber frame

HARDWOOD DOORS, ETC

Meranti framed, ledged, braced and battened door, formed of 110 x 44mm sides, 110 x 44mm top rail, 110 x 22mm middle rail, top and bottom brace and 220 x 44mm bottom rail, all filled in with 63mm tongue and groove slats and 3mm hardwood backing board

16	44mm Door size 813 x 2032mm high for door type D1, D5	No	15
17	44mm Door size 913 x 2032mm high door type D3, D6	No	2

SEMI-SOLID DOORS, ETC

Flush Semi-solid core meranti doors with concealed hardwood edge and 3mm masonate on both side hung to steel doorframe

JOINERY FITTINGS

18	Reception counter in building as per the attached drawings and proved by the Principal Agent.	Item
19	Kitchen Units in building and Guard house as per the attached drawings and approved by the Principal Agent.	Item
20	Counter tops in building and guard house as per the attached drawings and approved by the Principal Agent.	Item

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

21 Computer centre in building and guard house as per the
attached drawings and approved by the Principal Agent.

Item

22 Book Shelves in building and guard house as per the
attached drawings and approved by the Principal Agent

Item

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	BILL NO. 7			
	<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
	<u>(WORK GROUP 129)</u>			
	PREAMBLES For preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
	<u>NOTE</u>			
	All prices/rates to be net, excluding Value Added Tax			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Fixing			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at maximum 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	Ceilings			
	Unless otherwise described, ceilings shall be deemed to be horizontal			
	Suspended ceilings, bulkheads, etc			
	All suspended ceilings, bulkheads, etc. shall be installed by an approved firm of specialists, all in accordance with the materials supplied and methods employed by Manufacturer			
	Proprietary suspended ceilings			
	Hangers, suspension grids, "lay-in" panels, etc. of			
	Carried to Collection		R	
	Section No. 2 Bill No 7 - Ceilings, Partitions and access flooring LDPW-B/20150			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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suspended ceilings, bulkheads, etc are to be in accordance with the Manufacturers recommendation

Bulkheads

Bulkhead are defined as those portions of ceilings which are stepped vertically down or up from the general ceiling level and which generally occur along the perimeter of a room or area

Bulkheads have only been described as such where they conform to the above defination and where the horizontal or vertical dimensions do not exceed 900mm. Where these dimensions do exceed 900mm, 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

INSULATION

"Aerolite" or similar and approved by the Principal Agent thermal Insulation

- | | |
|---|--|
| 1 | 135mm Insulation "Owen Corning Aerolite" flexible non-combustible lightweight (nominal density 10kg/m ³) fibreglass reinforced insulation blanket, closely fitted with ends butted firmly and laid loose on top of branderling etc |
|---|--|

m2

883

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Section No. 2
Bill No 7 - Ceilings, Partitions and access flooring
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CEILING, ETC

NAILED UP CEILINGS

Note:

The tenderer shall make allowance in the ceilings for electrical light fittings, diffusers, panels, etc and for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)

Tenderers are advised to make allowance in their prices for ceiling subframes where required

PLASTERED PLASTERBOARD CEILINGS

BPB "Gypsum" RhinoCeil Prestige J flush jointed ceiling 9,5mm thick Taper-edge Rhinoboard fixed print side up and screwed to Donn steel capped tee flush plastered ceiling suspension system with drywall screws spaced at 150mm centres, including galvanised main tees at 1200mm centres and cross tees at 500mm centres, all suspended with 25 x 25mm galvanised angles at not exceeding 1200mm centres., all fixed to truses at centres. Joints to taped and finished as per manufacturerers instructions

2	Gypsum board ceilings to timber trusses	m2	16
3	Skimmed gypsum plaster on ceilings	m2	161
<u>BPB Gypsum Cornice</u>			
4	45 x 35mm flush plaster trim(9,5mm thick) cornice plugged to straight walls	m	192
5	Extra over ceiling for opening for 650 x 650 mm trap door complete with trimmers, frame, cross branders, ceiling board, hinges, etc	No	5

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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SUSPENDED CEILINGS

Ceilings "BPB Gypsum DonnCeil Gyprex" white vinyl finished gypsum ceiling tiles 12,5mm thick, laminated to glass wool board of 55mm x 60kg/m3, laid on and including Q/T38 White powder coated main tees, cross tees, hold-down clips, wedges, etc., all suspended with galvanized hangers at centres not exceeding 1200mm

6	1200 x 600mm Suspended Ceilings not exceeding 1m below steel members	m2	122	
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ACOUSTIC CEILINGS

Ceilings "OW Acoustic" Constellation Premium biologically absorbable mineral woll ceiling tile, NRC -0.70, CAC -33dB, fire classification A2-s1, d0, weight - 4.5kg/m2, white vinyl finished, laid on fire rated OWA construct S15 exposed demountable T15 suspension system, with galvanised main tees and cross tees, tees suspended by means of galvanised hangers at centres not exceeding 1200mm, all installed to manufacturer's specifications.

7	1200 x 600mm Suspended Ceilings not exceeding 1m below steel members	m2	320	
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"BPB Gypsum" Code LSM25 recessed shadowline cornice pluggged

8	Type SM25 47 X 35mm pre-painted cornices	m	211	
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PARTITIONS ETC

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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<u>"Rhino Drywall" partition systems</u>					
Partitions consisting of 63,5mm "Ultrasteel" steel studs inserted at 600mm centres into 63,5mm "Ultrasteel" steel track at top and bottom including additional studs as necessary at abutments, ends, etc, clad on both sides as described with wallboard screwed to studding with 25mm and 41mm drywall screws at maximum 220mm centres. Boards are to be butt jointed and finished with "RhinoTape" and "Rhinoglide" joint filler all in accordance with the manufacturer's instructions. Intersections and abutments are measured separately and descriptions shall be deemed to include any additional studs, corner beads, jointing compound, tape, etc					
Where partitions are described as "with top track fixed to suspended ceiling tees" rates shall be deemed to include for standard U-section aluminium channel to top of walls					
Rates for partitions are to include for penetrations of services and structures occurring in the ceiling void, and the sealing there off					
Wall paper and/or paint and varnish finishes are measured elsewhere					
<u>"GypRoc Standard System" or similar and approved by the Principal Agent steel stud partitions with both sides clad with one layer of 12,5mm "Taper-edge Rhino Board"</u>					
9	Partitioning approximately 2,72m high with bottom track mounted to H-beam and top track fixed to suspended ceiling tees	m	6		
10	Extra over partition approximately 2.75m high for fair end	No	2		
11	Extra over partition approximately 2.75m high for vertical abutment	No	2		
12	Extra over partition approximately 2.72m high for corner-intersection	No	1		
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Section No. 2 Bill No 7 - Ceilings, Partitions and access flooring LDPW-B/20150				R	

ACCESS FLOORING

"Bates" access flooring or similar approved

13

"Bates" access flooring or similar approved access flooring 600 x 600mm wide with 3CR12 suspension foot pieces not exceeding 1000mm deep.

m

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 8</u></p> <p><u>IRONMONGERY</u></p> <p><u>(WORK GROUP 132)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Fixing of door locks, handles, flush bolts etc</p> <p>Fixing of all locks, handles, flush bolt, etc. shall be regarded as fixed to timber door leaves, unless specifically otherwise indicated</p> <p>Preparation of door frames</p> <p>Descriptions for flush bolts, door closers, floor spring, etc. shall be deemed to include all necessary preparations to door frames to accomodate same.</p> <p>Tendered rates must make provision for the above-mentioned as no additional claims in this regards will afterwards be entertained</p> <p>All "en-suite" locks shall be ordered to operate in a dedicated master keyed and/or grand master keyed lock system</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 2 Bill No 8 - Ironmongery LDPW-B/20150</p>		R	

**SUPPLY AND INSTALLATION OF
IRONMONGERY**

HINGES, BOLTS, ETC

**"Dormakapa" or similar and approved by the
Principal Agent**

1	Type DBB-SS-009 102 x 75 x 3mm Thick two ball bearing butt hinge	No	45
2	Type BFBDM Aluminium anodised flush barrel bolt, with keep fixed to manufacturer's specification	No	6
3	Type HBAFM Hinge for aluminium frame.	No	10
4	Type DRP-SS-022, Adjustable roller bolt	No	2
5	Type HBFMF, Fire Hose reel cabinet door	No	3

"EN-SUITE" LOCKS

"Dormakapa" Locks to be suitable for Master Key

6	Type D02735 SS Narrow stile dead lock operating with european profile cylinder, casing 174 x 52mm deep, forend 238 x 22mm wide, backset 35mm and 20mm throw.	No	12
7	Type D02635 SS Narrow stile Sash lock operating with european profile cylinder, casing 174 x 52mm deep, forend 238 x 22mm wide, backset 35mm and 20mm throw.	No	3
8	Type D037D SS Cylinder deadlock, casing 116.5 x 78mm deep, forend 168 x 22mm wide and backset 57mm.	No	4
9	Type D032D SS, Bathroom deadlock, casing 102 x 78mm deep, forend 155 x 22mm wide and backset 57mm.	No	1
10	Type DDC106601MK Five pin Euro-profile double cylinder 66mm long	No	16

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

11	Type DCE-105 S.S Narrow Stile cylinder escutcheon	No	8
12	Type DCE-002 S.S Round cylinder escutcheon	No	6
13	Type D035S SS Bathroom sash lock, casing 102 x 78mm Deep, forend 155 x 22mm wide, backset 57mm and centres 57mm	No	5
14	Type D036S SS, Cylinder sash lock, casing 116.5 x 78mm Deep, forend 168 x 22mm wide, backset 57mm and centres 61mm	No	1
15	Type DKC106601 MK 66mm Long five pin euro-profile knob cylinder master keyed.	No	1
16	Type DSC104301 MK 43mm Long five pin euro-profile knob cylinder master keyed.	No	4
17	Type PHT3901, Exterior access lock with lever handle	No	1
18	Master key	No	2
19	Grand master key	No	1

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

HANDLES

**"Dormakapa" or similar and approved by the
Principal Agent**

20	Type TH125 NS Cyl S.S Lever handle on narrow stile rose with narrow stile cylinder escutcheons	No	9
21	Type DPH215 BTB 383 x 32mm Dia. D Shaped offset tubular pull handle	No	14
22	Type DPH301A BTB 383 x 25mm Dia. straight tubular pull handle	No	1
23	Type DPH301B, 325 x 25mm Dia. straight tubular pull handle	No	2
24	Type DPH-430-BL-SF Pull handle BT fixed on a plate (Plate elsewhere measured) with no cylinder cutout, installed to manufacturer's specification.	No	3
25	Type DWC-006, Disabled WC indicator and turnknob for physically impaired individuals.	No	1
26	Type TH125 WC S.S, Lever handle on rose for Bathroom/WC	No	10
27	Type DRP-SS-023, Flush pull handle 62 x 44mm ring	No	2

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PUSH PLATES AND KICKING PLATES

**"Dormakapa" or similar and approved by the
Principal Agent Pushplate drilled and counter sunk
to timber**

Pushplates

28	Type DPP-430-BL-SF 150 X 300 X 1,2mm Thick push plates fixed to timber door	No	3
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Kickplate drilled and counter sunk to timber

29	Type DKP-430-SF, 300 wide x 1,2mm Thick Kick plate fixed to timber door	No	15
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DOOR CLOSERS AND FLOOR SPRINGS

**"Dorma" or other equal and approved by the
Principal Agent**

30	Type TS71 PA HO (EN3 850-950, EN4 950-1100) parallel arm bracket, hold open door closer - hydraulic speed control, installed to manufacturer's specification.	No	12
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31	Type TS71 (EN3 850-950, EN4 950-1100) parallel arm bracket, non hold open door closer - hydraulic speed control, installed to manufacturer's specification.	No	4
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32	Type TS73V PA DC-PAB-SL (EN3 850-950, EN4 950-1100) parallel arm delayed action, installed to manufacturer's specification.	No	1
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33	Type TS91B G-SR, Non hold co-ordinated door closer system for rebated doors between 1350 - 1900mm, closing force EN3, with hydraulic speed control for door maximum 950mm per leaf, installed to manufacturer's specification.	No	1
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34	Type BTS75 SSA-NHO Single action stainless steel floorspring, EN 1-4 non hold open type, for 120Kg door leaf weight, with adjustable closing and latching speeds, backcheck.	No	2
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35	Type SR 392 Door co-ordinator for door leaf widths more than 800mm	No	7		
	<u>KIMBERLEY CLARK</u>				
36	"Kimberley Clark" pump action soap dispenser code SA921950,	No	6		
37	Stainless steel toilet paper (TR2) holder	No	6		
38	Stainless steel folded towel dispenser code 9962000	No	4		
39	Reflex sanitary stainless steel disposal bin 12 litre pedal operated	No	6		
40	Reflex stainless steel diposal bin 18.6 litre	No	4		
	<u>GRAB RAILS</u>				
	<u>"Chairman industries" or other equal and approved</u>				
41	Stainless steel side grab rail " Code DL2 " including fixing to wall	No	1		
42	Stainless steel rear grab rail " Code SR2 " including fixing to wall around cistern	No	1		
43	GR300 Stainless steel door rail and fixing to timber door	No	1		
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SUNDRIES

**"Dormakapa" or similar and approved by the
Principal Agent**

44	Type DPS-SS-032 Dust proof strike	No	6
45	Type DDS-NP-018 Floor mounted door stop fixed to concrete	No	26
46	Type DDH-SS-020, Wall mounted door buffer fixed to brickwork.	No	2
47	Type DHC-SS-031B, Hat and coat hook with rubber buffer, fixed to timber	No	5
48	Type PHA3 S DD, Three point locking panic bar - double door suitable for door double leaf 1000 x 2270mm high.	No	1
49	Type DPL1000 MK, 50mm Padlock suitable for master key.	No	4

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STEEL LOCKERS

"KROST SHELVING" or similar approved steel lockers with standard baked enamel finish

50	Interlocking two door lockers 1800mm High x 300mm Wide x 450mm Deep with 3 doors each side	No	6
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PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC

"Best Board Manufacturing cc" or similar and approved by the Principal Agent

Pining board in charcola carpet complete with deluxe anodised aluminium frame, rounded plastic corner and mounted horizontally against the masonry wall with mounting brackets, all in accordance with manufacturer's specifications

51	Standard pining board size 1200mm wide x 1500mm high	No	12
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SIGNAGE

"Dormakaba" or similar and approved by the Principal Agent

52	Type DSS-130 M, 150 x 150mm MALE sign	No	1
53	Type DSS-131 F, 150 x 150mm FEMALE sign	No	1
54	Type DSS-132 MF, 150 x 150mm MALE/FEMALE sign	No	1
55	Type DSS-133 P, 150 x 150mm DISABLED PERSONS sign	No	1
56	Type DSS-136 EL, 150 x 150mm ELECTRICAL sign	No	1
57	Type DSS-140 RH, 150 x 150mm RUNNING MAN sign	No	1
58	Type DSS-143 A, 150 x 150mm ARROW sign	No	1

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59	Type DSS-145 FHR, 150 x 150mm FIRE HOSE REEL sign	No	2		
60	Type DSS-146 FE, 150 x 150mm FIRE EXTINGUISHER sign	No	2		
<u>BLINDS AND CURTAINS</u>					
61	Provide a sum of R 50 000.00 (Fifty thousand rands) for supply and installation of curtain trucks, rails, curtains and blinds		Item		50 000.00
62	Profit		Item		
63	Attendance		Item		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 9</u></p> <p><u>STRUCTURAL STEEL</u></p> <p><u>(WORK GROUP 134)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p>			
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STRUCTURAL STEEL (Provisional)

Standardised Specifications

The SANS 1200 1200H Standardised Specification for Civil Engineering Construction for Structural Steelwork is applicable to this Bill

The SANS 1200 1200HC Standardised Specification for Civil Engineering Construction for Corrosion Protection of Structural Steelwork is applicable to this Bill

Project Specification

If the Standardised Specifications and the Project Specification (bounded in this document) are in conflict, the Project Specification shall apply. If these three specifications conflicts with the Model Preambles for Trades, the provisions of these specifications shall apply.

Descriptions

Descriptions of all structural steelwork shall be deemed to include for the preparation of shop detail drawings, supply and fabrication, delivery, abnormal loads, erection and approved protective treatment (Corrosion protection).

Items described as "bolted" shall be deemed to exclude the bolts and include the holes.

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

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.

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STRUCTURAL STEEL WORKS, ETC.

1	Contractor to supply workshop drawings to the Principal Agent for approval		Item
2	Allow for the issuing of all relevant roof truss design certificates as per SANS 0243: THE DESIGN, MANUFACTURE AND ERECTION OF STEEL TRUSSES.		Item
3	Certificates of compliance for complete roof installation		Item

MILD STEEL COLUMNS AND BEAMS

Welded and bolted columns in single lengths with welded flat section base and bolted angle section cleats

4	120 x120 x 4.5mm thick at 15.77kg/m Hollow section square columns	t	0.22
5	200 x200 x 5mm thick at 29.94kg/m Hollow section square columns	t	0.40
6	203 x 203 x 71mm thick at 71.5Kg/m thick H-lintel Steel beam	t	0.85

Bolts to columns, beams, etc

7	Grade 8.8 precision bolts	t	0.002
8	M20 x 300mm Chemset J- bolt cast into concrete	No	16
9	M12 x 100mm Expansion bolt	No	16

MILD STEEL BOLTED PURLINS, GIRTS, BRACING, ETC

Purlins and girts, plates, etc, welded/bolted to steel

10	350 x 350 x 10mm Thick Baseplate, four times holed and welded to Hollow Section column, and bolted to concrete base with J-bolts (elsewhere measured)	No	17
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STEEL TRUSSES ETC

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	<p><u>"Mitek Pamir" or similar and approved by the Principal Agent Ultra-Span light gauge steel roof trusses in accordance with part "A" and "L" of the National Building Regulations.</u></p>			
	<p><u>Hoisting into position exceeding 3.0m</u></p>			
11	<p>Roof construction to double pitched roof supplied and erected complete in position with the following specifications; top chord dead load of 0.100kN/m², bottom chord dead load 0.140kN/m², wind terrain category C, wind speed of 36m/s, wind pressure 0.436N/m², default pitch 5 degrees, etc. Trusses to be at 1400mm centres, battens at 1000mm centres and overhangs at 600mm. Approximately 751m² on plan. Roof construction to also include galvanised fascias and badge boards and all roof accessories (Refer to Architect's drawings at the back of these Bills of Quantities)</p>	Item		
	<p><u>PAINTWORK, ETC.</u></p>			
	<p><u>ON METAL</u></p>			
	<p><u>Spot primer defects in pre-primed surfaces with zinc chromate primer, one universal undercoat and two coats "Plascon" or equal and approved enamel paint</u></p>			
12	<p>On structural steelwork</p>	m2	29	
	<p>Section No. 2 Bill No 9 - Structural Steel LDPW-B/20150</p>		R	

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<p><u>BILL NO. 10</u></p> <p><u>METALWORK</u></p> <p><u>(WORK GROUP 136)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Descriptions of expansion anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Burglar bars to windows</p> <p>All opening sections shall be filled with burglar bars, unless otherwie described</p> <p>Glazing beads to windows</p> <p>Guarantees for glass shall be provided upon completion of the works.</p> <p>Tendered rates must make provision for the above-mentioned as no additional claims in this regards will afterwards be entertained</p>			
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<p>Section No. 2 Bill No 10 - Metalwork LDPW-B/20150</p>			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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Gates to external doors

1	Single gate 970 x 2125mm high overall comprising of 50 x 75mm galvanised rectangular steel tubular frame with 50 x 5mm thick plate welded onto the inside of the frame and bolted with M10 to brickwork, "Steeldale Bestfence" or similar and approved by the Principal Agent galvanised mesh "BRC Thru Fencing No. 917", with 12.7 x 76.2mm aperture and 4mm thick wire diameter in flush cut sheets of 440 x 1480mm welded to opening section of the gate. G01.	No	3
2	Screen 2800 x 1800mm high overall comprising of 50 x 75mm galvanised rectangular steel tubular frame with 50 x 5mm thick plate welded onto the inside of the frame and bolted with M10 to brickwork, "Steeldale Bestfence" or similar and approved by the Principal Agent galvanised mesh "BRC Thru Fencing No. 917", with 12.7 x 76.2mm aperture and 4mm thick wire diameter in flush cut sheets of 1200 x 2400mm welded to opening section of the gate. L01.	No	2
3	Screen 3000 x 1200mm high overall comprising of 50 x 75mm galvanised rectangular steel tubular frame with 50 x 5mm thick plate welded onto the inside of the frame and bolted with M10 to brickwork, "Steeldale Bestfence" or similar and approved by the Principal Agent galvanised mesh "BRC Thru Fencing No. 917", with 12.7 x 76.2mm aperture and 4mm thick wire diameter in flush cut sheets of 1200 x 2400mm welded to opening section of the gate. L01.	No	1
4	Screen 400 x 4400mm high overall comprising of 50 x 75mm galvanised rectangular steel tubular frame with 50 x 5mm thick plate welded onto the inside of the frame and bolted with M10 to brickwork, "Steeldale Bestfence" or similar and approved by the Principal Agent galvanised mesh "BRC Thru Fencing No. 917", with 12.7 x 76.2mm aperture and 4mm thick wire diameter in flush cut sheets of 440 x 1330mm welded to opening section of the gate. L01.	No	10

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**ALUMINIUM WINDOWS, ETC., INCLUDING
BUILDING INTO BRICKWORK**

NOTE: Indicative window schedules are attached at the end of

the bills of quantities to assist the tenderer in pricing

Rates for the following aluminium windows are to include for supplying and building in of temporary templates

Design, supply, deliver to site and install the following windows/shopfront in accordance with the manufacturers instructions

Polyester powder coated aluminium framed windows/shopfront glazed as described, including all necessary framing, transomes, mullions, beads, clips, etc., all ironmongery comprising hinges, friction stays, wedgeless handles, external sealing between gaskets, external sealant between framing and adjoining structure with an approved sealant recommended for the purpose intended, all fixings and supports protection from all damage, cleaning down upon completion and everything necessary for a perfectly weather tight installation to the intent, approval and satisfaction of the Architect. NOTE : All windows to be fitted complete with 12 x 12mm Aluminium square bars @ 150mm centres maximum and rates will be deemed to include such

Windows/shopfront glazed with 6.38mm thick PVB faidbrand laminated safety glass and plugged to brickwork

5	Purpose made window size 600 x 900mm high W1	No	6
6	Purpose made window size 440 x 3570mm high AL01	No	8
7	Purpose made window size 3456 x 680mm high AL02	No	7
8	Purpose made window size 3315 x 1615mm high AL04	No	1
9	Purpose made window size 4278 x 425mm high. AL06	No	1

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10	Purpose made window size 3390 x 2465mm high AL07	No	1
11	Purpose made window size 3643 x 425mm high AL08	No	1
12	Purpose made window size 2285 x 2465mm high AL09	No	1
13	Purpose made window size 3036 x 1445mm high AL11	No	1
14	Purpose made window size 1100 x 3740mm high AL14	No	2
15	Purpose made window size 2148 x 1530mm high AL18	No	1
16	Purpose made window size 4500 x 1530mm high AL19	No	1
17	Purpose made window size 2958 x 2465mm high AL21	No	1
18	Purpose made window size 4787 x 1530mm high AL23	No	1
19	Purpose made window size 3770 x 1105mm high AL24	No	1
20	Purpose made window size 2429 x 1105mm high AL25	No	1
21	Purpose made window size 3100 x 1105mm high AL26	No	1
22	Purpose made window size 4685 x 425mm high AL27	No	1
23	Purpose made window size 440 x 2465mm high AL28	No	3
24	Purpose made window size 5685 x 1072mm high AL30	No	1
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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**ALUMINIUM DOORS, ETC., INCLUDING
BUILDING INTO BRICKWORK**

Polyester coated aluminium framed windows/shopfront glazed as described, including all necessary framing, transomes, mullions, beads, clips, etc., all ironmongery comprising hinges, friction stays, wedgeless handles, external sealing between gaskets, external sealant between framing and adjoining structure with an approved sealant recommended for the purpose intended, all fixings and supports protection from all damage, cleaning down upon completion and everything necessary for a perfectly weather tight installation to the intent, approval and satisfaction of the Architect. NOTE : All doors to be fitted complete with "Trellidor" for the entire area and rates will be deemed to include such

Door and sidelights glazed with 6mm thick PVB faidbrand laminated safety glass and plugged to brickwork

Shopfront

25	Epoxy powder coated aluminium frame, 115 x 40mm (4253 x 2465mm high overall) Clip 44 shopfront with single swing 1800 x 2465 double doors, with 8,38mm Laminated safety glass. AL03	No	1.00
26	Epoxy powder coated aluminium frame, 115 x 40mm (4390 x 2465mm high overall) Clip 44 shopfront with single swing 1763 x 2465 double doors, with 8,38mm Laminated safety glass. AL05	No	1.00
27	Epoxy powder coated aluminium frame, 115 x 40mm (1045 x 2465mm high overall) Clip 44 shopfront with single swing 1045 x 2465 single doors, with 8,38mm Laminated safety glass. AL10	No	1.00

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28	Epoxy powder coated aluminium frame, 115 x 40mm (1876 x 2465mm high overall) Clip 44 shopfront with double swing 1876 x 2465 double doors, with 8,38mm Laminated safety glass below and 6,38mm Laminated safety glass above, 1876 x 650mm fanlight glazed with 6,38mm Laminated safety glass. AL12	No	1.00		
29	Epoxy powder coated aluminium frame, 115 x 40mm (2812 x 3740mm high overall) Clip 44 shopfront with double swing 1800 x 2400 double doors, with 8,38mm Laminated safety glass below and 6,38mm Laminated safety glass above, 2812 x 1340mm fanlight glazed with 6,38mm Laminated safety glass. AL13	No	1.00		
30	Epoxy powder coated aluminium frame, 115 x 40mm (3947 x 2890mm high overall) Clip 44 shopfront with double swing 1800 x 2400 double doors, with 8,38mm Laminated safety glass below and 6,38mm Laminated safety glass above, 3947 x 490mm fanlight glazed with 6,38mm Laminated safety glass. AL15	No	1.00		
31	Epoxy powder coated aluminium frame, 115 x 40mm (1200 x 2465mm high overall) Clip 44 shopfront with single swing 950 x 2465 single doors, with 8,38mm Laminated safety glass. AL16	No	1.00		
32	Epoxy powder coated aluminium frame, 115 x 40mm (1317 x 2465mm high overall) Clip 44 shopfront with single swing 950 x 2465 single doors, with 8,38mm Laminated safety glass. AL17	No	1.00		
33	Epoxy powder coated aluminium frame, 115 x 40mm (3810 x 2465mm high overall) Clip 44 shopfront with single swing 980 x 2465 single doors, with 8,38mm Laminated safety glass. AL20	No	1.00		
34	Epoxy powder coated aluminium frame, 115 x 40mm (1997 x 2465mm high overall) Clip 44 shopfront with single swing 999 x 2465 single doors, with 8,38mm Laminated safety glass. AL22	No	1.00		
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35	Epoxy powder coated aluminium frame, 115 x 40mm Clip 44 shopfront with single swing 2075 x 2465 double doors, with 8,38mm Laminated safety glass. AL29	No	1.00		
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ROLLER SHUTTER DOORS

**"Xpanda" or any other of similar quality approved
by the Principal Agent, chain operated installed to
manufacturer's specification.**

36	Roller shutter door with stainless steel frame suitable for opening size 4500 x 2800mm high with 500mm headroom, 130mm clearance on free side, 315mm clearance on operator side, 75mm wide x 1mm thick slate, 75mm wide side guides, "Xpanda Rol-Lok" or similar quality and approved by the Principal Agent locking mechanism complete with two keys, pressed steel canopy cover and weather strip T-bar to bottom edge, perimeter framing plugged and screwed to face at maximum 300mm centres to concrete and brickwork . D07	No	2
37	Roller shutter door with stainless steel frame suitable for opening size 3500 x 2500mm high with 500mm headroom, 130mm clearance on free side, 315mm clearance on operator side, 75mm wide x 1mm thick slate, 75mm wide side guides, "Xpanda Rol-Lok" or similar quality and approved by the Principal Agent locking mechanism complete with two keys, pressed steel canopy cover and weather strip T-bar to bottom edge, perimeter framing plugged and screwed to face at maximum 300mm centres to concrete and brickwork . D08	No	1

**STEEL STRONGROOM DOORS,
VENTILATORS, ETC**

**"Austen" or similar and approved by the Principal
Agent record room doors etc suitable for 220mm
walls fixed to brickwork or concrete**

38	"CAT 1 SABS 949" strongroom door and frame 1030 x 2010mm high overall with a mass of 321kg, including one 7 lever security lock and wall mounted doorstop	No	1
39	Double ended strongroom ventilator	No	2

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Item No	Quantity	Rate	Amount
<p><u>BILL NO. 11</u></p> <p><u>PLASTERING</u></p> <p><u>(WORK GROUP 142)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Textured finishes</p> <p>All textured finishes are to be applied to the satisfaction of the Principal Agent and executed by an approved firm of Specialists, all strictly in accordance with the materials supplied and methods employed by the Manufacturer</p> <p>Preparatory work for textured finishes</p> <p>Textured finishes to be applied to surfaces as described. Rates tendered are to include for all necessary priming, preparatory work, etc.</p> <p>All surfaces are to be inspected and approved by the Principal Agent prior to any work is commenced with</p>			
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AT TSHAULU, VHEMBE DISTRICT**

SCREEDS

3:1 Cement plaster screeds steel trowelled on concrete

1	25mm Thick on concrete floors to receive tiles	m2	614
2	25mm Thick on concrete floors to receive epoxy	m2	55

INTERNAL PLASTER

One coat (1:5) cement plaster on brickwork

3	On walls	m2	1 482
4	On narrow widths	m2	50

DIVIDING STRIPS, COVER STRIPS ETC

Strips

5	3 x 25mm Brass dividing strip with top flush with floor finish	m	17
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"Joint Master " or similar approved

6	Expansion joint seal series 800 Code 806- floor-floor cover strip	m	15
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SPECIALIST FINISH TO WALLS AND FLOORS

EPOXY TO FLOORS

4mm Thick "Sika" or similar and approved by the Principal Agent seamless slip resistant floor finish epoxy as per Manufacturers specification

7	On floors	m2	55
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Carried to Collection

Section No. 2
Bill No 11 - Plastering
LDPW-B/20150

R

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

GROUT

**"Sika MonoTop - 3020 ZA" or similar and approved
by the Principal Agent applied to the manufacturer's
specifications.**

8	Sides of beams and inverted beams	m2	188
9	Sides of columns	m2	11
10	Ditto but in foundations	m2	656
11	Ditto, but stub columns in foundations	m2	3

Carried to Collection

Section No. 2
Bill No 11 - Plastering
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<p><u>BILL NO. 12</u></p> <p><u>TILING</u></p> <p><u>(WORK GROUP 144)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Prices</p> <p>Prices are to include for all square cutting and waste, cleaning off on completion and protection from injury. Areas are measured net to face of bare brickwork and concrete</p>			
<p>Carried to Collection</p>			
<p>Section No. 2 Bill No 12 - Tiling LDPW-B/20150</p>			

WALL TILING

200 x 200 x 5mm "Tal Gold" or similar and approved by the Principal Agent ceramic wall tiles fixed with adhesive to plaster (plaster elsewhere measured) and flush pointed with tinted jointing compound in diagonal or rectangular dado tile pattern

1	On walls	m2	370		
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PORCELAIN FLOOR TILES

600mm x 600mm x 8.5mm Thick "Tal Gold" or similar and approved by the Principal Agent polished porcelain floor tile with 3mm joints complete with rectangular borders and diagonal infill panels, install with tile adhesive as recommended by tile manufacturer on well-prepared screed to suit required level. Finish all joints with CORPROX waterproof grout. All strictly to manufacturer's specifications. Colour and type and detail pattern design to Architect's approval.

2	On floors	m2	614		
3	Cut tile skirting 150 mm high with and including approved 10mm "Genesis" or similar approved aluminium trims	m	494		
4	Border tile of cut 150mm high with and including 2 x 10mm "Genesis" or approved aluminium strips	m	32		
5	10mm "Genesis" or approved aluminium strips to corners of windows and walls	m	70		

Carried to Collection

Section No. 2
Bill No 12 - Tiling
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Section No. 2

Bill No. 12

Bill No 12 - Tiling

COLLECTION

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No**

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Section No. 2
Bill No 12 - Tiling
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 13</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p><u>(WORK GROUP 148)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of</u> <u>Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Excavations</p> <p>Prices for excavations must include for necessary staging for risk of collapse of excavation side.</p> <p>Compacting</p> <p>Filling for all types of prices described as "under solid floors, etc" shall be done with approved backfilling and compacted to 93% Mod. AASHTO density, unless otherwise described</p> <p>Testing</p> <p>Descriptions for the testing of plumbing and drainage installations shall be deemed to cater for all testing apparatus, labour, etc. and shall be done strictly as directed by and in accordance to the Principal Agent's instructions, including for retesting after taking out and making good all defective work to his entire satisfaction</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 2 Bill No 13 - Plumbing and drainage LDPW-B/20150</p>		R	

Vitrified clay pipes:

Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

Soil, waste and vent pipe fittings shall be solvent weld jointed

uPVC pressure pipes and fittings

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Copper pipes

Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn pipes) shall not be bent. Class 1 (thin 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 siphon 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 ground.

Carried to Collection

Section No. 2
Bill No 13 - Plumbing and drainage
LDPW-B/20150

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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 will be entertained.

Excavations

No claim for extra rock excavation will be entertained unless the Contractor has timeously notified the Quantity Surveyor , thereof prior to backfilling, in writing

"Soft rock" and "Hard rock" shall be as defined in "Earthworks"

Laying, Backfilling, Bedding, etc. of Pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with the manufacturer's instructions

Where no manufacturer's instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium Pressure Pipes
LD : Sewers LE : Stormwater Drainage

Pipes 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 Clause 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

Carried to Collection

Section No. 2
Bill No 13 - Plumbing and drainage
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Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Waste unions

Description of waste unions shall be deemed to include rubber or vulcanite plugs and chains

DRAINAGE

NOTE: All items in this section shall be deemed to fall into Work Group No 146 for Haylett formula purposes

SOIL DRAINAGE

Unless otherwise stated herein, all items in this section shall be deemed to fall into Work Group No 146 for Haylett formula purposes.

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Section No. 2
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

RAINWATER DISPOSAL

Approved 0,8mm galvanised sheet iron with
"Chromadek" finish, in:

1	150 x 125mm Eaves gutter	m	145
2	Extra over last for stopped end	No	18
3	Ditto, but for outlet for 100mm diameter pipe	No	13
4	75mm Diameter rainwater downpipe fixed to wall	m	39
5	Extra over last for eaves or plinth offset	No	6
6	Ditto, but for shoe	No	13

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

SANITARY PLUMBING

uPVC pipes

7	50mm Pipes fixed to walls	m	19
8	50mm Pipes laid under slabs and including trenches not exceeding 1m deep	m	19
9	110mm Pipes fixed to walls or soffits	m	8
10	110mm Pipes laid under surface beds and including trenches not exceeding 1m deep	m	9
11	110mm Pipe encased in concrete 20MPa/20 under surface beds and including excavation exceeding 1m and not exceeding 2m deep	m	8
<u>Extra over upvc pipes for fittings</u>			
12	50mm Bend	No	14
13	50mm Access bend	No	11
14	50mm Access junction	No	4
15	50mm Junction	No	2
16	110 x 50mm Reducer	No	5
17	110mm Plain bend	No	7
18	110mm Access bend	No	6
19	110mm Access junction	No	3
20	110mm Pan connector	No	6
21	110mm Bent pan connector	No	1
22	110mm Two way vent valve	No	4

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

SANITARY FITTINGS

**"Franke" or similar and approved by the Principal
Agent Stainless steel grade 304 (18/10)**

23	Stainless steel kitchen sink Code: 310332	No	2		
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**"Vaal Potteries" or other equal and approved by the
Principal Agent**

24	"Vaal" 510 x 405mm semi rectangular "daisy" wash hand basin with single semi-punched taphole, integrated overflow and chainstay hole including fixing to wall and all accessories complete (code 7023)	No	6		
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25	Vaal "Cameo" 595 x 455mm oval self rimming vanity basin with one semi punched taphole wash hand basin with single semi-punched taphole, integrated overflow and chainstay hole including fixing to wall and all accessories complete (code 7023)	No	1		
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26	Aquasave vitreous china habiscus close coupled 90 degrees outlet open rim washdown pan as 772610 with solid hard plastic toilet seat and lid , 9 litre cistern as 710531 with chrome plated front -flush lever mounted to cistern	No	6		
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27	"Vaal" vitreous china Protea Paraplegic suite Code 750246, 90 degrees outlet pan Code 750200 and matching 9 litre cistern Code 710631 complete with lid, fitments and purpose made CP side flush lever (left or right) or a back inlet exposed flushvalves 750151 with solid hard plastic toilet seat and lid as Al de Lux (SABS CKS 301)	No	1		
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28	Lavetera 385 x 380 x 600mm vitreous china wall mounted urinal with top inlet (Code 704001), overall size 600 x 385 x 380mm. supplied with 38mm chrome plated domical grating (Code 8787),and chromium plated spreader (Code 7041Z0),and including flush master junior FJ6000 complete with all fittings.	No	2		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

WASTE UNION

"Cobra Watertech" or other equal and approved

29	32mm 301CP waste union	No	9
30	38mm 316CP Sink waste union	No	1

TRAPS, ETC

"Cobra Watertech" or other equal and approved

31	38mm Chromium plated bottle trap	No	9
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"Rubber"

32	40mm Deep seal "P" or "S" trap	No	7
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TAPS, VALVES, ETC

"Brass"

33	15mm Stopcock	No	16
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**"Sandria" or other equal and approved by the
Principal Agent**

34	15mm "Sandria" sink mixer code 3008/13SCCH chromium plated	No	2
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**"Franke" or other equal and approved by the
Principal Agent**

35	15 mm Basin mixer Code No. TVID0250	No	2
36	15 mm Elbow action pillar tap	No	5

Valves, control valves etc., fixed to copper pipes

**"Cobra Watertech" or other equal and approved by
the Principal Agent**

37	22mm Cast brass fullway gate valve	No	6
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

WATER SUPPLY

Class O thin wall hard drawn copper pipes and fittings with capillary soldered type connections

40	15mm Pipes	m	116
41	22mm Pipes	m	70
42	28mm Pipes	m	40

Extra over class O copper fittings for soldered capillary fittings

43	15mm Fitting	No	32
44	22mm Fitting	No	16
45	15mm Service pipe 350mm girth	No	20

Extra over 28mm diameter copper piping for soldered capillary fittings

46	Bend or elbow	No	14
47	Tee	No	6

FIRE APPLIANCES ETC.

48	Fire hose reel complete with 30m x 20m diameter hose, including reel, valve, nozzle and wall bracket bolted on	No	1
49	9Kg Dry chemical fire extinguisher	No	11

WATER SUPPLY TO FIRE APPLIANCES

Galvanised steel pipes

50	25mm Pipes	m	30
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Extra over galvanised steel pipes for steel fittings

51	25mm Fittings	No	4
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Carried to Collection

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Section No. 2
Bill No 13 - Plumbing and drainage
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

VALVES TO FIRE APPLIANCES

"Cobra watertech" or other equal and approved

52	25mm 1001/125-25 PRESTEX brass fullway gate valve	No	1
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Testing

53	Allow for testing the whole of the water supplies and fire service installation to the approval of the Representative/ Agent		Item
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Carried to Collection

Section No. 2
Bill No 13 - Plumbing and drainage
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 14</u></p> <p><u>GLAZING</u></p> <p><u>(WORK GROUP 150)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Prices</p> <p>Prices are to include for all square cutting and waste, cleaning off on completion and protection from injury. Areas are measured net to face of bare brickwork and concrete</p>			
	<p><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></p> <p><u>Mirror manufactured from 18/10 stainless steel with a reflective polished surface, drilled for screw to wall and reinforced with Novopan plates screwed to wall</u></p>			
1	<p>Size 450 x 600 x 6mm Silver floated glass with copper backed fixed with gold plated heads at corners</p>	No	7	
	<p>Carried Forward to Summary of Section No. 2</p> <p>Section No. 2 Bill No 14 - Glazing LDPW-B/20150</p>			
			R	

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<p><u>BILL NO. 15</u></p> <p><u>PAINTWORK</u></p> <p><u>(WORK GROUP 152)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Paint</p> <p>All paint, complete with undercoat, primer, etc., to be used strictly in accordance with the manufacturer's specification. Only paint which bears the described trade names will be permitted on site. No substitution will be allowed</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Access</p> <p>Rates for painting steelwork, shall include access, for unlimited height</p>			
<p style="text-align: right;">Carried to Collection</p>			
<p>Section No. 2 Bill No 15 - Paintwork LDPW-B/20150</p>			

PAINTWORK, ETC

PAINT ON FLOATED PLASTER

Prepare, stop and apply one coat "Plascon" or similar and approved alkali resistant primer and two coats super acrylic emulsion paint for interior use

1	On internal walls	m2	428	
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ON FIBRE CEMENT

Prepare, stop and apply one coat "Plascon" or similar and approved alkali resistant primer and two coats acrylic emulsion paint for interior use

2	On fibre cement ceilings	m2	320	
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3	Skimmed gypsum plaster board ceilings	m2	16	
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ON PLASTERBOARD

Prepare, stop and apply one coat "Plascon" or similar and approved alkali resistant primer and two coats acrylic emulsion paint for interior use

4	On plaster board ceilings	m2	264	
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Carried to Collection

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Section No. 2
Bill No 15 - Paintwork
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

ON METAL

Spot primer defects in pre-primed surfaces with zinc chromate primer, one universal undercoat and two coats "Plascon" or equal and approved enamel paint

5	On pressed steel door frames	m2	40
6	On steel gates	m2	76
7	On structural Steel	m2	26

PAINT ON WOOD

Prepare and paint one coat hardboard primer, one undercoat and two coats high gloss enamel "Plascon" or equal and approved paint

8	On general surfaces	m2	65
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Prepare, stop and apply three coats FPR 19 Teak clear varnish, lightly sanded down between coats

9	On skirtings not exceeding 300mm girth	m	46
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Carried to Collection

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Section No. 2
Bill No 15 - Paintwork
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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3	Bill No 3 - Masonry	125	
4	Bill No 4 - Waterproofing	128	
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6	Bill No 6 - Carpentry and Joinery	141	
7	Bill No 7 - Ceilings, Partitions and access flooring	148	
8	Bill No 8 - Ironmongery	158	
9	Bill No 9 - Structural Steel	163	
10	Bill No 10 - Metalwork	172	
11	Bill No 11 - Plastering	176	
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>PREAMBLES</u>			
For preambles see "Specification of materials and methods to be used - PW 371"			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Supplementary preambles and full descriptions of materials, items, work, etc. applicable to Section No. 3</u>			
The Contractor is referred to the previous Section 2 for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this Bill, unless specifically otherwise described			
<u>General</u>			
The Contractor shall carry out the work with as little mess and noise possible and with a minimum of disturbance to the occupants. The Contractor shall provide proper protection and provide and erect any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Principal Agent, and remove when directed			
<u>Site clearance</u>			
All rubble, rubbish, vegetable soil, shrubs, bush, trees, etc. shall be removed from the whole area and carted away off the construction site to a suitable dumping site, which has to be located by the Contractor, all to the full satisfaction of the Principal Agent			
Carried to Collection			R
Section No. 3 Bill No 1 - Earthwork LDPW-B/20150			

Filling (General)

It will be, at all times, required from the Contractor to apply and execute strict quality control on all filling material used

Samples of potential fill material obtained from excavations, trench excavations, etc. are to be submitted to and approved by the Principal Agent prior to the re-use thereof as "filling"

All filling obtained from a commercial source should comply to minimum G6 standard

Should any material be found unsuitable and the use thereof be disapproved, such material shall be disposed and approved material must be sourced and imported from an approved commercial source

Filling in general shall be compacted to the prescribed percentage Mod AASHTO density

CBR and indicator tests

Density tests for monitoring filling shall be done at the minimum prescribed frequencies per each 150mm thick layer of filling placed

The Contractor is to note that all necessary tests (i.e. CBR and indicator tests, etc.) are to be conducted for all filling material, whether obtained from the excavations or to be imported from an approved commercial source

Results of these tests are to be submitted to and approved by the Principal Agent prior to commencement of any placement thereof and/or filling done therewith

Density tests

It will be required from the Contractor to execute density tests for monitoring filling at the following minimum frequencies per each filling layer placed:

- **Filling to form building platforms, etc:**
1 Test per 200m² plan area per each 150mm thick layer

Carried to Collection

Section No. 3
Bill No 1 - Earthwork
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Results of density tests executed are to be submitted to and approval obtained from the Principal Agent prior commencement of any subsequent fill layers and/or other work

Keeping excavations free from water:

No separate provision has been made in this Bill for measurement and payment for bailing, pumping or otherwise keeping excavations free from water during the construction process of the work measured in this Bill

Therefore, tenderers are to note that their tendered rates are to cater for the above-mentioned as no claims arising out of their failure to do so will afterwards be entertained

Carting away of excessive and/or unsuitable excavated material

Descriptions for "carting away excessive or unsuitable excavated material from site" shall, unless specifically otherwise described, be deemed to include the loading and hauling of excessive or unsuitable excavated material to a suitable dumping site, which has to be located by the Contractor, off the construction site

The location of the intended dumping site will be subjected to the prior written approval of the Principal Agent

The Contractor shall also be liable to, upon completion, to rehabilitate all areas of the site which was disturbed during the construction phase due to construction activities, temporarily dumping/spoiling of excavated material, etc. It will be required from the Contractor to grade such areas to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the full satisfaction of the Principal Agent

Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained

Carried to Collection

Section No. 3
Bill No 1 - Earthwork
LDPW-B/20150

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Relevant SANS 1200 Specifications

The following relevant SANS 1200 Specifications shall be regarded applicable:

- Earth mattresses, building platforms, etc:

SANS 1200 AA	General (Small Works)
SANS 1200 C	Site clearance
SANS 1200 D	Earthworks
SANS 1200 ME	Sub-base
SANS 1200 MF	Base

All work related to the above-mentioned elements shall be done with materials specified and in according to methods prescribed by the relevant SANS 1200 referred to

SANS 1200 Specification (General)

The SANS 1200 Specifications as referred to above were drawn up to cover activities normally encountered on civil engineering work, which is equally applicable on work scheduled hereunder for this project

All the specifications referred to above, although not issued with these Bills of Quantities, shall be deemed to form part of this document and shall be considered as applying to the performance of work to be completed in terms of this Section

The Contractor shall obtain a copies of the said specifications from the South African Bureau of Standards and be kept on site at all times

Measurement and payment

Measurement and payment clauses as described in the above-mentioned SANS 1200 Specifications shall not apply to the work as set out in this Bill

Carried to Collection

Section No. 3
Bill No 1 - Earthwork
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

EARTHWORKS

(WORK GROUP 104)

BULK EARTHWORKS AND PODIUMS

Extra over all excavations for carting away

1	Surplus material from stock piles on site to a dumping site to be located by the contractor	m3	250	
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LAYERWORKS

Earth filling (G6 material) obtained and supplied by the contractor from commercial sources and compacted to 93% Modified AASHTO density

2	Sub-base to from platforms and embankments	m3	116	
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Earth filling (G7 material) obtained and supplied by the contractor from commercial sources and compacted to 93% Modified AASHTO density

3	Sub-base to from platforms and embankments	m3	101	
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Earth filling supplied by the Contractor including compactions in layers of 150mm in accordance with the engineers drawings and specifications

4	Rip and recompact insitu materials compacted to 90% MOD AASHTO density	m3	220	
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5	Base Course layer (G7 material quality) compacted to 90% MOD AASHTO density obtained from commercial source	m3	220	
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6	Upper selected sub-base layers (G6 material quality) compacted to 93%MOD AASHTO density obtained from commercial source	m3	210	
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7	Selected sub-base layer (C4 material quality) compacted to 96%MOD AASHTO density obtained from commercial source	m3	359	
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Carried to Collection

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Section No. 3
Bill No 1 - Earthwork
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

8	Rip and recompact insitu (G6 materials at parking area) compacted to 95% MOD AASHTO density	m2	165		
	<u>Sand bed</u>				
9	20mm Thick dry, clean, washed riversand layer evenly spread over filling (elsewhere), levelled, watered and rammed to receive waterproofing membrane (elsewhere) under solid floors	m3	45		
	<u>STABILIZATION:</u>				
	<u>Chemical stabilization extra over unstabilized compacted layers</u>				
10	Process subbase materials (Chemically stabilised C4 layer, with with UCS>750, GM>1.2 and PI<6), compacted to 95% MOD AASHTO	m3	359		
	<u>B35.01 Chemical stabilizing agent:</u>				
	(a) Common cement to SABS ENV 197-1				
11	CEM IIB-M (32.5N)	t	25		
	<u>Compaction of surfaces</u>				
12	Compaction of insitu ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	3 295		
	<u>Prescribed density test on filling</u>				
13	"Natural california Bearing Ratio" test	No	12		
14	"Modified AASHTO Density" test	No	20		
15	Atterberg limits test in accordance with method A2 to A4 of TMH1	No	7		
16	UCS test in accordance with method A14 of TMH 1	No	9		
Carried to Collection				R	
Section No. 3 Bill No 1 - Earthwork LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 2</u></p> <p><u>APRONS</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>(WORK GROUP 104)</u></p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Filling material (General)</u></p> <p>It will be, at all times, required from the Contractor to apply and execute strict quality control on all filling material used</p> <p>Samples of potential fill materials obtained from excavations, trench excavations, etc. are to be submitted to and approved by the Engineer prior the re-use thereof as "filling"</p> <p>All filling obtained from a commercial source should comply to a minimum G6 standard and to be approved by Engineer before haulage to site.</p> <p>Should any material be found unsuitable and the use thereof be disapproved, such material shall be disposed and approved material must be sourced and imported.</p> <p>Filling in general shall be compacted to the prescribed percentage Mod AASHTO density</p>			
	Carried to Collection		R	
	<p>Section No. 3</p> <p>Bill No 2 - Aprons</p> <p>LDPW-B/20150</p>			

Filling to form earth mattresses, in sub-layers, under floors, etc

All filling in layers under surface beds, in sub-layers, to form earth mattresses, etc. shall be done with materials specified and according to methods prescribed by the SABS 1200ME Sub-base Specification.

The aforesaid specification was drawn up to cover activities normally encountered on civil engineering work, which is equally applicable on the filling details and requirements prescribed for this project

The said specification, although not issued with, shall be regarded to form part of these Bills of Quantities. The Contractor shall obtain a copy of the said specification from the South African Bureau of Standards and be kept on site at all times

CBR and Indicator tests

Density tests for monitoring filling shall be done at the minimum prescribed frequencies per each 150mm thick layer of filling placed.

The Contractor is to note that all necessary tests (i.e CBR and indicator tests, etc) are to be conducted for all filling material, whether obtained from the excavations or to be imported from an approved commercial source.

Results of these tests are to be submitted to and approved by Engineer prior commencement of any placement thereof and/or filling done therewith

Carried to Collection

Section No. 3
Bill No 2 - Aprons
LDPW-B/20150

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Density test

It will be required from the Contractor to execute density tests for monitoring filling at the following minimum frequencies per each filling layer placed:

- Filling under surface beds

1 Test per 25m² plan area per each 150mm thick layer

- Filling behind retaining walls:

1 Test per each 10m length of retaining wall

Results of density test executed are to be submitted to and approval obtained from the Engineer prior commencement of any subsequent fill layers and/or other work

Carried to Collection

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LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

**Carting away of excessive and/or unsuitable
excavated material**

Descriptions for "carting away excessive or unsuitable excavated material from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material to a suitable dumping site, which has to be located by the Contractor, off the hospital premises

The location of the intended dumping site will be subjected to the prior written approval of the local authority (Municipality)

All materials for excavations marked for caring away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

The contractor will also be liable to remove upon completion, rehabilitate all those areas of the dumping site used for dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the full satisfaction of the Engineer/Principal Agent

Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained

NOTE: All materials from excavations marked from carting away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

Carried to Collection

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

EXCAVATIONS, FILLING, ETC,

**Excavate in earth below natural ground level,
reduced or made up ground level, not exceeding 2m
deep, for:**

1	To reduce levels	m3	37
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Keeping excavations free of water

2	Allow for bailing, pumping or otherwise keeping all excavations free from water		Item
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Prescribed density tests on filling (no payment for compaction shall be allowed until compaction results are produced, only results which have passed the test shall be paid for)

3	Modified AASHTO Density test	No	5
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SOIL POISONING

Approved insecticide solutions shall be mixed on site in the presence of clerk of works/engineer/principal agent in strict accordance with the manufacturers/suppliers specifications

Weedkiller, "Hyvar X' or other approved by a firm of specialist

4	Under aprons,paving etc	m2	324
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REINFORCED CONCRETE

Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days

5	In aprons cast in panels to fall	m3	18
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6	In ramps to fall	m3	2
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7	In Channels cast in panels	m3	140
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Carried to Collection

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Bill No 2 - Aprons
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

SUNDRIES

**Finishing surfaces of concrete smooth with a
woodfloat**

8	Aprons, slabs, etc	m2	324	
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**Finishing top surfaces of concrete to form anti-skid
finish**

9	Ramp, etc	m2	6	
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Carried to Collection

Section No. 3
Bill No 2 - Aprons
LDPW-B/20150

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FORMWORK

(WORK GROUP 111)

**ROUGH FORMWORK (DEGREE OF
ACCURACY III)**

Rough formwork to

- | | | | | |
|----|--|---|-----|--|
| 10 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 123 | |
|----|--|---|-----|--|

MOVEMENT JOINTS ETC

Movement joints

- | | | | | |
|----|--|---|-----|--|
| 11 | Movement joint formed of 15mm bitumen impregnated softboard not exceeding 300mm high built in vertically between brickwork and concrete and sealed with polysulphide sealing compound externally | m | 123 | |
|----|--|---|-----|--|

REINFORCEMENT (PROVISIONAL)

(WORK GROUP 114)

Fabric reinforcement

- | | | | | |
|----|--|----|-----|--|
| 12 | Type Ref 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 184 | |
|----|--|----|-----|--|

Carried to Collection

Section No. 3
Bill No 2 - Aprons
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 3</u></p> <p><u>RING ROAD (PROVISIONAL)</u></p> <p><u>PREAMBLE</u> These external works bills has been measured in accordance with the engineers specification SABS 1200 and shall be treated as such works</p>			
	<p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of Ground Conditions</u></p> <p>A geotechnical survey has been carried out on other surrounding buildings on site by the Engineers and the report is available at the engineers offices for viewings. Description of excavations shall be deemed to include all ground conditions other than "Hard Rock"</p> <p>"Hard Rock" shall mean granite, quartzitic sandstone or other rock of similar hardness which, in the Engineer's opinion, requires drilling, wedging and splitting or the use of explosives, etc.</p> <p><u>Carting Away of Excavated Material</u></p> <p>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</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p>			
	Carried to Collection		R	
	<p>Section No. 3 Bill No 3 - Road Works LDPW-B/20150</p>			

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm 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

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

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Carried to Collection

Section No. 3
Bill No 3 - Road Works
LDPW-B/20150

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CONCRETE BLOCK PAVING FOR ROADS

Precast concrete block road surfacing

Paving is to be laid in accordance with SABS 1200 MJ, SABS 1058 and the Concrete Masonry Association's specifications

Paving is to be laid to herringbone pattern on 25mm (thickness after final compaction) clean river sand (preparation of ground or filling elsewhere)

Clean sand is to be swept into joints between roadstones

80mm Standard grey interlocking "Concor " or similar and approved by the Principal Agent paving blocks

1	Paving to parking areas etc to falls	m2	2 215	
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60mm Standard grey interlocking "Concor " or similar and approved by the Principal Agent paving blocks

2	Paving to walkways, etc.	m2	225	
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User note

Where SANS 927 in the following three descriptions is not applicable, refer to other suitable construction standards or provide full specifications

3	150 x 300mm High kerbs (SANS 927 fig 3) with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc	m	545	
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Unreinforced concrete vertically to paving

25MPa/19mm concrete

4	Extra over for edge beam	m	36	
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Carried to Collection

Section No. 3
Bill No 3 - Road Works
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

	<u>Road signs</u>				
5	Standard "STOP" sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc	No	3		
	<u>Paintwork</u>				
	<u>Two coats reflective road marking paint on tarmacadam</u>				
	<u>Etching primer and two coats reflective road marking paint on concrete</u>				
6	Line 100mm wide	m	310		
7	Numeral or letter 1.8mm high	No	8		
Carried to Collection					R
Section No. 3 Bill No 3 - Road Works LDPW-B/20150					

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 4</u></p> <p><u>FENCING</u></p> <p><u>PREAMBLE</u>These external works bills has <u>been measured in accordance with the</u> <u>engineers specification SABS 1200 and shall be</u> <u>treated as such works</u></p>			
	<p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>User note</u></p> <p><i>In high corrosion areas fence posts, stays, gates, etc are to be galvanised</i></p> <p><u>Galvanised security fence with bitumen-aluminium painted (two coats) steel pipe posts, stays, gates, etc including galvanised steel bolts, straining eye bolts, etc, site clearance and preparation of ground</u></p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 3 Bill No 4 - Fencing LDPW-B/20150</p>		R	

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

METALWORK

**Invisible mesh security fencing including site
clearance and preparation of ground (LI)**

1	Powder-coated security fencing 2400mm high overall above ground level, of ref 3510 - 3D mesh panels fabricated from absel with a strength of 60% and a tensile strength of 500N/mm ² , with core diameter of 3mm and a tolerance of 0.07mm, with 4No. 43mm V-Profiled horizontal stiffeners, fixed to and including 76 x 45 x 3mm x 3000mm long steel post galvanised and powder-coated, with rubber cap on top, planted in concrete (elsewhere measured). Fencing panels to be securely fixed between posts, with and including galvanised and powder-coated fixators and nuts at centres not exceeding 300mm and to be twisted until they are detached.	m	30
2	Galvanised anti-burrow fencing 500mm high below ground level, secured into concrete for posts and haunching of 200 x 200 x 200mm at 1000mm centres maximum, of ref 3510 - 3D mesh panels fabricated from absel with a strength of 60% and a tensile strength of 500N/mm ² , with core diameter of 3mm and a tolerance of 0.07mm, including trench, backfilling and compacting.	m	30
3	Powder-coated anti-climb structure spiked rail bolted to invisible fence mesh flang along fence top.	m	30
4	Powder-coated security double gate 7000 x 3000mm high formed of 100 x 75 x 3mm frame with 2No. middle vertical and 1No. horizontal rail. Fencing mesh similar to main fence to be secured to gate frame with fixators. Sliding system to be of 2No 100 x 100 x 3mm vertical posts set into and including 20Mpa concrete. 14m of 50 x 50 x 3mm galvanised angle iron with 12mm diameter R12 reinforcing bar welded onto angle iron, with fixing lugs of 25 x 25 x 5mm flat bar at maximum 350mm, set into and including 20Mpa concrete. Top to have powder-coated anti-climb security spiked rail.	No	1

Carried to Collection

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Section No. 3
Bill No 4 - Fencing
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

5 Powder-coated security swing pedestrian gate 1500 x 3000mm high formed of 100 x 75 x 3mm frame with 2No. horizontal rails. Fencing mesh similar to main fence to be secured to gate frame with fixators. Posts system to be of 2No 100 x 100 x 3mm vertical posts set into and including 20Mpa concrete. Top to have powder-coated anti-climb security spiked rail. Gate to have approved locking mechanism

No

1

Carried to Collection

R

Section No. 3
Bill No 4 - Fencing
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	BILL NO. 5			
	<u>COVERED PARKINGS</u>			
	<u>DEMOLITIONS</u>			
	<u>REMOVAL OF EXISTING WORK</u>			
	<u>NOTE: All materials from excavations marked from carting away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer</u>			
	<u>Carefully taking out and removing existing road surface</u>			
1	Carefully Taking out and remove existing interlocking pre-cast concrete paving blocks, including carting away of rubble to an approved dumping site to be located by the contractor	m2	3	
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>EXCAVATIONS, FILLING, ETC,</u>			
	<u>Excavate in earth below natural ground level, reduced or made up ground level, not exceeding 2m deep, for:</u>			
2	Holes	m3	9	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
3	Soft rock	m3	1	
4	Hard rock	m3	1	
	Carried to Collection		R	
	Section No. 3 Bill No 5 - Covered Parking LDPW-B/20150			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

<u>Extra over all excavations for carting away</u>					
5	Surplus or unwanted excavated material to stock piles on site or to a dumping site to be located by the contractor	m3	4		
<u>Risk of collapse of excavations</u>					
6	Sides of trench excavations not exceeding 1,5m deep	m2	29		
<u>Keeping excavations free of water</u>					
7	Allow for bailing, pumping or otherwise keeping all excavations free from water		Item		
<u>Sand bed</u>					
8	50mm Thick dry, clean, washed riversand layer evenly spread over filling (elsewhere), levelled, watered and rammed to receive waterproofing membrane (elsewhere) under solid floors	m2	9		
<u>Compaction of surfaces</u>					
9	Compaction of ground surface under holes, floors, paving, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	9		
<u>Prescribed density tests on filling (no payment for compaction shall be allowed until compaction results are produced, only results which have passed the test shall be paid for)</u>					
10	Modified AASHTO Density test	No	12		
Carried to Collection					
Section No. 3 Bill No 5 - Covered Parking LDPW-B/20150				R	

SOIL POISONING

Approved insecticide solutions shall be mixed on site in the presence of clerk of works/engineer/principal agent in strict accordance with the manufacturers/suppliers specifications

Soil insecticide under a 5 year guarantee by an approved firm of registered specialists

11	To bottom and sides of trenches, holes etc	m2	38	
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CONCRETE, FORMWORK AND REINFORCEMENT

(WORK GROUP 110)

PREAMBLESFor preambles refer to
"Department of Public Works: Specification of Materials and Method to be used - PW371"

NOTE

All prices/rates to be net, excluding Value Added Tax

Carried to Collection

Section No. 3
 Bill No 5 - Covered Parking
LDPW-B/20150

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SUPPLEMENTARY PREAMBLES

Concrete test cubes

Descriptions and tendered rates for concrete strength test cubes, as required under clause 7, "Tests" of SABS 1200 G, shall be deemed to cater for all the cost of providing cube moulds necessary for the purpose, making, storing and sending thereof to an approved laboratory for testing, paying all charges in connection therewith and for submitting test results to Principal Agent

All concrete strength test cubes, each 150 x 150 x 150mm shall be prepared in a set of three

It will be required from the contractor to prepare concrete strength test cube sets for each section (radiology, dental etc) at the following minimum frequencies:

- One set of three cubes for every 20m³,
or part thereof, of concrete cast per day,

or

- One set of three cubes for each batch
of concrete cast per event as
directed by the Clerk Of Works.

All concrete strength test cubes shall be done on site regardless of ready mix and shall be labelled and the identity thereof (ie. date, concrete strength type, position where batch was cast relative to the area and section identity) shall be properly recorded for future reference.

Carried to Collection

Section No. 3
Bill No 5 - Covered Parking
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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 reconditioning as necessary before re-use

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 sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the Principal Agent for design reasons. Formwork necessitated by irregularities 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 which is made for in "Earthworks"

Test Blocks (Provisional)

- | | |
|----|---|
| 12 | Making of 150 x 150 x 150mm concrete strength test cube in sets of three, label and send to an approved laboratory for testing, including paying all charges and submit report to the Principal agent. (only successful tests will be paid for) |
|----|---|

Sets

1

REINFORCED CONCRETE

Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days

- 13 | In bases against excavated surfaces

m3

3

REINFORCEMENT (PROVISIONAL)

(WORK GROUP 114)

Carried to Collection

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Section No. 3
Bill No 5 - Covered Parking
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

14	<p><u>High tensile steel reinforcement to structural concrete work</u></p> <p>High tensile steel rod reinforcement in all sizes</p>	t	0.27	
	<p><u>ROOF COVERING</u></p> <p><u>(WORK GROUP 124)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>General</p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Sizes</p> <p>All items are measured net unless otherwise described</p> <p>Flashing, trimming plates, etc</p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet roof covering where applicable</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 3 Bill No 5 - Covered Parking LDPW-B/20150</p>			<p style="text-align: right;">R</p>

ROOF COVERINGS

SUPPLEMENTARY PREAMBLES

"Brownbuilt Products" or similar and approved

Brownbuilt products to be all galvanised and installed strictly to manufacturer's specifications but colours to be to the Architect's approval

Concealed fix 0,58mm thick "Brownbuilt Klip-Lok 700" or similar and approved by the Principal Agent heavy industrial Z275 spelter galvanised steel sheeting with "Global coat" finish on one side and half Global coat Grey on the other side in single lengths and fixed to steel purlins or rails with concealed fixing clips secured with hex head 25mm self drilling tek screws and 0,58mm galvanised sheet steel accessories with "Globalcoat" finish on one side

15	Roof covering with pitches not exceeding 25 degrees	m ²	84	
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SHEET METAL FLASHING, LININGS, COPING, ETC

Concealed fix 0,8mm thick "Brownbuilt Klip-Lok 700" 580mm light industrial Z275 spelter galvanised steel sheeting flashing, three times bent along girth and notched on site to suit roof profile with "Global coat" finish on one side and half Global coat Grey on the other side complete with metal and poly closer without joints 500mm overlay, complete with sealing strips

0,8mm Z275 "Brownbuilt" spelter galvanised steel sheeting

16	Fascia or barge angles 500mm girth with "Classicoat" finish on one side	m	33	
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STRUCTURAL STEEL

(WORK GROUP 134)

Carried to Collection

Section No. 3
Bill No 5 - Covered Parking
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

STEEL COLUMNS AND BEAMS

**Welded columns in single lengths with welded flat
section base and bolted angle section cleats**

17	100 x 100 x 4.5mm thick IPE x 12.95kg/m square tube columns	t	0.56
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PURLINS, GIRTS, BRACING, ETC

Purlins and girts, bolted to steel

18	75 x 50 x 20 x 2.5mm thick 3.85kg/m cold-formed lipped channel purlins	t	0.40
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**Welded bracing, etc. with welded flat section
connection plates bolted to steel**

19	Angle section bracing	t	0.19
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20	Base plate	t	0.04
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Bolts to purlins, bracing, etc.

21	M16 x 100mm Expansion bolt	No	120
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**PLUMBING AND DRAINAGE
(PROVISIONAL)**

RAINWATER DISPOSAL

**Approved 0.8mm galvanised sheet iron with
"Chromadek" finish, in:**

22	150 x 125mm Eaves gutter	m	14
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23	Extra over last for stopped end	No	2
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24	Ditto, but for outlet for 100mm diameter pipe	No	2
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25	75mm Diameter rainwater downpipe fixed to wall	m	6
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26	Extra over last for eaves or plinth offset	No	2
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27	<p>Ditto, but for shoe</p> <p><u>PAINTWORK</u></p> <p><u>(WORK GROUP 152)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Paint</p> <p>All paint, complete with undercoat, primer, etc., to be used strictly in accordance with the manufacturer's specification. Only paint which bears the described trade names will be permitted on site. No substitution will be allowed</p> <p>Previously painted plastered surfaces</p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p>Access</p> <p>Rates for painting steelwork, shall include access, for unlimited height</p>	No	2	
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 3 Bill No 5 - Covered Parking LDPW-B/20150</p>			R

PAINTWORK, ETC

ON METAL

Spot primer defects in pre-primed surfaces with zinc chromate primer, one universal undercoat and two coats "Plascon" or equal and approved enamel paint

28	On structural steel members	m2	12	
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[illegible]

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 6</u></p> <p><u>MAIN SEWER LINE (PROVISIONAL)</u></p> <p><u>(WORK GROUP 148)</u></p> <p><u>PREAMBLES</u>For preambles refer to <u>"Department of Public Works: Specification of Materials and Method to be used - PW371"</u></p> <p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Excavations</p> <p>Prices for excavations must include for necessary staging for risk of collapse of excavation side.</p> <p>Compacting</p> <p>Filling for all types of prices described as "under solid floors, etc" shall be done with approved backfilling and compacted to 93% Mod. AASHTO density, unless otherwise described</p> <p>Testing</p> <p>Descriptions for the testing of plumbing and drainage installations shall be deemed to cater for all testing apparatus, labour, etc. and shall be done strictly as directed by and in accordance to the Principal Agent's instructions, including for retesting after taking out and making good all defective work to his entire satisfaction</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 3 Bill No 6 - Main Sewer Line LDPW-B/20150</p>		R	

Vitrified clay pipes:

Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

Soil, waste and vent pipe fittings shall be solvent weld jointed

uPVC pressure pipes and fittings

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Copper pipes

Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn pipes) shall not be bent. Class 1 (thin 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 siphon 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 ground.

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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 will be entertained.

Excavations

No claim for extra rock excavation will be entertained unless the Contractor has timeously notified the Quantity Surveyor , thereof prior to backfilling, in writing

"Soft rock" and "Hard rock" shall be as defined in "Earthworks"

Laying, Backfilling, Bedding, etc. of Pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with the manufacturer's instructions

Where no manufacturer's instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium Pressure Pipes
LD : Sewers LE : Stormwater Drainage

Pipes 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 Clause 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

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Waste unions

Description of waste unions shall be deemed to include rubber or vulcanite plugs and chains

DRAINAGE

NOTE: All items in this section shall be deemed to fall into Work Group No 146 for Haylett formula purposes

Nature of Ground Conditions

A geotechnical survey has been carried out on other surrounding buildings on site by the Engineers and the report is available at the engineers offices for viewings. Description of excavations shall be deemed to include all ground conditions other than "Hard Rock"

"Hard Rock" shall mean granite, quartzitic sandstone or other rock of similar hardness which, in the Engineer's opinion, requires drilling, wedging and splitting or the use of explosives, etc.

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

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Concrete pipes:

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

uPVC pipes and fittings:

Soil, waste and vent pipes and fittings shall be solvent weld jointed

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm 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

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

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Permission for protected trees

The contractor shall apply to the authorities to seek permission before cutting any trees down

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

**These external works bills has been measured
in accordance with the engineers specification
SABS 1200 and shall be treated as such works**

SITE CLEARANCE

Clear and grub

1	Strips, 1.5m wide	m	88	
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EARTHWORKS (PIPE TRENCHES)

**Excavate in all materials for trenches, backfill,
compact and dispose of surplus materials:**

Pipes over 110mm dia up to 400mm dia for depths:

2	Over 1.0m up to 2.0m	m	88	
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Extra over items above for:

3	Intermediate excavation	m3	8	
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4	Hard rock excavation	m3	4	
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Particular Items:Labour intensive Method to EPWP

5	Shoring of trenches exceeding a depth of 1.5m		Item	
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

BEDDING (PIPES)

BEDDING FOR SEWER PIPES

Supply only of bedding by importation:

From commercial sources materials:

6	selected granular materials.	m3	22
7	selected fill materials	m3	24

Concrete bedding cradle:

8	Class 15MPa/19mm	m3	5
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Encasing of pipes in concrete

9	Class 15MPa/19mm	m3	5
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PIPE LAYING SEWERS

Supply, Lay, joint, bed on class C bedding and test pipeline:

uPVC (SABS 791) pipes of diameter

10	160mm Dia	m	88
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Extra over for fittings

11	160mm Dia bends	No	3
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Precast concrete manhole:

Supply all materials and labor for the construction of concrete manholes from precast sections complete with cover frame, including step irons, channeling, benching, grouting, sockets, etc. in the following Dia. and depth categories

12	1000mm Dia. 1.5m up to 2.9m	No	4
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<p><u>Extra over items above for testing water tightness</u></p> <p>Testing of tightness of manholes including all work and materials necessary as specified, only where instructed by the Engineer</p> <p><u>Anchor blocks:</u></p> <p>Grade 20/40 mass concrete anchor blocks on steep slopes as specified and detailed on the drawings where instructed ny the Engineers</p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>(WORK GROUP 104)</u></p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>	<p>Item</p> <p>m3</p> <p>3.00</p>		
<p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p>Carried to Collection</p> <p>Section No. 3 Bill No 6 - Main Sewer Line LDPW-B/20150</p>		<p>R</p>	

SUPPLEMENTARY PREAMBLES

Filling material (General)

It will be, at all times, required from the Contractor to apply and execute strict quality control on all filling material used

Samples of potential fill materials obtained from excavations, trench excavations, etc. are to be submitted to and approved by the Engineer prior to the re-use thereof as "filling"

All filling obtained from a commercial source should comply to a minimum G6 standard and to be approved by Engineer before haulage to site.

Should any material be found unsuitable and the use thereof be disapproved, such material shall be disposed and approved material must be sourced and imported.

Filling in general shall be compacted to the prescribed percentage Mod AASHTO density

Filling to form earth mattresses, in sub-layers, under floors, etc

All filling in layers under surface beds, in sub-layers, to form earth mattresses, etc. shall be done with materials specified and according to methods prescribed by the SABS 1200ME Sub-base Specification.

The aforesaid specification was drawn up to cover activities normally encountered on civil engineering work, which is equally applicable on the filling details and requirements prescribed for this project

The said specification, although not issued with, shall be regarded to form part of these Bills of Quantities. The Contractor shall obtain a copy of the said specification from the South African Bureau of Standards and be kept on site at all times

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CBR and Indicator tests

Density tests for monitoring filling shall be done at the minimum prescribed frequencies per each 150mm thick layer of filling placed.

The Contractor is to note that all necessary tests (i.e CBR and indicator tests, etc) are to be conducted for all filling material, whether obtained from the excavations or to be imported from an approved commercial source.

Results of these tests are to be submitted to and approved by Engineer prior commencement of any placement thereof and/or filling done therewith

Density test

It will be required from the Contractor to execute density tests for monitoring filling at the following minimum frequencies per each filling layer placed:

- Filling under surface beds

1 Test per 25m² plan area per each 150mm thick layer

- Filling behind retaining walls:

1 Test per each 10m length of retaining wall

Results of density test executed are to be submitted to and approval obtained from the Engineer prior commencement of any subsequent fill layers and/or other work

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Carting away of excessive and/or unsuitable excavated material

Descriptions for "carting away excessive or unsuitable excavated material from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material to a suitable dumping site, which has to be located by the Contractor, off the hospital premises

The location of the intended dumping site will be subjected to the prior written approval of the local authority (Municipality)

All materials for excavations marked for caring away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

The contractor will also be liable to remove upon completion, rehabilitate all those areas of the dumping site used for dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the full satisfaction of the Engineer/Principal Agent

Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained

NOTE: All materials from excavations marked from carting away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

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GENERAL SITE CLEARANCE ETC

Clear site

15	Digging up and removing rubbish, debris, vegetation, hedges, and shrubs etc, including stock piling of organic rich topsoil for reuse	m2	144
16	Cut surface to a depth of 150mm and cart away from site, rip, break down oversize material where necessary, add suitable material where necessary and compact to 90% MOD AASHTO Density.	m2	144

BULK EARTHWORKS AND PODIUMS

Open face excavation over sloping site

17	Open face excavation in earth to reduce levels under buildings and depositing excavated material over site including haulage not exceeding 1km from perimeter of excavations	m3	68
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Extra over bulk excavation in earth for excavation in

18	Extra over open face excavations in earth for excavation in soft rock	m3	25
19	Extra over open face excavations in earth for excavations in hard rock	m3	25

LAYERWORKS

Earth filling supplied by the Contractor including compactions in layers of 150mm in accordance with the engineers drawings and specifications

20	Base Course layer (G7 material quality) compacted to 90% MOD AASHTO density obtained from commercial source	m3	13
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

EXCAVATIONS, FILLING, ETC.

**Excavate in earth below natural ground level,
reduced or made up ground level, not exceeding 2m
deep, for:**

21	Trenches	m3	8
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**Extra over trench and hole excavations in earth for
excavation for**

22	Working space exceeding 500mm and not exceeding 1500mm deep	m2	8
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**Extra over trench and hole excavations in earth for
excavation in**

23	Soft rock	m3	16
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24	Hard rock	m3	16
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Risk of collapse of excavations

25	Sides of trench excavations not exceeding 1,5m deep	m2	10
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Keeping excavations free of water

26	Allow for bailing, pumping or otherwise keeping all excavations free from water		Item
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**Earth filling obtained from the excavations
compacted to 93% Mod AASHTO density**

27	In backfilling to trenches, holes, etc	m3	16
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Sand bed

28	50mm Thick dry, clean, washed riversand layer evenly spread over filling (elsewhere), levelled, watered and rammed to receive waterproofing membrane (elsewhere) under solid floors	m2	22
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Compaction of surfaces

29	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	22	
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Prescribed density tests on filling (no payment for compaction shall be allowed until compaction results are produced, only results which have passed the test shall be paid for)

30	Modified AASHTO Density test	No	5	
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CONCRETE, FORMWORK AND REINFORCEMENT

(WORK GROUP 110)

PREAMBLESFor preambles refer to
"Department of Public Works: Specification of Materials and Method to be used - PW371"

NOTE

All prices/rates to be net, excluding Value Added Tax

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SUPPLEMENTARY PREAMBLES

Concrete test cubes

Descriptions and tendered rates for concrete strength test cubes, as required under clause 7, "Tests" of SABS 1200 G, shall be deemed to cater for all the cost of providing cube moulds necessary for the purpose, making, storing and sending thereof to an approved laboratory for testing, paying all charges in connection therewith and for submitting test results to Principal Agent

All concrete strength test cubes, each 150 x 150 x 150mm shall be prepared in a set of three

It will be required from the contractor to prepare concrete strength test cube sets for each section (radiology, dental etc) at the following minimum frequencies:

- One set of three cubes for every 20m³,
or part thereof, of concrete cast per day,

or

- One set of three cubes for each batch
of concrete cast per event as
directed by the Clerk Of Works.

All concrete strength test cubes shall be done on site regardless of ready mix and shall be labelled and the identity thereof (ie. date, concrete strength type, position where batch was cast relative to the area and section identity) shall be properly recorded for future reference.

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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 reconditioning as necessary before re-use

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 sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the Principal Agent for design reasons. Formwork necessitated by irregularities 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 which is made for in "Earthworks"

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<u>Test Blocks (Provisional)</u>			
31	Making of 150 x 150 x 150mm concrete strength test cube in sets of three, label and send to an approved laboratory for testing, including paying all charges and submit report to the Principal agent. (only successful tests will be paid for)	Sets	5
<u>MASS CONCRETE</u>			
<u>CONCRETE</u>			
<u>Unreinforced concrete cast against excavated surfaces</u>			
<u>Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15MPa at 28 days</u>			
32	Surface blinding under strip footing and column bases	m3	1
<u>REINFORCED CONCRETE</u>			
<u>Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 30MPa at 28 days</u>			
33	In bases against excavated surfaces	m3	6
34	In slabs	m3	6
<u>SUNDRIES</u>			
<u>Finishing surfaces of concrete smooth with a woodfloat</u>			
35	Surface beds, slabs, etc	m2	142
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

FORMWORK

(WORK GROUP 111)

**ROUGH FORMWORK (DEGREE OF
ACCURACY III)**

Rough formwork to

36	Permanent formwork to soffits of slab to Engineer's Specification	m2	71
37	160mm Diameter to form hole for cable sleeves	No	2
38	550mm Diameter to form hole for manhole cover	No	2

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REINFORCEMENT (PROVISIONAL)

(WORK GROUP 114)

High tensile steel reinforcement to structural concrete work

39	Y12 High tensile steel rod reinforcement	t	0.99	
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Fabric reinforcement

40	Type Ref 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	71	
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MASONRY

(WORK GROUP 118)

PREAMBLESFor preambles refer to
"Department of Public Works: Specification of Materials and Method to be used - PW371"

NOTE

All prices/rates to be net, excluding Value Added Tax

SUPPLEMENTARY PREAMBLES

Wall ties

Descriptions and rates for cavity walls specified to include wire ties shall, unless otherwise specified, be deemed to include at least five metal wire ties, evenly spaced, per square metre brickwork. Metal wall ties shall:

- Comply with SABS 28 and of the butterfly or the modified PWD type
- Of suitable lengths to ensure that ends are built at least 75mm deep into brickwork.

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AT TSHAULU, VHEMBE DISTRICT**

SUBSTRUCTURE (PROVISIONAL)

Brickwork

**Brickwork of NFX bricks (14 MPa nominal
compressive strength) in class I mortar in
foundations**

41	One brickwall	m2	115	
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DAMP-PROOFING OF WALLS AND FLOORS

"ABE Saint-Gobain" cementitious waterproofing slurry and similar and approved by the Principal Agent.

44	On plastered walls	m2	115	
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Damp-proofing under floors

Polyolefin 0,25mm damp proof membrane sheeting complying with SABS 952, Type C in widest practicable widths with all joints lapped 200mm and sealed in accordance with the manufacturer's instruction

45	One layer of approved geofabric filter blanket wrapped around stone encasing with 150mm side and 300mm end laps including stitching (measured net)	m2	160	
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PLASTERING

(WORK GROUP 142)

PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"

NOTE

All prices/rates to be net, excluding Value Added Tax

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SUPPLEMENTARY PREAMBLES

Textured finishes

All textured finishes are to be applied to the satisfaction of the Principal Agent and executed by an approved firm of Specialists, all strictly in accordance with the materials supplied and methods employed by the Manufacturer

Preparatory work for textured finishes

Textured finishes to be applied to surfaces as described. Rates tendered are to include for all necessary priming, preparatory work, etc.

All surfaces are to be inspected and approved by the Principal Agent prior to any work is commenced with

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INTERNAL PLASTER

One coat (1:5) cement plaster on brickwork

46	On walls	m2	57	
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MAIN SEWER LINE (PROVISIONAL)

(WORK GROUP 148)

PREAMBLESFor preambles refer to
**"Department of Public Works: Specification of
Materials and Method to be used - PW371"**

NOTE

All prices/rates to be net, excluding Value Added Tax

SUPPLEMENTARY PREAMBLES

Excavations

Prices for excavations must include for necessary staging for risk of collapse of excavation side.

Compacting

Filling for all types of prices described as "under solid floors, etc" shall be done with approved backfilling and compacted to 93% Mod. AASHTO density, unless otherwise described

Testing

Descriptions for the testing of plumbing and drainage installations shall be deemed to cater for all testing apparatus, labour, etc. and shall be done strictly as directed by and in accordance to the Principal Agent's instructions, including for retesting after taking out and making good all defective work to his entire satisfaction

Carried to Collection

Section No. 3
Bill No 6 - Main Sewer Line
LDPW-B/20150

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Vitrified clay pipes:

Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

Soil, waste and vent pipe fittings shall be solvent weld jointed

uPVC pressure pipes and fittings

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Copper pipes

Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn pipes) shall not be bent. Class 1 (thin 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 siphon 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 ground.

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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 will be entertained.

Excavations

No claim for extra rock excavation will be entertained unless the Contractor has timeously notified the Quantity Surveyor , thereof prior to backfilling, in writing

"Soft rock" and "Hard rock" shall be as defined in "Earthworks"

Laying, Backfilling, Bedding, etc. of Pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with the manufacturer's instructions

Where no manufacturer's instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium Pressure Pipes
LD : Sewers LE : Stormwater Drainage

Pipes 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 Clause 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

Carried to Collection

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Waste unions

Description of waste unions shall be deemed to include rubber or vulcanite plugs and chains

DRAINAGE

NOTE: All items in this section shall be deemed to fall into Work Group No 146 for Haylett formula purposes

Nature of Ground Conditions

A geotechnical survey has been carried out on other surrounding buildings on site by the Engineers and the report is available at the engineers offices for viewings. Description of excavations shall be deemed to include all ground conditions other than "Hard Rock"

"Hard Rock" shall mean granite, quartzitic sandstone or other rock of similar hardness which, in the Engineer's opinion, requires drilling, wedging and splitting or the use of explosives, etc.

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 to Collection

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Concrete pipes:

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

uPVC pipes and fittings:

Soil, waste and vent pipes and fittings shall be solvent weld jointed

uPVC pressure pipes and fittings:

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Pipes of 50mm 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

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

Exposed concrete surfaces

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

Permission for protected trees

The contractor shall apply to the authorities to seek permission before cutting any trees down

Carried to Collection

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

**These external works bills has been measured
in accordance with the engineers specification
SABS 1200 and shall be treated as such works**

PIPE LAYING SEWERS

**Supply, Lay, joint, bed on class C bedding and test
pipeline:**

uPVC (SABS 791) pipes of diameter

47	160mm Dia	m	4
48	110mm Preforated uPVC pipes laid in stone pitch	m	16

Extra over for fittings

49	160mm Dia bends	No	2
50	Cast iron 2A lockable manhole lid and frame cast into concrete	No	2

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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<u>COLLECTION</u>			
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 7</u></p> <p><u>WATER AND FIRE RETICULATION</u></p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Excavations</p> <p>Prices for excavations must include for necessary staging for risk of collapse of excavation side.</p> <p>Compacting</p> <p>Filling for all types of prices described as "under solid floors, etc" shall be done with approved backfilling and compacted to 93% Mod. AASHTO density, unless otherwise described</p> <p>Testing</p> <p>Descriptions for the testing of plumbing and drainage installations shall be deemed to cater for all testing apparatus, labour, etc. and shall be done strictly as directed by and in accordance to the Principal Agent's instructions, including for retesting after taking out and making good all defective work to his entire satisfaction</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 3 Bill No 7 - Water Reticulation LDPW-B/20150</p>		R	

Vitrified clay pipes:

Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

Soil, waste and vent pipe fittings shall be solvent weld jointed

uPVC pressure pipes and fittings

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Copper pipes

Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn pipes) shall not be bent. Class 1 (thin 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 siphon 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 ground.

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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 will be entertained.

Excavations

No claim for extra rock excavation will be entertained unless the Contractor has timeously notified the Quantity Surveyor , thereof prior to backfilling, in writing

"Soft rock" and "Hard rock" shall be as defined in "Earthworks"

Laying, Backfilling, Bedding, etc. of Pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with the manufacturer's instructions

Where no manufacturer's instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium Pressure Pipes
LD : Sewers LE : Stormwater Drainage

Pipes 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 Clause 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

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

<u>Flush pans</u>					
Flush pans shall have straight or side outlets and "P" or "S" traps as necessary					
<u>Waste unions</u>					
Description of waste unions shall be deemed to include rubber or vulcanite plugs and chains					
<u>These external works bills has been measured in accordance with the engineers specification SABS 1200 and shall be treated as such works</u>					
<u>Site Clearance</u>					
1	Clear vegetation in length of pipeline route 1.5m wide (Provisional)	m	517		
<u>Excavation for trenches</u>					
2	Excavate in earth below natural ground level, reduced or made up ground level, not exceeding 2m deep, for:	m	517		
3	Extra-over for excavations in intermediate material	m3	52		
4	Extra-over for excavations in rock (Provisional)	m3	26		
5	Excavate and dispose of unsuitable material from trench bottom	m3	62		
<u>Backfill and compaction</u>					
6	Backfill and compact trenches using labour intensive methods	m3	72		
<u>Imported bedding materials:</u>					
(Bedding to be class C for flexible pipes as indicated in the contract drawings)					
7	Provision of bedding imported from commercial source using selected granular material	m3	88		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

	<u>Supply, Lay and bed uPVC pipe complete: (The rate shall exclude disinfection of pipes after completion of hydraulic pipe test)</u>				
8	50mm Dia uPVC pipe class 12	m	517		
	<u>Extra Over Fittings and specials - uPVC bends</u>				
9	50mm 45 degree bend	No	2		
10	50mm 90 degree bend	No	2		
	<u>Extra Over Special fittings - uPVC Tees</u>				
11	50mm dia. Equal Tees	No	3		
	<u>Special fittings - Fire Hydrant Bend: (Cast iron fire hydrant, Bitumen dipped and LYING sockets to SABS 546 and SABS 966 with flanged branch, 80mm dia, drilled to SABS 1123, Table 16.)</u>				
12	50mm Dia.	No	2		
	<u>Extra over for special fittings - end caps:</u>				
13	50mm Dia.	No	4		
	<u>Extra over for special fittings - Isolation Valves: (Flanged RSV isolation valves. Valves to be non-rising spindles with cap top)</u>				
14	50mm Dia PN16	No	2		
	<u>Valve Chamber:</u>				
15	Valve chamber - 1200 x 1400 x 1000mm deep, complete including excavations, materials, plant, labor, incidentals, etc. as per detail drawings.	No	2		
	<u>Hydraulic pipe testing</u>				
	Pipes				
16	50mm dia. uPVC class 12	m	517.00		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Disinfecting pipe works

Pipes

17	50mm dia. uPVC class 12	m	517.00
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Thrust Blocks:

18	Excavations	m3	5
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19	Formwork	m2	10
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20	Concrete (Class 20/19Mpa)	m3	5
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ELEVATED AND GROUND TANKS

EARTHWORKS (PROVISIONAL)

(WORK GROUP 104)

PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"

NOTE

All prices/rates to be net, excluding Value Added Tax

Carried to Collection

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PREAMBLES

Filling material (General)

It will be, at all times, required from the Contractor to apply and execute strict quality control on all filling material used

Samples of potential fill materials obtained from excavations, trench excavations, etc. are to be submitted to and approved by the Engineer prior the re-use thereof as "filling"

All filling obtained from a commercial source should comply to a minimum G6 standard and to be approved by Engineer before haulage to site.

Should any material be found unsuitable and the use thereof be disapproved, such material shall be disposed and approved material must be sourced and imported.

Filling in general shall be compacted to the prescribed percentage Mod AASHTO density

Filling to form earth mattresses, in sub-layers, under floors, etc

All filling in layers under surface beds, in sub-layers, to form earth mattresses, etc. shall be done with materials specified and according to methods prescribed by the SABS 1200ME Sub-base Specification.

The aforesaid specification was drawn up to cover activities normally encountered on civil engineering work, which is equally applicable on the filling details and requirements prescribed for this project

The said specification, although not issued with, shall be regarded to form part of these Bills of Quantities. The Contractor shall obtain a copy of the said specification from the South African Bureau of Standards and be kept on site at all times

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CBR and Indicator tests

Density tests for monitoring filling shall be done at the minimum prescribed frequencies per each 150mm thick layer of filling placed.

The Contractor is to note that all necessary tests (i.e CBR and indicator tests, etc) are to be conducted for all filling material, whether obtained from the excavations or to be imported from an approved commercial source.

Results of these tests are to be submitted to and approved by Engineer prior commencement of any placement thereof and/or filling done therewith

Density test

It will be required from the Contractor to execute density tests for monitoring filling at the following minimum frequencies per each filling layer placed:

- Filling under surface beds

1 Test per 25m² plan area per each 150mm thick layer

- Filling behind retaining walls:

1 Test per each 10m length of retaining wall

Results of density test executed are to be submitted to and approval obtained from the Engineer prior commencement of any subsequent fill layers and/or other work

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Carting away of excessive and/or unsuitable excavated material

Descriptions for "carting away excessive or unsuitable excavated material from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material to a suitable dumping site, which has to be located by the Contractor, off the hospital premises

The location of the intended dumping site will be subjected to the prior written approval of the local authority (Municipality)

All materials for excavations marked for caring away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

The contractor will also be liable to remove upon completion, rehabilitate all those areas of the dumping site used for dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the full satisfaction of the Engineer/Principal Agent

Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained

NOTE: All materials from excavations marked from carting away shall be cart at Municipal designated dumping site and proof of dumping to be submitted to the Safety / Enviromental officer

For preambles see "Specification of materials and methods to be used - PW 371"

Supplementary preambles and full descriptions of materials, items, work, etc. applicable to Section No. 3

The Contractor is referred to the previous Section 2 for supplementary preambles and full descriptions of materials, items, work, etc. which shall be regarded to be equally applicable for work described in this Bill, unless specifically otherwise described

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

General

The Contractor shall carry out the work with as little mess and noise possible and with a minimum of disturbance to the occupants. The Contractor shall provide proper protection and provide and erect any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Principal Agent, and remove when directed

Site clearance

All rubble, rubbish, vegetable soil, shrubs, bush, trees, etc. shall be removed from the whole area and carted away off the construction site to a suitable dumping site, which has to be located by the Contractor, all to the full satisfaction of the Principal Agent

Filling (General)

It will be, at all times, required from the Contractor to apply and execute strict quality control on all filling material used

Samples of potential fill material obtained from excavations, trench excavations, etc. are to be submitted to and approved by the Principal Agent prior the re-use thereof as "filling"

All filling obtained from a commercial source should comply to minimum G6 standard

Should any material be found unsuitable and the use thereof be disapproved, such material shall be disposed and approved material must be sourced and imported from an approved commercial source

Filling in general shall be compacted to the prescribed percentage Mod AASHTO density

CBR and indicator tests

Density tests for monitoring filling shall be done at the minimum prescribed frequencies per each 150mm thick layer of filling placed

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

The Contractor is to note that all necessary tests (i.e. CBR and indicator tests, etc.) are to be conducted for all filling material, whether obtained from the excavations or to be imported from an approved commercial source

Results of these tests are to be submitted to and approved by the Principal Agent prior commencement of any placement thereof and/or filling done therewith

Density tests

It will be required from the Contractor to execute density tests for monitoring filling at the following minimum frequencies per each filling layer placed:

- **Filling to form building platforms, etc:**
1 Test per 200m² plan area per each 150mm thick layer

Results of density tests executed are to be submitted to and approval obtained from the Principal Agent prior commencement of any subsequent fill layers and/or other work

Keeping excavations free from water:

No separate provision has been made in this Bill for measurement and payment for bailing, pumping or otherwise keeping excavations free from water during the construction process of the work measured in this Bill

Therefore, tenderers are to note that their tendered rates are to cater for the above-mentioned as no claims arising out of their failure to do so will afterwards be entertained

Carting away of excessive and/or unsuitable excavated material

Descriptions for "carting away excessive or unsuitable excavated material from site" shall, unless specifically otherwise described, be deemed to include the loading and hauling of excessive or unsuitable excavated material to a suitable dumping site, which has to be located by the Contractor, off the construction site

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

The location of the intended dumping site will be subjected to the prior written approval of the Principal Agent

The Contractor shall also be liable to, upon completion, to rehabilitate all areas of the site which was disturbed during the construction phase due to construction activities, temporarily dumping/spoiling of excavated material, etc. It will be required from the Contractor to grade such areas to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the full satisfaction of the Principal Agent

Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained

Relevant SANS 1200 Specifications

The following relevant SANS 1200 Specifications shall be regarded applicable:

- Earth mattresses, building platforms, etc:

SANS 1200 AA	General (Small Works)
SANS 1200 C	Site clearance
SANS 1200 D	Earthworks
SANS 1200 ME	Sub-base
SANS 1200 MF	Base

All work related to the above-mentioned elements shall be done with materials specified and in according to methods prescribed by the relevant SANS 1200 referred to

SANS 1200 Specification (General)

The SANS 1200 Specifications as referred to above were drawn up to cover activities normally encountered on civil engineering work, which is equally applicable on work scheduled hereunder for this project

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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All the specifications referred to above, although not issued with these Bills of Quantities, shall be deemed to form part of this document and shall be considered as applying to the performance of work to be completed in terms of this Section

The Contractor shall obtain a copies of the said specifications from the South African Bureau of Standards and be kept on site at all times

Measurement and payment

Measurement and payment clauses as described in the above-mentioned SANS 1200 Specifications shall not apply to the work as set out in this Bill

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

EARTHWORKS

GENERAL SITE CLEARANCE ETC

Clear site

21	Digging up and removing rubbish, debris, vegetation, hedges, and shrubs etc, including stock piling of organic rich topsoil for reuse	m2	49
22	Cut surface to a depth of 150mm and cart away from site, rip, break down oversize material where necessary, add suitable material where necessary and compact to 90% MOD AASHTO Density.	m2	49

EXCAVATIONS, FILLING, ETC,

Excavate in earth below natural ground level, reduced or made up ground level, not exceeding 2m deep, for:

23	Holes	m3	105
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Extra over trench and hole excavations in earth for excavation for

24	Working space exceeding 500mm and not exceeding 1500mm deep	m2	34
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Extra over trench and hole excavations in earth for excavation in

25	Soft rock	m3	11
26	Hard rock	m3	5

Extra over all excavations for carting away

27	Surplus or unwanted excavated material to stock piles on site or to a dumping site to be located by the contractor	m3	6
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Risk of collapse of excavations

28	Sides of hole excavations not exceeding 1,5m deep	m2	34
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

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**CONCRETE, FORMWORK AND
REINFORCEMENT**

(WORK GROUP 110)

PREAMBLESFor preambles refer to
**"Department of Public Works: Specification of
Materials and Method to be used - PW371"**

NOTE

All prices/rates to be net, excluding Value Added Tax

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SUPPLEMENTARY PREAMBLES

Concrete test cubes

Descriptions and tendered rates for concrete strength test cubes, as required under clause 7, "Tests" of SABS 1200 G, shall be deemed to cater for all the cost of providing cube moulds necessary for the purpose, making, storing and sending thereof to an approved laboratory for testing, paying all charges in connection therewith and for submitting test results to Principal Agent

All concrete strength test cubes, each 150 x 150 x 150mm shall be prepared in a set of three

It will be required from the contractor to prepare concrete strength test cube sets for each section (radiology, dental etc) at the following minimum frequencies:

- One set of three cubes for every 20m³,
or part thereof, of concrete cast per day,

or

- One set of three cubes for each batch
of concrete cast per event as
directed by the Clerk Of Works.

All concrete strength test cubes shall be done on site regardless of ready mix and shall be labelled and the identity thereof (ie. date, concrete strength type, position where batch was cast relative to the area and section identity) shall be properly recorded for future reference.

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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 reconditioning as necessary before re-use

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 sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the Principal Agent for design reasons. Formwork necessitated by irregularities 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 which is made for in "Earthworks"

Test Blocks (Provisional)

- 33 Making of 150 x 150 x 150mm concrete strength test cube in sets of three, label and send to an approved laboratory for testing, including paying all charges and submit report to the Principal agent. (only successful tests will be paid for)

Sets

2

MASS CONCRETE

CONCRETE

Unreinforced concrete cast against excavated surfaces

Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15MPa at 28 days

- 34 Surface blinding under strip footing and column bases

m3

1

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REINFORCED CONCRETE

Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 30MPa at 28 days

35	In surface beds cast in bays over waterproofing membrane (elsewhere)	m3	7
36	Stub columns	m3	2

FORMWORK

(WORK GROUP 111)

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Rough formwork to

37	Stub columns in foundations	m2	12
38	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	16
39	25 x 25mm Chamfers along top/bottom of columns stubs	m	8

REINFORCEMENT (PROVISIONAL)

(WORK GROUP 114)

High tensile steel reinforcement to structural concrete work

40	Y16 High tensile steel rod reinforcement	t	0.05
41	Y20 High tensile steel rod reinforcement	t	0.65

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STRUCTURAL STEEL

(WORK GROUP 134)

PREAMBLESFor preambles refer to
**"Department of Public Works: Specification of
Materials and Method to be used - PW371"**

All prices/rates to be net, excluding Value Added Tax

SUPPLEMENTARY PREAMBLES

STRUCTURAL STEEL (Provisional)

Standardised Specifications

The SANS 1200 1200H Standardised Specification for Civil Engineering Construction for Structural Steelwork is applicable to this Bill

The SANS 1200 1200HC Standardised Specification for Civil Engineering Construction for Corrosion Protection of Structural Steelwork is applicable to this Bill

Project Specification

If the Standardised Specifications and the Project Specification (bounded in this document) are in conflict, the Project Specification shall apply. If these three specifications conflicts with the Model Preambles for Trades, the provisions of these specifications shall apply.

Descriptions

Descriptions of all structural steelwork shall be deemed to include for the preparation of shop detail drawings, supply and fabrication, delivery, abnormal loads, erection and approved protective treatment (Corrosion protection).

Items described as "bolted" shall be deemed to exclude the bolts and include the holes.

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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

Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.

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STRUCTURAL STEEL WORKS, ETC.

- 42 Contractor to supply workshop drawings to the Principal Agent for approval

Item

MILD STEEL BOLTED PURLINS, GIRTS, BRACING, ETC

Bolts to columns, beams, etc

- 43 Class 4.8 galvanised M24 Hold down bolts 500mm long

No

16

Purlins and girts, plates, etc, welded/bolted to steel

- 44 85 x 85 x 12mm Thick Galvanised anchor plate to hold down bolt, welded or bolted to concrete base with J-bolts (elsewhere measured)

No

16

- 45 350 x 350 x 10mm Thick Baseplate, four times holed and welded to Hollow Section column, and bolted to concrete base with J-bolts (elsewhere measured)

No

4

STEEL STRUCTURE, ETC

Stressed steel Tank and stand

- 46 Supply, install, test and commission a 10m high Galvanised structural steel tank stand complete with columns, struts, braces, base plates, beams, gussets, tank access, Cat-ladder, etc. as supplied and installed by Tank Supplier. Including The issuing of an Engineer's Certificate. (Concrete base measured elsewhere)

Item

- 47 Supply, install, test and commission a 21kl Galvanised pressed metal segmental elevated tank size approximately 3.6m x 3.6m x 2.4m high including internal access ladders, hinged lockable manhole, float and pointed type water level indicator and screened ventilator supplied and installed by manufacturer on top of steel stand (steel stand elsewhere). Including all galvanized steel pipework and valves as per Civil Engineers drawing.

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WATER HARVESTING

48 Supply, install and commission 5000 litre tank including the plinth as per Engineer's Design.

No 2

Tank Connection Fittings

Galvanized Fittings

49 40mm Nipple

No 6

50 40mm Brass Ball Valve

No 2

51 40mm Elbow 90°

No 4

52 40mm x 500mm Stand Pipe

No 2

HDPE Fittings

53 Plasson HDPE 50mm x 50mm Male Adapter

No 2

54 50mm Plasson T-Piece

No 1

55 50mm HDPE Pipe Class 6

No 70

56 Excavation 600m deep, including bedding and blanket, backfill

No 70

Pump Connection Fittings

Galvanized Fittings

57 25mm Nipple

No 5

58 40mm Nipple

No 1

59 40mm x 25mm Reducing Bush

No 1

60 25mm Union Conical FF

No 1

61 40mm Union Conical FF

No 1

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62	40mm x 500mm Stand Pipe	No	1
63	40mm x 400mm Stand Pipe	No	1
64	25mm x 400mm Stand Pipe	No	1
65	25mm x 600mm Stand Pipe	No	1
66	25mm Elbow 90°	No	3
67	40mm Elbow 90°	No	2
68	25mm None Return Valve	No	1
<u>HDPE Fittings</u>			
69	Plasson HDPE 50mm x 50mm Male Adapter	No	1
70	Plasson HDPE 32mm x 32mm Male Adapter	No	1
71	32mm HDPE Pipe Class 9 Including excavation 600m deep, bedding and blanket.	m	200
72	Excavation 600m deep, bedding and blanket, backfill	m	200
<u>Garden Tap Connection Fittings</u>			
<u>Galvanized Fittings</u>			
73	25mm Nipple	No	4
74	25mm Elbow 90°	No	4
75	25mm x 1500mm Stand Pipe	No	2
76	20mm Garden Tap	No	2
77	25 x 20mm Reducing Bush	No	1
78	450 x 450 x 250mm Deep Concrete plinth of 25Mpa Strength	No	4

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FENCING

PREAMBLE These external works bills has been measured in accordance with the engineers specification SABS 1200 and shall be treated as such works

SUPPLEMENTARY PREAMBLES

User note

In high corrosion areas fence posts, stays, gates, etc are to be galvanised

Galvanised security fence with bitumen-aluminium painted (two coats) steel pipe posts, stays, gates, etc including galvanised steel bolts, straining eye bolts, etc. site clearance and preparation of ground

METALWORKS

Invisible mesh security fencing including site clearance and preparation of ground (LI)

- 84 Powder-coated security fencing 2400mm high overall above ground level, of ref 3510 - 3D mesh panels fabricated from absel with a strength of 60% and a tensile strength of 500N/mm², with core diameter of 3mm and a tolerance of 0.07mm, with 4No. 43mm V-Profiled horizontal stiffeners, fixed to and including 76 x 45 x 3mm x 3000mm long steel post galvanised and powder-coated, with rubber cap on top, planted in concrete (elsewhere measured). Fencing panels to be securely fixed between posts, with and including galvanised and powder-coated fixators and nuts at centres not exceeding 300mm and to be twisted until they are detached.

m

16

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85	Galvanised anti-burrow fencing 500mm high below ground level, secured into concrete for posts and haunching of 200 x 200 x 200mm at 1000mm centres maximum, of ref 3510 - 3D mesh panels fabricated from absel with a strength of 60% and a tensile strength of 500N/mm ² , with core diameter of 3mm and a tolerance of 0.07mm, including trench, backfilling and compacting.	m	16		
86	Powder-coated anti-climb structure spiked rail bolted to invisible fence mesh flang along fence top.	m	16		
87	Powder-coated security swing pedestrian gate 1500 x 3000mm high formed of 100 x 75 x 3mm frame with 2No. horizontal rails. Fencing mesh similar to main fence to be secured to gate frame with fixators. Posts system to be of 2No 100 x 100 x 3mm vertical posts set into and including 20Mpa concrete. Top to have powder-coated anti-climb security spiked rail. Gate to have approved locking mechanism	No	1		
<u>WATER MAIN MUNICIPAL CONNECTION FEE</u>					
88	Provide a sum of R 10 000.00 (Ten thousand rands) for municipal connection fee.		Item		10 000.00
89	Profit		Item		
90	Attendance		Item		
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BILL NO. 1			
PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
NOTE			
All prices/rates to be net, excluding Value Added Tax			
MV RETICULATION			
1	Item		60 000.00
2	Item		
3	Item		
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Item No		Quantity	Rate	Amount
	<u>BILL NO. 2</u>			
	PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
	<u>NOTE</u>			
	All prices/rates to be net, excluding Value Added Tax			
	<u>LV RETICULATION</u>			
	<u>Distribution Kiosks</u>			
	<u>3CR12, Powder coated, plinth mounted, complete with equipment as specified</u>			
1	Main Kiosk	No	1	
2	Plinth	No	1	
	<u>Trenching</u>			
	<u>Excavation, bedding, backfilling, consolidating and making good as specified.</u>			
3	Pickable earth	m3	56	
4	Soft rock	m3	18	
5	Hard rock	m3	18	
6	Backfilling and compaction	m3	90	
7	75mm Dia. PVC sleeves for road crossing/cable entries into the building-rate must include for galvanised steel draw wires in spare sleeves and sealing of ends.	m	20	
8	Concrete slabs for crossing of other services-rate must include installation 200mm below existing services	m	2	
	Carried to Collection			
	Section No. 4 Bill No 2 - LV Reticulation LDPW-B/20150			
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9	Cable warning tape, 300mm above cable	m	273
10	Cable marker, above cables	No	6
<u>600/1000V PVC SWA cables, in trenches and sleeves, including labels</u>			
11	35mm ² 4core	m	182
12	4mm ² 3core	m	150
13	6mm ² 4core	m	40
14	6mm ² 2core	m	30
15	4mm ² 2core	m	250
<u>600/1000V Cable terminations, for PVC PVC SWA PVC Cu cables, for indoor or outdoor use, as required</u>			
16	Gland no 5 complete with shroud	No	4
17	Gland no 4 complete with shroud	No	2
18	Gland no 2 complete with shroud	No	4
<u>Earth conductors (HDHC), including ends</u>			
19	25mm ²	m	182
20	4mm ²	m	40
21	2.5mm ²	m	400
<u>Electrical Test</u>			
22	Testing of this section in the presence of 'the Employer and/or the Engineer, including all equipment, power generator, etc.		Item
23	Electrical & Telkom Man holes 600 x 600 x 600mm	No	3

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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<u>BILL NO. 3</u> PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
<u>NOTE</u> All prices/rates to be net, excluding Value Added Tax General trenching work for sleeves along the routes as pegged out on site after co-ordinated with other services. Allowance must be made for the sitting of soil when required, removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried out as specified for overall siteworks.			
<u>MAIN LIBRARY BUILDING</u>			
<u>Draw Wires</u>			
1	Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation	m	1 930
<u>Distribution Boards</u>			
<u>Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays, doors, switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized internally</u>			
2	Supply and installation of DB - LIB as per Engineer's specification	Item	
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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	<u>PVC Wiring in conduits:</u>		
15	2.5mm ² for lights circuits	m	2 500
16	4mm ² for plug sockets circuits	m	1 800
	<u>Stranded Bare Copper Earth Wire</u>		
	<u>Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits.</u>		
	<u>Tendered rates shall make provision for wastage.</u>		
17	1.5mm ²	m	2 500
18	2.5mm ²	m	1 800
	<u>Light Switches:</u>		
	<u>Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting means</u>		
19	1 Lever 1 way	No	12
20	1 Lever 2 way	No	2
21	3 Lever 1 way	No	1
22	Photo cell	No	1
23	Occupancy Sensor	No	2
24	Motion Sensor	No	3

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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AT TSHAULU, VHEMBE DISTRICT**

Socket Outlets:

Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface.

The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.

All flush type boxes and special pedestals measured elsewhere.

Flush switched sockets type:

25	Single 16A ZA Plug Socket Outlet @300 A.F.F.L	No	15
26	Double 16A ZA Plug Socket Outlet @1200 A.F.F.L	No	1
27	16A 3 pin water tight double socket outlets	No	4
28	16A 3 pin single dedicated socket outlets	No	14
29	RJ 45 DATA outlet	No	18
30	RJ 11 telephone point	No	5
31	Type D: Wall mounted power cluster socket outlets	No	11
32	Type F: Wall mounted power cluster socket outlets	No	11

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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Light Fittings:

Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.

Fittings to be equal and similar approved to the below quoted manufacture.

33	TYPE B: 4 Inch 10W LED downlight with with battery backup	No	4
34	TYPE B: 4 INCH 10W LED downlight	No	20
35	18W LED RONDO downlight without Dali modification	No	22
36	18W LED rondo downlight with battery backup	No	7
37	18W LED Up & Down facing IP44 Stainless steel wall light	No	7
38	15W LED round bulkhead	No	11
39	VISUAL LED IP40 - 50W 2250x50mm suspended linear fitting	No	5
40	1200x600mm LED panel recessed light fitting with battery backup	No	11
41	1200x600mm LED Panel recessed light fitting without Dali modification	No	43

Electrical Tests:

Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate.

42	Building installation	Item
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<u>Others:</u>					
43	The installation of Telephone Distribution board as specified, lockable, flush mounted (380 x 380 x 120mm) complete with doors, frames, sub-frames and 20mm thick soft board panel as per Engineer's specifications	No	1		
44	100 x 100 x 50mm - Draw box for Communication complete with blank cover	No	3		
45	2 compartment power skirting installed in offices	m	100		
46	Data and Telephone points on Powerskirting; must include draw box, blank cover plate, etc,	No	50		
47	P9000 cable tray for small power and Data	m	70		
48	Supply and install earthing and lightning protection installations as per Engineer's specification		Item		
49	Provide an amount of R 110,000.00 (One Hundred and Ten Thousand Rands Only) for the earthing and lightning protection installation		Item		110 000.00
50	Profit		Item		
51	Attendance		Item		
52	30A TP Isolator, in suitable York Box, for HVAC/three phase isolators	No	2		
53	30A SP Isolator, in suitable York Box, for HVAC/single phase isolators	No	9		
54	Supply and installation of 5kVA online Uninterrupted power supply	No	1		
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<u>BILL NO. 4</u> PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
<u>NOTE</u> All prices/rates to be net, excluding Value Added Tax			
<u>GUARD HOUSE</u> <u>Draw Wires</u>			
1	Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation	m	100
<u>Distribution Boards</u> <u>Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized internally</u>			
2	Supply and installation of DB - LIB as per Engineer's specification	Item	
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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<u>Conduit Work</u>					
<u>Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories.</u>					
<u>Built or Chase into brick or concrete work:</u>					
3	20mm PVC Conduit	m	40		
4	25mm PVC Conduit	m	50		
<u>In Ceiling space and steel work or along Purlins</u>					
5	20mm PVC Conduit	m	10		
<u>Conduit Boxes:</u>					
<u>Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.</u>					
6	20mm diameter 4 way type(round box) PVC	No	2		
<u>Wall Boxes:</u>					
<u>Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work.</u>					
<u>Flush mounted type:</u>					
7	100 x 50 x 50mm	No	2		
8	100 x 100 x 50mm	No	3		
<u>PVC Wiring in conduits:</u>					
9	2.5mm ² for lights circuits	m	100		
10	4mm ² for plug sockets circuits	m	100		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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	<u>Stranded Bare Copper Earth Wire</u>				
	<u>Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage.</u>				
11	1.5mm ²	m	100		
	<u>Light Switches:</u>				
	<u>Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting means</u>				
12	1 Lever 1 way	No	2		
13	Photo cell	No	1		
	<u>Socket Outlets:</u>				
	<u>Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface.</u>				
	<u>The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.</u>				
	<u>All flush type boxes and special pedestals measured elsewhere.</u>				
	<u>Flush switched sockets type:</u>				
14	SA/Euro 16A Socket outlet @300 A.F.F.L	No	2		
15	One tier cluster wall box consisting of the following: - 16A Normal socket un-switched - 16A Dedicated socket un-switched - 5A 2Pin socket un-switched - 2x RJ45 Data & Telephone points	No	1		
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
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Light Fittings:

Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.

Fittings to be equal and similar approved to the below quoted manufacture.

16	24W LED wall/ceiling mounted bulkhead	No	6	
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Electrical Tests:

Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate.

17	Building installation	No		
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Others

18	Provide aa sum of R 12,500.00 (Twelve Thousand Five Hundred Rands Only) for the supply, installation and commissioning of earthing and lighting protection installation		Item	12 500.00
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Bill No 4 - Guard House
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Section No. 4

Bill No. 4

Bill No 4 - Guard House

COLLECTION

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Section No. 4

Bill No 4 - Guard House

LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
BILL NO. 5 PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
NOTE All prices/rates to be net, excluding Value Added Tax			
AREA LIGHTING <u>Supply and installation of SABS approved light fittings as per the specification, complete with lamps, mounted as described including accessories necessary to complete the mounting as specified and are measured separately</u>			
1	4m Steel Pole with brackets and foundation bolts (excluding luminaires), including Delivery to Site and offloading	No 13	
2	"ZELA" 30W LED light fitting complete with lamps, mounted as described including accessories necessities	No 13	
3	Photo cell	No 1	
Cabling PVC Wiring :			
4	4mm² x 2core copper cable	m 600	
5	2.5mm² bare copper earth wire (BCEW)	m 600	
Carried to Collection			R
Section No. 4 Bill No 5 - Area Lighting LDPW-B/20150			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

TESTING AND COMISSIONING

- 6 Testing and commissioning of the entire medium and low voltage network and area lighting including the provision of all test equipment required and issuing of a certificate of compliance for the installation.

Item

Carried to Collection

R

Section No. 4
Bill No 5 - Area Lighting
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Section No. 4

Bill No. 5

Bill No 5 - Area Lighting

COLLECTION

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Bill No 5 - Area Lighting
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<u>BILL NO. 6</u> <u>BOOK DETECTION SYSTEM</u> PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"			
<u>NOTE</u> All prices/rates to be net, excluding Value Added Tax <u>PREAMBLESFor preambles see "Standard Model Specifications for Building Works PW371/Oct 93"</u>			
1	"Bibliotheca Tattle" or similar and approved by the Principal Agent Tape Gate Single Aisle - Baseplate	No	1
2	"Bibliotheca Tattle" or similar and approved by the Principal Agent Tape Bookcheck - M942	No	1
3	Single locking exit gate - stainless steel arm	No	1
4	Custom made MDF partition - varied sizes	No	1
5	"Bibliotheca Tattle" or similar and approved by the Principal Agent Tape strips - B2 1000 per box	No	1
6	Stainless steel supermarket turnstile with screen	No	1
7	Delivery	No	1
8	Installation charges	No	1
Carried Forward to Summary of Section No. 4 Section No. 4 Bill No 6 - Book Detection System LDPW-B/20150			R

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p>BILL NO. 7</p> <p>ELECTRONIC INSTALLATIONS (CCTV AND NETWORK DATA SYSTEM)</p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p>NOTE</p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p>PREAMBLESFor preambles see "Standard Model Specifications for Building Works PW371/Oct 93"</p> <p>SUPPLEMENTARY PREAMBLES</p> <p>Installation of an IP CCTV surveillance and Recording System, with 7 days recording (on motion detection).</p> <p>All Cameras and switches are PoE+ compliant.</p> <p>Cameras are inclusive of, vandal & whetherproof housings.</p> <p>CCTV monitoring will be done from the Security Control Room.</p> <p>The system runs on the 10G Fibre LAN</p>			
1	1080p HD-TVI 30m vision cameras dome	No	3	
2	1080 HD -TVI 360 degree fish eye dome	No	2	
	Carried to Collection		R	
	Section No. 4 Bill No 7 - Electronic installation LDPW-B/20150			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

3	1080 HD TVI 40m colour vu vision bullet for outside	No	10
4	DVR 16 channel	No	1
5	Hard driver 2TB	No	1
6	HDMI cable 50m	No	1
7	Cat6 network cable 80m	No	1
8	Ups power supply with backup battery	No	1
9	Universal camera mount enclosure	No	12
10	Flaxi pipe 25mm	No	80
11	Connectors	No	32
12	LCD monitor 32" FULL HD LED	No	1
13	4U 300 x 200mm collar swing frame wall box cabinet	No	1
14	LCD wall mount bracket	No	1
15	Steel wire cable tray	No	17
16	RG59 +Power -black/100m	No	9
17	25mm PVC pipes	No	50
18	25mm PVC adaptor	No	40
19	25mm PVC coupling	No	30
20	Labour for new installation and programming		Item
	<u>Installation of wired data points and wireless access points on power skirting as specified and as indicated on drawings. The system runs on the 10G Fibre LAN</u>		
21	Cat6 Network cable 500M	No	2

Carried to Collection

Section No. 4
Bill No 7 - Electronic installation
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Bill No	SECTION SUMMARY - Section 4 - Electrical Installations	Page No	Amount
1	Bill No 1 - MV Reticulation	296	
2	Bill No 2 - LV Reticulation	299	
3	Bill No 3 - Main Library Building	307	
4	Bill No 4 - Guard House	313	
5	Bill No 5 - Area Lighting	316	
6	Bill No 6 - Book Detection System	317	
7	Bill No 7 - Electronic installation	321	
<p style="text-align: right;">Carried to Final Summary</p> <p>Section No. 4 LDPW-B/20150</p>			R

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p>BILL NO. 1</p> <p>HVAC INSTALLATION</p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p>NOTE</p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p>PREAMBLES For Preambles refer to "Limpopo Department of Public Works and Infrastructure: Part 3.1 - HVAC Specifications"</p> <p>SUPPLEMENTARY PREAMBLES</p> <ul style="list-style-type: none"> Specifications, drawings, etc: Tenderers are referred to the specification and drawings prepared by the Consulting Engineer, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings Preliminaries: Any preliminaries that may be required by subcontractors are to be included in the itemised rates or included with the main contractor's preliminaries, as no separate preliminary items have been provided for pricing, nor will such items be accepted General: Where applicable, the air-conditioning sub-contractor is to ensure that all air-conditioning controls are flush-mounted and positioned adjacent to the respective room's light switch, or as otherwise shown, all necessary chasing of walls and installation of necessary conduits and conduit boxes must be undertaken prior to the plastering of the walls, no sharing of lighting circuitry conduits and 			
	Carried to Collection		R	
	<p>Section No. 5 Bill No 1 - HVAC Installation LDPW-B/20150</p>			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

conduit boxes will be permitted. All air-conditioning controls are to be wired controls and be labelled to match their respective air-conditioning units. The condensate pipe from the unit shall be connected to the nearest suitable drain point and shall have a fall of not less than 1: 100 and be adequately supported (no bowing of the drains will be entertained). Electrical installation to be completed in accordance with SANS 10142 – 1: 2017 – Edition 2 (South African National Standards: The wiring of premises: Part 1: Low-voltage installations)

- **Ductwork:** Descriptions of ducts shall be deemed to include stiffeners, jointing materials, sealants, couplers in the running length and access/inspection panels in accordance with the specification All Ductwork to be galvanised sheet metal with or without insulation – refer to the BOQ specifications.
- **Air diffusion:** Descriptions of air terminals, grilles, louvres and the like shall be deemed to include necks, frames, supports and flexible connections
- **Fans:** Descriptions of fan assemblies shall be deemed to include supports from the structure, flexible or other connections to ductwork, vibration isolation mountings and airtight inspection doors
- **Sound attenuators:** Descriptions of sound attenuators shall be deemed to include flanged or flexible connections to ducts and supports from the structure
- **Fan coil units, fan air terminals and fan heaters:** Descriptions of fan coil units, fan air terminals and fan heaters shall be deemed to include connection points for water, air and electrical supply, air grilles, dust trays, condensate trays and vibration isolation mountings. Flexible ducts, flexible hose and connecting cables for connecting these units to each other or to water pipe, and electrical

Carried to Collection

Section No. 5
Bill No 1 - HVAC Installation
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

supply are measured separately

- **Piping:** Pipe diameters are nominal internal unless otherwise stated
- **Fixing of pipes:** Unless otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, casting in, building in or suspending not exceeding 1m below suspension level
- **Valves:** Descriptions of valves shall be deemed to include flanged or screwed connections to pipes, reducers, supports, etc.
- **Connections:** All equipment must be supplied complete with operation manuals, and installed/connected to service connection points (by others) within 2m of equipment.

Carried to Collection

Section No. 5
Bill No 1 - HVAC Installation
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

PERSONNEL REQUIRED

Qualified Refrigeration Mechanic will be required to perform all HVAC installations. The Refrigeration Mechanic will be required to have a VALID license to perform installations at the close of tender and during the construction phase of the project.

The practitioner shall be in possession of the following

- **Registration Category** - Category B
- **Registered with SAQCC Gas and the Department of Labour**
- **Trade Test**
- **Proof of Registration** - SAQCC Practitioners Card
- **Registration Title on Card** - Air Conditioning & Refrigeration Practitioner
- **Industry Sector Registration** - Air Conditioning & Refrigeration Plants
- **Refrigerant Group SANS 10147** - Group A1, A2 & A3
- **Authorised to Issue COC**

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Section No. 5
Bill No 1 - HVAC Installation
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

<u>Supply, delivery, installation, commissioning and testing of complete HVAC Systems inclusive of indoor and outdoor units, air-handling unit, interconnecting insulated refrigeration piping, pipe tray (cable tray), valves, wiring, refrigerant gas, drain pipes, mounting brackets, insulated ducting (for main system) and un-insulated system (for ablution) including all duct hangers, duct fittings, accessories, dampers and diffusers. All rates provided by contractor should cater for equipment, components, delivery to site, installation, all equipment required during installation, testing and system balancing, commissioning, final testing and training as well as a 12 month maintenance plan with provision for a breakdown maintenance.</u>					
1	70kW Ducted Air Handling Unit Inverter with Heat Pump Power Supply: 3Ph/380-415V/50Hz @ 23.6kW Cooling Capacity: 75.0kW Heating Capacity: 70.0kW Refrigeration Gas: R410A	No	1		
2	DVMs 5.6 kW Ceiling Cassette (Indoor) Unit Power Supply: 1Ph/220-240V/50Hz @ 32Watts Cooling Capacity: 5.6kW Heating Capacity: 6.3kW Refrigeration Gas: R410A	No	4		
3	DVMs 5.6 kW High Wall (Indoor) Unit Power Supply: 1Ph/220-240V/50Hz @ 32Watts Cooling Capacity: 5.6kW Heating Capacity: 6.3kW Refrigeration Gas: R410A	No	1		
4	DVMs 28kW Condenser (Outdoor) Unit Power Supply: 3Ph/380-415V/50Hz @ 7.30kW Cooling Capacity: 28.0kW Heating Capacity: 31.5kW Refrigeration Gas: R410A	No	1		
Carried to Collection					
Section No. 5 Bill No 1 - HVAC Installation LDPW-B/20150				R	

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

5	5.6 kW High Wall Inverter (Indoor and Outdoor) Unit Power Supply: 1Ph/220-240/50Hz @ 1.35kW Cooling Capacity: 5.0kW Refrigeration Gas: R410A	No	1		
6	Ø6.35 mm Dia. Copper Insulated Refrigeration Pipe	m	105		
7	Ø9.52 mm Copper Insulated Refrigeration Pipe	m	181		
8	Ø12.7 mm Copper Insulated Refrigeration Pipe	m	93		
9	Ø15.88 mm Copper Insulated Refrigeration Pipe	m	85		
10	Copper Refrigerant Pipe fittings, fixtures and harnesses		Item		
11	50mm x 50mm Electro-galvanized Steel Wire Cable Tray	m	250		
12	50mm x 50mm Electro-galvanized Steel Wire Cable Tray Bends	No	15		
13	50mm x 50mm Electro-galvanized Steel Wire Cable Connection Accessories		Item		
14	Ø25 mm uPVC Condensate Drain Pipe (Chased into Wall)	m	20		
15	R410 Refrigerant Top-up	kg	15		
16	Condensate Drain Pump: MDP-G075SP	No	4		
17	Wired Remote Controller (Including Wiring): MWR- SH00N	No	4		
18	Ø 550mm (Straight) Insulated Galvanized Steel Ducting	m	42		
19	Ø 350mm (Straight) Insulated Galvanized Steel Ducting	m	10		
20	Ø 300mm (Straight) Insulated Galvanized Steel Ducting	m	75		
21	Ø 900mm x Ø 900mm to Ø 750mm Reducer	No	2		
Carried to Collection				R	
Section No. 5 Bill No 1 - HVAC Installation LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

22	Ø400mm x Ø400mm to Ø 350mm Reducer	No	1
23	Ø 550mm Stop End	No	1
24	Ø 550mm to Ø 550mm by Ø 300mm to Ø 300mm Eccentric Cross	m	7
25	Ø 550mm, 90°Bend	No	2
26	Ø 350mm 90°Bend	No	2
27	Ø 300mm Air Balancing Damper	No	14
28	600 x 600mm (Throat: Ø 200mm)Constant Volume Diffuser	No	14
29	Provision of for Aluminium Door 450 x 450 Grilles	No	10
30	600 x 600mm Return Air Louvered Wall Grille	No	1
31	200mm x 600mm Return Air Louvered Ceiling Grille	No	4
32	Ø 750mm x 1500mm Duct Silencer	No	1
33	Ø 600mm x 1500mm Duct Silencer	No	1
34	Provision for creating Ø 900mm duct openings and making good	No	2
35	Core Drilling of up to Ø 200mm including making good where walls have been drilled	No	6
36	Provision for Duct System Balancing		Item
37	Provision for Testing of entire System		Item
38	Provision for Training of Limpopo DSAC Library Staff	No	6
39	Provision for Commissioning and Testing by Original Equipment Manufacturer	No	4

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Section No. 5
Bill No 1 - HVAC Installation
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

40	Provision for Certificate of Compliance by Registered Refrigeration Mechanic	No	2
41	Provision for Bi Annual Preventative Maintenance of Entire System inclusive of 1 x Registered Refrigeration Mechanic's call out fee to site for up to 24 working hours 1 x non-Registered Refrigeration Mechanic's call out fee to site for up to 24 working hours Refrigeration top up, Tooling, Hoists and Equipment required to perform maintenance Safety related documentation Refer to Technical Specifications for Maintenance Specifications for envisioned preventative maintenance	No	2
42	Provision for 36 Month Warranty from OEM on Entire HVAC System Warranty should cover, Call out fee for OEM to perform assessment, Provision for replacing any component or equipment of the HVAC System *Refer to Technical Specifications for Warranty Requirements	No	3
	<u>Ablution HVAC System</u>		
43	Ø 250mm (Straight) Uninsulated Galvanized Steel Ducting	m	5
44	Ø 200mm (Straight) Uninsulated Galvanized Steel Ducting	m	3
45	Ø 150mm (Straight) Uninsulated Galvanized Steel Ducting	m	4
46	Ø 100mm (Straight) Uninsulated Galvanized Steel Ducting	m	2
47	Ø 100mm (Straight) Uninsulated Flexible Ducting	m	8
48	Ø 300mm x Ø 300mm to Ø 250mm Reducer	No	1
49	Ø 250mm to Ø 300mm Reducer	No	4
	Carried to Collection		
	Section No. 5 Bill No 1 - HVAC Installation LDPW-B/20150		

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

50	Ø 250mm to Ø 200mm Reducer	No	1
51	Ø 200mm to Ø 150mm Reducer	No	4
52	Ø 150mm to Ø 100mm Reducer	No	4
53	Ø 250mm, 90°Bend	No	3
54	Ø 150mm, 90°Bend	No	1
55	Ø 100mm Uninsulated Flexible Duct Connector Kit	No	4
56	150mm x 150mm Extraction Valve with Ø 100mm Neck and Duct Connector Kit	No	4
57	Ø 300 x 300mm Side Wall Louvered Air Grille	No	1
58	Ø 250mm Duct Silencer	No	1
59	Provision for Testing of entire System		Item
60	Provision for Training of Limpopo DSAC Library Staff	No	6
61	450L/s @ 150pa In-line Duct Extraction Fan with Multiple Occupancy Detection System	No	1
62	75L/s @ 150pa Wall/Window Mounted Extraction Fan with Occupancy Detection System	No	1

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Bill No 1 - HVAC Installation
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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 2</u></p> <p>PREAMBLES For preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p>Tenderers are referred to the departmental specification " Part 3.2 - Fire Protection Specifications" and drawings prepared by the Consulting Engineer, annexed to these Bills of Quantities, for the full descriptions of the following items which are to be read and priced in conjunction with the said specification and drawings</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <ul style="list-style-type: none"> • Preliminaries: Any preliminaries that may be required by subcontractors are to be included in the itemised rates or included with the main contractor's preliminaries, as no separate preliminary items have been provided for pricing, nor will such items be accepted • Connections: All equipment must be supplied complete with operation manuals, and installed/connected to service connection points (by others) within 2m of equipment. <p>PERSONNEL REQUIRED</p> <p>Qualified Fire Detection Technician will be required to perform all Fire Detection installations. The Fire Detection Technician will be required to have a VALID license to perform installations at the close of tender and during the construction phase of the project.</p> <p>The practitioner shall be in possession of the following:</p>			
	Carried to Collection			
	<p>Section No. 5</p> <p>Bill No 2 - Fire Detection and Protection</p> <p>LDPW-B/20150</p>			
			R	

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

- **Registration Category** - SAQCC Fire
1475 Technician
- **Registered with SAQCC Fire**
- **Proof of Registration** - SAQCC 1475
Identity Card
- **Registration Title on Card** - Installer
of Fire Detection System
- **Industry Sector Registration** - Air
Conditioning & Refrigeration Plants
- **Industrial Sector Registration** - Fire
Detection
- **Fire Detection Types** -
Commercial/Residential

**FIRE DETECTION, SUPPRESSION AND
PROTECTION**

Note:

Supply, delivery, installation, commissioning and testing of complete Fire Protection Systems inclusive of all Fire Detection Systems, Fire Hose Reels, Fire Extinguishers, Fire Blankets, Escape Route Signs. All rates should include. All rates provided by contractor should cater for equipment, components, delivery to site, installation, all equipment required during installation, testing and system balancing, commissioning, final testing and training as well as a 12 month maintenance plan with provision for a breakdown maintenance.

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Section No. 5
Bill No 2 - Fire Detection and Protection
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Fire Detection System

Fire Control Panel, Model: TC5100 Intelligent
(Addressable) Panel (or equivalent if approved), Devices
Per Zone: 126 @ 1 Zone with 2 Sounders @2 x 24V /
0.3A Fuse, Power: 220-240V/1Ph/50Hz with 1 x
12V/7Ah Battery, Dimensions: 340 x 340 x 85mm
(HxWxD)

No

1

LiFePo4 Rechargeable Battery
Capacity: 7Ah
Voltage: 24V

No

2

Fire Detector (Addressable)
Multi-Sensor with Standard Base: (Smoke and Heat)
Protection Area: 120m²
Wire Size: 0.4mm² - 2.0mm²
Dimensions: Ø105mm x 48mm(H)"

No

14

Manual Call Point (Addressable)
Break-Glass Sensor with Standard Base:
Wire Size: 0.4mm - 2.0mm
Dimensions: 90mm x 90mm(H)

No

6

Audible and Visual Strobe (Addressable)
 Sounder Beacon with Base (Dual Function: Sound and Visual)
 Frequency: 400 - 2,850Hz
 Power: 20W, 80mA, 220-240V/1Ph/50Hz
 Dimensions: Ø97.5mm x 104mm

No

2

1mm² x 2 core, PH30 Fire Alarm Cable

m

980

Ø20mm Externally Threaded Rigid Galvanised Steel
Conducting placed in position for casting in concrete,
surface bed or screed, for building or chased into
brickwork and for surface mounting in ceiling space
including flexible bends, threaded coupling joints and
draw wires (SANS 62 Flared and Threaded Pipe)

m

735

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

8	Ø20mm x 500mm Externally Threaded Flexible Galvanised Steel Bend (SANS 14 / EN 10242 or BS143)	No	35		
9	Ø20mm x 500mm Externally Threaded Ridged Galvanised Steel Bend (SANS 14 / EN 10242 or BS143)	No	25		
10	Ø20mm Internally Threaded Coupling Joint/Socket (SANS 14 / EN 10242 or BS143)	No	305		
11	Ø20mm Galvanised Steel Conducting, Rubber Lined Wall Pipe Clamps complete with Screws and Nuts/Bolts (where required)	m	795		
12	50mm Anti-Corrosion Denso-Tape	m	480		
13	Core Drilling of up to Ø 50mm including making good where walls have been drilled	No	30		
14	Testing of entire System		Item		
15	Provision for Training of Limpopo DSAC Library Staff	No	6		
16	Provision for Commissioning	No	4		
17	Provision for Certificate of Compliance by Registered Refrigeration Mechanic	No	2		
18	Provision for Bi Annual Preventative Maintenance of Entire System inclusive of 1 x Registered Fire Detection Technician call out fee to site for up to 4 working hours Tooling, Hoists and Equipment required to perform maintenance Refer to Technical Specifications for Maintenance Specifications for envisioned preventative maintenance	No	2		
Carried to Collection				R	
Section No. 5 Bill No 2 - Fire Detection and Protection LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

19	Provision for 36 Month Warranty from OEM on Entire Fire Detection System Warranty should cover, Call out fee for OEM to perform assessment, Provision for replacing any component or equipment of the Fire Detection System, *Refer to Technical Specifications for Warranty Requirements	P/Mon	36		
	<u>Fire Protection System</u>				
20	Centrifugal Pump Inlet: Ø63 - 80mm Outlet: Ø50 - 63mm Pressure: 400kPa Flowrate: 1 L/s Complete with Baseplate and vibration dampers Power Supply: 415V, 3 Phase, 50Hz	No	1		
21	Ø63 - 80mm Threaded Strainer	No	1		
22	Ø63 - 80mm Threaded Isolation Valve	No	1		
23	Bottom Entry Analogue Positive Pressure Gauge Pressure Range: 1 - 9 Bar Glycerine Filled	No	1		
24	Ø50 - 63mm Threaded Isolation Valve	No	2		
25	Ø50 - 63mm Non-Return Valve	No	2		
26	Upright Pressure Tank Capacity: 100 Litre Material: 304 Stainless Steel Max Pressure: 10 bar Connector: 1 Stainless Steel Inlet Thread Membrane: Fixed Butyl Rubber Membrane Replaceable Type	No	1		
Carried to Collection					R
Section No. 5 Bill No 2 - Fire Detection and Protection LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

27	Automatic Pressure Switch Max Power: 15kw Starting Pressure: 2.0 Bar Maximum working Pressure: 10 Bar Connection: Ø50 - 63mm Protection Rating: IP 65 Maximum Temperature Rating: 60°C Automatic Start Switch Maximum Current: 25 Amp Power Supply: 415V, 3 Phase, 50Hz	No	1		
28	Ø80mm Galvanized Steel Pipe	m	90		
29	Ø63mm Galvanized Steel Pipe	m	80		
30	Ø50mm Galvanized Steel Pipe	m	80		
31	Ø80mm Galvanized Steel Pipe Connections		Item		
32	Ø63mm Galvanized Steel Pipe Connections		Item		
33	Ø50mm Galvanized Steel Pipe Connections		Item		
34	Ø50mm PN16 HDPE Pipe	m	180		
35	Ø32mm PN16 HDPE Pipe	m	60		
36	30m Swing Type Fire Hose Reel as per SANS 543 Complete with Pressure Gauge, Isolation Valve and Aluminium Nozzle	No	2		
37	9.0kg DCP Fire Extinguisher	No	8		
38	Fire Blanket Size: 1.8 x 1.8m Weight (min): 430 gr/m² Weight: 1.94kg Ignition Time: 13 min Max temp: 550°C	No	2		
Carried to Collection				R	
Section No. 5 Bill No 2 - Fire Detection and Protection LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 4</u></p> <p>PREAMBLESFor preambles refer to "Department of Public Works: Specification of Materials and Method to be used - PW371"</p>			
	<p><u>NOTE</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Excavations</p> <p>Prices for excavations must include for necessary staging for risk of collapse of excavation side.</p> <p>Compacting</p> <p>Filling for all types of prices described as "under solid floors, etc" shall be done with approved backfilling and compacted to 93% Mod. AASHTO density, unless otherwise described</p> <p>Testing</p> <p>Descriptions for the testing of plumbing and drainage installations shall be deemed to cater for all testing apparatus, labour, etc. and shall be done strictly as directed by and in accordance to the Principal Agent's instructions, including for retesting after taking out and making good all defective work to his entire satisfaction</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 5 Bill No 3 - Wet Services LDPW-B/20150</p>		R	

Vitrified clay pipes:

Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

uPVC pipes and fittings

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

Soil, waste and vent pipe fittings shall be solvent weld jointed

uPVC pressure pipes and fittings

Pipes for water supply shall be of the class stated

Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings

Copper pipes

Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (thin walled hard drawn pipes) shall not be bent. Class 1 (thin 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 siphon 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 ground.

Carried to Collection

Section No. 5
Bill No 3 - Wet Services
LDPW-B/20150

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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 will be entertained.

Excavations

No claim for extra rock excavation will be entertained unless the Contractor has timeously notified the Quantity Surveyor , thereof prior to backfilling, in writing

"Soft rock" and "Hard rock" shall be as defined in "Earthworks"

Laying, Backfilling, Bedding, etc. of Pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with the manufacturer's instructions

Where no manufacturer's instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium Pressure Pipes
LD : Sewers LE : Stormwater Drainage

Pipes 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 Clause 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

Carried to Collection

Section No. 5
Bill No 3 - Wet Services
LDPW-B/20150

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Flush pans

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

Waste unions

Description of waste unions shall be deemed to include rubber or vulcanite plugs and chains

WATER SERVICES

Water Supply Piping

Supply, delivery, installation, commissioning and testing of Potable Water Supply Piping

1	Ø20mm Ball Valve	No	2
2	Ø20mm Strainer	No	2
3	Ø20mm Non- Return Valve	No	2
4	Ø20mm Pressure Regulator	No	2
5	Ø15mm Braided Flexible Hose with Ball Valve	No	20
6	Ø20mm Class 2 Copper Piping	m	150
7	Ø15mm Class 2 Copper Piping	m	320
8	Ø20mm Class 2 Copper Piping Capillary Fittings		Item
9	Ø15mm Class 2 Copper Piping Capillary Fittings		Item

Grey Water

Supply, delivery, installation, commissioning and testing of Grey Water Drainage Piping

10	Ø50mm µPVC Piping (Class 34)	m	50
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Carried to Collection

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Section No. 5
Bill No 3 - Wet Services
LDPW-B/20150

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

11	Ø110mm µPVC Piping (Class 34)	m	180		
12	Ø50mm µPVC Piping (Class 34) Fittings		Item		
13	Ø110mm µPVC Piping (Class 34) Fittings		Item		
<u>Water Heating</u>					
<u>Supply, delivery, installation, commissioning and testing of Water Heating System</u>					
14	Hydro-boil Capacity: 10L Power Supply: 240V/1Pha/50Hz	No	1		
<u>Water Purification</u>					
<u>Supply, delivery, installation, commissioning and testing of Water Purification System</u>					
15	Industrial Reverse Osmosis System Model: BLPRO-1500, Membrane: 2 x 4040 Capacity: 150l/hr Power Supply: 240V/1Pha/50Hz	No	1		
<u>Borehole Installations</u>					
<u>Borehole Siting, Verification, Drilling, Equipping, Testing of Water Quality and Flowrate, Commissioning and Provision of COC</u>					
16	Borehole Pump Type: Submersible Max Flowrate: 2L/s Min Head: 150m Power Supply: 415V/3Ph/50Hz Complete with Timer, Grey Box, Outlet Piping, Valves, Pressure Guages, Water Meter and all pipe work, accessories and items required to ensure borehole is fully functional		Item		
Carried to Collection				R	
Section No. 5 Bill No 3 - Wet Services LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Bill No	SECTION SUMMARY - Section 5 - Mechanical Works	Page No	Amount
1	Bill No 1 - HVAC Installation	332	
2	Bill No 2 - Fire Detection and Protection	340	
3	Bill No 3 - Wet Services	347	
<p style="text-align: right;">Carried to Final Summary</p> <p>Section No. 5 LDPW-B/20150</p>			R

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Item No	Quantity	Rate	Amount
<p><u>SECTION NO 6</u></p> <p><u>BILL NO. 1</u></p> <p><u>OCCUPATIONAL HEALTH & SAFETY</u> <u>(PROVISIONAL)</u></p> <p><u>PREAMBLES</u></p> <p>All prices/rates to be net, excluding Value Added Tax</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Disaster Management Act: Regulations: Alert during Corona virus COVID-19 lock down</u></p> <p>i) The following is an extraction from the original gazetted Alert regulations. Amendments as gazetted in Gazette are indicated as follows - changes. Amendments as gazetted as follows - changes as detailed in the website indicated hereunder https://www.gov.za/Coronavirus</p> <p>Occupational Health and Safety Act of the Construction Regulation (2014), it is the Client's obligation that the cost for health & safety has been provided for by the Contractor, before appointment. Due to the Disaster Management Act and Regulation (Act nr. 57 of 2002)</p> <p>On behalf of the Client, we require the following health & safety to be included by the Principal Contractor for OHS & COVID-19 be made very clear that these are just some of the health & safety be included in the tender pricing. It is duty of the Principal Contractor to ensure that all aspects of the Occupational health & safety Act 85/1993 and construction regulation and additional costs in terms of COVID-19 Legal Requirements are costed for.</p>			
<p>Carried to Collection</p>			<p>R</p>
<p>Section No. 6 Bill No 1 - Occupational Health and Safety LDPW-B/20150</p>			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

<u>SUPPLY OF ALL ITEMS OF PERSONAL PROTECTIVE CLOTHING/EQUIPMENT & ENSURE USE THEREOF FOR FULL COMPLIANCE (INCLUDING COVID-19 COMPLIANCE PPE)</u>			
1	Overalls (2 x Sets per person)	Item	
2	Safety goggles: COVID-19 testing personnel (2 x Sets per person)	Item	
3	Full face shields for First Aider & Screening officer	Item	
4	3 Layered cloth masks (2 x per person)	Item	
5	"FFP2" Dust Mask	Item	
6	Ear plugs (2 x Sets per person)	Item	
7	Hand gloves (2 x Sets per person)	Item	
8	Personal fall arrest and rescue equipment with and including life lines and associated equipment's	Item	
9	Safety harnesses	Item	
10	Scaffolding	Item	
<u>BARRICADING: SUPPLY AND INSTALL, INCLUDING REMOVAL UPON COMPLETION TO ENSURE FULL COMPLIANCE TO LEGISLATION (CR 13 EXCAVATIONS)</u>			
11	Rigid type barricading (open trenches) orange netting - droppers 2.2m high and at 2m intervals	m	200
12	Temporary galvanised mesh fence 1.8m high barricading along perimeter of excavated	m	200
13	Contractor site camp facility fence 1.8m bonox fence (80% green shade net)	m	80
14	Extra over for vehicular gate	No	1
15	Extra over for pedestrian gate	No	1
Carried to Collection			R
Section No. 6 Bill No 1 - Occupational Health and Safety LDPW-B/20150			

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

16	Fencing of waste disposal area: Green netting 1.8m high at 80% green shade net bonox fence	m	80		
<u>OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION</u>					
17	Development of a Site Specific Health and Safety Plan, Hazard and Risk Assessment by a Competent qualified person, including Risks for COVID-19 to the approval of the Principal Agent.		Item		
18	Development of Fall Protection and Rescue Plan by a competent and qualified Fall Protection Plan Developer to the approval of the Principal Agent		Item		
19	Competent and qualified Occupational Health and Safety Officer SACPCMP registered (Full time on site)	Month	12		
20	Health and Safety Training		Item		
21	First Aider (Level 1)		Item		
22	SHE REP training		Item		
23	Working at heights training		Item		
24	Covid-19 Compliance Office Training		Item		
25	Scaffold erection/inspection		Item		
<u>EMPLOYEES MEDICALS: CR 7(1)(G)</u>					
26	Medical from Occupational Practitioner on annexure 3 format - including COVID-19 medical questionnaire		Item		
<u>ACCESS CONTROL: COVID-19 SCREENING</u>					
27	Screening officer full time access/COVID-19	Month	12		
28	Security officer full time access control	Month	12		
29	Tables		Item		
30	Chairs		Item		
Carried to Collection				R	
Section No. 6 Bill No 1 - Occupational Health and Safety LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

31	Stationery		Item		
32	Thermometer	No	2		
33	Hand sanitizer access point	No	4		
34	Isolation area (4 x 3m) at access control point: Shade net structure well ventilated with signage	No	1		
<u>WORKERS WELFARE FACILITIES</u>					
35	Toilet facilities (chemical) 1:30 1 x each gender with personnel hand sanitizer for each toilet and a wash hand basin including maintenance.	No	2		
36	Shade netting staggered eating area structure	No	1		
37	Chairs (Social distancing of 1.5m apart)		Item		
38	Tables		Item		
39	20 Litre 2 x bins at eating area (Biological waster)	No	2		
40	Wash hand basin including pump action soap dispenser and maintenance thereof	No	1		
41	Paper towel dispenser including maintenance thereof	No	12		
42	Changing area including lockers for each gender		Item		
<u>OTHER EQUIPMENT: COVID-19 COMPLIANCE</u>					
43	Hand sanitizer (70% alcohol based) and refills	I	50		
44	Disinfectant applied by knapsack sprayer for tools, offices, screening area for the construction period		Item		
45	Hand wash point at working area		Item		
46	First Aid kits	No	2		
47	20L Waste bins (biological waste, domestic waste) lined with plastic bags (waste management)	No	4		
Carried to Collection				R	
Section No. 6					
Bill No 1 - Occupational Health and Safety					
LDPW-B/20150					

**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

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**COMPLETION OF LIBRARY INCLUDING ELECTRICAL,
MECHANICAL INSTALLATION AND ASSOCIATED EXTERNAL WORKS
AT TSHAULU, VHEMBE DISTRICT**

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	Section 1 - Preliminaries	103	
2	Section 2 - Buildings	197	
3	Section 3 - External Works	295	
4	Section 4 - Electrical Installations	322	
5	Section 5 - Mechanical Works	348	
6	Section 6 - Occupational Health and Safety	354	
	Sub Total 1 - BUILDING COSTS		R
	<u>CONTINGENCY SUM</u>		
	Allow the amount of R 350,000.00 (Three hundred and Fifty thousand rands) for Contingencies to be used as directed by the Principal Agent	Item	350 000.00
	Sub Total 2 - BUILDINGS (VAT excl.)		R
	Value Added Tax (15%)		R
	Sub Total (VAT INCL.) CARRIED TO TENDER FORM		R
	Carried to Form of Tender		R
	LDPW-B/20150		

PART C3 SCOPE OF WORKS

PART C3.1: SPECIAL NOTES TO BIDDERS

The following special conditions are for compliance and attention to bidders:

- 1.1. LDPWR&I reserve the right to call interviews with short-listed bidders before final selection.
- 1.2. LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.
- 1.3. LDPWR&I reserve the right to appoint the bidder that proves to be fully capable and qualified to handle and execute the job.
- 1.4. The proposals submitted must be in line with the detailed specification.
- 1.5. LDPWR&I reserve the right to cancel or withdraw this bid if:
 - i. Due to changed circumstances, there is no longer a need for this services; or
 - ii. Funds are no longer available to cover the total envisaged expenditure; or
 - iii. No acceptable bids are received; or
 - iv. There is a material irregularity in the Bid process.
- 1.6. In the case of sub-contracting or joint venture agreement, LDPWR&I will enter into a single contract with the principal bidder.
- 1.7. Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.
- 1.8. Any completion of the bid document in pencil or erasable ink will not be acceptable and will automatically disqualify the submitted bid.
- 1.9. Successful bidder will be required to sign and enter into a formal contract upon the award.
- 1.10. Notwithstanding shortcomings and/or inconsistencies, if any, in this specification, which is only a minimum specification, a bidder shall make provision for a complete solution that will deliver the required service efficiently and cost-effectively.
- 1.11. Bid documents must be submitted physically to the closing address as reflected on the Request for Quotations/Tender.
- 1.12. Quotations received after the closing date and time will not be accepted for consideration.
- 1.13. This request for bid document contains confidential information about LDPWR&I, which has been provided to supply potential bidders with the data necessary to provide a holistic response.
- 1.14. No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of LDPWR&I.
- 1.15. Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.
- 1.16. References to LDPWR&I must not be made in any literature, promotional material, and brochures or sales presentations without the express written consent of LDPWR&I.



PART C3.2: OHS SPECIFICATIONS

PART C4 SITE INFORMATION



C4.1 DRAWINGS