

PROVISIONAL BILLS OF QUANTITIES

FOR

**NEW INFRASTRUCTURE AT MBIZANA REDHUB FOR THE POTATO
SORTING MACHINE**

FOR

ECRDA

ARCHITECTS

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BILL NO. 1

PRELIMINARIES

BUILDING AGREEMENT AND PRELIMINARIES

CPAP Work group No. 190 Unless Otherwise stated

MEANING OF TERM" TENDER / TENDERER"

Any reference to the words:Tender" or Tenderer herein and/or in any other documentation shall be constructed to have the same meaning as the words "BID" or "Bidder"

PRELIMINARIES

The JBCC

Preliminaries code 2013, May 2005 Edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 2101, march 2005 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intend and meaning of each clause. These clauses are referred to by number and heading only. Where standard clauses or option are not applicable to the contract such modifications aor corrections as are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked. "N/A" signifying "Not Applicable".

PRICING OF PRELIMINARIES

Should the contractor select Option A in the contract data for the adjustment of preliminaries , the amounts entered against the relevant items in these preliminaries are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)

SECTION A: PRINCIPAL BUILDING AGREEMENT

Interpretation

1 Clause 1.0 - Definitions and interpretation

Definition of agreement

The definition of agreement is replaced with the following definition :

'AGREEMENT : The JBCC Principal Building Agreement, the completed JBCC PBA contract data, the contract drawings, the priced documents and any other documents reduced to writing and signed by the parties'

Pricing of bills of quantities

The contractor is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement . Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities

Carried to Collection

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		Amount
2	<p>Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the contractor's omission to price any item will be entertained</p> <p>Prices for all construction equipment, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary</p> <p>Abbreviated descriptions</p> <p>The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice</p> <p>Legal status of contractor</p> <p>If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:</p> <ol style="list-style-type: none"> 1. These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement 2. These persons shall notify the employer of their leader who has authority to bind the contractor and each of these persons 3. The contractor shall not alter its composition or legal status without the prior written consent of the employer <p>Errata by JBCC</p> <p>Omit from definition of construction period the words : 'excluding annual holiday periods' Omit from definition of preliminaries the word : 'priced'</p>	
	<p>Clause 2.0 - Law, regulations and notices</p> <p>Health and safety</p> <p>Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification</p> <p>Health and safety of clause 2.0, the contractor's Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 specifically stated</p> <p>The contractor shall:</p> <ol style="list-style-type: none"> 1. Comply with the health and safety specification for the works 2. Prepare and agree with the health and safety consultant the health and safety plan for the works 	Item
Carried to Collection		R

		Amount
3	3. Co-operate with the health and safety consultant in all respects	
	4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification	
	5. Conform to the conditions contained in the employer's safety specification	Item
3	Clause 3.0 - Offer and acceptance	Item
4	Clause 4.0 - Assignment and cession	Item
5	Clause 5.0 - Contract documents	
	Value Added Tax	
	Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT)	
	The contract drawings are to be listed in the contract data. If insufficient space is available for such listing or for any other reason then reference should be made in the contract data as to where the contract drawings are listed.	
	Electronic issue of drawings	
	All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically	Item
	2.2.20 On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]	
	?3. Civil and structural engineer	
	User note	
	Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent	
	Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA	
	3.1 Duties : The civil and structural engineer is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works	
	3.2 Contract instructions [17.0] :	
	3.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement	
	3.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works	
	3.2.3 The site [13.2.4]	
	3.2.4 Compliance with the law , regulations and bylaws [2.1]	
	3.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works	
	Carried to Collection	R

Amount

<p>3.2.6 Opening up of work for inspection, removal or re-execution</p> <p>3.2.7 Removal or re-execution of work</p> <p>3.2.8 Removal or substitution of any materials and goods</p> <p>3.2.9 Protection of the works</p> <p>3.2.10 Making good physical loss and repairing damage to the works [8.0]</p> <p>3.2.11 Rectification of defects [21.2]</p> <p>3.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>3.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums</p> <p>3.2.14 Appointment of a subcontractor [14.0; 15.0]</p> <p>3.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]</p> <p>3.2.16 Work by (a) direct contractor (s) [17.0]</p> <p>3.2.17 Access by other or previous contractors to remedy defective work</p> <p>3.2.18 Removal from the site of any person employed on the works</p> <p>3.2.19 Removal from the site of any person not engaged on or connected with the works</p> <p>3.2.20 On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]</p> <p>24. Mechanical engineer</p> <p>User note</p> <p>Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent</p> <p>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</p> <p>4.1 Duties : The mechanical engineer is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works</p> <p>4.2 Contract instructions [17.0] :</p> <p>4.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement</p> <p>4.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>4.2.3 The site [13.2.4]</p> <p>4.2.4 Compliance with the law , regulations and bylaws [2.1]</p> <p>4.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works</p>	<p>Carried to Collection</p> <p>R</p>
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<p>4.2.6 Opening up of work for inspection, removal or re-execution</p> <p>4.2.7 Removal or re-execution of work</p> <p>4.2.8 Removal or substitution of any materials and goods</p> <p>4.2.9 Protection of the works</p> <p>4.2.10 Making good physical loss and repairing damage to the works [8.0]</p> <p>4.2.11 Rectification of defects [21.2]</p> <p>4.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>4.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums</p> <p>4.2.14 Appointment of a subcontractor [14.0; 15.0]</p> <p>4.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]</p> <p>4.2.16 Work by (a) direct contractor (s) [17.0]</p> <p>4.2.17 Access by other or previous contractors to remedy defective work</p> <p>4.2.18 Removal from the site of any person employed on the works</p> <p>4.2.19 Removal from the site of any person not engaged on or connected with the works</p> <p>4.2.20 On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]</p> <p>?5. Electrical engineer</p> <p>User note</p> <p>Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent</p> <p>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</p> <p>5.1 Duties : The electrical engineer is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works</p> <p>5.2 Contract instructions [17.0] :</p> <p>5.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement</p> <p>5.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>5.2.3 The site [13.2.4]</p> <p>5.2.4 Compliance with the law , regulations and bylaws [2.1]</p> <p>5.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works</p>	
Carried to Collection	R

Amount

<p>5.2.6 Opening up of work for inspection, removal or re-execution</p> <p>5.2.7 Removal or re-execution of work</p> <p>5.2.8 Removal or substitution of any materials and goods</p> <p>5.2.9 Protection of the works</p> <p>5.2.10 Making good physical loss and repairing damage to the works [8.0]</p> <p>5.2.11 Rectification of defects [21.2]</p> <p>5.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>5.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums</p> <p>5.2.14 Appointment of a subcontractor [14.0; 15.0]</p> <p>5.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]</p> <p>5.2.16 Work by (a) direct contractor (s) [17.0]</p> <p>5.2.17 Access by other or previous contractors to remedy defective work</p> <p>5.2.18 Removal from the site of any person employed on the works</p> <p>5.2.19 Removal from the site of any person not engaged on or connected with the works</p> <p>5.2.20 On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]</p> <p>?7. Wet Services engineer</p> <p>User note</p> <p>Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent</p> <p>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</p> <p>7.1 Duties : The electrical engineer is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works</p> <p>7.2 Contract instructions [17.0] :</p> <p>7.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement</p> <p>7.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>7.2.3 The site [13.2.4]</p> <p>7.2.4 Compliance with the law , regulations and bylaws [2.1]</p> <p>7.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works</p>	
Carried to Collection	R

Amount

<p>7.2.6 Opening up of work for inspection, removal or re-execution</p> <p>7.2.7 Removal or re-execution of work</p> <p>7.2.8 Removal or substitution of any materials and goods</p> <p>7.2.9 Protection of the works</p> <p>7.2.10 Making good physical loss and repairing damage to the works [8.0]</p> <p>7.2.11 Rectification of defects [21.2]</p> <p>7.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>7.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums</p> <p>7.2.14 Appointment of a subcontractor [14.0; 15.0]</p> <p>7.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]</p> <p>7.2.16 Work by (a) direct contractor (s) [17.0]</p> <p>7.2.17 Access by other or previous contractors to remedy defective work</p> <p>7.2.18 Removal from the site of any person employed on the works</p> <p>7.2.19 Removal from the site of any person not engaged on or connected with the works</p> <p>7.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0]</p> <p>?8. Health and safety consultant</p> <p>User note</p> <p>Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent</p> <p>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</p> <p>8.1 Duties : The health and safety consultant is responsible for all aspects of health and safety of the works.</p> <p>Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions</p> <p>8.1.1 Act as the employer's agent in terms of Construction Regulations issued in terms of the Occupational Health and Safety Act,1993</p> <p>8.1.2 Prepare and update the health and safety specification for the works</p> <p>8.1.3 Agree with the contractor the health and safety plan for the works</p> <p>8.1.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the Act and Regulations</p> <p>8.1.5 Stop the execution of the works where the agreed specification or plan is not adhered to</p> <p>Carried to Collection</p>	<p>Item</p> <p>R</p>
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Amount

6 Clause 6.0 - Employer's agents

Delegated authority

The authority of the principal agent to issue contract instructions and perform duties for specific aspects of the works.

1.1 Duties : The architect is responsible for the architectural design, functional design and quality inspection of the works

1.2 Contract instructions

1.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement

1.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works

1.2.3 The site [13.2.4]

1.2.4 Compliance with the law , regulations and bylaws [2.1]

1.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works

1.2.6 Opening up of work for inspection, removal or re-execution

1.2.7 Removal or re-execution of work

1.2.8 Removal or substitution of any materials and goods

1.2.9 Protection of the works

1.2.10 Making good physical loss and repairing damage to the works [8.0]

1.2.11 Rectification of defects [21.2]

1.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion

1.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums

1.2.14 Appointment of a subcontractor [14.0; 15.0]

1.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]

1.2.16 Work by (a) direct contractor (s) [17.0]

1.2.17 Access by other or previous contractors to remedy defective work

1.2.18 Removal from the site of any person employed on the works

1.2.19 Removal from the site of any person not engaged on or connected with the works

1.2.20 On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]

? 2. Quantity surveyor

User note

Carried to Collection

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		Amount
	<p>Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent</p> <p>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</p> <p>2.1 Duties : The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works</p> <p>2.2 Contract instructions [17.0] :</p> <p>2.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement</p> <p>2.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>2.2.3 The site [13.2.4]</p> <p>2.2.4 Compliance with the law , regulations and bylaws [2.1]</p> <p>2.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works</p> <p>2.2.6 Opening up of work for inspection, removal or re-execution</p> <p>2.2.7 Removal or re-execution of work</p> <p>2.2.8 Removal or substitution of any materials and goods</p> <p>2.2.9 Protection of the works</p> <p>2.2.10 Making good physical loss and repairing damage to the works [8.0]</p> <p>2.2.11 Rectification of defects [21.2]</p> <p>2.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>2.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums</p> <p>2.2.14 Appointment of a subcontractor [14.0; 15.0]</p> <p>2.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]</p> <p>2.2.16 Work by (a) direct contractor (s) [17.0]</p> <p>2.2.17 Access by other or previous contractors to remedy defective work</p> <p>2.2.18 Removal from the site of any person employed on the works</p> <p>2.2.19 Removal from the site of any person not engaged on or connected with the works</p>	
	7 Clause 7.0 - Design responsibility	Item
	<u>Insurance and security</u>	
8	Clause 8.0 - Works risk	Item
Carried to Collection		R

		Amount	
9	Clause 9.0 - Indemnities	Item	
10	Clause 10.0 - Insurances	Item	
11	<p>Clause 11.0 - Security</p> <p>User note</p> <p>If it is deemed advisable, the EXTENT of any security for payment may be stated as follows:</p> <p>?Security for payment</p> <p>The employer shall provide to the contractor security for payment in the amount of ? Rand (R) ? [11.4.1, 11.10] ?</p> <p>User note</p> <p>Where it is expected of the contractor to waive his lien in terms of clause 11.10, the waiver of lien may be extended to subcontracts as follows:</p> <p>? Extension of waiver of lien</p> <p>The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10] ?</p> <p>Errata by JBCC</p> <p>Clause 11.5</p> <p>Replace "ten (10)" with "five (5)"</p>	Item	
	<u>Execution</u>		
12	<p>Clause 12.0 - Duties of the parties</p> <p>Provisions of clauses 12.1.2 to 12.1.6 and 12.2.18</p> <p>Refer to the contract data, the Preliminaries document and "Section B : Preliminaries" of this Bill No. 1 with reference to the provisions of clauses 12.1.2 to 12.1.6 and 12.2.18 of the JBCC Principal Building Agreement</p> <p>? Office accommodation</p> <p>The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18] ?</p> <p>? Notice board</p> <p>The contractor shall erect in a position approved by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor, and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for such notice boards to be erected [12.2.18] ?</p> <p>User note</p>		
Carried to Collection		R	

		Amount
<p>Clause 12.1.5 requires the employer to identify access to water, sewer, stormwater and/or electricity connections to the site.</p> <p>Should such information be available then it is to be stated here or in the contract data in detail with a suitable heading in bold.</p> <p>Reference as [12.1.5]. The user should, however, note that clauses 8.1 and 8.2 of the Preliminaries state that the employer</p> <p>does not warrant that any water or electricity supplies that may exist are adequate for the proper execution of the works. Any</p> <p>ambiguity in this respect is to be dealt with</p> <p>Should access to water, sewer, stormwater and/or electricity connections not be identifiable due to such information not being available or the specific requirements of the contractor cannot be determined, then the following clause may be considered in which event a qualified tender may be expected</p> <p>? Access to water, sewer, stormwater and electricity connections</p> <p>The employer is not in a position to identify access to water, sewer, stormwater and/or electricity connections to the site as may be suitable for the execution of the works. The contractor is to allow what he considers to be required and is to qualify his tender in detail in this regard, failing which it shall be taken that the contractor has allowed what will be required for the execution of the works. In such case no claims for additional cost or loss shall be entertained [12.1.5] ?</p> <p>Statutory and other notices</p> <p>User note</p> <p>Statutory and other notices which the contractor must submit and/or comply with before possession of the site can be given are to be stated here or in the contract data. Reference [12.1.6]</p> <p>If specific information is not available then the user may consider a clause along the following lines</p> <p>? The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor. The contractor shall pay all deposits or fees in this regard [12.1.6]</p> <p>It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto ?</p> <p>Errata by JBCC</p> <p>Clause 12.2.17 Omit the words "[CD] within ten (10) working days"</p>		
13	Clause 13.0 - Setting out	Item
14	Clause 14.0 - Nominated subcontractor	Item
15	Clause 15.0 - Selected subcontractors	Item
16	Clause 16.0 - Direct contractors	
	Attendance on direct contractors	
Carried to Collection		R

		Amount
In respect of direct contractors the contractor shall:		
1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials		
2. Allow the use of personnel welfare facilities, where provided		
3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation		
4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right while it remains erected on the site [16.1]		
Errata by JBCC		
Clause 16.1.3 Reference should read "[26.5]"		Item
17	Clause 17.0 - Contract instructions	
Site instructions		
Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor.		Item
<u>Completion</u>		
18	Clause 18.0 - Interim completion	Item
19	Clause 19.0 - Practical completion	Item
20	Clause 20.0 - Sectional completion	Item
21	Clause 21.0 - Defects liability period and final completion	Item
22	Clause 22.0 - Latent defects liability period	Item
23	Clause 23.0 - Revision of date for practical completion	
Substitution of materials and goods		
The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value.		Item
24	Clause 24.0 - Penalty for late or non-completion	Item
<u>Payment</u>		
25	Clause 25.0 - Payment	
Materials and goods prematurely on site		
Materials and goods brought onto the site prematurely shall not be authorised for payment		
Materials and goods stored off site		
Materials and goods stored off site shall not be authorised for payment		
Materials and goods stored off site		
Carried to Collection		R

		Amount
26	<p>Materials and goods stored off site shall be authorised for payment subject to a guarantee for advance payment being provided to the employer</p> <p>Fluctuations in costs</p> <p>All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor</p> <p>Prices submitted</p> <p>Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing</p>	Item
	<p>Clause 26.0 - Adjustment of the contract value and final account</p> <p>User note</p> <p>Insert the following where tenant installations/users requirements may be delayed or omitted</p> <p>? Tenant installations/users requirements delayed</p> <p>There is a possibility that certain works related to tenant installations/users requirements may have to be delayed and may consequently not be executed prior to practical completion</p> <p>The employer reserves the right to omit such work without compensation to the contractor for loss of profit or any other loss which the contractor may suffer as a result of such omission</p> <p>Should the contractor be instructed to do so he shall execute this work under the conditions pertaining to this agreement on the basis that a separate amount for preliminaries appurtenant to this work (if applicable) is agreed to between the contractor and the principal agent and on condition that instruction to</p> <p>proceed with such work is given to him within a period of three (3) calendar months after the date of practical completion of the works ?</p> <p>Cost of claims</p> <p>All costs incurred by the contractor in the preparation of claims shall be borne by the contractor. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [30.6,7] from making a determination on costs</p> <p>The contractor shall review, assess and adjudicate any claims received by him from any subcontractor and thereafter submit same to the principal agent with a recommendation in order to assist the principal agent in adjudicating the claim [26.6]</p> <p>Errata by JBCC</p> <p>Clause 26.4.2 Omit the entire clause and renumber thereafter</p> <p>New clause 26.4.3 "Other proven or unavoidable costs"</p>	Item
Carried to Collection		R

		Amount	
27	<p>Clause 27.0 - Recovery of expense and/or loss</p> <p><u>Suspension and termination</u></p>	Item	
28	<p>Clause 28.0 - Suspension by the contractor</p> <p>Errata by JBCC</p> <p>New clause 28.1.5 and renumber thereafter "Or where an agent has failed to act in terms of this agreement [6.4] Clause 28.2 Replace the word "defect" with "default" in the first line</p>	Item	
29	<p>Clause 29.0 - Termination</p> <p>Errata by JBCC</p> <p>Clause 29.1.2 Delete the words : "within the period stated [CD]"</p> <p>Clause 29.14.1 Change as follows : "Provide or maintain a guarantee for payment.....[11.4 - 5]"</p> <p>Clause 29.14.2 Reference should read "[12.1.7]"</p> <p>New clause 29.14.8 "Or where an agent has failed to act in terms of this agreement [6.4]"</p> <p><u>Dispute resolution (A30)</u></p>	Item	
30	Clause 30.0 - Dispute resolution	Item	
31	<p>Agreement</p> <p>The second sentence of the introduction where the parties sign the agreement, namely "Any provision in this agreement..... acceptance by such subcontractor at any time." is deemed to be deleted</p> <p>The required information of the parties and the amount of the contract sum shall be inserted in the agreement for signature of the agreement by the parties</p>	Item	
32	<p>Contract data</p> <p>Payment of preliminaries</p> <p>Where Option B is applicable and the initial construction period is extended the monthly charge shall be recalculated on the same basis as was initially applied but taking into account the revised construction period and the amounts already paid to the contractor [CD26.0]</p> <p>Adjustment of preliminaries</p> <p>Where the adjustment of preliminaries is in terms of Option A, the construction period and the initial construction period shall be calculated in working days [CD 26.0]</p> <p>Where the adjustment of preliminaries is in terms of Option A and sectional completion is required, the contractor shall provide the principal agent with the division of the categorised amounts into sections. Should the contractor fail to provide such information within the period stipulated, the categorised amounts shall be prorated to the value of each section [CD 26.0]</p>		
Carried to Collection		R	

		Amount
<p>Where the adjustment of preliminaries is required in terms of Option B and sectional completion is required, the contractor shall provide the principal agent with details of the resources required for each section and those that are common to sections. Should the contractor fail to provide such information within the period stipulated, Option A shall apply [CD 26.0]</p> <p>User note</p> <p>Where removal of lateral support insurance is required and stated as such in the contract data for the employer to insure, it is to be noted that it may appear under "no" for the employer to insure where the contractor is to take out the other insurances. In such a case the following clause is to be inserted</p> <p>Removal of lateral support insurance</p> <p>Whilst it is stated in clause 10.0 of the contract data that the employer will not be responsible for works and other insurances the employer shall nevertheless be responsible for the removal of lateral support insurance in the amount stated ?</p> <p>User note</p> <p>Refer to the user note on page 2 of this Bill No 1 (Preliminaries) and insert the proposed clause in the space provided in the contract data where changes made to the JBCC documentation is to be recorded should the user wish to adhere to the system of inserting amendments, modifications, corrections or supplements to the JBCC documentation under the listed clause headings in this Bill No 1 (Preliminaries)</p> <p>Tenderer's selection</p> <p>Before submission of his tender the contractor is to complete the tenderer's selection in the contract data</p> <p>User note</p> <p>All information for the above requires consultation with the contractor. The principal agent should not pre-select any of the alternatives available to the contractor</p> <p>Note 4 on page 10 of the contract data</p> <p>Note 4 on page 10 of the contract data which relates to any benefit or right in favour of any subcontractor shall be deemed to be deleted</p>		
<u>SECTION B: PRELIMINARIES</u>		
<u>Interpretation</u>		
33	Clause 1.1 - Definitions	Item
34	Clause 1.2 - Interpretation	Item
<u>Documents</u>		
35	Clause 2.1 - Checking of documents	Item
36	Clause 2.2 - Provisional bills of quantities	
User Note		
Carried to Collection		R

		Amount	
	<p>Check 'wet trades' included in the bills of quantities and edit the following clause as may be necessary</p> <p>? Multiple procurement</p> <p>These bills of quantities are in multiple procurement format ie the 'wet trades' - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally (fully?) measured and the subsequent trades are budgetary allowances and/or provisional sums ?</p>	Item	
37	<p>Clause 2.3 - Availability of construction information</p> <p>? Budgetary allowances and provisional sums</p> <p>The budgetary allowances ?and/or provisional sums ? allocated for subsequent trades included in this agreement will be separately procured, based on multiple procurement of subcontractors during the construction period ?</p>	Item	
38	<p>Clause 2.4 - Ordering of materials and goods</p> <p><u>Previous work and adjoining properties</u></p>	Item	
39	Clause 3.1 - Previous work - dimensional accuracy	Item	
40	Clause 3.2 - Previous work - defects	Item	
41	Clause 3.3 - Inspection of adjoining properties	Item	
	<u>The Site</u>		
42	Clause 4.1 - Defined works area	Item	
43	Clause 4.2 - Handover of site in stages	Item	
44	Clause 4.3 - Enclosure of the works	Item	
45	Clause 4.4 - Geotechnical investigation	Item	
46	Clause 4.5 - Encroachments	Item	
47	Clause 4.6 - Existing premises occupied	Item	
48	Clause 4.7 - Services - known	Item	
49	Clause 4.8 - Protection of trees and/or relevant natural features	Item	
	<u>Management of Contract (B5)</u>		
50	Clause 5.1 - Management of the works	Item	
51	Clause 5.2 - Progress meetings	Item	
52	Clause 5.3 - Technical meetings	Item	
	<u>Samples, shop drawings and manufacturer's instructions (B6)</u>		
53	Clause 6.1 - Samples of materials	Item	
Carried to Collection		R	

		Amount
54	Clause 6.2 - Workmanship samples	Item
55	Clause 6.3 - Shop drawings	Item
56	Clause 6.4 - Compliance with manufacturer's instructions	Item
	<u>Deposits and fees (B7)</u>	
57	Clause 7.1 - Deposits and fees	Item
	<u>Temporary services (B8)</u>	
58	Clause 8.1 - Water	Item
59	Clause 8.2 - Electricity	Item
60	Clause 8.3 - Ablution and welfare facilities	Item
61	Clause 8.4 - Communication facilities	Item
	<u>Prime cost amounts (B9)</u>	
62	Clause 9.1 - Responsibility for prime cost amounts	
	User note	
	Where details of materials included in prime cost amounts are NOT readily available and it is therefore not possible for the contractor to price for waste, the relevant prime cost amount shall be inserted in the bills of quantities as a lump sum with the contractor being given the opportunity to separately price his overheads and profit and for taking delivery, etc as called for in this clause 9.1 of the preliminaries. In such case the fixing only or installation only of the relevant materials shall be provisionally measured for the contractor to price and shall be re-measured upon completion	
	Where details of materials for which prime cost amounts are to be allowed ARE readily available, the quantity surveyor may elect to insert the relevant prime cost amount in measured items, which measured items shall contain sufficient detail for the contractor to price for fixing and installation, waste, etc	Item
	<u>Attendance on subcontractors (B10)</u>	
63	Clause 10.1 - General attendance	
	User note	
	General attendance is defined as being the duties of the contractor in terms of clause 12.2 of the JBCC n/s subcontract agreement	Item
64	Clause 10.2 - Special attendance	
	User note	
	Insert details after the provisional sums (nominated or selected subcontract amount) for any special attendance where specifically required for each subcontractor separately	
Carried to Collection		R

		Amount
<p>It is important to note that general attendance only requires the contractor to 'permit the subcontractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right while it remains erected on the site' (refer to 12.2.13 of the JBCC n/s subcontract agreement). Many subcontractors qualify their tenders to exclude scaffolding and/or hoisting facilities. Especially scaffolding could be an expensive item and it may be necessary in order to avoid claims to require the contractor to provide for the extended use of scaffolding for specific subcontracts within a description of 'special attendance' in the applicable bill</p>		Item
<u>General (B11)</u>		
65	Clause 11.1 - Protection of the works	Item
66	Clause 11.2 - Protection/isolation of existing/sectionally occupied works	Item
67	Clause 11.3 - Security of the works	Item
68	Clause 11.4 - Notice before covering work	Item
69	Clause 11.5 - Disturbance	Item
70	Clause 11.6 - Environmental disturbance	Item
71	Clause 11.7 - Works cleaning and clearing	Item
72	Clause 11.8 - Vermin	Item
73	Clause 11.9 - Overhand work	Item
74	Clause 11.10 - Tenant installations by direct contractors	Item
75	Clause 11.11 - Advertising	Item
<u>Preliminaries Schedule</u>		
76	Information for completion of schedule	
<p>Information necessary for elections and completion of those clauses contained in the preliminaries schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract</p> <p>12.1 - Provisional bills of quantities [2.2] The quantities are provisional ? Yes/No ?</p> <p>12.2 - Availability of construction information [2.3] Construction documentation is complete? Yes/No ?</p> <p>12.3 - Previous work - dimensional accuracy [3.1]</p> <p>12.4 - Previous work - defects [3.2]</p> <p>12.5 - Inspection of adjoining properties [3.3]</p> <p>12.6 - Defined works area [4.1]</p> <p>User Note</p>		
Carried to Collection		R

Amount

Describe the restrictions to the site or areas that the contractor may not occupy. Reference as [PBA 12.1.4]		
12.7 - Handover of site in stages [4.2]		
User note		
Describe in detail where handover of the site to the contractor is done in stages		
12.8 - Enclosure of the works [4.3]		
12.9 - Geotechnical investigation [4.4]		
User note		
Insert the following clause should a geotechnical investigation report be available and insert the following annexure		
?Refer to Annexure ? For the results of a geotechnical investigation report ?		
12.10 Existing premises occupied [4.6]		
User note		
If the existing premises are occupied state it here and describe the detail and/or specific requirements. Reference as [PBA 12.1.2]		
12.11 - Services - known [4.7]		
User note		
Insert details should the contractor be responsible for the preservation of known services. Reference as [PBA 12.1.3]		
12.12 - Protection of trees and/or relevant natural features [4.8]		
User note		
Expand clause 4.8 of the Preliminaries should there be specific requirements for the preservation of trees or relevant natural features. Reference as [PBA 12.1.3]		
12.13 - Water [8.1]		
Option A (by contractor) ? Yes/No ?		
Option B (by employer - free of charge) ? Yes/No ?		
Option C (by employer - metered) ? Yes/No ?		
12.14 - Electricity [8.2]		
Option A (by contractor) ? Yes/No ?		
Option B (by employer - free of charge) ? Yes/No ?		
Option C (by employer - metered) ? Yes/No ?		
12.15 - Ablution and welfare facilities [8.3]		
Option A (by contractor) ? Yes/No ?		
Option B (by employer) ? Yes/No ?		
12.16 - Communication facilities [8.4]		
12.17 - Protection of the works [11.1]		
Carried to Collection	R	

		Amount
77	<p>12.18 - Protection/isolation of existing/sectionally occupied works [11.2] Protection/isolation is required ? Yes/No ?</p> <p>12.19 - Disturbance [11.5] User note The following clause may be used should "disturbance" [11.5] need to be extended ? All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever ?</p> <p>12.20 - Environmental disturbance [11.6] ? Controlling all forms of pollution The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due inter alia to noise, artificial light, wind-blown sand, dust, deposits of mud, etc The contractor is to ensure that all roads which border the site and is used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works ? ? Environmental management plan The employer has prepared an environmental management plan (EMP) (refer to Annexure ? for a copy of the relevant plan). The contractor shall price opposite this item for compliance with all the requirements of such EMP ?</p> <p><u>SECTION C: SPECIFIC PRELIMINARIES</u> User note Users shall avoid inserting in Section C items which may be construed as amending, modifying, correcting or supplementing the provisions of the JBCC Principal Building Agreement. Such amendments, modifications, corrections or supplements should be kept to the absolute minimum and should be inserted in the space provided in the contract data or in a single referenced annexure as stipulated in the contract data or, when taking into account the methodology suggested in the user note on page 2 of this Bill No. 1, should be inserted in Section A under the recited clause headings of the JBCC Principal Building Agreement in this Bill No. 1 User note : Selected examples of typical clauses are provided to indicate ways of describing such clauses. Users must delete, adapt or add to these examples to suit their particular circumstances</p> <p><u>Specific Preliminaries</u> Warranties for materials and workmanship</p>	<p>Item</p> <p>R</p>
	Carried to Collection	

		Amount
	<p>Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or doing the work and shall deliver same to the principal agent on the final completion of the contract</p> <p>The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so.</p> <p>The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor</p>	
78	<p>Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer</p>	Item
79	<p>Co-operation of the contractor for cost management</p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget</p>	Item
80	<p>Overloading</p> <p>The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense</p>	Item
81	<p>Propping of floors below</p> <p>The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor</p>	Item
82	<p>Testing of flat roof waterproofing for watertightness</p>	
Carried to Collection		R

		Amount
	Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent , flooded with water and kept 'ponde for at least forty (40) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing	Item
83	Green star building certification	
	User note	
	Insert the provisions called for by the relevant green star consultant should it be a requirement that the project be submitted for green star certification	Item
84	Broad based black economic empowerment (BBBEE)	
	Tenders submitted will be evaluated taking into account their empowerment rating	
	The employer will be monitoring the black economic empowerment status of the contractor throughout the execution of the works	
	The contractor is to submit to the principal agent on an annual basis a schedule of spend, split into vendors engaged as subcontractors and suppliers indicating their BBBEE rating including proof of the said rating	Item
85	Advertising rights	
	The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. Position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in the meeting of his obligations under this agreement	Item
86	Confidentiality	
	The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works	
	No information regarding this project shall be published or disclosed without the prior written consent of the employer	Item
87	Media releases	
	All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer	
	The contractor together with his subcontractors shall not, without the prior written consent of the employer, cause any statement or advertisement to be printed, screened or aired by the media	Item
<u>SUMMARY OF CATEGORIES</u>		
Category : Fixed R..... Category : Value R.....		
Category : Time R.....		
Carried to Collection		R

		Amount
<u>BILL NO. 1</u>		
<u>PRELIMINARIES</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	1	
	2	
	3	
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Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 2</u>				
<u>EARTHWORKS</u>				
<u>SITE CLEARANCE</u>				
<u>User note</u>				
Where the value is of significance, the removal of hedges etc shall be given separately in meters or in number				
<u>Site clearance</u>				
1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	728		
<u>EXCAVATIONS ETC</u>				
<u>Digging up topsoil</u>				
2 Digging up topsoil to an average depth of 150mm and preserving for use as filling	m ²	218		
<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
User Note				
Only the appropriate one of the above two alternative headings is to be inserted, depending on whether the separate bulk excavation, filling, etc option is utilised or not				
<u>Excavation in earth not exceeding 2m deep</u>				
3 Trenches	m ³	74		
4 Holes	m ³	23		
<u>Extra over bulk excavations in earth for excavation in</u>				
5 Soft rock	m ³	10		
6 Hard rock	m ³	4		
<u>Extra over all excavations for carting away</u>				
7 Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m ³	47		
<u>Risk of collapse of excavations</u>				
8 Sides of trench and hole excavations not exceeding 1,5m deep	m ²	296		
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
	<u>Keeping excavations free of water</u>				
9	Keeping excavations free of all water other than subterranean water	Item			
	<u>FILLING, ETC</u>				
	<u>Earth filling obtained from the excavations (not compacted)</u>				
10	In prescribed stock piles on site	m ³	56		
11	Over site to make up levels	m ³	49		
	<u>Earth filling obtained from a commercial source within 5-10 km radius</u>				
12	Commercial source	m ³	35		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density</u>				
13	Backfilling to trenches, holes, etc	m ³	14		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, including haulage approximately 1000m from the perimeter of the excavations or stock piles, compacted to 90% Mod AASHTO density</u>				
14	Backfilling to trenches, holes, etc	m ³	32		
	<u>Filling of gravel-soil material G7 supplied by the contractor, compacted to 90% Mod AASHTO density</u>				
15	Backfilling to trenches, holes, etc	m ³	48		
	<u>User note</u>				
	Where SANS 5859 is not applicable, refer to other suitable construction standards or provide full specifications				
	<u>Soil insecticide in accordance with SANS 5859</u>				
16	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m ²	360		
17	To bottoms and sides of trenches etc	m ²	67		
	<u>TESTS</u>				
	<u>Prescribed tests to determine degree of compaction or other properties of ground or filling</u>				
18	Modified AASHTO Density test	No	2		
	Carried to Collection			R	

[illegible]

		Amount
<u>BILL NO. 2</u>		
<u>EARTHWORKS</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	24	
	25	
	26	
Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<p><u>BILL NO. 3</u> <u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>User note</u></p> <p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions.</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions.</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards .</p> <p>Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications.</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008.</p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 Tests of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval . The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (t est cubes are measured separately)</p> <p><u>Breeze concrete</u></p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (1:12); the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
<p><u>Lightweight concrete</u></p> <p>Lightweight concrete shall have a density of 600kg/ m3 for the top 50mm and 400kg/ m3 for the remaining thickness. The minimum thickness at outlets, channels, etc shall be 50mm</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>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</p> <p>Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks</p> <p><u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u></p> <p><u>25MPa 19mm concrete</u></p> <p>1 Strip footings m³ 41</p> <p>2 Bases m³ 9</p> <p>3 Surface beds m³ 39</p> <p><u>TEST CUBES</u></p> <p>User note</p> <p>In lieu of the above the requirements in respect of quality control can be described and the total volume of concrete subject to control given in cubic meters (normally the reinforced concrete only). There are specialist companies who offer a control service based on a rate per cubic meter</p> <p>Carried to Collection</p>				
			R	

	Unit	Quantity	Rate	Amount
<u>Test Cubes</u>				
4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	Sets	6	
<u>Finishing top surfaces of concrete smooth with a wood float</u>				
5	Surface beds, slabs, etc	m ²	259	
<u>Finishing top surfaces of concrete smooth with a power float</u>				
6	Surface beds, slabs, etc	m ²	259	
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II) (CPAP WORK GROUP NO. 111)</u>				
<u>Rough formwork to sides</u>				
7	Concrete bases	m ²	12	
<u>MOVEMENT JOINTS ETC</u>				
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>				
8	10mm not exceeding 300mm high to edges of surface beds	m	134	
<u>Saw-cut joints</u>				
9	8 x 12mm Saw-cut joints in top of concrete	m	23	
<u>Horizontal construction joints through concrete including thick cement slurry to one face</u>				
10	Surface beds not exceeding 300mmm thick	m	41	
<u>REINFORCEMENT (CPAP WORK GROUP NO. 114)</u>				
<u>Mild steel reinforcement to structural concrete work</u>				
11	10mm Diameter bars	Tonnes	0.50	
12	12mm Diameter bars	Tonnes	0.50	
<u>Reinforcemnet Mesh wire</u>				
13	Ref 193 mesh wire	m ²	360.00	
Carried to Collection			R	

		Amount
<u>BILL NO. 3</u>		
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	28	
	29	
	30	
Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 4</u>				
<u>MASONRY</u>				
<u>MASONRY</u>				
User note				
Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions				
Take note that these Model Bills of Quantities utilise abbreviated descriptions				
The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (e.g. where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications				
Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008				
<u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
1 One brick wall	m ²	69		
<u>BLOCKWORK IN SUPERSTRUCTURE</u>				
<u>Blockwork in class II mortar</u>				
2 90 mm Internal Walls	m ²	81		
3 140 mm External Walls	m ²	125		
<u>BLOCKWORK SUNDRIES</u>				
4 Sprayed one mortar fillet maximum one course high between beamfilling and roof sheeting	m ²	60		
<u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u>				
5 On block walls	m ²	135		
<u>2.5 mm galvanised brick reinforcement</u>				
6 75 mm wide reinforcement built horizontally	m	88		
Carried to Collection			R	

[illegible]

		Amount
<u>BILL NO. 4</u>		
<u>MASONRY</u>		
<u>COLLECTION</u>		
	Page No	
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Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 5</u> <u>WATERPROOFING</u> <u>WATERPROOFING</u> <u>User note</u> <p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <u>Waterproofing</u> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs</p> <u>DAMPPROOFING OF WALLS AND FLOORS</u> <u>User note</u> <p>Where SANS 952-1985 in the following headings is not applicable, refer to other suitable construction standards or provide full specifications</p> <u>One layer type FV dampproof course</u>				
1	In walls	m ²	98	
Carried to Collection			R	

[illegible]

		Amount
<u>BILL NO. 5</u>		
<u>WATERPROOFING</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	35	
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Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 6</u>				
<u>ROOF COVERINGS</u>				
<u>ROOF COVERINGS, CLADDINGS, ETC</u>				
User note -				
Where BS reference to grades, etc and SANS 92 in the following two headings is not applicable, refer to other suitable construction standards or provide full specifications				
User Note -				
Where battens for roof coverings form part of the plate nailed timber roof truss design it shall be included under the roof construction in the Carpentry and Joinery trade and not under this trade				
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>				
User note -				
Profiled metal sheeting is available in various thicknesses				
Usually Z275 spelter galvanising is used in inland areas and Z600 spelter galvanising for coastal areas.				
However galvanised sheeting is generally not used in coastal areas				
When the pitch of troughed roof covering is less than 5 degrees or if dustproofing is required then the description of roof coverings "with side laps sealed" is to be used				
Where roof coverings are fixed on top of rigid board insulation to purlins etc they are to be described as such				
Note that besides galvanised steel, sheeting is also available in corten steel, stainless steel, copper and aluminium				
<u>0,6 mm Chromadek Roof Sheeting Novatexi</u>				
1	Roof covering with pitches not exceeding 25 degrees	m ²	60	
2	Side cladding on the external walls, closing the gap between brick wall and sheets	m ²	46	
3	Extra over roof covering for 20 Degree bullnose to 100 mm radius, at eaves ends	m	58	
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
<u>ROOF INSULATION</u>				
<u>Sisalation or similar approved 150mm minium industrial overlap in accordance with manufactures specification</u>				
4 Insulation laid under purlins and fixed concurrent with roof sheeting including galvised nails and straining wire	m²	480		
Carried to Collection			R	

		Amount
<u>BILL NO. 6</u>		
<u>ROOF COVERINGS</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	38	
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Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<p><u>BILL NO. 7</u> <u>CARPENTRY AND JOINERY</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>User note - Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <p><u>Fixing</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as bolted, the bolts have been given elsewhere</p> <p><u>Decorative thermosetting plastic laminate covering</u></p> <p>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PLATE NAILED TIMBER ROOF TRUSS CONSTRUCTION ETC</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Trusses are at maximum 750 mm centres</p> <p>Roof covering is type Chromak on timber purlins and battens. To be fixed according to Engineer design and specification</p>				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
<p>Ceiling is 6mm sheeting with skimming on 38 x 38 mm branding</p> <p>References given in descriptions refer to the respective types of trusses detailed on the architect's/engineer's drawings numbered ? annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes</p> <p>Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the architect/engineer and/or taken on site before design or fabrication commences</p> <p><u>The following is applicable in respect of roof trusses, trusses not exceeding 25 degree pitch maximum 300mm centre roof covering chromadek roof sheeting on 50 x76 mmtreated SA pine purlins at maximum 750 mm centres. The Contractor to confirm dimension before fabricating the timber structure</u></p>				
1	No	1		
<p>Roof construction to be Flat pitched roof with extreme ends size 9.00 m x 4.8 mm with 600 hang overall including wall plate, trusses, hurricane clips, rafters, permanent bracing and 50 x 76 mm purlins at 750 mm centres maximum for roof covering and 38 x 38 mm cleats complete as per Architect Canteen and Storage Section on the main building drawings 102,104 and floor plan</p>				
2	No	1		
<p>Roof construction to be Flat pitched roof with extreme ends size 2.7 m x 2. 581 m with 600mm high overall including wall plate, trusses, hurricane clips, rafters, permanent bracing and 50 x 76 mm purlins at 750 mm centres maximum for roof covering and 38 x 38 mm cleats complete as Architect Toilet Extension drawing 100 floor plan</p>				
<p><u>EAVES, VERGES, ETC</u></p>				
<p><u>Sawn softwood grade 6</u></p>				
3	m	15		
<p>50 x 114 mm valley boards</p>				
4	m	32		
<p>255 x 12 mm Fascias and barge Nutec Everrite board or similar approved</p>				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
5	<p><u>Wrought Timber doors hung to steel frames</u></p> <p><u>44mm Swart land SD14 or similar approved framed ledged, braced 840 x 2115 mm high battered door formed of 105 x 44 stiles and mid rails 144 x 22 mm bottom rail on 67 x 19 mm tongued and V- jointed on one side boarding and covered on the other side with 3 mm plywood with vineer to match door let into and including rebates all around as per Architect door specification AR 100.OA</u></p>			
	No	3		
<p><u>FITTINGS: CUPBOARDS TO KITCHENS, BEDROOMS, ETC</u></p> <p>User note -</p> <p>When using the following system of measuring cupboard fittings a detailed specification must either be annexed to the detail drawings of the cupboards or given in the bills of quantities</p> <p>The following clause is to be amended if any or all the items of others trades, i.e. glass, ironmongery, metalwork, paint or varnish finishes are given separately and is to include a clear statement to this effect</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>General</p> <p>The following cupboard fittings are given as complete units i.e. the components of the units have not been given separately. Descriptions of such units shall, therefore, be deemed to include all components, assembling, housing, notching, glueing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or varnish finishes, etc</p> <p>Prices are to include for all necessary filler pieces against walls etc</p> <p>References</p> <p>References given in descriptions refer to the respective types of fittings detailed on the architect's drawing(s) numbered ? Annexed to these bills of quantities (accompanying these bills of quantities?) for tender purposes</p>				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
<p><u>Kitchen cupboards with type stainless hinges, type handles and type telescopic drawer slides</u></p> <p>6 "Kitchen floor cupboard with single bowl sink" overall 4000 x 760 x 1200mm high formed of 32 mm Laminated meranti work top on 38x75 mm hard wood bearer. Cupboard drawers and doors to be 16 mm white melanine with 3 PVC edging all round</p>	No	1		
Carried to Collection			R	

		Amount
<u>BILL NO. 7</u>		
<u>CARPENTRY AND JOINERY</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	41	
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	43	
	44	
Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 8</u> <u>FLOOR COVERINGS</u>				
<u>FLOOR COVERINGS, WALL LININGS, ETC</u> User note - Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions <u>Fixing</u> Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc <u>FLOOR COVERINGS</u> <u>Apply Granolithic screed consisting of cement, sand and crushed rock aggregate, according to 1:1:2 ratio</u>				
1	On floors	m ²	406	
Carried to Summary			R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 9</u> <u>IRONMONGERY</u> <u>IRONMONGERY</u> User note - Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions Take note that these Model Bills of Quantities utilise abbreviated descriptions The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008 Proprietary items Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered On request returnable samples are to be provided to the principal agent for consideration <u>HINGES, BOLTS, ETC</u> <u>Manufactured by Approved Supplier</u>				
1	Sets	6		
<u>LOCKS</u> Keys				
Carried to Collection			R	

[illegible]

		Amount
<u>BILL NO. 9</u>		
<u>IRONMONGERY</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	47	
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Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<p><u>BILL NO. 10</u> <u>METALWORK</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>User note - Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions. Take note that these Model Bills of Quantities utilise abbreviated descriptions The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>Aluminium doors, windows, etc</u></p> <p>Doors and windows shall comply with AAAMSA design criteria</p> <p>Glazing shall comply with SAGGA regulations. Glass shall be type ? laminated performance glass as shown on the window schedules/drawings appended to these bills of quantities (as described in the headings to window descriptions?). Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings</p>				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
<p>Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed</p> <p>For purpose made windows and doors, refer to drawings annexed to (issued separately with?) these bills of quantities</p> <p>The following certificates shall be provided prior to commencement of site work:</p> <p>1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product</p> <p>2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively</p> <p>3 A powder guarantee of not less than 15 years issued by the powder manufacturer. The</p> <p>specific conditions contained in this guarantee shall form part of the powder coating process</p> <p>4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked</p> <p>5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years</p> <p><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></p> <p><u>1,6mm Rebated frames suitable for One brick walls</u></p> <p>1 Frame for door 813 x 2032 mm high</p> <p><u>GALVANISED PRESSED STEEL GARAGE DOORS</u></p> <p><u>Steel roller shutter tip-up doors fixed to brickwork or concrete</u></p> <p>2 Tip-up door for 4650 x 5400 mm high opening</p> <p><u>ALUMINIUM WINDOWS</u></p> <p>3 1000 x 1200 mm high window AL-01</p> <p><u>ALUMINIUM SLIDING DOOR</u></p> <p>4 Standard sliding door 1200 ,x 2030mm high</p> <p>Carried to Collection</p>				
			R	

		Amount
<u>BILL NO. 10</u>		
<u>METALWORK</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	50	
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Carried to Summary	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 11</u> <u>PLASTERING</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>User note</u>				
<p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <p>The following preambles are to be included only when specifically required by the principal agent</p>				
<u>PLASTER</u>				
<u>Cement Plaster on brickwork</u>				
1	On walls	m ²	221	
2	On narrow widths	m ²	27	
Carried to Summary			R	

	Unit	Quantity	Rate	Amount
<p><u>BILL NO. 12</u></p> <p><u>TILING</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>User note</u></p> <p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <p><u>Patterns</u></p> <p>Unless otherwise described, tiles shall be laid with continuous joints in both directions</p> <p><u>Fixing</u></p> <p>Unless described as fixed with adhesive to plaster (plaster elsewhere) descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as fixed with adhesive on power floated concrete shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p>				
Carried to Collection			R	

	Unit	Quantity	Rate	Amount
<u>WALL TILING</u>				
<u>200 x 200 x 5mm White matt ceramic tiles on brickwork including cement plaster backing</u>				
1 On walls in isolated panels, splash back	m ²	6		
Carried to Collection			R	

		Amount
<u>BILL NO. 12</u> <u>TILING</u> <u>COLLECTION</u>	Page No	
Brought Forward from Page	54	
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Carried to Summary		
	R	

	Unit	Quantity	Rate	Amount
<u>BILL NO. 13</u>				
<u>PLUMBING AND DRAINAGE</u>				
<p>User note - Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions Take note that these Model Bills of Quantities utilise abbreviated descriptions The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p>				
<u>RAINWATER DISPOSAL</u>				
<u>8,6mm thick seamless pre-painted aluminium Ogee gutter and accessories apipes</u>				
1 140 m x 150 x 0.8 mm profile gutter including fixing to fibre cement fascia boards with heavy duty fixing brackets	m	50		
2 Extra over for angles	No	6		
3 Extra over for stoped ends	No	5		
4 Extra over for outlets for 75 x 50 pipe	No	6		
5 100 x 75x 0.8 mm thick rain water down pipes	m	9		
6 Extra over rain water pipe for shoe	No	4		
7 Extra over rain water pipe for bends	No	4		
<u>PVC-U pipes</u>				
8 110 mm Pipes	m	5		
9 110 mm Pipes laid in and including trenches not exceeding 1m deep	m	25		
<u>Extra over PVC-U pipes for fittings</u>				
10 42 mm waste pipe	m	15		
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
11	110 mm Bend	No	3		
12	110 mm Long radius bend	No	2		
13	110mm Junction	No	2		
14	110 mm Reducing junction	No	1		
15	110 mm Cast iron bend including adaptors	No	1		
<u>STORMWATER DRAINAGE</u>					
<u>Sumps, catchpits, inspection chambers, etc including concrete kerbs or precast concrete cover slabs (gratings and covers elsewhere)</u>					
User note - Attention is drawn to the fact that suitable grouping according to depth may be adopted in the event of numerous items occurring, as shown in the following items					
16	1200 x 900mm Junction box 1200mm deep internally	No	2		
<u>Cast iron gratings, covers, etc</u>					
17	600 x 600 mm x 21 kg Single seal manhole cover and frame	No	2		
<u>SANITARY FITTINGS</u>					
18	510 x 405 mm Hibiscus white vitreous china lavatory basin mounted to wall with brackets	No	2		
19	1200 x 535 mm Franke trendline sink with one bowl side size 460 x 350 x 140 mm on cupboard	No	1		
20	Model GYP, VS RI/01 Vandal white resistance water closet pan manufactured from polymer concrete and polished smoothly silky finish	No	2		
21	545 x 400 mm 17/0 stainless steel sink trough with 485 x 480 mm bowl	No	1		
<u>TRAPS ETC</u>					
22	50 x 38 mm Rubber double bowl wash trough or sink reseal P or S trap combination	No	2		
<u>TAPS, VALVES, ETC</u>					
23	28 mm Brass stopcock	No	2		
24	22 mm Brass fullway gate valve	No	2		
25	22 mm Brass hose bib-tap	No	3		
26	15 mm chromium plated bib-tap	No	2		
Carried to Collection				R	

		Unit	Quantity	Rate	Amount
27	20 mm chromium plated hose bib-tap	No	2		
	<u>Water supply</u>				
	<u>Polypropylene pipe</u>				
28	15 mm Pipes	m	18		
29	15 mm Pipes chased into brickwork	m	2		
	<u>Class 1 copper pipes</u>				
30	15 mm pipe	m	15		
31	22 mm Pipes	m	6		
	<u>Extra over copper pipes for brass compression fittings</u>				
32	15 mm pipe	No	2		
33	22 mm pipe	No	2		
	<u>Testing</u>				
34	Testing water pipe system	Item			
Carried to Collection				R	

		Amount
<u>BILL NO. 13</u>		
<u>PLUMBING AND DRAINAGE</u>		
<u>COLLECTION</u>		
	Page No	
Brought Forward from Page	57	
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Carried to Summary	R	

		Unit	Quantity	Rate	Amount
<u>BILL NO. 14</u> <u>GLAZING</u>					
<u>SUPPLEMENTARY PREAMBLES</u>					
<u>User note</u> <p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p>					
<u>Float glass</u> <p>The term float glass is used for monolithic annealed glass</p>					
<u>Laminated glass</u> <p>Laminated glass to have polyvinyl butyral (PVB) interlayer(s)</p>					
<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>					
<u>6 mm Clear float glass with polished edges all round holed for and fixed with chromium plated dome capped mirror screws with rubber buffer to plug in brick work</u>					
1	700 x 650 mm high concealed thief resistant fixing	No	2		
Carried to Summary				R	

	Unit	Quantity	Rate	Amount
<p><u>BILL NO. 15</u></p> <p><u>PAINTWORK</u></p> <p><u>PAINTWORK</u></p> <p>User note</p> <p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <p>Attention is drawn to the measurement rules in the measuring system regarding paint colours which read as follows:</p> <p>4. 'Paintwork shall be classified in the different colour groups 'White', 'Pastel', 'Deep' and 'Transparent' (in accordance with the Natural Colour System (NCS) adopted by the SA National Standards)'</p> <p>and</p> <p>' 5. Paintwork in one colour group may be given as extra over paintwork in another colour group'</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>PREPARATORY WORK TO EXISTING WORK</u></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>Previously painted metal surfaces</p> <p>Carried to Collection</p>				
			R	

	Unit	Quantity	Rate	Amount
<p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p>Previously painted wood surfaces</p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p>Paint Specifications</p> <p>All painting shall be done in accordance with ? specifications unless otherwise described</p> <p><u>Colours</u></p> <p>User Note -</p> <p>In the event of the colour scheme for the project not being available when required for the preparation of quantities, it is recommended that either all paintwork be described as being in the White colour group or that ceilings be described as being in the White colour group and the balance being in the Pastel colour group and that provision be made for other colour groups by way of extra over items marked Provisional as provided for in the measuring system (See measurement rule No. 5 under item 2: Colours). The following items are examples of such extra over items:</p> <p>Extra over for paintwork on components ceilings in the White colour group for paintwork in the Pastel colour group (Provisional)</p> <p>Extra over for paintwork on components in the Pastel colour group for paintwork in the Deep colour group (Provisional)</p> <p>Unless otherwise described paintwork on ceilings shall be deemed to be in the White colour group and paintwork on all other components shall be deemed to be in the Pastel colour group in accordance with the Natural Colour System (NCS) adopted by the SA National Standards</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON NEW INTERNAL AND EXTERNAL FLOATED PLASTER SURFACES</u></p> <p><u>One coat alkali resistant primer and two coats PVA emulsion paint for interior use</u></p>				
1 Walls	m ²	221		
2 Narrow widths	m ²	27		
Carried to Collection			R	

[illegible]

		Amount
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<u>PAINTWORK</u>		
<u>COLLECTION</u>		
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	Unit	Quantity	Rate	Amount
<p><u>BILL NO. 16</u></p> <p><u>EXTERNAL WORKS</u></p> <p><u>EXTERNAL WORK</u></p> <p><u>User note</u></p> <p>Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions</p> <p>Take note that these Model Bills of Quantities utilise abbreviated descriptions</p> <p>The Model Preambles for Trades 2008 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards . Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system , represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</p> <p>Consider inserting the preambles hereunder when using the abovementioned Model Preambles for Trades 2008</p> <p><u>ROADWORK, PARKING AREAS AND PAVING</u></p> <p><u>User note</u></p> <p>Where SABS 1200 or SANS preambles are not applicable, refer to other suitable construction standards or provide full description</p> <p><u>Testing of material and filling</u></p> <p>Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required in accordance with the SABS 1200 series</p> <p><u>Precast concrete block road surfacing</u></p> <p>Paving shall be laid in accordance with SABS 1200 MJ, S A N S 1058 and the Concrete Masonry Associations specifications</p> <p>Paving shall be laid to herringbone (?) pattern on 20mm thick (thickness after final compaction) clean river sand (preparation of ground or filling elsewhere)</p> <p>Clean sand shall be swept into joints between roadstones at completion</p>				
Carried to Collection			R	

		Unit	Quantity	Rate	Amount
	<u>Site clearance</u>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	700		
	<u>Open face excavation in earth over sloping site</u>				
2	Open face excavation to form platforms under parking areas etc and depositing excavated material over site, including haulage not exceeding ? m from perimeter of excavations	m ³	263		
	<u>Excavation in earth</u>				
3	Not exceeding 2m deep over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site	m ³	175		
	<u>Extra over bulk excavation in earth for excavation in</u>				
4	Soft rock	m ³	12		
5	Hard rock	m ³	5		
	<u>Extra over all excavations for carting away</u>				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m ³	12		
	<u>Keeping excavations free of water</u>				
7	Keeping excavations free of water other than subterranean water	Item			
	<u>Compaction of surfaces</u>				
8	Compaction of ground surface s under parking areas etc by wetting and compacting with 12 passes of a 3-sided 25 kilo Joule high energy impact compactor	m ²	260		
	<u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site</u>				
9	Under road islands etc, compacted to 98% Mod AASHTO density	m ³	236		
10	Subbase course under parking areas etc, compacted to 90% Mod AASHTO density	m ³	26		
	<u>Filling supplied by the contractor under parking areas, roadways, etc</u>				
11	G7 gravel-soil material compacted to 96% Mod AASHTO density	m ³	315		
	Carried to Collection			R	

		Unit	Quantity	Rate	Amount
	<u>LAYER WORK</u>				
	<u>CONCRETE STORMWATER CHANNELS ETC</u>				
	<u>Concrete stormwater channels</u>				
12	100 x 100 mm Channel with segmental channel formed therein and finished smooth on exposed surfaces including necessary excavation and formwork	m	28		
13	Extra over for angles, intersections, ends, etc	m	8		
	<u>FENCING</u>				
	<u>User note</u>				
	In high corrosion areas fence posts, stays, gates, etc are to be galvanised				
	<u>Tricks hot dip galvanised mild steel Palisade Fence with 100 x 100 mm x 2.5 corner square poles, 60 x 60 mm intermediate square poles, 40 x 40 mm angle iron for top and bottom and 30 x 30 mm angle iron spears standards and droppers and 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>				
14	Palisade Fence 2100 m high consisting of post, interpost top and bottom rails filled with spear pales at 100mm centers, post to be positioned 4.0 m centers and cast into 450 x 450 x 600 mm 25MPa concret	m	186		
15	Double leaf swing gate 5.0 meters x 2100mm high formed of hot dipped galvanised steel palisade fence panels	No	1		
	Carried to Collection			R	

		Amount
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<u>EXTERNAL WORKS</u>		
<u>COLLECTION</u>		
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Amount

BILL NO. 17

PROVISIONAL SUMS

PROVISIONAL SUMS

User note

Insert preambles/specifications as may be required or in order to supplement any applicable preambles, specifications or bills of quantities descriptions

Take note that these Model Bills of Quantities utilise abbreviated descriptions

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General

Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant

?building agreement? ?building contract? and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances

Prime cost amounts and provisional sums are net. Prime cost amounts shall include for delivery to site of all articles concerned

Provisional sums are for material and equipment supplied and installed complete by firms of specialists

Profit

Where stated, the contractor may allow for profit if required

User note

Refer hereunder to 'nominated subcontractors' or 'selected subcontractors' or both as the case may be and in accordance with the relevant building agreement (building contract)

Where 'attendance' is defined in the relevant subcontract agreement/subcontract, the user is to refer thereto and is to ensure that the designations therein are used. Where 'attendance' is not defined in the relevant subcontract agreement/subcontract, the user is to provide a detailed description of the 'attendance' required from the contractor

General attendance on nominated/selected subcontractors

User note -

Use the following descriptions where the JBCC N/S Subcontract Agreement is applicable

Carried to Collection

R

		Amount	
<p>The item 'attendance' which follows each provisional sum for nominated/ selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/ selected subcontractors the contractor's duties as described in clause 12.2 of the JBCC N/S Subcontract Agreement</p> <p><u>Special attendance on nominated/selected subcontractors</u></p> <p>Where 'special attendance' such as unloading, storing, placing in position, providing special power supplies, specific hoisting, crange and scaffolding requirements, provision of temporary casing and/or other specific protection of the works, special security and clearing away rubbish is required, a separate item describing the specific requirements in detail is to be provided for the pricing of such requirements</p> <p><u>Builder's work</u></p> <p>Builder's work in connection with specialist services is given elsewhere in these bills of quantities</p> <p><u>BUDGETARY ALLOWANCES</u></p> <p><u>Council Drawings Submission</u></p>			
1	Provide the sum of R 22 000.00 (Twenty-Two Thousand Rands) for Council Submission and Approval of drawing to Elundini Municipality. The fee to be paid to the Principal Agent	Item	22 000 00
2	Profit and Attendance	Item	2 200 00
<u>PROVISIONAL SUMS FOR NOMINATED/SELECTED SUBCONTRACT WORKS</u>			
<u>Electrical Works</u>			
3	Provide the sum of R 100 000.00 for Electrical Works (installation of appliances, wiring and connections)	Item	100 000 00
4	Profit	Item	
5	Attendance	Item	
<u>Community Liason Officer</u>			
6	Provide the sum of R 18 000 for Community Liason Officer (R6000 per month to be paid to CLO)	Item	18 000 00
7	Profit	Item	
8	Attendance	Item	
<u>Structural steelwork</u>			
9	Provide the sum of R 580 000.00 for erection of portal frame including side clading and roof sheeting	Item	580 000 00
10	Profit	Item	
11	Attendance	Item	
Carried to Collection		R	

		Amount	
<u>Erection of Elevated Water Tank and Stand</u>			
12	Provide the sum R 30 000.00 for construction of Steel Elevated Water Tank and stand (2 x 5000 l tank)	Item	30 000 00
13	Profit	Item	
14	Attendance	Item	
<u>Fire protection Equipment</u>			
15	Provide the sum of R 6 000.00 for Fire protection Installation equipment - Fire extinguisher	Item	6 000 00
16	Profit	Item	
17	Attendance	Item	
Carried to Collection		R	

		Amount
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<u>PROVISIONAL SUMS</u>		
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ADD: CONTINGENCIES		
Allow the Amount of R80 000 (Rands) for contingencies, to be used by the Architect in terms of Clause 17 of the Principal Building Agreement.		80 000 00
SubTotal excluding Value Added Tax		
ADD VAT @ 15%:		
Carried to Tender	R	
NEW INFRASTRUCTURE AT MBIZANA RED HUB FOR THE POTATO SORTING MACHINE		

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