

Item No		Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>BILL NO 1</u>			
	<u>PRELIMINARIES</u>			
	<u>SUPPLEMENTARY NOTES BEFORE PRICING</u>			
	<u>THESE BILLS OF QUANTITIES</u>			
	1. DEFINITION			
	The terms "Architect", "Quantity Surveyor", "Engineer" or "Agent" in the documentation mean the authorized representative of the Taletso Tvet College			
	2. SITE			
	The site is situated on the Taletso Tvet College, Carrol Street, Retiefs Park, Lichtenburg			
	3. DRAWINGS			
	These Bills of Quantities are based on the accompanied drawings as prepared by the Taletso Tvet College, Lichtenburg			
	4. PERIOD FOR PAYMENT			
	The period for payment is 30 days after the date on the applicable invoice, as the case may be			
	5. METHOD OF MEASUREMENT			
	Standard System			
	Except where otherwise stated these bills of quantities have been prepared in accordance with the Sixth Edition 2nd Revision (as amended March 2013) of the Standard System of Measuring Builder's Work issued by the Association of South African Quantity Surveyors and hereinafter termed "the Standard System"			
	Qualifications			
	Notwithstanding the provisions of the Standard System the following the following amendments and/or definitions shall apply in respect of these bills of quantities			
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<p style="text-align: center;">Brought Forward</p> <p>Generally Wherever the words "shall be included in the description" in these bills of quantities incorporate such inclusions and statements</p> <p>6. DECIMAL POINTS AND THOUSAND SEPARATORS</p> <p>Please take good care of the fact that a decimal is indicated by a point (.) and a comma as a thousand separator (i.e. 1,342 = one thousand three hundred and forty two)</p> <p>7. GENERAL</p> <p>Works take place according to University hours, in other words from 07:30 to 16:30 for the full 5 days per week and any non-working hours must be scheduled in advance with the project manager and only on condition that the program is up to date ACCORDING TO THE PROJECT MANAGER'S DISCRETION</p> <p>No work will be allowed on Sundays</p> <p>Behaviour of staff: No interference or comments towards any student or any other person on the campus will be tolerated</p> <p>The Contractor is fully responsible to remove all building rubble and waste from the site</p> <p>i) The agreement is to be the JBCC Series 2000 Principal Building Agreement, Edition 6.2 May 2018, and other contract documents that together form the contract between the employer and contractor</p> <p>ii) The preliminaries are to be the JBCC Series 2000 code 2103 Preliminaries prepared by the Joint Building Contracts Committee, May 2008 edition and shall be deemed to be incorporated herein</p> <p>iii) Tenderers are referred to the above-mentioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary</p> <p>iv) Where standard clauses or alternatives are not</p>	<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 Preliminaries</p>
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<p style="text-align: right;">Brought Forward</p> <p>entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading</p> <p>v) Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable")</p> <p>vi) If alternative A as set out in clause B 10.3 hereinafter is to be used for the adjustment for the preliminaries each item priced is to allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time</p> <p><u>PREAMBLES FOR TRADES</u></p> <p>The Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained</p> <p>Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the Model Preambles</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles and/or specifications</p>	<p style="text-align: right;">R</p>
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<u>PRICING OF PRELIMINARIES</u>				
Should the contractor select Alternative A in terms of subclause B10.3 in the preliminaries and indicated on the form of tender [2.5] for the purpose of these adjustment of preliminaries , the amounts entered into the amount column 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)				
<u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u>				
<u>Definition (A1)</u>				
Definition and interpretation (1)				
The measuring system used for the preparation of the bills of quantities is the Standard System of Measuring Building Work (Sixth Edition, Second Revision, as amended March 2013) published by the Association of South African Quantity Surveyors [1.1]				
F.....V.....T.....				
1	Objectives and Preparation (A2 - A14)			
Offer, acceptance and performance (2)				
F:..... V:.....				
T:.....			Item	
2	Documents (3)			
F:..... V:.....				
T:.....			Item	
3	Design responsibility (4)			
F:..... V:.....				
T:.....			Item	
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4	Employer's agents (5) F:..... V:..... T:.....	Item
5	Contractor's site representative (6) F:..... V:..... T:.....	Item
6	Compliance with Law and regulations (7) Without limiting the generality of the provisions of clause 7.0, the contractor's attention is drawn to the provisions of the latest 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 (refer to Annexure A for a copy of the relevant specification) and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the Act and the regulations and provisions of the aforementioned health and safety specification [7.1] A formal Risk Analysis as well as health and safety plan must be submitted as soon as possible, but not later than seven (7) days after appointment F:..... V:..... T:.....	Item
<u>Health and Safety Requirements</u> Should the contractors identify any other items that they need to price to comply, they should allow for such items in the space allowed below. The Employer will not accommodate any additional claims due to this.		
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Brought Forward			R
7	Requirements regarding the Health and Safety Plan/file as Clause 7.0	Item	
8	Full time Safety Officer as per Clause 7.0	Item	
9	Requirements regarding Internal OHS audits and recovery plants per Clause 7.0	Item	
10	Requirements regarding Health and Safety Training as per Clause 7.0	Item	
	Requirements regarding Health and Safety Site requirements		
11	a. Administration Clause	Item	
12	b. Health and safety programme Clause	Item	
13	c. Personal protective equipment for employees and visitors Clause 7.0	Item	
14	d. Provision of employees site facilities Clause	Item	
15	e. OHS Signage Clause	Item	
16	f. OHS Notice Board Clause 7.0	Item	
17	g. OHS Training Clause 7.0	Item	
18	h. First aid station and firefighting equipment Clause 7.0	Item	
19	i. Medical Certificates of fitness Clause	Item	
20	Requirements regarding Project Risk Assessment and management Clause.7.0	Item	
21	Requirements on site listed hazards baseline risk assessment as Clause7.0	Item	
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	Other items identified by the contractor (describe), additional financial provision, if any, for the requirements of the Occupational Health and Safety not covered in the above - please specify per line			
22	Works risk (8) F:..... V:..... T:.....	Item		
23	Indemnities (9) F:..... V:..... T:.....	Item		
24	General Insurances (10) F:..... V:..... T:.....	Item		
25	Special Insurances (11) F:..... V:..... T:.....	Item		
26	Effecting Insurances (12) F:..... V:..... T:.....	Item		
	No Clause (13)			
27	Security (14) F:..... V:..... T:.....	Item		
	<u>Execution (A15 - A23)</u>			
28	Preparation for and execution of the works (15) F:..... V:..... T:.....	Item		
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45	<p>Notwithstanding this or any other clause, material and goods stored off site shall not be included in the amount authorised for payment</p> <p>Sub-clause 31.9 shall be amended as follows: Delete reference to "seven (7) calendar days of the date for issue of payment certificate" and insert "twenty one (21) calendar days of the date for issue of tax invoice"</p> <p>The contractor shall attach a tax invoice as the Value Added Tax legislation to each payment certificate when presenting the certificate to the employer for payment. Such tax invoices shall correctly reflect the prescribed information and the amounts shall match precisely the amounts included in the payment certificate. Should the contractor fail to comply with these requirements, the date of presentation of the certificate shall be deemed to be delayed at the contractor's default until such time as the requirements are met</p> <p>F:..... V:..... T:.....</p>	Item		
46	<p>Adjustment to the contract value (32)</p> <p>Where prices are submitted by the contractor or n/s subcontractors during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract 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> <p>F:..... V:..... T:.....</p>	Item		
47	<p>Recovery of expense and loss (33)</p> <p>F:..... V:..... T:.....</p>	Item		
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48	Final account and final payment (34) F:..... V:..... T:.....	Item	
49	Payment to other parties (35) F:..... V:..... T:.....	Item	
50	<u>Cancellation (A36-A39)</u> Cancellation by employer - contractor's default (36) F:..... V:..... T:.....	Item	
51	Cancellation by employer - loss and damage (37) F:..... V:..... T:.....	Item	
52	Cancellation by contractor - employers default (38) F:..... V:..... T:.....	Item	
53	Cancellation - cessation of the works (39) F:..... V:..... T:.....	Item	
54	<u>Dispute (A40)</u> Settlement of disputes (40) F:..... V:..... T:.....	Item	
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1.1 Agent [5.2]	Agents service:	Engineer and Principal	
	Agent(2):	CALLIPER CONSULTING ENGINEERS (PTY) LTD	
	Postal address:	P.O.Box 542 Lonehill	
	Code:	2062	
	Tel:	(011) 326 1680	
	Email:	info@groupengineering.co.za	
42.2 CONTRACT DETAILS			
42.2.1	Works Description:	Refer to conditions of tender and drawings for full description of work	
42.2.2	Site Description:	Refer to conditions of tender and drawings for full description of site	
42.2.3	Work or installations by direct contractors:	The employer reserves the right to employ his own contractors or sub-contractors for construction or installation of certain items not specifically measured in these bills of quantities	
42.2.4	This agreement is for a government contract:	No	
42.2.5	Date on which possession of the site is intended to be given:	TBC	
42.2.6	Period for the commencement of the works after the contractor takes possession of the site	5 working days	
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<p style="text-align: right;">Brought Forward</p> <p>42.2.7 For the works as a whole:</p> <p style="padding-left: 40px;">The contract period for the completion and delivery of the works shall be 6 months after site hand-over, excluding builder's holiday</p> <p style="padding-left: 40px;">Penalty amount: R4500.00 per calendar day</p> <p>42.2.8 Completion in sections will be required N/a</p> <p>42.2.9 The law applicable to this agreement shall be that of RSA</p> <p><u>42.3 INSURANCES</u></p> <p>42.3.1 Contract works insurance to be effected by: Contractor: For the sum of (Contract Sum +10%) With a deduction of R5000.00</p> <p>42.3.2 Supplementary insurance is required: Yes-Sasria</p> <p>42.3.3 Public liability insurance to be effected by: Contractor: For the sum of R5,000,000.00 With a deductible of R5,000.00</p> <p><u>42.4 DOCUMENTS</u></p> <p>42.4.1 Waiver of contractors lien or right of continuing possession is required: No</p> <p>42.4.2 Number of construction document copies to be supplied to the contractor free of charge: 2</p> <p>42.4.3 Bills of Quantities drawn up in accordance with:</p> <p style="padding-left: 40px;">Standard System of Measuring Builders Work:Seventh Edition (2015)</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 Preliminaries</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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	Brought Forward		R	
	42.4.4 Number of days for submission of priced documents: Together with tender			
	42.4.5 JBCC Engineering General Conditions are to be included in the contract documents: No			
	42.4.6 The value is to be adjusted using CPAP: (i) Contraction period less than 12 months - No CPAP (ii) Construction period exceeding 12 months - CPAP on the outstanding amounts after 12months Base date: N/A			
	42.4.7 Details of changes made to the provision of JBCC standard documentation: *Any changes are indicated against the relevant items in this section *Refer to clause 31 for changes to payment clauses			
	<u>SECTION B: PRELIMINARIES</u>			
	<u>Definitions and Interpretation (B1)</u>			
57	Definitions and interpretation (B1.1 - B1.4.6) F:..... V:..... T:.....	Item		
	<u>Documents (B2)</u>			
58	Checking of documents (B2.1) F:..... V:..... T:.....	Item		
59	Provisional bills of quantities (B2.2) F:..... V:..... T:.....			
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Brought Forward			R
60	Availability of construction documentation (B2.3) F:..... V:..... T:.....	Item	
61	Interests of agents (B2.4) F:..... V:..... T:.....	Item	
62	Priced documents (B2.5) F:..... V:..... T:.....	Item	
63	Tender submission (B2.6) Please note that the bill of quantities completed in full should be submitted with the tender F:..... V:..... T:.....	Item	
64	Inspection of adjoining properties F:..... V:..... T:..... <u>The site (B3)</u>	Item	
65	Defined works area (B3.1) F:..... V:..... T:.....	Item	
66	Geotechnical investigation (B3.2) F:..... V:..... T:.....	Item	
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67	Inspection of the site (B3.3) No claims for extras will be entertained as a result of neglect from the contractor not adhering to this clause F:..... V:..... T:.....	Item	
68	Existing premises occupied (B3.4) F:..... V:..... T:.....	Item	
69	Previous work - dimensional accuracy(B3.5) F:..... V:..... T:.....	Item	
70	Previous work - defects (B3.6) F:..... V:..... T:.....	Item	
71	Services - known (B3.7) F:..... V:..... T:.....	Item	
72	Services - unknown (B3.8) F:..... V:..... T:.....	Item	
73	Protection of trees,etc. (B3.9) F:..... V:..... T:.....	Item	
74	Articles of value (B3.10) F:..... V:..... T:.....	Item	
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Brought Forward			R
75	Inspection of adjoining properties, etc. (B3.11) F:..... V:..... T:.....	Item	
<u>Management of contract (B4)</u>			
76	Management of the works (B4.1) F:..... V:..... T:.....	Item	
77	Programme of the works (B4.2) F:..... V:..... T:.....	Item	
78	Progress meetings (B4.3) F:..... V:..... T:.....	Item	
79	Technical meetings (B4.4) F:..... V:..... T:.....	Item	
80	Labour and Plant records (B4.5) F:..... V:..... T:.....	Item	
<u>Samples, shop drawings and manufacturer's instructions (B5)</u>			
81	Samples of materials (B5.1) F:..... V:..... T:.....	Item	
82	Workmanship samples (B5.2) F:..... V:..... T:.....	Item	
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83	Shop drawings (B5.3) F:..... V:..... T:.....	Item	
84	Compliance with manufacturer's instructions (B5.4) F:..... V:..... T:.....	Item	
<u>Temporary works and plant (B6)</u>			
85	Deposits and fees (B6.1) F:..... V:..... T:.....	Item	
86	Enclosure of the works (B6.2) F:..... V:..... T:.....	Item	
87	Advertising (B6.3) F:..... V:..... T:.....	Item	
88	Plant, equipment, sheds and offices (B6.4) F:..... V:..... T:.....	Item	
89	Main notice board (B6.5) F:..... V:..... T:.....	Item	
90	Subcontractors' notice board (B6.6) F:..... V:..... T:.....	Item	
<u>Temporary services (B7)</u>			
91	Location (B7.1) F:..... V:..... T:.....	Item	
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	Brought Forward		R	
92	Water (B7.2)			
	F:..... V:..... T:.....	Item		
93	Electricity (B7.3)			
	F:..... V:..... T:.....	Item		
94	Telecommunication facilities (B7.4)			
	F:..... V:..... T:.....	Item		
95	Ablution facilities (B7.5)			
	F:..... V:..... T:.....	Item		
	<u>Prime cost amounts (B8)</u>			
96	Responsibility for prime cost amounts (B8.1)			
	<u>Attendance on N/S subcontractors (B9)</u>			
97	General attendance (B9.1)			
	F:..... V:..... T:.....	Item		
98	Special attendance (B9.2)			
99	Commissioning - Fuel, water and power (B9.3)			
	<u>Financial aspects (B10)</u>			
100	Statutory taxes, duties and levies (B10.1)			
	F:..... V:..... T:.....	Item		
101	Payment of preliminaries (B10.2)			
	F:..... V:..... T:.....	Item		
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102	Adjustment of preliminaries (B10.3) F:..... V:..... T:.....	Item	
103	Payment certificate cash flow (B10.4) F:..... V:..... T:.....	Item	
<u>General (B11)</u>			
104	Protection of the works (B11.1) F:..... V:..... T:.....	Item	
105	Protection/isolation of existing/sectionally occupied works (B11.2) F:..... V:..... T:.....	Item	
106	Security of the works (B11.3) F:..... V:..... T:.....	Item	
107	Notice before covering work (B11.4) F:..... V:..... T:.....	Item	
108	Disturbance (B11.5) F:..... V:..... T:.....	Item	
	Environmental disturbance (B11.6) F:..... V:..... T:.....	Item	
109	Works cleaning and clearing (B11.7) F:..... V:..... T:.....	Item	
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110	Vermin (B11.8) F:..... V:..... T:.....	Item	
111	Overhand work (B11.9) F:..... V:..... T:.....	Item	
112	Instruction manuals and guaranteed (B11.10) F:..... V:..... T:.....	Item	
113	As built information (B11.11) F:..... V:..... T:.....	Item	
114	Tenant Installation (B11.12) F:..... V:..... T:.....	Item	
	<u>Schedule of variables (B12)</u>		
115	Pre-tender information (B12.1) F:..... V:..... T:..... This schedule contains all variables referred to in this document and is divided into pre-tender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries 12.1.1 Provisional bills of quantities [B2.2] The quantities are provisional Yes 12.1.2 Availability of construction information [B2.3] Construction documentation is complete: No	Item	
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<p style="text-align: center;">Brought Forward</p> <p>12.1.3 Interest of agents (B2.4)</p> <p>12.1.4 Defined work area (B3.1)</p> <p style="padding-left: 40px;">The contractor shall not extend his operations beyond the site boundaries as shown on the site plan and pointed out on the site inspection</p> <p>12.1.5 Geotechnical investigation (B3.2) : N/A</p> <p>12.1.6 Existing premises occupied (B3.4)</p> <p style="padding-left: 40px;">The site is situated at the North-West University and no work will be allowed on Sundays. Conditions to use adjacent sites/buildings should be strictly adhered to</p> <p>12.1.7 Previous work - dimensional accuracy (B3.5)</p> <p style="padding-left: 40px;">Details: No specific information</p> <p>12.1.8 Previous work - defects (B3.6)</p> <p style="padding-left: 40px;">Details: No specific information</p> <p>12.1.9 Services - known (B3.7)</p> <p style="padding-left: 40px;">Details: Care should be taken not to remove or damage any services and to notify the Principal Agent immediately. Existing services are shown on drawings as far as possible</p> <p>12.1.10 Protection of the works (B3.9)</p> <p style="padding-left: 40px;">Care should be taken not to damage any trees</p> <p>12.1.11 Inspection of adjoining properties (B3.11)</p> <p style="padding-left: 40px;">Care should be taken not to damage any adjoining properties and liaison between the contractor and the Representative / Agent is of paramount importance</p> <p>12.1.11 Services - known [4.7]</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 Preliminaries</p>		R	

<p style="text-align: right;">Brought Forward</p> <p>12.1.12 Enclosure of works [6.2] Specific requirements: The contractor shall provide, erect, alter as necessary, maintain, remove and make good on completion of the works suitable hoarding, complete safety screens, barriers, etc as necessary for the enclosure of the works and the protection of the public, all to the satisfaction of the Representative and the Local Authority and the Employer</p> <p>12.1.13 Offices [6.4.3] Specific requirements: N/A</p> <p>12.1.15 Subcontractors notice board (B6.6) A notice board is required : No</p> <p>12.1.16 Water [7.2] Option A (by contractor) Yes Option B (by employer - free of charge) No Option C (by employer - metered) No</p> <p>12.1.17 Electricity [7.4] Option A (by contractor) Yes Option B (by employer - free of charge) No Option C (by employer - metered) No</p> <p>12.1.18 Ablution facilities [7.5] Option A (by contractor) Yes Option B (by employer) No</p> <p>12.1.20 Protection of existing/sectionally occupied works (B11.2) Protection are required: Yes</p> <p>12.1.22 Protection of the works (B11.1): No specific requirements</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 Preliminaries</p>		R	

	Brought Forward		R
	<p>12.1.23 Disturbance</p> <p>[11.5] Specific requirements: No specific requirements</p> <p>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>12.1.24 Environmental disturbance (B11.6) No specific requirements</p> <p><u>SECTION C: SPECIFIC PRELIMINARIES</u></p> <p>PROPRIETARY BRANDED PRODUCTS</p> <p>The contractor shall take delivery of, handle, store, use apply and/or fix all proprietary branded products in strict accordance with the manufactures' instruction after consultation with the manufacturer's authorised representative</p> <p>F:..... V:..... T:.....</p>		
116	<p>NON CESSION OF MONIES</p> <p>The contractor shall not cede nor assign his rights or claims to any monies due or to become due under this contract</p> <p>F:..... V:..... T:.....</p>	Item	
117	<p>SITE INSTRUCTIONS</p> <p>Site instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor</p> <p>F:..... V:..... T:.....</p>	Item	
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Brought Forward			R	
118	LABOUR RECORD At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day F:..... V:..... T:.....	Item		
119	PLANT RECORD At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works F:..... V:..... T:.....	Item		
<u>BUDGETARY ALLOWANCE FOR CLO (COMMUNITY LIAISING OFFICER)</u>				
120	Allow the sum of R30 000 (Thirty Thousand Rand) for CLO (Community Liaising Officer)	Item		30,000.00
121	Allow for profit	Item		
122	Allow for attendance	Item		
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Item No		Quantity	Rate	Amount
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	<u>BILL NO. 1</u>			
	<u>FOUNDATIONS (PROVISIONAL)</u>			
	<u>PREAMBLES:</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>ALTERATIONS, ETC</u>			
	<u>Taking out/off and remove existing fence</u>			
1	Fence 2100 mm high and make good to fix a new gate	m	5	
2	Gate 3000 x 2100 high gate	No	1	
	<u>Breaking up brick wall including cutting off, removing reinforcement etc making good face brick both</u>			
3	One brickwall	m2	11	
	<u>Taking out/off and remove existing concrete column</u>			
4	300mm Diameter column 2100mm high	No	2	
5	300mm Diameter column 1500mm high	No	2	
	<u>EXCAVATIONS IN TRENCHES AND HOLES</u>			
6	Trenches for strip footings	m3	26	
7	Bases	m3	48	
	<u>Extra over excavations in earth to trenches and holes for</u>			
8	Excavation in soft rock	m3	7	
	Carried Forward			
	Section No. 2			
	Bill No. 1			
	Earthworks			

R

	Brought Forward			R
9	Excavation in hard rock	m3	4	
<u>CARTING AWAY OF EXCAVATED MATERIAL</u>				
<u>Note:</u>				
Description of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or , alternatively, from stock piles situated on the building site.				
10	Extra over all excavations for loading and carting away surplus excavated material from holes, trenches, etc. to a suitable dumping ground to be located by the contractor	m3	30	
Carried Forward				
Section No. 2				
Bill No. 1				
Earthworks				

Brought Forward			R
<u>RISK OF COLLAPSE OF EXCAVATIONS</u>			
<u>Risk of collapse to side of excavation in earth not exceeding 1,5m deep</u>			
11	Trench and holes	m2 224	
<u>KEEPING EXCAVATIONS FREE FROM WATER</u>			
12	Allow for keeping excavations free from water	Item	
<u>FILLING, ETC.</u>			
<u>Filling supplied by the Contractor under floors, trenches, etc.</u>			
13	Backfilling to trenches, holes, etc	m3 44	
14	Sub-base filling (G6) from excavations under solid floors, steps, pavings, etc., compacted to 95% modified AASHTO density	m3 10	
<u>COMPACTION OF SURFACES</u>			
15	Prepare ground surface by scarifying subgrade, rip and recompact 150mm to 93% modified AASHTO density	m2 21	
<u>WEEDKILLERS, INSECTICIDES, TERMITES, etc.</u>			
<u>Termite poisoning: Treat ground under all internal and external walls, concrete beds and reinforced concrete slabs with poison as per clause 2.13 of specification OOG-001E with 50mm sand over poison.</u>			
16	Loosen top surface of excavation or filling under solid floors and pavings for a depth of 50mm, level and dose uniformly with insecticide solution, including raking over to ensure an even distribution and recompact along foundation walls, columns, etc	m2 20	
17	To bottom of excavated trenches, Holes, etc.	m2 252	
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 1			
Earthworks			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>Cost of tests:</u>			
	The costs of making, storing and testing of concrete test cube as required under clause 7 'Tests of SABS 1200 G shall include the cost for providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Employer.			
	<u>Formwork:</u>			
	Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.			
	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.			
	Carried Forward		R	
	Section No. 2			
	Bill No. 2			
	Concrete, Formwork and Reinforcement			

Brought Forward			R
Formwork to soffits of solid slabs etc. shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc. will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks.			
<u>CONCRETE, FORMWORK AND REINFORCEMENT IN FOUNDATIONS</u>			
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>Grade 15Mpa/19mm concrete</u>			
1	50mm concrete blinding under footings and bases	m3	3
<u>REINFORCED CONCRETE</u>			
<u>25MPa/19mm Concrete:</u>			
2	In strip footings.	m3	1
3	Thickenings.	m3	1
4	Surface beds.	m3	2
<u>30MPa/20mm Concrete:</u>			
5	Bases	m3	15
6	Column,.etc	m3	3
7	Foundation beams	m3	7
8	Columns	m3	0.2
9	In Stub Columns	m3	2
<u>TEST BLOCKS</u>			
Carried Forward			R
Section No. 2			
Bill No. 2			
Concrete, Formwork and Reinforcement			

Brought Forward			R
<u>Notes:</u>			
Curing and testing of test blocks are to be carried out by a approved labaratory			
10	Making and testing set of six 150 x 150 x 150mm concrete strength test cubes	Sets	36
<u>SUNDRIES TO CONCRETE</u>			
<u>Surface treatment</u>			
11	Wood float finish to top surfaces of concrete surface beds, slabs, etc	m2	24
<u>Grade 15Mpa/19mm concrete apron</u>			
12	Concrete Apron cast to fall, including formwork, etc	m3	2
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete surfaces</u>			
13	6mm x 15mm deep saw cut joint	m	4
14	10 mm Joints not exceeding 300 mm high	m	25
<u>Flintkote sealing compound including backing cord, bond breaker, primer, etc</u>			
15	6 x 10mm in saw cut joints in floors	m	24
<u>SMOOTH FORMWORK</u>			
<u>Degree of Accuracy 2</u>			
<u>Smooth formwork to sides and soffits</u>			
16	Slabs propped up exceeding 3,0 and not exceeding 4,5m high	m2	19
17	To columns exceeding 3.5 but not exceeding 5m high	m2	21
Carried Forward			R
Section No. 2			
Bill No. 2			
Concrete, Formwork and Reinforcement			

Brought Forward			R
<u>ROUGH FORMWORK</u>			
<u>Degree of Accuracy 2</u>			
<u>Formwork including propping not exceeding 3,5m high to:</u>			
18	Edge of slab not exceeding 300mm high	m	41
<u>CONCRETE DUNDRIES</u>			
<u>Dowel bars</u>			
19	12mm Diameter high tensile steel dowel 400mm long with one end embedded 200mm deep in side of concrete and other end greased with "Epidermix 396" and wrapped in polyethylene sheeting including hole through formwork (drilling elsewhere measured)	No	132
<u>Drilled holes</u>			
20	Drill 28mm diameter hole in existing reinforced concrete	No	132
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>Mild Steel reinforcement to structural work</u>			
21	8mm Diameter bars	t	1.40
22	10mm Diameter bars	t	0.40
<u>High tensile steel reinforcement to structural concrete</u>			
23	10mm Diameter bars	t	0.50
24	12mm Diameter bars	t	0.51
25	16mm Diameter bars	t	0.01
<u>Fabric reinforcement:</u>			
26	Type 311 fabric reinforcement in concrete surface beds, slabs, etc.	m2	28
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 2			
Concrete, Formwork and Reinforcement			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>BRICKWORK IN FOUNDATION, etc.</u>			
	<u>Ordinary brickwork</u>			
	<u>Brickwork in 73mm burnt clay masonry units class NFP in Class II mortar laid in stretcher bond with 10mm flush joints and prepared to take plaster</u>			
1	One-brick wall	m2	39	
2	Half brick walls.	m2	2	
3	440mm brick wall	m2	5	
	<u>Reinforcement to brickwork</u>			
4	Brick reinforcing fabric 75mm wide	m	15	
5	Brick reinforcing fabric 150mm wide	m	173	
	<u>BRICKWORK IN SUPERSTRUCTURE</u>			
	<u>TEMPORARY TURNING PIECES, ETC</u>			
6	To flat block not exceeding 300 wide	m	6	
	<u>Brickwork in burnt clay NFP bricks in 3:1 cement mortar:</u>			
7	Half brick walls.	m2	17	
8	One-brick wall	m2	120	
	Carried Forward			
	Section No. 2			
	Bill No. 3			
	Masonry			

R

Brought Forward			R
<u>SUNDRIES</u>			
9	75mm Wide reinforcement built in horizontally.	m	56
10	150mm Wide reinforcement built in horizontally.	m	394
<u>Galvanised hoop iron cramps, ties, etc.</u>			
11	30 x 1,6mm Wall tie 300mm long with one end shot pinned to concrete and other end built into brickwork.	No	20
<u>PRECAST CONCRETE LINTELS</u>			
<u>Approved prestressed fabricated lintels</u>			
12	110 x 75mm Standard lintel not exceeding 3m long, hoisted into position and laid over opening on brick walls with ends bedded in class II mortar.	m	1
13	Pair of 110 x 75mm Lintel not exceeding 3m long, hoisted into position and laid over opening on brick walls with ends bedded in class II mortar.	m	10
<u>FACE BRICKWORK</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>30-40Mpa Midrand Country Meadow FBX clay face bricks with PC sum amount of R 3 800.00 per thousand bricks delivered to site (excluding VAT) manufactured in accordance with SANS 227-2007, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints, suitable for exposure zones 1-2</u>			
14	Extra over Ordinary brickwork for face brickwork in foundations (Provisional)	m2	43
15	Extra over brickwork for face brickwork	m2	122
16	Extra over ordinary face-brick work for brick-on-edge header course band	m	25
Carried Forward			R
Section No. 2 Bill No. 3 Masonry			

	Brought Forward			R
17	Cut face brick-on-edge header course external window cill in cement mortar 160mm high, set sloping and pointed on top and front edge including fair and fitted ends	m	11	
18	Extra over ordinary face-brick work for brick-on-edge header course lintel	m	12	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 3				
Masonry				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 4</u>			
	<u>WATERPROOFING</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	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.			
	<u>DAMPPROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp-proof course:</u>			
1	In walls, under cills, etc.	m2	18	
	<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape":</u>			
2	Under surface beds.	m2	16	
	<u>Apply one coat abe bitu primer and allow to dry and one layer abedex unigum 4mm dual reinforced waterproofing membrane, fully bonded by means of "torch on fusion", with 100mm side laps and 150mm end laps using a torch, all in accordance with manufacturer's technical specifications</u>			
3	On screeded slab	m2	19	
	Carried Forward			
	Section No. 2			
	Bill No. 4			
	Waterproofing			

R

	Brought Forward			R
4	Bottom and sides of planters	m2	38	
5	On turn-ups and turn downs not exceeding 300mm girth	m	22	
	<u>Apply three coats super laykold, embed abe membrane into first wet coat, avoiding bubbles or wrinkles, membrane overlaps minimum 100mm on end laps and 75mm on side laps using brush or roller all in accordance with manufacturer's recommendations</u>			
6	On screeded slab	m	25	
7	Bottom and sides of planters	m2	38	
8	On turn-ups and turn downs not exceeding 300mm girth	m	22	
	<u>Apply two coats silvakote all in accordance with manufacturer's instructions</u>			
9	On screeded slab	m2	18	
10	Bottom and sides of planters	m2	38	
11	On turn-ups and turn downs not exceeding 300mm girth	m	22	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 4				
Waterproofing				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 5</u>			
	<u>ROOF COVERINGS, ETC.</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>PROFILED SHEETING OF METAL, FIBRE-CEMENT, PLASTICS, ETC.</u>			
	<u>0,58mm "Global Roofing Solutions Klip-lok 700" Z275 galvanised sheet metal roof covering roll-formed in continuous lengths with "white lion" chromadek finish to one side and grey batching coat to the other side fixed to purlins</u>			
1	Roof sheeting with pitch not exceeding 25 degrees	m2	197	
2	Valley flashing 550mm girth	m	22	
3	Narrow and broad flute closer 550mm girth	m	22	
4	0,6mm Thick Galvanised Preformed valley liner	m	11	
	<u>ROOF INSULATION</u>			
	<u>Fibreglass reinforced aluminium foil faced resin bonded glass fibre flexible building insulation:</u>			
5	50mm Thick fibreglass roof insulation (10kg/m3) laid taut over purlins (purlins at approximately 2m centres) with minimum 100mm side laps and fixed concurrent with roof covering including galvanised steel straining wires, etc.	m2	206	
	Carried Forward to Summary of Section No. 2			
	Section No. 2			
	Bill No. 5			
	Roof Coverings, etc			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>DOORS, WINDOWS, SASHES, ETC.</u>			
	<u>Solid flush doors with commercial veneer on both sides hung on steel frames suitable for 220mm thick wall (frames elsewhere):</u>			
1	40mm Framed, ledged, braced and battened doors 813 x 2032mm high of 40 x 110mm top rail and stiles, 20 x 150mm middle ledge, 20 x 110mm braces and 20 x 225mm bottom ledge filled in with 20mm V-joined one side boarding	No	2	
	<u>Solid flush doors:</u>			
2	Standard 44mm thick solid core flush panel with hardwood timber veneer on both sides prepared for painting. average door size overall 813 x 2032mm high. (D2)	No	2	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
	Bill No. 6			
	Carpentry and Joinery			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 7</u>			
	<u>IRONMONGERY</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>LOCKS</u>			
	<u>All locks to be provided with two keys per door with master key set submitted to Project Manager</u>			
1	Lockset comprising CISA hostel lock with satin chrome finish with "Union code 2 x 195CMKD" or similar approved knob cylinder masterkeyed and stainless Umea Couple lever	No	4	
	<u>DOOR CLOSERS</u>			
2	"Dorma TS83" door closer with hold open parallel arm	No	2	
	<u>LETTER, NAMEPLATES, ETC</u>			
3	"Serra Rol TR2 Code DS1310" size 265 x 130 x 135mm stainless steel lockable toilet roll holder including mounting brackets screwed and plugged to walls	No	2	
	<u>SUNDRIES</u>			
	<u>Silver aluminium clip-lock door numbering system</u>			
4	"ASSA ABLOY code TL0708" 45 x 25mm diameter, 6mm rubber floor door stop, plugged	No	4	
	<u>Hat and coat hooks</u>			
5	"Buchels B3653" or similar approved chromium plated hat and coat hook plugged and screwed to timber doors	No	2	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
	Bill No. 7			
	Ironmongery			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 8</u>			
	<u>STRUCTURAL STEEL</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>STRUCTURE</u>			
	<u>The following steel columns, rafters, and beams in frames hoisted and bolted together in position approximately 5561mm above finished floor level. Members with welded plates and angle sections in connections:</u>			
1	Light steel frame mono pitched roof structure complete, total floor coverage area 104m2	t	4.25	
2	Light steel frame mono pitched roof structure complete, total floor coverage area 102m2	t	3.50	
	<u>SUNDRIES</u>			
3	Dry pack grouting 25mm thick under steel base plate to top of column size 500 x 500mm	No	24	
	<u>DRAWINGS</u>			
	<u>Preparation of acceptable shop detail drawings</u>			
4	Prepare and submit to the engineer acceptable as-built drawings	Item		
	<u>PAINTWORK, ETC TO NEW WORK ON</u>			
	<u>ON STRUCTURAL STEEL</u>			
	Carried Forward		R	
	Section No. 2			
	Bill No. 8			
	Structural Steel			

Brought Forward			R
<u>Apply one coat syncromate primer in accordance with SABS 679 1972, apply one coat multi purpose undercoat in accordance with SABS 681 and apply two coats of alkyd base enamel in accordance with SABS 630 (colour to Architects approval)</u>			
5	On columns and beams	t 5.48	
6	<u>On channel</u> , bracing, etc	t 2.27	
7	On plates, bolts	t 0.83	
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 8			
Structural Steel			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 9</u>			
	<u>METALWORK</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>HOT-DIP GALVANISED PRESSED STEEL DOOR FRAMES</u>			
	<u>1,2mm Double rebated pressed steel door frames suitable for half brick walls</u>			
1	Frame for door size 813 x 2 032mm high properly fitted level by all means	No	2	
	<u>1,2mm Double rebated pressed steel door frames suitable for One brick walls</u>			
2	Frame for door size 813 x 2 032mm high properly fitted level by all means	No	2	
	<u>Steel Gate</u>			
3	Single gate, size 900 x 2164mm high of 50 x 30 x 3mm rectangular hollow section frame all round with mitred angles and two 30 x 6mm flat section horizontal intermediate rails with ends welded to framing and with seven 12mm diameter rod vertical bars framed through intermediate rails with ends welded to and including 40 x 40 x 3mm hollow section framing, hinges, locking devices, etc	No	1	
	<u>PURPOSE MADE BRONZE POWDERCOATED ALUMINIUM DOOR AND WINDOWS SEALED AND FIXED TO BRICKWORK OR CONCRETE</u>			
	Doors and windows all according to door and window schedule			
	Carried Forward			
	Section No. 2 Bill No. 9 Metalwork			
			R	

Brought Forward			R
<u>Window glazed with 4mm obscure glass</u>			
4	Aluminium window size 600 x 900mm high (W4)	No 2	
5	Aluminium window size 1200 x 1100mm high (W1)	No 4	
6	Aluminium window size 1270 x 1000mm high (W2)	No 2	
7	Aluminium window size 1270 x 1000mm high (W3)	No 2	
<u>WELDED STEEL FRAMEWORK, COLUMNS, ETC</u>			
<u>Plates, cleats, etc</u>			
8	250 x 250 x 20mm Thick base plate six times holed for M28 bolts (elsewhere) welded on	No 132	
<u>Bolts, etc</u>			
9	M28 x 300 holding down bolt cast in concrete	No 132	
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 9			
Metalwork			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 11</u>			
	<u>TILING</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>WALL TILING</u>			
	<u>600 x 400mm x 6mm Thick glazed ceramic wall tiles "Johnson WD Woodlands Mist", and add for waste, laying, fixing with an approved adhesive and jointing and pointing in 'Tal' grout to:</u>			
1	On walls	m2	38	
2	On narrow widths	m2	2	
3	Walls in splash backs	m2	1	
4	Fair exposed cutting and fitting around pipe not exceeding 50mm diameter	No	2	
5	Fair exposed cutting and fitting around pipe exceeding 50mm and not exceeding 110mm internal diameter	No	2	
	<u>FLOOR TILING IN PATTERNS</u>			
	<u>600 x 600 x 10mm "Ceragran" or similar approved full bodied porcelain tiles includes waste, laying, supply and fixing with an approved adhesive and jointing in tinted "Tal" grout to:</u>			
6	Screeded floor	m2	15	
7	200mm High cut skirtings	m	15	
8	In narrow widths	m2	0.2	
	Carried Forward			
	Section No. 2			
	Bill No. 11			
	Tiling			
			R	

Brought Forward				R
<u>ALUMINIUM AND PVC TRIMS, ETC.</u>				
9	`Genesis ESA 150' natural anodised aluminium straight edge protector 12mm high at junction of differing floor finishes, plugged and screwed	m	2	
<u>GRANITE SLABS</u>				
<u>32mm thick " Rustenburg black" granite top fixed to and including 32 x 32 x 3mm thick mild steel angle and all necessary cleats, bolts, bolting to the walls, powder coating, etc</u>				
10	2540 x 300mm High vanity with bullnose finish on front and sides including 300mm granite modesty panel on front and one side, top to include 100mm high slashback, named "vanity section" on drawing no. J307-A161	No	2	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 11				
Tiling				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 12</u>			
	<u>PLUMBING AND DRAINAGE</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	<u>SANITARY FITTINGS</u>			
1	<u>"Vaal Lavatera code 705326" white vitreous china wall hung "flatback" urinal size 415 x 315 x 275mm complete with and including concealed wall hangers, chromium plated waste outlet and 38mm diameter domical grating (code 8787Z0), spreader and exposed flush valve (code 8543Z0), and two hinger brackets (code 8127Z0) including sealing watertight, along the junction with wall, with an approved silicon sealant and "Cobra Watertech code 340" chromium plated bottle trap</u>	No	2	
2	510 x 405mm White "Vaal Hibiscus Code 702303WH" wash hand basin wall hung, neatly bolted to the wall with two 8mm code 8446Z0 bolts neatly sealed with silicon between basin and wall. Basin to be fitted with 15mm "Cobra Star Pillar Tap 503-21B"chromium plated taps, connection to water supply with "flexi" chromium plated connection pipes and installation of chromium plated angle regulating valve complete with sliding wall flange "Cobra Watertech code 232-10" . Basin supplied complete with "Cobra Watertech Code 340" chromium plated bottle trap and 32mm basin waste union and plugs and chain complete.	No	2	
	<u>ELECTRIC WATER HEATERS</u>			
3	"Prisma Kwikot FPRX-10-UB" 10 Litre under basin geyser in ceiling including for geyser tray, all hot and cold water pipework and fittings, pressure reducing valves, vacuum breakers, in-line strainers, overflow pipes, etc	No	1	
	Carried Forward		R	
	Section No. 2 Bill No. 12 Plumbing and drainage			

Brought Forward			R
<u>Testing</u>			
4	Allow for testing the whole of the plumbing installation	Item	
<u>Full bore Cast Iron outlet</u>			
5	80mm Vertical outlet	No 4	
6	80mm 45 or 90 Degree side outlet	No 4	
7	80mm Two-way outlet	No 4	
<u>SANITARY PLUMBING</u>			
<u>Upvc pipes</u>			
8	40mm pipes fixed to walls, concrete, etc	m 3	
9	50mm pipes fixed to walls, concrete, etc	m 5	
10	110mm pipes fixed to walls, concrete, etc	m 2	
<u>Extra over pipes for fittings</u>			
11	40mm Plain Bend	No 6	
12	40mm Access bend	No 6	
13	40mm Junction	No 3	
14	40mm diameter 2 way vent valve	No 2	
15	50mm Bend	No 3	
16	50mm T juntion	No 2	
17	50mm Access bend	No 2	
18	50mm Access Junction	No 3	
19	110mm Access bend	No 2	
20	110mm Plain bend	No 2	
Carried Forward			R
Section No. 2			
Bill No. 12			
Plumbing and drainage			

	Brought Forward			R
21	110mm Pan connector	No	2	
22	110mm Reducing junction	No	4	
23	100mm diameter Two way vent valve	No	2	
	<u>Full bore Cast Iron outlet</u>			
24	80mm Vertical outlet	No	2	
25	80mm 45 or 90 Degree side outlet	No	2	
26	80mm Two-way outlet	No	2	
27	100mm Vertical outlet	No	2	
28	100mm 45 or 90 Degree side outlet	No	2	
29	100mm Two-way outlet	No	2	
	<u>WATER SUPPLY</u>			
	<u>HOT AND COLD WATER AND FIRE SERVICE RETICULATIONS</u>			
	<u>Medium class copper to SABS 62, with screwed ends, to walls , etc.:</u>			
30	15mm Diameter pipe.	m	30	
31	20mm Diameter pipe.	m	18	
	<u>Extra over copper pipes for screwed fittings:</u>			
32	15mm Fitting.	No	30	
33	20mm Fitting.	No	30	
	<u>TESTING</u>			
34	Testing water pipe system		Item	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
	Bill No. 12			
	Plumbing and drainage			

Section No. 2
Bill No. 13
Glazing

R

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Item No		Unit	Quantity	Rate	Amount
	<p><u>SECTION NO. 2</u></p> <p><u>BILL NO. 15</u></p> <p><u>EXTERNAL WORK</u></p> <p><u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u></p>				
	<p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and dumping on areas to be indicated by the Architect</p>				
	<p><u>Note:</u></p> <p>All External Works excavations measured in the following sections are in poor soil conditions.</p> <p>The responsibility of achieving the compaction densities specified and for obtaining suitable fill material from an appropriate source (either from site excavations or imported) rests solely with the Contractor. The rates shall be deemed to include for all costs in connection therewith.</p> <p>The Tenderer is advised to refer Architect's site layout plan for site clearance, etc before pricing this bill.</p> <p>To Civil engineers detail and specification. Parking as per council zoning requirements. Minimum requirement by client is 2 parking bays per fitment and alignment bay. Client to approve parking layout prior to any work being put in hand.</p>				
	<p style="text-align: right;">Carried Forward</p>				
	<p>Section No. 2</p> <p>Bill No. 15</p> <p>External Works</p>				
				R	

Brought Forward			R
Loading area to be provided with direct access to roll up door to store. Loading area min 3m wide.			
<u>SITE CLEARANCE ETC</u>			
<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	4,454
2	Stripping average 600mm thick layer of top soil and stockpiling on site	m2	4,454
<u>Taking out and removing, grubbing up roots and filling in holes</u>			
<u>REMOVAL OF TREES ETC</u>			
3	Tree stump exceeding 200mm and not exceeding 500mm girth	No	1
4	Tree stump exceeding 1000mm and not exceeding 1500mm girth	No	2
<u>BULK EXCAVATION, FILLING, ETC</u>			
<u>Open face excavation in earth over sloping site</u>			
5	Open face excavation (including widening and depth to be approved by the engineer) to form platform	m3	906
<u>Extra over bulk excavation in earth for excavation in</u>			
6	Soft rock	m3	91
7	Hard rock	m3	9
<u>Extra over all excavation for carting away</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor 5km from building site	m3	22
<u>RISK OF COLLAPSE OF EXCAVATIONS</u>			
Carried Forward			R
Section No. 2 Bill No. 15 External Works			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of bulk excavations not exceeding 1,5m deep	m2 14	
10	Sides of bulk excavations exceeding 1,5m deep	m2 7	
<u>KEEPING EXCAVATIONS FREE FROM WATER</u>			
11	Keeping excavations free of all water other than subterranean water	Item	
<u>FILLING, ETC.</u>			
<u>Earth filling supplied by the contractor compacted to 97% Mod AASHTO</u>			
12	Over site to form platforms	m3 11	
<u>Earth filling (MinCBR at 93% Mod AASHTO =25: Max PI=10) supplied by the contractor compacted to 93% Mod AASHTO density</u>			
13	Selected sub-grade of G5 material in accordance with SABS 1200 DM compacted to 93% Mod AASHTO density in 150mm thick layers.	m3 11	
14	Selected sub-grade of G6 material in accordance with SABS 1200 DM compacted to 93% Mod AASHTO density in 150mm thick layers.	m3 11	
15	In-situ rip and recompact filing compacted to 90% Mod AASHTO density	m3 11	
<u>PAVING</u>			
<u>EARTHWORKS</u>			
<u>REMOVAL OF EXISTING WORK</u>			
<u>Breaking down and removing concrete etc</u>			
16	Paving, etc	m2 37	
<u>Excavations in earth not exceeding 2m deep</u>			
17	Reduced levels under paving	m3 259	
Carried Forward			R
Section No. 2 Bill No. 15 External Works			

Brought Forward			R
<u>Extra over bulk excavation in earth for excavation in (Provisional)</u>			
18	Soft rock	m3	26
19	Hard rock	m3	3
<u>Earth filling supplied by the contractor under pavings etc</u>			
20	150mm Sub-grade layer of G5 material compacted to 95% MOD AASHTO density	m3	389
21	150mm Sub-grade layer of G6 material compacted to 95% MOD AASHTO density	m3	389
<u>Filling, etc.</u>			
22	50mm thick clean, dry river sand layer treated with an approved weed killer at a rate of 50 grams per square metre, spread and levelled to receive paving blocks (elsewhere)	m2	2,592
<u>Compaction of surfaces</u>			
23	Compaction of ground surface under pavings, etc including scarifying for depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 98% modified AASHTO density	m2	2,592
<u>Prescribed density tests on filling</u>			
24	"Modified AASHTO Density" test	No	1
<u>"Hyvar-X" or similar weed killer</u>			
25	Under pavings, etc and sprayed over previously wetted ground	m2	2,592
Carried Forward			R
Section No. 2 Bill No. 15 External Works			

Brought Forward			R
	<u>Paved to be constructed around the building, elsewhere, and Ramp to be provided up to main door to the building, etc. to allow vehicle access. pavers to match existing, pavers laid in strict accordance with the manufacturer's printed instructions, colour and pattern to Architect's approval:</u>		
26	80mm Thick interlocking paving blocks, Type S - A class 25 with individual blocks having a wet strength of 20MPa complying with SABS 1200 MJ - 1984 Specification, or laid to match existing pavers	m2	2,592
27	Extra for edge kerbs	m	1,211
	<u>Precast concrete finished smooth o exposed surfaces, including bedding, jointing and pointing</u>		
28	300 x 150mm High kerbs (SABS 927 fig 8) with 150 x 150 x 300mm unreinforced concrete haunching at the back of each joint, including excavation, backfilling, etc	m	76
	<u>Road markings with non-reflectorised paint applied at nominal rate of 0.42 l/m2 (SANS 1200MM 8.4.1)</u>		
29	100mm White lines (broken or unbroken)	km	0.5
30	White characters and symbols	m2	5
	<u>ROADS</u>		
	<u>FILLING, ETC.</u>		
	<u>BULK EXCAVATION, FILLING, ETC</u>		
	<u>Open face excavation in earth over sloping site</u>		
31	Open face excavation (including widening and depth to be approved by the engineer) to form platform	m3	141
	<u>Extra over bulk excavation in earth for excavation in</u>		
32	Soft rock	m3	14
33	Hard rock	m3	2
	Carried Forward		R
	Section No. 2 Bill No. 15 External Works		

Brought Forward			R
<u>Extra over all excavation for carting away</u>			
34	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor 5km from building site	m3 71	
<u>RISK OF COLLAPSE OF EXCAVATIONS</u>			
<u>Risk of collapse of excavations</u>			
35	Sides of bulk excavations not exceeding 1,5m deep	m2 141	
36	Sides of bulk excavations exceeding 1,5m deep	m2 14	
<u>KEEPING EXCAVATIONS FREE FROM WATER</u>			
37	Keeping excavations free of all water other than subterranean water	Item	
<u>Earth filling (MinCBR at 93% Mod AASHTO =25: Max PI=10) supplied by the contractor compacted to 93% Mod AASHTO density</u>			
38	Selected sub-grade of G5 material in accordance with SABS 1200 DM compacted to 95% Mod AASHTO density in 150mm thick layers.	m3 530	
39	Selected base material in accordance with SABS 1200 DM from stockpile and compacted to 95% Mod AASHTO density in 150mm thick layers.	m3 141	
40	In-situ rip and recompact filing compacted to 90% Mod AASHTO density	m3 943	
<u>ASPHALT BASE AND SURFACING</u>			
<u>Prime coat</u>			
41	Apply MC-30 cut back bitumen (using an application rate 1l/m2)	m2 943	
<u>Tack coat</u>			
42	Apply tack coat 30% stable grade emulsion	m2 943	
Carried Forward			R
Section No. 2 Bill No. 15 External Works			

Brought Forward				R
<u>Asphalt</u>				
43	25mm Thick asphalt continuously medium graded, using SBS or AE-2 modified binder or similar thickness	m2	943	
<u>SEWER DRAINAGE</u>				
<u>Allow for site visits and Inspections of existing drainage system:</u>				
44	Allow for Drainage System Inspection.		Item	
<u>Supply uPVC Heavy Duty Class 34 to SANS 791 sewer pipes</u>				
45	110mm Pipe and excavation not exceeding 1m deep	m	35	
46	110mm Pipe and excavation exceeding 1m deep but not exceeding 2m deep	m	5	
<u>Extra over uPVC pipe for fittings</u>				
47	110mm Bend	No	3	
48	110mm Access junction	No	2	
49	160mm T-junction pipe	No	1	
<u>Sundries</u>				
	Gulley not exceeding 1m deep to invert comprising 110mm diameter uPVC gulley trap and head, fitted with 190mm diameter cast iron grating, including excavation for, bedding on and encasing in 15MPa/19mm mass concrete and fitted with and including precast gulley top bedded in cement mortar	No	1	
50	ABC cast iron or similar approved straight or bent cleaning eye with removable cover jointed to 110mm uPVC pipe and set in and including 15Mpa/19mm mass concrete surround with exposed surfaces trowelled smooth	No	1	
51	Connect to existing soil drainage pipe exceeding 100mm and not exceeding 200mm diameter and make good	No	1	
Carried Forward				R
Section No. 2 Bill No. 15 External Works				

	Brought Forward			R
	<u>THE FOLLOWING IN PRE-FABRICATED MANHOLES</u>			
	<u>Excavate in earth for and including circular type precast concrete manhole formed of 1.4m diameter x 100mm thick 20MPa/19mm mass concrete bottom with manhole shaft formed of 1.05m diameter (internal) precast concrete rings with joints sealed with bitumious putty with and including precast concrete cover slab 125mm thick and precast concrete spacer slab with opening for and including heavy duty road type manhole cover and frame as type 4 set in cement mortar and sealed in tallow and with fine mass concrete benching in bottom floated smooth with falls to and including 150mm vitrified clay channels and finished on all exposed surfaces with 25mm thick granolithic with angles rounded including all necessary step iron, etc</u>			
52	Manhole not exceeding 1000mm deep	No	1	
	<u>WATER RETICULATION</u>			
	<u>Allow for site visits and Inspections of existing water system:</u>			
53	Allow for Water System Inspection.		Item	
	<u>HDPE Class 12 piping with "Plasson" or other approved fittings</u>			
54	32mm Diameter and excavations not exceeding 1m deep	m	35	
	<u>Extra over polyethylene pipe for fittings</u>			
55	32mm Tee or reducing tee	No	2	
56	32mm Reducing junction	No	3	
57	32mm Adaptor	No	2	
58	32mm T-junction pipe	No	1	
	Carried Forward			R
	Section No. 2			
	Bill No. 15			
	External Works			

Brought Forward				R
<u>Sundries, etc.</u>				
59	Excavate in earth for and build stop cock box size 225 x 600mm deep internally with half brick sides in cement mortar with 225 x 225mm regulation pattern cast iron hinged box Type 11B set in and including 15Mpa/19mm mass concrete surround size 75mm wide x 100mm deep all round	No	1	
60	Excavate in earth for and build water connection manhole size 1 015 x 600 x 880mm deep internally with half brick sides in cement mortar and 15Mpa concrete foundation and floor, manhole to include 5mm thick steel plate with 10mm roundbar drop handles, etc complete as per detail Drawing	No	1	
61	Allow for 75mm water connection into existing main water supply		Item	
<u>Testing</u>				
62	Supply all the necessary apparatus, water etc. for and test the water supply system to the satisfaction of the Representative/Agent and Local Authority, rectify all defective work free of charge and leave in perfect order	No	1	
Carried Forward to Summary of Section No.				
2				R
Section No. 2				
Bill No. 15				
External Works				

Bill No	SECTION SUMMARY - Taletso Access Control, Lichtenburg Campus		Page No	Amount
1	Earthworks		29	
2	Concrete, Formwork and Reinforcement		33	
3	Masonry		36	
4	Waterproofing		38	
5	Roof Coverings, etc		39	
6	Carpentry and Joinery		40	
7	Ironmongery		41	
8	Structural Steel		43	
9	Metalwork		45	
10	Plastering		46	
11	Tiling		48	
12	Plumbing and drainage		51	
13	Glazing		52	
14	Paintwork		54	
15	External Works		63	
Carried to Final Summary				R
Section No. 2				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 1</u>			
	<u>PROVISIONAL SUMS</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades published by Association of South African Quantity Surveyors</u>			
	The following sums and amounts are NETT.			
	Under no circumstances may any Provisional Sum or P.C Item be altered.			
	<u>ALLOW THE FOLLOWING PROVISIONAL SUMS</u>			
	<u>SIGNAGE</u>			
1	Provide the amount of R 30 000.00 (Thirty Thousand Rands) for the complete signage	Item		30,000.00
2	Profit on above item.	Item		
3	Attendance on ditto.	Item		
	<u>ELECTRICAL INSTALLATION</u>			
4	Provide the amount of R 100 000.00 (One Hundred Thousand Rands) for the complete electrical installation	Item		100,000.00
5	Profit on above item.	Item		
6	Attendance on ditto.	Item		
	<u>ACCESS CONTROL</u>			
7	Provide the amount of R 500 000.00 (Five Hundred Thousand Rands) for the complete access control installation	Item		500,000.00
8	Profit on above item.	Item		
9	Attendance on ditto.	Item		
	Carried Forward		R	
	Section No. 3			
	Bill No. 1			
	Provisional Sums			

Brought Forward		R	
<u>CARPORTS</u>			
10	Provide the amount of R 250 000.00 (Two Hundred Fifty Thousand Rands) for carports	Item	250,000.00
<u>GATE</u>			
11	Provide the amount of R 50 000.00 (Fifty Thousand Rands) for the gates	Item	50,000.00
<u>LANDSCAPE</u>			
12	Provide the amount of R 50 000 (Fifty Thousand Rands) for the landscape	Item	50,000.00
13	Profit on above item.	Item	
14	Attendance on ditto.	Item	
Carried to Final Summary		R	
Section No. 3			
Bill No. 1			
Provisional Sums			

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	Preliminary and General	26	
2	Taletso Access Control, Lichtenburg Campus	64	
3	Provisional Sums	66	
	SUB-TOTAL		R
	<u>CONTINGENCIES</u>		
	Allow Three Hundred Thousand Rand (R300 000.00) on the sub-total above for Contingencies to be used at the discretion of the Principal Agent and to be deducted in whole or in part if not required	Item	300,000.00
	SUB-TOTAL		R
	Value Added Tax (15%)		R
	Total to the Form of Tender		R
	Carried to Form of Tender		R