Item No		Quantity	Rate	Amount

SECTION NO. 1

BILL NO. 1

PRELIMINARIES

BUILDING AGREEMENT AND PRELIMINARIES

The JBCC Principal Building Agreement (Edition 6.2 – May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described

The JBCC Principal Building Agreement contract data form an integral part of this agreement

The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 – May 2018) shall be deemed to be incorporated in this project specific preliminaries, amended as hereinafter described

The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause

The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause

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

Carried Forward R

	Brought Forward		R	

PREAMBLES FOR TRADES

The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in this Project Specific Preliminaries

Supplementary preambles and/or specifications are incorporated in this Project Specific Preliminaries to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles

The contract sum shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications

PRICING OF PRELIMINARIES

Should the **contractor** select Option A in terms of subclause 3.2.1 in the **Contract Data** - **Contractor** to **Employer** (CE) for the purpose of adjustment of these **preliminaries**, the amount entered into the amount column in these **preliminaries** is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)

SECTION A - PRINCIPAL BUILDING AGREEMENT

Definitions (A1)

1	Clause 1.0 - Definitions and interpretation The measuring system used for the preparation of the **bills of quantities** is the Standard System of Measuring Building Work (sixth edition, revised 1999) published by the Association of South African Quantity Surveyors [1.1] F:..... V:..... T:.....	Item		

	Carried Forward		R	

	Brought Forward		R	
	Objective and preparations (A2 - A14)			
2	Clause 2.0 - Offer acceptance and performance obligations F:..... V:..... T:.....	Item		
3	Clause 3.0 - Documents			
	The **contract drawings** are as listed on the contents page of the **bills of quantities**			
	Provision is made in the summary page of these **bills of quantities** for the inclusion of Value Added Tax (VAT) [3.5]			
	The **principal agent** shall decide which portion of the **priced document** may be used as a specification of **materials and goods** or methods, if any [3.9]			
	F:..... V:..... T:.....			
		Item		
4	Clause 4.0 - Design responsibility F:..... V:..... T:.....	Item		
5	Clause 5.0 - Employer's agents F:..... V:..... T:.....	Item		
6	Clause 6.0 - Contractor's site representative F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
7	Clause 7.0 - Compliance with laws and regulations Without limiting the generality of the provisions of clause 7.0, the **contractor's** attention is drawn to the provisions of the Construction Regulations, 2014 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 specifications [7.1] F:..... V:..... T:.....	Item		
8	Clause 8.0 - Works risk F:..... V:.....T:.....	Item		
9	Clause 9.0 - Indemnities F:..... V:..... T:.....	Item		
10	Clause 10.0 - General insurances F:..... V:.....T:.....	Item		
11	Clause 11.0 - Special insurances F:..... V:..... T:.....	Item		
12	Clause 12.0 - Effecting insurances F:..... V:.....T:.....	Item		
13	Clause 13.0 - Assignment F:..... V:..... T:.....	Item		
14	Clause 14.0 - Security F:..... V:..... T:.....	Item		
	<u>Execution (A15 - A23)</u>			
15	Clause 15.0 - Preparation for and execution of the works F: ..... V:..... T:	Item		
	Carried Forward		R	

	Brought Forward		R	
16	Clause 16.0 - Site and access The sites are as identified in the site description. Access restrictions therefore vary depending on the school. Reference as [16.1] Geotechnical Report is avaialable and attached to this document [16.4] The school will be in operation during construction period. Reference as [16.6] There are no knonw services on site. Reference as [16.7] F:..... V:..... T:.....	Item		
17	Clause 17.0 - **Contract instructions** F:..... V:..... T:.....	Item		
18	Clause 18.0 - Setting out of the works The **contractor** shall notify the **principal agent** if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments [18.1]. F: ..... V:.....T:.....	Item		
19	Clause 19.0 - Temporary works and plant Area of construction to be barricaded against intrusion by pupils. [19.1.1] Contractor to provide own office accommodation for meetings, etc.[19.1.2] Clause 19.1.1 - *Enclosure of the **works*** Clause 19.1.2 - *Office accommodation* Clause 19.2 - *Advertising rights and notice boards* F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
20	Clause 20.0 - **Nominated subcontractors** Refer to the provisions on general attendance hereinafter F:..... V:..... T:.....	Item		
21	Clause 21.0 - **Selected subcontractors** General attendance of **n/s subcontractors** for pricing by the **contractor** shall be in accordance with the **n/s agreement**. Notwithstanding this provision, general attendance shall bedeemed to include for the **contractor** to provide free of chargeto any n/s subcontractor such scaffolding as may reasonably be required by such **n/s subcontractor** for the execution of therelevant subcontract work F:..... V:..... T:.....	Item		
22	Clause 22.0 - Employer's direct contractors F:..... V:..... T:.....	Item		
23	Clause 23.0 - Contractor's domestic subcontractors F:..... V:..... T:.....	Item		
	<u>Completion (A24 - A30)</u>			
24	Clause 24.0 - **Practical completion** F:..... V:..... T:.....	Item		
25	Clause 25.0 - **Works completion** F:..... V:..... T:.....	Item		
26	Clause 26.0 - Final completion F:..... V:..... T:.....	Item		
27	Clause 27.0 - **Latent defects** liability period F:..... V:..... T:.....	Item		
28	Clause 28.0 - Sectional completion F:..... V:..... T:.....	N/A		
	Carried Forward		R	

	Brought Forward		R	
29	Clause 29.0 - Revision of date for **practical completion** The removal and replacement of materials and/or workmanship which do not conform to specification or the **contract drawings** shall not constitute grounds for the extension of the **construction period** nor for the adjustment of the **contract value** (Clause 29.3) F:..... V:..... T:.....	Item		
30	Clause 30.0 - Penalty for late or non-completion F:..... V:..... T:.....	Item		
	<u>Payment (A31 - A35)</u>			
31	Clause 31.0 - Interim payment The inclusion of **materials and goods** stored off **site** in the amount authorised for payment in terms of clause 31.4 shall be at the sole discretion of the **principal agent** and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is therefore not applicable [31.4.2, 31.6.5] **Materials and goods** stored off **site** shall not be included in the amount authorised for payment [31.6.5] F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
32	Clause 32.0 - Adjustment to the **contract** value All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the **contractor** [32.13] Where prices are submitted by the **contractor** or **n/s subcontractor** 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 The **contractor** shall not receive any mark-up for overheads and profit on any omission of tenant installation work or tenant installation work by others. Claims for loss or profit shall not be entertained [32.2] F:..... V:..... T:.....	Item		
33	Clause 33.0 - Recovery of expense and loss F:..... V:..... T:.....	Item		
34	Clause 34.0 - Final account and final payment F:..... V:..... T:.....	Item		
35	Clause 35.0 - Payment to other parties F:..... V:..... T:.....	Item		
	<u>Termination (A36 - A39)</u>			
36	Clause 36.0 - Termination by **employer** - **contractor's** default F:..... V:..... T:.....	Item		
37	Clause 37.0 - Termination by **employer** - loss and damage F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
38	Clause 38.0 - Termination by **contractor** - **employer's** default F:..... V:..... T:.....	Item		
39	Clause 39.0 - Termination - cessation of the **works** F:..... V:..... T:.....	Item		
	Dispute (A40)			
40	Clause 40.0 - Settlement of disputes F:..... V:..... T:.....	Item		
	Contract variables (A41 - A42)			
41	Clause 41.0 - Post tender provisions The **contractor** is to complete before submission of his tender the **JBCC** Principal Building Agreement **Contract Data** CE F:..... V:..... T:.....	Item		
42	Clause 42.0 - Contractual agreement The required information of the contracting **parties** and the amount of the accepted **contract sum** shall be inserted in the **agreement** for signature of the agreement by the **parties** F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
	SECTION B - PRELIMINARIES			
	Definitions and interpretation (B1)			
43	Clause 1.0 - Definitions and interpretation F:..... V:..... T:.....	Item		
	Documents (B2)			
44	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item		
45	Clause 2.2 - Provisional **bills of quantities** 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 selected subcontract amounts F:..... V:..... T:.....	Item		
46	Clause 2.3 - Availability of construction documentation The **budgetary allowances** and selected subcontract amounts allocated for subsequent trades included in this **agreement** will be separately procured, based on multiple procurement of subcontractors during the **construction period** F:..... V:..... T:.....	Item		
	Previous work and adjoining properties (B3)			
47	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item		
48	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item		
49	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
	Samples, shop drawings and manufacturer's instructions (B4)			
50	Clause 4.1 - Samples of materials F:..... V:..... T:.....	Item		
51	Clause 4.2 - Workmanship samples F:..... V:..... T:.....	Item		
52	Clause 4.3 - Shop drawings F:..... V:..... T:.....	Item		
53	Clause 4.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item		
	Deposits and fees (B5)			
54	Clause 5.1 - Deposits and fees F:..... V:..... T:.....	Item		
	Temporary services (B6)			
55	Clause 6.1 - Water F:..... V:..... T:.....	Item		
56	Clause 6.2 - Electricity F:..... V:..... T:.....	Item		
57	Clause 6.3 - Telecommunication facilities F:..... V:..... T:.....	Item		
58	Clause 6.4 - Ablution facilities F:..... V:..... T:.....	Item		
	Prime cost amounts (B7)			
59	Clause 7.1 - Responsibility for **prime cost amounts** F:..... V:..... T:.....	Item		
	Special attendance on n/s subcontractors (B8)			
60	Clause 8.1 - Special attendance F:..... V:..... T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
	General (B9)			
61	Clause 9.1 - Protection of the works F:..... V:..... T:.....	Item		
62	Clause 9.2 - Protection/isolation of existing/sectionally occupied **works** F:..... V:..... T:.....	Item		
63	Clause 9.3 - Security of the **works** F:..... V:..... T:.....	Item		
64	Clause 9.4 - Notice before covering work F:..... V:..... T:.....	Item		
65	Clause 9.5 - Disturbance F:..... V:..... T:.....	Item		
66	Clause 9.6 - Environmental disturbance The **employer** has prepared an environmental management plan (EMP) (Refer to Annexure for a copy of the relevant plan). The **contractor** shall price opposite this item for compliance with all the requirements of such emp F:..... V:..... T:	N/A		
67	Clause 9.7 - **Works** cleaning and clearing F:..... V:..... T:.....	Item		
68	Clause 9.8 - Vermin F:..... V:..... T:.....	Item		
69	Clause 9.9 - Overhand work F:..... V:..... T:.....	Item		
	Carried Forward		R	

Brought Forward R

Schedule of variables (B10)

Information necessary for elections and completion of those clauses contained in the 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

10.1 - Provisional **bills of quantities** [clause 2.2]
The quantities are provisional
No

10.2 - Availability of construction documentation [clause 2.3]
Construction documentation is complete
Yes

10.3 - Previous work - dimensional accuracy [clause 3.1]

10.4 - Previous work - defects [clause 3.2]

10.5 - Inspection of adjoining properties [clause 3.3]

10.6 - Water [clause 7.2]

Option A (by **contractor**)
Yes

Option B (by **employer** - free of charge)
No

Option C (by **employer** - metered)
No

10.7 - Electricity [clause 7.3]

Option A (by **contractor**) Yes

Option B (by **employer** - free of charge) No

Option C (by **employer** - metered) No

Carried Forward R

Brought Forward		R
10.8 - Telecommunications [clause 7.4]		
Telephone Yes		
Facsimile Yes		
E-mail Yes		
10.9 - Ablution facilities [clause 7.5]		
Option A (by **contractor**) Yes		
Option B (by **employer**) No		
10.10 - Protection of the **works** [clause 9.1]		
10.11 - Protection/isolation of existing/sectionally occupied **works** [clause 9.2]		
Protection/isolation is required Yes		
10.12 - Disturbance [clause 9.5]		
10.13 - Environmental disturbance [clause 9.6]		
Carried Forward		R

	Brought Forward		R	
	SECTION C - SPECIFIC PRELIMINARIES			
70	**Site instructions** **Contract Instructions** issued on **site** are to be recorded in triplicate in a **site** instruction book which is to be maintained on site by the **contractor** F:..... V:.....T:.....	Item		
71	**Warranties for material and workmanship** Where warranties for materials and/or workmanship are called for, the **contractor** shall obtain a written warranty, addressed to the **employer**, from the firm supplying the materials and/or doing the work and shall deliver same to the **principal agent** on the **final completion** of the **contract**. The warranty shall state that workmanship, materials and installation are warranteed for a specified period from the date of **final completion** and that any **defects** that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by **defects** in the construction of the building in which case the responsibility for replacement shall rest entirely with the **contractor** F:.....V:.....T:.....	Item		
72	**Co-operation of contractor for cost management** It is specifically agreed that the **contractor** accepts the obligation of assisting the **principal agent** in implementing proper cost management. The **contractor** will be advised by the **principal agent** of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The **principal agent** undertakes to make available to the **contractor** all **budgetary allowances** and cost assessments/reports to enable the proper procedure to be implemented and the **contractor** shall attend all cost plan review and cost management meetings. The **contractor** undertakes to extend these procedures, as necessary, to all subcontractors F:.....V:.....T:.....	Item		
	Carried Forward		R	

	Brought Forward		R	
73	**Propping of floors below** The **contractor** is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of **materials and goods** and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the **principal agent** and the cost thereof shall be borne by the **contractor** F:..... V:..... T:.....	Item		
74	**Testing of windows for watertightness** Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the **principal agent,** the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means F:..... V:..... T:.....	Item		
75	**Testing of flat roof waterproofing for watertightness** Flat roof waterproof areas shall be flooded and kept "ponded" 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 F:..... V:..... T:.....	Item		
	SECTION D: SPECIFIC PRELIMINARIES			
76	Section E contains Specific Preliminary items which apply to this contract except where "N/A" (Not Applicable) appears against the item	Item		
	Carried Forward		R	

	Brought Forward		R
77	**D1 PROPRIETARY BRANDED PRODUCTS** The Contractor shall take delivery of, handle, store, use apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instruction after consultation with the manufacturer's authorised representative. F:_____V:_____T:_____	Item	
78	**D2 OVERTIME** Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the Contractor unless the Engineer/Principal Agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the Employer. F:_____V:_____T:_____	Item	
79	**D3 AS BUILT DRAWINGS** The position of construction breaks and the extent of individual concrete pours are to be recorded by the Contractor on the Structural Engineer's drawings and are to be submitted to the Engineer/Principal Agent and the Structural Engineer for their records. F:_____V:_____T:_____	Item	
80	**D4 SITE INSTRUCTIONS** 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. F:_____V:_____T:_____	Item	
	Carried Forward		R

	Brought Forward			R
81	**D5 LABOUR RECORD** At the end of each week, the Contractor shall provide the Engineer/Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all Sub-contractors on the works each day. F:_____V:_____T:_____ *Note: In the event that the contractor fails to satisfy the requirements of this specification, the Employer (Head: Public Works) may apply any of the sanctions provided in the contract. Sanctions may include the application of a financial penalty of .04% of the Contract Sum per calendar day of which the required report has not been submitted*		Item	
82	**D6 PLANT RECORD** At the end of each week the Contractor shall provide the Engineer/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	
83	**D7 NON CESSION OF MONIES** The Contractor shall not cede nor assign his rights or claims to any monies due or to become due under this contract. F:_____V:_____T:_____		Item	
	Carried Forward			R

	Brought Forward			R
84	**D8 SECTIONAL COMPLETION** When it is required that the contract be executed in sections or portions, the Tenderer shall allow for all costs in this regard as no claim for additional costs will be entertained. F:_____V:_____T: _____		Item	
85	**D9 LOCAL LABOUR** It is a general requirement of this contract that persons normally resident in the locality of the works (local labour) be given preference for employment on the contract. Provided, however, that should adequate and appropriate Labour not be available within the locality, other may be employed subject to satisfactory proof being provided that every reasonable endeavour has been made to employ local Labour. The Contractor shall identify the local community leaders with the purpose of negotiating with them regarding the utilization of local Labour in the construction process. In this regard, the Contractor shall furthermore give preference, wherever possible to the employment of single heads of households, women and youth and preference should be given to parents of those children that are enrolled in the school whom are not currently employed. The Contractor shall, in general, maximize the involvement of the local labour and it is required that 100% of unskilled labour should be from the local community. All standard local labour employment forms (EPWP local labour forms) together with the supporting documentation (certified ID copies, employee details, wage rates, proof of payment, period of employment, employment contracts, etc) must be submitted with the monthly payment certificates and issued to the engineer. F:_____V:_____T:_____		Item	
	Carried Forward			R

	Brought Forward			R
86	**D10 IMPORT PERMITS AND DUTIES** The responsibility for obtaining the necessary import permits shall rest with the successful Tenderer. No foreign exchange will be arranged or provided by the Administration. Tenderers are to allow in their tenders and pay the ordinary levy imposed on imported items in terms of item 196.10 of Part 8 of Schedule No. 1 of the Customs and Excise Act, 1964 with effect from 1 October 1989. F:_____V:_____T:_____		Item	
87	**D11 CONTRACT PRICE ADJUSTMENT PROVISIONS (CPAP)** Notwithstanding anything to the contrary contained in the GCC for Construction Works 2010 2nd Edition, this Contract shall only when the Construction Period exceeds 6 months and the Contract sum exceeds R1,000,000,00 be subject to the Contract Price Adjustment Provisions Indices Application Manual for use with P0151 indices (CPAP) (Revised 1 January 2013) as published by Statistics South Africa. Tenderers are advised that with reference to Clause 3.4.6 of the Contract Price Adjustment Provisions (CPAP) Indices Applications Manual, the Head: Public Works will not accept the submission by Tenderers of lists of additional items. Where this contract is a Lump Sum contract, the contract will be subject to Contract Price Adjustment Provisions (CPAP) only where the contract period equals or exceeds 6 calendar months. The applicable work group shall be WG 180 for domestic buildings or WG 181 for commercial and industrial buildings. F:_____V:_____T:_____		Item	
	Carried Forward			R

	Brought Forward			R
88	**12.1 EPWP PROGRAMME** **D12.1 a. Employment Targets** The Contractor needs to provide a realistic estimate on the number of jobs that the project has the potential to create throughout the project duration as the project will be implemented using labour intensive construction methods on elements where it is economical and feasible for this construction method. No of jobs to be created is a minimum of **8 unskilled labour** F:_____V:_____T:_____ It is a general requirement of this contract that persons normally resident in the locality of the works (local labour) or unemployed parents whose children attend the specific school be given preference for employment on the contract. Provided, however, that **should adequate and appropriate labour not be available within the ward**, others may be employed subject to satisfactory proof being provided that every reasonable endeavour has been made to employ local labour **(Local Sub-Contractor(s); Skilled; Semi-Skilled and Unskilled).** The Contractor shall identify the local community leaders **(Project Steering Committee)** with the purpose of negotiating with them regarding the utilization of local labour in the construction process. In this regard, the Contractor shall furthermore give preference, wherever possible to the employment of single heads of households, women and youth as well as families declared most indigent by War on Poverty / Sukuma Sakhe program profiling process. The Contractor should aim, in general, to maximize the involvement of the local community, however workers from the communities should not exceed 20% of all persons working on the project, where local employees possess skills at level of competency that meet contractors requirements	Item		
	Carried Forward			R

Section No. 1
Bill No. 1
PRELIMINARIES
MAVUSANDILE SOLUTIONS (PTY) LTD

	Brought Forward			R
89	**D12 EXPANDED PUBLIC WORKS PROGRAMME (EPWP)** Tenderers are advised that this contract will be subject to certain provisions of the Expanded Public Works Program (EPWP) aimed at alleviating and reducing unemployment. Tenderers must allow for any costs for the following employment requirements of the EPWP. 1. 60% of unskilled labour to be women. 2. 55% of unskilled labour to be youth aged between 18 and 35 years. 3. 2% of unskilled labour to be people living with disability. 100% Unskilled labour utilised must reside within the boundaries of the Municipality Ward where this contract is executed, with preference to the local community closest or at the walking distance to the contract site. Wherever possible local skilled tradesmen are to be employed on this contract with the view to maximize utilization of local resources. F:_____V:_____ T:__		Item	
90	**D12.1 LABOUR RATE AND PAYMENT INTERVALS** The contractor should ensure that labour rate paid to unskilled local labour is commensurate to the daily task. When determining the rate, consideration should be given to EPWP beneficiaries are mostly bread winners in their families, as the program intends alleviating poverty. There should also be consideration that the labour rate promotes creation of expanded number of jobs created and person days of work. Contractors should make endeavours to ensure that labourers, particularly unskilled are remunerated on forthnighlty basis and prior notification be made should there be a shortfall on their wages. The labour rate for local unskilled shall also be determined in consideration of the location of the project, i.e. for projects implemented in urbanized municipalities will not be the same as that for rural municipalities. F:_____V:_____T:_		Item	
	Carried Forward			R

	Brought Forward		R	
91	**12.2 LABOUR INTENSIVE CONSTRUCTION METHOD** **D12.2 a Labour Intensive Construction (LIC) Method** On site there must a person(s) having competency in managing and implementing LIC methods *Foreman @ NQF Level 4 the Unit Standard on Implementing LIC methods on site*Site Agent/ Managers @ NQF level 5 the Unit Standard on Manage Labour-Intensive Skills Programme both must be CETA accredited. F:_____V:_____T:_____ D12.2 b Labour Intensive Construction Method Those parts of the contract to be constructed using Labour Intensive methods will be marked in the BoQ with letter LI (indicating Labour Intensive) against every item so designated. Such works will only be constructed using method so indicated.Reference to be made to Guidelines for the implementation of Labour Intensive Infrastructure projects under EPWP. "Scope of Work in Respect of Work Relating to the Expanded Public Works Programme (EPWP)" **Labour-intensive component** Due to the nature of the work involved, this type of project lends itself to be feasible as a labour-Intensive project i.e. the construction activities will indeed require skilled/unskilled labour. The aim of the projects is to provide some form of economic benefit whilst generating and increasing the acquired skills shortage to improve sustainability in the local area. The following are potential focus areas where employment creation can be optimized per project: (i) Trenching works not exceeding depth of 1.5m, including trenching for Foundation, Electrical, Water, Mechanical & Civil Services Works including backfilling where ground conditions permit (ii) Building Works; All masonry works (which include concrete mixing on site; brickwork; block work ; plastering; screed works; jointing; etc.); Painting, Plumbing, Ironmongery; roof cladding; glazing; tilling; carpentry; flooring; waterproofing; etc. (iii) Sewers works including Construction of manholes, laying of Sewer pipes, bedding, backfilling and compaction.			
	Carried Forward		R	

	Brought Forward		R
		Item	
92	(iv) Water Reticulation works including excavation, bedding, laying of pipes and compaction (v) Site Clearance Works (vi) Electrical Reticulation works. (vii) Stormwater water drainage using in-situ concrete (viii) Landscaping and Grassing of Sports Field (ix) Cleaning and Fencing Works The above identified activities are deemed suitable to be constructed using the LIC methods; to build, upgrade and maintain the social and economic of the underdeveloped area, promoting community participation, development of skills and creating more work opportunities. The above identified activities should be marked in the Bill of Quantities with the letter (LI). Contractor to price the above items in the Bill of Quantities bearing in mind that they are regarded as the main sources of job creation, whether sub contracted or undertaken by the main contractor The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letter LI are not necessarily an exhaustive list of all the activities which must be done by hand. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment. F:_____V:_____T:_____		
		Item	
	Carried Forward		R

	Brought Forward			R
93	D12.3 RECORD KEEPING 12.3.1 Every employer must keep in the project site office the following minutes of site progress minutes; contractors' monthly site progress reports; accurately recorded attendance register; proof of payment as means to verify authenticity of data in the EPWP Beneficiary form submitted with payment certificates. Copies of submitted EPWP beneficiary data forms should also be kept in the site office. 12.3.2 The employer must keep this record for a period of at least three (3) years after the completion of the project in his/her office as the project site office would have been relocated. This should be safely kept for job creation data verifications and periodical audits on projects conducted by National and Provincial Department of Public Works after one (1) or two (2) quarters of submitting captured EPWP Data to the National EPWP coordinating Department. F:_____V:_____T:_____		Item	
94	**D12.4 EPWP MONTHLY REPORTING DOCUMENTS** At the end of each month the contractor must submit: EPWP monthly data collection form Worker monthly payment upload Worker monthly acknowledgement of receipt of payment Worker monthly Payment register Worker monthly training form Monthly attendance Register Worker Monthly pay slips Unskilled labour certified ID copies (once off) Beneficiary ID-size photos Proof of UIF Proof of COIDA F:_____V:_____T:_____		Item	
	Carried Forward			R

	Brought Forward			R
95	**D12.5 EPWP PROMOTION** **12.5.1. EPWP signage board** EPWP Program at the project level shall always be promoted through the provision of projects signage board that embraces EPWP logo at the bottom, correct measurement for this sign board will be provided by the project leader during the site handing over meeting. F:_____V:_____T:	Item		
96	**D13 EPWP contract for labour** It is compulsory that shortly after the contractor and or sub contractor has appointed local labour, the employment contract should be signed by both parties, prior to commencement with works on site. The employment contract forms part of the Ministerial Determination or from the regional EPWP officials F……..V……T…… ……	Item		
97	**D14 EPWP Scope of Work For This Project** Contractors are to price the items on the Bill of Quantities highlighted below, bearing in mind that they are regarded as main sources of job creation, whether sub contracted or undertaken by the main contractor. Elements of the scope of work where the application of Labour Intensive Construction methods are indicated with the letters (LI) are as follows; Excavating trenches for foundations and any other civil works with the depth not more than 1.5 m All masonry works which include concrete mixing on site; brickwork; plastering; screed works; jointing; etc. Painting, Plumbing, Ironmongery; roof cladding; glazing; tilling; carpentry; flooring; waterproofing; etc. External works such as landscaping; cleaning; paving; fencing; tarmac; etc. F……..V.....T…… ……..	Item		
	Carried Forward			R

	Brought Forward		R	
98	**12.5.2 Branding of labour apparel** Contractor & Sub-contractors' labourers shall be provided with EPWP branded Personal Protective Equipment (PPE), reflector vest with EPWP acronym at the back as an ideal and cost effective means of promoting program on site. The contractor is advised to price for both items 12.5.1 and 12.5.2 F:_____V:_____T:_____	Item		
99	**D12 COMMUNITY LIAISON OFFICER (CLO)** **UTILISATION OF A COMMUNITY LIAISON OFFICER** The Contractor shall allow for and pay any and all costs necessary for the engagement of the services of a Community Liaison Officer (CLO) for the full duration of this contract Provide the sum of R39 000.00 for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R6 500.00 a month for the duration (6 months) A CLO will be identified by the local structures (Project Steering Committee) of the ward areas and appointed following fair and transparent interviewing process, to be conducted in the presence of local structures and the contractor representative, in order to assist the Contractor in the procurement of any local labour, etc. required for this project. The Contractor is to liaise with the CLO and afford him any assistance needed in ensuring sound working relations with the local community.	Item		39 000,00
100	**Key responsibilities of the CLO are envisaged to include and not necessarily be limited to:** 1. Assisting local leadership in conducting skills and resources audit which facilitates sourcing labour from within the ward or targeted areas for employment, as required by Contractor 2. Assisting in sourcing labour-only domestic Sub-contractors and the procurement of materials from local resources, as required by the Contractor. 3. Assisting the Contractor by identifying areas of			
	Carried Forward		R	

Brought Forward			R
potential conflict and or threats to the project or to stakeholders in the project and recommend appropriate action to the Contractor. 4. Assisting Contractor and stakeholders in the project in the resolution of any conflicts which may arise. 5. Establishing and ensuring that sufficient and open communication channels between the Contractor and the work force are maintained. 6. Establish and ensuring that efficient and open communication channels between the Contractor and the community are maintained. 7. Identifying and reporting to the Contractor regarding issues where communication between stakeholder is necessary, recommend courses of action and facilitate such communications. 8. Assisting the Contractor and the workforce in the establishment of grievance procedures and necessary recommendations to the Contractor regarding the grievances and solution thereto 9. Attending to site meetings and project implementation meetings as required by the Contractor and preparing periodic reports as may be required by the Contractor, from time to time. 10. Attending to such other duties which are consistent with the functions of a CLO, as may be required by the Contractor, from time to time. Tenderers are to price twice the rate of unskilled local labour rate for the Community Liason Officer (CLO) against this item for any and all costs arising out of compliance with the foregoing and in the event of a Tenderer failing to price against this item or making inadequate financial provision against this item for compliance as aforesaid, then no claim for costs or additional cost incurred will be entertained by the Head: F:_____V:_____T:____	Item		
Carried Forward			R

Brought Forward		R

SUMMARY OF CATEGORIES - MAIN WORKS ONLY EXCLUDING SHE AMOUNT

Category: Fixed R .....

Category: Value R .....

Category: Time R .....

Carried to Final Summary		R

Section No. 1
Bill No. 1
PRELIMINARIES
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO. 2

BILL NO. 1

ALTERATIONS

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

OLD MATERIALS TO BECOME PROPERTY OF THE CONTRACTOR: Old materials from alterations except where described to be re-used or handed over, become the property of the contractor, who must allow credit for same in the Final Summary

OLD MATERIALS TO BE CARTED AWAY: Old materials from the alterations except where described to be re-used or handed over, as well as all rubbish etc. must be regularly carted from the site and not be allowed to accumulate on or around the site.

OLD MATERIALS NOT TO BE REUSED: None of the old materials are to be used for new work except where specifically described as being set aside for re-use.

HANDING OVER OF MATERIALS: Where certain materials or articles from demolitions or alterations are described as to be handed over by the contractor to the Regional Representative or Representative/ Agent such materials or articles shall be properly stored by the contractor, until handing over thereof. The contractor shall obtain an official receipt listing the materials or articles and dates of handing over. If the contractor fails to submit the receipt when requested to do so it shall be deemed that the materials or articles are still in his possession and he will be held liable to the Department for the full replacement value thereof which amount will be deducted from monies due to the contractor.

WORK GROUP 102

Carried Forward R

				R	
	Brought Forward				
	REMOVAL OF EXISTING WORK				
	Demolishing and removing				
1	Demolish pit latrine structure comprising of brick/block work with asbestos roof sheeting, approximate size 34,4 square meter structure and 2,0m deep pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).	No	1		
2	Demolish pit latrine structure comprising of brick/block work with asbestos roof sheeting, approximate size 16 square meter structure and 2,0m deep pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).	No	1		
3	Demolish pit latrine structure comprising of brick/block work with asbestos roof sheeting, approximate size 19 square meter structure and 2,0m deep pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).	No	1		
4	Demolish pit latrine structure comprising of brick/block work with asbestos roof sheeting, approximate size 13 square meter structure and 2,0m deep pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).	No	1		
5	Cart away rubble from demolitions and dispose off site.		Item		
6	Backfill existing hole with G7 fill material in max. 150mm layers and compact to 95% MOD AASHTO density.		Item		
7	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	5		
8	Provision of a certificate of safe disposal for asbestos.		Item		
	Desludging				
9	Clean out pit latrine by desludging including removal of all debris and waste including solid waste as per Health and Safety requirements and make good on completion including disposing of all debris and waste at an authorised municipal waste disposal facility. Contractor to price per seat		Item		
	Carried Forward			R	

				R
	Brought Forward			
10	Issue of Certificate of Waste Disposal.		Item	
	TEMPORARY BARRIERS, SCREENS, ETC			
	Temporary barriers, screens, etc including removal			
11	Temporary shade cloth screen 2000mm high of 70% green shade cloth including posts, fixing, etc.	m	200	
	TEMPORARY GATE			
	Temporary Double swing gate for construction vehicles.			
12	Double swing gate 5000mm wide x 2400mm high with 50 x 38 x 5 mm handle and catch with 15mm diameter hole for padlock.The bottom lock have 2mm washer welded to bar to serve as a stopper and 38 x 50 5mm to be guided with 20mm diameter holes	No	1	
	Carried to Final Summary			R

Section No. 2
Bill No. 1
ALTERATIONS(PROVISIONAL)
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO.3

BILL NO 1

EARTHWORKS (PROVISIONAL)

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Nature of ground

The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock".

The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock".

The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, therefore "earth", but possibly interspersed with "hard rock".

Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth". The trial holes also indicate that the water table is at a maximum depth of approximately 1000mm.

A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured

Carried Forward R

				R	
	Brought Forward				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
	Filling				
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material				
	WORK GROUP 104				
	EXCAVATIONS				
	Excavation in earth n.e 2m				
1	Reduced levels under floors	m3	121		
	Excavation in earth exceeding 2m and n.e 4m deep				
2	Holes (Pits)	m3	30		
	EXCAVATIONS IN STRATA OF A MORE DIFFICULT CHARACTER				
	Extra over trench and hole excavations in earth for excavation in				
3	Intermediate	m3	16		
4	Hard rock	m3	8		
	Extra over all excavations for carting away				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	167		
	Carried Forward			R	

				R
	Brought Forward			
	Risk of collapse of excavations			
6	Sides of trench and hole excavations exceeding 1,5m deep	m2	145	
	Keeping excavations free of water			
7	Keeping excavations free of water		Item	
	FILLING ETC			
	G5 earth filling supplied by the contractor, compacted to 93% Mod AASHTO density			
8	Under trenches, floors	m3	41	
	G7 earth filling supplied by the contractor, compacted to 93% Mod AASHTO density			
9	To sides of Pits etc.	m3	38	
	Coarse river sand filling supplied by the contractor			
10	nder floors etc	m3	18	
	Compaction of surfaces			
11	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	22	
	Prescribed density test on filling			
12	"Modified AASHTO Density" test	No	3	
	SOIL POISONING			
	Soil insecticide			
13	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	16	
14	To bottoms and sides of trenches etc	m2	103	
	Carried Forward to Summary of Section No. 3			R

Item No		Quantity	Rate	Amount

SECTION NO.3

BILL NO 2

CONCRETE, FORMWORK AND REINFORCEMENT(PROVISIONAL)

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Cost of tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)

Formwork

Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. 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

				R	
	Brought Forward				
	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 fordesign 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"				
	WORK GROUP 110				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	15MPa/20mm concrete				
1	Surface blinding under footings and bases	m3	1		
	REINFORCED CONCRETE				
	25Mpa/20mm concrete				
2	Strip footings	m3	3		
3	Floor slab	m3	3		
	REINFORCED CONCRETE				
	30MPa/19mm concrete				
4	Bases	m3	7		
5	In between Pit cavity walls	m3	4		
6	Suspended slab.	m3	5		
7	Base to tank stand	m3	1		
	WORK GROUP 111				
	Carried Forward			R	

				R
	Brought Forward			
	SMOOTH FORMWORK (DEGREE OF ACCURACY 1)			
	Smooth formwork to sides:			
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	22	
	Smooth form work to soffits			
9	Suspended slabs including propping n.e 3.5m high	m2	29	
	Smooth Formwork to form:			
10	450mm Diameter opening through 200mm thick slab	No	8	
	CONCRETE SUNDRIES			
	Finishing top surface of concrete with a wood trowel.			
11	Surface beds, slabs, etc	m2	50	
	Concrete strength test cubes			
12	Prepare set of six concrete cubes each size 150 x 150 x 150 mm and deliver to an approved laboratory for testing and pay all charges. (Provisional)	Sets	5,0	
	MOVEMENT JOINTS ETC			
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:			
13	6 x 20mm deep saw cut joints in top of concrete	m	30	
	WORK GROUP 114			
	REINFORCEMENT (PROVISIONAL)			
	Carried Forward			R

				R
	Brought Forward			
	High tensile steel reinforcement to structural concrete work			
14	Bars in reinforcement of all sizes	t	2,52	
	Fabric reinforcement			
15	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	117	
16	Mesh Ref. 888	m2	57	
17	Mesh Ref. 193	m2	50	
	Carried Forward to Summary of Section No. 3			R

Item No		Quantity	Rate	Amount

SECTION NO.3

BILL NO 4

MASONRY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

BRICKWORK

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick

Hollow walls etc

Descriptions of hollow walls shall be deemed to include wall ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole

Reinforced brick lintels

Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Carried Forward R

Brought Forward R

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BLOCKWORK

Concrete masonry units

Blocks shall be either solid or hollow modular dense concrete masonry units in accordance with SABS Specification 1215, having compressive strengths as described

Blockwork

Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"

Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole

Standard complementary blocks

Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding asnecessary

DECORATIVE BLOCKS

Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour

"WINBLOK" MODULAR PRECAST CONCRETE WINDOW SURROUNDS

Carried Forward R

Brought Forward R

General

Window surrounds shall be built into brick walls and pointed all round on both sides with 10 x 10mm square recessed joints

Prices shall include for building in as single units or combinations in patterns of two or more window units and for bedding solid all round in mortar and pointing

Note

Aluminium infill windows, glazing and pointing with sealing compound are measured elsewhere

SAMPLES

Samples of all masonry building units, shall consist of a minimum of 6 units

PAVINGS

Quarry tiles, precast concrete, cement, terrazzo and similar tiles

Tiles shall be of approved manufacture, well burnt or cured, and uniform and true in size, shape and colour

Preparation of concrete floor beds, slabs, etc for pavings

Concrete surfaces shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. Surfaces shall then be wetted and kept damp for at least six hours before slushing with 1:2 cement/sand and while still wet, pavings, etc. shall be laid on a 1:4 cement mortar bed not exceeding 25mm thick. Sand shall be clean, sharp river sand

Jointing of pavings

Pavings, etc, shall, except for crazy paving, be laid with continuous joints in both directions

STONEWORK

Carried Forward R

Brought Forward		R
Slate, marble, granite, etc Slate, marble, granite, etc is to be best quality stone from an approved quarry, free from cracks and other defects and equal to samples to be submitted to and approved by the architect. Each stone is to hold its full size, square to the back and tobe set on its natural quarry bed		
Setting out Care shall be exercised in setting out the work, the preparation of templates and the checking of the detail drawings. All measurements shall be taken on the site where necessary and the full size setting out of each course shall be done at the yardso as to ensure the proper fitting of each stone Before putting any work in hand the contractor is to submit to the architect for his approval details of the manner in which he proposes to set out the slabs and joints in all wall facings, pavings, sills, treads, etc together with samples of grain or pattern matching		
Face labours Face labours are to match samples to be submitted to and approved by the architect Arrises are to be clean and sharp except to treads and thresholds where they are to be slightly rounded		
Carried Forward		R

Brought Forward R

Bedding and jointing

Slate, marble, granite and other floor paving and wall linings are to be bedded solidly on the mortar thicknesses described and are to have tightly fitting butt joints unless otherwise stated

Where stonework is to be fixed with adhesive, the adhesive is to be "TAL Goldstar/Bond" (mixed 20kg/5 litre) for external use or where white or light coloured marble is used, "TAL Goldstar" for internal use or other approved. The contractor will be liable for any defects to the slate, marble and granite arising from the use of the adhesive

Where soffit linings are suspended the suspension system must be concealed and must be submitted to the architect for approval before work commences

Where tolerance screws are required these are to be stainless steel expanding bolt type with matching stainless steel bracket and PVC clad dowel with nuts and washers etc

Damaged work

Any damaged stonework shall be discarded and replaced at the contractor's expense. No touching up will be permitted except in exceptional cases, with the architect's consent

Descriptions

Descriptions of stonework shall be deemed to include preparatory work, labours to backs, beds and joints, templates, mortices for bolts etc and for hoisting and setting in position, bedding, jointing and pointing, casing and protecting from injury and cleaning down at completion

Descriptions of recessed pointing to stonework shall be deemed to be square recessed, hollow recessed, weathered pointing, etc

Carried Forward R

				R	
	Brought Forward				
	WORK GROUP 116				
	FOUNDATIONS				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class 1 mortar				
1	One brick wall to strip foundation	m2	38		
2	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	53		
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
3	Half brick walls	m2	31		
4	Half brick wall in beamfilling.	m2	8		
5	One brick walls	m2	79		
6	Piers	m3	0,4		
	Facebrick				
	"Corobrik Road Satin" or other approved face bricks in stretcher bond with ruled joints and perpends externally:				
7	1m High . One brick wall Facebrick Road Satin FBX " (Or Similar Approved @ PC Sum R12 000 per 1000) clay face brick or equal . Architect approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal	m2	10		
8	Extra over ordinary brickwork for facing in stretcher bond and pointed on both sides	m2	90		
9	Extra over brickwork for face brickwork in beamfilling.	m2	8		
	Carried Forward			R	

				R
	Brought Forward			
10	Face brick on edge window cill set sloping and slightly projecting on bottom edge in 1:5 cement mortar including cutting and fitting between reveals, fair splay cutting under and pointing on top, edge and projecting soffit (In No. 28)	m	6	
11	Face brick cut soldier course window head, formed with cant bricks170mm high, bedded in 1:5 cement mortar including cutting and fitting between reveals and pointing on top and front face.	m	6	
12	Fair raking cutting.	m	6	
	BRICKWORK SUNDRIES			
	Bagging of 1:3 cement and sand mixture			
13	Bag outer face or inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	79	
	Brickwork reinforcement			
14	75mm Wide reinforcement built in horizontally	m	128	
15	150mm Wide reinforcement built in horizontally	m	344	
	Concrete prestressed fabricated lintels			
16	110 x 75mm Lintels in lengths not exceeding 3m	m	2	
	Air bricks etc			
17	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	8	
	Carried Forward to Summary of Section No. 3			R

Section No. 3
Bill No. 3
MASONRY
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 5				
	WATERPROOFING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 120				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
1	In walls	m2	7		
	One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	On Ground floor slab	m2	28		
3	Under Pit base slab.	m2	40		
	Two coats "Brixeal" bitumen emulsion waterproof coating				
4	Internal Pit Walls	m2	40		
5	Pit walls etc.	m2	40		
6	On bagged brick walls	m2	40		
	SEALANTS ETC				
7	Silicon pointing to aluminium windows	m	24		
	Carried Forward			R	

	Brought Forward			R
	SIKAFELX PRO 2HP or other equally approved sealing compound including backing cord, bond breaker, primer, etc			
8	10 x 12mm Construction joint joints in floors	m	34	
	Carried Forward to Summary of Section No. 3			R

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 6				
	ROOF COVERINGS ETC				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 124				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.58mm Zinc alum Z250 broad flute IBR finish Top chromadek pre - coated roof sheeting (charcoal) laid at 18 degrees pitch on 75 x 50mm purlins at +/- 1200mm centres max. on Sisalation RSA 420 underlay under purlins on straining tape on timber trusses laid as per manufacturers specification. 0,8mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's instructions.				
1	Roof coverings with pitches not exceeding 50 degrees	m2	63		
2	0.5mm thick ridge capping	m	8		
3	Moulded narrow or broad rib polyethelene filler blocks	m	21		
	ROOF AND WALL INSULATION				
	Carried Forward			R	

				R
	Brought Forward			
	"Sisalation 420" heavy industrial grade aluminium foil based insulation			
4	Reflective foil insulation or equal approved 402 Heavy industrial grade reinforced aluminium foil insulation double sided, heavy grammage reflective foil laminate incorporating eight layers of aluminium foil, reinforcing scrim, Kraft paper and polyethylene, tested for conformance with SABS 1381: Part IV- 1985, with a Class 1 fire rating in accordance with SABS 0177: part III - 1981 and BS 476 part 5, 6 and 7, secured to each truss/rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll. All to be fixed in accordance with manufactures specification.	m2	63	
	Sundries			
5	"Sondor" Eave Polycloser	m	21	
	Carried Forward to Summary of Section No. 3			R

Item No		Quantity	Rate	Amount

SECTION NO.3

BILL NO 7

CARPENTRY AND JOINERY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

WORK GROUP 126

ROOFS, ETC

Plate nailed timber roof truss construction

Timber roof truss **prices are to include for the design, supply,wind categoy as per SANS 10160 and erection of the trusses** into position complete including bolts, connectors, connections, etc.The dimensions of the trusses given in the following descriptions are nominal and the actual measurements for the design and manufacture of the trusses must be taken on site to match existing.The truss spans given are measured horizontally between the outer faces of the wall plates. Permanent bracing and runners have not been measured in accordance with the Standard System of Measuring Builder's Work and are measured as an item, the price of which is to include for the design, supply and fixing of necessary permanent bracing and runners.

Carried Forward R

				R	
	Brought Forward				
	Monoplaner Prefabricated Connector Plate Roof Trussesat 1600mm maximum centres with a pitch of 25 Degrees and suitable for EVERITE Nutec Bigsix corrugated roof sheeting or other equal approved wth 50 x 76mm purlins(elsewhere measured) at 1050mm centres and Gypsum plasterboard ceiling (Gypsum plasterboard ceiling elsewhere measured) with brandering at 450mm centres				
1	Design, supply and install prefabricated timber roof truss system complete, designed in accordance with the Standard Building Regulations and the Engineer's requirements, measured on the flat plan area of the roof inclusive of overhangs	m2	47		
	Sawn softwood				
2	38 x 114mm Wall plates	m	21		
3	38 x 114mm Bracing	m	25		
4	50 x 76mm Purlins, bolted	m	84		
	Sundries				
5	Hurrican clips	No	16		
	TR1 and TR2 Certificates				
6	Allow for TR1 and TR2 certification of all trusses		Item		
	EAVES, VERGES, ETC				
	"Everite" medium density plain nutec-cement				
7	80 x 200mm Barge boards including H-profile jointing strips	m	6		
	"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).				
8	15 x 225mm Fascias including Pvc H-profile jointing strips	m	39		
	DOORS, ETC				
	Carried Forward			R	

	Brought Forward			R	
	External Commercial Grade Entrance Door:				
9	Meranti standard hardwood swing door with Z bracings behind and two hardwood edge strips. 2032 x 813 x 44mm Meranti single swing entrance door complete with approved Z bracings behind sanded down or imperfections & finished with 1 coat of pink wood primer , completed with 2 coats of eggshell gloss enamel paint. All to architect's later spec. Door Hung on 2.5 mm galvanised mild steel standard pressed Single rebate frame fit for 1 brick wall	No	1		
	Internal Medium Duty Standard Door:				
10	Horizontal Slatted 8 Panel Semi Solid Meranti hardwood panel door with in 8 sections to both sides of door and two hardwood edge strips: 2032 x 813 x 44mm. Door omplete with a 100mm under cut . Door to be hung on Hardwood Meranti Single rebate door Jambs . Door omplete with pink primer & 2 coats eggshell gloss enamel paint.	No	8		
	FRAMED FRAMES, ETC				
	Timber frames				
11	108 x 44mm rebated timber door frames for 813x 2032mm door with 5 x 5 mm inner rebate and 14 x 14mm chamfered outward exposed edge for stiles and top frame securely retro fixed to walls	No	8		
	Carried Forward to Summary of Section No. 3			R	

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 8				
	IRONMONGERY				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 132				
	HINGES, BOLTS, ETC				
	Approved				
1	1.5 pairs 108mm brass butt hinges	Pairs	10,0		
	LOCKS				
	"Union"				
2	Union 2261-76SS 4 lever upright lock with and including Union AL684 - 05AS bishop lever furniture	No	2		
3	Facility indicator bolt, code 37651RH	No	8		
	SUNDRIES				
	"Supreme Hygiene" or similar approved				
4	TR3 - 3 Tier Toilet roll holder Lockable	No	8		
5	Liquid Soap Dispenser	No	3		
6	She Bin 12L	No	8		
	Door Closer				
7	Union 87001SS door stop	No	11		
	Carried Forward			R	

	Brought Forward			R	
	Door signs or numbers to be of an approved grey ultra high impact acryllic plastic construction plugged to wall or screwed to door with 15mm countersunk raised head chromium plated screws at each corner or hung from ceilings with two chromium plated chains				
8	200 x 70 x 2.5mm Sign with 40mm high letters to centre of main door leaf 1850mm above ffl (Allow for 10 Letters)	No	1		
	Carried Forward to Summary of Section No. 3			R	

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 9				
	METALWORK				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 136				
	HOT DIP GALVANISED STEEL WINDOWS				
	The following units refer to the Architects diagrams, details and specifications bound into the back of these bills of quantities and must be adherred to in all respects and all prices are to include all glass, ironmongery,, fixing,sealing etc				
1	Standard window size 533 x 654mm	No	8		
2	Standard window size 899 x 457mm	No	4		
	STANDARD PRESSED STEEL DOOR FRAMES				
	1,2mm Double rebated frame suitable for one brick walls complete with crimped lugs for building in 2 x 100mm galvanised and welded loose pin hinges				
3	Frame for door 813 x 2032mm high	No	3		
	Carried Forward			R	

				R
	Brought Forward			
	HOT DIP GALVANISED STEEL GATES			
4	Hot dip galvanised single gate size 877mm long x 2225mm high overall, formed of 50 x 30 x 2,5mm thick rectangular hollow section frame with 50 x 30 x 2,5mm thick rectangular hollow section middle rail and 38 x 38 x 2,5mm thick square hollow section tube Diametergonal braces in between, all sections welded together, with 25 x 25 x 2mm thick square tube bolt frame with 12mm Diameter. x 85mm long bolt (bolt formed of 85mm long high tension solid round bar welded to 76 x 25 x 5mm plate with 14mm Diameter. drilled hole), including drilling hole size 18mm Diameter. through square tube gate frame for bolt opening, with and including three pin hinges (size 25mm Diameter. x 80mm long overall) with 15mm dia. x 30mm long pin and 25mm dia. sheath welded to gate and post	No	1	
	MANHOLE COVERS			
5	600 x 600mm Type 2A Heavy duty cast iron manhole cover and frame to SABS 558.	No	9	
	Carried Forward to Summary of Section No. 3			R

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 10				
	PLASTERING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 142				
	SCREEDS				
	Screeds on concrete				
1	30mm Thick on floors and landings	m2	48		
2	30mm Thick on Pits base slab.	m2	43		
	Carried Forward to Summary of Section No. 3			R	

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 11				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 146				
	RAINWATER DISPOSAL				
	Seamless Aluminium Gutters and Downpipes				
1	125 x 75 x 0,6mm aluminium ogee gutter with baked enamel finish fixed with concealed brackets.	m	21		
2	Long-arm –Swan-neck100 Bend combination	No	2		
3	Extra for stopped end	No	4		
4	Extra for outlet for 75mm pipe	No	2		
5	100 x 75 x 0,6mm Fluted aluminium downpipes with white baked enamel finish.	m	6		
6	Extra for bend	No	2		
7	Extra for shoe	No	2		
8	Spreader for 75mm pipe	No	2		
	WORK GROUP 148				
	Carried Forward			R	

				R
	Brought Forward			
	SANITARY FITTINGS			
9	Atlas VIP 200 floor mounted plastic seat overall size 482 x 650 x 505mm standard toilet pedestal with baby seat & lid. Colour; Granite and including Atlas VIP 200 inlet funnel or similar approved	No	9	
10	382AP Christy wash hand basin including brackets,etc.	No	5	
	TAPS, VALVES, ETC			
	Brass			
11	COBRA WATERTECH (Code. 232-10-15) fullway isolating ball valves with plastic coated plated steel lever handle	No	5	
12	No.KM2 15mm pillar tap with blue inlay.	No	5	
13	20mm Stopcock.	No	5	
	SANITARY PLUMBING			
	PVC pipes			
14	50mm Waste pipe.	m	30	
15	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirlys4Africa Toilet / Sewer Ventilator to Fit on 110mm Pipe A Energy Saving, Silent Operation, Anti Dust Tower Fan (Black).	m	28	
	Extra for:			
16	50mm Fittings	No	15	
17	110mm Fittings	No	15	
18	50mm Rubber S trap with side outlet.	No	6	
19	Black Whirlybird with insect-proof netting inside, to fit on 110mm vent pipe.	No	8	
	Carried Forward			R

				R
	Brought Forward			
	WATER SUPPLY			
	Polycop pipe			
20	15mm pipe from tank to sink	m	30	
21	22mm Polycop pipe to walls,etc	m	20	
	Extra over Class 2 copper pipes for brass compression fittings			
22	15mm Fittings	No	20	
23	22mm Fittings	No	12	
	Soakaway (Provisional)			
24	3 000 x 900 x minimum 700mm deep, complete with graded stone filling, geotextile lining of Bidim U14 or similar approved, 500mm compacted soil cover to 90% MOD AASHTO above soakaway, pipe connection from hand wash basin waste, excavation, backfilling and disposal of surplus material, all subject to final Engineer's detail.	No	1	
	The following in JoJo 5500 litre capacity tanks (Stromy sky ME 5513 in colour)			
25	JOJO / ROTO TANKS or similar approved 5000 Litre Low Profile light duty cylindrical polyurethane water storage tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	1	
	TESTING			
26	Testing water pipe system		Item	
	Carried Forward to Summary of Section No. 3			R

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 12				
	GLAZING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 150				
	6.38mm thick laminated safety glass panels. All edges of the glazing panels to be treated and fully sealed with Betaseal to avoid delamination and penetrating stains.				
1	6.38mm Arctic Snow safety laminated glass	m2	4		
	MIRRORS				
2	Polished Stainless steel mirror (1 mm thick) Size: 400x300x1.0mm vertically above each basin 670mm above floor - screw fixed with countersunk stainless steel Philips screws on four corners. Rear surface of the mirror and plastic wall-plugs securely epoxy-glued to wall	No	5		
	Carried Forward to Summary of Section No. 3			R	

Item No			Quantity	Rate	Amount
	SECTION NO.3				
	BILL NO 13				
	PAINTWORK				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 152				
	PAINTWORK, ETC TO NEW WORK ON				
	FIBRE-CEMENT SURFACES WITH				
	Two coats pure acrylic paint on				
1	Fascias and barge boards	m2	8		
	METAL SURFACES WITH				
	Clean with galvanised iron cleaner,apply one coat galvanised iron primer,one coat undercoat and two coats enamel				
2	Door frame	m2	3		
3	Security gates	m2	4		
	Global Roofing 0,60mm "Klip-Lok 700" concealed fix galvanized roof sheeting with "Chromadek" finish on one side including KL700 clips fixed to timber purlins according to manufacturer's intructions				
	WOOD SURFACES WITH				
	Two coats oil wood primer on				
4	Backs of frames, linings, etc not exceeding 300mm wide	m	41		
	Carried Forward			R	

	Brought Forward			R	
	One coat Dulux Supergrip primer wood primer,one coat Dulux Trade Universal Undercoat,two coats Dulux Pearlglo Waterbased Enamel paint on				
5	Door frames	m2	2		
6	Doors	m2	36		
	Prepare and apply two coats carbolineum on:				
7	Roof timbers.	m2	36		
	EPOXY				
	Epoxy coating				
8	Floor	m2	48		
	Carried Forward to Summary of Section No. 3			R	

Section No. 3
Bill No. 12
PAINTWORK
MAVUSANDILE SOLUTIONS (PTY) LTD

SECTION SUMMARY - GIRLS - 8G,6WHB

Bill No		Page No	Amount
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Carried to Final Summary R

Section No. 3
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO.4

BILL NO 1

EARTHWORKS (PROVISIONAL)

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Nature of ground

The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock".

The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with "soft rock".

The nature of the ground is assumed to be silty clay with loose river boulders varying in size up to approximately 450mm diameter, therefore "earth", but possibly interspersed with "hard rock".

Trial holes indicate that the nature of the ground is silty clay to a depth of approximately 500mm with fine to medium loose sandy material below, therefore "earth". The trial holes also indicate that the water table is at a maximum depth of approximately 1000mm.

A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured

Carried Forward R

				R	
	Brought Forward				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
	Filling				
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material				
	WORK GROUP 104				
	EXCAVATIONS				
	Excavation in earth not exceeding 2m deep:				
1	Trenches.	m3	20		
2	Holes.	m3	15		
3	Reduced levels under floors	m3	3		
	Excavation in earth exceeding 2m and n.e 4m deep				
4	Holes (Pit)	m3	96		
	Extra over trench and hole excavations in earth for excavation in:				
5	Soft rock	m3	1		
6	Hard rock	m3	7		
	Extra over all excavations for carting away:				
7	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	134		
	Carried Forward			R	

				R	
	Brought Forward				
	Risk of collapse of excavations:				
8	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	56		
9	Ditto, but from ground level to exceeding 1,5m and not exceeding 3,0m deep.	m2	21		
	Keeping excavations free of water:				
10	Keeping excavations free from mud and all water including subterranean sources.		Item		
	EARTH FILLING, ETC.				
	Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density				
11	Backfilling to trenches, holes, etc	m3	20		
	Earth filling (G5 material) supplied by the contractor compacted to 98% Mod AASHTO density:				
12	Under floors, steps, pavings, etc	m3	9		
13	To sides of Pits etc.	m3	8		
	Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:				
14	Under floors, steps, pavings, footings, etc.	m3	11		
15	To sides of Pits etc.	m3	8		
	Coarse river sand filling supplied by the contractor:				
16	Under floors etc	m3	3		
	Compaction of surfaces:				
17	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	111		
	Carried Forward			R	

				R
	Brought Forward			
	Prescribed density test on filling			
18	"Modified AASHTO Density" test	No	2	
	SOIL POISONING			
	Soil insecticide			
19	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	30	
20	To bottoms and sides of trenches etc	m2	46	
	Carried Forward to Summary of Section No. 4			R

Section No. 4
Bill No. 1
EARTHWORKS (PROVISIONAL)
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO.4

BILL NO 2

CONCRETE, FORMWORK AND REINFORCEMENT(PROVISIONAL)

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Cost of tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)

Formwork

Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. 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

				R	
	Brought Forward				
	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 fordesign 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"				
	WORK GROUP 110				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	15MPa/20mm concrete				
1	Surface blinding under footings and bases	m3	1		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25Mpa/20mm concrete				
2	Strip footings	m3	3		
3	Surface bed	m3	6		
	30Mpa/20mm concrete				
4	Pit slab	m3	1		
5	Infill to 330mm cavity walls	m3	2		
6	Ramps,aprons etc	m3	2		
	TEST BLOCKS				
	Test blocks:				
7	Making and testing set of three 150x150x150mm concrete strength test cubes (Provisional).	No	2		
	Carried Forward			R	

				R
	Brought Forward			
	CONCRETE SUNDRIES			
	Finishing top surface of concrete with a wood trowel.			
8	Surface beds, slabs, etc	m2	28	
	Sikafloor-curehard-24 dry-shake floor hardening agent in accordance with the manufacturer's instructions applied on			
9	Power floated concrete surfaces during the power floating process	m2	21	
	WORK GROUP 111			
	ROUGH FORMWORK (DEGREE OF ACCURACY III)			
	Rough Formwork to Sides:			
10	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	32	
	Permanent Formwork:			
11	Soffit of slab over pit.	m2	7	
	Extra on permanent formwork for boxing or blocking in or boxing out to form:			
12	450mm Diameter opening through 200mm thick slab.	No	2	
	SMOOTH FORMWORK (DEGREE OF ACCURACY 1)			
	Smooth formwork to sides and soffits:			
13	230x 350mm Concrete Beam below suspended slab	m2	9	
	Smooth Formwork to form:			
14	250 mm Diameter opening.	No	2	
15	110mm Diameter opening.	No	2	
	Carried Forward			R

				R	
	Brought Forward				
	MOVEMENT JOINTS ETC				
	Saw cut Ream out 6mm wide 20mm deep seal,10 x 6 with SIKAFLEX-PRO 2HP on polyethylene backing cord.				
16	6 x 20mm deep saw cut joints in top of concrete	m	9		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
17	10mm Joints not exceeding 300mm high or wide	m	21		
18	10mm Joints exceeding 300mm high or wide	m2	6		
	WORK GROUP 114				
	REINFORCEMENT (PROVISIONAL)				
	High tensile steel reinforcement to structural concrete work				
19	Steel reinforcement to structural concrete work.	t	0,21		
	Fabric reinforcement				
20	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	22		
21	REF. 888 fabric reinforcement in concrete surface beds, slabs, etc.	m2	183		
	Carried Forward to Summary of Section No. 4			R	

Item No		Quantity	Rate	Amount

SECTION NO.4

BILL NO 3

MASONRY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

BRICKWORK

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick

Hollow walls etc

Descriptions of hollow walls shall be deemed to include wall ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole

Reinforced brick lintels

Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Carried Forward R

Brought Forward R

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BLOCKWORK

Concrete masonry units

Blocks shall be either solid or hollow modular dense concrete masonry units in accordance with SABS Specification 1215, having compressive strengths as described

Blockwork

Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"

Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole

Standard complementary blocks

Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding asnecessary

DECORATIVE BLOCKS

Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour

"WINBLOK" MODULAR PRECAST CONCRETE WINDOW SURROUNDS

Carried Forward R

Brought Forward R

General

Window surrounds shall be built into brick walls and pointed all round on both sides with 10 x 10mm square recessed joints

Prices shall include for building in as single units or combinations in patterns of two or more window units and for bedding solid all round in mortar and pointing

Note

Aluminium infill windows, glazing and pointing with sealing compound are measured elsewhere

SAMPLES

Samples of all masonry building units, shall consist of a minimum of 6 units

PAVINGS

Quarry tiles, precast concrete, cement, terrazzo and similar tiles

Tiles shall be of approved manufacture, well burnt or cured, and uniform and true in size, shape and colour

Preparation of concrete floor beds, slabs, etc for pavings

Concrete surfaces shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. Surfaces shall then be wetted and kept damp for at least six hours before slushing with 1:2 cement/sand and while still wet, pavings, etc. shall be laid on a 1:4 cement mortar bed not exceeding 25mm thick. Sand shall be clean, sharp river sand

Jointing of pavings

Pavings, etc, shall, except for crazy paving, be laid with continuous joints in both directions

WORK GROUP 116

Carried Forward R

				R	
	Brought Forward				
	BRICKWORK IN FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:				
1	Piers	m3	0,2		
2	One brick wall in Pits.	m2	27		
3	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	22		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
4	75mm Wide reinforcement built in horizontally	m	350		
5	150mm Wide reinforcement built in horizontally	m	478		
	Two coats of 1:3 cement/sand bagwash slurry mixture (total thickness approx. 4mm), hand-applied with a synthetic bristle heavy-duty brush to the inner face of the outer leaf in 220mm superstructure cavity wall, ensuring all joints are filled flush and the surface is finished to a smooth, uniform consistency to receive waterproofing. Rate to include for keeping the 8mm cavity free of mortar droppings and debris as the work proceeds.				
6	To walls (Provisional).	m2	75		
	Concrete prestressed fabricated lintels				
7	110 x 75mm Lintels in lengths not exceeding 3m	m	1		
	Galvanised hoop iron cramps, ties, etc				
8	32 x 1,2mm Galvanised hoop iron roof tie 600mm girth with each end fixed to timber	No	55		
	Carried Forward			R	

				R
	Brought Forward			
	Ventilation blockwork:			
9	Corobrick 222 x 73 x 106mm facing Roan Satin FBX facing breeze blocks laid in class II mortar. 0.5m2 Per cubicle above Window	m2	2	
	FACE BRICKWORK			
	"Corobrik Road Satin FBX" or other approved face bricks in stretcher bond with ruled joints and perpends externally:			
10	Extra over ordinary brickwork for facing in stretcher bond and pointing.	m2	60	
11	Extra over for facebrick in piers.	m2	4	
12	Extra over for facebrick in foundations (Provisional).	m2	22	
13	Half brick wall in beam filling pointed one side including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.	m2	7	
14	Fair raking cutting.	m	22	
	Brick-on-edge header course copings, sills, etc, of "Corobrik Road Satin" or other approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:			
15	Face brick on edge window cill set sloping and slightly projecting on bottom edge in 1:5 cement mortar including cutting and fitting between reveals, fair splay cutting under and pointing on top, edge and projecting soffit (In No. 28)	m	3	
16	Face brick cut soldier course window head, formed with cant bricks170mm high, bedded in 1:5 cement mortar including cutting and fitting between reveals and pointing on top and front face.	m	3	
17	Face brick soldier course band 160mm wide to top of one brick wall bedded in 1:5 cement mortar including pointing to sides and faces	m	3	
	Carried Forward to Summary of Section No. 4			R

Section No. 4
Bill No. 3
MASONRY
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 4				
	WATERPROOFING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 120				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':				
1	Under surface beds.	m2	30		
	One layer of 350 micron embossed dampcourse waterproof sheeting below walls, sills, etc:				
2	Below walls, sills, etc.	m2	25		
	Two coats of "a.b.e.® Brixeal" or similar approved bitumen emulsion waterproofing, applied in accordance with the manufacturer's instructions (total coverage approx. 1.5 litres/m²), applied to previously bagwashed surfaces of brickwork within the cavity, including all necessary surface preparation, protection of adjacent facebrick, and cleaning of equipment.				
3	Pit walls etc.	m2	22		
4	Internal walls	m2	53		
	JOINT SEALANTS ETC				
	Carried Forward			R	

				R
	Brought Forward			
	Clear Neutral silicone sealant:			
5	In joint sealing and pointing all round external window and door frames.	m	22	
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc			
6	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).	m	21	
	Carried Forward to Summary of Section No. 4			R

Section No. 4
Bill No. 4
WATERPROOFING
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 5				
	ROOF COVERINGS ETC				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 124				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.58mm Zinc alum Z250 broad flute IBR finish Top chromadek pre - coated roof sheeting (charcoal) laid at 18 degrees pitch on 75 x 50mm purlins at +/- 1200mm centres max. on Sisalation RSA 420 underlay under purlins on straining tape on timber trusses laid as per manufacturers specification. 0,8mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's instructions.				
1	Roof covering with pitch not exceeding 18 degrees.	m2	28		
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	6		
3	0,8mm Thick cover flashing piece	m	6		
4	Hole through metal roof sheeting for and flashing around 110mm pipe with Fibreglass and sealing with resin	No	2		
5	Moulded narrow or broad rib polyethelene filler blocks	m	16		
	Carried Forward			R	

				R
	Brought Forward			
	Extra Over for Translucent polycarbonate roof sheeting Make Allowance for 15 % of all roof sheets to be 1.2mm Broad Flute Global Roofing Solutions (GRS) Clear Heavy Duty Polycarbonate Roof Sheeting including all necessary fittings & fixtures to Manufactures Specification.			
6	0.58 mm translucent polycarbonate roof sheeting to match roof profile, complete with proprietary fixings	m2	4	
	ROOF AND WALL INSULATION			
	"Sisalation 420" Reflective foil insulation or equal approved 402 Heavy industrial grade reinforced aluminium foil insulation double sided, heavy grammage reflective foil laminate incorporating eight layers of aluminium foil, reinforcing scrim, Kraft paper and polyethylene, tested for conformance with SABS 1381: Part IV- 1985, with a Class 1 fire rating in accordance with SABS 0177: part III - 1981 and BS 476 part 5, 6 and 7, secured to each truss/rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll. All to be fixed in accordance with manufactures specification.			
7	Insulation laid taut over purlins and fixed concurrent with roof covering, including taped laps and nylon straining wires as per manufacturers specification	m2	28	
	Sundries			
8	"Sondor" Eave Polycloser	m	16	
	Carried Forward to Summary of Section No. 4			R

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 6				
	CARPENTRY AND JOINERY				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 126				
	ROOFS, ETC				
	Plate nailed timber roof truss construction				
	Sawn softwood:				
1	Design, supply and install prefabricated timber roof truss system complete, designed in accordance with the Standard Building Regulations and the Engineer's requirements, measured on the flat plan area of the roof inclusive of overhangs	m2	28		
2	38 x 114mm Wall plate.	m	11		
3	50 x 76mm Purlins.	m	22		
4	76 x 50mm Cross bracing	m	11		
5	Hurricane clips	No	54		
	Carried Forward			R	

				R	
	Brought Forward				
6	Prior to the erection of all the roof trusses the consulting engineer shall certify that he has received such working drawings and construction detail designs from the professional engineer employed by the contractor and that he has considered same and given permission to proceed with the fabrication of the trusses (TR1 certificate issued by Contractor's Engineer) and then before the roof covering commences the completed structure shall be inspected and certifed as stable by the professional engineer employed by the contractor to ensure that the manufacture of the trusses and erection details have been complied with to his satisfaction (TR2 certificate issued by Contractor's Engineer)		Item		
	EAVES, VERGES, ETC				
	"Aluminium" or equal approved				
7	12 x 225mm Fascia board (product no (041-202) or equal approved. Aluminium H-Profile fascia joiners (product no 685-1950. Drill and for fix with Hot dipped galvanised screws and washers.	m	11		
8	0,7 x 240mm seamless aluminium anthracite grey powder coated Barge boards. drill and fix with Hot dipped galvanise screws and washers. 76 x 50mm trimmer batten fixed underside of purlin ends for barge board fixing.	m	7		
	DOORS ETC				
	MERANTI edging on all sides: Meranti standard hardwood swing door with Z bracings behind and two hardwood edge strips. 2032 x 813 x 44mm Meranti single swing entrance door complete with approved Z bracings				
9	Door size 813 x 2032mm high External door	No	1		
	Carried Forward			R	

				R
	Brought Forward			
	Horizontal Slatted 8 Panel Semi Solid Meranti hardwood panel door with in 8 sections to both sides of door and two hardwood edge strips: 2032 x 813 x 44mm. Door complete with a 100mm under cut . Door to be hung on Hardwood Meranti Single rebate door Jambs			
10	Door size 813 x 2032mm high Internal door	No	2	
	Horizontal Slatted 5 Panel Solid Meranti hardwood panel door with in 5 sections to both sides of door and two hardwood edge strips: 1200mm x 813 x 44mm. Door to be hung on Hardwood Meranti Single rebate door Jambs			
11	Door size 813 x 1200mm high internal Grade R door	No		
	FRAMED FRAMES, ETC			
	Meranti Frames bolted to wall with expanding masonry bolts - four per style including quadrant beads on both sides:			
12	50 x 108mm rebated meranti frame	No	54	
	Carried Forward to Summary of Section No. 4			R

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 7				
	IRONMONGERY				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 132				
	HINGES, BOLTS, ETC				
	"UNION" or equal approved				
1	SS2BB BUTT HINGE EN 1935GRD13 (Stainless Steel) - Code JH-BB-STD-22-SS-01	No	12		
2	Bolt Indicator Satin Chrome Union CZ80941SCR	No	2		
	LOCKS				
	"ASSA ABLOY" or equal approved				
3	"Gower" CZ6822461CH Gower 4 Lever Lockset Solid cast zinc handle and zinc backplate	No	3		
	HANDLES				
	"Union" or equal approved				
4	"AL 8294 AS anodised aluminium" Water closet indicator bolt.	No	3		
	PUSH PLATES AND KICKING PLATES				
	Carried Forward			R	

				R
	Brought Forward			
	"Union" or equally approved			
5	Kick Plate 900 X 800mm Works Code - SS5089-900W x 2 Per Door	each	4	
	SUNDRIES			
	"ASSA ABLOY" or equal approved			
6	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	3	
	"Union" or equal approved			
7	Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	3	
	LETTERS, NAMEPLATES, ETC.			
	Stainless steelGrade 201 Stainless Steel Signage Plate,600mm X 1252mm X 1.2mm . Supplied with 4 mounting screws - Pozi head 14.6x3.87mm Radius end plates to eliminate sharp cormers after mounting plate Counter-sunk screw holes - screws will have a nice flush finish with the signage			
8	Sign plate plugged and screwed to walls with chromium plated dome headed screws.	No	1	
	BATHROOM FITTINGS			
	"Supreme Hygiene" or similar approved			
9	TR3 - 3 Tier Toilet roll holder Lockable	No	4	
10	Waste disposal bin 27L mounted on the wall	No	1	
11	Liquid Soap Dispenser	No	2	
12	She Bin 12L	No		
	Carried Forward to Summary of Section No. 4			R

Section No. 4
Bill No. 7
IRONMONGERY
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 8				
	METALWORK				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 136				
	HOT-DIPPED GALVANISED STEEL WINDOWS FRAMES				
	Purpose made school windows with brass fittings to opening sashes with and including Horizontal 20x5mm burglar bars fitted externally central to the frame:				
1	Window (W1)size 533 x 654mm high.	No	4		
2	Window (W2)size 987 x 611mm high.	No	1		
	GALVANIZED PRESSED STEEL DOOR FRAMES				
	1,6mm galvanised mild steel standard pressed jamb lining with double rebates to suit one brick wall:				
3	Frame for door 813 x 2032mm high.	No	4		
	HOT DIP GALVANIZED STEEL GATES				
	Note: The contractor is to check on site measurements before placing of order.				
	Carried Forward			R	

	Brought Forward			R	
	Gate constructed from hot-dipped galvanised mild steel, consisting of 40mm x 30mm x 2,0mm thick rectangular hollow section to outer frame and horizontal rails. Infill to be no. 8 continuous 10mm dia galvanised mild steel rods passing through and welded to horizontal rails and welded to outer frame. Lock housing to be formed of no.2 100mm x 180mm x 3mm galvanised mild steel plates welded to finish flush with each face of the gate and is to have the necessary cut-outs for the lock deadbolt and Euro Profile cylinder. Frame stile to hinge side to be 30mm x 30mm x 2,00mm thick galvanised mild steel hollow square section 2000mm long, bolted to wall with no. 4 expansion bolts. 30mm x 30mm x 2,00mm thick galvanised mild steel hollow square section 260mm long, twice bolted to wall as lock keep. End caps to be provided to both the frame stile and the lock keep. Gate to include 1,5 pairs galvanised mild steel pintle hinges welded to gate and frame stile. Pin of top hinge to be inverted. No. 1 N302 Union Euro Profile Cylinder Gate Lock with LH5240-N302 housing and 2 x 18SC Union double cylinder. No. 1 Halstead 166SC cabin hook and eye with cabin hook screwed to 100mm x 70mm x 32mm Meranti block plugged and screwed to wall, and eye welded to leading edge of gate outer frame:				
4	Security Gate size 1 000 x 2 100mm high.	No	1		
	MANHOLE COVERS				
5	600 x 600mm Type 2A Heavy duty cast iron manhole cover and frame to SABS 558.	No	2		
	Carried Forward to Summary of Section No. 4			R	

Section No. 4
Bill No. 8
METALWORK
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 9				
	TILING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 144				
	WALL TILES				
	Ceramic Wall Tile Specification: Supply and install 200 × 200 mm ceramic wall tiles, 8 mm thick, first-grade quality with a smooth glazed, satin or semi-gloss finish, colour as selected by the Architect. Fix tiles to prepared wall surfaces using an approved cement-based tile adhesive in accordance with the manufacturer's specifications. Provide TAL Grout to all joints in the approved colour, ensuring uniform joint widths, watertight joints, and a clean, flush finish complete				
1	Splash back	No	3		
	Carried Forward to Summary of Section No. 4			R	

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 10				
	PLASTERING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 142				
	GRANOLITHIC				
	Untinted granolithic on concrete:				
1	30mm Thick on floors.	m2	30		
	SCREEDS				
	Screeds on concrete				
2	30mm Thick on floors and landings	m2	30		
3	30mm Thick on Pits base slab.	m2	7		
	POLYURETHANE FLOOR FINISH				
	Prepare existing concrete surface and apply approved 4 mm heavy-duty polyurethane cement floor finish, complete with primer, body coat, seal coat and 100 mm high integral coved skirting, all in accordance with the manufacturer's recommendations:				
4	On floors	m2	30		
	Carried Forward to Summary of Section No. 4			R	

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 11				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 146				
	RAINWATER DISPOSAL				
	0.6mm Seamless aluminium gutters and downpipes				
1	125 x 75mm high gutters fixed to falls in continuous lengths at not exceeding 1000mm centres with and including approved gutter brackets.	m	11		
2	100 x 75mm rainwater downpipe	m	6		
3	Long-arm –Swan-neck100 Bend combination	No	2		
4	Extra over rainwater pipe for shoe	No	2		
5	Extra eaves gutter for stopped end.	No	2		
6	Extra over rainwater downpipe for bend	No	4		
	TRAPS ETC				
	Rubber traps, etc.:				
7	40 x 40mm 'Flexitrap' butyl rubber deep seal 'P' or 'S' trap jointed to waste outlet fitting and to PVC pipe including coupling clamps, etc.	No	2		
	TAPS, VALVES, ETC				
	Carried Forward			R	

				R	
	Brought Forward				
	Cobra Watertech or Similar approved				
8	(Code. 232-10-15) fullway isolating ball valves with plastic coated plated steel lever handle	No	2		
	Brass				
9	Cobra Water tech 15mm chrome plated elbow action raised nose pillar tap with blue indicator for cold water (Code: 503-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	2		
10	No.KM2 15mm pillar tap with blue inlay.	No	2		
11	20mm Stopcock.	No	4		
	SANITARY FITTINGS				
	Atlas Plastics or similar approved				
12	Wall Hung Urinal : PRODUCT CODE 705426/705427 DESCRIPTION .Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code 705426) or back inlet (code 705427). Overall size 600 x 385 x 380 mm. Top inlet fittings (code 7054Z1) and back inlet fittings (code 7054Z2) include a 38 mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two brackets. No Traps Req	No	4		
13	Atlas VIP 200 floor mounted plastic seat overall size 482 x 650 x 505mm standard toilet pedestal with baby seat & lid. Colour; Granite	No	4		
14	Atlas "Bambi Long Drop" (code 613AP) with footpiece complete with seat and lid screwed in precast slab including inlet funnel (code 224AP) riveted to shaft	No			
15	VAAL WHB MIDI WEAVER RECTANGULAR 1TH COUNTER BASIN 450X350 White Ceramic Wash Hand Basin including matching ceramic pedastal to manufacturers recommendations code: 706601. Including All Flexi Connectors, Plumbing finished and fixtures	No	3		
	Carried Forward			R	

				R	
	Brought Forward				
	Extra for:				
	SANITARY PLUMBING				
	PVC waste or vent pipes with Windmaster Extractor				
16	200mm Vent pipe.	m	6		
	PVC waste or vent pipes and fittings:				
17	50mm Waste pipe.	m	40		
18	50mm Bend.	No	6		
19	50mm Access bend.	No	4		
20	50mm Rubber S trap with side outlet.	No	5		
21	Black Whirlybird with insect-proof netting inside, to fit on 110mm vent pipe.	No	2		
	Polycop pipe				
22	15mm pipe from tank to sink	m	54		
	WATER SUPPLY				
	Class 2 Copper Pipes				
23	20mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (including chases), in concrete, etc.	m	65		
24	15mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (including chases), in concrete, etc.	m	23		
	Extra over class 2 copper pipes for brass compression fittings				
25	20mm Fittings	No	17		
26	15mm Fittings	No	9		
	Carried Forward			R	

				R
	Brought Forward			
	Soakaway (Provisional)			
27	3 000 x 900 x minimum 700mm deep, complete with graded stone filling, geotextile lining of Bidim U14 or similar approved, 500mm compacted soil cover to 90% MOD AASHTO above soakaway, pipe connection from hand wash basin waste, excavation, backfilling and disposal of surplus material, all subject to final Engineer's detail.	No	1	
	The following in JOJO / ROTO 5000 litre capacity tanks			
28	JOJO / ROTO TANKS or similar approved 5000 Litre Low Profile light duty cylindrical polyurethane water storage tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	1	
	TANK STANDS			
	Excavation in earth not exceeding 2m deep			
29	Trenches	m3	9	
	Risk of collapse of excavations			
30	Sides of trench and hole excavations not exceeding 1.5m deep	m2	13	
	Compaction of surfaces			
31	Compaction of ground surface under sub base to roadways, pavings, etc., including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	6	
	25MPa/19mm concrete			
32	Slab	m3	1	
33	Strip footing	m3	9	
	Carried Forward			R

				R
	Brought Forward			
	Fabric reinforcement			
34	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	13	
	Brickwork			
35	One brick walls	m2	13	
	Face brickwork			
	"Corobrik Road Satin FBX" or other approved face bricks in stretcher bond with ruled joints and perpends externally:			
36	Extra over ordinary brickwork for facing in stretcher bond and pointing.	m2	10	
	Brickwork reinforcement			
37	150mm Wide reinforcement built in horizontally	m	75	
	Carried Forward to Summary of Section No. 4			R

Section No. 4
Bill No. 11
PLUMBING AND DRAINAGE(PROVISIONAL)
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 12				
	GLAZING TO STEEL WITH PUTTY				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 150				
	6.38 mm laminated "Arctic Snow" obscure safety glass secured into galvanised steel windows with compatible UV-resistant structural glazing sealant complete, all in accordance with SANS 10400				
1	Panes exceeding 0,1m2 and not exceeding 0,5m2.	m2	1		
2	Panes exceeding 0,5m2 and not exceeding 1,0m2.	m2	1		
3	Issue glazing certificate of compliance		Item		
	MIRRORS				
	6mm Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete				
4	400x300mm mirror	No	2		
	Carried Forward to Summary of Section No. 4			R	

Item No			Quantity	Rate	Amount
	SECTION NO.4				
	BILL NO 13				
	PAINTWORK				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	PAINTWORK, ETC TO NEW WORK ON				
	WORK GROUP 152				
	FIBRE-CEMENT SURFACES				
	Prepare and brush surface to remove loose contaminants and apply one coat professional gypsum & plaster primer PP700, and two coats "Plascon Wall 'n All (WAA)" or equal approved emulsion paint				
1	Fascias and barge boards	m2	2		
	METAL SURFACES WITH				
	Prepare surfaces and remove all loose material, check for dents in frame and fill with body filler as required.Wash down with galv clean.Touch up factory applied primer and apply one undercoat, followed by two coats Eggshell enamell paint				
2	On window frames	m2	2		
3	On door frames	m2	10		
	Two coats oil wood primer on				
4	Backs of frames, linings, etc not exceeding 300mm wide	m	15		
	WOOD SURFACES				
	Carried Forward			R	

				R
	Brought Forward			
	Prepare, sand down and brush surface to remove all loose contaminants, and apply one coat 1 coat of pink wood primer , completed with 2 coats of eggshell gloss enamel paint. All to architect's later spec.			
5	On doors	m2	10	
	Prepare and brush surface to remove all loose contaminants and apply Four coats "ABE Provonite" or equal approved carbolineum anti-corrosive coal tar paint on All Trusses			
6	On exposed timbers.	m2	28	
	EPOXY			
	Epoxy coating			
7	Floor	m2	30	
	Carried Forward to Summary of Section No. 4			R

Section No. 4
Bill No. 13
PAINTWORK
MAVUSANDILE SOLUTIONS (PTY) LTD

SECTION SUMMARY - BOYS - 4B,4U,3WHB

Bill No		Page No	Amount
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Carried to Final Summary R

Section No. 4
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO. 5

BILL NO.1

EARTHWORKS (PROVISIONAL)

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Nature of ground

A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site

Levels of Site

Contractor is to prepare the platforms of each building before excavations of foundations occurs as costs of extra foundations and reducing levels within the buildings envelope will not be entertained at a later date and will be at the contractor's cost

WORK GROUP 104

EARTHWORKS

Carried Forward R

				R	
	Brought Forward				
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep:				
1	Trenches	m3	82		
2	Holes	m3	87		
3	Reduced levels under floors	m3	8		
	Extra over trench and hole excavations in earth for excavation in				
4	Intermediate material	m3	18		
5	Hard rock	m3	9		
	Extra over all excavations for carting away				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	177		
	Risk of collapse of excavations				
7	Sides of trench excavations not exceeding 1,5m deep	m2	51		
8	Sides of bulk excavations exceeding 1,5m deep	m2	142		
	Keeping excavations free of water				
9	Keeping excavations free of all water other than subterranean water		Item		
	FILLING,ETC				
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density				
10	To trenches, holes, etc	m3	9		
	Carried Forward			R	

				R
	Brought Forward			
	Gravel filling (G5) supplied by the contractor compacted to 95% Mod AASHTO density in 150mm layers			
11	Under floors, steps, paving, etc	m3	59	
	Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:			
12	Under floors, steps, paving, etc	m3	54	
	River sand filling supplied by the contractor			
13	Under floors etc	m3	5	
	Compaction of surfaces			
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	63	
	Prescribed density test on filling			
15	"Modified AASHTO Density" test	No	4	
	SOIL POISONING			
	Soil insecticide in accordance with SANS 5859			
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	54	
17	To bottoms and sides of trenches etc	m2	48	
	Carried Forward to Summary of Section No. 5			R

Item No		Quantity	Rate	Amount

SECTION NO. 5

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Cost of tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)

Expansion Joints

A surface bed that exceeds 25 meters squared, poured in a single panel must have expansion joints fitted

Formwork

Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use

Carried Forward R

				R	
	Brought Forward				
	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.				
	Formworks to soffits of solid slabs etc shall be deemed to be 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"				
	WORK GROUP 110				
	UNREINFORCED CONCRETE				
	15MPa/19mm concrete				
1	50mm Thick surface blinding under footings and bases	m3	1		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
2	Footings to walls (Provisional).	m3	8		
3	Surface beds on waterproofing	m3	3		
	REINFORCED CONCRETE				
	30MPa/19mm concrete				
4	Suspended slab.	m3	4		
5	In pit base slab.	m3	5		
6	Tank stand.	m3	1		
	Carried Forward			R	

				R	
	Brought Forward				
7	Infill to 330mm cavity walls.	m3	4		
	TEST BLOCKS				
8	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	12		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float:				
9	Surface beds, slabs, etc	m2	80		
	WORK GROUP 111				
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Smooth formwork to sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	22		
	SMOOTH FORMWORK (DEGREE OF ACCURACY III)				
	Smooth formwork to sides:				
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	29		
	Permanent Formwork:				
12	Suspended slabs including propping n.e 3.5m high	m2	20		
	Extra on permanent formwork for boxing or blocking in or boxing out to form:				
13	450mm Diameter opening through 200mm thick slab.	No	3		
	MOVEMENT JOINTS ETC				
	Carried Forward			R	

				R
	Brought Forward			
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:			
14	12mm Joints not exceeding 300mm high (Provisional).	m	37	
	WORK GROUP 114			
	REINFORCEMENT WORK			
	Mild steel reinforcement to structural concrete work			
15	Rods in varying diameters in Foundations,bases,columns,etc	t	1	
	High Tensile steel reinforcement to structural concrete work			
16	Rods in varying diameters in Foundations,bases,columns,etc	t	1	
	Fabric reinforcement			
17	BRC Mesh Ref 193 fabric reinforcement in cavity wall etc	m2	42	
18	BRC Mesh Ref 888 fabric reinforcement in suspended slabs.	m2	20	
19	BRC Mesh Ref 395 fabric reinforcement in soil crete backfill .	m2	87	
	Carried Forward to Summary of Section No. 5			R

Item No		Quantity	Rate	Amount

SECTION NO. 5

BILL NO. 3

MASONRY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

BRICKWORK

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BLOCKWORK

Concrete masonry units

Blocks shall be either solid or hollow modular dense concrete masonry units in accordance with SABS Specification 1215, having compressive strengths as described

Carried Forward R

	Brought Forward			R	
	Blockwork				
	Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"				
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole				
	Standard complementary blocks				
	Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding asnecessary				
	DECORATIVE BLOCKS				
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour				
	WORK GROUP 116				
	BRICKWORK IN FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:				
1	One brick wall	m2	55		
2	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	35		
3	Mass brickwork walls.	m3	0,2		
	SUPERSTRUCTURE				
	Carried Forward			R	

				R	
	Brought Forward				
	Brickwork of NFP bricks in class II mortar				
4	One brick wall	m2	142		
5	Half brick wall	m2	12		
6	Half brick wall in beamfilling including building around roof timbers	m2	4		
7	400 x 400mm Brick Piers	m3	0,4		
	Facebrick				
	One brick wall Facebrick Road Satin FBX " (Or Similar Approved @ PC Sum R 8 500 per 1000) clay face brick or equal Architect approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2:. Including bagging and bricks sealing, Two coats of 1:3 cement/sand bagwash slurry mixture (total thickness approx.				
8	Extra over for facebrick in piers.	m2	8		
9	Extra over for facebrick in foundations (Provisional).	m2	8		
10	Half brick wall in beam filling pointed one side including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.	m2	4		
11	Half brick wall in partition walls.	m2	12		
12	One brickwall pointed on both sides.	m2	284		
13	Fair raking cutting.	m	14		
	Brick-on-edge header course copings, sills, etc, of "Corobrik Road Satin" or other approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:				
14	230mm Brick on edge sill bedded sloping and jointed in cement mortar and pointed on top, edge and projecting soffit including cutting and fitting between reveals and splay cutting brickwork under.	m	4		
	Carried Forward			R	

				R	
	Brought Forward				
15	220mm Wide lintel pointed on face and 110mm soffit.	m	22		
	BRICKWORK SUNDRIES				
	Bagging of 1:3 cement and sand mixture				
	Cement wash of 1:3 liquid cement and sand mixture applied with a brush				
16	On outer face of inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	9		
	Brickwork reinforcement in foundations				
17	150mm Wide reinforcement built in horizontally	m	193		
	Brickwork reinforcement in superstructure				
18	75mm Wide reinforcement built in horizontally in superstructure	m	128		
19	150mm Wide reinforcement built in horizontally in superstructure	m	770		
	"Stalton" prestressed fabricated lintels				
20	110 x 75mm Lintels in lengths not exceeding 3m	m	4		
	Galvanised hoop iron cramps, ties, etc				
21	38 x 1.6mm Hoop iron slotted roof tie straps built into walls, wrapped and spiked to roof timbers., about 1200mm long	No	14		
	Air bricks etc				
22	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	6		
	Carried Forward to Summary of Section No. 5			R	

Section No. 5
Bill No. 3
Masonry
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO. 4				
	WATERPROOFING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	SUPPLEMENTARY PREAMBLES				
	Waterproofing				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	WORK GROUP 120				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':				
1	Under surface beds	m2	54		
	One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
2	In walls	m2	12		
3	Under window cills	m2	2		
	Carried Forward			R	

	Brought Forward			R	
	Two coats of 1:3 cement/sand bagwash slurry mixture (total thickness approx. 4mm), hand-applied with a synthetic bristle heavy-duty brush to the inner face of the outer leaf in 220mm superstructure cavity wall, ensuring all joints are filled flush and the surface is finished to a smooth, uniform consistency to receive waterproofing. Rate to include for keeping the 8mm cavity free of mortar droppings and debris as the work proceeds. Two coats of "a.b.e.® Brixeal" or similar approved bitumen emulsion waterproofing, applied in accordance with the manufacturer's instructions (total coverage approx. 1.5 litres/m²), applied to previously bagwashed surfaces of brickwork within the cavity, including all necessary surface preparation, protection of adjacent facebrick, and cleaning of equipment.				
4	On bagged brick walls	m2	9		
5	Internal Pit walls.	m2	68		
6	External Pit walls.	m2	35		
	JOINT SEALANTS ETC				
	Clear Neutral silicone sealant:				
7	In joint sealing and pointing all round external window and door frames.	m	19		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
8	**10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).**	m	37		
	Carried Forward to Summary of Section No. 5			R	

Section No. 5
Bill No. 4
Waterproofing
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO. 5				
	ROOF COVERINGS ETC				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 124(METAL ROOF)				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.58mm Zinc alum Z250 broad flute IBR finish Top chromadek pre - coated roof sheeting (charcoal) laid at 18 degrees pitch on 75 x 50mm purlins at +/- 1200mm centres max. on Sisalation RSA 420 underlay under purlins on straining tape on timber trusses laid as per manufacturers specification. 0,8mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's instructions.				
1	Roof covering with pitch not exceeding 15 degrees.	m2	60		
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	9		
	Sundries				
3	Polyethylene ridge closures	m	17		
4	Broad flute ridge closures	m	17		
5	Hurricane clips	No	112		
	ROOF AND WALL INSULATION				
	Carried Forward			R	

	Brought Forward			R	
	Reflective foil insulation or equal approved 402 Heavy industrial grade reinforced aluminium foil insulation double sided, heavy grammage reflective foil laminate incorporating eight layers of aluminium foil, reinforcing scrim, Kraft paper and polyethylene, tested for conformance with SABS 1381: Part IV-1985, with a Class 1 fire rating in accordance with SABS 0177: part III - 1981 and BS 476 part 5, 6 and 7, secured to each truss/rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll. All to be fixed in accordance with manufactures specification.				
6	Insulation laid taut over purlins (at approximately 1100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires at 500mm centres	m2	60		
	Carried Forward to Summary of Section No. 5			R	

Section No. 5
Bill No. 5
Roof Coverings
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO. 5

BILL NO.6

CARPENTRY AND JOINERY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Joinery:

Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes

Fixing

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete

Decorative laminate finish:

Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish

Plate nailed timber roof truss construction

The following is applicable in respect of roof trusses:

Carried Forward R

				R	
	Brought Forward				
	Trusses are at maximum 1200mm centres and purlins are at maximum 1200mm centres The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings numbered 021MAV008 annexed to these bills of quantities/accompanying these bills of quantities for tender purposes. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences				
	WORK GROUP 126				
	ROOFS ETC				
	Plate nailed timber roof truss construction				
	The following is applicable in respect of roof trusses:				
	Trusses are at maximum 900mm centres The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences				
	Double pitched prefabricated roof trusses bearing on wall plate on both sides with pitch not exceeding 30 degrees				
1	Double pitch truss size 3000mm to 5000mm overall span with 600mm eaves overhang projection on both sides	No	1		
	Sawn softwood SA Pine grade 4				
2	38 x 114mm Wall plates bedded level on and including cement mortar	m	15		
3	50 x 75mm Purlins	m	69		
4	38 x 114mm Bracing	m	15		
	TR1 and TR2 Certificates				
5	Allow for TR1 and TR2 certification of all trusses		Item		
	Carried Forward			R	

				R	
	Brought Forward				
	EAVES, VERGES, ETC				
	"Everite" medium density plain nutec-cement				
	'Everite Nutec' fibre cement socket less barge boards (Product no. 721-800):				
6	80 x 200mm Barge boards including H-profile jointing strips	m	17		
	"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).				
7	15 x 225mm Fascias including Pvc H-profile jointing strips	m	13		
	FRAMED DOORS, ETC				
	Wrought meranti doors as hung to steel frames				
	Meranti standard hardwood swing door with Z bracings behind and two hardwood edge strips. 2032 x 813 x 44mm Meranti single swing entrance door complete with approved Z bracings behind sanded down or imperfections & finished with 1 coat of pink wood primer , completed with 2 coats of eggshell gloss enamel paint. All to architect's later spec				
8	44mm Door, size 813 x 2032mm high	No	4		
	Carried Forward to Summary of Section No. 5			R	

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO.7				
	IRONMONGERY				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	SUPPLEMENTARY PREAMBLES				
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	"Union"				
	WORK GROUP 132				
	LOCKS				
1	ASSA ABLOY UNION CZ6822461CH Gower 4 Lever Lockset Solid cast zinc handle and zinc backplate, SABS Approved	No	3		
2	Union SS2BB BUTT HINGE EN 1935GRD13 (Stainless Steel) - Code JH-BB-STD-22-SS-01.	No	7		
3	Union Kick Plate 900 X 800mm Works Code - SS5089-900W	No	6		
4	60mm "Viro" or Similar Pad lock.	No	3		
	Carried Forward			R	

				R
	Brought Forward			
5	Bolt Indicator Satin Chrome Union CZ80941SCR	No	4	
	DOOR CLOSERS			
6	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	3	
7	Union Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	7	
	BATHROOM FITTINGS			
	"Supreme Hygiene" or similar approved			
8	TR3 - 3 Tier Toilet roll holder Lockable	No	4	
9	Waste disposal bin 27L mounted on the wall	No	2	
10	Liquid Soap Dispenser	No	3	
11	She Bin 12L	No	2	
	"Chairman Industries cc" grab rails			
12	Code KB26, 300 x 300 x 300 x 50mm Stainless steel dog leg side grab rail fixed in position.	No	1	
13	Code KB18, 800 long x 50mm Projecting stainless steel straight grab rail fixed in position	No	1	
	SIGNAGE			
	Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:			
14	Stainless steelGrade 201 Stainless Steel Signage Plate,600mm X 1252mm X 1.2mm . Supplied with 4 mounting screws - Pozi head 14.6x3.87mm Radius end plates to eliminate sharp cormers after mounting plate Counter-sunk screw holes - screws will have a nice flush finish with the signage	No	3	
	Carried Forward to Summary of Section No. 5			R

Section No. 5
Bill No. 7
Ironmongery
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO. 5

BILL NO. 8

METALWORK

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described

WORK GROUP 136

GALVANISED STEEL GATES, SCREENS, ETC

The following in framed and welded galvanised mild steel security grille gates including fixing in position complete

Carried Forward R

				R	
	Brought Forward				
	Gate constructed from hot-dipped galvanised mild steel, consisting of 40mm x 30mm x 2,0mm thick rectangular hollow section to outer frame and horizontal rails. Infill to be no. 8 continuous 10mm dia galvanised mild steel rods passing through and welded to horizontal rails and welded to outer frame. Lock housing to be formed of no.2 100mm x 180mm x 3mm galvanised mild steel plates welded to finish flush with each face of the gate and is to have the necessary cut-outs for the lock deadbolt and Euro Profile cylinder. Frame stile to hinge side to be 30mm x 30mm x 2,00mm thick galvanised mild steel hollow square section 2000mm long, bolted to wall with no. 4 expansion bolts. 30mm x 30mm x 2,00mm thick galvanised mild steel hollow square section 260mm long, twice bolted to wall as lock keep. End caps to be provided to both the frame stile and the lock keep. Gate to include 1,5 pairs galvanised mild steel pintle hinges welded to gate and frame stile. Pin of top hinge to be inverted. No. 1 N302 Union Euro Profile Cylinder Gate Lock with LH5240-N302 housing and 2 x 18SC Union double cylinder. No. 1 Halstead 166SC cabin hook and eye with cabin hook screwed to 100mm x 70mm x 32mm Meranti block plugged and screwed to wall, and eye welded to leading edge of gate outer frame:				
1	Security Gate size 1 000 x 2 100mm high.	No	2		
	GALVANISED PRESSED STEEL DOOR FRAMES				
	1.2mm Double rebated frames suitable for half brick walls with two brass butt hinges per door leaf "LI"				
2	Frame for door size, 813 x 2032mm high	No	4		
	GALVANISED STEEL WINDOWS, DOORS, ETC				
	All windows shall be fitted with solid brass handles, screws, stays and hinge pins.				
	Standard commercial windows with heavy duty solid brass ironmongery with opening sections fitted with standard burglar bars.				
3	E1 533 x 654mm high. (W1)	No	4		
	Carried Forward			R	

	Brought Forward			R	
4	E2 987 x 611mm High (W2)	No	3		
	MANHOLE COVER				
	Supply and install heavy-duty 450 × 450 mm cast iron manhole cover and frame, complete with bedding in cement mortar, securely fixed to the top of brickwork elsewhere measured, including alignment to finished level, all cutting, fitting, making good to complete the installation in accordance with the Engineer's details and specifications.				
5	450 x 450mm Manhole cover.	No	3		
	Carried Forward to Summary of Section No. 5			R	

Section No. 5
Bill No. 8
Metalwork
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO.9				
	PLASTERING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 142				
	SCREEDS				
	Untinted granolithic on concrete				
1	40mm Thick on floors to even finish.	m2	40		
	Finish with Polyscreed MD (colour of choice) at a nominal thickness of 4 mm as per manufacturer's instructions to falls and allow to cure for a minimum of 24 hours. Cut and seal joints with Solid joint LV100 **Install 75mm high covings using Solidcove Mortar and Sealing with Polyscreed Lockcoat to match the floor.**				
2	Concrete floors	m2	40		
	Carried Forward to Summary of Section No. 5			R	

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO. 10				
	TILING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WALL TILING				
	Supply and install 200 × 200 mm ceramic wall tiles, 8 mm thick, first-grade quality with a smooth glazed, satin or semi-gloss finish, colour as selected by the Architect. Fix tiles to prepared wall surfaces using an approved cement-based tile adhesive in accordance with the manufacturer's specifications. Provide TAL Grout to all joints in the approved colour, ensuring uniform joint widths, watertight joints, and a clean, flush finish complete				
1	On splash back.	m2	3		
	Carried Forward to Summary of Section No. 5			R	

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO. 11				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 146				
	RAINWATER DISPOSAL				
	Seamless Aluminium Gutters and Downpipes				
1	125 x 75 x 0,6mm aluminium ogee gutter with baked enamel finish fixed with concealed brackets.	m	17		
2	Extra over 250mm girth eaves box gutter for stopped end	No	4		
3	Extra over 250mm girth box eaves gutter for outlet for 100 x 75mm pipe	No	2		
4	100 x 75 x 0,6mm Fluted aluminium downpipes with white baked enamel finish.	m	10		
5	Extra over 100 x 75mm diameter rainwater pipe for bend	No	8		
6	Extra over 100 x 75mm rainwater pipe for shoe	No	2		
7	Extra over 100 x 75mm rainwater pipe for eaves or plinth offset 600mm projection	No	2		
	WORK GROUP 148				
	SANITARY FITTINGS				
	Carried Forward			R	

				R	
	Brought Forward				
	"Atlas Plastics" or similar approved plastic sanitary fittings including connection to services and fixing to walls or floors.				
	Water Closet, basins, urinals,etc				
8	223 AP, VIP 200 toilet pedestal for VIP toilets complete with lid and single flap heavy duty plastic seat fitted as per manufacturer's instructions.	No	4		
9	496AP Waterless urinal fitting and waste	No	1		
10	382AP Christy wash hand basin including brackets,etc.	No	3		
	"Cobra"				
	TRAPS ETC				
	"Marley"				
11	38mm Deep seal "P" or "S" trap	No	3		
	WASTE UNIONS ETC				
12	32mm Basin waste union	No	3		
	TAPS, VALVES, ETC				
	"Cobra Watertech"				
13	15mm Chrome plated ball-o-stop valve	No	3		
14	Star pillar tap (Code 111-20)	No	2		
15	Cobra Water tech 15mm chrome plated elbow action raised nose pillar tap with blue indicator for cold water (Code: 503-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	1		
	Brass				
16	22mm Stopcock	No	2		
17	28mm Fullway gate valve	No	2		
	Carried Forward			R	

				R
	Brought Forward			
	SANITARY PLUMBING			
	uPVC pipes in walls, cast in slabs etc.			
18	50mm Pipes	m	37	
19	110mm Pipes	m	25	
	200mm HD Vent Pipe with Windmaster Extractor			
20	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirlys4Africa Toilet	m	14	
	Extra over uPVC pipes for fittings			
21	50mm Fittings	No	20	
22	110mm Fittings.	No	10	
23	200mm Fittings.	No	5	
	WATER SUPPLIES			
	Polycop pipes			
24	15mm Polycop pipe to walls,etc	m	27	
25	22mm Polycop pipe to walls,etc	m	18	
26	15mm Polycop pipe in ground < 1m deep	m	13	
27	22mm Polycop pipe in ground < 1m deep	m	25	
	Extra over Class 2 copper pipes for brass compression fittings			
28	15mm Fittings	No	21	
29	22mm Fittings	No	27	
	Carried Forward			R

				R
	Brought Forward			
	Soakaway (Provisional)			
30	3 000 x 900 x minimum 700mm deep, complete with graded stone filling, geotextile lining of Bidim U14 or similar approved, 500mm compacted soil cover to 90% MOD AASHTO above soakaway, pipe connection from hand wash basin waste, excavation, backfilling and disposal of surplus material, all subject to final Engineer's detail.	No	1	
	The following in JoJo 5500 litre capacity tanks (Stromy sky ME 5513 in colour)			
31	JOJO / ROTO TANKS or similar approved 5000 Litre Low Profile light duty cylindrical polyurethane water storage tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	1	
	TESTING			
32	Testing water pipe system		Item	
	Carried Forward to Summary of Section No. 5			R

Item No			Quantity	Rate	Amount
	SECTION NO. 5				
	BILL NO. 12				
	GLAZING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	SUPPLEMENTARY PREAMBLES				
	Note: Glazing of laminated safety glass into steel frames: all edges to be sealed with 15mm selotape to prevent water absorption via the vinyl interlayer. Glass to be set on 25mm neoprene rubber setting blocks of 60 - 90 degree sure hardness				
	WORK GROUP 150				
	GLAZING TO STEEL WITH PUTTY				
	6.38mm Arctic Snow safety laminated glass				
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	3		
	MIRRORS ETC				
	6mm Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete.				
2	600 x 600mm high mirror	No	3		
	Carried Forward to Summary of Section No. 5			R	

Item No		Quantity	Rate	Amount

SECTION NO. 5

BILL NO. 13

PAINTWORK

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

PREPARATORY WORK TO EXISTING WORK

Previously painted plastered surfaces

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

Previously painted metal surfaces

Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal

Previously painted wood surfaces

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

WORK GROUP 152

PAINTWORK ETC TO NEW WORK

ON FASCIAS AND BARGE BOARDS

Carried Forward R

				R	
	Brought Forward				
	Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth				
1	On fascias and barge boards	m2	8		
	ON METAL				
	Prepare and apply Dulux cleaner to galvanised iron, One coat Dulux primer for galvanised iron, one coat Dulux universal undercoat and two coats Dulux gloss enamel to galvanised steel				
2	Security gates and screens	m2	11		
3	Windows	m2	6		
	ON WOOD				
	Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearlglo paint				
4	On doors & frames	m2	28		
	EPOXY				
	Epoxy coating				
5	Floor	m2	32		
	Carried Forward to Summary of Section No. 5			R	

SECTION SUMMARY - STAFF - 2F,1M,1U,1P,3WHB

Bill No		Page No	Amount
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Carried to Final Summary R

Section No. 5
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO. 6

BILL NO.1

EARTHWORKS (PROVISIONAL)

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Nature of ground

A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site

Levels of Site

Contractor is to prepare the platforms of each building before excavations of foundations occurs as costs of extra foundations and reducing levels within the buildings envelope will not be entertained at a later date and will be at the contractor's cost

WORK GROUP 104

EARTHWORKS

Carried Forward R

				R	
	Brought Forward				
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep:				
1	Trenches	m3	49		
2	Holes	m3	102		
3	Reduced levels under floors	m3	3		
	Extra over trench and hole excavations in earth for excavation in				
4	Intermediate material	m3	16		
5	Hard rock	m3	8		
	Extra over all excavations for carting away				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	155		
	Risk of collapse of excavations				
7	Sides of trench excavations not exceeding 1,5m deep	m2	20		
8	Sides of bulk excavations exceeding 1,5m deep	m2	130		
	Keeping excavations free of water				
9	Keeping excavations free of all water other than subterranean water		Item		
	FILLING,ETC				
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density				
10	To trenches, holes, etc	m3	3		
	Carried Forward			R	

				R
	Brought Forward			
	Gravel filling (G5) supplied by the contractor compacted to 95% Mod AASHTO density in 150mm layers			
11	Under floors, steps, paving, etc	m3	8	
	Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:			
12	Under floors, steps, paving, etc	m3	8	
	River sand filling supplied by the contractor			
13	Under floors etc	m3	5	
	Compaction of surfaces			
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	52	
	Prescribed density test on filling			
15	"Modified AASHTO Density" test	No	4	
	SOIL POISONING			
	Soil insecticide in accordance with SANS 5859			
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	43	
17	To bottoms and sides of trenches etc	m2	29	
	Carried Forward to Summary of Section No. 6			R

Item No		Quantity	Rate	Amount

SECTION NO. 6

BILL NO. 2

CONCRETE, FORMWORK AND REINFORCEMENT

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Cost of tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)

Expansion Joints

A surface bed that exceeds 25 meters squared, poured in a single panel must have expansion joints fitted

Formwork

Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use

Carried Forward R

				R	
	Brought Forward				
	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.				
	Formworks to soffits of solid slabs etc shall be deemed to be 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"				
	WORK GROUP 110				
	UNREINFORCED CONCRETE				
	15MPa/19mm concrete				
1	50mm Thick surface blinding under footings and bases	m3	0,4		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
2	Footings to walls (Provisional).	m3	4		
3	Surface beds on waterproofing	m3	1		
	REINFORCED CONCRETE				
	30MPa/19mm concrete				
4	Suspended slab.	m3	5		
5	In pit base slab.	m3	6		
6	Tank stand.	m3	1		
	Carried Forward			R	

				R	
	Brought Forward				
7	Infill to 330mm cavity walls.	m3	5		
	TEST BLOCKS				
8	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	12		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float:				
9	Surface beds, slabs, etc	m2	74		
	WORK GROUP 111				
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Smooth formwork to sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	24		
	SMOOTH FORMWORK (DEGREE OF ACCURACY III)				
	Smooth formwork to sides:				
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	31		
	Permanent Formwork:				
12	Suspended slabs including propping n.e 3.5m high	m2	24		
	Extra on permanent formwork for boxing or blocking in or boxing out to form:				
13	450mm Diameter opening through 200mm thick slab.	No	3		
	MOVEMENT JOINTS ETC				
	Carried Forward			R	

				R
	Brought Forward			
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:			
14	12mm Joints not exceeding 300mm high (Provisional).	m	19	
	WORK GROUP 114			
	REINFORCEMENT WORK			
	Mild steel reinforcement to structural concrete work			
15	Rods in varying diameters in Foundations,bases,columns,etc	t	1	
	High Tensile steel reinforcement to structural concrete work			
16	Rods in varying diameters in Foundations,bases,columns,etc	t	1	
	Fabric reinforcement			
17	BRC Mesh Ref 193 fabric reinforcement in cavity wall etc	m2	47	
18	BRC Mesh Ref 888 fabric reinforcement in suspended slabs.	m2	24	
19	BRC Mesh Ref 395 fabric reinforcement in soil crete backfill .	m2	82	
	Carried Forward to Summary of Section No. 6			R

Item No		Quantity	Rate	Amount

SECTION NO. 6

BILL NO. 3

MASONRY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

BRICKWORK

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

BLOCKWORK

Concrete masonry units

Blocks shall be either solid or hollow modular dense concrete masonry units in accordance with SABS Specification 1215, having compressive strengths as described

Carried Forward R

	Brought Forward			R	
	Blockwork				
	Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"				
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole				
	Standard complementary blocks				
	Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding asnecessary				
	DECORATIVE BLOCKS				
	Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour				
	WORK GROUP 116				
	BRICKWORK IN FOUNDATIONS (PROVISIONAL)				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:				
1	One brick wall	m2	36		
2	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	39		
3	Mass brickwork walls.	m3	0,2		
	SUPERSTRUCTURE				
	Carried Forward			R	

				R	
	Brought Forward				
	Brickwork of NFP bricks in class II mortar				
4	One brick wall	m2	75		
5	Half brick wall	m2	16		
6	Half brick wall in beamfilling including building around roof timbers	m2	4		
7	400 x 400mm Brick Piers	m3	0,4		
	Facebrick				
	One brick wall Facebrick Road Satin FBX " (Or Similar Approved @ PC Sum R12 000 per 1000) clay face brick or equal Architect approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2:. Including bagging and bricks sealing, Two coats of 1:3 cement/sand bagwash slurry mixture (total thickness approx.				
8	Extra over for facebrick in piers.	m2	4		
9	Extra over for facebrick in foundations (Provisional).	m2	7		
10	Half brick wall in beam filling pointed one side including cutting and fitting around roof timbers and bedding roofing solid on top in cement mortar.	m2	4		
11	Half brick wall in partition walls.	m2	16		
12	One brickwall pointed on both sides.	m2	150		
13	Fair raking cutting.	m	14		
	Brick-on-edge header course copings, sills, etc, of "Corobrik Road Satin" or other approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:				
14	230mm Brick on edge sill bedded sloping and jointed in cement mortar and pointed on top, edge and projecting soffit including cutting and fitting between reveals and splay cutting brickwork under.	m	6		
	Carried Forward			R	

				R	
	Brought Forward				
15	220mm Wide lintel pointed on face and 110mm soffit.	m	18		
	BRICKWORK SUNDRIES				
	Bagging of 1:3 cement and sand mixture				
	Cement wash of 1:3 liquid cement and sand mixture applied with a brush				
16	On outer face of inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	9		
	Brickwork reinforcement in foundations				
17	75mm Wide reinforcement built in horizontally in superstructure	m	457		
18	150mm Wide reinforcement built in horizontally	m	159		
	Brickwork reinforcement in superstructure				
19	75mm Wide reinforcement built in horizontally in superstructure	m	94		
20	150mm Wide reinforcement built in horizontally in superstructure	m	416		
	"Stalton" prestressed fabricated lintels				
21	110 x 75mm Lintels in lengths not exceeding 3m	m	6		
	Galvanised hoop iron cramps, ties, etc				
22	38 x 1.6mm Hoop iron slotted roof tie straps built into walls, wrapped and spiked to roof timbers., about 1200mm long	No	12		
	Air bricks etc				
23	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	4		
	Carried Forward to Summary of Section No. 6			R	

Section No. 6
Bill No. 3
Masonry
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO. 4				
	WATERPROOFING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	SUPPLEMENTARY PREAMBLES				
	Waterproofing				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	WORK GROUP 120				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':				
1	Under surface beds	m2	43		
	One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
2	In walls	m2	7		
3	Under window cills	m2	3		
	Carried Forward			R	

	Brought Forward			R	
	Two coats of 1:3 cement/sand bagwash slurry mixture (total thickness approx. 4mm), hand-applied with a synthetic bristle heavy-duty brush to the inner face of the outer leaf in 220mm superstructure cavity wall, ensuring all joints are filled flush and the surface is finished to a smooth, uniform consistency to receive waterproofing. Rate to include for keeping the 8mm cavity free of mortar droppings and debris as the work proceeds. Two coats of "a.b.e.® Brixeal" or similar approved bitumen emulsion waterproofing, applied in accordance with the manufacturer's instructions (total coverage approx. 1.5 litres/m²), applied to previously bagwashed surfaces of brickwork within the cavity, including all necessary surface preparation, protection of adjacent facebrick, and cleaning of equipment.				
4	On bagged brick walls	m2	9		
	Two coats bituminous waterproof coating to external faces of below-ground pit walls prior to backfilling, "Sika Igolflex-201" or approved equivalent				
5	Internal Pit walls.	m2	70		
6	Under surface beds.	m2	32		
7	External Pit walls.	m2	39		
	JOINT SEALANTS ETC				
	Clear Neutral silicone sealant:				
8	In joint sealing and pointing all round external window and door frames.	m	21		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
9	**10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).**	m	19		
	Carried Forward to Summary of Section No. 6			R	

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO. 5				
	ROOF COVERINGS ETC				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 124(METAL ROOF)				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.58mm Zinc alum Z250 broad flute IBR finish Top chromadek pre - coated roof sheeting (charcoal) laid at 18 degrees pitch on 75 x 50mm purlins at +/- 1200mm centres max. on Sisalation RSA 420 underlay under purlins on straining tape on timber trusses laid as per manufacturers specification. 0,8mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's instructions.				
1	Roof covering with pitch not exceeding 15 degrees.	m2	53		
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	8		
	Sundries				
3	Polyethylene ridge closures	m	15		
4	Broad flute ridge closures	m	15		
5	Hurricane clips	No	96		
	ROOF AND WALL INSULATION				
	Carried Forward			R	

	Brought Forward			R	
	Reflective foil insulation or equal approved 402 Heavy industrial grade reinforced aluminium foil insulation double sided, heavy grammage reflective foil laminate incorporating eight layers of aluminium foil, reinforcing scrim, Kraft paper and polyethylene, tested for conformance with SABS 1381: Part IV-1985, with a Class 1 fire rating in accordance with SABS 0177: part III - 1981 and BS 476 part 5, 6 and 7, secured to each truss/rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll. All to be fixed in accordance with manufactures specification.				
6	Insulation laid taut over purlins (at approximately 1100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires at 500mm centres	m2	53		
	Carried Forward to Summary of Section No. 6			R	

Section No. 6
Bill No. 5
Roof Coverings
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount

SECTION NO. 6

BILL NO.6

CARPENTRY AND JOINERY

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Joinery:

Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes

Fixing

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete

Decorative laminate finish:

Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish

Plate nailed timber roof truss construction

The following is applicable in respect of roof trusses:

Carried Forward R

				R	
	Brought Forward				
	Trusses are at maximum 1200mm centres and purlins are at maximum 1200mm centres The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings numbered 021MAV008 annexed to these bills of quantities/accompanying these bills of quantities for tender purposes. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences				
	WORK GROUP 126				
	ROOFS ETC				
	Plate nailed timber roof truss construction				
	The following is applicable in respect of roof trusses:				
	Trusses are at maximum 900mm centres The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from the architect and/or the site before design or fabrication commences				
	Double pitched prefabricated roof trusses bearing on wall plate on both sides with pitch not exceeding 30 degrees				
1	Double pitch truss size 3000mm to 5000mm overall span with 600mm eaves overhang projection on both sides	No	6		
	Sawn softwood SA Pine grade 4				
2	38 x 114mm Wall plates bedded level on and including cement mortar	m	14		
3	50 x 75mm Purlins	m	62		
4	38 x 114mm Bracing	m	15		
	TR1 and TR2 Certificates				
5	Allow for TR1 and TR2 certification of all trusses		Item		
	Carried Forward			R	

				R
	Brought Forward			
	EAVES, VERGES, ETC			
6	AVAX Steel 2.5mm Ribbed Profiled Aesthetic x 225mm seamless aluminium anthracite grey powder coated fascia board. Drill and fix with Hot dipped galvanised screws and washers.	m	16	
7	0,7 x 240mm seamless aluminium anthracite grey powder coated Barge boards. drill and fix with Hot dipped galvanise screws and washers. 76 x 50mm trimmer batten fixed underside of purlin ends for barge board fixing.	m	13	
	FRAMED DOORS, ETC			
	Wrought meranti doors as hung to steel frames			
	Internal Medium Duty Grade R Door			
8	Horizontal Slatted 5 Panel Solid Meranti hardwood panel door with in 5 sections to both sides of door and two hardwood edge strips: 1200mm x 813 x 44mm. Door to be hung on Hardwood Meranti Single rebate door Jambs	No	5	
	Carried Forward to Summary of Section No. 6			R

Section No. 6
Bill No. 6
Carpentry & Joinery
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO.7				
	IRONMONGERY				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	SUPPLEMENTARY PREAMBLES				
	Finishes to ironmongery				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	"Union"				
	WORK GROUP 132				
	LOCKS				
1	ASSA ABLOY UNION CZ6822461CH Gower 4 Lever Lockset Solid cast zinc handle and zinc backplate, SABS Approved	No	2		
2	Union SS2BB BUTT HINGE EN 1935GRD13 (Stainless Steel) - Code JH-BB-STD-22-SS-01.	No	7		
3	Union Kick Plate 900 X 800mm Works Code - SS5089-900W	No	2		
4	Bolt Indicator Satin Chrome Union CZ80941SCR	No	6		
	Carried Forward			R	

				R	
	Brought Forward				
	DOOR CLOSERS				
5	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	2		
6	Union Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	7		
	BATHROOM FITTINGS				
	"Supreme Hygiene" or similar approved				
7	TR3 - 3 Tier Toilet roll holder Lockable	No	5		
8	Waste disposal bin 27L mounted on the wall	No	1		
9	Liquid Soap Dispenser	No	2		
10	She Bin 12L	No	1		
	"Chairman Industries cc" grab rails				
11	Code KB26, 300 x 300 x 300 x 50mm Stainless steel dog leg side grab rail fixed in position.	No	1		
12	Code KB18, 800 long x 50mm Projecting stainless steel straight grab rail fixed in position	No	1		
	SIGNAGE				
	Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:				
13	Stainless steelGrade 201 Stainless Steel Signage Plate,600mm X 1252mm X 1.2mm . Supplied with 4 mounting screws - Pozi head 14.6x3.87mm Radius end plates to eliminate sharp cormers after mounting plate Counter-sunk screw holes - screws will have a nice flush finish with the signage	No	2		
	Carried Forward to Summary of Section No. 6			R	

Item No		Quantity	Rate	Amount

SECTION NO. 6

BILL NO. 8

METALWORK

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described

WORK GROUP 136

GALVANISED STEEL GATES, SCREENS, ETC

The following in framed and welded galvanised mild steel security grille gates including fixing in position complete

Carried Forward R

	Brought Forward			R	
	Gate constructed from hot-dipped galvanised mild steel, consisting of 40mm x 30mm x 2,0mm thick rectangular hollow section to outer frame and horizontal rails. Infill to be no. 8 continuous 10mm dia galvanised mild steel rods passing through and welded to horizontal rails and welded to outer frame. Lock housing to be formed of no.2 100mm x 180mm x 3mm galvanised mild steel plates welded to finish flush with each face of the gate and is to have the necessary cut-outs for the lock deadbolt and Euro Profile cylinder. Frame stile to hinge side to be 30mm x 30mm x 2,00mm thick galvanised mild steel hollow square section 2000mm long, bolted to wall with no. 4 expansion bolts. 30mm x 30mm x 2,00mm thick galvanised mild steel hollow square section 260mm long, twice bolted to wall as lock keep. End caps to be provided to both the frame stile and the lock keep. Gate to include 1,5 pairs galvanised mild steel pintle hinges welded to gate and frame stile. Pin of top hinge to be inverted. No. 1 N302 Union Euro Profile Cylinder Gate Lock with LH5240-N302 housing and 2 x 18SC Union double cylinder. No. 1 Halstead 166SC cabin hook and eye with cabin hook screwed to 100mm x 70mm x 32mm Meranti block plugged and screwed to wall, and eye welded to leading edge of gate outer frame:				
1	Security Gate size 1 000 x 2 100mm high.	No	2		
	GALVANISED PRESSED STEEL DOOR FRAMES				
	1,2mm Double rebated frames suitable for one brick wall				
2	Frame for door 813 x 2032mm high	No	2		
	1.2mm Double rebated frames suitable for half brick walls with two brass butt hinges per door leaf "LI"				
3	Frame for door size, 813 x 2032mm high	No	5		
	GALVANISED STEEL WINDOWS, DOORS, ETC				
	All windows shall be fitted with solid brass handles, screws, stays and hinge pins.				
	Carried Forward			R	

				R	
	Brought Forward				
	Standard commercial windows with heavy duty solid brass ironmongery with opening sections fitted with standard burglar bars.				
4	E1 533 x 654mm high. (W1)	No	5		
5	E2 987 x 611mm High (W2)	No	3		
	MANHOLE COVER				
	Supply and install heavy-duty 450 × 450 mm cast iron manhole cover and frame, complete with bedding in cement mortar, securely fixed to the top of brickwork elsewhere measured, including alignment to finished level, all cutting, fitting, making good to complete the installation in accordance with the Engineer's details and specifications.				
6	450 x 450mm Manhole cover.	No	2		
	Carried Forward to Summary of Section No. 6			R	

Section No. 6
Bill No. 8
Metalwork
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO.9				
	PLASTERING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 142				
	SCREEDS				
	Untinted granolithic on concrete				
1	40mm Thick on floors to even finish.	m2	25		
	Finish with Polyscreed MD (colour of choice) at a nominal thickness of 4 mm as per manufacturer's instructions to falls and allow to cure for a minimum of 24 hours. Cut and seal joints with Solid joint LV100 **Install 75mm high covings using Solidcove Mortar and Sealing with Polyscreed Lockcoat to match the floor.**				
2	Concrete floors	m2	25		
	Carried Forward to Summary of Section No. 6			R	

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO. 10				
	TILING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WALL TILING				
	Supply and install 200 × 200 mm ceramic wall tiles, 8 mm thick, first-grade quality with a smooth glazed, satin or semi-gloss finish, colour as selected by the Architect. Fix tiles to prepared wall surfaces using an approved cement-based tile adhesive in accordance with the manufacturer's specifications. Provide TAL Grout to all joints in the approved colour, ensuring uniform joint widths, watertight joints, and a clean, flush finish complete				
1	On splash back.	m2	6		
	Carried Forward to Summary of Section No. 6			R	

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO. 11				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	WORK GROUP 146				
	RAINWATER DISPOSAL				
	Seamless Aluminium Gutters and Downpipes				
1	125 x 75 x 0,6mm aluminium ogee gutter with baked enamel finish fixed with concealed brackets.	m	15		
2	Extra over 250mm girth eaves box gutter for stopped end	No	4		
3	Extra over 250mm girth box eaves gutter for outlet for 100 x 75mm pipe	No	2		
4	100 x 75 x 0,6mm Fluted aluminium downpipes with white baked enamel finish.	m	10		
5	Extra over 100 x 75mm diameter rainwater pipe for bend	No	8		
6	Extra over 100 x 75mm rainwater pipe for shoe	No	2		
7	Extra over 100 x 75mm rainwater pipe for eaves or plinth offset 600mm projection	No	2		
	WORK GROUP 148				
	SANITARY FITTINGS				
	Carried Forward			R	

				R	
	Brought Forward				
	"Atlas Plastics" or similar approved plastic sanitary fittings including connection to services and fixing to walls or floors.				
	Water Closet, basins, urinals,etc				
8	223 AP, VIP 200 toilet pedestal for VIP toilets complete with lid and single flap heavy duty plastic seat fitted as per manufacturer's instructions.	No	1		
9	496AP Waterless urinal fitting and waste	No			
10	382AP Christy wash hand basin including brackets,etc.	No	6		
11	Atlas "Bambi Long Drop" (code 613AP) with footpiece complete with seat and lid screwed in precast slab including inlet funnel (code 224AP) riveted to shaft (LI)	No	5		
	"Cobra"				
	TRAPS ETC				
	"Marley"				
12	38mm Deep seal "P" or "S" trap	No	6		
	WASTE UNIONS ETC				
13	32mm Basin waste union	No	6		
	TAPS, VALVES, ETC				
	"Cobra Watertech"				
14	15mm Chrome plated ball-o-stop valve	No	6		
15	Star pillar tap (Code 111-20)	No	5		
16	Cobra Water tech 15mm chrome plated elbow action raised nose pillar tap with blue indicator for cold water (Code: 503-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	1		
	Carried Forward			R	

				R
	Brought Forward			
	Brass			
17	22mm Stopcock	No	2	
18	28mm Fullway gate valve	No	2	
	SANITARY PLUMBING			
	uPVC pipes in walls, cast in slabs etc.			
19	50mm Pipes	m	24	
20	110mm Pipes	m	27	
	200mm HD Vent Pipe with Windmaster Extractor			
21	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirlys4Africa Toilet	m	21	
	Extra over uPVC pipes for fittings			
22	Copper gauze to vent pipe tops size 200 x 200 mm	No	6	
23	50mm Bend	No	6	
24	50mm Access bend	No	6	
25	50mm Access junction	No	12	
26	110mm Access bend	No	16	
27	Black Whirlybird with insect-proof netting inside, to fit on 200mm vent pipe.	No	6	
	WATER SUPPLIES			
	Polycop pipes			
28	15mm Polycop pipe to walls,etc	m	25	
29	22mm Polycop pipe to walls,etc	m	30	
30	15mm Polycop pipe in ground < 1m deep	m	13	
	Carried Forward			R

				R
	Brought Forward			
31	22mm Polycop pipe in ground < 1m deep	m	20	
	Extra over Class 2 copper pipes for brass compression fittings			
32	15mm Fittings	No	21	
33	22mm Fittings	No	25	
	Soakaway (Provisional)			
34	3 000 x 900 x minimum 700mm deep, complete with graded stone filling, geotextile lining of Bidim U14 or similar approved, 500mm compacted soil cover to 90% MOD AASHTO above soakaway, pipe connection from hand wash basin waste, excavation, backfilling and disposal of surplus material, all subject to final Engineer's detail.	No	1	
	The following in JoJo 5500 litre capacity tanks (Stromy sky ME 5513 in colour)			
35	JOJO / ROTO TANKS or similar approved 5000 Litre Low Profile light duty cylindrical polyurethane water storage tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	1	
	TESTING			
36	Testing water pipe system		Item	
	Carried Forward to Summary of Section No. 6			R

Section No. 6
Bill No. 11
Plumbing & Drainage
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No			Quantity	Rate	Amount
	SECTION NO. 6				
	BILL NO. 12				
	GLAZING				
	Preambles				
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	SUPPLEMENTARY PREAMBLES				
	Note: Glazing of laminated safety glass into steel frames: all edges to be sealed with 15mm selotape to prevent water absorption via the vinyl interlayer. Glass to be set on 25mm neoprene rubber setting blocks of 60 - 90 degree sure hardness				
	WORK GROUP 150				
	GLAZING TO STEEL WITH PUTTY				
	6.38mm Arctic Snow safety laminated glass				
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	4		
	MIRRORS ETC				
	6mm Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete.				
2	600 x 600mm high mirror	No	6		
	Carried Forward to Summary of Section No. 6			R	

Item No		Quantity	Rate	Amount

SECTION NO. 6

BILL NO. 13

PAINTWORK

Preambles

TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

SUPPLEMENTARY PREAMBLES

PREPARATORY WORK TO EXISTING WORK

Previously painted plastered surfaces

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

Previously painted metal surfaces

Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal

Previously painted wood surfaces

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

WORK GROUP 152

PAINTWORK ETC TO NEW WORK

ON FASCIAS AND BARGE BOARDS

Carried Forward R

				R
	Brought Forward			
	Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth			
1	On fascias and barge boards	m2	8	
	ON METAL			
	Prepare and apply Dulux cleaner to galvanised iron, One coat Dulux primer for galvanised iron, one coat Dulux universal undercoat and two coats Dulux gloss enamel to galvanised steel			
2	Security gates and screens	m2	8	
3	Windows	m2	7	
	ON WOOD			
	Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearlglo paint			
4	On doors & frames	m2	25	
	PAINTS TO ROOF TRUSSES, PURLINS, BRANDERING, WALLS PLATES ETC.			
5	Prepare and brush surface to remove all loose contaminants and apply Four coats "ABE Provonite" or equal approved carbolineum anti-corrosive coal tar paint on All Trusses	m2	32	
	EPOXY			
	Epoxy coating			
6	Floor	m2	32	
	Carried Forward to Summary of Section No. 6			R

Section No. 6
Bill No. 13
Paintwork
MAVUSANDILE SOLUTIONS (PTY) LTD

SECTION SUMMARY - GRADE R - 4GR,1P,3WHB

Bill No		Page No	Amount
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9	Plastering	157	
10	Tiling	158	
11	Plumbing & Drainage	162	
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13	Paintwork	165	

Carried to Final Summary R

Section No. 6
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount
	SECTION NO.7			
	BILL NO 1			
	EXTERNAL WORKS, ETC.			
	Preambles			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	WORK GROUP 104 (EARTHWORKS)			
	SITE CLEARANCE, ETC.			
	Removal of surface vegetable matter			
1	Allow for digging up, carting and depositing all grass, rubbish, debris, building rubble, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc to existing pond on site.	m2 400		
	BULK EARTHWORKS			
	Rates for open face excavation shall include for the formation of battered banks as required for lateral support and for ramps for the removal of excavated material.			
	General			
	Earthworks are to be executed in accordance with SABS 1200 DM, SABS 1200 D or SABS 1200 DA 1979 "Earthworks (Small Works)" as applicable. Consolidations are to be done at optimum moisture content. Measuring and payment items are to be disregarded.			
	Carried Forward		R	

				R	
	Brought Forward				
	Excavate to reduce levels in open face 1,50 m deep extreme and deposit in areas of fill (Cut to Fill), well watered and consolidated in layers not exceeding 150 mm thick to obtain 95% modified AASHTO dry density under				
2	Building platforms, walkways and open areas	m3	50		
	Extra over bulk excavation in pickable material for basements, reduced levels, etc. for :				
3	Excavating in soft rock.	m3	6		
4	Ditto, in hard rock.	m3	3		
	Imported Filling				
5	Approved G5 natural crushed stone from commercial sources as filling over site in layers not exceeding 150 mm thick compacted to 93% Modified AASHTO density.	m3	48		
6	Extra over all excavations for carting surplus excavated material from spoil heaps and spreading, levelling and lightly compacting on site where directed average 200 m from the excavations.(Measured nett- no allowance for bulking).	m3	78		
	Sundries				
7	Allow for keeping bulk excavations free from water or mud.		Item		
	In-situ soils tests				
8	"Modified AASHTO Density" test	No	1		
9	"Natural California Bearing Ratio" test	No	1		
10	"Field Density" test including "Optimum Moisture Content" (four readings per test)	No	1		
11	"Indicator" test (Grading and Atterberg Indicators)	No	1		
	Carried Forward			R	

				R	
	Brought Forward				
	Prescribed density tests on filling				
12	"Modified AASHTO Density" test	No	6		
13	"Natural California Bearing Ratio" test	No	1		
	WALKWAYS				
	Earthworks				
14	Excavate in earth to reduce levels not exceeding 2 m deep.	m3	59		
15	Extra over all excavations for carting surplus excavated material from the site.	m3	30		
16	Scarify ground to a depth of 150 mm and re-compact to 90% Mod. AASHTO density.	m2	198		
17	Approved G7 natural crushed stone as base course 150 mm thick compacted to 98% Modified AASHTO density under pavings	m3	59		
	Concrete Paving Blocks				
	Paving of 50mm thick 200x100mm 25MPa Bevel Bond paver blocks grey in colour in herringbone pattern on and including 20mm thick sand bed with dry filler sand swept and vibrated into joints all laid on subgrade (elsewhere measured) conforming to SABS 1200D degree of accuracy I:				
18	Paving to walkway areas, etc laid to falls.	m2	198		
19	Extra over ordinary paving for 200mm wide block-on-flat header course edging on 100mm thick mortar bed including unreinforced concrete haunching along outside edge.	m	220		
	Kerbing				
	Carried Forward			R	

				R
	Brought Forward			
	Precast or in situ mass concrete (25 MPa - 19 mm stone) kerbs cast in convenient lengths with exposed faces finished smooth from the mould and all salient angles rounded, jointed and pointed in 1:3 cement mortar, including excavations, formwork, etc.			
20	Figure 8B (300 x 275 x 175mm) semi mountable kerb laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.	m	220	
	OPEN STORMWATER CHANNELS			
	WORK GROUP 104 (EARTHWORKS)			
	Excavation not exceeding 2m deep			
21	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	50	
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):			
22	Off site to a dumping site to be found by the Contractor.	m3	50	
	Filling supplied by the contractor under channels			
23	G7 Base course material compacted to 98% Mod AASHTO density	m3	10	
24	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m3	10	
	Carried Forward			R

				R	
	Brought Forward				
	Cast in-situ Ref 395 mesh reinforced concrete (25MPa) open stormwater channels having V-shaped waterway formed in top, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 2m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer.				
25	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground in 2000mm sections including all formwork, reinforcement, expansion joints, smooth finishing to top of concrete surface etc.	m	103		
26	Extra for 700mm angle	No	5		
27	Extra for forming 200mm thick 700mm wide spreader with 200mm high edges fanning out to 1 960mm width at furthest end with hard burnt bricks pitching cast in ass diffusers including working off concrete to a smooth finish and draining onto natural ground with 150 - 200mm diameter loose stones.	No	5		
	WORK GROUP 146 (DRAINAGE)				
	Reno Mattresses of 2,7mm diameter PVC coated galvanised wire boxes laced together and filled with broken stone				
28	300mm Thick Reno mattress formed of 3500 x 1000mm boxes properly bonded in accordance with the manufacturers instructions, the last 300mm to be buried into insitu ground.	No	4		
	THE FOLLOWING IN ACCESS DRIVEWAY, ETC.				
	Excavation not exceeding 2m deep				
29	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	190		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
30	Off site to a dumping site to be found by the Contractor.	m3	190		
	Carried Forward			R	

				R
	Brought Forward			
	Filling supplied by the contractor under driveways			
31	G7 Base course material compacted to 98% Mod AASHTO density	m3	35	
32	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m3	35	
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:			
33	Under floors,etc.	m2	125	
	Prescribed density tests on filling:			
34	In-situ dry density test.	No	5	
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:			
35	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	416	
	THE FOLLOWING IN SECURITY FENCING, ETC			
	Site clearance			
36	Allow for clearing site for the width of 1 000 mm where fencing is to be erected including removing trees, shrubs etc. not exceeding 200 mm girth, grubbing up roots and roughly levelling.	m2	120	
	Straining wires, fencing and razor wire:			
37	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	44	
38	Four strands of 4mm Class'A' galvanised straining wires secured to fencing posts with doubled 2 mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns at the other end to straining bolts (elsewhere measured).	m	44	
	Carried Forward			R

				R
	Brought Forward			
39	Fencing formed of 50 x 50 x 2.0mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres including Y12 pegs at 900mm c/c between posts (straining wires elsewhere measured).	m	44	
	Posts for 1 800mm high security fence:			
40	60mm Diameter galvanised steel intermediate fencing post 1800mm long fitted with a pressed steel mushroom cap one end and 150 x 150 x 5 mm baseplate at bottom and embedded in and including 350 x 350 x 600 mm mass concrete (15 MPa) base.	No	36	
41	100mm Ditto as corner post, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	10	
42	150mm Ditto as gate post 1 800mm long, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	4	
43	12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers.	No	8	
44	Form 12mm diameter hole through fence post.	No	10	
	Carried Forward			R

				R
	Brought Forward			
	Gates:			
45	Security fence single gate, size 1 000 mm wide x 1 800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, with two 50 mm diameter nominal bore x 3,25 mm wall thickness security posts each 600 mm long with one end welded to top rail of gate and closure plate to other end, the gate covered with 100 x 50 x 2,5 mm weld mesh with four straining wires as before described and with four 2,37 mm four point core diameter single "kampeon" wires with crimped droppers to security posts as before described; including three strands flat wrap razor barbed tape wire fixed as before described, leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including 500 mm long approved chain spot welded to gate	No	1	
	PADLOCKS			
46	Supply 50 mm "Viro" Padlocks and Keys (or equal approved)	No	1	
	Carried to Final Summary			R

Item No		Quantity	Rate	Amount
	SECTION NO.8			
	BILL NO 1			
	OCCUPATIONAL HEALTH AND SAFETY			
1	Allow the sum of R 278 000.00 (Two Hundred and Seventy Eight Thousand Rands) for Occupational Health and Safety	Item		278 000,00
	Carried to Final Summary		R	

Section No. 8
Bill No. 1
Occupational Health and Safety
MAVUSANDILE SOLUTIONS (PTY) LTD

Item No		Quantity	Rate	Amount
	SECTION NO.9			
	BILL NO 1			
	PROVISIONAL SUMS ETC			
	SUPPLEMENTARY PREAMBLES			
	Work executed by direct contractors			
	Work listed under the heading "DIRECT CONTRACTORS WORK" will commence during the excecution of this contract and the contractor shall allow free access to the site for these direct contractors. The contractor shall prepare a programme in conjunctionwith these direct contractors in order to complete the work successfully. The direct contractors will be regarded as nominated sub-contractors but payment will not be made to them via the contractor. The estimated values of these contracts are listedto enable the contractor to determine profit and attendances, if required			
	General			
	Unless otherwise described, all prime cost amounts and provisional sums exclude the cash discount of 5% and include for delivery to site of all articles concerned			
	All prime cost amounts and provisional sums are net and include for delivery to siteof all articles concerned			
	Preliminaries			
	The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"			
	ELECTRICAL INSTALLATION & LIGHTNING PROTECTION.			
1	Allow a provisional sum of **R 200 000.00** (Two Hundred Thousand Rands) for electrical installation and lightning protection by a specialist sub-contractor.	Item		200 000,00
	Carried Forward		R	

	Brought Forward		R	
2	Allow for profit and Attendance on the above item.		%	
	TOPOGRAPHICAL SURVEY			
3	Provide an amount of R 30 000.00 (Thirty Thousand Rand) for carrying out a topographical survey of the site and submission of survey drawings.	Item		30 000,00
4	Allow for profit and Attendance on the above item.		%	
	TEMPORARY ABLUTIONS			
5	Provide the amount of R120 000.00 (One Hundred and Twenty Thousand Rand) for temporary ablutions, to be executed complete.	Item		120 000,00
	Carried to Final Summary		R	

FINAL SUMMARY

Section No		Page No		Amount
1	PRELIMINARIES	29		
2	ALTERATIONS	32		
3	GIRLS - 8G,6WHB	65		
4	BOYS - 4B,4U,3WHB	100		
5	STAFF - 2F,1M,1U,1P,3WHB	133		
6	GRADE R - 4GR,1P,3WHB	166		
7	SITE WORKS	174		
8	OCCUPATIONAL HEALTH AND SAFETY	175		
9	PROVISIONAL SUMS	177		
	Sub Total		R	
	Add Contingencies @5%	Item		210 000,00
	Add VAT @ 15%		R	
	Carried to Form of Tender		R	

MAVUSANDILE SOLUTIONS (PTY) LTD