

Item No	Quantity	Rate	Amount
<u>SECTION NO. 1</u>			
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
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			
<u>PREAMBLES FOR TRADES</u>			
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			
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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]

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Objective and preparations (A2 - A14)

- 2 Clause 2.0 - Offer acceptance and performance obligations

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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
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
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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	
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 available and attached to this document [16.4] The school will be in operation during construction period. Reference as [16.6] There are no known services on site. Reference as [16.7] F:..... V:..... T:.....	Item	
17	Clause 17.0 - Contract instructions F:..... V:..... T:.....	Item	
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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 - <i>Enclosure of the works</i> Clause 19.1.2 - <i>Office accommodation</i> Clause 19.2 - <i>Advertising rights and notice boards</i> F: V: T:	Item
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 be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may reasonably be required by such n/s subcontractor for the execution of the relevant 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
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<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
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
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<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
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
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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	
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	
<u>Dispute (A40)</u>			
40	Clause 40.0 - Settlement of disputes F:..... V:..... T:.....	Item	
<u>Contract variables (A41 - A42)</u>			
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	
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42	Clause 42.0 - Contractual agreement
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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**

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<u>SECTION B - PRELIMINARIES</u>			
<u>Definitions and interpretation (B1)</u>			
43	Clause 1.0 - Definitions and interpretation F:..... V:..... T:.....	Item	
<u>Documents (B2)</u>			
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	
<u>Previous work and adjoining properties (B3)</u>			
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	
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<u>Samples, shop drawings and manufacturer's instructions (B4)</u>			
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	
<u>Deposits and fees (B5)</u>			
54	Clause 5.1 - Deposits and fees F:..... V:..... T:.....	Item	
<u>Temporary services (B6)</u>			
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	
<u>Prime cost amounts (B7)</u>			
59	Clause 7.1 - Responsibility for prime cost amounts F:..... V:..... T:.....	Item	
<u>Special attendance on n/s subcontractors (B8)</u>			
60	Clause 8.1 - Special attendance F:..... V:..... T:.....	Item	
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<u>General (B9)</u>		
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
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Brought Forward <u>Schedule of variables (B10)</u> 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 Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd	R R
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Brought Forward 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 Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd	R
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SECTION C - SPECIFIC PRELIMINARIES70 **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**

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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 warranted 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**

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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

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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
<u>SECTION D: SPECIFIC PRELIMINARIES</u>		
76	Section E contains Specific Preliminary items which apply to this contract except where "N/A" (Not Applicable) appears against the item	Item
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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		
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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

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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

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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

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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.

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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: _____

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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.

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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:_____

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88	Brought Forward 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 Carried Forward Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd	Item	R	
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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 fortnightly 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
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91	Brought Forward 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; tiling; carpentry; flooring; waterproofing; etc. (iii) Sewers works including Construction of manholes, laying of Sewer pipes, bedding, backfilling and compaction. Carried Forward Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd	R R
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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	
Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd			

	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
	Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd		

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; tiling; carpentry; flooring; waterproofing; etc. External works such as landscaping; cleaning; paving; fencing; tarmac; etc. F.....V.....T.....	Item
Carried Forward		R
Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd		

	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) <u>UTILISATION OF A COMMUNITY LIAISON OFFICER</u> 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		
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 potential conflict and or threats to the project or to stakeholders in the project and recommend appropriate			
	Carried Forward		R	
	Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd			

Brought Forward		R	
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 Preliminaries & Generals Bill No. 1 Preliminaries Mavusandile Solutions (Pty)Ltd		R	

Brought Forward

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SUMMARY OF CATEGORIES - MAIN WORKS
ONLY EXCLUDING SHE AMOUNT

Category: Fixed R

Category: Value R

Category: Time R

Carried to Final Summary

R

Preliminaries & Generals

Bill No. 1

Preliminaries

Mavusandile Solutions (Pty)Ltd

Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO. 1</u>			
<u>ALTERATIONS</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
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.			
<u>WORK GROUP 102</u>			
Carried Forward			R
Alterations Bill No. 1 Alterations(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>REMOVAL OF EXISTING WORK</u>			
<u>Demolishing and removing</u>			
1	Single storey building with pitched roof, 5,5m x 3.2m on plan and 2.55m high at eaves, comprising concrete surface bed, plastered and painted walls and steel roof covering on timber trusses, complete including desludging and removal of internal sanitary fittings and plumbing	No	1
2	Single storey building with pitched roof, 11.4m x 6.1m on plan and 2.55m high at eaves, comprising concrete surface bed, plastered and painted walls and steel roof covering on timber trusses, complete including desludging and removal of internal sanitary fittings and plumbing	No	2
3	G7 material in 200mm layers compacted to 93% mod. in filling in of existing toilet pits	m3	174
Tenderer to note that they are required to provide the desludging certificate prior to be paid for demolition of toilets			
<u>Take down and remove roofs, floors, panneling, ceilings partition, etc:</u>			
4	Fibre cement fascias and barge boards.	m	30
5	Corrugated metal roof sheeting on timber purlins	m2	28
<u>Taking out and removing doors, windows, etc from brickwork</u>			
6	Single timber door size 813x2032mm including awnings	No	6
<u>Taking out and remove existing aluminium gutters, existing down pipes, etc,</u>			
7	Existing eaves gutter and brackets	m	16
8	Existing rainwater pipes and holderbats.	m	7
Carried Forward			R
Alterations Bill No. 1 Alterations(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Taking out/off and removing glazing</u>			
9	Glazing from steel windows, including cleaning out rebates and preparing for new glass	m2	2
<u>Taking out and removing piping, sanitary fittings, etc, including cutting off as necessary, disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paint work elsewhere)</u>			
10	PVC piping not exceeding 50mm diameter	m	10
11	Defective/ broken water closet.	No	6
12	Defective Wash hand basins.	No	4
13	Existing toilet roll holders.	No	6
<u>CLEANING</u>			
<u>Cleaning internal and external walls.</u>			
14	clean existing internal walls, remove all black algea and vegetation, stains and dirt, scraping off existing paint, making good and preparing for repainting.	m2	104
15	Carefully clean and prepare all existing face brickwork prior to the application of brick dressing, including the removal of all dirt, dust, loose particles, surface contaminants, efflorescence, cement splashes, mortar stains, algae, moss, biological growth, grease, oil, existing loose coatings and other foreign matter that may adversely affect the adhesion, appearance or performance of the brick dressing.	m2	85
<u>TEMPORARY BARRIERS, SCREENS, ETC</u>			
<u>Temporary barriers, screens, etc including removal</u>			
16	Temporary shade cloth screen 2000mm high of 70% green shade cloth including posts, fixing, etc.	m	385
<u>TEMPORARY GATE</u>			
Carried Forward			R
Alterations Bill No. 1 Alterations(Provisional) Mavusandile Solutions (Pty)Ltd			

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 1</u>			
<u>ROOF COVERINGS ETC</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 124(METAL ROOF)</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>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.</u>			
1	Roof covering with pitch not exceeding 15 degrees.	m2	28
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	8
<u>Sundries</u>			
3	Polyethylene ridge closures	m	16
4	Broad flute ridge closures	m	16
<u>ROOF AND WALL INSULATION</u>			
Carried Forward			
EXISTING GRADE "R" ABLUTIONS Bill No. 1 Roof Coverings Mavusandile Solutions (Pty)Ltd			R

	Brought Forward <u>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.</u> 5 Insulation laid taut over purlins (at approximately 1100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires at 500mm centres			R
5	Insulation laid taut over purlins (at approximately 1100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires at 500mm centres	m2	28	
	Carried Forward to Summary of Section No. 3 EXISTING GRADE "R" ABLUTIONS Bill No. 1 Roof Coverings Mavusandile Solutions (Pty)Ltd			R

Brought Forward			R
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 <u>WORK GROUP 126</u> <u>EAVES, VERGES, ETC</u> <u>"Everite" medium density plain nutec-cement</u> <u>'Everite Nutec' fibre cement socket less barge boards (Product no. 721-800):</u>			
1	80 x 200mm Barge boards including H-profile jointing strips	m	14
<u>"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).</u>			
2	15 x 225mm Fascias including Pvc H-profile jointing strips	m	16
<u>FRAMED DOORS, ETC</u> <u>Wrought meranti doors as hung to steel frames</u> <u>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</u>			
3	44mm Door, size 813 x 2032mm high	No	2
Carried Forward			R
EXISTING GRADE "R" ABLUTIONS Bill No. 2 Carpentry & Joinery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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 .Door complete with pink primer & 2 coats eggshell gloss enamel paint.</u>			
4	44mm Door, size 813 x 2032mm high	No	5
Carried Forward to Summary of Section No. 3			
EXISTING GRADE "R" ABLUTIONS			
Bill No. 2			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO.3</u>			
	<u>IRONMONGERY</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Finishes to ironmongery</u>			
	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			
	<u>"Union"</u>			
	<u>WORK GROUP 132</u>			
	<u>LOCKS</u>			
1	ASSA ABLOY UNION CZ6822461CH Gower 4 Lever Lockset Solid cast zinc handle and zinc backplate, SABS Approved	No	2	
2	60mm "Viro" or Similar Pad lock.	No	2	
3	Bolt Indicator Satin Chrome Union CZ80941SCR	No	5	
	<u>DOOR CLOSERS</u>			
4	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	2	
5	Union Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	5	
	Carried Forward		R	
	EXISTING GRADE "R" ABLUTIONS Bill No. 3 Ironmongery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>BATHROOM FITTINGS</u>			
<u>"Supreme Hygiene" or similar approved</u>			
6	TR3 - 3 Tier Toilet roll holder Lockable	No	6
7	Waste disposal bin 27L mounted on the wall	No	1
8	Liquid Soap Dispenser	No	2
<u>"Chairman Industries cc" grab rails</u>			
9	Code KB26, 300 x 300 x 300 x 50mm Stainless steel dog leg side grab rail fixed in position.	No	1
10	Code KB18, 800 long x 50mm Projecting stainless steel straight grab rail fixed in position	No	1
<u>SIGNAGE</u>			
<u>Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:</u>			
11	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 corners 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. 3			R
EXISTING GRADE "R" ABLUTIONS			
Bill No. 3			
Ironmongery			
Mavusandile Solutions (Pty)Ltd			

1

No

2

R

Item No	Quantity	Rate	Amount
<u>BILL NO.6</u>			
<u>PLASTERING</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 142</u>			
<u>SCREEDS</u>			
<u>Untinted granolithic on concrete</u>			
1	40mm Thick on floors to even finish.	m2	35
<u>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</u> <u>Install 75mm high covings using Solidcove Mortar and Sealing with Polyscreed Lockcoat to match the floor.</u>			
2	Concrete floors	m2	35
Carried Forward to Summary of Section No. 3 EXISTING GRADE "R" ABLUTIONS Bill No. 5 Plastering Mavusandile Solutions (Pty)Ltd			R

Item No	Quantity	Rate	Amount
<u>BILL NO.8</u>			
<u>PLUMBING AND DRAINAGE</u>			
<u>(PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 146</u>			
<u>RAINWATER DISPOSAL</u>			
<u>Seamless Aluminium Gutters and Downpipes</u>			
1	125 x 75 x 0,6mm aluminium ogee gutter with baked enamel finish fixed with concealed brackets.	m	16
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	7
5	Extra over 100 x 75mm diameter rainwater pipe for bend	No	6
6	Extra over 100 x 75mm rainwater pipe for shoe	No	2
<u>WORK GROUP 148</u>			
<u>SANITARY FITTINGS</u>			
<u>"Atlas Plastics" or similar approved plastic sanitary fittings including connection to services and fixing to walls or floors.</u>			
Carried Forward			R
EXISTING GRADE "R" ABLUTIONS			
Bill No. 7			
Plumbing & Drainage			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Water Closet, basins, urinals,etc</u>			
7	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
8	382AP Christy wash hand basin including brackets,etc.	No	4
9	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
<u>"Cobra"</u>			
<u>TRAPS ETC</u>			
<u>"Marley"</u>			
10	38mm Deep seal "P" or "S" trap	No	4
<u>WASTE UNIONS ETC</u>			
11	32mm Basin waste union	No	4
<u>TAPS, VALVES, ETC</u>			
<u>"Cobra Watertech"</u>			
12	15mm Chrome plated ball-o-stop valve	No	4
13	Star pillar tap (Code 111-20)	No	3
14	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
<u>Brass</u>			
15	22mm Stopcock	No	1
16	28mm Fullway gate valve	No	
<u>SANITARY PLUMBING</u>			
Carried Forward			R
EXISTING GRADE "R" ABLUTIONS			
Bill No. 7			
Plumbing & Drainage			
Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>uPVC pipes in walls, cast in slabs etc.</u>				
17	50mm Pipes	m	16	
18	110mm Pipes	m		
<u>200mm HD Vent Pipe with Windmaster Extractor</u>				
19	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirlys4Africa Toilet	m		
<u>Extra over uPVC pipes for fittings</u>				
20	50mm Fitting.	No	15	
21	110mm Fittings.	No		
22	200mm Fittings.	No		
<u>WATER SUPPLIES</u>				
<u>Polycop pipes</u>				
23	15mm Polycop pipe to walls,etc	m	23	
24	22mm Polycop pipe to walls,etc	m	6	
25	15mm Polycop pipe in ground < 1m deep	m		
26	22mm Polycop pipe in ground < 1m deep	m	3	
<u>Extra over Class 2 copper pipes for brass compression fittings</u>				
27	15mm Fittings	No	10	
28	22mm Fittings	No	8	
Carried Forward				R
EXISTING GRADE "R" ABLUTIONS Bill No. 7 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Soakaway (Provisional)</u>			
29	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	
<u>The following in JoJo 5500 litre capacity tanks (Stromy sky ME 5513 in colour)</u>			
30	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	
<u>TESTING</u>			
31	Testing water pipe system	Item	
Carried Forward to Summary of Section No. 3			
EXISTING GRADE "R" ABLUTIONS			R
Bill No. 7			
Plumbing & Drainage			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO.9</u>			
	<u>GLAZING</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>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</u>			
	<u>WORK GROUP 150</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>6.38mm Arctic Snow safety laminated glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	3	
	<u>MIRRORS ETC</u>			
	<u>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.</u>			
2	600 x 600mm high mirror	No	3	
	Carried Forward to Summary of Section No. 3			
	EXISTING GRADE "R" ABLUTIONS			
	Bill No. 8			
	Glazing			
	Mavusandile Solutions (Pty)Ltd			
			R	

Brought Forward			R
	<u>Prepare surface, stop with multi purpose crack filler. Apply one coat dulux plaster primer and two coats full strength Dulux weather guard-ultrasmooth finishing coat to match the school colours</u>		
1	On internal walls	m2	104
	<u>PAINTWORK ETC TO NEW WORK</u>		
	<u>ON FASCIAS AND BARGE BOARDS</u>		
	<u>Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth</u>		
2	On fascias and barge boards	m2	8
	<u>ON METAL</u>		
	<u>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</u>		
3	Security gates and screens	m2	8
4	Windows	m2	6
	<u>ON WOOD</u>		
	<u>Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearlglo paint</u>		
5	On doors & frames	m2	21
	<u>PAINTS TO ROOF TRUSSES, PURLINS, BRANDERING, WALLS PLATES ETC.</u>		
6	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	35
Carried Forward to Summary of Section No. 3			R
EXISTING GRADE "R" ABLUTIONS			
Bill No. 9			
Paintwork			
Mavusandile Solutions (Pty)Ltd			

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO.1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Nature of ground</u>			
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			
<u>Carting away of excavated material</u>			
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			
<u>Levels of Site</u>			
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			
<u>WORK GROUP 104</u>			
<u>EARTHWORKS</u>			
<u>EXCAVATION, FILLING, ETC</u>			
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 1			
Earthworks			
Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Excavation in earth not exceeding 2m deep:</u>				
1	Trenches	m3	76	
2	Holes	m3	117	
3	Reduced levels under floors	m3	8	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Intermediate material	m3	20	
5	Hard rock	m3	10	
<u>Extra over all excavations for carting away</u>				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	201	
<u>Risk of collapse of excavations</u>				
7	Sides of trench excavations not exceeding 1,5m deep	m2	28	
8	Sides of bulk excavations exceeding 1,5m deep	m2	188	
<u>Keeping excavations free of water</u>				
9	Keeping excavations free of all water other than subterranean water		Item	
<u>FILLING,ETC</u>				
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u>				
10	To trenches, holes, etc	m3	10	
<u>Gravel filling (G5) supplied by the contractor compacted to 95% Mod AASHTO density in 150mm layers</u>				
11	Under floors, steps, paving, etc	m3	64	
Carried Forward				R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:</u>			
12	Under floors, steps, paving, etc	m3	60
<u>River sand filling supplied by the contractor</u>			
13	Under floors etc	m3	8
<u>Compaction of surfaces</u>			
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	73
<u>Prescribed density test on filling</u>			
15	"Modified AASHTO Density" test	No	4
<u>SOIL POISONING</u>			
<u>Soil insecticide in accordance with SANS 5859</u>			
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	55
17	To bottoms and sides of trenches etc	m2	43
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 1			
Earthworks			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO.5</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Cost of tests</u>			
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)			
<u>Expansion Joints</u>			
A surface bed that exceeds 25 meters squared, poured in a single panel must have expansion joints fitted			
<u>Formwork</u>			
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			
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	
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 2			
Concrete, Formwork & Reinforcement			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
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"			
<u>WORK GROUP 110</u>			
<u>UNREINFORCED CONCRETE</u>			
<u>15MPa/19mm concrete</u>			
1	50mm Thick surface blinding under footings and bases	m3	1
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>25MPa/19mm concrete</u>			
2	Footings to walls (Provisional).	m3	3
3	Surface beds on waterproofing	m3	4
<u>REINFORCED CONCRETE</u>			
<u>30MPa/19mm concrete</u>			
4	Suspended slab.	m3	4
5	In pit base slab.	m3	4
6	Tank stand.	m3	1
7	Infill to 330mm cavity walls.	m3	4
<u>TEST BLOCKS</u>			
8	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	12
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
9	Surface beds, slabs, etc	m2	90
<u>WORK GROUP 111</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	35
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	46
<u>Permanent Formwork:</u>			
12	Suspended slabs including propping n.e 3.5m high	m2	27
<u>Extra on permanent formwork for boxing or blocking in or boxing out to form:</u>			
13	450mm Diameter opening through 200mm thick slab.	No	2
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>			
14	12mm Joints not exceeding 300mm high (Provisional).	m	22
<u>WORK GROUP 114</u>			
<u>REINFORCEMENT WORK</u>			
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Mild steel reinforcement to structural concrete work</u>			
15	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>High Tensile steel reinforcement to structural concrete work</u>			
16	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>Fabric reinforcement</u>			
17	BRC Mesh Ref 193 fabric reinforcement in cavity wall etc	m2	77
18	BRC Mesh Ref 888 fabric reinforcement in suspended slabs.	m2	27
19	BRC Mesh Ref 395 fabric reinforcement in soil crete backfill .	m2	98
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 2			
Concrete, Formwork & Reinforcement			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 3</u> <u>MASONRY</u> <u>Preambles</u> TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) <u>SUPPLEMENTARY PREAMBLES</u> <u>BRICKWORK</u> <u>Face bricks</u> Bricks shall be ordered timeously to obtain uniformity in size and colour <u>Pointing</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc <u>BLOCKWORK</u> <u>Concrete masonry units</u> 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 BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd		R	

Brought Forward			R
<u>Blockwork</u> 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 <u>Standard complementary blocks</u> 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 as necessary <u>DECORATIVE BLOCKS</u> Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour <u>WORK GROUP 116</u> <u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>			
1	One brick wall	m2	52
2	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	48
3	Mass brickwork walls.	m3	0.3
<u>SUPERSTRUCTURE</u>			
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Brickwork of NFP bricks in class II mortar</u>				
4	One brick wall	m2	96	
5	Half brick wall	m2	22	
6	Half brick wall in beamfilling including building around roof timbers	m2	5	
7	400 x 400mm Brick Piers	m3	1	
<u>Facebrick</u>				
<u>One brick wall Facebrick Road Satin FBX " (Or Similar Approved @ PC Sum R8 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.</u>				
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	5	
11	Half brick wall in partition walls.	m2	22	
12	One brickwall pointed on both sides.	m2	167	
13	Fair raking cutting.	m	14	
<u>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:</u>				
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	7	
15	220mm Wide lintel pointed on face and 110mm soffit.	m	21	
Carried Forward				R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Bagging of 1:3 cement and sand mixture</u>			
<u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u>			
16	On outer face of inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	9
<u>Brickwork reinforcement in foundations</u>			
17	75mm Wide reinforcement built in horizontally.	m	739
18	150mm Wide reinforcement built in horizontally.	m	367
<u>Brickwork reinforcement in superstructure</u>			
19	75mm Wide reinforcement built in horizontally in superstructure	m	128
20	150mm Wide reinforcement built in horizontally in superstructure	m	459
<u>"Stalton" prestressed fabricated lintels</u>			
21	110 x 75mm Lintels in lengths not exceeding 3m	m	2
<u>Galvanised hoop iron cramps, ties, etc</u>			
22	38 x 1.6mm Hoop iron slotted roof tie straps built into walls, wrapped and spiked to roof timbers., about 1200mm long	No	16
<u>Air bricks etc</u>			
23	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	8
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 3			
Masonry			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Waterproofing</u>			
Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
<u>WORK GROUP 120</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>			
1	Under surface beds	m2	57
<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>			
2	In walls	m2	10
3	Under window cills	m2	3
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 4 Waterproofing Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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.® Brixal" 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.</u>			
4	On bagged brick walls	m2	9
5	Internal Pit walls.	m2	90
6	External Pit walls.	m2	70
<u>JOINT SEALANTS ETC</u>			
<u>Clear Neutral silicone sealant:</u>			
7	In joint sealing and pointing all round external window and door frames.	m	27
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
8	<u>10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).</u>	m	22
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 4			
Waterproofing			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 124(METAL ROOF)</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>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.</u>			
1	Roof covering with pitch not exceeding 15 degrees.	m2	65
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	9
<u>Sundries</u>			
3	Polyethylene ridge closures	m	18
4	Broad flute ridge closures	m	18
5	Hurricane clips	No	128
<u>ROOF AND WALL INSULATION</u>			
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 5 Roof Coverings Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO.6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Joinery:</u>			
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			
<u>Fixing</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
<u>Decorative laminate finish:</u>			
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish			
<u>Plate nailed timber roof truss construction</u>			
The following is applicable in respect of roof trusses:			
Carried Forward			
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			
		R	

Brought Forward		R	
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 <u>WORK GROUP 126</u> <u>ROOFS ETC</u> <u>Plate nailed timber roof truss construction</u> 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 <u>Double pitched prefabricated roof trusses bearing on wall plate on both sides with pitch not exceeding 30 degrees</u>			
1	Double pitch truss size 3000mm to 5000mm overall span with 600mm eaves overhang projection on both sides	No	8
<u>Sawn softwood SA Pine grade 4</u>			
2	38 x 114mm Wall plates bedded level on and including cement mortar	m	17
3	50 x 75mm Purlins	m	74
4	38 x 114mm Bracing	m	15
<u>TR1 and TR2 Certificates</u>			
5	Allow for TR1 and TR2 certification of all trusses	Item	
<u>EAVES, VERGES, ETC</u>			
Carried Forward		R	
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 6 Carpentry & Joinery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>"Everite" medium density plain nutec-cement</u>			
<u>'Everite Nutec' fibre cement socket less barge boards (Product no. 721-800):</u>			
6	80 x 200mm Barge boards including H-profile jointing strips	m	18
<u>"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).</u>			
7	15 x 225mm Fascias including Pvc H-profile jointing strips	m	13
<u>FRAMED DOORS, ETC</u>			
<u>Wrought meranti doors as hung to steel frames</u>			
<u>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</u>			
8	44mm Door, size 813 x 2032mm high	No	2
<u>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 .Door complete with pink primer & 2 coats eggshell gloss enamel paint.</u>			
9	44mm Door, size 813 x 2032mm high	No	6
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO.8</u>			
	<u>IRONMONGERY</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Finishes to ironmongery</u>			
	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			
	<u>"Union"</u>			
	<u>WORK GROUP 132</u>			
	<u>LOCKS</u>			
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	8	
3	Union Kick Plate 900 X 800mm Works Code - SS5089-900W x 2 Per Door.	No	4	
4	60mm "Viro" or Similar Pad lock.	No	2	
5	Bolt Indicator Satin Chrome Union CZ80941SCR	No	6	
	Carried Forward			
	BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 7 Ironmongery Mavusandile Solutions (Pty)Ltd		R	

Brought Forward			R
<u>DOOR CLOSERS</u>			
6	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	2
7	Union Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	8
<u>BATHROOM FITTINGS</u>			
<u>"Supreme Hygiene" or similar approved</u>			
8	TR3 - 3 Tier Toilet roll holder Lockable	No	7
9	Waste disposal bin 27L mounted on the wall	No	1
10	Liquid Soap Dispenser	No	3
11	She Bin 12L	No	1
<u>"Chairman Industries cc" grab rails</u>			
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
<u>SIGNAGE</u>			
<u>Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:</u>			
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 corners 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. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 7 Ironmongery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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:</u>			
1	Security Gate size 1 000 x 2 100mm high.	No	2
<u>GALVANISED PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for one brick wall</u>			
2	Frame for door 813 x 2032mm high	No	2
<u>1,2mm Double rebated frames suitable for half brick walls with two brass butt hinges per door leaf "LI"</u>			
3	Frame for door size, 813 x 2032mm high	No	6
<u>GALVANISED STEEL WINDOWS, DOORS, ETC</u>			
All windows shall be fitted with solid brass handles, screws, stays and hinge pins.			
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 8 Metalwork Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Standard commercial windows with heavy duty solid brass ironmongery with opening sections fitted with standard burglar bars.</u>			
4	E1 533 x 654mm high. (W1)	No	6
5	E2 987 x 611mm High (W2)	No	4
<u>MANHOLE COVER</u>			
<u>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.</u>			
6	450 x 450mm Manhole cover.	No	3
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 8			
Metalwork			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO.10</u>			
<u>PLASTERING</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 142</u>			
<u>SCREEDS</u>			
<u>Untinted granolithic on concrete</u>			
1	40mm Thick on floors to even finish.	m2	37
<u>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</u>			
<u>Install 75mm high covings using Solidcove Mortar and Sealing with Polyscreed Lockcoat to match the floor.</u>			
2	Concrete floors	m2	37
Carried Forward to Summary of Section No. 4			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 9 Plastering Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 12</u>			
	<u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>WORK GROUP 146</u>			
	<u>RAINWATER DISPOSAL</u>			
	<u>Seamless Aluminium Gutters and Downpipes</u>			
1	125 x 75 x 0,6mm aluminium ogee gutter with baked enamel finish fixed with concealed brackets.	m	18	
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	
	<u>WORK GROUP 148</u>			
	<u>SANITARY FITTINGS</u>			
	<u>"Atlas Plastics" or similar approved plastic sanitary fittings including connection to services and fixing to walls or floors.</u>			
	Carried Forward		R	
	BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
	<u>Water Closet, basins, urinals,etc</u>		
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	7
9	382AP Christy wash hand basin including brackets,etc.	No	5
	<u>"Cobra"</u>		
	<u>TRAPS ETC</u>		
	<u>"Marley"</u>		
10	38mm Deep seal "P" or "S" trap	No	5
	<u>WASTE UNIONS ETC</u>		
11	32mm Basin waste union	No	5
	<u>TAPS, VALVES, ETC</u>		
	<u>"Cobra Watertech"</u>		
12	15mm Chrome plated ball-o-stop valve	No	5
13	Star pillar tap (Code 111-20)	No	4
14	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
	<u>Brass</u>		
15	22mm Stopcock	No	2
16	28mm Fullway gate valve	No	2
	<u>SANITARY PLUMBING</u>		
	<u>uPVC pipes in walls, cast in slabs etc.</u>		
17	50mm Pipes	m	22
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
18	110mm Pipes	m	25	
	<u>200mm HD Vent Pipe with Windmaster Extractor</u>			
19	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirllys4Africa Toilet	m	21	
	<u>Extra over uPVC pipes for fittings</u>			
20	50mm fittings	No	15	
21	110mm fittings	No	8	
22	200mm Vent cowl	No	7	
	<u>WATER SUPPLIES</u>			
	<u>Polycop pipes</u>			
23	15mm Polycop pipe to walls,etc	m	27	
24	22mm Polycop pipe to walls,etc	m	35	
25	15mm Polycop pipe in ground < 1m deep	m	13	
26	22mm Polycop pipe in ground < 1m deep	m	32	
	<u>Extra over Class 2 copper pipes for brass compression fittings</u>			
27	15mm Fittings	No	25	
28	22mm Fittings	No	23	
	<u>Soakaway (Provisional)</u>			
29	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	
Carried Forward				R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd				

Brought Forward		R
<u>The following in JoJo 5500 litre capacity tanks</u> <u>(Stromy sky ME 5513 in colour)</u>		
30	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
<u>TESTING</u>		
31	Testing water pipe system	Item
Carried Forward to Summary of Section No. 4		
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd		
		R

Item No		Quantity	Rate	Amount
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>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</u>			
	<u>WORK GROUP 150</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>6.38mm Arctic Snow safety laminated glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	4	
	<u>MIRRORS ETC</u>			
	<u>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.</u>			
2	600 x 600mm high mirror	No	5	
	Carried Forward to Summary of Section No. 4			
	BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
	Bill No. 12			
	Glazing			
	Mavusandile Solutions (Pty)Ltd			
			R	

Item No	Quantity	Rate	Amount
<u>BILL NO. 14</u>			
<u>PAINTWORK</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>PREPARATORY WORK TO EXISTING WORK</u>			
<u>Previously painted plastered surfaces</u>			
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			
<u>Previously painted metal surfaces</u>			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
<u>Previously painted wood surfaces</u>			
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			
<u>WORK GROUP 152</u>			
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FASCIAS AND BARGE BOARDS</u>			
Carried Forward			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Bill No. 13			
Paintwork			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth</u>			
1	On fascias and barge boards	m2	9
<u>ON METAL</u>			
<u>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</u>			
2	Security gates and screens	m2	8
3	Windows	m2	9
<u>ON WOOD</u>			
<u>Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearl glo paint</u>			
4	On doors & frames	m2	28
<u>PAINTS TO ROOF TRUSSES, PURLINS, BRANDERING, WALLS PLATES ETC.</u>			
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	35
Carried Forward to Summary of Section No. 4 BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S Bill No. 13 Paintwork Mavusandile Solutions (Pty)Ltd			R

Bill No	SECTION SUMMARY - BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S	Page No	Amount
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7	Ironmongery	72	
8	Metalwork	75	
9	Plastering	76	
10	Tiling	77	
11	Plumbing & Drainage	81	
12	Glazing	82	
13	Paintwork	84	
Carried to Final Summary			R
BLOCK D-NEW 6 VIP G,1 PARAPLEGIC & 5WHB'S			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>SECTION NO.5</u>			
<u>BILL NO.1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Nature of ground</u>			
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			
<u>Carting away of excavated material</u>			
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			
<u>Levels of Site</u>			
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			
<u>WORK GROUP 104</u>			
<u>EARTHWORKS</u>			
<u>EXCAVATION, FILLING, ETC</u>			
Carried Forward			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Excavation in earth not exceeding 2m deep:</u>				
1	Trenches	m3	82	
2	Holes	m3	87	
3	Reduced levels under floors	m3	8	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Intermediate material	m3	18	
5	Hard rock	m3	9	
<u>Extra over all excavations for carting away</u>				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	177	
<u>Risk of collapse of excavations</u>				
7	Sides of trench excavations not exceeding 1,5m deep	m2	51	
8	Sides of bulk excavations exceeding 1,5m deep	m2	142	
<u>Keeping excavations free of water</u>				
9	Keeping excavations free of all water other than subterranean water		Item	
<u>FILLING,ETC</u>				
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u>				
10	To trenches, holes, etc	m3	9	
<u>Gravel filling (G5) supplied by the contractor compacted to 95% Mod AASHTO density in 150mm layers</u>				
11	Under floors, steps, paving, etc	m3	59	
Carried Forward				R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:</u>			
12	Under floors, steps, paving, etc	m3	54
<u>River sand filling supplied by the contractor</u>			
13	Under floors etc	m3	5
<u>Compaction of surfaces</u>			
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
<u>Prescribed density test on filling</u>			
15	"Modified AASHTO Density" test	No	4
<u>SOIL POISONING</u>			
<u>Soil insecticide in accordance with SANS 5859</u>			
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	54
17	To bottoms and sides of trenches etc	m2	48
Carried Forward to Summary of Section No. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 1			
Earthworks			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>Preambles</u>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Cost of tests</u>			
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)			
<u>Expansion Joints</u>			
A surface bed that exceeds 25 meters squared, poured in a single panel must have expansion joints fitted			
<u>Formwork</u>			
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			
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
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 2			
Concrete, Formwork & Reinforcement			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
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"			
<u>WORK GROUP 110</u>			
<u>UNREINFORCED CONCRETE</u>			
<u>15MPa/19mm concrete</u>			
1	50mm Thick surface blinding under footings and bases	m3	1
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>25MPa/19mm concrete</u>			
2	Footings to walls (Provisional).	m3	4
3	Surface beds on waterproofing	m3	3
<u>REINFORCED CONCRETE</u>			
<u>30MPa/19mm concrete</u>			
4	Suspended slab.	m3	3
5	In pit base slab.	m3	3
6	Tank stand.	m3	1
7	Infill to 330mm cavity walls.	m3	4
<u>TEST BLOCKS</u>			
8	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	12
Carried Forward			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
9	Surface beds, slabs, etc	m2	80
<u>WORK GROUP 111</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	22
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	29
<u>Permanent Formwork:</u>			
12	Suspended slabs including propping n.e 3.5m high	m2	20
<u>Extra on permanent formwork for boxing or blocking in or boxing out to form:</u>			
13	450mm Diameter opening through 200mm thick slab.	No	3
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>			
14	12mm Joints not exceeding 300mm high (Provisional).	m	37
<u>WORK GROUP 114</u>			
<u>REINFORCEMENT WORK</u>			
Carried Forward			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Mild steel reinforcement to structural concrete work</u>			
15	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>High Tensile steel reinforcement to structural concrete work</u>			
16	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>Fabric reinforcement</u>			
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
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 2			
Concrete, Formwork & Reinforcement			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 3</u> <u>MASONRY</u> <u>Preambles</u> TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) <u>SUPPLEMENTARY PREAMBLES</u> <u>BRICKWORK</u> <u>Face bricks</u> Bricks shall be ordered timeously to obtain uniformity in size and colour <u>Pointing</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc <u>BLOCKWORK</u> <u>Concrete masonry units</u> 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 BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd		R	

Brought Forward			R
<u>Blockwork</u> 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 <u>Standard complementary blocks</u> 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 as necessary <u>DECORATIVE BLOCKS</u> Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour <u>WORK GROUP 116</u> <u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>			
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
<u>SUPERSTRUCTURE</u>			
Carried Forward			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Brickwork of NFP bricks in class II mortar</u>				
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	
<u>Facebrick</u>				
<u>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.</u>				
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	
<u>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:</u>				
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	
15	220mm Wide lintel pointed on face and 110mm soffit.	m	22	
Carried Forward				R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Bagging of 1:3 cement and sand mixture</u>			
<u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u>			
16	On outer face of inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	9
<u>Brickwork reinforcement in foundations</u>			
17	150mm Wide reinforcement built in horizontally	m	193
<u>Brickwork reinforcement in superstructure</u>			
18	75mm Wide reinforcement built in horizontally in superstructure	m	128
19	150mm Wide reinforcement built in horizontally in superstructure	m	770
<u>"Stalton" prestressed fabricated lintels</u>			
20	110 x 75mm Lintels in lengths not exceeding 3m	m	4
<u>Galvanised hoop iron cramps, ties, etc</u>			
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
<u>Air bricks etc</u>			
22	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	6
Carried Forward to Summary of Section No. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 3			
Masonry			
Mavusandile Solutions (Pty)Ltd			

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

Brought Forward			R
<u>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.® Brixal" 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.</u>			
4	On bagged brick walls	m2	9
5	Internal Pit walls.	m2	68
6	External Pit walls.	m2	35
<u>JOINT SEALANTS ETC</u>			
<u>Clear Neutral silicone sealant:</u>			
7	In joint sealing and pointing all round external window and door frames.	m	19
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
8	<u>10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).</u>	m	37
Carried Forward to Summary of Section No. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 4			
Waterproofing			
Mavusandile Solutions (Pty)Ltd			

	Brought Forward <u>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.</u> 6 Insulation laid taut over purlins (at approximately 1100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires at 500mm centres			R
		m2	60	
	Carried Forward to Summary of Section No. 5 BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 5 Roof Coverings Mavusandile Solutions (Pty)Ltd			R

Item No	Quantity	Rate	Amount
<u>BILL NO.6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Joinery:</u>			
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			
<u>Fixing</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
<u>Decorative laminate finish:</u>			
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish			
<u>Plate nailed timber roof truss construction</u>			
The following is applicable in respect of roof trusses:			
Carried Forward			
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			
		R	

Brought Forward		R	
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 <u>WORK GROUP 126</u> <u>ROOFS ETC</u> <u>Plate nailed timber roof truss construction</u> 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 <u>Double pitched prefabricated roof trusses bearing on wall plate on both sides with pitch not exceeding 30 degrees</u>			
1	Double pitch truss size 3000mm to 5000mm overall span with 600mm eaves overhang projection on both sides	No	7
<u>Sawn softwood SA Pine grade 4</u>			
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
<u>TR1 and TR2 Certificates</u>			
5	Allow for TR1 and TR2 certification of all trusses	Item	
<u>EAVES, VERGES, ETC</u>			
Carried Forward		R	
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 6 Carpentry & Joinery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>"Everite" medium density plain nutec-cement</u>			
<u>'Everite Nutec' fibre cement socket less barge boards (Product no. 721-800):</u>			
6	80 x 200mm Barge boards including H-profile jointing strips	m	17
<u>"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).</u>			
7	15 x 225mm Fascias including Pvc H-profile jointing strips	m	13
<u>FRAMED DOORS, ETC</u>			
<u>Wrought meranti doors as hung to steel frames</u>			
<u>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</u>			
8	44mm Door, size 813 x 2032mm high	No	3
<u>Horizontal Slatted 8 Panel Semi-Solid 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 .Door complete with pink primer & 2 coats eggshell gloss enamel paint.</u>			
9	44mm Door, size 813 x 2032mm high	No	4
Carried Forward to Summary of Section No. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO.7</u>			
	<u>IRONMONGERY</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Finishes to ironmongery</u>			
	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			
	<u>"Union"</u>			
	<u>WORK GROUP 132</u>			
	<u>LOCKS</u>			
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	
5	Bolt Indicator Satin Chrome Union CZ80941SCR	No	4	
	Carried Forward			
	BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 7 Ironmongery Mavusandile Solutions (Pty)Ltd		R	

Brought Forward			R
<u>DOOR CLOSERS</u>			
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
<u>BATHROOM FITTINGS</u>			
<u>"Supreme Hygiene" or similar approved</u>			
8	TR3 - 3 Tier Toilet roll holder Lockable	No	5
9	Waste disposal bin 27L mounted on the wall	No	1
10	Liquid Soap Dispenser	No	3
11	She Bin 12L	No	1
<u>"Chairman Industries cc" grab rails</u>			
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
<u>SIGNAGE</u>			
<u>Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:</u>			
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 corners 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. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 7			
Ironmongery			
Mavusandile Solutions (Pty)Ltd			

[illegible]

Brought Forward			R
<u>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:</u>			
1	Security Gate size 1 000 x 2 100mm high.	No	3
<u>GALVANISED PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for one brick wall</u>			
2	Frame for door 813 x 2032mm high	No	3
<u>1,2mm Double rebated frames suitable for half brick walls with two brass butt hinges per door leaf "LI"</u>			
3	Frame for door size, 813 x 2032mm high	No	4
<u>GALVANISED STEEL WINDOWS, DOORS, ETC</u>			
All windows shall be fitted with solid brass handles, screws, stays and hinge pins.			
Carried Forward			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 9 Metalwork Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Standard commercial windows with heavy duty solid brass ironmongery with opening sections fitted with standard burglar bars.</u>			
4	E1 533 x 654mm high. (W1)	No	4
5	E2 987 x 611mm High (W2)	No	3
<u>MANHOLE COVER</u>			
<u>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.</u>			
6	450 x 450mm Manhole cover.	No	3
Carried Forward to Summary of Section No. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 9			
Metalwork			
Mavusandile Solutions (Pty)Ltd			

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Item No		Quantity	Rate	Amount
<u>BILL NO. 11</u>				
<u>PLUMBING AND DRAINAGE</u>				
<u>(PROVISIONAL)</u>				
<u>Preambles</u>				
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
<u>WORK GROUP 146</u>				
<u>RAINWATER DISPOSAL</u>				
<u>Seamless Aluminium Gutters and Downpipes</u>				
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	
<u>WORK GROUP 148</u>				
<u>SANITARY FITTINGS</u>				
<u>"Atlas Plastics" or similar approved plastic sanitary fittings including connection to services and fixing to walls or floors.</u>				
Carried Forward				R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Water Closet, basins, urinals,etc</u>			
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 5	
9	496AP Waterless urinal fitting and waste	No 2	
10	382AP Christy wash hand basin including brackets,etc.	No 3	
<u>"Cobra"</u>			
<u>TRAPS ETC</u>			
<u>"Marley"</u>			
11	38mm Deep seal "P" or "S" trap	No 3	
<u>WASTE UNIONS ETC</u>			
12	32mm Basin waste union	No 3	
<u>TAPS, VALVES, ETC</u>			
<u>"Cobra Watertech"</u>			
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	
<u>Brass</u>			
16	22mm Stopcock	No 2	
17	28mm Fullway gate valve	No 2	
<u>SANITARY PLUMBING</u>			
Carried Forward			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>uPVC pipes in walls, cast in slabs etc.</u>				
18	50mm Pipes	m	37	
19	110mm Pipes	m	25	
<u>200mm HD Vent Pipe with Windmaster Extractor</u>				
20	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirlys4Africa Toilet	m	14	
<u>Extra over uPVC pipes for fittings</u>				
21	50mm Fittings	No	20	
22	110mm Fittings.	No	10	
23	200mm Fittings.	No	5	
<u>WATER SUPPLIES</u>				
<u>Polycop pipes</u>				
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	
<u>Extra over Class 2 copper pipes for brass compression fittings</u>				
28	15mm Fittings	No	21	
29	22mm Fittings	No	27	
Carried Forward				R
BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Soakaway (Provisional)</u>			
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
<u>The following in JoJo 5500 litre capacity tanks (Stromy sky ME 5513 in colour)</u>			
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
<u>TESTING</u>			
32	Testing water pipe system		Item
Carried Forward to Summary of Section No. 5			R
BLOCK C-NEW 3F +1M+1P+1U&3WHB			
Bill No. 11			
Plumbing & Drainage			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 12</u>			
	<u>GLAZING</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>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</u>			
	<u>WORK GROUP 150</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>6.38mm Arctic Snow safety laminated glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	3	
	<u>MIRRORS ETC</u>			
	<u>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.</u>			
2	600 x 600mm high mirror	No	3	
	Carried Forward to Summary of Section No. 5		R	
	BLOCK C-NEW 3F +1M+1P+1U&3WHB			
	Bill No. 12			
	Glazing			
	Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 13</u>			
<u>PAINTWORK</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>PREPARATORY WORK TO EXISTING WORK</u>			
<u>Previously painted plastered surfaces</u>			
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			
<u>Previously painted metal surfaces</u>			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
<u>Previously painted wood surfaces</u>			
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			
<u>WORK GROUP 152</u>			
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FASCIAS AND BARGE BOARDS</u>			
Carried Forward			
BLOCK C-NEW 3F +1M+1P+1U&3WHB		R	
Bill No. 13			
Paintwork			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth</u>			
1	On fascias and barge boards	m2	8
<u>ON METAL</u>			
<u>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</u>			
2	Security gates and screens	m2	11
3	Windows	m2	6
<u>ON WOOD</u>			
<u>Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearl glo paint</u>			
4	On doors & frames	m2	28
<u>PAINTS TO ROOF TRUSSES, PURLINS, BRANDERING, WALLS PLATES ETC.</u>			
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	28
Carried Forward to Summary of Section No. 5 BLOCK C-NEW 3F +1M+1P+1U&3WHB Bill No. 13 Paintwork Mavusandile Solutions (Pty)Ltd			R

SECTION SUMMARY - BLOCK C-NEW 3F +1M+1P+1U&3WHB			
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Item No	Quantity	Rate	Amount
<u>SECTION NO. 6</u>			
<u>BILL NO.1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Nature of ground</u>			
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			
<u>Carting away of excavated material</u>			
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			
<u>Levels of Site</u>			
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			
<u>WORK GROUP 104</u>			
<u>EARTHWORKS</u>			
<u>EXCAVATION, FILLING, ETC</u>			
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Excavation in earth not exceeding 2m deep:</u>				
1	Trenches	m3	68	
2	Holes	m3	47	
3	Reduced levels under floors	m3	6	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Intermediate material	m3	12	
5	Hard rock	m3	6	
<u>Extra over all excavations for carting away</u>				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	121	
<u>Risk of collapse of excavations</u>				
7	Sides of trench excavations not exceeding 1,5m deep	m2	35	
8	Sides of bulk excavations exceeding 1,5m deep	m2	116	
<u>Keeping excavations free of water</u>				
9	Keeping excavations free of all water other than subterranean water		Item	
<u>FILLING,ETC</u>				
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u>				
10	To trenches, holes, etc	m3	6	
<u>Gravel filling (G5) supplied by the contractor compacted to 95% Mod AASHTO density in 150mm layers</u>				
11	Under floors, steps, paving, etc	m3	43	
Carried Forward				R
BLOCK A-3B+3U+2WHB Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:</u>			
12	Under floors, steps, paving, etc	m3	39
<u>River sand filling supplied by the contractor</u>			
13	Under floors etc	m3	4
<u>Compaction of surfaces</u>			
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	43
<u>Prescribed density test on filling</u>			
15	"Modified AASHTO Density" test	No	4
<u>SOIL POISONING</u>			
<u>Soil insecticide in accordance with SANS 5859</u>			
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	33
17	To bottoms and sides of trenches etc	m2	42
Carried Forward to Summary of Section No. 6			R
BLOCK A-3B+3U+2WHB			
Bill No. 1			
Earthworks			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Cost of tests</u>			
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)			
<u>Expansion Joints</u>			
A surface bed that exceeds 25 meters squared, poured in a single panel must have expansion joints fitted			
<u>Formwork</u>			
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			
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	
BLOCK A-3B+3U+2WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
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"			
<u>WORK GROUP 110</u>			
<u>UNREINFORCED CONCRETE</u>			
<u>15MPa/19mm concrete</u>			
1	50mm Thick surface blinding under footings and bases	m3	1
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>25MPa/19mm concrete</u>			
2	Footings to walls (Provisional).	m3	3
3	Surface beds on waterproofing	m3	2
<u>REINFORCED CONCRETE</u>			
<u>30MPa/19mm concrete</u>			
4	Suspended slab.	m3	2
5	In pit base slab.	m3	3
6	Tank stand.	m3	1
7	Infill to 330mm cavity walls.	m3	3
<u>TEST BLOCKS</u>			
8	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	12
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
9	Surface beds, slabs, etc	m2	50
<u>WORK GROUP 111</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	15
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	23
<u>Permanent Formwork:</u>			
12	Suspended slabs including propping n.e 3.5m high	m2	10
<u>Extra on permanent formwork for boxing or blocking in or boxing out to form:</u>			
13	450mm Diameter opening through 200mm thick slab.	No	2
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>			
14	12mm Joints not exceeding 300mm high (Provisional).	m	17
<u>WORK GROUP 114</u>			
<u>REINFORCEMENT WORK</u>			
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Mild steel reinforcement to structural concrete work</u>			
15	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>High Tensile steel reinforcement to structural concrete work</u>			
16	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>Fabric reinforcement</u>			
17	BRC Mesh Ref 193 fabric reinforcement in cavity wall etc	m2	28
18	BRC Mesh Ref 888 fabric reinforcement in suspended slabs.	m2	10
19	BRC Mesh Ref 395 fabric reinforcement in soil crete backfill .	m2	54
Carried Forward to Summary of Section No. 6			R
BLOCK A-3B+3U+2WHB			
Bill No. 2			
Concrete, Formwork & Reinforcement			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 3</u>			
<u>MASONRY</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>BRICKWORK</u>			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>BLOCKWORK</u>			
<u>Concrete masonry units</u>			
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	
BLOCK A-3B+3U+2WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Blockwork</u> 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 <u>Standard complementary blocks</u> 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 as necessary <u>DECORATIVE BLOCKS</u> Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour <u>WORK GROUP 116</u> <u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>			
1	One brick wall	m2	38
2	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	23
3	Mass brickwork walls.	m3	0.2
<u>SUPERSTRUCTURE</u>			
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Brickwork of NFP bricks in class II mortar</u>				
4	One brick wall	m2	58	
5	Half brick wall	m2	10	
6	Half brick wall in beamfilling including building around roof timbers	m2	4	
7	400 x 400mm Brick Piers	m3	0.4	
<u>Facebrick</u>				
<u>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.</u>				
8	Extra over for facebrick in piers.	m2	4	
9	Extra over for facebrick in foundations (Provisional).	m2	6	
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	5	
12	One brickwall pointed on both sides.	m2	111	
13	Fair raking cutting.	m	14	
<u>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:</u>				
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	2	
15	220mm Wide lintel pointed on face and 110mm soffit.	m	16	
Carried Forward				R
BLOCK A-3B+3U+2WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Bagging of 1:3 cement and sand mixture</u>			
<u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u>			
16	On outer face of inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	9
<u>Brickwork reinforcement in foundations</u>			
17	75mm Wide reinforcement built in horizontally in superstructure	m	271
18	150mm Wide reinforcement built in horizontally	m	147
<u>Brickwork reinforcement in superstructure</u>			
19	75mm Wide reinforcement built in horizontally in superstructure	m	60
20	150mm Wide reinforcement built in horizontally in superstructure	m	397
<u>"Stalton" prestressed fabricated lintels</u>			
21	110 x 75mm Lintels in lengths not exceeding 3m	m	2
<u>Galvanised hoop iron cramps, ties, etc</u>			
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
<u>Air bricks etc</u>			
23	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	4
Carried Forward to Summary of Section No. 6			R
BLOCK A-3B+3U+2WHB			
Bill No. 3			
Masonry			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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.® Brixéal" 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.</u>			
4	On bagged brick walls	m2	9
5	Internal Pit walls.	m2	40
6	External Pit walls.	m2	23
<u>JOINT SEALANTS ETC</u>			
<u>Clear Neutral silicone sealant:</u>			
7	In joint sealing and pointing all round external window and door frames.	m	10
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
8	<u>10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).</u>	m	17
Carried Forward to Summary of Section No. 6			R
BLOCK A-3B+3U+2WHB			
Bill No. 4			
Waterproofing			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 124(METAL ROOF)</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>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.</u>			
1	Roof covering with pitch not exceeding 15 degrees.	m2	49
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	7
<u>Sundries</u>			
3	Polyethylene ridge closures	m	14
4	Broad flute ridge closures	m	14
5	Hurricane clips	No	96
<u>ROOF AND WALL INSULATION</u>			
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 5 Roof Coverings Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO.6</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Joinery:</u>			
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			
<u>Fixing</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
<u>Decorative laminate finish:</u>			
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish			
<u>Plate nailed timber roof truss construction</u>			
The following is applicable in respect of roof trusses:			
Carried Forward			
BLOCK A-3B+3U+2WHB			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			
		R	

Brought Forward		R	
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 <u>WORK GROUP 126</u> <u>ROOFS ETC</u> <u>Plate nailed timber roof truss construction</u> 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 <u>Double pitched prefabricated roof trusses bearing on wall plate on both sides with pitch not exceeding 30 degrees</u>			
1	Double pitch truss size 3000mm to 5000mm overall span with 600mm eaves overhang projection on both sides	No	7
<u>Sawn softwood SA Pine grade 4</u>			
2	38 x 114mm Wall plates bedded level on and including cement mortar	m	12
3	50 x 75mm Purlins	m	56
4	38 x 114mm Bracing	m	15
<u>TR1 and TR2 Certificates</u>			
5	Allow for TR1 and TR2 certification of all trusses	Item	
<u>EAVES, VERGES, ETC</u>			
Carried Forward		R	
BLOCK A-3B+3U+2WHB Bill No. 6 Carpentry & Joinery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>"Everite" medium density plain nutec-cement</u>			
<u>'Everite Nutec' fibre cement socket less barge boards (Product no. 721-800):</u>			
6	80 x 200mm Barge boards including H-profile jointing strips	m	14
<u>"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).</u>			
7	15 x 225mm Fascias including Pvc H-profile jointing strips	m	13
<u>FRAMED DOORS, ETC</u>			
<u>Wrought meranti doors as hung to steel frames</u>			
<u>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</u>			
8	44mm Door, size 813 x 2032mm high	No	1
<u>Horizontal Slatted 8 Panel 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 .Door complete with pink primer & 2 coats eggshell gloss enamel paint.</u>			
9	44mm Door, size 813 x 2032mm high	No	3
Carried Forward to Summary of Section No. 6			R
BLOCK A-3B+3U+2WHB			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO.7</u>			
<u>IRONMONGERY</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Finishes to ironmongery</u>			
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			
<u>"Union"</u>			
<u>WORK GROUP 132</u>			
<u>LOCKS</u>			
1	ASSA ABLOY UNION CZ6822461CH Gower 4 Lever Lockset Solid cast zinc handle and zinc backplate, SABS Approved	No	1
2	Union SS2BB BUTT HINGE EN 1935GRD13 (Stainless Steel) - Code JH-BB-STD-22-SS-01.	No	4
3	Union Kick Plate 900 X 800mm Works Code - SS5089-900W	No	2
4	60mm "Viro" or Similar Pad lock.	No	1
5	Bolt Indicator Satin Chrome Union CZ80941SCR	No	3
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 7 Ironmongery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>DOOR CLOSERS</u>			
6	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	1
7	Union Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	4
<u>BATHROOM FITTINGS</u>			
<u>"Supreme Hygiene" or similar approved</u>			
8	TR3 - 3 Tier Toilet roll holder Lockable	No	3
9	Waste disposal bin 27L mounted on the wall	No	1
10	Liquid Soap Dispenser	No	1
<u>SIGNAGE</u>			
<u>Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:</u>			
11	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 corners 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
BLOCK A-3B+3U+2WHB Bill No. 7 Ironmongery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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:</u>			
1	Security Gate size 1 000 x 2 100mm high.	No	1
<u>GALVANISED PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for one brick wall</u>			
2	Frame for door 813 x 2032mm high	No	1
<u>1,2mm Double rebated frames suitable for half brick walls with two brass butt hinges per door leaf "LI"</u>			
3	Frame for door size, 813 x 2032mm high	No	3
<u>GALVANISED STEEL WINDOWS, DOORS, ETC</u>			
All windows shall be fitted with solid brass handles, screws, stays and hinge pins.			
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 8 Metalwork Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Standard commercial windows with heavy duty solid brass ironmongery with opening sections fitted with standard burglar bars.</u>			
4	E1 533 x 654mm high. (W1)	No	3
5	E2 987 x 611mm High (W2)	No	1
<u>MANHOLE COVER</u>			
<u>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.</u>			
6	450 x 450mm Manhole cover.	No	1
Carried Forward to Summary of Section No. 6 BLOCK A-3B+3U+2WHB Bill No. 8 Metalwork Mavusandile Solutions (Pty)Ltd			R

[illegible]

[illegible]

Brought Forward			R
<u>Water Closet, basins, urinals,etc</u>			
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 3	
9	496AP Waterless urinal fitting and waste	No 2	
10	382AP Christy wash hand basin including brackets,etc.	No 2	
<u>"Cobra"</u>			
<u>TRAPS ETC</u>			
<u>"Marley"</u>			
11	38mm Deep seal "P" or "S" trap	No 2	
<u>WASTE UNIONS ETC</u>			
12	32mm Basin waste union	No 2	
<u>TAPS, VALVES, ETC</u>			
<u>"Cobra Watertech"</u>			
13	15mm Chrome plated ball-o-stop valve	No 3	
14	Star pillar tap (Code 111-20)	No 2	
<u>Brass</u>			
15	22mm Stopcock	No 2	
16	28mm Fullway gate valve	No 2	
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes in walls, cast in slabs etc.</u>			
17	50mm Pipes	m 25	
18	110mm Pipes	m 27	
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>200mm HD Vent Pipe with Windmaster Extractor</u>			
19	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirllys4Africa Toilet	m	11
<u>Extra over uPVC pipes for fittings</u>			
20	50mm Fittings.	No	20
21	100mm Fittings.	No	8
22	200mm Fittings.	No	3
<u>WATER SUPPLIES</u>			
<u>Polycop pipes</u>			
23	15mm Polycop pipe to walls,etc	m	15
24	22mm Polycop pipe to walls,etc	m	15
25	15mm Polycop pipe in ground < 1m deep	m	13
26	22mm Polycop pipe in ground < 1m deep	m	20
<u>Extra over Class 2 copper pipes for brass compression fittings</u>			
27	15mm Fittings	No	21
28	22mm Fittings	No	25
<u>Soakaway (Provisional)</u>			
29	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
Carried Forward			R
BLOCK A-3B+3U+2WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward		R	
<u>The following in JoJo 5500 litre capacity tanks</u> <u>(Stromy sky ME 5513 in colour)</u>			
30	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
<u>TESTING</u>			
31	Testing water pipe system	Item	
Carried Forward to Summary of Section No. 6		R	
BLOCK A-3B+3U+2WHB			
Bill No. 11			
Plumbing & Drainage			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 12</u>			
	<u>GLAZING</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>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</u>			
	<u>WORK GROUP 150</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>6.38mm Arctic Snow safety laminated glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	2	
	<u>MIRRORS ETC</u>			
	<u>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.</u>			
2	600 x 600mm high mirror	No	2	
	Carried Forward to Summary of Section No. 6		R	
	BLOCK A-3B+3U+2WHB			
	Bill No. 12			
	Glazing			
	Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 13</u>			
<u>PAINTWORK</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>PREPARATORY WORK TO EXISTING WORK</u>			
<u>Previously painted plastered surfaces</u>			
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			
<u>Previously painted metal surfaces</u>			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
<u>Previously painted wood surfaces</u>			
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			
<u>WORK GROUP 152</u>			
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FASCIAS AND BARGE BOARDS</u>			
Carried Forward			
BLOCK A-3B+3U+2WHB		R	
Bill No. 13			
Paintwork			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth</u>			
1	On fascias and barge boards	m2	8
<u>ON METAL</u>			
<u>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</u>			
2	Security gates and screens	m2	4
3	Windows	m2	3
<u>ON WOOD</u>			
<u>Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearl glo paint</u>			
4	On doors & frames	m2	14
<u>PAINTS TO ROOF TRUSSES, PURLINS, BRANDERING, WALLS PLATES ETC.</u>			
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	28
Carried Forward to Summary of Section No. 6			R
BLOCK A-3B+3U+2WHB			
Bill No. 13			
Paintwork			
Mavusandile Solutions (Pty)Ltd			

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION NO.7</u>			
<u>BILL NO.1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Nature of ground</u>			
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			
<u>Carting away of excavated material</u>			
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			
<u>Levels of Site</u>			
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			
<u>WORK GROUP 104</u>			
<u>EARTHWORKS</u>			
<u>EXCAVATION, FILLING, ETC</u>			
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Excavation in earth not exceeding 2m deep:</u>				
1	Trenches	m3	68	
2	Holes	m3	47	
3	Reduced levels under floors	m3	6	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Intermediate material	m3	12	
5	Hard rock	m3	6	
<u>Extra over all excavations for carting away</u>				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	121	
<u>Risk of collapse of excavations</u>				
7	Sides of trench excavations not exceeding 1,5m deep	m2	35	
8	Sides of bulk excavations exceeding 1,5m deep	m2	116	
<u>Keeping excavations free of water</u>				
9	Keeping excavations free of all water other than subterranean water		Item	
<u>FILLING,ETC</u>				
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u>				
10	To trenches, holes, etc	m3	6	
<u>Gravel filling (G5) supplied by the contractor compacted to 95% Mod AASHTO density in 150mm layers</u>				
11	Under floors, steps, paving, etc	m3	43	
Carried Forward				R
BLOCK B-3B+3U+2WHB Bill No. 1 Earthworks Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Earth filling (G7 material) supplied by the contractor compacted to 95% Mod AASHTO density:</u>			
12	Under floors, steps, paving, etc	m3	39
<u>River sand filling supplied by the contractor</u>			
13	Under floors etc	m3	4
<u>Compaction of surfaces</u>			
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	43
<u>Prescribed density test on filling</u>			
15	"Modified AASHTO Density" test	No	4
<u>SOIL POISONING</u>			
<u>Soil insecticide in accordance with SANS 5859</u>			
16	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	33
17	To bottoms and sides of trenches etc	m2	42
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 1			
Earthworks			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>Preambles</u>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Cost of tests</u>			
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)			
<u>Expansion Joints</u>			
A surface bed that exceeds 25 meters squared, poured in a single panel must have expansion joints fitted			
<u>Formwork</u>			
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			
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	
BLOCK B-3B+3U+2WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
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"			
<u>WORK GROUP 110</u>			
<u>UNREINFORCED CONCRETE</u>			
<u>15MPa/19mm concrete</u>			
1	50mm Thick surface blinding under footings and bases	m3	1
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>25MPa/19mm concrete</u>			
2	Footings to walls (Provisional).	m3	3
3	Surface beds on waterproofing	m3	2
<u>REINFORCED CONCRETE</u>			
<u>30MPa/19mm concrete</u>			
4	Suspended slab.	m3	2
5	In pit base slab.	m3	3
6	Tank stand.	m3	1
7	Infill to 330mm cavity walls.	m3	3
<u>TEST BLOCKS</u>			
8	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	12
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float:</u>			
9	Surface beds, slabs, etc	m2	50
<u>WORK GROUP 111</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	15
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY III)</u>			
<u>Smooth formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	23
<u>Permanent Formwork:</u>			
12	Suspended slabs including propping n.e 3.5m high	m2	10
<u>Extra on permanent formwork for boxing or blocking in or boxing out to form:</u>			
13	450mm Diameter opening through 200mm thick slab.	No	2
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>			
14	12mm Joints not exceeding 300mm high (Provisional).	m	17
<u>WORK GROUP 114</u>			
<u>REINFORCEMENT WORK</u>			
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 2 Concrete, Formwork & Reinforcement Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Mild steel reinforcement to structural concrete work</u>			
15	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>High Tensile steel reinforcement to structural concrete work</u>			
16	Rods in varying diameters in Foundations,bases,columns,etc	t	1
<u>Fabric reinforcement</u>			
17	BRC Mesh Ref 193 fabric reinforcement in cavity wall etc	m2	28
18	BRC Mesh Ref 888 fabric reinforcement in suspended slabs.	m2	10
19	BRC Mesh Ref 395 fabric reinforcement in soil crete backfill .	m2	54
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 2			
Concrete, Formwork & Reinforcement			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Blockwork</u> 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 <u>Standard complementary blocks</u> 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 as necessary <u>DECORATIVE BLOCKS</u> Blocks shall be of approved manufacture, sound, well burnt or cured and uniform and true in size, shape and colour <u>WORK GROUP 116</u> <u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u> <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u>			
1	One brick wall	m2	38
2	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	23
3	Mass brickwork walls.	m3	0.2
<u>SUPERSTRUCTURE</u>			
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>Brickwork of NFP bricks in class II mortar</u>				
4	One brick wall	m2	58	
5	Half brick wall	m2	10	
6	Half brick wall in beamfilling including building around roof timbers	m2	4	
7	400 x 400mm Brick Piers	m3	0.4	
<u>Facebrick</u>				
<u>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.</u>				
8	Extra over for facebrick in piers.	m2	4	
9	Extra over for facebrick in foundations (Provisional).	m2	6	
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	5	
12	One brickwall pointed on both sides.	m2	111	
13	Fair raking cutting.	m	14	
<u>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:</u>				
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	2	
15	220mm Wide lintel pointed on face and 110mm soffit.	m	16	
Carried Forward				R
BLOCK B-3B+3U+2WHB Bill No. 3 Masonry Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Bagging of 1:3 cement and sand mixture</u>			
<u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u>			
16	On outer face of inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	9
<u>Brickwork reinforcement in foundations</u>			
17	75mm Wide reinforcement built in horizontally in superstructure	m	271
18	150mm Wide reinforcement built in horizontally	m	147
<u>Brickwork reinforcement in superstructure</u>			
19	75mm Wide reinforcement built in horizontally in superstructure	m	60
20	150mm Wide reinforcement built in horizontally in superstructure	m	397
<u>"Stalton" prestressed fabricated lintels</u>			
21	110 x 75mm Lintels in lengths not exceeding 3m	m	2
<u>Galvanised hoop iron cramps, ties, etc</u>			
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
<u>Air bricks etc</u>			
23	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	4
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 3			
Masonry			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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.® Brixal" 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.</u>			
4	On bagged brick walls	m2	9
5	Internal Pit walls.	m2	40
6	External Pit walls.	m2	23
<u>JOINT SEALANTS ETC</u>			
<u>Clear Neutral silicone sealant:</u>			
7	In joint sealing and pointing all round external window and door frames.	m	10
<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>			
8	<u>10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary (Provisional).</u>	m	17
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 4			
Waterproofing			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 124(METAL ROOF)</u>			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>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.</u>			
1	Roof covering with pitch not exceeding 15 degrees.	m2	49
2	Ridge capping 500mm girth, screwed through sheet to purlins	m	7
<u>Sundries</u>			
3	Polyethylene ridge closures	m	14
4	Broad flute ridge closures	m	14
5	Hurricane clips	No	96
<u>ROOF AND WALL INSULATION</u>			
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 5 Roof Coverings Mavusandile Solutions (Pty)Ltd			

Brought Forward		R	
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 <u>WORK GROUP 126</u> <u>ROOFS ETC</u> <u>Plate nailed timber roof truss construction</u> 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 <u>Double pitched prefabricated roof trusses bearing on wall plate on both sides with pitch not exceeding 30 degrees</u>			
1	Double pitch truss size 3000mm to 5000mm overall span with 600mm eaves overhang projection on both sides	No	7
<u>Sawn softwood SA Pine grade 4</u>			
2	38 x 114mm Wall plates bedded level on and including cement mortar	m	12
3	50 x 75mm Purlins	m	56
4	38 x 114mm Bracing	m	15
<u>TR1 and TR2 Certificates</u>			
5	Allow for TR1 and TR2 certification of all trusses	Item	
<u>EAVES, VERGES, ETC</u>			
Carried Forward		R	
BLOCK B-3B+3U+2WHB Bill No. 6 Carpentry & Joinery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>"Everite" medium density plain nutec-cement</u>			
<u>'Everite Nutec' fibre cement socket less barge boards (Product no. 721-800):</u>			
6	80 x 200mm Barge boards including H-profile jointing strips	m	14
<u>"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).</u>			
7	15 x 225mm Fascias including Pvc H-profile jointing strips	m	13
<u>FRAMED DOORS, ETC</u>			
<u>Wrought meranti doors as hung to steel frames</u>			
<u>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</u>			
8	44mm Door, size 813 x 2032mm high	No	1
<u>Horizontal Slatted 8 Panel 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 .Door complete with pink primer & 2 coats eggshell gloss enamel paint.</u>			
9	44mm Door, size 813 x 2032mm high	No	3
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 6			
Carpentry & Joinery			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>DOOR CLOSERS</u>			
6	ASSA ABLOY DC300DA R&P closer EN 3-6 SIL (Silver) Code - DC300DA.	No	1
7	Union Floor Door Stop Satin (Stainless Steel) Code 87001SS.	No	4
<u>BATHROOM FITTINGS</u>			
<u>"Supreme Hygiene" or similar approved</u>			
8	TR3 - 3 Tier Toilet roll holder Lockable	No	3
9	Waste disposal bin 27L mounted on the wall	No	1
10	Liquid Soap Dispenser	No	1
<u>SIGNAGE</u>			
<u>Union Male, Female , Male + Female / Paraplegic Engraved Pictogram signage:</u>			
11	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 corners 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. 7			R
BLOCK B-3B+3U+2WHB Bill No. 7 Ironmongery Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>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:</u>			
1	Security Gate size 1 000 x 2 100mm high.	No	1
<u>GALVANISED PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for one brick wall</u>			
2	Frame for door 813 x 2032mm high	No	1
<u>1,2mm Double rebated frames suitable for half brick walls with two brass butt hinges per door leaf "LI"</u>			
3	Frame for door size, 813 x 2032mm high	No	3
<u>GALVANISED STEEL WINDOWS, DOORS, ETC</u>			
All windows shall be fitted with solid brass handles, screws, stays and hinge pins.			
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 8 Metalwork Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Standard commercial windows with heavy duty solid brass ironmongery with opening sections fitted with standard burglar bars.</u>			
4	E1 533 x 654mm high. (W1)	No	3
5	E2 987 x 611mm High (W2)	No	1
<u>MANHOLE COVER</u>			
<u>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.</u>			
6	450 x 450mm Manhole cover.	No	1
Carried Forward to Summary of Section No. 7			
BLOCK B-3B+3U+2WHB			
Bill No. 8			
Metalwork			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO.9</u>			
<u>PLASTERING</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 142</u>			
<u>SCREEDS</u>			
<u>Untinted granolithic on concrete</u>			
1	40mm Thick on floors to even finish.	m2	20
<u>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</u>			
<u>Install 75mm high covings using Solidcove Mortar and Sealing with Polyscreed Lockcoat to match the floor.</u>			
2	Concrete floors	m2	20
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 9			
Plastering			
Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Water Closet, basins, urinals,etc</u>			
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 3	
9	496AP Waterless urinal fitting and waste	No 2	
10	382AP Christy wash hand basin including brackets,etc.	No 2	
<u>"Cobra"</u>			
<u>TRAPS ETC</u>			
<u>"Marley"</u>			
11	38mm Deep seal "P" or "S" trap	No 2	
<u>WASTE UNIONS ETC</u>			
12	32mm Basin waste union	No 2	
<u>TAPS, VALVES, ETC</u>			
<u>"Cobra Watertech"</u>			
13	15mm Chrome plated ball-o-stop valve	No 3	
14	Star pillar tap (Code 111-20)	No 2	
<u>Brass</u>			
15	22mm Stopcock	No 2	
16	28mm Fullway gate valve	No 2	
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes in walls, cast in slabs etc.</u>			
17	50mm Pipes	m 25	
18	110mm Pipes	m 27	
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>200mm HD Vent Pipe with Windmaster Extractor</u>			
19	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirllys4Africa Toilet	m	11
<u>Extra over uPVC pipes for fittings</u>			
20	50mm Fittings.	No	20
21	100mm Fittings.	No	8
22	200mm Fittings.	No	3
<u>WATER SUPPLIES</u>			
<u>Polycop pipes</u>			
23	15mm Polycop pipe to walls,etc	m	15
24	22mm Polycop pipe to walls,etc	m	15
25	15mm Polycop pipe in ground < 1m deep	m	13
26	22mm Polycop pipe in ground < 1m deep	m	20
<u>Extra over Class 2 copper pipes for brass compression fittings</u>			
27	15mm Fittings	No	21
28	22mm Fittings	No	25
<u>Soakaway (Provisional)</u>			
29	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
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
<u>The following in JoJo 5500 litre capacity tanks</u> <u>(Stromy sky ME 5513 in colour)</u>				
30	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	
<u>TESTING</u>				
31	Testing water pipe system		Item	
Carried Forward to Summary of Section No. 7				
BLOCK B-3B+3U+2WHB Bill No. 11 Plumbing & Drainage Mavusandile Solutions (Pty)Ltd				

Item No		Quantity	Rate	Amount
	<u>BILL NO. 12</u>			
	<u>GLAZING</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>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</u>			
	<u>WORK GROUP 150</u>			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>6.38mm Arctic Snow safety laminated glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0.5m2	m2	2	
	<u>MIRRORS ETC</u>			
	<u>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.</u>			
2	600 x 600mm high mirror	No	2	
	Carried Forward to Summary of Section No. 7			
	BLOCK B-3B+3U+2WHB			
	Bill No. 12			
	Glazing			
	Mavusandile Solutions (Pty)Ltd			
			R	

Item No	Quantity	Rate	Amount
<u>BILL NO. 13</u>			
<u>PAINTWORK</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>PREPARATORY WORK TO EXISTING WORK</u>			
<u>Previously painted plastered surfaces</u>			
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			
<u>Previously painted metal surfaces</u>			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
<u>Previously painted wood surfaces</u>			
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			
<u>WORK GROUP 152</u>			
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FASCIAS AND BARGE BOARDS</u>			
Carried Forward			R
BLOCK B-3B+3U+2WHB Bill No. 13 Paintwork Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Prepare and apply one coat Dulux primer, one coat Dulux undercoat for all surfaces and two coats Dulux weatherguard ultrasmooth</u>			
1	On fascias and barge boards	m2	8
<u>ON METAL</u>			
<u>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</u>			
2	Security gates and screens	m2	4
3	Windows	m2	3
<u>ON WOOD</u>			
<u>Prepare and apply one coat Dulux primer for wood, one coat Dulux trade universal undercoat and two coats Dulux trade pearl glo paint</u>			
4	On doors & frames	m2	14
<u>PAINTS TO ROOF TRUSSES, PURLINS, BRANDERING, WALLS PLATES ETC.</u>			
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	28
Carried Forward to Summary of Section No. 7			R
BLOCK B-3B+3U+2WHB			
Bill No. 13			
Paintwork			
Mavusandile Solutions (Pty)Ltd			

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION NO.8</u>			
<u>BILL NO 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Nature of ground</u>			
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
BLOCK E-6G+2WHB Bill No. 1 EARTHWORKS(PROVISIONAL) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Carting away of excavated material</u>			
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			
<u>Filling</u>			
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			
<u>WORK GROUP 104</u>			
<u>EXCAVATIONS</u>			
<u>Excavation in earth n.e 2m</u>			
1	Reduced levels under floors, and Holes (Pits)	m3	125
<u>Excavation in earth exceeding 2m and n.e 4m deep</u>			
2	Holes (Pits)	m3	24
<u>EXCAVATIONS IN STRATA OF A MORE DIFFICULT CHARACTER</u>			
<u>Extra over trench and hole excavations in earth for excavation in</u>			
3	Intermediate material	m3	11
4	Hard rock	m3	6
<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	116
<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations exceeding 1,5m deep	m2	103
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 1 EARTHWORKS(PROVISIONAL) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Keeping excavations free of water</u>			
7	Keeping excavations free of water	Item	
<u>FILLING ETC</u>			
<u>G5 earth filling supplied by the contractor, compacted to 93% Mod AASHTO density</u>			
8	Under trenches, floors	m3	30
<u>G7 earth filling supplied by the contractor, compacted to 93% Mod AASHTO density</u>			
9	Under trenches, floors	m3	63
<u>Coarse river sand filling supplied by the contractor</u>			
10	Under floors etc	m3	1
<u>Compaction of surfaces</u>			
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	18
<u>Prescribed density test on filling</u>			
12	"Modified AASHTO Density" test	No	3
<u>SOIL POISONING</u>			
<u>Soil insecticide</u>			
13	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	18
14	To bottoms and sides of trenches etc	m2	105
Carried Forward to Summary of Section No. 8			R
BLOCK E-6G+2WHB			
Bill No. 1			
EARTHWORKS(PROVISIONAL)			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT(PROVISIONAL)</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>SUPPLEMENTARY PREAMBLES</u>			
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
BLOCK E-6G+2WHB Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT(PR Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
Formwork to soffits of (solid) slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<u>WORK GROUP 110</u>			
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>15MPa/20mm concrete</u>			
1	Surface blinding under footings and bases	m3	1
<u>REINFORCED CONCRETE</u>			
<u>25Mpa/20mm concrete</u>			
2	Strip footings	m3	2
3	Surface bed	m3	2
<u>REINFORCED CONCRETE</u>			
<u>30MPa/19mm concrete</u>			
4	In between Pit cavity walls	m3	3
5	Suspended slab.	m3	3
6	Bases	m3	2
7	Base to tank stand	m3	1
<u>WORK GROUP 111</u>			
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY 1)</u>			
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT (PR Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Smooth formwork to sides:</u>			
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	34
<u>Smooth form work to soffits</u>			
9	Suspended slabs including propping n.e 3.5m high	m2	15
<u>Smooth Formwork to form:</u>			
10	450mm Diameter opening through 200mm thick slab	No	4
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surface of concrete with a wood trowel.</u>			
11	Surface beds, slabs, etc	m2	37
<u>Concrete strength test cubes</u>			
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
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>			
13	6 x 20mm deep saw cut joints in top of concrete	m	40
<u>WORK GROUP 114</u>			
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>High tensile steel reinforcement to structural concrete work</u>			
14	Bars in reinforcement of all sizes	t	1.02
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT(PR Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Fabric reinforcement</u>			
15	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	57
16	Mesh Ref. 888	m2	15
17	Mesh Ref. 193	m2	39
Carried Forward to Summary of Section No. 8			R
BLOCK E-6G+2WHB			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT(PR			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO 4</u>			
	<u>MASONRY</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Hollow walls etc</u>			
	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			
	<u>Reinforced brick lintels</u>			
	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			
	<u>Face bricks</u>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<u>Pointing</u>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	Carried Forward		R	
	BLOCK E-6G+2WHB Bill No. 3 MASONRY Mavusandile Solutions (Pty)Ltd			

Brought Forward

R

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 as necessary

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**General**

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

Carried Forward

R

BLOCK E-6G+2WHB
Bill No. 3
MASONRY
Mavusandile Solutions (Pty)Ltd

Brought Forward

R

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

BLOCK E-6G+2WHB
Bill No. 3
MASONRY
Mavusandile Solutions (Pty)Ltd

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 to be 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 yard so 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

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

Carried Forward

R

BLOCK E-6G+2WHB

Bill No. 3

MASONRY

Mavusandile Solutions (Pty)Ltd

Brought Forward				R
<u>Brickwork of NFP bricks in class II mortar</u>				
3	Half brick walls	m2	15	
4	Half brick wall in beamfilling.	m2	7	
5	One brick walls	m2	59	
6	Piers	m3	0.4	
<u>Facebrick</u>				
<u>"Corobrik Road Satin" or other approved face bricks in stretcher bond with ruled joints and perpends externally:</u>				
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	64	
9	Extra over brickwork for face brickwork in beamfilling.	m2	7	
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	3	
11	Face brick cut soldier course window head, formed with cant bricks 170mm high, bedded in 1:5 cement mortar including cutting and fitting between reveals and pointing on top and front face.	m	3	
12	Fair raking cutting.	m	3	
<u>BRICKWORK SUNDRIES</u>				
<u>Bagging of 1:3 cement and sand mixture</u>				
13	Bag outer face or inner skin of brick wall to receive bitumen paint (elsewhere measured)	m2	64	
Carried Forward				R
BLOCK E-6G+2WHB Bill No. 3 MASONRY Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>Brickwork reinforcement</u>			
14	75mm Wide reinforcement built in horizontally	m	64
15	150mm Wide reinforcement built in horizontally	m	599
<u>Concrete prestressed fabricated lintels</u>			
16	110 x 75mm Lintels in lengths not exceeding 3m	m	2
<u>Air bricks etc</u>			
17	229 x 150mm Clay vermin proof air brick including internal pvc cover	No	4
Carried Forward to Summary of Section No. 8			R
BLOCK E-6G+2WHB			
Bill No. 3			
MASONRY			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>BILL NO 5</u>			
<u>WATERPROOFING</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 120</u>			
<u>DAMPPROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	6
<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	On Ground floor slab	m2	30
3	Under Pit base slab.	m2	21
<u>Two coats "Brixéal" bitumen emulsion waterproof coating</u>			
4	Internal Pit Walls	m2	58
5	Pit slab	m2	30
6	Pit walls etc.	m2	58
7	On bagged brick walls	m2	58
<u>SEALANTS ETC</u>			
8	Silicon pointing to aluminium windows	m	15
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 4 WATERPROOFING Mavusandile Solutions (Pty)Ltd			

Brought Forward					
	<u>SIKAFELX PRO 2HP or other equally approved sealing compound including backing cord, bond breaker, primer, etc</u>				R
9	10 x 12mm Isolation joints in floors	m	40		
Carried Forward to Summary of Section No. 8 BLOCK E-6G+2WHB Bill No. 4 WATERPROOFING Mavusandile Solutions (Pty)Ltd					R

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Brought Forward			R
<u>"Sisalation 420" heavy industrial grade aluminium foil based insulation</u>			
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	38
<u>Sundries</u>			
5	"Sondor" Eave Polycloser	m	13
Carried Forward to Summary of Section No. 8			R
BLOCK E-6G+2WHB			
Bill No. 5			
ROOF COVERINGS			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO 7</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>WORK GROUP 126</u>			
	<u>ROOFS, ETC</u>			
	<u>Plate nailed timber roof truss construction</u>			
	Timber roof truss prices are to include for the design, supply,wind category 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.			
	<u>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 with 50 x 76mm purlins(elsewhere measured) at 1050mm centres and Gypsum plasterboard ceiling (Gypsum plasterboard ceiling elsewhere measured) with brandering at 450mm centres</u>			
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	27	
	Carried Forward		R	
	BLOCK E-6G+2WHB Bill No. 6 CARPENTRY AND JOINERY Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Sawn softwood</u>			
2	38 x 114mm Wall plates	m	11
3	38 x 114mm Bracing	m	21
4	50 x 76mm Purlins, bolted	m	51
<u>Sundries</u>			
5	Hurricane clips	No	12
<u>TR1 and TR2 Certificates</u>			
6	Allow for TR1 and TR2 certification of all trusses	Item	
<u>EAVES, VERGES, ETC</u>			
<u>"Everite" medium density plain nutec-cement</u>			
7	80 x 200mm Barge boards including H-profile jointing strips	m	12
<u>"Everite Nutec" medium density fibre cement fascia boards (Product No. 041-202).</u>			
8	15 x 225mm Fascias including Pvc H-profile jointing strips	m	6
<u>DOORS, ETC</u>			
<u>External Commercial Grade Entrance Door:</u>			
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
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 6 CARPENTRY AND JOINERY Mavusandile Solutions (Pty)Ltd			

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Item No		Quantity	Rate	Amount
	BILL NO 8			
	<u>IRONMONGERY</u>			
	Preambles			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>WORK GROUP 132</u>			
	<u>HINGES, BOLTS, ETC</u>			
	<u>Approved</u>			
1	1.5 pairs 108mm brass butt hinges	Pairs	5.0	
	<u>LOCKS</u>			
	<u>"Union"</u>			
2	Union 2261-76SS 4 lever upright lock with and including Union AL684 - 05AS bishop lever furniture	No	1	
3	Facility indicator bolt, code 37651RH	No	4	
	<u>SUNDRIES</u>			
	<u>"Supreme Hygiene" or similar approved</u>			
4	TR3 - 3 Tier Toilet roll holder Lockable	No	4	
5	Liquid Soap Dispenser	No	2	
6	She Bin 12L	No	4	
	<u>Door Closer</u>			
7	Union 87001SS door stop	No	6	
	<u>SIGNAGE</u>			
	Carried Forward		R	
	BLOCK E-6G+2WHB Bill No. 7 IRONMONGERY Mavusandile Solutions (Pty)Ltd			

Brought Forward				R
8	<u>Door signs or numbers to be of an approved grey ultra high impact acrylic 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</u> Male sign WBH 2314 size150x150mm with rounded corners and polished edges - white ABS plastic with black engraved International cloakroom door signage. 4xflush screwed and epoxy glued at 1500mm high and centre to each toilet entrance door.	No	1	
	Carried Forward to Summary of Section No. 8 BLOCK E-6G+2WHB Bill No. 7 IRONMONGERY Mavusandile Solutions (Pty)Ltd			R

Item No	Quantity	Rate	Amount
<u>BILL NO 9</u>			
<u>METALWORK</u>			
<u>Preambles</u>			
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
<u>WORK GROUP 136</u>			
<u>HOT DIP GALVANISED STEEL WINDOWS</u>			
<u>The following units refer to the Architects diagrams, details and specifications bound into the back of these bills of quantities and must be adhered to in all respects and all prices are to include all glass, ironmongery,, fixing,sealing etc</u>			
1	Standard window size 533 x 654mm	No	4
2	Standard window size 899 x 457mm	No	2
<u>STANDARD PRESSED STEEL DOOR FRAMES</u>			
<u>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</u>			
3	Frame for door 813 x 2032mm high	No	2
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 8 METALWORK Mavusandile Solutions (Pty)Ltd			

Brought Forward		R	
<u>HOT DIP GALVANISED STEEL GATES</u>			
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
<u>MANHOLE COVERS</u>			
5	600 x 600mm Type 2A Heavy duty cast iron manhole cover and frame to SABS 558.	No	4
Carried Forward to Summary of Section No. 8			
BLOCK E-6G+2WHB			
Bill No. 8			
METALWORK			
Mavusandile Solutions (Pty)Ltd			

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Item No		Quantity	Rate	Amount
BILL NO 11				
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>				
<u>Preambles</u>				
TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
<u>WORK GROUP 146</u>				
<u>RAINWATER DISPOSAL</u>				
<u>Seamless Aluminium Gutters and Downpipes</u>				
1	125 x 75 x 0,6mm aluminium ogee gutter with baked enamel finish fixed with concealed brackets.	m	6	
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	5	
6	Extra for bend	No	2	
7	Extra for shoe	No	2	
8	Spreader for 75mm pipe	No	2	
<u>WORK GROUP 148</u>				
			R	
Carried Forward				
BLOCK E-6G+2WHB				
Bill No. 10				
PLUMBING AND DRAINAGE(PROVISIONAL)				
Mavusandile Solutions (Pty)Ltd				

Brought Forward			R
<u>SANITARY FITTINGS</u>			
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	4
10	382AP Christy wash hand basin including brackets,etc.	No	2
<u>TAPS, VALVES, ETC</u>			
<u>Brass</u>			
11	COBRA WATERTECH (Code. 232-10-15) fullway isolating ball valves with plastic coated plated steel lever handle	No	2
12	No.KM2 15mm pillar tap with blue inlay.	No	2
13	20mm Stopcock.	No	2
<u>SANITARY PLUMBING</u>			
<u>PVC pipes</u>			
14	50mm Waste pipe.	m	20
15	200mm diameter, 2.5mm HDPVC vent pipe attached to RoofWhirllys4Africa Toilet / Sewer Ventilator to Fit on 110mm Pipe A Energy Saving, Silent Operation, Anti Dust Tower Fan (Black).	m	11
<u>Extra for:</u>			
16	50mm Fittings	No	12
17	110mm Fittings	No	12
18	50mm Rubber S trap with side outlet.	No	2
19	Black Whirlybird with insect-proof netting inside, to fit on 110mm vent pipe.	No	4
Carried Forward			R
BLOCK E-6G+2WHB Bill No. 10 PLUMBING AND DRAINAGE(PROVISIONAL) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>WATER SUPPLY</u>			
<u>Polycop pipe</u>			
20	15mm pipe from tank to sink	m	30
21	22mm Polycop pipe to walls,etc	m	30
<u>Extra over Class 2 copper pipes for brass compression fittings</u>			
22	15mm Fittings	No	18
23	22mm Fittings	No	15
<u>Soakaway (Provisional)</u>			
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
<u>The following in JoJo 5500 litre capacity tanks (Stromy sky ME 5513 in colour)</u>			
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
<u>TESTING</u>			
26	Testing water pipe system	Item	
Carried Forward to Summary of Section No. 8			R
BLOCK E-6G+2WHB			
Bill No. 10			
PLUMBING AND DRAINAGE(PROVISIONAL)			
Mavusandile Solutions (Pty)Ltd			

Item No		Quantity	Rate	Amount
	<u>BILL NO 12</u>			
	<u>GLAZING</u>			
	<u>Preambles</u>			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>WORK GROUP 150</u>			
	<u>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.</u>			
1	6.38mm Arctic Snow safety laminated glass	m2	2	
	<u>MIRRORS</u>			
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	2	
	Carried Forward to Summary of Section No. 8			
	BLOCK E-6G+2WHB			
	Bill No. 11			
	GLAZING			
	Mavusandile Solutions (Pty)Ltd			
			R	

Item No		Quantity	Rate	Amount
	BILL NO 13			
	<u>PAINTWORK</u>			
	Preambles			
	TheTenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<u>WORK GROUP 152</u>			
	<u>PAINTWORK, ETC TO NEW WORK ON</u>			
	<u>FIBRE-CEMENT SURFACES WITH</u>			
	<u>Two coats pure acrylic paint on</u>			
1	Fascias and barge boards	m2	5	
	<u>METAL SURFACES WITH</u>			
	<u>Clean with galvanised iron cleaner,apply one coat galvanised iron primer,one coat undercoat and two coats enamel</u>			
2	Door frame	m2	3	
3	Security gates	m2	4	
	<u>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</u>			
	<u>WOOD SURFACES WITH</u>			
	<u>Two coats oil wood primer on</u>			
4	Backs of frames, linings, etc not exceeding 300mm wide	m	20	
	Carried Forward		R	
	BLOCK E-6G+2WHB Bill No. 12 PAINTWORK Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>One coat Dulux Supergrip primer wood primer,one coat Dulux Trade Universal Undercoat,two coats Dulux Pearl glo Waterbased Enamel paint on</u>			
5	Door frames	m2	2
6	Doors	m2	20
<u>Prepare and apply two coats carbolineum on:</u>			
7	Roof timbers.	m2	27
Carried Forward to Summary of Section No. 8			R
BLOCK E-6G+2WHB			
Bill No. 12			
PAINTWORK			
Mavusandile Solutions (Pty)Ltd			

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Brought Forward			R
<u>General</u>			
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.			
<u>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</u>			
3	Building platforms, walkways and open areas	m3	98
<u>Extra over bulk excavation in pickable material for basements, reduced levels, etc. for :</u>			
4	Excavating in soft rock.	m3	8
5	Ditto, in hard rock.	m3	4
<u>Imported Filling</u>			
6	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	65
7	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	98
<u>Sundries</u>			
8	Allow for keeping bulk excavations free from water or mud.		Item
<u>In-situ soils tests</u>			
9	"Modified AASHTO Density" test	No	1
10	"Natural California Bearing Ratio" test	No	1
Carried Forward			R
External Works Bill No. 1 Site Works(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
11	"Field Density" test including "Optimum Moisture Content" (four readings per test)	No	1
12	"Indicator" test (Grading and Atterberg Indicators)	No	1
<u>Prescribed density tests on filling</u>			
13	"Modified AASHTO Density" test	No	8
14	"Natural California Bearing Ratio" test	No	2
<u>CONCRETE WALKWAYS</u>			
<u>Earthworks</u>			
15	Excavate in earth to reduce levels not exceeding 2 m deep.	m3	70
16	Extra over all excavations for carting surplus excavated material from the site.	m3	70
17	Scarify ground to a depth of 150 mm and re-compact to 90% Mod. AASHTO density.	m2	242
18	Approved G7 natural crushed stone as base course 150 mm thick compacted to 98% Modified AASHTO density under pavings	m3	49
<u>WORK GROUP 116(MASONRY)</u>			
19	80mm Thick 25MPa/19 precast concrete interlocking grey block paving in accordance with SANS 1058, laid to falls on and including 40mm thick sand layer with joints filled in with sand, compacted with a vibration compactor to parking areas and sidewalks laid to falls	m2	243
20	Precast concrete kerb (SANS 927 Fig. 7), size 180mm wide x 280 mm high extreme in 1m lengths installed on a 80 x 300mm wide unreinforced concrete base at edges of roadbed and 125 x 100 x 400 mm unreinforced concrete haunching at back of each joint and including necessary excavations formwork, filling in and ramming	m	324
Carried Forward			R
External Works Bill No. 1 Site Works(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>CONCRETE APRONS</u>			
<u>WORK GROUP 104 (EARTHWORKS)</u>			
<u>Earthworks</u>			
21	Excavate in earth to reduce levels not exceeding 2 m deep.	m3	21
22	Extra over all excavations for carting surplus excavated material from the site.	m3	21
23	Scarify ground to a depth of 150 mm and re-compact to 90% Mod. AASHTO density.	m2	78
24	Approved G5 natural crushed stone as base course 150 mm thick compacted to 98% Modified AASHTO density under pavings	m3	12
25	Termite and ant proofing of ground surfaces under pavings, etc.	m2	78
<u>WORK GROUP 110 (CONCRETE)</u>			
<u>Concrete</u>			
26	Cement concrete 25 MPa/20mm stone in surface bed	m3	8
<u>WORK GROUP 111 (FORMWORK)</u>			
<u>Formwork</u>			
27	Formwork to edges, risers, ends and reveals not exceeding 300mm high or wide	m	156
28	Extra for floating off smooth tops of aprons to falls with a wood float.	m2	78
<u>10mm Thick Jointex or other approved compressible joint filler</u>			
29	10mm Joints not exceeding 300mm high	m	156
<u>WORK GROUP 114 (REINFORCEMENT)</u>			
Carried Forward			R
External Works Bill No. 1 Site Works(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Reinforcement</u>			
30	Reference 193 welded mesh reinforcement lapped 300mm at edge of adjoining sheets and bound with annealed wire and laying in concrete surface beds (Measured nett - no allowance made for laps)	m2	78
<u>WORK GROUP 120(WATERPROOFING)</u>			
<u>Waterproofing</u>			
<u>Approved polysulphide sealing compound including backing cord, bond breaker, primer etc.:</u>			
31	10mm Wide x 10mm deep in vertical expansion joints between concrete and concrete or brick surfaces, including raking out expansion joint filler as necessary	m	156
<u>OPEN STORMWATER CHANNELS</u>			
<u>WORK GROUP 104 (EARTHWORKS)</u>			
<u>Earthworks</u>			
32	Excavate for channel not exceeding 1m deep	m3	35
33	Extra over all excavations for carting away from the site surplus excavated material	m3	24
34	Scarify ground to a depth of 150 mm and re-compact to 90% Modified AASHTO density.	m2	115
35	Approved G5 natural crushed stone as base course 150 mm thick compacted to 95% Modified AASHTO density under pavings	m3	12
<u>WORK GROUP 110 (CONCRETE)</u>			
<u>Concrete</u>			
36	Cement concrete 25 MPa/20mm stone in stormwater channel	m3	4
<u>WORK GROUP 111 (FORMWORK)</u>			
Carried Forward			R
External Works Bill No. 1 Site Works(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
<u>Formwork</u>			
37	Semi smooth formwork to sides, edges and risers of stormwater channel not exceeding 300mm high or wide	m	215
38	Extra for floating off smooth tops of stormwater dished drains to falls with a wood float	m2	115
<u>10mm Thick Jointex or other approved compressible joint filler</u>			
39	10mm Joints not exceeding 300mm high	m	115
<u>WORK GROUP 114 (REINFORCEMENT)</u>			
<u>Reinforcement</u>			
40	Reference 193 welded mesh reinforcement lapped 300mm at edge of adjoining sheets and bound with annealed wire and laying in concrete stormwater channels (Measured nett - no allowance made for laps)	m2	115
<u>WORK GROUP 120(WATERPROOFING)</u>			
<u>Waterproofing</u>			
41	10mm Wide x 10mm deep in vertical expansion joints between concrete and concrete or brick surfaces, including raking out expansion joint filler as necessary	m	165
<u>OVERFLOW CHANNEL</u>			
<u>WORK GROUP 104 (EARTHWORKS)</u>			
<u>Earthworks</u>			
42	Excavate to reduce levels in pickable material not exceeding 2m deep for overflow channel	m3	8
43	Scarify ground to a depth of 150 mm and re-compact to 90% Modified AASHTO density.	m2	18
44	Extra over all excavations for carting away from the site surplus excavated material	m3	5
Carried Forward			R
External Works Bill No. 1 Site Works(Provisional) Mavusandile Solutions (Pty)Ltd			

Brought Forward			R
45	Approved G5 natural crushed stone consolidated in 150 mm thick layers and compacted to 95% Modified AASHTO density in stormwater channel overflow berm	m3	3
<u>WORK GROUP 146 (DRAINAGE)</u>			
<u>Reno Mattresses of 2,7mm diameter PVC coated galvanised wire boxes laced together and filled with broken stone</u>			
46	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	5
<u>WORK GROUP 110 (CONCRETE)</u>			
<u>Concrete</u>			
47	Cement concrete 25 MPa/19mm stone in reno mattress kicker beam or holding down strip	m3	2
Carried to Final Summary			R
External Works			
Bill No. 1			
Site Works(Provisional)			
Mavusandile Solutions (Pty)Ltd			

Item No	Quantity	Rate	Amount
<u>SECTION NO.10</u>			
<u>BILL NO 1</u>			
<u>PROVISIONAL SUMS ETC</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Work executed by direct contractors</u>			
Work listed under the heading "DIRECT CONTRACTORS WORK" will commence during the execution of this contract and the contractor shall allow free access to the site for these direct contractors. The contractor shall prepare a programme in conjunction with 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 listed to enable the contractor to determine profit and attendances, if required			
<u>General</u>			
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 site of all articles concerned			
<u>Preliminaries</u>			
The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"			
Carried Forward			R
Provisional Sums Bill No. 1 Provisional Sums Mavusandile Solutions (Pty)Ltd			

Brought Forward

R

ELECTRICAL INSTALLATION & LIGHTNING PROTECTION.

- 1 Allow a provisional sum of R 248 500.00 (**Two Hundred and Forty Eight Thousand and Five Hundred Rand**) for the complete design, supply, delivery, installation, testing, commissioning and certification of the electrical installation serving the school sanitation/ablution facilities, including all labour, materials, plant, tools, equipment, accessories, fixings, supports, consumables and incidental works necessary to provide a complete, safe, functional and compliant electrical installation.

The works shall include all electrical services associated with the ablution buildings, including internal lighting, external lighting where applicable, general-purpose power outlets, dedicated supplies to ablution equipment, ventilation/extract systems where specified, distribution equipment, wiring, containment, earthing, protection, testing and commissioning.

Item

248 500.00

- 2 Allow for profit and Attendance on the above item.

%

Carried to Final Summary

R

Provisional Sums

Bill No. 1

Provisional Sums

Mavusandile Solutions (Pty)Ltd

Item No		Quantity	Rate	Amount
	<u>SECTION NO.11</u>			
	<u>BILL NO 1</u>			
	<u>OCCUPATIONAL HEALTH & SAFETY</u>			
	<u>OHS COMPLIANCE & PERSONNEL</u>			
1	Project-specific OHS plan, safety file and risk assessments.		SUM	
2	Construction Health & Safety Officer.	No 6		
3	Pre-employment medical fitness examinations.	Nr 30		
	<u>PPE, HYGIENE & BIOLOGICAL EXPOSURE</u>			
4	Basic PPE set: hard hat, boots, reflective vest and overalls.	Sets 30.0		
5	Disposable coveralls, heavy-duty gloves and FFP2 respirators.		SUM	
6	Handwashing, disinfection and drinking-water station.		SUM	
	<u>PIT-LATRINE SPECIFIC CONTROLS</u>			
7	Barricading, covers and danger signage around pits.		SUM	
8	Portable gas detector hire and atmospheric testing.	No 2		
9	Safe desludging, transport and authorised disposal with manifests.	Item		35 000.00
10	Disinfection and decontamination of work area and equipment.		SUM	
	<u>EMERGENCY PREPAREDNESS & TRAINING</u>			
11	First-aid kit and fire extinguishers.		SUM	
	Carried Forward		R	
	Occupational Health & Safety Bill No. 1 Occupational Health & Safety Mavusandile Solutions (Pty)Ltd			

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