



	<p style="text-align: center;"><b>Brought Forward</b></p> <p>Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence</p> <p><b><u>PREAMBLES FOR TRADES</u></b></p> <p>1 The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</p> <p>Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles</p> <p style="text-align: right;">m</p> <p><b><u>GENERAL</u></b></p> <p>If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value</p> <p><b><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></b></p> <p><b><u>Definitions (A1)</u></b></p> <p>Definitions and interpretation (clause 1)</p> <p style="text-align: center;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>		R	
			R	

<b>Brought Forward</b>		R
F:..... V:..... T:.....	Item	
<b><u>Objective and Preparation (A2 to A14)</u></b>		
Offer acceptance and performance (clause 2)		
F:..... V:..... T:.....	Item	
Documents (clause 3)		
F:..... V:..... T:.....	Item	
Design responsibility (clause 4)		
F:..... V:..... T:.....	Item	
Employer's agents (clause 5)		
F:..... V:..... T:.....	Item	
The principal agent shall:		
- monitor and control progress and scheduling		
- monitor all contract conditions, and		
- coordinate the efforts of the employer's agents, the contractor and subcontractors		
 The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part		
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		

<b>Brought Forward</b>			R
The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process			
Site representative (clause 6)			
F:..... V:..... T:.....	Item		
Compliance with regulations (clause 7)			
F:..... V:..... T:.....	Item		
Works risk (clause 8)			
F:..... V:..... T:.....	Item		
Indemnities (clause 9)			
F:..... V:..... T:.....	Item		
Works insurances (clause 10)			
F:..... V:..... T:.....	Item		
Liability insurances (clause 11)			
F:..... V:..... T:.....	Item		
Effecting insurance (clause 12)			
F:..... V:..... T:.....	Item		
NO CLAUSE (Clause 13)			
Security (clause 14)			
<b>Carried Forward</b>			R
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
F:..... V:..... T:.....	Item		
<b><u>Execution (A15-A23)</u></b>			
Preparation for and execution of the works (clause 15)			
F:..... V:..... T:.....	Item		
Access to the works (clause 16)			
F:..... V:..... T:.....	Item		
Contract instructions (clause 17)			
F:..... V:..... T:.....	Item		
Setting out of the works (clause 18)			
F:..... V:..... T:.....	Item		
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			
Assignment (clause 19)			
F:..... V:..... T:.....	Item		
The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer			
Nominated subcontractors (clause 20)			
F:..... V:..... T:.....	Item		
Selected subcontractors (clause 21)			
F:..... V:..... T:.....	Item		
<b>Carried Forward</b>			R
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

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<b>Brought Forward</b>		
Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted		
All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors		
Employer's Direct Contractors (clause 22)		
F:..... V:..... T:.....	Item	
Contractor's Domestic Sub-Contractors (Clause 23)		
F:..... V:..... T:.....	Item	
<b><u>Completion (A24-A30)</u></b>		
Practical completion (clause 24)		
F:..... V:..... T:.....	Item	
Works completion (clause 25)		
F:..... V:..... T:.....	Item	
Final completion (clause 26)		
F:..... V:..... T:.....	Item	
Latent defects liability period (clause 27)		
F:..... V:..... T:.....	Item	
Sectional completion (clause 28)		
F:..... V:..... T:.....	Item	
Revision of date of practical completion (clause 29)		
F:..... V:..... T:.....	Item	
<b>Carried Forward</b>		
P's and G's		R
<b>R MAHANGE &amp; ASSOCIATES</b>		



<b>Brought Forward</b>			R
The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion			
The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account			
Payment to other parties (clause 35)			
F:..... V:..... T:.....	Item		
<b><u>Cancellation (A36-A39)</u></b>			
Cancellation by employer - contractor's default (clause 36)			
F:..... V:..... T:.....	Item		
Cancellation by employer - loss and damage (clause 37)			
F:..... V:..... T:.....	Item		
Cancellation by contractor - employer's default (clause 38)			
F:..... V:..... T:.....	Item		
Cancellation - cessation of the works (clause 39)			
F:..... V:..... T:.....	Item		
<b>Carried Forward</b>			R
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>Dispute (A40)</u></b>			
Dispute Settlement (clause 40)			
F:..... V:..... T:.....	Item		
<b><u>Substitute Provisions (A41)</u></b>			
State clauses (Clause 41)			
F:..... V:..... T:.....	Item		
Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
<b><u>THE SCHEDULE</u></b>			
Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
Pre-tender information (clause 42)			
F:..... V:..... T:.....	Item		
<b><u>42.1 CONTRACTING AND OTHER PARTIES</u></b>			
42.1.1 Employer: THE MVULA TRUST			
42.1.2 Principal Agent: R Mahange and Associates			
<b>Carried Forward</b>			R
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>		R
<b><u>42.2 CONTRACT DETAILS</u></b>		
42.2.1 Works Description: Construction of sanitation facilities		
42.2.2 Site Description: as per the information on the tender data		
42.2.3 Work or installations by direct contractors: N/A		
42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only Yes		
42.2.5 Date on which possession of the site is intended to be given:  As per the information provided in the Tender Data		
42.2.6 Period for the commencement of the works after the contractor takes possession of site: 7 DAYS		
42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day Intended Date of Practical Completion: As per the information provided in the Tender Data		
Penalty Amount: The penalty per calendar day shall be 7.5 cents per R100 of the Tendered Amount (inclusive of value added tax)		
42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day  N/A		
42.2.9 The law applicable to this agreement shall be that of		
<b>Carried Forward</b>		
P's and G's		R
<b>R MAHANGE &amp; ASSOCIATES</b>		

<p><b>Brought Forward</b></p> <p><i>South Africa (country)</i></p> <p><b><u>42.3 INSURANCES</u></b></p> <p>42.3.1 Contract works insurance to be effected by:</p> <p style="text-align: right;"><i>Contractor: For the Sum of R Contract Amount + 10.00 % With a deductible of - to be determined by the contractor</i></p> <p>42.3.2 Supplementary insurance is required</p> <p style="text-align: right;"><i>No</i></p> <p>42.3.3 Public liability insurance to be effected by:</p> <p style="text-align: right;"><i>Contractor: For the Sum of R 5 000 000-00 With a deductible of - to be determined by the contractor</i></p> <p><b><u>42.4 DOCUMENTS</u></b></p> <p>42.4.1 Waivers of <b>contractors lien</b> or right of continuing possession is required</p> <p style="text-align: right;"><i>Yes</i></p> <p>42.4.2 Number of construction document copies to be supplied to the <b>contractor</b> free of charge:</p> <p style="text-align: right;"><i>3 Number of</i></p> <p>42.4.3 <b>Bills of Quantities/Lump sum document</b> schedule of rates drawn up in accordance with:</p> <p><i>"Standard System of Measuring Builders' Work"</i></p> <p>42.4.4 On acceptance of the tender the bills of quantities/lump sum document is to be submitted within</p> <p style="text-align: right;"><b>5 working days</b></p> <p style="text-align: center;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>	<p>R</p>	
	<p>R</p>	

<p style="text-align: right;"><b>Brought Forward</b></p> <p><i>The priced bills of quantities must be handed in with the tender</i></p> <p>42.4.5 JBCC Engineering General Conditions are to be included in the <b>contract documents</b>:</p> <p style="text-align: right;"><i>No</i></p> <p>42.4.6 The contract value is to be adjusted using escalation adjustment indices</p> <p style="text-align: right;"><i>No</i></p> <p style="text-align: center;">Where <b>JBCC CPAP</b> is to be used</p> <p style="text-align: right;">Base Month <b>N/A</b></p> <p>42.4.7 Details of changes made to the provision of JBCC standard documentation:</p> <p style="text-align: center;">Part 1 - Contract Data completed by Employer</p> <p><b><u>SECTION B: PRELIMINARIES</u></b></p> <p><b><u>Definitions and interpretation (B1)</u></b></p> <p>Definition and interpretation (B1.1 - B1.4.6)</p> <p>F:..... V:..... T:.....</p> <p><b><u>Documents (B2)</u></b></p> <p>Checking of documents (B2.1)</p> <p>F:..... V:..... T:.....</p> <p>Provisional bills of quantities (B2.2)</p> <p>F:..... V:..... T:.....</p> <p>Availability of construction documentation (B2.3)</p>	R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>	R	

<b>Brought Forward</b>			R
F:..... V:..... T:..... Interests of agents (B2.4)	Item		
F:..... V:..... T:..... Priced documents (B2.5)	Item		
F:..... V:..... T:..... Tender submission (B2.6)	Item		
F:..... V:..... T:..... Defined works area (B3.1)	Item		
F:..... V:..... T:..... <b><u>The site (B3)</u></b>	Item		
Geotechnical investigation (B3.2)			
F:..... V:..... T:..... Inspection of the site (B3.3)	Item		
F:..... V:..... T:..... Existing premises occupied (B3.4)	Item		
F:..... V:..... T:..... Specific requirements:  The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.	Item		
Previous work - dimensional accuracy (B3.5)			
F:..... V:..... T:.....	Item		
<b>Carried Forward</b>			R
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>		R	
Previous work - defects (B3.6)			
F:..... V:..... T:.....	Item		
Services - known (B3.7)			
F:..... V:..... T:.....	Item		
Services - unknown (B3.8)			
F:..... V:..... T:.....	Item		
Protection of trees etc. (B3.9)			
F:..... V:..... T:.....	Item		
Articles of value (B3.10)			
F:..... V:..... T:.....	Item		
Inspection of adjoining properties etc. (B3.11)			
F:..... V:..... T:.....	Item		
<b><u>Management of contract (B4)</u></b>			
Management of the works (B4.1)			
F:..... V:..... T:.....	Item		
Programme for the works (B4.2)			
F:..... V:..... T:.....	Item		
Progress meetings (B4.3)			
F:..... V:..... T:.....	Item		
Technical meetings (B4.4)			
F:..... V:..... T:.....	Item		
<b>Carried Forward</b>		R	
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>		R
Labour and Plant records (B4.5)		
F:..... V:..... T:.....	Item	
<b><u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u></b>		
Samples of materials (B5.1)		
F:..... V:..... T:.....	Item	
Workmanship samples (B5.2)		
F:..... V:..... T:.....	Item	
Shop drawings (B5.3)		
F:..... V:..... T:.....	Item	
Compliance with Manufacturer's Instructions (B5.4)		
F:..... V:..... T:.....	Item	
<b><u>Temporary works and plant (B6)</u></b>		
Deposits and fees (B6.1)		
F:..... V:..... T:.....	Item	
Enclosure of the works (B6.2)		
F:..... V:..... T:.....	Item	
Advertising (B6.3)		
F:..... V:..... T:.....	Item	
Plant, equipment, sheds and offices (B6.4)		
F:..... V:..... T:.....	Item	
Main notice board (B6.5)		
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		

			R
<b>Brought Forward</b>			
F:..... V:..... T:.....	Item		
Subcontractors' notice board (B6.6)			
F:..... V:..... T:.....	Item		
<b><u>Temporary services (B7)</u></b>			
Location (B7.1)			
F:..... V:..... T:.....	Item		
Water (B7.2)			
<b>Option [A] shall apply</b>			
F:..... V:..... T:.....	Item		
Electricity (B7.3)			
<b>Option [A] shall apply</b>			
F:..... V:..... T:.....	Item		
Telecommunication facilities (B7.4)			
F:..... V:..... T:.....	Item		
Ablution facilities (B7.5)			
<b>Option [A] shall apply</b>			
F:..... V:..... T:.....	Item		
<b><u>Prime cost amounts (B8)</u></b>			
Responsibility for prime cost amounts (B8.1)			
F:..... V:..... T:.....	Item		
<b>Carried Forward</b>			
P's and G's			R
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>		R
<b><u>Attendance on N/S Subcontractors (B9)</u></b>		
General attendance (B9.1)		
F:..... V:..... T:.....	Item	
Special attendance (B9.2)		
F:..... V:..... T:.....	Item	
Commissioning - Fuel, water and power (B9.3)		
F:..... V:..... T:.....	Item	
<b><u>Financial aspects (B10)</u></b>		
Statutory taxes, duties and levies (B10.1)		
F:..... V:..... T:.....	Item	
Payment of preliminaries (B10.2)		
<b>Option [B] shall apply</b>		
F:..... V:..... T:.....	Item	
Adjustment of preliminaries (B10.3)		
<b>Option [A] shall apply</b>		
F:..... V:..... T:.....	Item	
Payment certificate cash flow (B10.4)		
F:..... V:..... T:.....	Item	
<b><u>General (B11)</u></b>		
Protection of works (B11.1)		
F:..... V:..... T:.....	Item	
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		



<b>Brought Forward</b>		R	
Tenant Installations (B11.12)			
F:..... V:..... T:.....	Item		
<b><u>Schedule of variables (B12)</u></b>			
Pre-tender information (B12.1)			
F:..... V:..... T:.....	Item		
12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional:			
No			
12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete			
No			
12.1.3 Interest of agents (B2.4)			
12.1.4 Defined works area (B3.1)			
12.1.5 Geotechnical investigation (B3.2)			
N/A			
12.1.6 Existing premises occupied (B3.4)			
12.1.7 Previous work - dimensional accuracy (B3.4)			
12.1.8 Previous work - defects (B3.5)			
12.1.9 Services - known (B3.7)			
12.1.10 Protection of trees (B3.9)			
All trees should be protected and only on instruction of the Principal Agent may any trees be removed			
<b>Carried Forward</b>			
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			
		R	

<b>Brought Forward</b>		R
12.1.11 Inspection of adjoining properties (B3.11)		
12.1.12 Enclosure of the works (B6.2)		
12.1.13 Offices (B6.4.3)		
Specific requirements:		
The contractor shall provide, maintain and remove, on completion of the works, an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.		
12.1.14 Main notice board (B6.5)	YES	
12.1.15 Subcontractors notice board (B6.6) A notice board is required	Yes	
12.1.16 Water (B7.2) Alternative Selected: A		
12.1.17 Electricity (B7.3) Alternative selected: A		
12.1.18 Telecommunications (B7.4)		
12.1.19 Ablution facilities (B7.5) Alternative selected: A		
12.1.20 Protection of existing/sectionally occupied works (B11.2)		
12.1.21 Special attendance (B9.2)		
Subcontractor (1) details: N/A		
12.1.22 Protection of the works (B11.1)		
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		

	<b>Brought Forward</b>		R	
N/A				
12.1.23 Disturbance (B11.5)				
N/A				
12.1.24 Environmental Disturbance (B11.6)				
N/A				
<b><u>Post tender information (B12.2)</u></b>				
12.2.1 Payment of preliminaries Alternative selected: B				
12.2.2 Adjustment of preliminaries Alternative selected: A				
12.2.3 Additional agreed preliminaries items N/A				
<b><u>SECTION C: SPECIFIC PRELIMINARIES</u></b>				
Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included				
<b>Site instructions</b>				
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		
Black economic empowerment and training				
F:..... V:..... T:.....		Item		
Proprietary branded products				
<b>Carried Forward</b>				
P's and G's			R	
<b>R MAHANGE &amp; ASSOCIATES</b>				

<b>Brought Forward</b>		R
F:..... V:..... T:.....	Item	
<b>Testing of flat roof waterproofing for water tightness</b>		
Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 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	
The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative		
<b>Contract instructions</b>		
F:..... V:..... T:.....	Item	
Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor		
<b>Labour record</b>		
F:..... V:..... T:.....	Item	
At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week		
<b>Plant record</b>		
F:..... V:..... T:.....	Item	
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		

<p style="text-align: center;"><b>Brought Forward</b></p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week</p> <p>Guarantees</p> <p>F:..... V:..... T:.....</p> <p>Where guarantees are called for, the contractor shall obtain a written guarantee, 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 certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, 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 from the principal agent to do so. This guarantee 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. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement</p> <p>Overtime</p> <p>F:..... V:..... T:.....</p> <p>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 principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> <p>Co-operation of contractor for cost management</p> <p>F:..... V:..... T:.....</p>	Item	R	
<b>Carried Forward</b>		R	
<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants 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 quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors</p> <p>Occupational Health and Safety Specification</p> <p>F:..... V:..... T:.....</p> <p>The contractor shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)</p> <p>It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document.</p> <p>The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.</p>	<p>R</p>	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>	<p>R</p>	

<b>Brought Forward</b>			R	
<p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause, as well as the clauses that follow hereafter and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under these clauses and no additional claims in this regard shall be entertained.</p> <p>The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines. It is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under this clause and the specific related clauses hereafter and no additional claims in this regard shall be entertained.</p> <p>Occupational Health and Safety Specification</p> <p>F:..... V:..... T:.....</p> <p>Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines</p> <p>Occupational Health and Safety Specification</p> <p>F:..... V:..... T:.....</p> <p>Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc</p> <p>Occupational Health and Safety Specification</p> <p>F:..... V:..... T:.....</p> <p>Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc.</p> <p>Provision of personal protective equipment (PPE)</p>	Item			
<b>Carried Forward</b>			R	
<p>P's and G's</p> <p><b>R MAHANGE &amp; ASSOCIATES</b></p>				

<b>Brought Forward</b>		R
F:..... V:..... T:.....	Item	
Provision of reflective vests		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of hard hats		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of protective footwear		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of earplugs		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of dust masks		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of gloves		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of high visibility overalls to SARTSM Chapter 13 Level 3		
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		

		R
<b>Brought Forward</b>		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
Provision of SANS approved ear defenders		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
Provision of face masks (Covid -19)		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
Provision of face shields (Covid-19)		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
Provision of gloves (Covid-19)		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
Provision of hand sanitiser (min 70% alcohol), foot press stands and paper towels (Covid-19)		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19)		
Provision of personal protective equipment (PPE) F:..... V:..... T:.....	Item	
<b>Carried Forward</b>		
P's and G's		R
<b>R MAHANGE &amp; ASSOCIATES</b>		

<b>Brought Forward</b>			R
Provision of digital infra red non-contact body thermometer (Covid-19, minimum of two per site entrance)			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of perspex screens for office staff (Covid-19, minimum size 600 x 500mm)			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of signage, including Covid-19 related signage			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Provision of full time construction health and safety officer (SACPCMP Registered)			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
Medical screenings, examinations, etc. in terms of Covid_19 regulations			
Provision of personal protective equipment (PPE)			
F:..... V:..... T:.....	Item		
<b>Carried Forward</b>			R
P's and G's			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>		R
Induction training, including Covid-19 training		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Provision of first aid boxes to GSR requirements		
Provision of personal protective equipment (PPE)		
F:..... V:..... T:.....	Item	
Noise monitoring including establishment of noise zones (plant), audio grams (personnel), etc.		
F:..... V:..... T:.....	Item	
Submission of health and safety file		
HIV/AIDS Awareness		
F:..... V:..... T:.....	Item	
It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C11.1 to C11.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained.		
<b>Carried Forward</b>		R
P's and G's		
<b>R MAHANGE &amp; ASSOCIATES</b>		

**Brought Forward**

R

The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.

**SUMMARY OF CATEGORIES**

Category : Fixed R.....

Category : Value R.....

Category : Time  
R.....

**Carried Forward**

R

P's and G's

**R MAHANGE & ASSOCIATES**



Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>Nature of ground</b>			
Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
<b>Nature of ground</b>			
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			
<b>Carting away of excavated material</b>			
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			
<b>Filling</b>			
<b>Carried Forward</b>		R	
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	86
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	86
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	29
4	Thickening under aprons	m3	3
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
5	Soft rock	m3	4
6	Hard rock	m3	2
Carried Forward			R
<p>F10 WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Brought Forward			R
<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	19
<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	92
<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	11
11	Backfilling to trenches, holes, etc	m3	16
<b>Compaction of surfaces</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	75
<b>Under floors, steps, paving, etc.</b>			
<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	5
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	120
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	41
<b>Soil insecticide</b>			
16	To bottoms and sides of trenches etc	m2	120
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	41
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	2
<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	7
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	5
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	37
<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
<b>CONCRETE SUNDRIES</b>			
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	74
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	34
<b>REINFORCEMENT (PROVISIONAL)</b>			
<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	2.00
26	10mm Diameter bars	t	2.00
<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	40
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
28	One brick walls	m2	25
29	Half brick walls	m2	11
<b>FACE BRICKWORK</b>			
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
30	Extra over brickwork for face brickwork	m2	22
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	6
32	Half brick walls	m2	44
33	One brick walls	m2	86
<b>FACE BRICKWORK</b>			
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	75
<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	13
36	110mm Wide sill set level and slightly projecting	m	11
37	220mm Wide sill set sloping and slightly protecting outside	m	11
38	Fair cutting fitting around pipe not exceeding 100mm	No	11
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	11
<b>BRICKWORK SUNDRIES</b>			
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	66
41	150mm Wide reinforcement built in horizontally	m	381
<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	18
<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	8
44	230mm Wide turning pieces	m	8
<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	12
<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	16
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 4</u></b>			
<b><u>WATERPROOFING</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>DAMP-PROOFING OF WALLS AND FLOORS</b>			
<b>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</b>			
47	In walls	m2	9
<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>			
48	Under surface beds	m2	43
<b>FLOOR AND WALL SEALERS</b>			
<b>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</b>			
49	Around steel windows and door frames	m	99
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>ROOF COVERINGS ETC</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
50	Roof covering with pitch not exceeding 25 degrees	m2	51
<b>ROOF AND WALL INSULATION</b>			
51	12" Thermal resistance insulation laid on purlins	m2	51
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>ROOFS, ETC.</b>			
<b>Sawn softwood grade 6</b>			
52	76 x 38mm Wall plates	m	20
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	53
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	77
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	77
<b>Sundries</b>			
56	Two coats creosote on sawn timbers	m2	27
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18
58	Hurricane clips	No	44
<b>EAVES, VERGES, ETC</b>			
<b>Pressed fibre-cement:</b>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	36
<b>DOORS, ETC</b>			
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b>Wrought meranti doors hung to steel frames</b>			
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	4
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	10
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward		R
<b><u>SECTION NO. 2</u></b>		
<b><u>BILL NO. 7</u></b>		
<b><u>IRONMONGERY</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>HINGES, BOLTS, ETC</b>		
100mm Chrome plated "D" type handle 3 by solid brace hinges		
<b>CATCHES,CABIN HOOKS, ETC</b>		
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2
<b>LOCKS</b>		
<b>Approved</b>		
63	Three lever mortice lock set	No 2
64	Indicator lock set	No 10
65	Security double throw dead lock (no latch)	No 2
<b>HANDLES, ETC.</b>		
<b>Aluminium Pull Handle</b>		
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets 2.0
<b>SUNDRIES</b>		
Carried Forward		R
F10 WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>ASSA ABLOY</b>			
67	38mm Diameter rubber door stop plugged	No	2
<b>Vaal Paragon</b>			
68	32mm Type 9 back grab rail 800mm long plugged	No	1
69	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
70	DSS-130 Engraved "Male" information sign, plugged	No	
71	DSS-131 Engraved "Female" information sign, plugged	No	1
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	12
<b>stainless Steel</b>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2
Carried Forward			R
<b>F10 WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>WELDED SCREENS, GATES, ETC</b>			
<b>Gates to external doors</b>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2
<b>PRESSED STEEL DOOR FRAMES</b>			
<b>1,2mm Double rebated frames suitable for half brick walls</b>			
78	Frame for door size 813 x 2032mm high	No	2
<b>1,2mm Double rebated frames suitable for one brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	2
<b>STEEL WINDOWS, DOORS, ETC</b>			
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
80	Window type NE1, size 533 x 654mm high	No	10
81	Window type NE7, size 1022 x 654mm high	No	5
<b>Sundries</b>			
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



		Brought Forward		R
<b><u>SECTION NO. 2</u></b>				
<b><u>BILL NO. 9</u></b>				
<b><u>PLASTERING</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
<b>GRANOLITHIC</b>				
<b>Untinted granolithic on concrete</b>				
83	20mm Thick on floors	m2	40	
<b>INTERNAL PLASTER</b>				
<b>Cement plaster on brickwork or blockwork</b>				
84	On internal plastered walls	m2	75	
		Carried Forward		R
F10 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 2</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	11
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	6
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	6
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	10
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<b>Rainwater tank, etc.</b>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<b>Extra over uPVC pipes for fittings</b>			
97	110mm Bend	No	12
98	110mm Junction	No	12
<b>uPVC gulleys</b>			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
<b>WASTE UNIONS ETC</b>			
<b>Carried Forward</b>			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>"Cobra Watertech"</b>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	6
<b>TRAPS ETC</b>			
<b>"Cobra Watertech"</b>			
101	Cobra Ref. 365/40" CP bottle trap	No	1
<b>Marley</b>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
<b>TAPS, VALVES, ETC</b>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	10
104	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	2
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
105	50mm Pipes	m	30
<b>Extra over uPVC pipes for fittings</b>			
106	50mm Bend	No	6
107	50mm Access bend	No	6
108	50mm Junction	No	6
<b>WATER SUPPLIES</b>			
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Class 0 copper pipes</b>				
109	15mm Pipes	m	30	
110	22mm Pipes	m	30	
<b>Extra over class 0 copper pipes for capillary fittings</b>				
111	15mm Fittings	No	24	
112	22mm Pipes	No	24	
<b>SUNDRIES</b>				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	24	
114	Ditto, but in hard rock	m3	5	
115	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	15	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	20	
<b>TESTING</b>				
117	Allow for testing all drains, sanitary plumbing, water supplies and installion to the satisfaction of the Principle Agent.		Item	
Carried Forward				R
F10 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				



Brought Forward

R

**SECTION NO. 2**

**BILL NO. 12**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint

119 On fascias and barge boards

m2

7

Carried Forward

R

F10 WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward			R
<b>ON METAL</b>			
<b>Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.</b>			
120	On door frames	m2	26
<b>Spot priming defects in pre-prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP. golden brown gloss enamel paint on steel</b>			
121	On windows with burglar bars	m2	8
<b>1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)</b>			
122	On gates (Measured over the full flat area of both sides)	m2	7
<b>ON WOOD</b>			
<b>Under coat and minimum 2 coats gloss enamel, colour TBC</b>			
123	On doors (External)	m2	7
124	On doors (Internal)	m2	44
Carried Forward			R
F10 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward

R

Carried to Summary

R

F10 WATERBORNE

**R MAHANGE & ASSOCIATES**

Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>Nature of ground</b>			
Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
<b>Nature of ground</b>			
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			
<b>Carting away of excavated material</b>			
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			
<b>Filling</b>			
<b>Carried Forward</b>		R	
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	98
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	98
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	36
4	Thickening under aprons	m3	3
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
5	Soft rock	m3	4
6	Hard rock	m3	2
Carried Forward			R
<p>F12 WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

<b>Brought Forward</b>			R
<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	22
<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	108
<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	11
11	Backfilling to trenches, holes, etc	m3	21
<b>Compaction of surfaces</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	87
<b>Under floors, steps, paving, etc.</b>			
<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	5
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	141
<b>Carried Forward</b>			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>				R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	49	
	<b>Soil insecticide</b>			
16	To bottoms and sides of trenches etc	m2	141	
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	49	
<b>Carried Forward</b>				R
F12 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	2
<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	8
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	5
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	42
<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
<b>CONCRETE SUNDRIES</b>			
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	86
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	39
<b>REINFORCEMENT (PROVISIONAL)</b>			
<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	2.00
26	10mm Diameter bars	t	2.00
<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	40
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
28	One brick walls	m2	28
29	Half brick walls	m2	11
<b>FACE BRICKWORK</b>			
<b>Carried Forward</b>			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
30	Extra over brickwork for face brickwork	m2	26
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	7
32	Half brick walls	m2	44
33	One brick walls	m2	100
<b>FACE BRICKWORK</b>			
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	88
<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	13
36	110mm Wide sill set level and slightly projecting	m	12
37	220mm Wide sill set sloping and slightly protecting outside	m	12
38	Fair cutting fitting around pipe not exceeding 100mm	No	12
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	12
<b>BRICKWORK SUNDRIES</b>			
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	70
41	150mm Wide reinforcement built in horizontally	m	436
<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	18
<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	8
44	230mm Wide turning pieces	m	8
<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	12
<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	15
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>				R
<b><u>SECTION NO. 3</u></b>				
<b><u>BILL NO. 4</u></b>				
<b><u>WATERPROOFING</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
<b>DAMP-PROOFING OF WALLS AND FLOORS</b>				
<b>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</b>				
47	In walls	m2	10	
<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>				
48	Under surface beds	m2	51	
<b>FLOOR AND WALL SEALERS</b>				
<b>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</b>				
49	Around steel windows and door frames	m	110	
<b>Carried Forward</b>				R
F12 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

<b>Brought Forward</b>			R
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>ROOF COVERINGS ETC</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
<b>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</b>			
50	Roof covering with pitch not exceeding 25 degrees	m2	61
<b>ROOF AND WALL INSULATION</b>			
51	12" Thermal resistance sisalition laid on purlins	m2	61
<b>Carried Forward</b>			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>ROOFS, ETC.</b>			
<b>Sawn softwood grade 6</b>			
52	76 x 38mm Wall plates	m	25
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	53
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	93
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	93
<b>Sundries</b>			
56	Two coats creosote on sawn timbers	m2	30
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18
58	Hurricane clips	No	44
<b>EAVES, VERGES, ETC</b>			
<b>Pressed fibre-cement:</b>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	40
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

		Brought Forward		R
<b>DOORS, ETC</b>				
<b>Wrought meranti doors hung to steel frames</b>				
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	2	
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	12	
		Carried Forward		R
F12 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward		R
<b><u>SECTION NO. 3</u></b>		
<b><u>BILL NO. 7</u></b>		
<b><u>IRONMONGERY</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>HINGES, BOLTS, ETC</b>		
100mm Chrome plated "D" type handle 3 by solid brace hinges		
<b>CATCHES,CABIN HOOKS, ETC</b>		
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2
<b>LOCKS</b>		
<b>Approved</b>		
63	Three lever mortice lock set	No 2
64	Indicator lock set	No 12
65	Security double throw dead lock (no latch)	No 2
<b>HANDLES, ETC.</b>		
<b>Aluminium Pull Handle</b>		
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets 2.0
<b>SUNDRIES</b>		
Carried Forward		R
F12 WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>ASSA ABLOY</b>			
67	38mm Diameter rubber door stop plugged	No	2
<b>Vaal Paragon</b>			
68	32mm Type 9 back grab rail 800mm long plugged	No	2
69	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
70	DSS-130 Engraved "Male" information sign, plugged	No	
71	DSS-131 Engraved "Female" information sign, plugged	No	1
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	10
<b>stainless Steel</b>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	5
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2
Carried Forward			R
<b>F12 WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>WELDED SCREENS, GATES, ETC</b>			
<b>Gates to external doors</b>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2
<b>PRESSED STEEL DOOR FRAMES</b>			
<b>1,2mm Double rebated frames suitable for half brick walls</b>			
78	Frame for door size 813 x 2032mm high	No	12
<b>1,2mm Double rebated frames suitable for one brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	2
<b>STEEL WINDOWS, DOORS, ETC</b>			
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
80	Window type NE1, size 533 x 654mm high	No	10
81	Window type NE7, size 1022 x 654mm high	No	5
<b>Sundries</b>			
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



Brought Forward

R

**SECTION NO. 3**

**BILL NO. 9**

**PLASTERING**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**GRANOLITHIC**

Untinted granolithic on concrete

83	20mm Thick on floors	m2	40
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**INTERNAL PLASTER**

Cement plaster on brickwork or blockwork

84	On internal plastered walls	m2	88
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Carried Forward

R

F12 WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward			R
<b><u>SECTION NO. 3</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	11
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	6
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	10
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
92	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<b>Rainwater tank, etc.</b>			
93	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
94	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<b>Extra over uPVC pipes for fittings</b>			
95	110mm Bend	No	12
96	110mm Junction	No	12
<b>uPVC gulleys</b>			
97	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
<b>WASTE UNIONS ETC</b>			
<b>"Cobra Watertech"</b>			
98	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	6
<b>TRAPS ETC</b>			
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>"Cobra Watertech"</b>			
99	Cobra Ref. 365/40" CP bottle trap	No	1
<b>Marley</b>			
100	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
<b>TAPS, VALVES, ETC</b>			
101	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	10
102	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	2
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
103	50mm Pipes	m	50
<b>Extra over uPVC pipes for fittings</b>			
104	50mm Bend	No	13
105	50mm Access bend	No	7
106	50mm Junction	No	7
<b>WATER SUPPLIES</b>			
<b>Class 0 copper pipes</b>			
107	15mm Pipes	m	50
108	22mm Pipes	m	50
Carried Forward			R
F12 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Extra over class 0 copper pipes for capillary fittings</b>				
109	15mm Fittings	No	28	
110	22mm Pipes	No	28	
<b>SUNDRIES</b>				
111	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26	
112	Ditto, but in hard rock	m3	6	
113	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	16	
114	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22	
<b>TESTING</b>				
115	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.			Item
<b><u>SECTION NO. 3</u></b>				
<b><u>BILL NO. 12</u></b>				
<b><u>GLAZING</u></b>				
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>				
<b>GLAZING TO STEEL WITH PUTTY</b>				
<b>6,38mm Obscure safety glass</b>				
116	Panes not exceeding 0,1 m2	m2	8	
Carried Forward				R
F12 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward

R

Carried Forward

R

F12 WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward

R

**SECTION NO. 3**

**BILL NO. 13**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Carried Forward

R

F12 WATERBORNE

**R MAHANGE & ASSOCIATES**



Brought Forward

R

Carried to Summary

R

F12 WATERBORNE

**R MAHANGE & ASSOCIATES**

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b>SUPPLEMENTARY PREAMBLES</b></p> <p><b>Nature of ground</b></p> <p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p> <p><b>Nature of ground</b></p> <p>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</p> <p><b>Carting away of excavated material</b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p><b>Filling</b></p>			
	Carried Forward		R	
	S12 + D WATERBORNE			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	110
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	110
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	39
4	Thickening under aprons	m3	3
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
5	Soft rock	m3	5
6	Hard rock	m3	3
Carried Forward			R
<p>S12 + D WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

<b>Brought Forward</b>			R
<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	25
<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	123
<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	18
11	Backfilling to trenches, holes, etc	m3	22
<b>Compaction of surfaces</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	87
<b>Under floors, steps, paving, etc.</b>			
<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	5
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	153
<b>Carried Forward</b>			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>				R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	49	
	<b>Soil insecticide</b>			
16	To bottoms and sides of trenches etc	m2	153	
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	49	
<b>Carried Forward</b>				R
S12 + D WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 4</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	2
<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	9
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	5
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	42
<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
<b>CONCRETE SUNDRIES</b>			
Carried Forward			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	86
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	39
<b>REINFORCEMENT (PROVISIONAL)</b>			
<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	2.00
26	10mm Diameter bars	t	2.00
<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	57
Carried Forward			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 4</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
28	One brick walls	m2	34
29	Half brick walls	m2	13
<b>FACE BRICKWORK</b>			
<b>Carried Forward</b>			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
30	Extra over brickwork for face brickwork	m2	29
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	8
32	Half brick walls	m2	55
33	One brick walls	m2	111
<b>FACE BRICKWORK</b>			
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	85
<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	16
36	110mm Wide sill set level and slightly projecting	m	14
37	220mm Wide sill set sloping and slightly protecting outside	m	14
38	Fair cutting fitting around pipe not exceeding 100mm	No	14
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	14
<b>BRICKWORK SUNDRIES</b>			
Carried Forward			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	84
41	150mm Wide reinforcement built in horizontally	m	490
<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	18
<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	
44	230mm Wide turning pieces	m	10
<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15
<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	18
Carried Forward			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>				R
<b><u>SECTION NO. 4</u></b>				
<b><u>BILL NO. 4</u></b>				
<b><u>WATERPROOFING</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
<b>DAMP-PROOFING OF WALLS AND FLOORS</b>				
<b>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</b>				
47	In walls	m2	12	
<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>				
48	Under surface beds	m2	49	
<b>FLOOR AND WALL SEALERS</b>				
<b>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</b>				
49	Around steel windows and door frames	m	130	
<b>Carried Forward</b>				R
S12 + D WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

<b>Brought Forward</b>			R
<b><u>SECTION NO. 4</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>ROOF COVERINGS ETC</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
<b>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</b>			
50	Roof covering with pitch not exceeding 25 degrees	m2	70
<b>ROOF AND WALL INSULATION</b>			
51	12" Thermal resistance insulation laid on purlins	m2	70
<b>Carried Forward</b>			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 4</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>ROOFS, ETC.</b>			
<b>Sawn softwood grade 6</b>			
52	76 x 38mm Wall plates	m	29
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	53
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	107
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	107
<b>Sundries</b>			
56	Two coats creosote on sawn timbers	m2	33
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18
58	Hurricane clips	No	44
<b>EAVES, VERGES, ETC</b>			
<b>Pressed fibre-cement:</b>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	40
Carried Forward			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



Brought Forward		R
<b><u>SECTION NO. 4</u></b>		
<b><u>BILL NO. 7</u></b>		
<b><u>IRONMONGERY</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>HINGES, BOLTS, ETC</b>		
100mm Chrome plated "D" type handle 3 by solid brace hinges		
<b>CATCHES,CABIN HOOKS, ETC</b>		
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 3
<b>LOCKS</b>		
<b>Approved</b>		
63	Three lever mortice lock set	No 3
64	Indicator lock set	No 12
65	Security double throw dead lock (no latch)	No 2
<b>HANDLES, ETC.</b>		
<b>Aluminium Pull Handle</b>		
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets 2.0
<b>SUNDRIES</b>		
Carried Forward		R
S12 + D WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>ASSA ABLOY</b>			
67	38mm Diameter rubber door stop plugged	No	2
<b>Vaal Paragon</b>			
68	32mm Type 9 back grab rail 800mm long plugged	No	1
69	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
70	DSS-130 Engraved "Male" information sign, plugged	No	
71	DSS-131 Engraved "Female" information sign, plugged	No	1
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	10
<b>stainless Steel</b>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2
Carried Forward			R
<b>S12 + D WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 4</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>WELDED SCREENS, GATES, ETC</b>			
<b>Gates to external doors</b>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2
<b>PRESSED STEEL DOOR FRAMES</b>			
<b>1,2mm Double rebated frames suitable for half brick walls</b>			
78	Frame for door size 813 x 2032mm high	No	2
<b>1,2mm Double rebated frames suitable for one brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	12
<b>STEEL WINDOWS, DOORS, ETC</b>			
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
80	Window type NE1, size 533 x 654mm high	No	13
81	Window type NE7, size 1022 x 654mm high	No	6
<b>Sundries</b>			
<b>Carried Forward</b>			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			





Brought Forward			R
<b><u>SECTION NO. 4</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	15
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	7
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	13
Carried Forward			R
<b>S12 + D WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<b>Rainwater tank, etc.</b>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<b>Extra over uPVC pipes for fittings</b>			
97	110mm Bend	No	8
98	110mm Junction	No	9
<b>uPVC gulleys</b>			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	7
<b>WASTE UNIONS ETC</b>			
<b>Carried Forward</b>			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>"Cobra Watertech"</b>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
<b>TRAPS ETC</b>			
<b>"Cobra Watertech"</b>			
101	Cobra Ref. 365/40" CP bottle trap	No	1
<b>Marley</b>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
<b>TAPS, VALVES, ETC</b>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	9
104	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	2
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
105	50mm Pipes	m	50
<b>Extra over uPVC pipes for fittings</b>			
106	50mm Bend	No	13
107	50mm Access bend	No	7
108	50mm Junction	No	7
<b>WATER SUPPLIES</b>			
Carried Forward			R
S12 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Class 0 copper pipes</b>				
109	15mm Pipes	m	50	
110	22mm Pipes	m	50	
<b>Extra over class 0 copper pipes for capillary fittings</b>				
111	15mm Fittings	No	28	
112	22mm Pipes	No	28	
<b>SUNDRIES</b>				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26	
114	Ditto, but in hard rock	m3	6	
115	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	16	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22	
<b>TESTING</b>				
117	Allow for testing all drains, sanitary plumbing, water supplies and installion to the satisfaction of the Principle Agent.			Item
Carried Forward				R
S12 + D WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward

R

**SECTION NO. 4**

**BILL NO. 11**

**GLAZING**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**GLAZING TO STEEL WITH PUTTY**

6,38mm Obscure safety glass

118	Panes not exceeding 0,1 m2	m2	9	
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Carried Forward

R

S12 + D WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward

R

**SECTION NO. 4**

**BILL NO. 12**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Carried Forward

R

S12 + D WATERBORNE

**R MAHANGE & ASSOCIATES**





Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>Nature of ground</b>			
Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
<b>Nature of ground</b>			
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			
<b>Carting away of excavated material</b>			
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			
<b>Filling</b>			
<b>Carried Forward</b>		R	
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	109
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	109
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	29
4	Thickening under aprons	m3	1
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
5	Soft rock	m3	4
6	Hard rock	m3	2
Carried Forward			R
<p>M6 WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Brought Forward			R
<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	25
<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	124
<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	11
11	Backfilling to trenches, holes, etc	m3	11
<b>Compaction of surfaces</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	71
<b>Under floors, steps, paving, etc.</b>			
<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	9
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	126
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



Brought Forward			R
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	2
<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	7
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	4
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	32
<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
<b>CONCRETE SUNDRIES</b>			
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	61
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	29
<b>REINFORCEMENT (PROVISIONAL)</b>			
<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	2.00
26	10mm Diameter bars	t	2.00
<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	34
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
28	One brick walls	m2	29
29	Half brick walls	m2	8
<b>FACE BRICKWORK</b>			
<b>Carried Forward</b>			R
<b>M6 WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
30	Extra over brickwork for face brickwork	m2	22
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	5
32	Half brick walls	m2	33
33	One brick walls	m2	73
<b>FACE BRICKWORK</b>			
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	78
<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	12
36	110mm Wide sill set level and slightly projecting	m	10
37	220mm Wide sill set sloping and slightly protecting outside	m	10
38	Fair cutting fitting around pipe not exceeding 100mm	No	10
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10
<b>BRICKWORK SUNDRIES</b>			
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	51
41	150mm Wide reinforcement built in horizontally	m	319
<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	18
<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	9
44	230mm Wide turning pieces	m	9
<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15
<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	18
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 4</u></b>			
<b><u>WATERPROOFING</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>DAMP-PROOFING OF WALLS AND FLOORS</b>			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls	m2	7
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	35
<b>FLOOR AND WALL SEALERS</b>			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	89
<b>Carried Forward</b>			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>ROOF COVERINGS ETC</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
<b>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</b>			
50	Roof covering with pitch not exceeding 25 degrees	m2	48
<b>ROOF AND WALL INSULATION</b>			
51	12" Thermal resistance sisalition laid on purlins	m2	48
<b>Carried Forward</b>			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b><u>SECTION NO. 5</u></b>				
<b><u>BILL NO. 6</u></b>				
<b><u>CARPENTRY AND JOINERY</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
<b>ROOFS, ETC.</b>				
<b>Sawn softwood grade 6</b>				
52	76 x 38mm Wall plates	m	19	
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	51	
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	73	
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	73	
<b>Sundries</b>				
56	Two coats creosote on sawn timbers	m2	27	
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	44	
58	Hurricane clips	No	44	
<b>EAVES, VERGES, ETC</b>				
<b>Pressed fibre-cement:</b>				
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	43	
Carried Forward				R
M6 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

		Brought Forward		R
<b>DOORS, ETC</b>				
<b>Wrought meranti doors hung to steel frames</b>				
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	2	
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	6	
		Carried Forward		R
M6 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward		R
<b><u>SECTION NO. 5</u></b>		
<b><u>BILL NO. 7</u></b>		
<b><u>IRONMONGERY</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>HINGES, BOLTS, ETC</b>		
100mm Chrome plated "D" type handle 3 by solid brace hinges		
<b>CATCHES,CABIN HOOKS, ETC</b>		
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 2
<b>LOCKS</b>		
<b>Approved</b>		
63	Three lever mortice lock set	No 2
64	Indicator lock set	No 6
65	Security double throw dead lock (no latch)	No 2
<b>HANDLES, ETC.</b>		
<b>Aluminium Pull Handle</b>		
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets 2.0
<b>SUNDRIES</b>		
Carried Forward		R
M6 WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>ASSA ABLOY</b>			
67	38mm Diameter rubber door stop plugged	No	2
<b>Vaal Paragon</b>			
68	32mm Type 9 back grab rail 800mm long plugged	No	2
69	32mm Type 8 side grab rail 900mm girth plugged	No	2
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
70	DSS-130 Engraved "Male" information sign, plugged	No	2
71	DSS-131 Engraved "Female" information sign, plugged	No	
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	6
<b>stainless Steel</b>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2
Carried Forward			R
<b>M6 WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>WELDED SCREENS, GATES, ETC</b>			
<b>Gates to external doors</b>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2
<b>PRESSED STEEL DOOR FRAMES</b>			
<b>1,2mm Double rebated frames suitable for half brick walls</b>			
78	Frame for door size 813 x 2032mm high	No	6
<b>1,2mm Double rebated frames suitable for one brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	2
<b>STEEL WINDOWS, DOORS, ETC</b>			
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
80	Window type NE1, size 533 x 654mm high	No	9
81	Window type NE7, size 1022 x 654mm high	No	4
<b>Sundries</b>			
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



		Brought Forward		R
<b><u>SECTION NO. 5</u></b>				
<b><u>BILL NO. 9</u></b>				
<b><u>PLASTERING</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
<b>GRANOLITHIC</b>				
<b>Untinted granolithic on concrete</b>				
83	20mm Thick on floors	m2	33	
<b>INTERNAL PLASTER</b>				
<b>Cement plaster on brickwork or blockwork</b>				
84	On internal plastered walls	m2	127	
		Carried Forward		R
M6 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 5</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	11
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	6
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	4
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	6
Carried Forward			R
<b>M6 WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	6
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	1
<b>Rainwater tank, etc.</b>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<b>Extra over uPVC pipes for fittings</b>			
97	110mm Bend	No	8
98	110mm Junction	No	8
<b>uPVC gulleys</b>			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
<b>WASTE UNIONS ETC</b>			
<b>Carried Forward</b>			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>"Cobra Watertech"</b>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
<b>TRAPS ETC</b>			
<b>"Cobra Watertech"</b>			
101	Cobra Ref. 365/40" CP bottle trap	No	1
<b>Marley</b>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
<b>TAPS, VALVES, ETC</b>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	13
104	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	2
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
105	50mm Pipes	m	50
<b>Extra over uPVC pipes for fittings</b>			
106	50mm Bend	No	13
107	50mm Access bend	No	7
108	50mm Junction	No	7
<b>WATER SUPPLIES</b>			
Carried Forward			R
M6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Class 0 copper pipes</b>				
109	15mm Pipes	m	50	
110	22mm Pipes	m	50	
<b>Extra over class 0 copper pipes for capillary fittings</b>				
111	15mm Fittings	No	28	
112	22mm Pipes	No	28	
<b>SUNDRIES</b>				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26	
114	Ditto, but in hard rock	m3	6	
115	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	16	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22	
<b>TESTING</b>				
117	Allow for testing all drains, sanitary plumbing, water supplies and installion to the satisfaction of the Principle Agent.		Item	
Carried Forward				R
M6 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				



Brought Forward

R

**SECTION NO. 5**

**BILL NO. 12**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Carried Forward

R

M6 WATERBORNE

**R MAHANGE & ASSOCIATES**





Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>Nature of ground</b>			
Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes			
<b>Nature of ground</b>			
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			
<b>Carting away of excavated material</b>			
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			
<b>Filling</b>			
<b>Carried Forward</b>		R	
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	100
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	100
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	30
4	Thickening under aprons	m3	3
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
5	Soft rock	m3	4
6	Hard rock	m3	2
Carried Forward			R
<p>MD6 WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

<b>Brought Forward</b>			R
<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	21
<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	50
<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	11
11	Backfilling to trenches, holes, etc	m3	14
<b>Compaction of surfaces</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	75
<b>Under floors, steps, paving, etc.</b>			
<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	9
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	120
<b>Carried Forward</b>			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	36
	<b>Soil insecticide</b>		
16	To bottoms and sides of trenches etc	m2	120
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	36
<b>Carried Forward</b>			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	2
<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	8
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	4
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	34
<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
<b>CONCRETE SUNDRIES</b>			
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

	<b>Brought Forward</b>			R
	<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	65	
	<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
	<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	31	
	<b>REINFORCEMENT (PROVISIONAL)</b>			
	<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	2.00	
26	10mm Diameter bars	t	2.00	
	<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	34	
	<b>Carried Forward</b>			R
	MD6 WATERBORNE			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
28	One brick walls	m2	30
29	Half brick walls	m2	8
<b>FACE BRICKWORK</b>			
<b>Carried Forward</b>			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
30	Extra over brickwork for face brickwork	m2	23
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	6
32	Half brick walls	m2	34
33	One brick walls	m2	75
<b>FACE BRICKWORK</b>			
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	83
<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	12
36	110mm Wide sill set level and slightly projecting	m	10
37	220mm Wide sill set sloping and slightly protecting outside	m	10
38	Fair cutting fitting around pipe not exceeding 100mm	No	10
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	55
<b>BRICKWORK SUNDRIES</b>			
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	55
41	150mm Wide reinforcement built in horizontally	m	327
<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	18
<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	9
44	230mm Wide turning pieces	m	9
<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15
<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	18
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 4</u></b>			
<b><u>WATERPROOFING</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>DAMP-PROOFING OF WALLS AND FLOORS</b>			
One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course			
47	In walls	m2	7
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
48	Under surface beds	m2	35
<b>FLOOR AND WALL SEALERS</b>			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
49	Around steel windows and door frames	m	89
<b>Carried Forward</b>			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



Brought Forward			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>ROOFS, ETC.</b>			
<b>Sawn softwood grade 6</b>			
52	76 x 38mm Wall plates	m	21
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	36
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	79
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	137
<b>Sundries</b>			
56	Two coats creosote on sawn timbers	m2	29
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18
58	Hurricane clips	No	44
<b>EAVES, VERGES, ETC</b>			
<b>Pressed fibre-cement:</b>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	31
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

		Brought Forward		R
<b>DOORS, ETC</b>				
<b>Wrought meranti doors hung to steel frames</b>				
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3	
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	6	
		Carried Forward		R
MD6 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 7</u></b>			
<b><u>IRONMONGERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>HINGES, BOLTS, ETC</b>			
100mm Chrome plated "D" type handle 3 by solid brace hinges			
<b>CATCHES,CABIN HOOKS, ETC</b>			
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3
<b>LOCKS</b>			
<b>Approved</b>			
63	Three lever mortice lock set	No	3
64	Indicator lock set	No	6
65	Security double throw dead lock (no latch)	No	3
<b>HANDLES, ETC.</b>			
<b>Aluminium Pull Handle</b>			
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	3.0
<b>SUNDRIES</b>			
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>ASSA ABLOY</b>			
67	38mm Diameter rubber door stop plugged	No	3
<b>Vaal Paragon</b>			
68	32mm Type 9 back grab rail 800mm long plugged	No	3
69	32mm Type 8 side grab rail 900mm girth plugged	No	3
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
70	DSS-130 Engraved "Male" information sign, plugged	No	1
71	DSS-131 Engraved "Female" information sign, plugged	No	
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	6
<b>stainless Steel</b>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	3
Carried Forward			R
<b>MD6 WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>WELDED SCREENS, GATES, ETC</b>			
<b>Gates to external doors</b>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	3
<b>PRESSED STEEL DOOR FRAMES</b>			
<b>1,2mm Double rebated frames suitable for half brick walls</b>			
78	Frame for door size 813 x 2032mm high	No	6
<b>1,2mm Double rebated frames suitable for one brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	3
<b>STEEL WINDOWS, DOORS, ETC</b>			
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
80	Window type NE1, size 533 x 654mm high	No	9
81	Window type NE7, size 1022 x 654mm high	No	4
<b>Sundries</b>			
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			





Brought Forward			R
<b><u>SECTION NO. 6</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	12
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	6
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	4
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	6
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	6
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	1
<b>Rainwater tank, etc.</b>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<b>Extra over uPVC pipes for fittings</b>			
97	110mm Bend	No	8
98	110mm Junction	No	8
<b>uPVC gulleys</b>			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
<b>WASTE UNIONS ETC</b>			
<b>Carried Forward</b>			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>"Cobra Watertech"</b>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
<b>TRAPS ETC</b>			
<b>"Cobra Watertech"</b>			
101	Cobra Ref. 365/40" CP bottle trap	No	1
<b>Marley</b>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
<b>TAPS, VALVES, ETC</b>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	7
104	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	7
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
105	50mm Pipes	m	50
<b>Extra over uPVC pipes for fittings</b>			
106	50mm Bend	No	13
107	50mm Access bend	No	7
108	50mm Junction	No	7
<b>WATER SUPPLIES</b>			
Carried Forward			R
MD6 WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Class 0 copper pipes</b>				
109	15mm Pipes	m	50	
110	22mm Pipes	m	50	
<b>Extra over class 0 copper pipes for capillary fittings</b>				
111	15mm Fittings	No	28	
112	22mm Pipes	No	28	
<b>SUNDRIES</b>				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26	
114	Ditto, but in hard rock	m3	6	
115	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	16	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22	
<b>TESTING</b>				
117	Allow for testing all drains, sanitary plumbing, water supplies and installion to the satisfaction of the Principle Agent.		Item	
Carried Forward				R
MD6 WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward

R

**SECTION NO. 6**

**BILL NO. 11**

**GLAZING**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**GLAZING TO STEEL WITH PUTTY**

6,38mm Obscure safety glass

118	Panes not exceeding 0,1 m2	m2	6
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Carried Forward

R

MD6 WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward

R

**SECTION NO. 6**

**BILL NO. 12**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Carried Forward

R

MD6 WATERBORNE

**R MAHANGE & ASSOCIATES**





Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><b>SUPPLEMENTARY PREAMBLES</b></p> <p><b>Nature of ground</b></p> <p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p> <p><b>Nature of ground</b></p> <p>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</p> <p><b>Carting away of excavated material</b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p><b>Filling</b></p>			
	Carried Forward		R	
	S12 WD-WATERBORNE			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	188
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	188
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	49
4	Thickening under aprons	m3	4
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
5	Soft rock	m3	6
6	Hard rock	m3	3
Carried Forward			R
<p>S12 WD-WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Brought Forward			R
<b>Extra over all excavations for carting away</b>			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	32
<b>Risk of collapse of excavations</b>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	78
<b>Keeping excavations free of water</b>			
9	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
10	Under floors, steps, paving, etc	m3	13
11	Backfilling to trenches, holes, etc	m3	28
<b>Compaction of surfaces</b>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	84
<b>Under floors, steps, paving, etc.</b>			
<b>Prescribed density tests on filling</b>			
13	Modified AASHTO Density	No	9
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
14	To bottoms and sides of trenches, etc.	m2	193
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>				R
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	75	
	<b>Soil insecticide</b>			
16	To bottoms and sides of trenches etc	m2	193	
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	75	
<b>Carried Forward</b>				R
S12 WD-WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 7</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
18	Surface blinding under footings and bases	m3	3
<b>25MPa/19mm concrete</b>			
19	Strip footings	m3	12
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
20	Surface beds	m3	8
21	Extra over for thickening in pits for thickening size approximately 125mm deep, 500mm at top and tapering to 460mm at bottom, incl. all excavations, cart away, etc.	m	47
<b>TEST CUBES</b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	9.0
<b>CONCRETE SUNDRIES</b>			
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
23	Surface beds, slabs, etc	m2	119
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
<b>Smooth formwork to sides</b>			
24	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	44
<b>REINFORCEMENT (PROVISIONAL)</b>			
<b>Mild steel reinforcement to structural concrete work</b>			
25	8mm Diameter bars	t	3.00
26	10mm Diameter bars	t	3.00
<b>Fabric Reinforcement</b>			
27	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	75
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b><u>SECTION NO. 7</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
28	One brick walls	m2	44
29	Half brick walls	m2	16
<b>FACE BRICKWORK</b>			
<b>Carried Forward</b>			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
30	Extra over brickwork for face brickwork	m2	34
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
31	Half brick walls in beamfilling .	m2	9
32	Half brick walls	m2	65
33	One brick walls	m2	131
<b>FACE BRICKWORK</b>			
<b>Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:</b>			
34	Extra over brickwork for face brickwork	m2	126
<b>Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:</b>			
35	Extra over brickwork for brick-on-edge header course lintel	m	17
36	110mm Wide sill set level and slightly projecting	m	24
37	220mm Wide sill set sloping and slightly protecting outside	m	24
38	Fair cutting fitting around pipe not exceeding 100mm	No	24
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	24
<b>BRICKWORK SUNDRIES</b>			
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Brickwork reinforcement</b>			
40	75mm Wide reinforcement built in horizontally	m	98
41	150mm Wide reinforcement built in horizontally	m	579
<b>Galvanised wire ties etc</b>			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	18
<b>Turning pieces to lintels etc.</b>			
43	115mm Wide turning pieces	m	9
44	230mm Wide turning pieces	m	9
<b>Prestressed fabricated lintels</b>			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	15
<b>Air bricks etc.</b>			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	18
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>				R
<b><u>SECTION NO. 7</u></b>				
<b><u>BILL NO. 4</u></b>				
<b><u>WATERPROOFING</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
<b>DAMP-PROOFING OF WALLS AND FLOORS</b>				
<b>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</b>				
47	In walls	m2	12	
<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>				
48	Under surface beds	m2	84	
<b>FLOOR AND WALL SEALERS</b>				
<b>Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight</b>				
49	Around steel windows and door frames	m	147	
<b>Carried Forward</b>				R
S12 WD-WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

<b>Brought Forward</b>			R
<b><u>SECTION NO. 7</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>ROOF COVERINGS ETC</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
<b>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</b>			
50	Roof covering with pitch not exceeding 25 degrees	m2	98
<b>ROOF AND WALL INSULATION</b>			
51	12" Thermal resistance sisalition laid on purlins	m2	98
<b>Carried Forward</b>			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 7</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>ROOFS, ETC.</b>			
<b>Sawn softwood grade 6</b>			
52	76 x 38mm Wall plates	m	34
53	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	75
54	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	124
55	50 x 76mm Purlins in lengths exceeding 6,6m and not exceeding 8,1m	m	75
<b>Sundries</b>			
56	Two coats creosote on sawn timbers	m2	42
57	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18
58	Hurricane clips	No	44
<b>EAVES, VERGES, ETC</b>			
<b>Pressed fibre-cement:</b>			
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	46
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

		Brought Forward		R
<b>DOORS, ETC</b>				
<b>Wrought meranti doors hung to steel frames</b>				
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3	
61	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	12	
		Carried Forward		R
S12 WD-WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward		R
<b><u>SECTION NO. 7</u></b>		
<b><u>BILL NO. 7</u></b>		
<b><u>IRONMONGERY</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>HINGES, BOLTS, ETC</b>		
100mm Chrome plated "D" type handle 3 by solid brace hinges		
<b>CATCHES,CABIN HOOKS, ETC</b>		
62	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 3
<b>LOCKS</b>		
<b>Approved</b>		
63	Three lever mortice lock set	No 3
64	Indicator lock set	No 12
65	Security double throw dead lock (no latch)	No 3
<b>HANDLES, ETC.</b>		
<b>Aluminium Pull Handle</b>		
66	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets 3.0
<b>SUNDRIES</b>		
Carried Forward		R
S12 WD-WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>ASSA ABLOY</b>			
67	38mm Diameter rubber door stop plugged	No	3
<b>Vaal Paragon</b>			
68	32mm Type 9 back grab rail 800mm long plugged	No	3
69	32mm Type 8 side grab rail 900mm girth plugged	No	3
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
70	DSS-130 Engraved "Male" information sign, plugged	No	
71	DSS-131 Engraved "Female" information sign, plugged	No	
72	DSS-132 Engraved "Male/Female" information sign, plugged	No	1
73	DSS-133 Engraved "Disabled" information sign, plugged	No	1
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
74	SQ2 code 405607B white none lockable toilet roll holder	No	12
<b>stainless Steel</b>			
75	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6
76	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	3
Carried Forward			R
<b>S12 WD-WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 7</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>WELDED SCREENS, GATES, ETC</b>			
<b>Gates to external doors</b>			
77	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	3
<b>PRESSED STEEL DOOR FRAMES</b>			
<b>1,2mm Double rebated frames suitable for half brick walls</b>			
78	Frame for door size 813 x 2032mm high	No	12
<b>1,2mm Double rebated frames suitable for one brick walls</b>			
79	Frame for door size 813 x 2032mm high	No	3
<b>STEEL WINDOWS, DOORS, ETC</b>			
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
80	Window type NE1, size 533 x 654mm high	No	15
81	Window type NE7, size 1022 x 654mm high	No	6
<b>Sundries</b>			
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

		Brought Forward			R
	<b>Cage, etc</b>				
82	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No	3		
		Carried Forward			R
S12 WD-WATERBORNE					
<b>R MAHANGE &amp; ASSOCIATES</b>					



<b>Brought Forward</b>			R
<b><u>SECTION NO. 7</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
85	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	18
86	Extra over eaves gutter for stopped end	No	2
87	75 x 100mm Diameter rainwater down pipes fixed to wall	m	6
88	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
89	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
90	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	8
91	WC suite, comprising with pan and double flap heavy duty plastic seat and matching cistern with flush pipe, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	12
<b>Carried Forward</b>			R
<b>S12 WD-WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
92	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	
93	Vitreous china urinal. Complete with all fittings and accessories including cutting & making good wall & floor wherever required.	No	3
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
94	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	2
<b>Rainwater tank, etc.</b>			
95	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
96	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30
<b>Extra over uPVC pipes for fittings</b>			
97	110mm Bend	No	8
98	110mm Junction	No	8
<b>uPVC gulleys</b>			
99	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
<b>WASTE UNIONS ETC</b>			
<b>Carried Forward</b>			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>"Cobra Watertech"</b>			
100	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
<b>TRAPS ETC</b>			
<b>"Cobra Watertech"</b>			
101	Cobra Ref. 365/40" CP bottle trap	No	1
<b>Marley</b>			
102	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2
<b>TAPS, VALVES, ETC</b>			
103	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	13
104	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	2
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
105	50mm Pipes	m	50
<b>Extra over uPVC pipes for fittings</b>			
106	50mm Bend	No	13
107	50mm Access bend	No	7
108	50mm Junction	No	7
<b>WATER SUPPLIES</b>			
Carried Forward			R
S12 WD-WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Class 0 copper pipes</b>				
109	15mm Pipes	m	50	
110	22mm Pipes	m	50	
<b>Extra over class 0 copper pipes for capillary fittings</b>				
111	15mm Fittings	No	28	
112	22mm Pipes	No	28	
<b>SUNDRIES</b>				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	26	
114	Ditto, but in hard rock	m3	6	
115	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	16	
116	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	22	
<b>TESTING</b>				
117	Allow for testing all drains, sanitary plumbing, water supplies and installion to the satisfaction of the Principle Agent.			Item
Carried Forward				R
S12 WD-WATERBORNE				
<b>R MAHANGE &amp; ASSOCIATES</b>				



Brought Forward

R

**SECTION NO. 7**

**BILL NO. 13**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Carried Forward

R

S12 WD-WATERBORNE

**R MAHANGE & ASSOCIATES**





Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO. 8</u></b></p>			
<p><b><u>BILL NO. 1</u></b></p>			
<p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p>			
<p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p>			
<p><b>SUPPLEMENTARY PREAMBLES</b></p>			
<p><b>Nature of ground</b></p>			
<p>Use "assumed to be" if no trial holes, soils investigations, etc have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes</p>			
<p><b>Nature of ground</b></p>			
<p>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</p>			
<p><b>Carting away of excavated material</b></p>			
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>			
<p><b>Filling</b></p>			
<p>Carried Forward</p>			
<p>S8 + D WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			
			R

Brought Forward			R
<p><b>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</b></p>			
<p><b>Soil poisoning</b></p>			
<p><b>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</b></p>			
<p><b>SITE CLEARANCE ETC</b></p>			
<p><b>Site clearance</b></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	124
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	124
<p><b>EXCAVATION, FILLING, ETC</b></p>			
<p><b>Excavation in earth not exceeding 2m deep</b></p>			
3	Trenches	m3	
4	Pits	m3	42
5	Thickening under aprons	m3	2
<p><b>Extra over trench and hole excavations in earth for excavation in</b></p>			
6	Soft rock	m3	5
7	Hard rock	m3	3
Carried Forward			R
<p>S8 + D WATERBORNE</p>			
<p><b>R MAHANGE &amp; ASSOCIATES</b></p>			

Brought Forward			R
<b>Extra over all excavations for carting away</b>			
8	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	7
<b>Risk of collapse of excavations</b>			
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	65
<b>Keeping excavations free of water</b>			
10	Keeping excavations free of all water other than subterranean water		Item
<b>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</b>			
11	Under floors, steps, paving, etc	m3	10
12	Backfilling to trenches, holes, etc	m3	4
<b>Compaction of surfaces</b>			
13	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 93% Mod AASHTO density	m2	24
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 93% Mod AASHTO density (Enviro Loo Tanks Pit)	m2	13
15	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	33
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Prescribed density tests on filling</b>			
16	Modified AASHTO Density	No	6
<b>SOIL POISONING</b>			
<b>Weedkiller mixed in accordance to supplier's specifications</b>			
17	To bottoms and sides of trenches, etc.	m2	39
18	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	50
19	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	29
<b>Soil insecticide</b>			
20	To bottoms and sides of trenches etc	m2	39
21	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	50
22	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	29
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 8</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>UNREINFORCED CONCRETE, ETC.</b>			
<b>15MPa/19mm concrete</b>			
23	Surface blinding under footings and bases	m3	2
24	Aprons cast in panels to falls	m3	7
25	Extra over for concrete thickening in aprons size approximately 100mm deep, 400mm at top and tapering one side to 200mm at bottom, including all excavations, cart away, etc.	m	31
<b>25MPa/19mm concrete</b>			
26	Strip footings	m3	2
27	Ramps	m3	
<b>REINFORCED CONCRETE</b>			
<b>25MPa/19mm concrete</b>			
28	Surface beds in pits	m3	5
29	Extra over for thickening in pits for thickening size approximately 150mm deep, 500mm at top and tapering to 400mm at bottom, incl. all excavations, cart away, etc.	m	31
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>30Mpa/19mm concrete</b>			
30	Surface beds cast in panels on waterproofing.	m3	5
31	Slabs (pits)	m3	2
<b>TEST CUBES</b>			
32	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith	Sets	10.0
<b>CONCRETE SUNDRIES</b>			
<b>Finishing top surfaces of concrete smooth with a wood float/steel trowel</b>			
33	Surface beds, slabs, etc	m2	39
34	Surface beds, slabs, etc (pits)	m2	49
35	Aprons to falls	m2	68
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</b>			
<b>Smooth formwork to sides</b>			
36	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	55
<b>Permanent formwork to soffits</b>			
37	Slabs propped up not exceeding 1,5m high	m2	15
38	Form 500mm radius opening in floor slab	No	2
<b>REINFORCEMENT (PROVISIONAL)</b>			
<b>Mild steel reinforcement to structural concrete work</b>			
39	8mm Diameter bars	t	1.00
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			



<b>Brought Forward</b>			R
<b><u>SECTION NO. 8</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>MASONRY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>BRICKWORK</b>			
Sizes in descriptions			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<b>Face bricks</b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b>Pointing</b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b>FOUNDATIONS (PROVISIONAL)</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
42	One brick walls	m2	16
43	One brick walls in pits	m2	44
<b>Carried Forward</b>			R
<b>S8 + D WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>FACE BRICKWORK</b>			
44	Extra over brickwork for face brickwork	m2	26
<b>SUPERSTRUCTURE</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
45	Half brick walls	m2	40
46	Half brick walls in beamfilling	m2	7
47	One brick walls	m2	88
<b>FACE BRICKWORK</b>			
48	Extra over brickwork for face brickwork	m2	88
49	Extra over brickwork for brick-on-edge header course lintel	m	11
50	110mm Wide sill set level and slightly projecting	m	11
51	220mm Wide sill set sloping and slightly protecting outside	m	11
52	Fair cutting fitting around pipe not exceeding 100mm	No	3
53	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10
<b>BRICKWORK SUNDRIES</b>			
<b>Brickwork reinforcement</b>			
54	75mm Wide reinforcement built in horizontally	m	185
55	150mm Wide reinforcement built in horizontally	m	585
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Galvanised wire ties etc</b>			
56	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	24
<b>Turning pieces to lintels etc.</b>			
57	115mm Wide turning pieces	m	10
58	230mm Wide turning pieces	m	10
<b>Prestressed fabricated lintels</b>			
59	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	21
<b>Air bricks etc.</b>			
60	230 x 152mm terra-cotta vermin proofed louvered air brick	No	100
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward

R

**SECTION NO. 8**

**BILL NO. 4**

**WATERPROOFING**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**DAMP-PROOFING OF WALLS AND FLOORS**

One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course

61	In walls	m2	6
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One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"

62	Under surface beds	m2	67
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63	Under aprons and ramps	m2	50
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**FLOOR AND WALL SEALERS**

Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight

64	Around steel windows and door frames	m	85
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Carried Forward

R

S8 + D WATERBORNE

**R MAHANGE & ASSOCIATES**

<b>Brought Forward</b>			R
<b><u>SECTION NO. 8</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>ROOF COVERINGS ETC</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
<b>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</b>			
65	Roof covering with pitch not exceeding 25 degrees	m2	63
<b>ROOF AND WALL INSULATION</b>			
66	12" Thermal resistance sisalition laid on purlins	m2	63
<b>Carried Forward</b>			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 8</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>ROOFS, ETC.</b>			
<b>Sawn softwood grade 6</b>			
67	76 x 38mm Wall plates	m	24
68	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	78
69	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	69
<b>Sundries</b>			
70	Two coats creosote on sawn timbers	m2	30
71	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	25
72	Hurricane clips	No	30
<b>EAVES, VERGES, ETC</b>			
<b>Pressed fibre-cement:</b>			
73	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	36
<b>DOORS, ETC</b>			
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>			R
<b>Wrought meranti doors hung to steel frames</b>			
74	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3
75	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom) (D2)	No	
76	44mm framed, ledged and braced door 915 x 2032mm high including external weather bar (disabled)	No	8
<b>Carried Forward</b>			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward		R
<b><u>SECTION NO. 8</u></b>		
<b><u>BILL NO. 7</u></b>		
<b><u>IRONMONGERY</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>HINGES, BOLTS, ETC</b>		
100mm Chrome plated "D" type handle 3 by solid brace hinges		
<b>CATCHES,CABIN HOOKS, ETC</b>		
77	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 3
<b>LOCKS</b>		
<b>Approved</b>		
78	Three lever mortice lock set	No 3
79	Indicator lock set	No 8
80	Security double throw dead lock (no latch)	No 2
<b>HANDLES, ETC.</b>		
<b>Aluminium Pull Handle</b>		
81	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets 3.0
<b>SUNDRIES</b>		
Carried Forward		R
S8 + D WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>ASSA ABLOY</b>			
82	38mm Diameter rubber door stop plugged	No	3
<b>Vaal Paragon</b>			
83	32mm Type 9 back grab rail 800mm long plugged	No	3
84	32mm Type 8 side grab rail 900mm girth plugged	No	3
<b>LETTERS, NAMEPLATES, ETC</b>			
<b>Dorma:</b>			
85	DSS-130 Engraved "Male" information sign, plugged	No	1
86	DSS-133 Engraved "Female" information sign, plugged	No	
<b>BATHROOM FITTINGS</b>			
<b>Sundries</b>			
<b>Kimberley-Clark or Similar</b>			
87	SQ2 code 405607B white none lockable toilet roll holder	No	3
<b>stainless Steel</b>			
88	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	2
89	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	2
Carried Forward			R
<b>S8 + D WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward		R
<b><u>SECTION NO. 8</u></b>		
<b><u>BILL NO. 8</u></b>		
<b><u>METALWORK</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
<b>WELDED SCREENS, GATES, ETC</b>		
<b>Gates to external doors</b>		
90	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No
91	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No
<b>PRESSED STEEL DOOR FRAMES</b>		
<b>1,2mm Double rebated frames suitable for half brick walls</b>		
92	Frame for door size 813 x 2032mm high	No 8
<b>1,2mm Double rebated frames suitable for one brick walls</b>		
93	Frame for door size 813 x 2032mm high	No
94	Frame for door size 914 x 2032mm high	No 3
<b>STEEL WINDOWS, DOORS, ETC</b>		
Carried Forward		R
S8 + D WATERBORNE		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes</b>			
95	Window type NE1, size 533 x 654mm high	No	11
96	Window type NE7, size 1022 x 654mm high	No	5
<b>Sundries</b>			
<b>Cage, etc</b>			
97	She bin cages, to fit 330 x 280 x 180mm width, she bin to be able to open, including pad lock and locking mechanism, complete, etc	No	2
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 8</u></b>			
<b><u>BILL NO. 9</u></b>			
<b><u>PLASTERING</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
<b>GRANOLITHIC</b>			
<b>Untinted granolithic on concrete</b>			
98	20mm Thick on floors	m2	65
<b>INTERNAL PLASTER</b>			
<b>Cement plaster on brickwork or blockwork</b>			
99	On internal plastered walls(pits)	m2	166
<b>FLOOR AND WALLS SEALERS</b>			
<b>Minimum two coats approved epoxy coat:</b>			
100	On floors in pits	m2	18
101	On internal plastered walls in pits	m2	83
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 8</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLUMBING AND DRAINAGE(PROVISIONAL)</u></b>			
<b>RAINWATER DISPOSAL</b>			
<b>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</b>			
<b>Aluminium Zinc Seamless Gutters</b>			
102	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	14
103	Extra over eaves gutter for stopped end	No	2
104	75 x 100mm Diameter rainwater down pipes fixed to wall	m	5
105	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	2
106	Ditto .for shoe	No	2
<b>SANITARY FITTINGS</b>			
<b>"Vaal" or similar and approved</b>			
107	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required for disable toilets.	No	1
<b>SUPPLY AND INSTALL "ENVIRO-LOO" TOILET SYSTEMS</b>			
108	Enviroloo Industrial Standard seat system complete, (Code: FG-1040STDCA/B3)	No	9
Carried Forward			R
<b>S8 + D WATERBORNE</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
109	Enviroloo two (3) Pan Urinal system complete (ABS) (FG-URI3PA/B3)	No	3
<b>PRECAST CONCRETE WASH HAND TROUGH</b>			
110	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, fixed complete to berick wall, including all necessary pipework, including soak away as per 'Engineers detail'.	No	3
<b>Rainwater tank, etc.</b>			
111	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
<b>SOIL DRAINAGE</b>			
<b>uPVC pipes</b>			
112	110mm Pipes laid in and including trenches not exceeding 1m deep	m	35
<b>Extra over uPVC pipes for fittings</b>			
113	110mm Bend	No	6
114	110mm Junction	No	6
<b>uPVC gulleys</b>			
115	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
<b>TRAPS ETC</b>			
<b>Marley</b>			
116	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	4
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>TAPS, VALVES, ETC</b>			
117	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	10
118	Cobra Watertech 15mm chrome plated bibtap (Code: NM-500-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	4
<b>SANITARY PLUMBING</b>			
<b>uPVC pipes</b>			
119	50mm Pipes	m	35
<b>Extra over uPVC pipes for fittings</b>			
120	50mm Bend	No	4
121	50mm Access bend	No	4
122	50mm Junction	No	
<b>WATER SUPPLIES</b>			
<b>Class 0 copper pipes</b>			
123	15mm Pipes	m	35
124	22mm Pipes	m	35
<b>Extra over class 0 copper pipes for capillary fittings</b>			
125	15mm Fittings	No	12
126	22mm Pipes	No	12
Carried Forward			R
S8 + D WATERBORNE			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward

R

**TESTING**

127 Allow for testing all drains, sanitary plumbing, water supplies and installion to the satisfaction of the Principle Agent.

Item

Carried Forward

R

S8 + D WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward

R

**SECTION NO. 8**

**BILL NO. 11**

**GLAZING**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**GLAZING TO STEEL WITH PUTTY**

6,38mm Obscure safety glass

128	Panes not exceeding 0,1 m2	m2	7	
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Carried Forward

R

S8 + D WATERBORNE

**R MAHANGE & ASSOCIATES**

Brought Forward

R

**SECTION NO. 8**

**BILL NO. 12**

**PAINTWORK**

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades

**PAINTWORK ETC TO NEW WORK**

**PREPARATORY WORK TO EXISTING WORK**

**Previously painted plastered surfaces**

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**Previously painted metal surfaces**

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

**Previously painted wood surfaces**

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

**ON FIBRE-CEMENT**

Carried Forward

R

S8 + D WATERBORNE

**R MAHANGE & ASSOCIATES**





**Brought Forward**

R

**Carried to Summary**

R

S8 + D WATERBORNE

**R MAHANGE & ASSOCIATES**

Item No		Quantity	Rate	Amount
	<b><u>EXTERNAL WORKS</u></b>			
	<b><u>SECTION NO. 9</u></b>			
	<b><u>BILL NO. 1</u></b>			
	<b><u>WATER SUPPLIES</u></b>			
	<b>SUPLIMENTARY PREAMBLES</b>			
	For preambles see "Specification of materials and methods to be used-PW 371"			
	<b>Class 10 HDPE type IV pipes</b>			
1	40mm Pipes laid in and including trenches not exceeding 1m deep	m	30	
2	50mm Pipes laid in and including trenches not exceeding 1m deep	m	175	
	<b>Extra over Class 10 HDPE type IV pipes for fittings</b>			
3	40mm Fittings	No	20	
4	40mm Reducer	No	6	
5	40mm Bend	No	12	
6	50mm Reducer	No	6	
7	50mm Bend	No	12	
8	50mm Threaded adaptor	No	5	
	<b>Galvanised medium steel pipes with screwed and socketed joints</b>			
9	50mm pipes	m	24	
	<b>Carried Forward</b>			R
	<b>EXTERNAL WORKS</b>			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward				R
<b>Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings</b>				
10	50mm Fittings	No	4	
11	50mm Bush	No	4	
12	50mm Elbow	No	4	
<b>Valve boxes</b>				
13	600x600mm Stopcock box complete as per detail drawing 'Valve chamber' including 400x400 cast iron cover and frame depth not exceeding 750mm internally	No	1	
<b>Sundries</b>				
14	300x300x50mm Precast concrete pipeline marker slab set in ground	No	1	
15	Cutting into existing water pipe	No	1	
Carried Forward				R
EXTERNAL WORKS				
<b>R MAHANGE &amp; ASSOCIATES</b>				

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 2</u></b>			
<b><u>ELEVATED WATER TANKS</u></b>			
<b>SUPPLIMENTARY PREAMBLES</b>			
For preambles see "Specification of materials and methods to be used-PW 371"			
<b>Excavation in earth not exceeding 2m deep</b>			
16	Holes	m3	8
<b>Extra over trench and hole excavations in earth for excavation in:</b>			
17	Soft rock	m3	4
18	Hard rock	m3	2
<b>Extra over all excavations for carting away</b>			
19	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	6
<b>Risk of collapse of excavations</b>			
20	Sides of trench and hole excavation not exceeding 1.5m deep	m2	16
<b>Keep excavation free of water</b>			
21	Keep excavation free of water		Item
<b>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</b>			
22	Backfilling to trenches,holes ,etc	m3	2
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
	<b>Soil insecticide</b>		
23	To bottom and sides of trenches,etc	m2	24
	<b>One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions</b>		
24	Under surface beds	m2	24
	<b>15Mpa/19mm concrete</b>		
25	Blinding	m3	1
	<b>25Mpa/19mm concrete</b>		
26	Bases	m3	6
27	Platform surface beds cast in panels	m3	5
	<b>Finishing top surface of concrete smooth with a wood float</b>		
28	Platform surface beds	m2	24
	<b>Finishing top surface of concrete smooth with a wood float</b>		
29	On top of bases	m2	5
	<b>'Jojo" o equal approved SANS PVC water tanks</b>		
30	5000 Litre plastic water tank fitted onto and secured to tank platforms	No	1
31	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	3
	<b>Galvanised medium normalised mild steel piping</b>		
32	25mm Pipes	m	60
	<b>Carried Forward</b>		
	EXTERNAL WORKS		
	<b>R MAHANGE &amp; ASSOCIATES</b>		
			R

Brought Forward			R
33	50mm Pipes	m	102
<b>Extra over galvanised medium normalised mild steel piping for fittings:</b>			
34	25mm Fittings	No	10
35	50mm Elbows	No	10
36	50mm Union	No	10
37	50mm Reducing bush	No	4
<b>'Cobra Watertech" or other equal approved</b>			
38	15mm 'Cobra Ref.108LK" brass hose bibtap	No	4
39	50mm Fullway gate valve	No	4
<b>The following in structural steel tank stands</b>			
<b>Welded steel columns in single lengths with flat base,cap,bearer and connection plates,bolted to concrete</b>			
40	80x80x6mm angle columns	t	1.49
<b>Steel members and girth,bolted to steel</b>			
41	30x30x6mm flat-bar	t	0.19
42	40x40x5mm angle	t	0.19
43	125x75x8mm unequal angle	t	0.22
44	125x50x20x2mm Lipped channel	t	0.47
<b>BOLTS,FASTENERS,ETC (LI)</b>			
45	High tensile bolts	t	0.50
Carried Forward			R
EXTERNAL WORKS			
<b>R MAHANGE &amp; ASSOCIATES</b>			

<b>Brought Forward</b>									
46	12mm Diameter L-shaped threaded anchor bolt 350mm girth embedded in top of concrete	No	16						
	<b>ON METAL</b>								
	<b>Undercoat and minimum 2 coats gloss enamel</b>								
47	Paint to structural steel	m	125						
	<b>TESTING</b>								
	<b>Testing of water tanks</b>								
48	Testing for tank		Item						
<b>Carried Forward</b>									
	<b>EXTERNAL WORKS</b>								
	<b>R MAHANGE &amp; ASSOCIATES</b>								

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 3</u></b>			
<b><u>WATER FOUNTAINS</u></b>			
<b>SUPPLIMENTARY PREAMBLES</b>			
<b>Earthworks</b>			
<b>Excavation in compacted building platform not exceeding 2m deep</b>			
49	Trenches	m3	2
<b>Extra over all excavations for carting away</b>			
50	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	6
<b>Compaction of surfaces</b>			
51	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 93% Mod AASTHO density	m2	2
<b>FILLING</b>			
<b>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASTHO density</b>			
52	Backfilling to trenches,holes ,etc	m3	1
<b>Concrete, etc</b>			
<b>25Mpa/19mm concrete</b>			
53	Wall	m3	1
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

	<b>Brought Forward</b>			R
54	Slabs	m3	1	
	<b>Rough formwork to sides</b>			
55	Edges,risers,ends and reveals not exceeding 300mm high or wide "Labour Intensive"	m	12	
56	Formwork to sides	m2	4	
	<b>Mesh Reinforcement (measure nett)</b>			
57	Mesh ref.No.395 fabric reinforcement fixed horizontal in surface beds	m2	4	
	<b>WATER SUPPLIES</b>			
	<b>Class 0 copper pipes and fittings with capillary soldered type connections</b>			
58	15mm Pipes	m	16	
	<b>Extra over class 0 pipes for capillary fittings</b>			
59	15mm fittings	No	8	
	<b>'Cobra Watertech" or equal approved</b>			
60	19mm chrome plated push button taps	No	4	
	<b>Carried Forward</b>			R
	<b>EXTERNAL WORKS</b>			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward		R
<b><u>SECTION NO. 9</u></b>		
<b><u>BILL NO. 4</u></b>		
<b><u>SEPTIC TANKS, ETC</u></b>		
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
61	Allow the amount of R150 000.00 (One hundred and fifty thousand rand) for the refurbishment of the septic tank not clearly defined, to be used as directed by the principal agent and deducted in whole or in part if not required.	Item
<b>SITE CLEARANCE</b>		
<b>Site clearance</b>		
62	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2 40
<b>EXCAVATION, FILLING, ETC</b>		
<b>Excavation in earth exceeding 2m and not exceeding 4m deep</b>		
63	Holes	m3 88
<b>Extra over all excavations for carting away</b>		
64	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3 32
Carried Forward		R
<b>EXTERNAL WORKS</b>		
<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b>Risk of collapse of excavations</b>			
65	Sides of trench and hole excavation not exceeding 1.5m deep	m2	58
<b>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</b>			
66	Backfilling to trenches,holes ,etc	m3	7
<b>Keep excavation free of water</b>			
67	Keep excavation free of water		Item
<b>REINFORCED CONCRETE</b>			
<b>15Mpa/19mm concrete</b>			
68	15mpa blinding	m3	1
<b>25Mpa/19mm concrete</b>			
69	25Mpa in base	m3	7
70	25Mpa in slabs over septic tank	m3	4
71	Concrete haunch formed below pipes	m3	0.1
<b>Finishing top surface of concrete smooth with a steel trowel</b>			
72	Surface beds,slabs,etc to falls	m2	22
<b>Permanent formwork to soffits</b>			
73	Slab over septic tank	m2	22
<b>Smooth formwork to form</b>			
74	Opening not exceeding 1m girth through 170mm slab	No	2
<b>SMOOTH FORMWORK (DEGREE OF ACCURACY 1)</b>			
Carried Forward			R
EXTERNAL WORKS			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Smooth formwork to sides</b>			
75	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	20
<b>REINFORCEMENT</b>			
<b>Fabric reinforcement</b>			
76	Type 888 fabric reinforcement in concrete surface beds,slabs,etc	m2	44
<b>MASONRY</b>			
<b>Brickwork of NFP bricks in class 11 mortar</b>			
77	One brick walls	m2	69
<b>Brick reinforcement</b>			
78	150mm wide reinforcement built in horizontally	m	228
<b>Face bricks (purchase price of R5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</b>			
79	Extra over brickwork for face brickwork in foundation	m	16
<b>BRICKWORK SUNDRIES</b>			
80	Leave of form 450x150mm high opening through a one brick wall	No	2
81	Leave or form opening through one brickwall for pipe 110mm dia	No	3
<b>PLASTERING</b>			
<b>Watertight cement plaster on brickwork</b>			
82	On walls	m2	58
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

	<b>Brought Forward</b>			R
	<b>Screed</b>			
83	On floors	m2	22	
	<b>Two coats approved epoxy coats</b>			
84	On walls and floors	m2	80	
	<b>PLUMBING AND DRAINAGE</b>			
	<b>UPVC pipes</b>			
85	110mm pipes	m	45	
	<b>Extra over upvc pipes for fittings</b>			
86	110mm Tee	No	2	
	<b>Cover,etc</b>			
87	600x600mm Type 2A cast iron single seal manhole cover and frame	No	4	
88	Lifting key for manhole cover	No	1	
	<b>Carried Forward</b>			R
	<b>EXTERNAL WORKS</b>			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 5</u></b>			
<b><u>FRENCH DRAINS</u></b>			
<b>SITE CLEARANCE ETC</b>			
<b>Site clearance</b>			
89	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	20
<b>Excavation in earth not exceeding 2m deep</b>			
90	Holes	m3	15
<b>Extra over trench and hole excavations in earth for excavation in:</b>			
91	Soft rock	m3	1
92	Hard rock	m3	1
<b>Extra over all excavations for carting away</b>			
93	Surplus material from excavations and/rock piles on site to the dumping site to be located by the Contractor	m3	8
<b>Risk of collapse of excavations</b>			
94	Sides of trench and hole excavation not exceeding 1.5m deep	m2	4
<b>Keep excavation free of water</b>			
95	Keep excavation free of water		Item
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
	<b>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</b>		
96	On top of french drain as soil cover	m3	7
	<b>FILTER FABRIC</b>		
	<b>'Kaytech Engineered Fabric' or similar approved laid in strict accordance to the manufacturer's instructions</b>		
97	'Kaytech U14" or equal approved around stone filling in sub-soil drain trenches	m2	20
	<b>20mm Graded stone filling or similar approved</b>		
98	In holes	m3	5
	<b>200-300mm Diameter clean washed stone filling or similar approved by Engineer</b>		
99	In holes	m3	15
	<b>WATER PROOFING</b>		
	<b>One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions</b>		
100	On top of pipes as protection of joints	m2	15
	<b>ROOF SHEETING</b>		
	<b>Roof sheeting</b>		
101	On top of french drain	m2	15
	<b>uPVC Pipes</b>		
102	110mm pipes laid in and including trenches	m	15
	<b>Carried Forward</b>		
	<b>EXTERNAL WORKS</b>		
	<b>R MAHANGE &amp; ASSOCIATES</b>		
			R

Brought Forward			R
103	160mm pipes laid in and including trenches	m	10
<b>Extra over uPVC pipes for fittings</b>			
104	110mm End cap	No	4
105	110mm Bend	No	2
Carried Forward			R
EXTERNAL WORKS			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>WATER TANKS</u></b>			
<b>SITE CLEARANCE ETC</b>			
<b>Site clearance</b>			
106	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	62
<b>EXCAVATION, FILLING, ETC</b>			
<b>Excavation in earth not exceeding 2m deep</b>			
107	Trenches	m3	20
<b>Extra over trench and hole excavations in earth for excavation in</b>			
108	Soft rock	m3	5
109	Hard rock	m3	2
<b>Extra over all excavations for carting away</b>			
110	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10
<b>Risk of collapse of excavations</b>			
111	Sides of trench and hole excavations not exceeding 1,5m deep	m2	23
<b>Keeping excavations free of water</b>			
112	Keeping excavations free of all water other than subterranean water	Item	
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			



Brought Forward			R
<b>TEST CUBES</b>			
119	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	3.0
<b>BRICKWORK</b>			
<b>Brickwork of NFP bricks in class II mortar</b>			
120	One brick walls	m2	17
<b>BRICKWORK SUNDRIES</b>			
<b>Brickwork reinforcement</b>			
121	150mm Wide reinforcement built in horizontally	m	50
<b>FACE BRICKWORK</b>			
<b>Face bricks (Purchase price of R5 000-00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</b>			
122	Extra over brickwork for face brickwork	m	23
<b>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R3 500,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</b>			
123	Coping on top of one brick wall	m	50
<b>WATERPROOFING</b>			
<b>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</b>			
124	Under surface beds	m3	31
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>WATER SUPPLIES</b>			
<b>Jojo approved SANS PVC water tanks</b>			
125	5000 Litre plastic water tank fitted onto and secured to tank platforms	No	2
<b>Galvanized medium normalized mild steel piping</b>			
126	25mm Pipes	m	10
<b>Extra over galvanised mild steel water supply pipes for fittings:</b>			
127	25mm Pipes	No	10
128	15mm "Cobra Ref. 108LK" brass hose biptap	No	5
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 7</u></b>			
<b><u>PAVED WALKWAYS</u></b>			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>For preambles see "Specifications of materials and methods to be used - PW 371"</b>			
<b>Site Clearance</b>			
129	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	410
130	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	410
<b>Open face excavation in earth over sloping site</b>			
131	Excavation in earth not exceeding 2m open face excavation to form platforms under parking areas etc and depositing excavated material over site, including haulage not exceeding 10m from perimeter of excavations exceeding 2m deep	m3	150
<b>Extra over all excavations for carting away</b>			
132	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	150
<b>Earth filling supplied by the contractor under parking areas, roadways, etc</b>			
133	Sub-base course of G5 material in accordance with SABS 1200 DM, compacted to 93% Mod AASHTO density	m3	150
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b>Compaction of surfaces</b>			
134	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 93% Mod AASHTO density	m2	410
<b>Soil poisoning</b>			
135	Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasion 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m <sup>2</sup> on cleared ground	m2	410
<b>60mm Thick precast concrete DZZ interlocking heavy duty block paving of grey paving blocks in accordance with SANS 1058, laid to falls on and including 25mm thick sand layer with joints filled in with sand, compacted with a vibration compactor:</b>			
136	Paving to toilet areas etc to falls	m2	410
137	Fig. 12 kerbs to sides of paving	m	615
138	15Mpa/19mm unreinforced concrete in haunching	m3	1
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 8</u></b>			
<b><u>STORMWATER CONTROL</u></b>			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>Earthworks</b>			
<b>For preambles see "Specifications of materials and methods to be used - PW 371"</b>			
139	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	250
140	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, paving, etc	m3	35
141	Extra over surplus material from excavations and/stock piles on site to the dumping site to be located by the	m3	35
<b>Contractor.</b>			
142	Extra over trench or hole for excavations in soft rock	m3	20
143	Extra over trench or hole for excavations in hard rock	m3	15
144	Re-compaction of disturbed formation levels, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	250
145	Treat soil under concrete rain water channels, etc. with an approved insecticide solution at the rate not less than 2 litre per 1m2	m2	250
Carried Forward			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

		Brought Forward		R
		<b>Reinforced Concrete</b>		
146	25Mpa/19mm Mass concrete in V-shaped channel 2000mm wide x 75mm thick with rounded salient edges and finished on exposed surfaces with 2:1 cement mortar, with and including one layer of ref.193 mesh reinforcement, laid to falls in panels not exceeding 2.0m long with 12mm bitumen impregnated softboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork	m	230	
147	Extra for fair open end	No	25	
148	Extra for fair stopped end	No	25	
149	Extra for angle intersection	No	30	
		Carried Forward		R
		EXTERNAL WORKS		
		<b>R MAHANGE &amp; ASSOCIATES</b>		

Brought Forward			R
<b><u>SECTION NO. 9</u></b>			
<b><u>BILL NO. 9</u></b>			
<b><u>FENCING</u></b>			
<b>SUPPLEMENTARY PREAMBLES</b>			
<b>For preambles see "Specifications of materials and methods to be used - PW 371"</b>			
<b>Welded mesh fence</b>			
150	1800mm High welded mesh fencing formed of 2.5 x 50mm galvanized welded mesh in long lengths, with three strands of 1.6mm galvanized steel wire at 150mm centres to and including four strings of 2.5mm galvanized steel binding wire stringed through holes and secured to straining bolts or posts ,10mm Diameter galvanized straining eye bolt 300mm long with nut and washer sawn off and bent after straining, 3150mm high, 50mm diameter x 2.8mm round mild steel intermediates posts with cover cap, Corner post formed of 100mm diameter x 3mm thick x 3150mm overall length steel post and 50mm Diameter x 2.6mm steel stays.	m	250
151	1800mm High and 900mm wide swing gate from 32mm diameter framework, all tube hot dipped galvanised after fabrication, with 50 x 50 x 2.5mm hot dipped galvanised welded mesh infill, fixed with heavy duty hinges to 100mm diameter x 3.5mm HDG corner posts, 2400mm long with standard type cap, 150 x 150 x 3mm base plate and casting into and including 500 x 500 x 600mm deep 20MPa concrete in ground, each corner post with off 32mm diameter x 2.5mm HDG stays at 45 degree angle, 50 x 50 x 2mm baseplate and casting into and including 300 x 300 x 300mm deep 20MPa concrete complete with all earthworks, trimmings and fixing	No	1
<b>Carried to Summary</b>			R
<b>EXTERNAL WORKS</b>			
<b>R MAHANGE &amp; ASSOCIATES</b>			

Item No		Quantity	Rate	Amount
	<b><u>PROVISIONAL SUMS</u></b>			
1	Electrical works	Item		
2	Add profit and attendance	%		
3	Borehole refurbishment	Item		
4	Add profit and attendance	%		
5	Refurbishments of existing ablutions	Item		
6	Add profit and attendance	%		
	<b>Carried to Summary</b>			R
	<b>PROVISIONAL SUMS</b>			
	<b>R MAHANGE &amp; ASSOCIATES</b>			

Bill No	<u>FINAL SUMMARY</u>	Page No	Amount
1	P's and G's	31	
2	F10 WATERBORNE	57	
3	F12 WATERBORNE	83	
4	S12 + D WATERBORNE	109	
5	M6 WATERBORNE	135	
6	MD6 WATERBORNE	161	
7	S12 WD-WATERBORNE	187	
8	S8 + D WATERBORNE	215	
9	EXTERNAL WORKS	239	
10	PROVISIONAL SUMS	240	
	Sub Total		R
	Contingency Sum (@10%)		R
	Sub Total		R
	VAT (@15%)		R
	<b>Carried to Form of Tender</b>		R
	<b>R MAHANGE &amp; ASSOCIATES</b>		