

Item No		Quantity	Rate	Amount
	<u>SECTION NO: 1</u>			
	<u>BILL NO: 1 PRELIMINARIES</u>			
	<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
	<p>The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described</p> <p>The Preliminaries for use with the JBCC Series 2000 Principal Building Agreement (May 2005 edition) prepared by the Joint Building Contracts Committee, shall be deemed to be incorporated in these bills of quantities</p> <p>Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above-mentioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</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>PREAMBLES FOR TRADES</p>			
	Carried Forward		R	
	P's & G's			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward				R
<p>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>GENERAL</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><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>Definitions (A1)</u></p>				
1	Definitions and interpretation (clause 1)			
2	F:.....V:.....T:.....	Item	1.00	
<p><u>Objective and Preparation (A2 to A14)</u></p>				
3	Offer acceptance and performance (Clause 2)			
Carried Forward				R
P's & G's				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
4	F:.....V:.....T:.....	Item	1.00		
5	Documents (Clause 3)				
6	F:.....V:.....T:.....	Item	1.00		
7	Design responsibility (Clause 4)				
8	F:.....V:.....T:.....	Item	1.00		
9	Employer's agents (Clause 5)				
10	F:.....V:.....T:.....	Item			
	The principal agent shall:				
	monitor and control progress and scheduling				
	monitor all contract conditions, and				
11	coordinate the efforts of the employer's agents, the contractor and subcontractors Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES AND GENERALS 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				
	Carried Forward			R	
	P's & G's				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
12	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				
13	Site representative (Clause 6)				
14	F:.....V:.....T:.....	Item	1.00		
15	Compliance with regulations (Clause 7)				
16	F:.....V:.....T:.....	Item	1.00		
17	Works risk (Clause 8)				
18	F:.....V:.....T:.....	Item	1.00		
19	Idemnities (Clause 9)				
20	F:.....V:.....T:.....	Item	1.00		
21	Works insurances (Clause 10)				
22	F:.....V:.....T:.....	Item	1.00		
23	Liability insurances (Clause 11)				
24	F:.....V:.....T:.....	Item	1.00		
25	Effecting insurance (Clause 12)				
26	F:.....V:.....T:.....	Item	1.00		
	Carried Forward			R	
	P's & G's				
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	Brought Forward			R	
27	NO CLAUSE (Clause 13	Item			
28	Security (Clause 14)				
29	F:.....V:.....T:.....	Item	1.00		
	<u>Execution (A15-A23)</u>				
30	Preparation for and execution of the works (Clause 15)				
31	F:.....V:.....T:.....	Item			
32	Access to the works (Clause 16)				
33	F:.....V:.....T:.....	Item	1.00		
34	Contract instructions (Clause 17)				
35	F:.....V:.....T:.....	Item	1.00		
36	Setting out of the works (Clause 18)				
37	F:.....V:.....T:.....	Item	1.00		
38	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 encroachment				
39	Assignment (Clause 19)				
40	Nominated subcontractors (Clause 20)				
41	F:..... V:..... T:.....	Item			
42	Selected subcontractors (Clause 21)				
43	F:..... V:..... T:.....	Item			
	Carried Forward			R	
	P's & G's				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R
44	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			
45	All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors			
46	Employer's Direct Contractors (Clause 22)			
47	F:..... V:..... T:.....	Item		
	<u>Completion (A24-A30)</u>			
48	Practical Completion (Clause 24)			
49	F:..... V:..... T:.....	Item	1.00	
50	Works completion (Clause 25)			
51	F:..... V:..... T:.....	Item	1.00	
52	Final Completion (Clause 26)			
53	F:..... V:..... T:.....	Item	1.00	
54	Latent defects liability period (Clause 27)			
55	F:..... V:..... T:.....	Item		
56	Sectional completion (Clause 28)			
57	F:..... V:..... T:.....	Item		
58	The removal and replacement of materials and/or workmanship that do not conform to specification or drawings shall not constitute grounds for an extension of the construction period for an adjustment to the contract sum (Clause 29.3)			
59	Penalty for non-completion (Clause 30)			
	Carried Forward			R
	P's & G's			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward		R	
60	F:..... V:..... T:..... Item			
	<u>Payment (A31-A35)</u>			
61	Interim paymen to the contractor (Clause 31)			
62	F:..... V:..... T:..... Item			
63	Adjustment to the contract value (Clause 32)			
64	F:..... V:..... T:..... Item			
65	Where prices are submitted by the contractor or nominated/selected subcontractors during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing			
66	Recovery of expense and loss (Clause 33)			
67	F:..... V:..... T:..... Item			
68	Fianl account and final payment (Clause 34)			
69	F:..... V:..... T:..... Item			
70	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES AND GENERALS 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			
	Carried Forward		R	
	P's & G's			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward		R
71	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		
72	Payment to other parties (Clause 35)		
73	F:..... V:..... T:.....	Item	
74	Cancellation (A36-A39)		
75	Cancellation by employer - contractor's default (Clause 36)		
76	F:..... V:..... T:.....	Item	
77	Cancellation by employer - loss and damage (Clause 37)		
78	F:..... V:..... T:.....	Item	
79	Cancellation by contractor - employer's default (Clause 38)		
80	F:..... V:..... T:.....	Item	
81	Cancellation - cessation of the works (Clause 39)		
82	F:..... V:..... T:.....	Item	
	<u>Dispute (A40)</u>		
83	Dispute Settlement (Clause 40)		
84	F:..... V:..... T:.....	Item	
	Carried Forward		R
	P's & G's		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

	Brought Forward		R
	<u>Substitute Provisions (A41)</u>		
85	State clauses (Clause 41)		
86	F:..... V:..... T:.....	Item	
87	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES AND GENERALS Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder		
	<u>THE SCHEDULE</u>		
88	Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder		
89	Pre-tender information (Clause 42)		
90	F:..... V:..... T:.....	Item	
91	42.1 CONTRACTING AND OTHER PARTIES	Item	
	42.1.1 Employer: THE MVULA TRUST		
	42.1.2 Principal Agent: R Mahange and Associates		
	<u>Section No. 1</u> <u>PRELIMINARIES</u> <u>Bill No. 1</u> <u>PRELIMINARIES AND GENERALS</u> <u>42.2 CONTRACT DETAILS</u>		
	42.2.1 Works Description: Construction of sanitation facilities Yes		
	42.2.2 Site Description: as per the information on the tender data		
	Carried Forward		R
	P's & G's		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

<p style="text-align: right;">Brought Forward</p> <p>42.2.3 Work or installations by direct contractors: N/A</p> <p>42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only</p> <p>42.2.5 Date on which possession of the site is intended to be given: As per the information provided in the Tender Data</p> <p>42.2.6 Period for the commencement of the works after the contractor takes possession of site: 7 DAYS</p> <p>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)</p> <p>42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day N/A</p> <p>42.2.9 The law applicable to this agreement shall be that of South Africa (country)</p> <p><u>42.3 INSURANCES</u></p> <p>42.3.1 Contract works insurance to be effected by: 42.3 INSURANCES</p> <p>Contractor: For the Sum of R Contract Amount + 10.00 % With a deductible of - to be determined by the contractor</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>P's & G's</p> <p>R MAHANGE AND ASSOCIATES (PTY)LTD</p>	<p style="text-align: right;">R</p>

Brought Forward	R	
42.3.2 Supplementary insurance is required		
No		
42.3.3 Public liability insurance to be effected by:		
Contractor:		
For the Sum		
of R 5 000 000-00		
With a deductible of - to be determined		
by the contractor		
42.4 DOCUMENTS		
42.4.1 Waivers of contractors lien or right of continuing possession is required		
Yes		
42.4.2 Number of construction document copies to be supplied to the contractor free of charge:		
3 Number of		
42.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with:		
"Standard System of Measuring Builders' Work"		
42.4.4 On acceptance of the tender the bills of quantities/lump sum document is to be submitted within		
5 working days		
The priced bills of quantities must be handed in with the tender		
Section No. 1		
PRELIMINARIES		
Bill No. 1		
PRELIMINARIES AND GENERALS		
42.4.5 JBCC Engineering General Conditions are to be included in the contract documents:		
No		
Carried Forward	R	
P's & G's		
R MAHANGE AND ASSOCIATES (PTY)LTD		

	Brought Forward			R
	42.4.6 The contract value is to be adjusted using escalation adjustment indices			
	No			
	Where JBCC CPAP is to be used			
	Base Month N/A			
	42.4.7 Details of changes made to the provision of JBCC standard documentation:			
	Part 1 - Contract Data completed by Employer			
	<u>SECTION B: PRELIMINARIES</u>			
	<u>Definitions and interpretation (B1)</u>			
	Definition and interpretation (B1.1 - B1.4.6)			
92	F:..... V:..... T:.....	Item		
	<u>Documents (B2)</u>			
	Checking of documents (B2.1)			
93	F:..... V:..... T:.....	Item		
	Provisional bills of quantities (B2.2)			
94	F:..... V:..... T:.....	Item	1.00	
	Interests of agents (B2.4)			
95	F:..... V:..... T:.....	Item		
	Priced documents (B2.5)			
96	F:..... V:..... T:.....	Item		
	Tender submission (B2.6)			
97	F:..... V:..... T:.....	Item		
	Carried Forward			R
	P's & G's			
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		Brought Forward			R
	Defined works area (B3.1)				
98	F:..... V:..... T:.....	Item			
	<u>The site (B3)</u>				
	Geotechnical investigation (B3.2)				
99	F:..... V:..... T:.....	Item	1.00		
	Inspection of the site (B3.3)				
100	F:..... V:..... T:.....	Item	1.00		
	Existing premises occupied (B3.4)				
101	F:..... V:..... T:.....	Item			
	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.				
	Previous work - dimensional accuracy (B3.5)				
102	F:..... V:..... T:.....	Item			
	Previous work - defects (B3.6)				
103	F:..... V:..... T:.....	Item			
	Services - known (B3.7)				
104	F:..... V:..... T:.....	Item	1.00		
	Services - unknown (B3.8)				
105	F:..... V:..... T:.....	Item	1.00		
	Protection of trees etc. (B3.9)				
106	F:..... V:..... T:.....	Item	1.00		
		Carried Forward			R
	P's & G's				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

		Brought Forward			R
		Articles of value (B3.10)			
107	F:..... V:..... T:.....	Item			
		Inspection of adjoining properties etc. (B3.11)			
108	F:..... V:..... T:.....	Item			
		Management of contract (B4)			
		Management of the works (B4.1)			
109	F:..... V:..... T:.....	Item			
		Programme for the works (B4.2)			
110	F:..... V:..... T:.....	Item			
		Progress meetings (B4.3)			
111	F:..... V:..... T:.....	Item	1.00		
		Technical meetings (B4.4)			
112	F:..... V:..... T:.....	Item	1.00		
		Labour and Plant records (B4.5)			
113	F:..... V:..... T:.....	Item	1.00		
		Samples, Shop Drawings and Manufacturer's Instructions (B5)			
		Samples of materials (B5.1)			
114	F:..... V:..... T:.....	Item			
		Workmanship samples (B5.2)			
115	F:..... V:..... T:.....	Item			
		Shop drawings (B5.3)			
116	F:..... V:..... T:.....	Item			
		Carried Forward			R
		P's & G's			
		R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward				R
	Compliance with Manufacturer's Instructions (B5.4)				
117	F:..... V:..... T:.....	Item			
	Temporary works and plant (B6)				
	Deposits and fees (B6.1)				
118	F:..... V:..... T:.....	Item			
	Enclosure of the works (B6.2)				
119	F:..... V:..... T:.....	Item			
	Advertising (B6.3)				
120	F:..... V:..... T:.....	Item			
	Plant, equipment, sheds and offices (B6.4)				
121	F:..... V:..... T:.....	Item	1.00		
	Main notice board (B6.5)				
122	F:..... V:..... T:.....	Item	1.00		
	Subcontractors' notice board (B6.6)				
123	F:..... V:..... T:.....	Item			
	Temporary services (B7)				
	Location (B7.1)				
124	F:..... V:..... T:.....	Item			
	Water (B7.2)				
	Option [A] shall apply				
125	F:..... V:..... T:.....	Item	1.00		
	Electricity (B7.3)				
	Carried Forward				R
	P's & G's				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward				R
	Option [A] shall apply				
126	F:..... V:..... T:.....	Item	1.00		
	Telecommunication facilities (B7.4)				
127	F:..... V:..... T:.....	Item	1.00		
	Ablution facilities (B7.5)				
128	F:..... V:..... T:.....	Item	1.00		
	<u>Prime cost amounts (B8)</u>				
	Responsibility for prime cost amounts (B8.1)				
129	F:..... V:..... T:.....	Item			
	<u>Attendance on N/S Subcontractors (B9)</u>				
	General attendance (B9.1)				
130	F:..... V:..... T:.....	Item			
	Special attendance (B9.2)				
131	F:..... V:..... T:.....	Item			
	Commissioning - Fuel, water and power (B9.3)				
132	F:..... V:..... T:.....	Item			
	<u>Financial aspects (B10)</u>				
	Statutory taxes, duties and levies (B10.1)				
133	F:..... V:..... T:.....	Item			
	Payment of preliminaries (B10.2)				
	Option [B] shall apply				
134	F:..... V:..... T:.....	Item			
	Carried Forward				
	P's & G's				R
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R
	Adjustment of preliminaries (B10.3)		
	Option [A] shall apply		
135	F:..... V:..... T:.....	Item	
	Payment certificate cash flow (B10.4)		
136	F:..... V:..... T:.....	Item	
	<u>General (B11)</u>		
	Protection of works (B11.1)		
137	F:..... V:..... T:.....	Item	
	Protection/isolation of existing/sectionally occupied works (B11.2)		
138	F:..... V:..... T:.....	Item	
	Security of the Works (B11.3)		
139	F:..... V:..... T:.....	Item	
	Notice before covering work (B11.4)		
140	F:..... V:..... T:.....	Item	
	Disturbance (B11.5)		
141	F:..... V:..... T:.....	Item	
	Environmental Disturbance (B11.6)		
142	F:..... V:..... T:.....	Item	
	Works cleaning and clearing (B11.7)		
143	F:..... V:..... T:.....	Item	
	Carried Forward		R
	P's & G's		
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	Brought Forward		R
	Vermin (B11.8)		
144	F:..... V:..... T:..... Item		
	Overhand work (B11.9)		
145	F:..... V:..... T:..... Item		
	Instruction manuals and guarantees (B11.10)		
146	F:..... V:..... T:..... Item		
	As built information (B11.11)		
147	F:..... V:..... T:..... Item		
	Tenant Installations (B11.12)		
148	F:..... V:..... T:..... Item		
	Schedule of variables (B12)		
	Pre-tender information (B12.1)		
149	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)		
	Carried Forward		R
	P's & G's		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

<p style="text-align: right;">Brought Forward</p> <p>All trees should be protected and only on instruction of the Principal Agent may any trees be removed</p> <p>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:</p> <p>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.</p> <p>12.1.14 Main notice board (B6.5) Yes</p> <p>12.1.15 Subcontractors notice board (B6.6) A notice board is required Yes</p> <p>12.1.16 Water (B7.2) Alternative Selected: A</p> <p>12.1.17 Electricity (B7.3) Alternative selected: A</p> <p>12.1.18 Telecommunications (B7.4)</p> <p>12.1.19 Ablution facilities (B7.5) Alternative selected: A</p> <p>12.1.20 Protection of existing/sectionally occupied works (B11.2)</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES AND GENERALS</p> <p>12.1.21 Special attendance (B9.2)</p>	<p style="text-align: center;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>P's & G's</p> <p>R MAHANGE AND ASSOCIATES (PTY)LTD</p>	<p style="text-align: center;">R</p>

<p style="text-align: right;">Brought Forward</p> <p>Subcontractor (1) details: N/A</p> <p>12.1.22 Protection of the works (B11.1) N/A</p> <p>12.1.23 Disturbance (B11.5) N/A</p> <p>12.1.24 Environmental Disturbance (B11.6) N/A</p> <p>Post tender information (B12.2)</p> <p>12.2.1 Payment of preliminaries Alternative selected: B</p> <p>12.2.2 Adjustment of preliminaries Alternative selected: A</p> <p>12.2.3 Additional agreed preliminaries items N/A</p> <p>SECTION C: SPECIFIC PRELIMINARIES 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</p> <p>Section No. 1 PRELIMINARIES AND GENERALS SECTION SUMMARY - BUILDING</p> <p>Site instructions</p> <p style="text-align: right;">Carried Forward</p> <p>P's & G's</p> <p>R MAHANGE AND ASSOCIATES (PTY)LTD</p>	<p style="text-align: center;">R</p>
	R

	Brought Forward		R
	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		
150	F:..... V:..... T:..... Item		
	Black economic empowerment and training		
151	F:..... V:..... T:..... Item		
	Proprietary branded products		
	F:..... V:..... T:.....		
	Testing of flat roof waterproofing for water tightness		
	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		
152	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		
	Contract instructions		
153	F:..... V:..... T:..... Item		
	Carried Forward		R
	P's & G's		
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	Brought Forward			R
	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			
	Labour record			
154	F:..... V:..... T:..... 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	Item		
	Plant record			
155	F:..... V:..... T:..... 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	Item		
	Guarantees			
156	F:..... V:..... T:.....	Item	1.00	
	Carried Forward			R
	P's & G's R MAHANGE AND ASSOCIATES (PTY)LTD			

		Brought Forward			R
		<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>	Item		
157					
		Carried Forward			R
		P's & G's			
		R MAHANGE AND ASSOCIATES (PTY)LTD			

		Brought Forward			R
		Co-operation of contractor for cost management			
158	F:..... V:..... T:.....	Item			
	<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>				
		Occupational Health and Safety Specification			
159	F:..... V:..... T:.....	Item	1.00		
	<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) 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. The contractor must take note that compliance with the Occupational Health and Safety Act, Construction</p>				
		Carried Forward			R
	P's & G's				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R
	<p>Regulations and Health and Safety Specification is compulsory. In the event of partial or total noncompliance, 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>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. 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>		
160	F:..... V:..... T:.....	Item	
	Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines		
	Carried Forward		R
	P's & G's		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

	Brought Forward			R	
	Occupational Health and Safety Specification				
161	F:..... V:..... T:..... Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc Occupational Health and Safety Specification	Item			
162	F:..... V:..... T:..... Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc. Provision of personal protective equipment (PPE)	Item			
163	F:..... V:..... T:..... Provision of reflective vests Provision of personal protective equipment (PPE)	Item			
164	F:..... V:..... T:..... Provision of hard hats Provision of personal protective equipment (PPE)	Item	1.00		
165	F:..... V:..... T:..... Provision of protective footwear Provision of personal protective equipment (PPE)	Item	1.00		
166	F:..... V:..... T:.....	Item	1.00		
	Carried Forward			R	
	P's & G's				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R	
	Section No. 1 PRELIMINARIES AND GENERALS SECTION SUMMARY - BUILDING			
	Provision of earplugs			
	Provision of personal protective equipment (PPE)			
167	F:..... V:..... T:..... Item	1.00		
	Provision of dust masks			
	Provision of personal protective equipment (PPE)			
168	F:..... V:..... T:..... Item	1.00		
	Provision of gloves			
	Provision of personal protective equipment (PPE)			
169	F:..... V:..... T:..... Item	1.00		
	Provision of high visibility overalls to SARTSM Chapter 13 Level 3			
	Provision of personal protective equipment (PPE)			
170	F:..... V:..... T:..... Item			
	Provision of SANS approved ear defenders			
	Provision of personal protective equipment (PPE)			
171	F:..... V:..... T:..... Item			
	Provision of face masks (Covid -19)			
	Provision of personal protective equipment (PPE)			
172	F:..... V:..... T:..... Item	1.00		
	Provision of face shields (Covid-19)			
	Carried Forward		R	
	P's & G's			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

		Brought Forward			R
		Provision of personal protective equipment (PPE)			
173	F:..... V:..... T:.....	Item			
		Provision of gloves (Covid-19)			
		Provision of personal protective equipment (PPE)			
174	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)			
175	F:..... V:..... T:.....	Item	1.00		
		Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid - 19)			
		Provision of personal protective equipment (PPE)			
176	F:..... V:..... T:.....	Item			
		Provision of digital infra red non-contact body thermometer (Covid-19, minimum of two per site entrance)			
		Provision of personal protective equipment (PPE)			
177	F:..... V:..... T:.....	Item			
		Provision of perspex screens for office staff (Covid-19, minimum size 600x500mm)			
		Provision of personal protective equipment (PPE)			
178	F:..... V:..... T:.....	Item			
		Provision of signage, including Covid-19 related signage			
		Carried Forward			R
		P's & G's			
		R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward		R	
	Provision of personal protective equipment (PPE)			
179	F:..... V:..... T:..... Item			
	Provision of full time construction health and safety officer (SACPCMP Registered)			
	Provision of personal protective equipment (PPE)			
180	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)			
181	F:..... V:..... T:..... Item			
	Medical screenings, examinations, etc. in terms of Covid 19 regulations			
	Provision of personal protective equipment (PPE)			
182	F:..... V:..... T:..... Item			
	Induction training, including Covid-19 training			
	Provision of personal protective equipment (PPE)			
183	F:..... V:..... T:..... Item			
	Provision of first aid boxes to GSR requirements			
	Provision of personal protective equipment (PPE)			
184	F:..... V:..... T:..... Item			
	Noise monitoring including establishment of noise zones (plant), audio grams (personnel), etc.			
185	F:..... V:..... T:..... Item			
	Carried Forward		R	
	P's & G's			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward		R	
	Submission of health and safety file			
186	HIV/AIDS Awareness F:..... V:..... T:.....	Item	1.00	
	<p>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.</p> <p>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.</p> <p><u>SUMMARY OF CATEGORIES</u></p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time-related R.....</p>			
	Carried to Summary			
	P's & G's			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2:DEMOLITIONS AND ALTERATIONS</u></p> <p><u>ALTERATIONS</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>View site</u></p> <p>Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained.</p> <p><u>Explosives</u></p> <p>No explosives whatsoever may be used for demolition.</p> <p><u>General</u></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent.</p>			
	Carried Forward		R	
	Alterations			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<p>Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent.</p> <p>Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before re-fixing including taking off, easing and re-hanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately.</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc.</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing.</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork.</p>			
<u>DEMOLITIONS AND ALTERATIONS</u>			
<u>DEMOLITIONS OF EXISTING TOILET STRUCTURES</u>			
1	Allow an amount of R30 000 for demolitions	Item	1.00
2	Demolish existing pit toilet structures including hacking up and removing foundations and surface beds, doors, windows and door frames, ironmongery and plumbing fittings complete. All pits are to be filled with soil	No	
Carried Forward			R
Alterations			
R MAHANGE AND ASSOCIATES (PTY)LTD			

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<p>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</p> <p>Soil poisoning</p> <p>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</p> <p><u>SITE CLEARANCE ETC</u></p> <p>Site clearance</p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	75	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	75	
<u>EXCAVATION, FILLING, ETC</u>				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3	20	
4	Thickening under aprons	m3	5	
Extra over trench and hole excavations in earth for excavation in				
5	Soft rock	m3	3	
6	Hard rock	m3	1	
Carried Forward			R	
F8 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
Extra over all excavations for carting away			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10
<u>RISK OF COLLAPSE</u>			
8	Sides of trench and hole excavations not exceeding 2m deep	m2	40
<u>KEEP EXCAVATION FREE OF WATER</u>			
9	Keeping excavations free of all water other than subterranean water	Item	1.00
Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
10	Under floors, steps, paving, etc	m3	10
11	Backfilling to trenches, holes, etc	m3	10
Compaction of surfaces			
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	40
13	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	35
Prescribed density tests on filling			
14	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
Weedkiller mixed in accordance to supplier's specifications			
To bottoms and sides of trenches, etc.	m2	55	
Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	35	
Soil insecticide			
To bottoms and sides of trenches etc	m2	55	
Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	35	
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward				R	
<u>SECTION NO.3</u>					
<u>BILL NO. 2</u>					
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>					
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades					
UNREINFORCED CONCRETE, ETC.					
15MPa/19mm concrete					
19	Surface blinding under footings and bases	m3	5		
20	Ramp	m3	5		
21	Aprons cast in panels to falls	m3	10		
22	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	40		
25MPa/19mm concrete					
23	Strip footings	m3	10		
REINFORCED CONCRETE					
25MPa/19mm concrete					
24	Surface beds	m3	15		
25	Strip footings	m3	10		
26	Ramps	m3	5		
30Mpa/19mm concrete					
27	Surface beds cast in panels on waterproofing.	m3	35		
Carried Forward				R	
F8 Waterborne					
R MAHANGE AND ASSOCIATES (PTY)LTD					

	Brought Forward		R	
TEST CUBES				
28	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	
CONCRETE SUNDRIES				
Finishing top surfaces of concrete smooth with a wood float/steel trowel				
29	Surface beds, slabs, etc	m ²	35	
30	Surface beds, slabs, etc (pits)	m ²	20	
31	Aprons to falls	m ²	40	
SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
Smooth formwork to sides				
32	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	55	
REINFORCEMENT (PROVISIONAL)				
Mild steel reinforcement to structural concrete work				
33	8mm Diameter bars	t	10.00	
34	10mm Diameter bars	t	5.00	
Fabric Reinforcement				
35	Mesh ref. No. 395 fabric reinforcement fixed horizontalt in surface beds etc.	m ²	35	
Carried Forward				R
F8 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R	
<u>SECTION N0.3</u>				
<u>BILL NO. 3</u>				
<u>MASONRY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
SUPPLEMENTARY PREAMBLES				
BRICKWORK				
Sizes in descriptions				
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
Face bricks				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
Pointing				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
FOUNDATIONS (PROVISIONAL)				
Brickwork of NFP bricks in class II mortar				
36	One brick walls	m2	15	
37	half brick walls	m2	5	
Carried Forward			R	
F8 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:		
38	Extra over brickwork for face brickwork	m2	5
	SUPERSTRUCTURE		
	Brickwork of NFP bricks in class II mortar		
39	Half brick walls in beamfilling .	m2	10
40	One brick walls	m2	85
	FACE BRICKWORK		
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:		
41	Extra over brickwork for face brickwork	m2	150
42	Extra over brickwork for brick-on-edge header course lintel	m	10
43	110mm Wide sill set level and slightly projecting	m	10
44	220mm Wide sill set sloping and slightly protecting outside	m	10
45	Fair cutting fitting around pipe not exceeding 100mm	No	25
46	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	10
	BRICKWORK SUNDRIES		
	Brickwork reinforcement		
47	75mm Wide reinforcement built in horizontally	m	145
48	150mm Wide reinforcement built in horizontally	m	255
	Carried Forward		R
	F8 Waterborne		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

Brought Forward			R
Galvanised wire ties etc			
49	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	20
Turning pieces to lintels etc.			
50	115mm Wide turning pieces	m	5
51	230mm Wide turning pieces	m	10
Prestressed fabricated lintels			
52	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	20
Air bricks etc.			
53	230 x 152mm terra-cotta vermin proofed louvered air brick	No	40
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
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 Brikrip DPC" embossed damp proof course			
54	In walls	m2	10
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
55	Under surface beds	m2	45
56	Under aprons and ramps	m2	35
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
57	Around steel windows and door frames	m	95
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
PROFILED METAL SHEETING AND ACCESSORIES			
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
58	Roof covering with pitch not exceeding 25 degrees	m2	55
ROOF AND WALL INSULATION			
59	12" Thermal resistance sisalation laid on 76x50mm pine purlins	m2	55
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
ROOFS, ETC.			
Sawn softwood grade 6			
60	76 x 38mm Wall plates	m	20
61	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	55
62	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	55
Sundries			
63	Two coats creosote on sawn timbers	m2	20
64	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	50
65	Hurricane clips	No	50
EAVES, VERGES, ETC			
Pressed fibre-cement:			
66	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	30
DOORS, ETC			
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
Wrought meranti doors hung to steel frames				
67	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar	No	2	
68	44mm framed, ledged and braced door 813 x 1882mm high (door raised by 150mm from bottom)	No	10	
69	813 x 1914 x 44mm semi solid door	No	2	
Carried Forward			R	
F8 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R	
<u>SECTION NO.3</u>				
<u>BILL NO. 7</u>				
<u>IRONMONGERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
HINGES, BOLTS, ETC				
100mm Chrome plated "D" type handle 3 by solid brace hinges				
CATCHES,CABIN HOOKS, ETC				
70	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	10	
LOCKS				
71	Approved Three lever mortice lock set	No	2	
72	Two lever mortice lock set	No	2	
73	Security double throw dead lock (no latch)	No	2	
HANDLES, ETC.				
Aluminium Pull Handle				
74	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	12.0	
SUNDRIES				
ASSA ABLOY				
75	38mm Diameter rubber door stop plugged	No	8	
Carried Forward			R	
F8 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

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Brought Forward				R
<u>SECTION NO.3</u>				
<u>BILL NO. 8</u>				
<u>METALWORK</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
WELDED SCREENS, GATES, ETC				
Gates to external doors				
Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2		
PRESSED STEEL DOOR FRAMES				
1,2mm Double rebated frames suitable for half brick walls				
Frame for door size 813 x 1882mm high	No	8		
1,2mm Double rebated frames suitable for one brick walls				
Frame for door size 813 x 2032mm high	No	2		
STEEL WINDOWS, DOORS, ETC				
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes				
Window type NE1, size 533 x 654mm high	No	8		
Window type NE7, size 1022 x 654mm high	No	3		
Sundries				
		Carried Forward		R
F8 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

<p>Brought Forward</p> <p>Cage, etc</p> <p>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</p> <p>No</p>	<p>8</p>	<p>R</p>	
<p>Carried Forward</p> <p>F8 Waterborne</p> <p>R MAHANGE AND ASSOCIATES (PTY)LTD</p>		<p>R</p>	

		Brought Forward				R
<u>SECTION NO.3</u>						
<u>BILL NO. 9</u>						
<u>PLASTERING</u>						
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades						
GRANOLITHIC						
Untinted granolithic on concrete						
88	20mm Thick on floors	m2	42			
		Carried Forward				R
F8 Waterborne						
R MAHANGE AND ASSOCIATES (PTY)LTD						

Brought Forward			R
<u>SECTION NO.3</u>			
<u>BILL NO. 11</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
89	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	30
90	Extra over eaves gutter for stopped end	No	4
91	75 x 100mm Diameter rainwater down pipes fixed to wall	m	15
92	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4
93	Ditto .for shoe	No	4
SANITARY FITTINGS			
"Vaal" or similar and approved			
94	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required for disable toilets.	No	6
PRECAST CONCRETE WASH HAND TROUGH			
95	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
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
Rainwater tank, etc.			
96	10000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
97	110mm Pipes laid in and including trenches not exceeding 1m deep	m	60
Extra over uPVC pipes for fittings			
98	110mm Bend	No	15
99	110mm Junction	No	15
uPVC gulleys			
100	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	6
TRAPS ETC			
Marley			
101	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2
TAPS, VALVES, ETC			
102	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	8
103	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	8
SANITARY PLUMBING			
Carried Forward			R
F8 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

		Brought Forward			R
	uPVC pipes				
104	50mm Pipes	m	135		
	Extra over uPVC pipes for fittings				
105	50mm Bend	No	12		
106	50mm Access bend	No	12		
107	50mm Junction	No	12		
	WATER SUPPLIES				
	Class 0 copper pipes				
108	15mm Pipes	m	10		
109	22mm Pipes	m	10		
	Extra over class 0 copper pipes for capillary fittings				
110	15mm Fittings	No	6		
111	22mm Pipes	No	4		
	TESTING				
112	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item	2.00		
	SUNDRIES				
113	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	40		
114	Ditto, but in hard rock	m3	10		
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	5		
	Carried Forward				R
	F8 Waterborne				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

[illegible]

Brought Forward

R

SECTION NO.3

BILL NO. 12

GLAZING

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

GLAZING TO STEEL WITH PUTTY

6,28mm Obscure safety glass

118	Panes not exceeding 1 m2
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m2

6

Carried Forward

R

F8 Waterborne

R MAHANGE AND ASSOCIATES (PTY)LTD

	Brought Forward			R
	<u>SECTION NO.3</u>			
	<u>BILL NO. 13</u>			
	<u>PAINTWORK</u>			
	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	10	
	ON METAL			
	Carried Forward			R
	F8 Waterborne			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
Carried Forward			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward				R	
<p>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</p> <p>Soil poisoning</p> <p>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</p> <p><u>SITE CLEARANCE ETC</u></p> <p>Site clearance</p>					
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	75		
<p>Section No. 2 BUILDING Bill No. 2 EARTHWORKS (PROVISIONAL)</p>					
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	75		
<p><u>EXCAVATION, FILLING, ETC</u></p> <p>Excavation in earth not exceeding 2m deep</p>					
3	Trenches	m3	20		
4	Thickening under aprons	m3	10		
<p>Extra over trench and hole excavations in earth for excavation in</p>					
5	Soft rock	m3	3		
Carried Forward				R	
<p>FD6 Waterborne</p> <p>R MAHANGE AND ASSOCIATES (PTY)LTD</p>					

Brought Forward			R
6	Hard rock	m3	1
Extra over all excavations for carting away			
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	15
<u>RISK OF COLLAPSE OF EXCAVATIONS</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	50
Keeping excavations free of water			
9	Keeping excavations free of all water other than subterranean water	Item	1.00
Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
10	Under floors, steps, paving, etc	m3	5
11	Backfilling to trenches, holes, etc	m3	10
Compaction of surfaces			
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	55
13	Under floors, steps, paving, etc.	m2	40
Prescribed density tests on filling			
14	Modified AASHTO Density	No	5
<u>SOIL POISONING</u>			
Carried Forward			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

[illegible]

Brought Forward				R	
<u>SECTION NO.4</u>					
<u>BILL NO. 2</u>					
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>					
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades					
UNREINFORCED CONCRETE, ETC.					
15MPa/19mm concrete					
19	Surface blinding under footings and bases	m3	5		
20	Aprons cast in panels to falls	m3	10		
21	Ramp	m3	5		
25MPa/19mm concrete					
22	Strip footings	m3	10		
REINFORCED CONCRETE					
25MPa/19mm concrete					
23	Surface beds	m3	6		
TEST CUBES					
24	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	24.0		
CONCRETE SUNDRIES					
Carried Forward				R	
FD6 Waterborne					
R MAHANGE AND ASSOCIATES (PTY)LTD					

[illegible]

Brought Forward			R	
<u>SECTION NO.4</u>				
<u>BILL NO. 3</u>				
<u>MASONRY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
SUPPLEMENTARY PREAMBLES				
BRICKWORK				
Sizes in descriptions				
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
Face bricks				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
Pointing				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
FOUNDATIONS (PROVISIONAL)				
Brickwork of NFP bricks in class II mortar				
30	One brick walls	m2	25	
31	Half brick walls	m2	10	
FACE BRICKWORK				
Carried Forward			R	
FD6 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:				
32	Extra over brickwork for face brickwork	m2	5		
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
33	Half brick walls in beamfilling .	m2	30		
34	One brick walls	m2	105		
	FACE BRICKWORK				
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:				
35	Extra over brickwork for face brickwork	m2	130		
	Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:				
36	Extra over brickwork for brick-on-edge header course lintel	m	10		
37	110mm Wide sill set level and slightly projecting	m	10		
38	220mm Wide sill set sloping and slightly protecting outside	m	10		
39	Fair cutting fitting around pipe not exceeding 100mm	No	12		
40	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	6		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
41	75mm Wide reinforcement built in horizontally	m	41		
42	150mm Wide reinforcement built in horizontally	m	280		
	Carried Forward			R	
	FD6 Waterborne				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
Galvanised wire ties etc			
43	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	32
Turning pieces to lintels etc.			
44	115mm Wide turning pieces	m	4
45	230mm Wide turning pieces	m	9
Prestressed fabricated lintels			
46	110 x 75mm Lintels in lengths exceeding 6m	m	12
Air bricks etc.			
47	230 x 152mm terra-cotta vermin proofed louvered air brick	No	110
48	set of two 22x155mm high terra cotta clay varmin proof air bricks including making good reveals and gauze	No	10
Carried Forward			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<u>SECTION NO.4</u>				
<u>BILL NO. 4</u>				
<u>WATERPROOFING</u>				
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 Brikrip DPC" embossed damp proof course				
49	In walls	m2	20	
50	Under aprons and ramps	m2	50	
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
51	Under surface beds	m2	75	
FLOOR AND WALL SEALERS				
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight				
52	Around steel windows and door frames	m	85	
Carried Forward			R	
FD6 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R	
<u>SECTION NO.4</u>				
<u>BILL NO. 5</u>				
<u>ROOF COVERINGS ETC</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
PROFILED METAL SHEETING AND ACCESSORIES				
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
53	Roof covering with pitch not exceeding 25 degrees	m2	55	
ROOF AND WALL INSULATION				
54	12" Thermal resistance sisalation laid on purlins	m2	55	
Carried Forward			R	
FD6 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
	<u>SECTION NO.4</u>				
	<u>BILL NO. 6</u>				
	<u>CARPENTRY AND JOINERY</u>				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
	ROOFS, ETC.				
	Sawn softwood grade 6				
55	76 x 38mm Wall plates	m	35		
56	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	65		
57	50 x 76mm Purlins in lengths exceeding 8,1	m	80		
	Sundries				
58	Two coats creosote on sawn timbers	m2	40		
59	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	77		
60	Hurricane clips	No	77		
	EAVES, VERGES, ETC				
	Pressed fibre-cement:				
61	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	35		
	DOORS, ETC				
	Wrought meranti doors hung to steel frames				
62	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3		
	Carried Forward			R	
	FD6 Waterborne				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

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Brought Forward			R	
<u>SECTION NO.4</u>				
<u>BILL NO. 7</u>				
<u>IRONMONGERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
HINGES, BOLTS, ETC				
100mm Chrome plated "D" type handle 3 by solid brace hinges				
CATCHES,CABIN HOOKS, ETC				
65	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3	
LOCKS				
Approved				
66	Three lever mortice lock set	No	3	
67	Two lever mortice lock set	No	3	
68	Security double throw dead lock (no latch)	No	2	
HANDLES, ETC.				
Aluminium Pull Handle				
69	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	12.0	
70	100mm chrome "D" Type Handle 3 by solid brace hinges	No	6	
SUNDRIES				
Carried Forward			R	
FD6 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

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Brought Forward			R	
<u>SECTION NO.4</u>				
<u>Bill No. 8</u>				
<u>IRONMONGERY</u>				
BATHROOM FITTINGS				
Sundries				
Kimberley-Clark or Similar				
76	SQ2 code 405607B white none lockable toilet roll holder	No	7	
stainless Steel				
77	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	7	
78	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	7	
Carried Forward			R	
FD6 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward				R	
<u>SECTION NO.4</u>					
<u>BILL NO. 9</u>					
<u>METALWORK</u>					
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades					
WELDED SCREENS, GATES, ETC					
Gates to external doors					
79	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2		
80	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No	1		
PRESSED STEEL DOOR FRAMES					
1,2mm Double rebated frames suitable for half brick walls					
81	Frame for door size 813 x 1882mm high	No	6		
1,2mm Double rebated frames suitable for one brick walls					
82	Frame for door size 813 x 2032mm high	No	2		
83	Frame for door size 914 x 2032mm high	No	1		
STEEL WINDOWS, DOORS, ETC					
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes					
84	Window type NE1, size 533 x 654mm high	No	8		
85	Window type NE7, size 1022 x 654mm high	No	3		
Carried Forward				R	
FD6 Waterborne					
R MAHANGE AND ASSOCIATES (PTY)LTD					

Brought Forward		R
Sundries		
Cage, etc		
86	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 8
Carried Forward		R
FD6 Waterborne		
R MAHANGE AND ASSOCIATES (PTY)LTD		

Brought Forward

R

SECTION NO.4

BILL NO. 11

PLASTERING

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

GRANOLITHIC

Untinted granolithic on concrete

87	20mm Thick on floors
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m2

35

Carried Forward

R

FD6 Waterborne

R MAHANGE AND ASSOCIATES (PTY)LTD

Brought Forward			R	
<u>SECTION NO.4</u>				
<u>BILL NO. 12</u>				
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>				
RAINWATER DISPOSAL				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
Aluminium Zinc Seamless Gutters				
88	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	35	
89	Extra over eaves gutter for stopped end	No	4	
90	75 x 100mm Diameter rainwater down pipes fixed to wall	m	15	
91	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
92	Ditto .for shoe	No	4	
SANITARY FITTINGS				
"Vaal" or similar and approved				
93	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	4	
94	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	
95	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	1	
Carried Forward			R	
FD6 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
PRECAST CONCRETE WASH HAND TROUGH			
96	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
Rainwater tank, etc.			
97	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
98	110mm Pipes laid in and including trenches not exceeding 1m deep	m	120
Extra over uPVC pipes for fittings			
99	110mm Bend	No	15
100	110mm Junction	No	15
uPVC gulleys			
101	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
WASTE UNIONS ETC			
"Cobra Watertech"			
102	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	7
TRAPS ETC			
"Cobra Watertech"			
103	Cobra Ref. 365/40" CP bottle trap	No	7
Carried Forward			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
Marley			
104	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
TAPS, VALVES, ETC			
105	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	9
106	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	9
SANITARY PLUMBING			
uPVC pipes			
107	50mm Pipes	m	20
Extra over uPVC pipes for fittings			
108	50mm Bend	No	10
109	50mm Access bend	No	10
110	50mm Junction	No	10
WATER SUPPLIES			
Class 0 copper pipes			
111	15mm Pipes	m	25
112	22mm Pipes	m	25
Extra over class 0 copper pipes for capillary fittings			
113	15mm Fittings	No	13
114	22mm Pipes	No	13
Carried Forward			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
Section No. 2 BUILDING Bill No. 11 PLUMBING AND DRAINAGE(PROVISIONAL)			
SUNDRIES			
115	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	45
116	Ditto, but in hard rock	m3	15
117	Extra over excavation for pipe trenches, chambers, etc for carting away surplus material to a dumping site to be located by the contractor	m3	10
118	Extra over backfilling to drain trenches, chambers, etc for suitable earth backfilling supplied by the contractor	m3	50
TESTING			
119	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item	1.00
Carried Forward			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

[illegible]

	Brought Forward			R
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 14</u>			
	<u>PAINTWORK</u>			
	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			
121	On fascias and barge boards	m2	10	
	ON METAL			
	Carried Forward			R
	FD6 Waterborne			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
	Prime and paint undercoat and 2 finishing coats in gloss enamel, colour TBC.		
122	On door frames	m2	5
	Spot prining 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		
123	On windows with burglar bars	m2	5
	1 coat zinc chromate primer minimum and 2 coats gloss enamel (Exterior Quality)		
124	On gates (Measured over the full flat area of both sides)	m2	10
Section No. 2 BUILDING Bill No. 13 PAINTWORK ON WOOD Under coat and minimum 2 coats gloss enamel, colour TBC			
125	On doors (External)	m2	10
126	On doors (Internal)	m2	20
Carried to Summary			R
FD6 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 5</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
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			
Soil poisoning			
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			
SITE CLEARANCE ETC			
Site clearance			
Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc			
m2	115		
Stripping average 100mm thick layer of top soil and stockpiling on site			
m2	115		
EXCAVATION, FILLING, ETC			
Excavation in earth not exceeding 2m deep			
Trenches			
m3	30		
Thickening under aprons			
m3	5		
Extra over trench and hole excavations in earth for excavation in			
Soft rock			
m3	4		
Hard rock			
m3	2		
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward			R	
	Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	15		
	<u>RISK OF COLLAPSE OF EXCAVATIONS</u>				
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	80		
	<u>KEEP EXCAVATION FREE OF WATER</u>				
9	Keeping excavations free of all water other than subterranean water	Item	1.00		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
10	Under floors, steps, paving, etc	m3	10		
11	Backfilling to trenches, holes, etc	m3	14		
	Compaction of surfaces				
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	65		
13	Under floors, steps, paving, etc.	m2	50		
	Prescribed density tests on filling				
14	Modified AASHTO Density	No	5		
	SOIL POISONING				
	Weedkiller mixed in accordance to supplier's specifications				
15	To bottoms and sides of trenches, etc.	m2	88		
	Carried Forward			R	
	MD7 Waterborne				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

[illegible]

Brought Forward			R
<u>SECTION NO.5</u>			
<u>BILL NO. 2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
UNREINFORCED CONCRETE, ETC.			
15MPa/19mm concrete			
19	Surface blinding under footings and bases	m3	5
20	Ramp	m3	5
25MPa/19mm concrete			
21	Strip footings	m3	10
REINFORCED CONCRETE			
25MPa/19mm concrete			
22	Surface beds	m3	20
TEST CUBES			
23	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	24.0
CONCRETE SUNDRIES			
Finishing top surfaces of concrete smooth with a wood float/steel trowel			
24	Surface beds, slabs, etc	m2	65
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward			R
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)			
	Smooth formwork to sides			
25	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	65	
	Carried Forward			
	Section No. 2			
	BUILDING			
	Bill No. 3			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	Brought Forward			
	REINFORCEMENT (PROVISIONAL)			
	Mild steel reinforcement to structural concrete work			
26	8mm Diameter bars	t	2.00	
27	10mm Diameter bars	t	1.00	
	Fabric Reinforcement			
28	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds etc.	m2	65	
	Carried Forward			R
	MD7 Waterborne			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<u>SECTION NO.5</u>				
<u>BILL NO. 3</u>				
<u>MASONRY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
SUPPLEMENTARY PREAMBLES				
BRICKWORK				
Sizes in descriptions				
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
Face bricks				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
Pointing				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
FOUNDATIONS (PROVISIONAL)				
Brickwork of NFP bricks in class II mortar				
29	One brick walls	m2	30	
30	Half brick walls	m2	10	
FACE BRICKWORK				
Carried Forward			R	
MD7 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:		
31	Extra over brickwork for face brickwork	m2	5
	SUPERSTRUCTURE		
	Brickwork of NFP bricks in class II mortar		
32	Half brick walls in beamfilling .	m2	15
33	One brick walls	m2	150
	FACE BRICKWORK		
	Corobrick "Letaba Satin Face bricks" pointed with recessed horizontal and vertical joints:		
34	Extra over brickwork for face brickwork	m2	220
	Section No. 2 BUILDING Bill No. 4 MASONRY		
	Corobrick "Letaba Satin Face bricks" Brick-on-edge header course copings, sills, etc pointed with recessed joints on all exposed faces:		
35	Extra over brickwork for brick-on-edge header course lintel	m	10
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	12
39	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	6
	BRICKWORK SUNDRIES		
	Carried Forward		R
	MD7 Waterborne		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

Brought Forward			R
Brickwork reinforcement			
40	75mm Wide reinforcement built in horizontally	m	120
41	150mm Wide reinforcement built in horizontally	m	680
Galvanised wire ties etc			
42	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	42
Turning pieces to lintels etc.			
43	115mm Wide turning pieces	m	10
44	230mm Wide turning pieces	m	10
Prestressed fabricated lintels			
45	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 6m	m	10
Air bricks etc.			
46	230 x 152mm terra-cotta vermin proofed louvered air brick	No	75
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
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 Brikrip DPC" embossed damp proof course			
47	In walls	m2	15
48	Under aprons and ramps	m2	45
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
49	Under surface beds	m2	65
FLOOR AND WALL SEALERS			
Secomastic non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight			
50	Around steel windows and door frames	m	120
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<u>SECTION NO. 5</u>			
<u>BILL NO. 5</u>			
<u>ROOF COVERINGS ETC</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
PROFILED METAL SHEETING AND ACCESSORIES			
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)			
51	Roof covering with pitch not exceeding 25 degrees	m2	75
ROOF AND WALL INSULATION			
52	12" Thermal resistance sisalation laid on purlins	m2	75
Section No. 2 BUILDING Bill No. 6 ROOF COVERINGS			
SECTION NO. 1			
BILL NO. 6			
CARPENTRY AND JOINERY			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
ROOFS, ETC.			
Sawn softwood grade 6			
53	76 x 38mm Wall plates	m	45
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward			R	
54	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	85		
55	50 x 76mm Purlins in lengths exceeding 8,1m	m	85		
	Sundries				
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	80		
58	Hurricane clips	No	80		
	EAVES, VERGES, ETC				
	Pressed fibre-cement:				
59	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	45		
	DOORS, ETC				
	Wrought meranti doors hung to steel frames				
60	44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3		
61	813 x 1914 x 44mm semi solid door	No	7		
62	4mm framed, ledged and braced door 915x2032mm high including external weather (disabled)	No	1		
	Carried Forward			R	
	MD7 Waterborne				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R	
<u>SECTION NO. 5</u>				
<u>BILL NO. 7</u>				
<u>IRONMONGERY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
HINGES, BOLTS, ETC				
100mm Chrome plated "D" type handle 3 by solid brace hinges				
CATCHES,CABIN HOOKS, ETC				
63	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3	
LOCKS				
Approved				
64	Three lever mortice lock set	No	3	
65	Two lever mortice lock set	No	3	
66	Indicator lock set	No	7	
67	Security double throw dead lock (no latch)	No	2	
HANDLES, ETC.				
Aluminium Pull Handle				
68	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	13.0	
69	100mm chrome "D" Type Handle 3 by solid brace hinges	No	7	
Carried Forward			R	
MD7 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

		Brought Forward			R
		SUNDRIES			
		ASSA ABLOY			
70	38mm Diameter rubber door stop plugged	No	10		
		Vaal Paragon			
71	32mm Type 9 back grab rail 800mm long plugged	No	1		
72	32mm Type 8 side grab rail 900mm girth plugged	No	1		
		LETTERS, NAMEPLATES, ETC			
		Dorma:			
73	DSS-130 Engraved "Male" information sign, plugged	No	2		
74	DSS-131 Engraved "Female" information sign, plugged	No	4		
75	DSS-133 Engraved "Disabled" information sign, plugged	No	1		
		BATHROOM FITTINGS			
		Sundries			
		Kimberley-Clark or Similar			
76	SQ2 code 405607B white none lockable toilet roll holder	No	8		
		stainless Steel			
77	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	8		
78	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	8		
		Carried Forward			R
	MD7 Waterborne				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward				R	
<u>SECTION NO. 5</u>					
<u>BILL NO. 8</u>					
<u>METALWORK</u>					
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades					
WELDED SCREENS, GATES, ETC					
Gates to external doors					
79	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2		
80	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No	1		
PRESSED STEEL DOOR FRAMES					
1,2mm Double rebated frames suitable for half brick walls					
81	Frame for door size 813 x 2032mm high	No	6		
1,2mm Double rebated frames suitable for one brick walls					
82	Frame for door size 813 x 2032mm high	No	2		
83	Frame for door size 914 x 2032mm high	No	3		
STEEL WINDOWS, DOORS, ETC					
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes					
84	Window type NE1, size 533 x 654mm high	No	13		
85	Window type NE7, size 1022 x 654mm high	No	5		
Carried Forward				R	
MD7 Waterborne					
R MAHANGE AND ASSOCIATES (PTY)LTD					

Brought Forward		R
Sundries		
Cage, etc		
86	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 8
Carried Forward		R
MD7 Waterborne		
R MAHANGE AND ASSOCIATES (PTY)LTD		

	Brought Forward			R
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 9</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	GRANOLITHIC			
	Untinted granolithic on concrete			
87	20mm Thick on floors	m2	64	
	Section No. 2 BUILDING Bill No. 10 PLASTERING			
	SECTION NO. 1			
	BILL NO. 10			
	PLUMBING AND DRAINAGE(PROVISIONAL)			
	RAINWATER DISPOSAL			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	Aluminium Zinc Seamless Gutters			
88	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	45	
89	Extra over eaves gutter for stopped end	No	4	
90	75 x 100mm Diameter rainwater down pipes fixed to wall	m	15	
	Carried Forward			R
	MD7 Waterborne			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward			R
91	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4	
92	Ditto .for shoe	No	4	
SANITARY FITTINGS				
"Vaal" or similar and approved				
93	Ceramic wall mounted wash hand basin, complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	3	
94	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	7	
95	Paraplegic floor mounted suite with purpose made flush lever, etc. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	1	
96	Vitreous china urinal. Complete with all fittings and accesseries including cutting & making good wall & floor wherever required.	No	4	
Section No. 2				
BUILDING				
Bill No. 11				
PLUMBING AND DRAINAGE(PROVISIONAL)				
PRECAST CONCRETE WASH HAND TROUGH				
97	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	
Rainwater tank, etc.				
98	2 500 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1	
Carried Forward				R
MD7 Waterborne				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R	
	SOIL DRAINAGE			
	uPVC pipes			
99	110mm Pipes laid in and including trenches not exceeding 1m deep	m	140	
	Extra over uPVC pipes for fittings			
100	110mm Bend	No	30	
101	110mm Junction	No	20	
	uPVC gulleys			
102	110mm Gully not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	10	
	WASTE UNIONS ETC			
	"Cobra Watertech"			
103	Cobra Watertech 32mm chrome plated basin waste (code: 308) with 62mm diameter flange, 80mm long shank and plug	No	10	
	Section No. 2 BUILDING Bill No. 11 PLUMBING AND DRAINAGE(PROVISIONAL)			
	TRAPS ETC			
	"Cobra Watertech"			
104	Cobra Ref. 365/40" CP bottle trap	No	7	
	Marley			
105	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	7	
	Carried Forward			R
	MD7 Waterborne			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
TAPS, VALVES, ETC			
106	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	3
107	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	3
SANITARY PLUMBING			
uPVC pipes			
108	50mm Pipes	m	100
Extra over uPVC pipes for fittings			
109	50mm Bend	No	25
110	50mm Access bend	No	10
111	50mm Junction	No	10
WATER SUPPLIES			
Class 0 copper pipes			
112	15mm Pipes	m	25
113	22mm Pipes	m	25
Extra over class 0 copper pipes for capillary fittings			
114	15mm Fittings	No	10
115	22mm Pipes	No	10
Section No. 2 BUILDING Bill No. 11 PLUMBING AND DRAINAGE(PROVISIONAL)			
Carried Forward			R
MD7 Waterborne			
R MAHANGE AND ASSOCIATES (PTY)LTD			

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Brought Forward

R

SECTION NO. 5

BILL NO. 12

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

121	Panes not exceeding 1 m2
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m2

15

Carried Forward

R

MD7 Waterborne

R MAHANGE AND ASSOCIATES (PTY)LTD

	Brought Forward			R
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 13</u>			
	<u>PAINTWORK</u>			
	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			
122	On fascias and barge boards	m2	10	
	ON METAL			
	Carried Forward			R
	MD7 Waterborne			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 6</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
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			
Nature of ground			
A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured			
Carting away of excavated material			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
Filling			
		R	
Carried Forward			
SD7 Enviroloo			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<p>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</p> <p>Soil poisoning</p> <p>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</p> <p>SITE CLEARANCE ETC</p> <p>Site clearance</p>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	140	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	140	
EXCAVATION, FILLING, ETC				
Excavation in earth not exceeding 2m deep				
3	Trenches	m3	25	
4	Pits	m3	35	
5	Thickening under aprons	m3	10	
Extra over trench and hole excavations in earth for excavation in				
6	Soft rock	m3	7	
7	Hard rock	m3	3	
Carried Forward			R	
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
	Extra over all excavations for carting away				
8	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	45		
	Risk of collapse of excavations				
9	Sides of trench and hole excavations not exceeding 2m deep	m2	90		
	Keeping excavations free of water				
10	Keeping excavations free of all water other than subterranean water	Item	1.00		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
11	Under floors, steps, paving, etc	m3	5		
12	Backfilling to trenches, holes, etc	m3	15		
	Compaction of surfaces				
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	35		
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	25		
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	40		
	Carried Forward			R	
	SD7 Enviroloo				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R
	Prescribed density tests on filling			
16	Modified AASHTO Density	No	5	
	SOIL POISONING			
	Weedkiller mixed in accordance to supplier's specifications			
17	To bottoms and sides of trenches, etc.	m2	45	
18	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	40	
19	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	40	
	Soil insecticide			
20	To bottoms and sides of trenches etc	m2	45	
21	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming(pits)	m2	40	
22	Under floors, aprons etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	40	
	Carried Forward			R
	SD7 Enviroloo			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<u>SECTION NO. 6</u>				
<u>BILL NO. 2</u>				
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
UNREINFORCED CONCRETE, ETC.				
15MPa/19mm concrete				
23	Surface blinding under footings and bases	m3	5	
24	Aprons cast in panels to falls	m3	15	
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	40	
25MPa/19mm concrete				
26	Strip footings	m3	15	
27	Ramps	m3	4	
REINFORCED CONCRETE				
25MPa/19mm concrete				
28	Surface beds in pits	m3	8	
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	40	
Carried Forward			R	
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
	30Mpa/19mm concrete				
30	Surface beds cast in panels on waterproofing.	m3	5		
31	Slabs (pits)	m3	5		
	TEST CUBES				
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	9.0		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a wood float/steel trowel				
33	Surface beds, slabs, etc	m2	45		
34	Surface beds, slabs, etc (pits)	m2	25		
35	Aprons to falls	m2	50		
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	Smooth formwork to sides				
36	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	45		
	Permanent formwork to soffits				
37	Slabs propped up not exceeding 1,5m high	m2	20		
38	Form 500mm radius opening in floor slab	No	2		
	REINFORCEMENT (PROVISIONAL)				
	Mild steel reinforcement to structural concrete work				
39	8mm Diameter bars	t	5.00		
40	10mm Diameter bars	t	3.00		
	Carried Forward			R	
	SD7 Enviroloo				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

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Brought Forward			R	
<u>SECTION NO. 6</u>				
<u>BILL NO. 3</u>				
<u>MASONRY</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
SUPPLEMENTARY PREAMBLES				
BRICKWORK				
Sizes in descriptions				
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
Face bricks				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
Pointing				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
FOUNDATIONS (PROVISIONAL)				
Brickwork of NFP bricks in class II mortar				
42	One brick walls	m2	30	
43	One brick walls in pits	m2	45	
FACE BRICKWORK				
44	Extra over brickwork for face brickwork	m2	5	
Carried Forward			R	
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward				R
SUPERSTRUCTURE				
Brickwork of NFP bricks in class II mortar				
45	Half brick walls	m2	60	
46	Half brick walls in beamfilling	m2	10	
47	One brick walls	m2	85	
FACE BRICKWORK				
48	Extra over brickwork for face brickwork	m2	110	
49	Extra over brickwork for brick-on-edge header course lintel	m	14	
50	110mm Wide sill set level and slightly projecting	m	14	
51	220mm Wide sill set sloping and slightly protecting outside	m	10	
52	Fair cutting fitting around pipe not exceeding 100mm	No	20	
53	Fair cutting fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	6	
BRICKWORK SUNDRIES				
Brickwork reinforcement				
54	75mm Wide reinforcement built in horizontally	m	170	
55	150mm Wide reinforcement built in horizontally	m	560	
Galvanised wire ties etc				
56	6mm Diameter roof tie 2m long with one end fixed to timber and other end built into brickwork	No	24	
Turning pieces to lintels etc.				
57	115mm Wide turning pieces	m	5	
Carried Forward				R
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
58	230mm Wide turning pieces	m	12
Prestressed fabricated lintels			
59	110 x 75mm Lintels in lengths exceeding 6m	m	20
Air bricks etc.			
60	230 x 152mm terra-cotta vermin proofed louvered air brick	No	40
Carried Forward			R
SD7 Enviroloo			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
<u>SECTION NO. 6</u>			
<u>BILL NO. 4</u>			
<u>WATERPROOFING</u>			
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	15
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
62	Under surface beds	m2	45
63	Under aprons and ramps	m2	35
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	125
Carried Forward			R
SD7 Enviroloo			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<u>SECTION NO. 6</u>				
<u>BILL NO. 5</u>				
<u>ROOF COVERINGS ETC</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
PROFILED METAL SHEETING AND ACCESSORIES				
0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)				
65	Roof covering with pitch not exceeding 25 degrees	m2	60	
ROOF AND WALL INSULATION				
66	12" Thermal resistance sisalation laid on 76x50mm pine purlins	m2	60	
Carried Forward			R	
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
<u>SECTION NO. 6</u>			
<u>BILL NO. 6</u>			
<u>CARPENTRY AND JOINERY</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
ROOFS, ETC.			
Sawn softwood grade 6			
67	76 x 38mm Wall plates	m	32
68	38 x 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	66
69	50 x 76mm Purlins in lengths exceeding 6,6m	m	78
Sundries			
70	Two coats creosote on sawn timbers	m2	45
71	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	80
72	Hurricane clips	No	80
EAVES, VERGES, ETC			
Pressed fibre-cement:			
73	15 x 230mm Nutec Fascias and barge boards including galvanised steel H-profile jointing strips	m	45
DOORS, ETC			
Wrought meranti doors hung to steel frames			
74	813 x 1914 x 44mm semi solid door	No	7
Carried Forward			R
SD7 Enviroloo			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward		R
44mm framed, ledged and braced door 813 x 2032mm high including external weather bar (D1)	No	3
4mm framed, ledged and braced door 915x2032mm high including external weather (disabled)	No	1
Carried Forward		R
SD7 Enviroloo		
R MAHANGE AND ASSOCIATES (PTY)LTD		

		Brought Forward			R
		<u>SECTION NO. 6</u>			
		<u>BILL NO. 7</u>			
		<u>IRONMONGERY</u>			
		For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
		HINGES, BOLTS, ETC			
		100mm Chrome plated "D" type handle 3 by solid brace hinges			
		CATCHES,CABIN HOOKS, ETC			
77	100mm brace Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3		
		LOCKS			
		Approved			
78	Three lever mortice lock set	No	3		
79	2 lever mortice lock set	No	3		
80	Security double throw dead lock (no latch)	No	3		
		HANDLES, ETC.			
		Aluminium Pull Handle			
81	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres.	Sets	10.0		
		SUNDRIES			
		ASSA ABLOY			
82	38mm Diameter rubber door stop plugged	No	10		
		Carried Forward			R
		SD7 Enviroloo			
		R MAHANGE AND ASSOCIATES (PTY)LTD			

	Brought Forward		R	
	Vaal Paragon			
83	32mm Type 9 back grab rail 800mm long plugged	No	1	
84	32mm Type 8 side grab rail 900mm girth plugged	No	1	
	LETTERS, NAMEPLATES, ETC			
	Dorma:			
85	DSS-130 Engraved "male" information sign, plugged	No	2	
86	DSS-133 Engraved "Disabled" information sign, plugged	No	1	
	Sundries			
	Kimberley-Clark or Similar			
87	SQ2 code 405607B white none lockable toilet roll holder	No	9	
	stainless Steel			
88	Stainless steel mirror size: 350 x 400mm plugged to wall with chrome plated screws.	No	6	
89	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc	No	9	
	Carried Forward			R
	SD7 Enviroloo			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R	
<u>SECTION NO. 6</u>				
<u>BILL NO. 8</u>				
<u>METALWORK</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
WELDED SCREENS, GATES, ETC				
Gates to external doors				
90	Purpose made square hollow section mild steel single security gate and frame size to fit standard door, size 813 x 2032mm high	No	2	
91	Single gate and frame size to fit none standard door, size approximately 915 x 2032mm high (disable)	No	1	
PRESSED STEEL DOOR FRAMES				
1,2mm Double rebated frames suitable for half brick walls				
92	Frame for door size 813 x 2032mm high	No	7	
1,2mm Double rebated frames suitable for one brick walls				
93	Frame for door size 813 x 2032mm high	No	3	
94	Frame for door size 914 x 2032mm high	No	1	
STEEL WINDOWS, DOORS, ETC				
Nty steel or similar approved school windows with standard burglar bars formed of 20 x 5mm thick flat bars to all sashes				
95	Window type NE1, size 533 x 654mm high	No	10	
96	Window type NE7, size 1022 x 654mm high	No	5	
Carried Forward			R	
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward		R
Sundries		
Cage, etc		
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 7
Carried Forward		R
SD7 Enviroloo		
R MAHANGE AND ASSOCIATES (PTY)LTD		

Brought Forward			R	
<u>SECTION NO. 6</u>				
<u>BILL NO. 9</u>				
<u>PLASTERING</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades				
GRANOLITHIC				
Untinted granolithic on concrete				
98	20mm Thick on floors	m2	55	
INTERNAL PLASTER				
Cement plaster on brickwork or blockwork				
99	On internal plastered walls(pits)	m2	55	
FLOOR AND WALLS SEALERS				
Minimum two coats approved epoxy coat:				
100	On floors in pits	m2	15	
101	On internal plastered walls in pits	m2	55	
Carried Forward			R	
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
<u>SECTION NO. 6</u>			
<u>BILL NO. 10</u>			
<u>PLUMBING AND DRAINAGE(PROVISIONAL)</u>			
RAINWATER DISPOSAL			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
Aluminium Zinc Seamless Gutters			
102	100 x 100mm sandard rainwater gutters fixed with gutter brackets	m	37
103	Extra over eaves gutter for stopped end	No	4
104	75 x 100mm Diameter rainwater down pipes fixed to wall	m	20
105	Extra over eaves gutter for outlet for 75 x 100mm down pipe	No	4
106	Ditto .for shoe	No	4
SANITARY FITTINGS			
"Vaal" or similar and approved			
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	6
SUPPLY AND INSTALL "ENVIRO-LOO" TOILET SYSTEMS			
108	Enviroloo Industrial Standard seat system complete, (Code: FG-1040STDCA/B3)	No	7
Carried Forward			R
SD7 Enviroloo			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
PRECAST CONCRETE WASH HAND TROUGH			
109	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
Rainwater tank, etc.			
110	5000 Litre watertank fitted onto and secured to tank platforms including fastening cables	No	1
SOIL DRAINAGE			
uPVC pipes			
111	110mm Pipes laid in and including trenches not exceeding 1m deep	m	55
Extra over uPVC pipes for fittings			
112	110mm Bend	No	20
113	110mm Junction	No	10
uPVC gulleys			
114	110mm Gulley not exceeding 750mm deep, including excavations, pre-cast concrete surround etc.	No	5
TRAPS ETC			
Marley			
115	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	2
TAPS, VALVES, ETC			
116	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	6
Carried Forward			R
SD7 Envirolloo			
R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward				R
117	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	6	
SANITARY PLUMBING				
uPVC pipes				
118	50mm Pipes	m	60	
Extra over uPVC pipes for fittings				
119	50mm Bend	No	10	
120	50mm Access bend	No	10	
121	50mm Junction	No	10	
WATER SUPPLIES				
Class 0 copper pipes				
122	15mm Pipes	m	15	
123	22mm Pipes	m	12	
Extra over class 0 copper pipes for capillary fittings				
124	15mm Fittings	No	6	
125	22mm Pipes	No	6	
TESTING				
126	Allow for testing all drains, sanitary plumbing, water supplies and installtion to the satisfaction of the Principle Agent.	Item	1.00	
Carried Forward				R
SD7 Enviroloo				
R MAHANGE AND ASSOCIATES (PTY)LTD				

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

6,28mm Obscure safety glass

127	Panes not exceeding 1 m2
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m2

10

Carried Forward

R

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R MAHANGE AND ASSOCIATES (PTY)LTD

	Brought Forward			R
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	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			
128	On fascias and barge boards	m2	15	
	ON METAL			
	Carried Forward			R
	SD7 Enviroloo			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>WATER SUPPLY</u>			
	Class 10 HDPe type IV pipes			
1	50mm Pipes laid in and including trenches not exceeding 1m deep	m	115	
	Extra over Class 10 HDPE type IV pipes for fittings			
2	50mm Fittings	No	8	
3	50mm Reducer	No	8	
4	50mm Bend	No	8	
	Galvanised medium steel pipes with screwed and socketed joints			
5	50mm Pipes	m	1 150	
	Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings			
6	50mm Fittings	No	10	
7	50mm Bush	No	8	
8	50mm Elbow	No	10	
	Valve boxes			
9	600 x 600mm Stopcock box complete as per detail drawing "Valve chamber" including 400 x 400 cast iron cover and frame depth not exceeding 750mm internally.	No	4	
	Sundries			
10	300 x 300 x 50mm Precast concrete pipeline marker slab set in ground	No	2	
	Carried Forward			
	EXTERNAL WORKS			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

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	Brought Forward			R	
	WATER TANKS				
	ELEVATED WATER TANKS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	Excavation in earth not exceeding 2m deep				
12	Holes	m3	30		
	Extra over trench and hole excavations in earth for excavation in				
13	Soft rock	m3	2		
14	Hard rock	m3	2		
	Extra over all excavations for carting away				
15	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	5		
	Risk of collapse of excavations				
16	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	15		
	Keeping excavations free of water.				
17	Keeping excavations free of water	Item	1.00		
	Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93 % Mod AASHTO density				
18	Backfilling to trenches, holes, etc.	m3	15		
	Soil insecticide				
19	To bottoms and sides of trenches, etc.	m2	10		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

		Brought Forward			R	
	One layer of 250 micron green medium density waterproof sheeting sealed at laps with pressure sensitive tape in accordance with the manufacturer's instructions.					
20	Under surface beds	m2	2			
	15Mpa/19mm Concrete					
21	Blinding	m3	2			
	25Mpa/19mm Concrete					
22	Bases	m3	10			
23	Platform surface beds cast in panels	m3	2			
	Finishing top surfaces of concrete smooth with a wood float					
24	Platform surface beds	m2	15			
	Finishing top surfaces of concrete smooth with a wood float					
25	On top of bases	m2	20			
	"Jojo" or equal approved SANS PVC water tanks					
26	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	1			
27	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	3			
	Galvanized medium normalized mild steel piping					
28	25mm Pipes	m	150			
29	50mm Pipes	m	45			
	Extra over galvanised mild steel water supply pipes for fittings:					
30	25mm Fittings.	No	100			
		Carried Forward			R	
	EXTERNAL WORKS					
	R MAHANGE AND ASSOCIATES (PTY)LTD					

	Brought Forward			R
31	50mm Elbows.	No	45	
32	50mm Union	No	50	
33	50mm Reducing bush	No	30	
	"Cobra Watertech" or other equal approved			
34	15mm "Cobra Ref. 108LK" brass hose biptap	No	3	
35	50mm Fullway gate valve	No	3	
	The following in structural steel tank stands			
	Welded steel columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete			
36	80 x 80mm x 6mm angle columns	t	1.30	
	Steel members and girth, bolted to steel			
37	30 x 30mm x 6mm Flat t 41 -bar	t	1.30	
38	40 x 40mm x 5mm angle	t	1.30	
39	125 x 75mm x 8mm unequal angle	t	1.30	
40	125 x 50mm x 20 x 2mm Lipped channel	t	1.30	
	BOLTS, FASTENERS, ETC. (LI)			
41	High t 45 tensile bolt	t	1.30	
42	12mm Diameter L-shaped threaded anchor bolt 350mm girth embedded in top of concrete	No	10	
	ON METAL			
	Undercoat and minimum 2 coat gloss enamel			
43	Paint to structural steel	m	17	
	Carried Forward			R
	EXTERNAL WORKS			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

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	Brought Forward		R
	STAND PIPES		
	SEPTIC TANK AND FRENCH DRAINS		
	SEPTIC TANKS, ETC		
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades		
45	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	1.00
	SITE CLEARANCE ETC		
	Site clearance		
46	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	105
	EXCAVATION, FILLING, ETC.		
	Excavation in earth exceeding 2m and not exceeding 4m deep		
47	Holes	m3	160
	Extra over all excavations for carting away		
48	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	160
	Risk of collapse of excavations		
49	Sides of trench and hole excavations exceeding 1,5m deep and not exceeding not exceeding 3m deep	m2	55
	Carried Forward		R
	EXTERNAL WORKS		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

	Brought Forward			R
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density			
50	Backfilling to trenches, holes, etc	m3	140	
	Keeping excavations free of water			
51	Keeping excavations free of all water other than subterranean water	Item	1.00	
	REINFORCED CONCRETE			
	15MPa/19mm concrete			
52	15Mpa in blinding	m3	7	
	25MPa/19mm concrete			
53	25Mpa in base	m3	15	
54	25Mpa in slab over septic tank	m3	10	
55	Concrete haunch formed below pipes	m3	10	
	CONCRETE SUNDRIES			
	Finishing top surfaces of concrete smooth with a steel trowel			
56	Surface beds, slabs, etc. to falls	m2	15	
	Permanent formwork to soffits			
57	Slab over septic tank	m2	65	
	Smooth formwork to form			
58	Opening not exceeding 1m girth through 170mm slab	No	45	
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)			
	Carried Forward			R
	EXTERNAL WORKS			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

Brought Forward			R
	Smooth formwork to sides		
59	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	62
	REINFORCEMENT		
	Fabric reinforcement		
60	Type 888 fabric reinforcement in concrete surface beds, slabs, etc	m2	125
	MASONRY		
	Brickwork of NFP bricks in class II mortar		
61	One brick walls	m2	70
	Brickwork reinforcement		
62	150mm Wide reinforcement built in horizontally	m2	480
	Face bricks (purchase price of R5 000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints		
63	Extra over brickwork for face brickwork in foundation	m2	55
	BRICKWORK SUNDRIES		
64	Leave of form 450 x 150mm high opening through a one brick wall	No	3
65	Leave or form opening through one brickwall for pipe 110mm dia	No	3
	PLASTERING		
	Watertight cement plaster on brickwork		
66	On walls	m2	60
	Carried Forward		R
	EXTERNAL WORKS		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

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		Brought Forward			R	
		FRENCH DRAINS				
		SITE CLEARANCE ETC.				
		Site clearance				
73	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	60			
		EXCAVATION, FILLING, ETC.				
		Excavation in earth not exceeding 2m deep				
74	Holes	m3	50			
		Extra over trench and hole excavations in earth for excavation in				
75	Soft rock	m3	16			
		Hard rock				
		Extra over all excavations for carting away				
76	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	10			
		Risk of collapse of excavations				
77	Sides of trench and hole excavations not exceeding 1,5m deep	m2	8			
		Keeping excavations free of water				
78	Keeping excavations free of all water other than subterranean water	Item	1.00			
		Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)				
79	On top of french drain as soil cover	m3	12			
		Carried Forward			R	
		EXTERNAL WORKS				
		R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
	FILTER FABRIC				
	"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions				
80	"Kaymat U14" or equal approved around stone filling in sub-soil drain trench	m2	25		
	20mm Graded stone filling or similar approved				
81	In holes	m3	5		
	200 - 300mm Diameter clean washed stone filling or similar approved by engineer				
82	In holes	m3	15		
	WATERPROOFING				
	One layer of 250 micron "Tarkon USB Green" or equal approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
83	On top of pipes as protection of joints	m2	35		
	ROOF SHEETING				
	Roof sheeting				
84	On top of french drain	m2	35		
	uPVC pipes				
85	110mm pipes laid in and including trenches	m	145		
86	160mm pipes laid in and including trenches	m	140		
	Extra over uPVC pipes for fittings				
87	110mm End cap	No	4		
88	110mm Bend	No	4		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward

R

Carried Forward

R

EXTERNAL WORKS

R MAHANGE AND ASSOCIATES (PTY)LTD

	Brought Forward			R	
	WATER HARVESTING TANKS				
	WATER TANKS				
	SITE CLEARANCE ETC				
	Site clearance				
89	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	80		
	EXCAVATION, FILLING, ETC.				
	Excavation in earth not exceeding 2m deep				
90	Trenches	m3	30		
	Extra over trench and hole excavations in earth for excavation in				
91	Soft rock	m3	5		
	Hard rock				
	Extra over all excavations for carting away				
92	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	10		
	Risk of collapse of excavations				
93	Sides of trench and hole excavations not exceeding 1,5m deep	m2	35		
	Keeping excavations free of water				
94	Keeping excavations free of all water other than subterranean water	Item	1.00		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R	
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
95	Backfilling to trenches, holes, etc	m2	8		
	SOIL POISONING				
	Soil poisoning mixed in accordance to supplier's specifications				
96	To bottoms and sides of trenches, etc	m2	15		
	CONCRETE, FORMWORK AND REINFORCEMENT				
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
97	Strip footings	m3	12		
	Platform surface beds cast in panels				
	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float/steel trowel				
98	Surface beds, slabs, etc (rainwater tanks)	m2	35		
	REINFORCEMENT				
	Fabric reinforcement				
99	Type 295 fabric reinforcement in concrete surface beds, slabs, etc	m2	35		
	TEST CUBES				
100	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	6.0		
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward		R
	BRICKWORK		
	Brickwork of NFP bricks in class II mortar		
101	One brick walls	m2	35
	BRICKWORK SUNDRIES		
	Brickwork reinforcement		
102	150mm Wide reinforcement built in horizontall	m	50
	FACE BRICKWORK		
	Face bricks (Purchase price of R5 000-00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints		
103	Extra over brickwork for face brickwork	m2	30
	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		
104	Coping on top of one brick wall	m	50
	WATERPROOFING		
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"		
105	Under surface beds	m2	30
	WATER SUPPLIES		
	"Jojo" approved SANS PVC water tanks		
106	5000 Litre plastic water tank fitted onto and secured to tank platforms	No	5
	Carried Forward		R
	EXTERNAL WORKS		
	R MAHANGE AND ASSOCIATES (PTY)LTD		

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		Brought Forward			R
		PAVED WALKWAYS			
		SUPPLEMENTARY PREAMBLES			
		For preambles see "Specifications of materials and methods to be used - PW 371"			
		Site Clearance			
108	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc	m2	520		
109	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	520		
	Open face excavation in earth over sloping site				
110	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	160		
	Extra over all excavations for carting away				
111	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor.	m3	160		
	Earth filling supplied by the contractor under parking areas, roadways, etc				
112	Sub-base course of G5 material in accordance with SABS 1200 DM, compacted to 93% Mod AASHTO density	m3	160		
	Compaction of surfaces				
113	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	520		
		Carried Forward			R
	EXTERNAL WORKS				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

Brought Forward			R
Soil poisoning			
114	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 ² on cleared ground 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:	m2	520
115	Paving to toilet areas etc. to falls	m2	520
116	Fig. 10 kerbs to sides of paving	m	750
117	15Mpa/19mm unreinforced concrete in haunching	m3	60
Carried Forward			R
EXTERNAL WORKS			
R MAHANGE AND ASSOCIATES (PTY)LTD			

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	Brought Forward			R	
	FENCING AROUND TANK STANDS				
	FENCING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	Welded mesh fence				
	Panels: 1.80m x 3.0m				
	Palings 'DevilFork'; 21 palings per panel. 30 x 30 x 2mm steel angle iron paling 1.8m high. Palings are to be inserted and firmly welded to the bearers at 133mm centre to centre. The top of the paling should provide a "Devil fork" effect and the bottom will have a dove tail.				
	Fence bearers: 40 x 40 x 2mm angle iron. These are places 300mm from the top of the paling and 300mm from the bottom paling (350mm from ground level). These are to be welded flash with the back of the post				
129	Painting: All joints must be smoothed off. All faux, rust, grease and loose material to be removed before painting. Apply one coat primer for steel (red oxide), apply one coat universal undercoat for all surfaces, apply one coat gloss enamel. The colour of the gloss enamel paint shall be traffic green unless directed otherwise by the Limpopo Department of Education (not school) No brush painting	m	825		
130	Posts: 76 x 76 x 2mm steel square tubing with closing pyramid caps on top. The post should be at least 2.4m high and 600mm will be planted into the concrete footing in accordance to the engineers design	No	276		
	Palisade Gates				
	Carried Forward			R	
	EXTERNAL WORKS				
	R MAHANGE AND ASSOCIATES (PTY)LTD				

	Brought Forward			R
	<p>Sliding Gate: 5m wide x 1.8m high, 40 x 40 x 2mm angle iron palings welded to a 76 x 38 x 2 mm rectangular tubing bearer frame. Plings must be placed at 133 mm apart from each other centre to centre. The gate is to be provided with proper closing and guidance mechanism. The track should be 12mm steel rod welded to a 40 x 40 x 5mm angle iron fixed into a 300 wide x 400 thick x 5m length of the gate</p> <p>Gate post: 75mm x 75mm x 2mm steel square tubing post is to be provided on each side of the gate opening with closing pyramid caps on top. The post is to be founded in a concrete footing 450 x 450 x 600 deep. Concrete strength to be 20MPa (minimum) at 28 days</p>			
131	<p>Painting: All joints must be smoothed off. All faux, rust, grease and loose material to be removed before painting. Apply one coat primer for steel (red oxide), apply one coat universal undercoat for all surfaces, apply one coat gloss enamel. The colour of the gloss enamel paint shall be traffic green unless directed otherwise by the Limpopo Department of Education (not school) No brush painting</p>	No	1	
	Carried to Summary			R
	EXTERNAL WORKS			
	R MAHANGE AND ASSOCIATES (PTY)LTD			

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