ltem No		Quantity	Rate	Amount
	SECTION 1			
	<u>BILL NO. 1</u>			
	PRELIMINARIES			
	BUILDING AGREEMENT AND PRELIMINARIES			
	The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described			
	The Preliminaries are 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			
	Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof			
	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			
	Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"			
	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			
	Carried Forward Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES		R	
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	Brought Forward		R	
	PREAMBLES FOR TRADES			
	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			
	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			
	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			
	GENERAL			
	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			
	<u>SECTION A - PRINCIPAL BUILDING</u> AGREEMENT			
	Definitions (A1)			
1	Definitions and interpretation (clause 1)			
	F: V: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
	Objective and Preparation (A2 to A14)		<u> </u>	
2	Offer acceptance and performance (clause 2)			
	F: V: T:	Item		
3	Documents (clause 3)			
	F: V: T:	Item		
4	Design responsibility (clause 4)			
	F: V: T:	Item		
				<u> </u>
	Carried Forward		R	
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5	Employer's agents (clause 5)				
	F: V:				
	The principal agent shall:				
	- monitor and control progress and scheduling				
	- monitor all contract conditions, and				
	- coordinate the efforts of the employer's agents, the contractor and subcontractors				
	The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part				
	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				
		Item			
6	Site representative (clause 6)				
	F: V:	Item			
	Carried Forward		R		
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Brought Forward		R	
Compliance with regulations (clause 7)			
F: V: T:			
Sub-clause 7.3 added: The Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 will in all respects be applicable to this contract. All obligations in respect of health and safety requirements of the Contractor are set out in the Scope of Work.			
Sub-clause 7.3.1 is added: Notwithstanding any actions which the employer may take, the contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2014, for which the contractor is liable as mandatory. By entering into this agreement it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act and will enter into the mandatory agreement as set out in the Scope of Work. This clause will be sufficient to establish the mandatory obligations of the contractor in the event the parties fail to execute the aforesaid mandatory agreement." Note: A separate clause has been included in Section C: Specific Preliminaries of the bills of quantities / lump sum document for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification.			
in terms of all Covid-19 legislation, regulations and guidelines.			
	Item		
Carried Forward		R	
Section No. 1 PRELIMINARIES AND GENERAL			
Bill No. 1 PRELIMINARIES			

	Brought Forward		R	
8	Works risk (clause 8)			
	F: V: T:			
		ltem		
9	Indemnities (clause 9)			
	F: V: T:	ltem		
10	Works insurances (clause 10)			
	F: V: T:			
		ltem		
11	Liability insurances (clause 11)			
	F: V: T:	ltem		
12	Effecting insurance (clause 12)			
	F: V: T:	ltem		
13	NO CLAUSE	N/A		
14	Security (clause 14)			
	The security to be submitted by the contractor to the employer will be as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT)			
	F: V: T:	Item		
	Carried Forward Section No. 1 PRELIMINARIES AND GENERAL		R	
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	Brought Forward		R
	Execution (A15-A23)		
15	Preparation for and execution of the works (clause 15)		
	F: V: T:	Item	
16	Access to the works (clause 16)		
	F: V: T:	Item	
17	Contract instructions (clause 17)		
	F: V: T:	Item	
18	Setting out of the works (clause 18)		
	F: V: T:		
	The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments		
		Item	
19	Assignment (clause 19)		
	F: V: T:		
	The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer		
		Item	
20	Nominated subcontractors (clause 20)		
	F: V: T:		
		Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES		
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21	Selected subcontractors (clause 21)			
	F: V: T:			
	Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted			
	All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors			
		ltem		
22	Employer's Direct Contractors (clause 22)			
	F: V: T:	ltem		
23	Contractor's Domestic Sub-Contractors (Clause 23)			
	F: V: T:	ltem		
	Completion (A24-A30)			
24	Practical completion (clause 24)			
	F: V: T:	ltem		
25	Works completion (clause 25)			
	F: V: T:	Item		
26	Final completion (clause 26)			
	F: T:	ltem		
	Carried Forward		R	
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	Brought Forward		R	
27	Latent defects liability period (clause 27)			
	F: V: T:	ltem		
28	Sectional completion (clause 28)			
	F: V: T:	ltem		
29	Revision of date of practical completion (clause 29)			
	F: V: T:			
	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 nor for an adjustment to the contract sum (clause 29.3)			
		ltem		
30	Penalty for non-completion (clause 30)			
	F: V: T:			
		ltem		
	<u> Payment (A31 - A35)</u>			
31	Interim payment to the contractor (clause 31)			
	F: V: T:			
		ltem		
	Carried Forward Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES		R	
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	Brought Forward		R	
32	Adjustment to the contract value (clause 32)			
	F: V: T:			
	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			
		ltem		
33	Recovery of expense and loss (clause 33)			
	F: V: V:	ltem		
34	Final account and final payment (clause 34)			
	F: V: T:			
	The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion			
	The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account			
		ltem		
	Carried Forward		R	
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	Brought Forward		R	
35	Payment to other parties (clause 35)			
	F: V: T:	ltem		
	Cancellation (A36-A39)			
36	Cancellation by employer - contractor's default (clause 36)			
	F: T:	ltem		
37	Cancellation by employer - loss and damage (clause 37)			
	F: V: T:	ltem		
38	Cancellation by contractor - employer's default (clause 38)			
	F: T:	ltem		
39	Cancellation - cessation of the works (clause 39)			
	F: V: T:	ltem		
	Dispute (A40)			
40	Dispute Settlement (clause 40)			
	F: V: T:	ltem		
	Substitute Provisions (A41)			
41	State clauses (Clause 41)			
	F: V: T:			
		Item		
	Carried Forward		R	
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	Brought Forward		R	
	THE SCHEDULE			
	Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder			
42	Pre-tender information (clause 42)			
	F: V: T:	ltem		
	42.1 CONTRACTING AND OTHER PARTIES			
	42.1.1 Employer: The Mvula Trust			
	42.1.2 Principal Agent: BVI Consulting Engineers			
	42.2 CONTRACT DETAILS			
	42.2.1 Works Description: Construction of water and sanitation facilities			
	42.2.2 Site Description: As per the information provided in the tender data			
	42.2.3 Work or installations by direct contractors:			
	As per the information provided in the tender data			
	42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only			
	Yes			
	Carried Forward		R	
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42.2.5 Date on which possession of the site is intended to be given:		
As per the information provided in the tender data		
42.2.6 Period for the commencement of the works after the contractor takes possession of site:		
Seven days		
42.2.7 For the works as a whole . Intended date of practical completion and the penalty per calendar day		
Intended Date of Practical Completion: As per the information provided in the tender data		
Penalty Amount: The penalty per calender day shall be: 0.1% of the tendered amount (inclusive of value added tax)		
42.2.8 For the works in sections : Intended date of practical completion and the penalty per calender day		
Section 1 N/A Date		
N/A Penalty Amount		
42.2.9 The law applicable to this agreement shall be that of:		
South Africa (Country)		
Carried Forward	R	
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2.3 INSURANCES	
42.3.1 Contract works insurance to be effected by:	
Contractor:	
For the Sum of R Contract Amount + 10.00 %	
With a deductible amount the contractor deems appropriate	
12.3.2 Supplementary insurance is required:	
No	
12.3.3 Public liability insurance to be effected by:	
Contractor:	
For the Sum of R 5 000 000-00	
With a deductible amount the contractor deems appropriate	
2.4 DOCUMENTS	
12.4.1 Waivers of contractors lien or right of continuing possession is required	
Yes	
12.4.2 Number of construction document copies to be supplied to the contractor free of charge:	
3 Number of	
2.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with:	
"Standard System of Measuring Builders' Work"	
Carried Forward	R
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	Brought Forward		R	
	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			
	42.4.5 JBCC Engineering General Conditions are to be included in the contract documents: No			
	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 the Employer			
	SECTION B: PRELIMINARIES			
	Definitions and interpretation (B1)			
43	Definition and interpretation (B1.1 - B1.4.6)			
	F: V: T:	ltem		
	Documents (B2)			
44	Checking of documents (B2.1)			
	F: V: T:	Item		
	Carried Forward		R	
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	PRELIMINARIES			
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	Brought Forward		R	
45	Provisional bills of quantities (B2.2)			
	F: V: T:	N/A		
46	Availability of construction documentation (B2.3)			
	F: V: T:	Item		
47	Interests of agents (B2.4)			
	F: V: T:	Item		
48	Priced documents (B2.5)			
	F: V: T:	Item		
49	Tender submission (B2.6)			
	F: V: T:	Item		
50	Defined works area (B3.1)			
	F: V: T:	Item		
	<u>The site (B3)</u>			
51	Geotechnical investigation (B3.2)			
	F: V: T:	Item		
52	Inspection of the site (B3.3)			
	F: V: T:			
		Item		
	Carried Forward		R	
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	Bill No. 1 PRELIMINARIES			
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	Brought Forward		R	
	Existing premises occupied (B3.4)			
	F: V: T:			
	Specific requirements: The contractor shall also comply with the additional requirements with regard to the Coronavirus pandemic in terms of all Covid-19 legislation, regulations and guidelines.			
	Previous work - dimensional accuracy (B3.5)			
	F: V: T:			
	Previous work - defects (B3.6)			
	F: V: T:			
53	Services - known (B3.7)			
	F: V: T:	ltem		
54	Services - unknown (B3.8)			
	F: V: T:	ltem		
55	Protection of trees etc (B3.9)			
	F: V: T:	ltem		
56	Articles of value (B3.10)			
	F: V: T:	ltem		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
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	E	Brought Forward	R	
	Management of contract (B4)			
57	Inspection of adjoining properties etc (B3	3.11)		
	F: V: T:	lterr		
58	Management of the works (B4.1)			
	F: V: T:	Item		
59	Programme for the works (B4.2)			
	F: V: T:	Item		
60	Progress meetings (B4.3)			
	F: V: T:	ltem		
61	Technical meetings (B4.4)			
	F: V: T:	lterr		
62	Labour and Plant records (B4.5)			
	F: V: T:	ltem		
	Samples, Shop Drawings and Manufa Instructions (B5)	<u>cturer's</u>		
63	Samples of materials (B5.1)			
	F: V: T:	lterr		
64	Workmanship samples (B5.2)			
	F: V: T:	ltem		
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		Brought Forward		R	
35.3)	65 S	drawings (B5.3)			
V:	F	V: T:	Item		
Manufacturer's In	66 C	iance with Manufacturer's Instructions (B5.4)			
V:	F	V: T:	Item		
<u>ks and plant (B6)</u>	Ī	orary works and plant (B6)			
s (B6.1)	67 C	its and fees (B6.1)			
V:	F	V: T:	Item		
		sure of the works (B6.2)			
V:	F	V: T:	Item		
)	69 A	ising (B6.3)			
V:	F	V: T:	Item		
, sheds and office	70 F	equipment, sheds and offices (B6.4)			
V:	F	V: T:	Item		
d (B6.5)	71 N	notice board (B6.5)			
V:	F	V: T:	Item		
notice board (B6.6	72 5	ntractors' notice board (B6.6)			
V:	F	V: T:	N/A		
i	F B F	Carried Forward n No. 1 MINARIES AND GENERAL . 1 MINARIES ONSULTING ENGINEERS		R	
	F	MINARIES			

		Brought Forward	R	
	Temporary services (B7)			
73	Location (B7.1)			
	F: V: T:	Iten	ו	
74	Water (B7.2) Option	n [A] shall apply		
	F: V: T:	Iten	ו	
75	Electricity (B7.3) Option	n [A] shall apply		
	F: V: T:	Iten	ו	
76	Telecommunication facilities (B7.4)			
	F: V: T:	Iten	ו	
77	Ablution facilities (B7.5) Option	n [A] shall apply		
	F: V: T:	Iten	ו	
	Prime cost amounts (B8)			
78	Responsibility for prime cost amounts (B	38.1)		
	F: V: T:	Iten	ו	
	Attendance on N/S Subcontractors (E	<u>39)</u>		
79	General attendance (B9.1)			
	F: V: T:	Iten	ו	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES BVI CONSULTING ENGINEERS	Carried Forward	R	

	Brought Forward		R	
80	Special attendance (B9.2)			
	F: V: T:	ltem		
81	Commissioning - Fuel, water and power (B9.3)			
	F: V: T:	ltem		
	Financial aspects (B10)			
	Statutory taxes, duties and levies (B10.1)			
	F: V: T:	ltem		
82	Payment of preliminaries (B10.2) Option [B] shall apply			
	F: V: T:	ltem		
83	Adjustment of preliminaries (B10.3) Option [A] shall apply			
	F: V: T:	Item		
84	Payment certificate cash flow (B10.4)			
	F: V: T:	Item		
	<u>General (B11)</u>			
85	Protection of works (B11.1)			
	F: V: T:	Item		
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86	Protection/isolation of existing/sectionally occupied works (B11.2)		
	F: V: T:	Item	
87	Security of the Works (B11.3)		
	The security to be submitted by the contractor to the employer will be as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT)		
	F: V: T:	ltem	
88	Notice before covering work (B11.4)		
	F: V: T:	ltem	
89	Disturbance (B11.5)		
	F: V: T:	ltem	
90	Environmental Disturbance (B11.6)		
	F: V: T:	ltem	
91	Works cleaning and clearing (B11.7)		
	F: V: T:	Item	
92	Vermin (B11.8)		
	F: V: T:	ltem	
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93	Overhand work (B11.9)			ç.	
	F: V: T:	Item			
94	Instruction manuals and guarantees (B11.10)				
	F: V: T:	ltere			
95	As built information (B11.11)	ltem			
	F:				
		Item			
96	Tenant Installations (B11.12)				
	F: V: T:	Item			
	Schedule of variables (B12)				
97	Pre-tender information (B12.1)				
	F: V: T:	Item			
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional:				
	No				
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete				
	No				
	12.1.3 Interest of agents (B2.4)				
	12.1.4 Defined works area (B3.1)				
	Carried Forward		R		
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12.1.5 Geotechnical investigation (B3.2)		
N/A		
12.1.6 Existing premises occupied (B3.4)		
12.1.7 Previous work - dimensional accuracy (B3.4)		
12.1.8 Previous work - defects (B3.5)		
12.1.9 Services - known (B3.7)		
12.1.10 Protection of trees (B3.9)		
All trees should be protected and only on instruction of the Principal Agent may any trees be removed		
12.1.12 Enclosure of the works (B6.2)		
12.1.11 Inspection of adjoining properties (B3.11)		
12.1.13 Offices (B6.4.3)		
Specific requirements:		
The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size $4 \times 3 \times 3m$ 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.		
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12.1.14 Main notice board (B6.5)			
	YES		
12.1.15 Subcontractors notice board (B6.6)			
A notice board is required	Yes		
12.1.16 Water (B7.2)			
Alternative Selected: A			
12.1.17 Electricity (B7.3)			
Alternative selected: A			
12.1.18 Telecommunications (B7.4)			
12.1.19 Ablution facilities (B7.5)			
Alternative selected: A			
12.1.20 Protection of existing/sectionally occupied works (B11.2)			
12.1.21 Special attendance (B9.2)			
Subcontractor (1) details:			
	N/A		
12.1.22 Protection of the works (B11.1)			
	N/A		
12.1.23 Disturbance (B11.5)			
	N/A		
		-	
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	12.1.24 Environmental Disturbance (B11.6)			
	N/A			
	Post tender information (B12.2)			
	12.2.1 Payment of preliminaries			
	Alternative selected: B			
	12.2.2 Adjustment of preliminaries			
	Alternative selected: A			
	12.2.3 Additional agreed preliminaries items			
	N/A			
	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			
98	Site instructions			
	Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor			
	F: : T:	ltem		
99	Black economic empowerment and training			
	F: V: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
100	Proprietary branded products			
	F: V: V:	ltem		
101	Testing of flat roof waterproofing for watertightness			
	Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing			
	F: V: T:	ltem		
		liem		
	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			
102	Contract instructions			
	F: V: T:	ltem		
	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			
103	Labour record			
	F: V: T:			
		Item		
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week			
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R	
104	Plant record			
	F: V: T:	ltem		
	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			
105	Guarantees			
	F: V: T:	ltem		
106	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			
100	F: V: T:	ltem		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R	
	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			
107	Co-operation of contractor for cost management			
	F: V: T:	ltem		
	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			
108	Occupational Health and Safety Specification			
	 F:			
	Carried Forward Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1		R	
	PRELIMINARIES BVI CONSULTING ENGINEERS			

	Brought Forward		R	
	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			
	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			
		ltem		
109	Occupational Health and Safety Specification			
	F: V: T:			
	Preparation of contractor's site specific health and safety plan, including compliance with Covid-19 legislation, regulations and guidelines	ltem		
110	Occupational Health and Safety Specification			
	F: V: T:			
	Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc	ltem		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			
		-		

	Brought Forward		R	
111	Occupational Health and Safety Specification			
	F: V: T:			
	Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations and Covid-19 regulations, etc	Item		
112	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of reflective vests	Item		
113	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of hard hats	Item		
114	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of protective footwear	Item		
115	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of earplugs	Item		
116	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of dust masks	Item		
117	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of gloves	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R	
118	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of high visibility overalls to SARTSM Chapter 13 Level 3	Item		
119	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of SANS approved ear defenders	Item		
120	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of face masks (Covid -19)	Item		
121	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of face shields (Covid -19)	Item		
122	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of gloves (Covid -19)	Item		
123	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of hand sanitiser (min 70% alchohol), foot press stands and paper towels (Covid -19)	Item		
124	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of covered refuse bins and refuse bags and waste (including hazardous) management (Covid -19)	Item		
			-	
	Carried Forward Section No. 1		R	
	PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R	
125	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of digital infrared non-contact body thermometer (Covid -19, minimum of two per site entrance)	Item		
126	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of perspex screens for office staff (Covid -19, minimum size 600 x 500mm)	Item		
127	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of signage, including Covid -19 related signage	Item		
128	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of full time construction health and safety officer (SACPCMP Registered)	Item		
129	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations	Item		
130	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Medical screenings, examinations, etc in terms of Covid- 19 regulations	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			
	-			

	Brought Forward		R	
131	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Induction training, including Covid-19 training	Item		
132	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Provision of first aid boxes to GSR requirements	Item		
133	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Noise monitoring including establishment of noise zones (plant), audiograms (personnel), etc	ltem		
134	Provision of personal protective equipment (PPE)			
	F: V: T:			
	Submission of health and safety file	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES			
	BVI CONSULTING ENGINEERS			

Item

R

R

135

Brought Forward

5 HIV/AIDS Awareness

F:..... T:.....

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.

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

Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occopational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionaire" The contractor to comply with all provisions of the above and to be enforced on all selected and or other sub-contractors, as no claim afterwards will be entertained

SUMMARY OF CATEGORIES

Category : Fixed	R
Category : Value	R
Category : Time	R

Carried to Final Summary

Section No. 1 PRELIMINARIES AND GENERAL Bill No. 1 PRELIMINARIES

BVI CONSULTING ENGINEERS

ltem No			Quantity	Rate	Amount
	SECTION 2	I			
	BILL NO.1				
	EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	51		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	51		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep:				
3	Trenches	m3	13		
4	For aprons thickenning	m3	3		
	Extra over trench and hole excavations in earth for excavation:				
5	Soft rock	m3	17		
6	Hard rock	m3	17		
	Extra over all excavations for carting away:				
7	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	6		
	Carried Forward Section No. 2 SFD2 Bill No. 1 EARTHWORKS			R	
	BVI CONSULTING ENGINEERS				

Risk of collapse of excavations: m2 39 Sides of trench and hole excavation not exceeding 1,5m deep. m2 39 Keeping excavations free of water: m2 39 Keeping excavations free of water other than subterranean water Item Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density. m3 Under floors, steps, pavings, etc. m3 4 Backfilling to trenches, holes, etc. m3 7 Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding sutable material where necessary and compacting to 93% Mod AASHTO density m2 14 Compaction of ground surface to promise to including scarifying for a depth of 150mm, breaking down oversize material, adding sutable material where necessary and compacting to 93% Mod AASHTO density m2 33 Prescribed density tests on filling: m2 33 Prescribed density tests on filling: m2 33 Modified AASHTO Density tests No 5 Soil insecticide: 14 14 Modified AASHTO Density tests No 5 Soil insecticide: 14 14 Lother floors etc including forming and poisoni	Brought Forward			R	
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9 Keeping excavations free of water other than subterranean water Item 10 Under floors, steps, pavings, etc. m3 4 11 Backfilling to trenches, holes, etc. m3 7 12 Compaction of surfaces: 7 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 14 13 Compaction of ground surface to aprons 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 14 13 Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO m2 33 Prescribed density tests on filling: m2 33 Prescribed density tests on filling: 14 5 Soil insecticide: 14 5 15 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 14 Keetion No. 2 SFD2 14 14 15 Under floors etc including forming and	5 /-	m2	39		
subterranean water Item Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density. modAASHTO density. 10 Under floors, steps, pavings, etc. m3 4 11 Backfilling to trenches, holes, etc. m3 7 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 14 13 Compaction of ground surface to aprons 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 14 13 Compaction of ground surface to aprons 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 33 Prescribed density tests on filling: m2 33 14 Modified AASHTO Density tests No 5 Soll Insecticide; Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 Carried Forward R Section No. 2 SFO2 Bill No. 1 EARTHWORKS	Keeping excavations free of water:				
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11 Backfilling to trenches, holes, etc. m3 7 2 Compaction of surfaces: 7 2 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 14 3 Compaction of ground surface to aprons 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 14 3 Compaction of ground surface to aprons 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 33 Prescribed density tests on filling: m2 33 4 Modified AASHTO Density tests No 5 Soil insecticide: 5 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 Carried Forward R Section No. 2 SFD2 Bill No. 1 EARTHWORKS R	prescribed stock piles on site compacted to 93%				
Compaction of surfaces:	0 Under floors, steps, pavings, etc.	m3	4		
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13 Compaction of ground surface to aprons 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 33 Prescribed density tests on filling: m2 33 14 Modified AASHTO Density tests No 5 Soil POISONING Soil insecticide: 14 15 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 R Section No. 2 SFD2 Bill No. 1 EARTHWORKS	scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO	m2	14		
density m2 33 Prescribed density tests on filling: Modified AASHTO Density tests No 4 Modified AASHTO Density tests No 5 Soil poisoning Soil insecticide: 5 5 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 Carried Forward R Section No. 2 SECtion No. 2 SFD2 Bill No. 1 EARTHWORKS R	3 Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where				
14 Modified AASHTO Density tests No 5 SOIL POISONING Soil insecticide: Image: Soil insecticide: Image: Soil insecticide: 15 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 14 Image: Section No. 2 SFD2 Image: SFD2 Image: SFD2 Bill No. 1 EARTHWORKS Image: Section No. 2 SFD2		m2	33		
SOIL POISONING Soil insecticide: 5 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 R Section No. 2 SFD2 Bill No. 1 EARTHWORKS	Prescribed density tests on filling:				
Soil insecticide: 5 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 Carried Forward R Section No. 2 SFD2 Bill No. 1 EARTHWORKS	4 Modified AASHTO Density tests	No	5		
5 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming. m2 14 Carried Forward R Section No. 2 SFD2 Bill No. 1 EARTHWORKS	SOIL POISONING				
furrows against foundation walls etc, filling in furrows and ramming. m2 14 Carried Forward R Section No. 2 SFD2 Bill No. 1 EARTHWORKS	Soil insecticide:				
Section No. 2 SFD2 Bill No. 1 EARTHWORKS	furrows against foundation walls etc, filling in furrows	m2	14		
SFD2 Bill No. 1 EARTHWORKS				R	
BVI CONSULTING ENGINEERS	SFD2 Bill No. 1				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
16	To bottom of concrate aprons	m2	33		
16	To bottom of concrate aprons To bottoms and sides of trenches, etc.	m2 m2	33 52		
	Carried Forward to Summary of Section No. 2 Section No. 2 SFD2 Bill No. 1 EARTHWORKS BVI CONSULTING ENGINEERS			R	

ltem No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
1	Strip footings	m3	3		
2	2Aprons cast in panels	m3	3		
3	Ramp	m3	1		
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	4		
5	Thickening down apron on edge 110mm deep x 200mm wide	m	25		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
6	Surface beds	m3	1		
	CONCRETE SUNDRIES				
	Carried Forward			R	
	Section No. 2			ĸ	
	SFD2 Bill No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Finishing top surfaces of concrete smooth with a steel trowel:				
7	Suface beds, slabs, etc.	m2	14		
	Finishing top surfaces of concrete smooth with a wood float:				
8	Aprons and pavings to falls	m2	33		
	TEST CUBES				
9	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24		
	FORMWORK				
	Rough formwork to sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	30		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett):				
11	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	14		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 SFD2 Bill No. 2 CONCRETE FORMWORK AND REINFORCEMENT				-
	BVI CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions:			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc.:			
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks:			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Carried Forward		R	
	Section No. 2 SFD2 Bill No. 3 MASONRY			
	BVI CONSULTING ENGINEERS			

	Brought Forward			R	I
	Pointing:				1
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SAMPLES				1
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	FOUNDATIONS				1
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	15		
	FACE BRICKWORK				1
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
2	Extra over brickwork for face brickwork in foundation	m2	3		l
	SUPERSTRUCTURE				1
	FACE BRICKWORK				I
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
3	Half brickwork for face brick walls pointed both sides	m2	18		
4	One brickwork for face brick walls pointed both sides	m2	58		1
5	Extra over brickwork for face brickwork in beamfilling	m2	3		1
6	Fair raking and cutting	m	7		1
	Carried Forward			R	
	Section No. 2 SFD2 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				1

	Brick-on-edge header course coping, sills, etc. of face				
ļ	bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:				
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	7		
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	4		
8	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	2		
9	Fair cutting and fitting around pipe exceeding 100mm diameter and not exceeding 100mm diameter.	No	3		
	BRICKWORK SUNDRIES				
	Brick reinforcement:				
10	75mm Wide reinforcement built in horizontally	m	53		
11	150mm Wide reinforcement built in horizontally	m	223		
	Turning pieces:				
12	220mm Wide turning piece to lintel etc	m	7		
	Galvanised wire ties etc.:				
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12		
	Prestressed fabricated lintels:				
14	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9		
	Ventillation bricks:				
15	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	7		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 SFD2 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course:				
1	In walls	m2	5		
	One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:				
2	Under surface beds	m2	14		
3	Aprons and ramps	m2	33		
	FLOOR AND WALLS SEALERS "Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	7		
	Carried Forward to Summary of Section No. 2 Section No. 2 SFD2 Bill No. 4 WATERPROOFING			R	
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere):				
1	Roof covering with pitch not exceeding 25 degrees	m2	23		
	<u>Sundries</u>				
2	12" Thermal resistance sisalition laid on purlins	m2	23		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	5		
4	Extra over for closed ends	No	2		
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3		
6	Extra over rainwater pipe for eaves offset	No	1		
	Carried Forward			R	
	Section No. 2 SFD2 Bill No. 5 ROOF COVERINGS				
	BVI CONSULTING ENGINEERS				

7 Ditto , for shoe 1 A Image: Solution of the state		Brought Forward		R	
Section No. 2 SFD2 Bill No. 5 ROOF COVERINGS	7	Ditto ,for shoe No	1		
Section No. 2 SFD2 Bill No. 5 ROOF COVERINGS					
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ROOF COVERINGS		Section No. 2 SFD2			
BVI CONSULTING ENGINEERS		Bill No. 5 ROOF COVERINGS			
		BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	<u>Sawn softwood:</u>				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	25		
2	76 x 38mm Wall plates	m	8		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	25		
	Sundries:				
4	Two coats creosote on sawn timbers	m2	18		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	12		
6	Hurricane clips	No	30		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement:				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	19		
	DOORS, ETC.				
	Carried Forward Section No. 2			R	
	SFD2 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames:				
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2		
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom)				
	(D2)	No	2		
	Carried Econyard to Summary of Section No. 2			R	
	Carried Forward to Summary of Section No. 2 Section No. 2				
	SFD2 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

ltem No		Qu	antity	Rate	Amount
	SECTION 2				
	BILL NO.7				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CATCHES, CABIN, HOOKS, ETC				
	Approved:				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged N	o	2		
	LOCKS				
	Approved:				
2	Three lever mortice lockset	o	2		
3	Indicator lockset	o	2		
	DOORSTOPS				
	Approved:				
4	38mm Diameter rubber door stop plugged	o	4		
	LETTERS, NAMEPLATES, ETC.				
	"Union" or similar approved:				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	0	2		
	Carried Forward			R	
	Section No. 2 SFD2 Bill No. 7 IRONMONGERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	"Vaal Paragon" or similar approved:			<u>1</u>	
6	32mm Type 9 back grab rail 800mm long plugged	No	1		
7	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	BATHROOM FITTINGS				
	<u>"Kimberley-Clark"or Simlilar:</u>				
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	3		
	Stainless steel				
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	2		
	Sundries:				
10	Female SHE BIN plugged to walls	No	2		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 SFD2 Bill No. 7 IRONMONGERY				
	BVI CONSULTING ENGINEERS				

em Io			Quantity	Rate	Amount
	SECTION 2				
	BILL NO.8				
	METALWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	<u>1,2mm Single rebated frames suitable for half brick</u> walls:				
1	Frame for door 813 x 2032mm high	No	2		
	<u>1.6mm Double rebated frames suitable for one</u> brickwalls:				
2	Frame for door 813 x 2032mm high	No	2		
	STEEL WINDOWS, DOORS, ETC				
3	Window type NE1, 533 x 654mm high including burglar bars	No	3		
4	Window type NE 7,1022 x 654mm high including burglar bars	No	2		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames:				
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2		
	<u>Sundires:</u>				
6	Purpose made protective steel cage to SHE-BIN	No	2		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 SFD2 Bill No. 8 METALWORK				
	BVI CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount	
	SECTION 2				
	<u>BILL NO. 9</u>				
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CEMENT SCREEDS TO CONCRETE				
	Screeds to steel trowelled, on concrete:				
1	30mm thick on floors m2	14			
	FLOOR AND WALLS SEALERS				
	Minimum two coats approved epoxy coat:				
2	On screed m2	14			
	Carried Forward to Summary of Section No. 2		R		
	Section No. 2 SFD2				
	Bill No. 9 PLASTERING				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO. 10				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SOIL DRAINAGE				
	uPVC flexible drainage pipes:				
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30		
2	110mm Ditto, but exceeding 1m and not exceeding 2m deep	m	30		
	Extra over uPVC flexible drainage pipes for fittings:				
3	110mm Bend	No	5		
4	110mm Junction	No	5		
5		No	3		
6	110mm Rodding eye 110mm Inspection eye	No	3		
0		NO	5		
7	<u>uPVC gulleys:</u>	No	2		
I	110mm Gulley not exceeding 500mm deep	INU	2		
8	Testing: Testing soil drainage system		ltem		
0			item		
	SANITARY FITTINGS				
	Carried Forward			R	
	SFD2 Bill No. 10 PLUMBING AND DRAINAGE				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R
	Vaal or similar approved:			
9	Wash hand basin bolted to wall including all fittings and necessary pipework	No	2	
10	WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern	No	3	
	TRAPS, ETC			
	uPVC:			
11	40mm "P" or "S" trap	No	5	
	TAPS, VALVES, ETC			
12	15mm elbow action pillar tap	No	1	
13	19mm chrome plated push button taps to WHB	No	1	
	WATER SUPPLIES			
	uPVC pipes:			
14	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50	
15	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10	
	Extra over uPVC pipes for fittings:			
16	20mm Bend	No	5	
17	40mm Bend	No	5	
	Galvanised steel pipes:			
18	20mm Pipes chased into brick walls	m	3	
	Extra over galvanised steel pipes for steel fittings:			
19	20mm Fittings	No	5	
	Carried Forward Section No. 2 SFD2			R
	Bill No. 10 PLUMBING AND DRAINAGE			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R	
	TESTING			
20	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item		
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2 SFD2 Bill No. 10 PLUMBING AND DRAINAGE			
	BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount	
	SECTION 2				
	<u>BILL NO. 11</u>				
	GLAZING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	GLAZING TO STEEL WITH PUTTY				
	4mm Obscure safety glass:				
1	Panes not exceeding 0,1 m2 m2	2			
	Carried Forward to Summary of Section No. 2		R		
	Section No. 2 SFD2 Bill No. 11				
	GLAZING				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO. 12				
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:				
1	On fascias and barge boards	m2	6		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel:				
2	On doors (Internal)	m2	7		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel:				
4	On door frames	m2	1		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	10		
	Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:				
7	On windows with burglar bars	m2	2		
	Carried Forward to Summary of Section No. 2 Section No. 2 SFD2 Bill No. 12 PAINTWORK			R	
	BVI CONSULTING ENGINEERS				

Bill No

	SECTION SUMMARY - SFD2			
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3	MASONRY	43		
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12	PAINTWORK	57		
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	Section No. 2 SFD2			
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO.1				
	EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	73		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	73		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep:				
3	Trenches	m3	18		
4	Pit	m3	27		
5	For aprons thickenning	m3	4		
	Extra over trench and hole excavations in earth for excavation:				
6	Soft rock	m3	49		
7	Hard rock	m3	49		
	Extra over all excavations for carting away:				
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	35		
	Carried Forward			R	
	Section No. 3 SMD3 Bill No. 1 EARTHWORKS				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Risk of collapse of excavations:				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	82		
	Keeping excavations free of water:				
10	Keeping excavations free of water other than subterranean water		ltem		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:				
11	Under floors, steps, pavings, etc.	m3	7		
12	Backfilling to trenches, holes, etc.	m3	9		
	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	25		
14	Compaction of ground surface to pits 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	20		
15	Compaction of ground surface to aprons 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	44		
	Prescribed density tests on filling:				
16	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Carried Forward Section No. 3 SMD3 Bill No. 1 EARTHWORKS			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Soil insecticide:				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	25		
18	To bottom of concrate aprons	m2	44		
19	To bottoms and sides of trenches, etc.	m2	69		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 SMD3				
	Bill No. 1 EARTHWORKS				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO.2				
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
1	Strip footings	m3	4		
2	Ditto, but surface bed in pit	m3	3		
3	2Aprons cast in panels	m3	4		
4	Ramp	m3	1		
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	8		
6	Thickening down apron on edge 110mm deep x 200mm wide	m	34		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
7	Surface beds	m3	2		
8	Slabs	m3	1		
	Carried Forward			R	
	Section No. 3 SMD3 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel:				
9	Suface beds, slabs, etc.	m2	35		
	Finishing top surfaces of concrete smooth with a wood float:				
10	Aprons and pavings to falls	m2	44		
	TEST CUBES				
11	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24		
	FORMWORK				
	Rough formwork to sides:				
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	39		
	Permanent formwork to soffits:				
13	Slabs propped up not exceeding 1.5m high	m2	7		
14	Leave or form 500mm diameter opening in top of floor slab	No	4		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett):				
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	25		
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	SMD3 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount
	SECTION 3			
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions:			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc.:			
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks:			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Carried Forward		R	
	Section No. 3 SMD3 Bill No. 3 MASONRY			
	BVI CONSULTING ENGINEERS			

	Brought Forward			R	
	Pointing:				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SAMPLES				
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	FOUNDATIONS				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	20		
2	One brick walls in pit	m2	44		
3	4Half brick corbelling in pit	m	12		
	FACE BRICKWORK				
	<u>Face bricks (purchase price of R 5000.00/1000</u> <u>delivered to site excluding VAT) pointed with flush</u> <u>horizontal and vertical joints:</u>				
4	Extra over brickwork for face brickwork in foundation	m2	4		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
5	Half brickwork for face brick walls pointed both sides	m2	21		
6	One brickwork for face brick walls pointed both sides	m2	77		
	Carried Forward			R	
	Section No. 3 SMD3 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
7	Extra over brickwork for face brickwork in beamfilling	m2	4		
8	Fair raking and cutting	m	7		
	Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:				
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	11		
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	6		
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1		
	BRICKWORK SUNDRIES				
	Brick reinforcement:				
11	75mm Wide reinforcement built in horizontally	m	61		
12	150mm Wide reinforcement built in horizontally	m	501		
	Turning pieces:				
13	220mm Wide turning piece to lintel etc	m	6		
	Galvanised wire ties etc.:				
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	18		
	Prestressed fabricated lintels:				
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	15		
	Ventillation bricks:				
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	11		
	Carried Forward to Summary of Section No. 3 SMD3 Bill No. 3 MASONRY			R	
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course:				
1	In walls	m2	14		
	One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:				
2	Under surface beds	m2	38		
3	Aprons and ramps	m2	44		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	11		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 SMD3				
	Bill No. 4 WATERPROOFING				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	37		
	Sundries:				
2	12" Thermal resistance sisalition laid on purlins	m2	37		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	8		
4	Extra over for closed ends	No	2		
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3		
6	Extra over rainwater pipe for eaves offset	No	1		
	Carried Forward Section No. 3 SMD3 Bill No. 5			R	
	ROOF COVERINGS BVI CONSULTING ENGINEERS				

	Brought Forward		R	
7	Ditto ,for shoe No	1		
	Carried Forward to Summary of Section No. 3		R	
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ltem No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood:				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	41		
2	76 x 38mm Wall plates	m	14		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	41		
	Sundries:				
4	Two coats creosote on sawn timbers	m2	26		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18		
6	Hurricane clips	No	45		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement:				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	28		
	DOORS, ETC.				
	Carried Forward Section No. 3			R	
	SMD3 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
l	Wrought meranti doors hung to steel frames:				
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2		
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	3		
			3		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 SMD3 Bill No. 6 CARPENTRY AND JOINERY				_
	BVI CONSULTING ENGINEERS				

tem No			Quantity	Rate	Amount
-	SECTION 3				
	BILL NO.7				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CATCHES, CABIN, HOOKS, ETC				
	Approved:				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	LOCKS				
	Approved:				
2	Three lever mortice lockset	No	2		
3	Indicator lockset	No	3		
	DOORSTOPS				
	Approved:				
4	38mm Diameter rubber door stop plugged	No	5		
	LETTERS, NAMEPLATES, ETC.				
	<u>"Union" or similar approved:</u>				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2		
	Carried Forward Section No. 3			R	
	SMD3 Bill No. 7 IRONMONGERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R		
	"Vaal Paragon" or similar approved:					
6	32mm Type 9 back grab rail 800mm long plugged	No	1			
7	32mm Type 8 side grab rail 900mm girth plugged	No	1			
	BATHROOM FITTINGS					
	<u>"Kimberley-Clark"or Simlilar:</u>					
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	4			
	Stainless steel					
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	1			
	Carried Forward to Summary of Section No. 3 Section No. 3			R		
	Section No. 5 SMD3 Bill No. 7 IRONMONGERY					
	BVI CONSULTING ENGINEERS					
				I I	I	

tem No			Quantity	Rate	Amount
-	SECTION 3				
	BILL NO.8				
	METALWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	<u>1,2mm Single rebated frames suitable for half brick</u> walls:				
1	Frame for door 813 x 2032mm high	No	3		
	<u>1,6mm Double rebated frames suitable for one</u> brickwalls:				
2	Frame for door 813 x 2032mm high	No	2		
	STEEL WINDOWS, DOORS, ETC				
3	Window type NE1, 533 x 654mm high including burglar bars	No	6		
4	Window type NE 7,1022 x 654mm high including burglar bars	No	3		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames:				
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2		
				5	
	Carried Forward to Summary of Section No. 3 Section No. 3			R	
	SMD3 Bill No. 8 METALWORK				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount	
No	SECTION 3					
	BILL NO. 9					
	PLASTERING					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	CEMENT SCREEDS TO CONCRETE					
	Screeds to steel trowelled, on concrete:					
1	30mm thick on floors	m2	25			
	INTERNAL PLASTER					
	Cement plaster on brickwork or blockwork:					
2	On pits walls	m2	37			
	FLOOR AND WALLS SEALERS					
	Minimum two coats approved epoxy coat:					
3	On screed	m2	25			
4	On internal textured plaster walls and floors in pit	m2	45			
	Carried Forward to Summary of Section No. 3			R		
	Section No. 3 SMD3					—
	Bill No. 9 PLASTERING					
	BVI CONSULTING ENGINEERS					

tem No			Quantity	Rate	Amount
	SECTION 3				
	<u>BILL NO. 10</u>				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SANITARY FITTINGS				
	White glazed fireclay or vitreous china coupling with SABS specification 497 in:				
1	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1		
	TRAPS, ETC				
	<u>uPVC:</u>				
2	40mm "P" or "S" trap	No	3		
	TAPS, VALVES, ETC				
3	15mm elbow action pillar tap	No	1		
4	19mm chrome plated push button taps to wash troughs	No	2		
	WATER SUPPLIES				
	<u>uPVC pipes:</u>				
5	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50		
6	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10		
	Carried Forward Section No. 3			R	
	SMD3 Bill No. 10 PLUMBING AND DRAINAGE				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Extra over uPVC pipes for fittings:				
7	20mm Bend	No	5		
8	40mm Bend	No	5		
	Galvanised steel pipes:				
9	20mm Pipes chased into brick walls	m	3		
	Extra over galvanised steel pipes for steel fittings:				
10	20mm Fittings	No	5		
	TESTING				
11	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect		Item		
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3 SMD3 Bill No. 10 PLUMBING AND DRAINAGE BVI CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount	
	SECTION 3				
	BILL NO. 11				
	<u>GLAZING</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	GLAZING TO STEEL WITH PUTTY				
	<u>4mm Obscure safety glass:</u>				
1	Panes not exceeding 0,1 m2 m2	4			
	Consider Forward to Summary of Conting No. 2				
	Carried Forward to Summary of Section No. 3 Section No. 3		R		_
	SMD3 Bill No. 11				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 3				
	BILL NO. 12				
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:				
1	On fascias and barge boards	m2	8		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel:				
2	On doors (Internal)	m2	10		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel:				
4	On door frames	m2	1		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	13		
	Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:				
7	On windows with burglar bars	m2	4		
	Carried Forward to Summary of Section No. 3 Section No. 3 SMD3 Bill No. 12 PAINTWORK			R	
	BVI CONSULTING ENGINEERS				

Bill No

	SECTION SUMMARY - SMD3			
 0		Page No		Amount
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2	CONCRETE, FORMWORK AND REINFORCEMENT	63		
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4	WATERPROOFING	67		
5	ROOF COVERINGS	69		
6	CARPENTRY AND JOINERY	71		
7	IRONMONGERY	73		
8	METALWORK	74		
9	PLASTERING	75		
10	PLUMBING AND DRAINAGE	77		
11	GLAZING	78		
12	PAINTWORK	79		
	Carried to Final Summary Section No. 3 SMD3		R	
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount	
	SECTION 4					
	BILL NO.1					
	EARTHWORKS (PROVISIONAL)					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	SITE CLEARANCE					
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	73			
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	73			
	EXCAVATION, FILLING, ETC					
	Excavation in earth not exceeding 2m deep:					
3	Trenches	m3	18			
4	Pit	m3	26			
5	For aprons thickenning	m3	4			
	Extra over trench and hole excavations in earth for excavation:					
6	Soft rock	m3	49			
7	Hard rock	m3	49			
	Extra over all excavations for carting away:					
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	35			
	Carried Forward			R		
	Section No. 4 FD5 Bill No. 1 EARTHWORKS					
	BVI CONSULTING ENGINEERS					

	Brought Forward			R	
	Risk of collapse of excavations:				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	81		
	Keeping excavations free of water:				
10	Keeping excavations free of water other than subterranean water		ltem		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:				
11	Under floors, steps, pavings, etc.	m3	7		
12	Backfilling to trenches, holes, etc.	m3	11		
	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	25		
14	Compaction of ground surface to pits 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	21		
15	Compaction of ground surface to aprons 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	43		
	Prescribed density tests on filling:				
16	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Carried Forward Section No. 4 FD5 Bill No. 1 EARTHWORKS			R	
	BVI CONSULTING ENGINEERS				

	Soil insecticide:				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	25		
18	To bottom of concrate aprons	m2	43		
19	To bottoms and sides of trenches, etc.	m2	69		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4			К	-
	FD5 Bill No. 1				
	EARTHWORKS				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO.2				
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
1	Strip footings	m3	4		
2	Ditto, but surface bed in pit	m3	3		
3	2Aprons cast in panels	m3	4		
4	Ramp	m3	1		
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	12		
6	Thickening down apron on edge 110mm deep x 200mm wide	m	34		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
7	Surface beds	m3	2		
8	Slabs	m3	1		
	Carried Forward			R	
	Section No. 4 FD5 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

Brought Forward			R
CONCRETE SUNDRIES			
Finishing top surfaces of concrete smooth with a steel trowel:			
Suface beds, slabs, etc.	m2	34	
Finishing top surfaces of concrete smooth with a wood float:			
Aprons and pavings to falls	m2	43	
TEST CUBES			
Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24	
FORMWORK			
Rough formwork to sides:			
Edges, risers, ends and reveals not exceeding 300mm high or wide	m	39	
Permanent formwork to soffits:			
Slabs propped up not exceeding 1.5m high	m2	10	
Leave or form 500mm diameter opening in top of floor slab	No	6	
REINFORCEMENT			
Mesh Reinforcement (measure nett):			
Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	25	
			-
Carried Forward to Summary of Section No. 4 Section No. 4 FD5 Bill No. 2			R
BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount
	SECTION 4			
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions:			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc.:			
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks:			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Carried Forward		R	
	Section No. 4 FD5 Bill No. 3 MASONRY			
	BVI CONSULTING ENGINEERS			

	Brought Forward			R	ĺ
	Pointing:				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SAMPLES				
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	FOUNDATIONS				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	20		
2	One brick walls in pit	m2	54		
3	4Half brick corbelling in pit	m	16		
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
4	Extra over brickwork for face brickwork in foundation	m2	4		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	<u>Face bricks (purchase price of R 5000.00/1000</u> delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
5	Half brickwork for face brick walls pointed both sides	m2	30		
6	One brickwork for face brick walls pointed both sides	m2	76		
	Carried Forward			R	
	Section No. 4 FD5 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				
					1

	Brought Forward			R	
7	Extra over brickwork for face brickwork in beamfilling	m2	4		
8	Fair raking and cutting	m	7		
	Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:				
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	12		
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	6		
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1		
	BRICKWORK SUNDRIES				
	Brick reinforcement:				
11	75mm Wide reinforcement built in horizontally	m	89		
12	150mm Wide reinforcement built in horizontally	m	556		
	Turning pieces:				
13	220mm Wide turning piece to lintel etc	m	6		
	Galvanised wire ties etc.:				
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	18		
	Prestressed fabricated lintels:				
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	15		
	Ventillation bricks:				
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	11		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 FD5				
	Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course:				
1	In walls	m2	15		
	One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:				
2	Under surface beds	m2	38		
3	Aprons and ramps	m2	43		
	FLOOR AND WALLS SEALERS "Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	12		
	Carried Forward to Summary of Section No. 4 Section No. 4 FD5 Bill No. 4 WATERPROOFING BVI CONSULTING ENGINEERS			R	

ltem No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere):				
1	Roof covering with pitch not exceeding 25 degrees	m2	37		
	Sundries:				
2	12" Thermal resistance sisalition laid on purlins	m2	37		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	8		
3	Extra over for closed ends	No	2		
4	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3		
5	Extra over rainwater pipe for eaves offset	No	1		
	Carried Forward Section No. 4 FD5			R	
	Bill No. 5 ROOF COVERINGS				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
6	Ditto ,for shoe	No	1		
	Carried Forward to Summary of Section No. 4			R	
	FD5 Bill No. 5 ROOF COVERINGS				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
-	SECTION 4				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	<u>Sawn softwood:</u>				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	41		
2	76 x 38mm Wall plates	m	14		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	41		
	Sundries:				
4	Two coats creosote on sawn timbers	m2	28		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18		
6	Hurricane clips	No	45		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement:				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	25		
	DOORS, ETC.				
	Carried Forward Section No. 4			R	
	FD5 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
l	Wrought meranti doors hung to steel frames:				
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2		
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	5		
	Carried Forward to Summary of Section No. 4 Section No. 4 FD5			R	
	Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO.7				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CATCHES, CABIN, HOOKS, ETC				
	Approved:				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	LOCKS				
	Approved:				
2	Three lever mortice lockset	No	2		
3	Indicator lockset	No	5		
	DOORSTOPS				
	Approved:				
4	38mm Diameter rubber door stop plugged	No	7		
	LETTERS, NAMEPLATES, ETC.				
	"Union" or similar approved:				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2		
	Carried Forward			R	
	Section No. 4 FD5				
	Bill No. 7				
	IRONMONGERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	"Vaal Paragon" or similar approved:				
6	32mm Type 9 back grab rail 800mm long plugged	No	1		
7	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	BATHROOM FITTINGS				
	<u>"Kimberley-Clark"or Simlilar:</u>				
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	6		
	Stainless steel				
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	1		
	Sundries:				
10	Female SHE BIN plugged to walls	No	2		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 FD5 Bill No. 7 IRONMONGERY				
	BVI CONSULTING ENGINEERS				

em No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO.8				
	METALWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	<u>1,2mm Single rebated frames suitable for half brick</u> walls:				
1	Frame for door 813 x 2032mm high	No	5		
	<u>1,6mm Double rebated frames suitable for one</u> brickwalls:				
2	Frame for door 813 x 2032mm high	No	2		
	STEEL WINDOWS, DOORS, ETC				
3	Window type NE1, 533 x 654mm high including burglar bars	No	6		
4	Window type NE 7,1022 x 654mm high including burglar bars	No	3		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames:				
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2		
	Sundires:				
6	Purpose made protective steel cage to SHE-BIN	No	2		
	Carried Forward to Summary of Section No. 4 Section No. 4 FD5 Bill No. 8 METALWORK			R	
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount	
	SECTION 4					
	BILL NO. 9					
	PLASTERING					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	CEMENT SCREEDS TO CONCRETE					
	Screeds to steel trowelled, on concrete:					
1	30mm thick on floors	m2	25			
	INTERNAL PLASTER					
	Cement plaster on brickwork or blockwork:					
2	On pits walls	m2	52			
	FLOOR AND WALLS SEALERS					
	Minimum two coats approved epoxy coat:					
3	On screed	m2	25			
4	On internal textured plaster walls and floors in pit	m2	62			
	Carried Forward to Summary of Section No. 4			R		_
	Section No. 4 FD5					=
	Bill No. 9 PLASTERING					
	BVI CONSULTING ENGINEERS					

ltem No			Quantity	Rate	Amount
	SECTION 4				
	<u>BILL NO. 10</u>				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SOIL DRAINAGE				
	uPVC flexible drainage pipes:				
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30		
2	110mm Ditto, but exceeding 1m and not exceeding 2m deep	m	30		
	Extra over uPVC flexible drainage pipes for fittings:				
3	110mm Bend	No	5		
4	110mm Junction	No	5		
5	110mm Rodding eye	No	3		
6	110mm Inspection eye	No	3		
	<u>uPVC gulleys:</u>				
7	110mm Gulley not exceeding 500mm deep	No	2		
	Testing:				
8	Testing soil drainage system		ltem		
	SANITARY FITTINGS				
	Carried Forward Section No. 4 FD5 Bill No. 10 PLUMBING AND DRAINAGE			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	White glazed fireclay or vitreous china coupling with SABS specification 497 in:				
9	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1		
	TRAPS, ETC				
	<u>uPVC:</u>				
10	40mm "P" or "S" trap	No	1		
	TAPS, VALVES, ETC				
11	15mm elbow action pillar tap	No	1		
12	19mm chrome plated push button taps to wash troughs	No	2		
	WATER SUPPLIES				
	uPVC pipes:				
13	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50		
14	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10		
	Extra over uPVC pipes for fittings:				
15	20mm Bend	No	5		
16	40mm Bend	No	5		
	Galvanised steel pipes:				
17	20mm Pipes chased into brick walls	m	3		
	Extra over galvanised steel pipes for steel fittings:				
18	20mm Fittings	No	5		
	Carried Forward			R	
	Section No. 4 FD5 Bill No. 10 PLUMBING AND DRAINAGE				
	BVI CONSULTING ENGINEERS				

	Brought Forward		R	
	TESTING			
19	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item		
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4 FD5 Bill No. 10 PLUMBING AND DRAINAGE			
	BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount
	SECTION 4			
	<u>BILL NO. 11</u>			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	<u>4mm Obscure safety glass:</u>			
1	Panes not exceeding 0,1 m2 m2	4		
	Carried Forward to Summary of Section No. 4 Section No. 4		R	
	FD5 Bill No. 11			
	GLAZING			
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 4				
	BILL NO. 12				
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:				
1	On fascias and barge boards	m2	8		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel:				
2	On doors (Internal)	m2	16		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel:				
4	On door frames	m2	1		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	13		
	Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:				
7	On windows with burglar bars	m2	4		
	Carried Forward to Summary of Section No. 4 Section No. 4 FD5 Bill No. 12 PAINTWORK			R	
	BVI CONSULTING ENGINEERS				

Bill No

	SECTION SUMMARY - FD5			
ll D		Page No		Amount
1	EARTHWORKS	83		
2	CONCRETE, FORMWORK AND REINFORCEMENT	85		
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7	IRONMONGERY	95		
8	METALWORK	96		
9	PLASTERING	97		
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11	GLAZING	101		
12	PAINTWORK	102		
	Carried to Final Summary Section No. 4		R	
	FD5			
	BVI CONSULTING ENGINEERS			
	l	1	I	I I

ltem No			Quantity	Rate	Amount	
	SECTION 5					
	BILL NO.1					
	EARTHWORKS (PROVISIONAL)					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	SITE CLEARANCE					
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	103			
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	103			
	EXCAVATION, FILLING, ETC					
	Excavation in earth not exceeding 2m deep:					
3	Trenches	m3	24			
4	Pit	m3	42			
5	For aprons thickenning	m3	5			
	Extra over trench and hole excavations in earth for excavation:					
6	Soft rock	m3	71			
7	Hard rock	m3	71			
	Extra over all excavations for carting away:					
8	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	53			
	Carried Forward			R		
	Section No. 5 MD7 Bill No. 1 EARTHWORKS					
	BVI CONSULTING ENGINEERS					

	Brought Forward			R	
	Risk of collapse of excavations:				
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	112		
	Keeping excavations free of water:				
10	Keeping excavations free of water other than subterranean water		ltem		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:				
11	Under floors, steps, pavings, etc.	m3	12		
12	Backfilling to trenches, holes, etc.	m3	13		
	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	39		
14	Compaction of ground surface to pits 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	33		
15	Compaction of ground surface to aprons 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	54		
	Prescribed density tests on filling:				
16	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Carried Forward Section No. 5 MD7 Bill No. 1 EARTHWORKS			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Soil insecticide:				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	39		
18	To bottom of concrate aprons	m2	54		
19	To bottoms and sides of trenches, etc.	m2	92		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 MD7				
	Bill No. 1 EARTHWORKS				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount	
	SECTION 5					
	BILL NO.2					
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to					
	be used - PW 371"					
	UNREINFORCED CONCRETE, ETC					
	25Mpa/19mm Concrete:					
1	Strip footings	n3	6			
2	Ditto, but surface bed in pit	n3	4			
3	2Aprons cast in panels	n3	5			
4	Ramp n	n3	1			
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	17			
6	Thickening down apron on edge 110mm deep x 200mm wide	m	42			
	REINFORCED CONCRETE, ETC					
	25Mpa/19mm Concrete:					
7	Surface beds n	n3	4			
8	Slabs	n3	2			
	Carried Forward			R		
	Section No. 5 MD7 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT					
	BVI CONSULTING ENGINEERS					

	Brought Forward			R	
<u>co</u>	ONCRETE SUNDRIES				
	nishing top surfaces of concrete smooth with a steel wel:				
9 Su	face beds, slabs, etc.	m2	56		
<u>Fir</u> floa	nishing top surfaces of concrete smooth with a wood at:				
) Ap	prons and pavings to falls	m2	54		
TE	EST CUBES				
15 lab	ow for preparing a set of three test cubes each size 0x150x150mm, sending them to an approved testing poratory for testing and paying all charges in nnection therewith.	No	24		
FC	DRMWORK				
Ro	ough formwork to sides:				
	lges, risers, ends and reveals not exceeding 300mm gh or wide	m	48		
Pe	ermanent formwork to soffits:				
3 Sla	abs propped up not exceeding 1.5m high	m2	12		
4 Lea sla	ave or form 500mm diameter opening in top of floor ab	No	7		
RE	EINFORCEMENT				
Me	esh Reinforcement (measure nett):				
	esh ref. No. 395 fabric reinforcement fixed horizontal surface beds	m2	39		
	Carried Forward to Summary of Section No. 5			R	
MD Bill	ction No. 5 D7 I No. 2 DNCRETE,FORMWORK AND REINFORCEMENT				
В	I CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount	
	SECTION 5				
	BILL NO.3				
	BRICKWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	BRICKWORK				
	Sizes in descriptions:				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Hollow walls etc.:				
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.				
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.				
	User note: The above preamble generally applies for works in hot and humid coastal areas				
	Face bricks:				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
					_
	Carried Forward		R		
	Section No. 5 MD7 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Pointing:				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SAMPLES				
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	FOUNDATIONS				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	26		
2	One brick walls in pit	m2	56		
3	4Half brick corbelling in pit	m	19		
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
4	Extra over brickwork for face brickwork in foundation	m2	6		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
5	Half brickwork for face brick walls pointed both sides	m2	42		
6	One brickwork for face brick walls pointed both sides	m2	102		
					<u> </u>
	Carried Forward			R	
	Section No. 5 MD7 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				
					1

	Brought Forward			R	[
7	Extra over brickwork for face brickwork in beamfilling	m2	6		
8	Fair raking and cutting	m	7		
	Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:				
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	16		
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	9		
10	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	1		
	BRICKWORK SUNDRIES				
	Brick reinforcement:				
11	75mm Wide reinforcement built in horizontally	m	124		
12	150mm Wide reinforcement built in horizontally	m	577		
	Turning pieces:				
13	220mm Wide turning piece to lintel etc	m	18		
	Galvanised wire ties etc.:				
14	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	28		
	Prestressed fabricated lintels:				
15	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	17		
	Ventillation bricks:				
16	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	16		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 MD7				
	Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 5				
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course:				
1	In walls	m2	18		
	One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:				
2	Under surface beds	m2	61		
3	Aprons and ramps	m2	54		
	FLOOR AND WALLS SEALERS				
	"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	16		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 MD7				
	Bill No. 4 WATERPROOFING				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 5				
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)				
1	Roof covering with pitch not exceeding 25 degrees	m2	56		
	Sundries:				
2	12" Thermal resistance sisalition laid on purlins	m2	56		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	13		
4	Extra over for closed ends	No	2		
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3		
6	Extra over rainwater pipe for eaves offset	No	1		
	Carried Forward			R	
	Section No. 5 MD7 Bill No. 5 ROOF COVERINGS				
	BVI CONSULTING ENGINEERS				

	Brought Forward		R	
7	Ditto ,for shoe No	1		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 MD7			
	Bill No. 5 ROOF COVERINGS			
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 5				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	<u>Sawn softwood:</u>				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	62		
2	76 x 38mm Wall plates	m	23		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	62		
	Sundries:				
4	Two coats creosote on sawn timbers	m2	40		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	28		
6	Hurricane clips	No	70		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement:				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	34		
	DOORS, ETC.				
	Carried Forward Section No. 5			R	
	MD7 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R		
l	Wrought meranti doors hung to steel frames:					
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2			
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	6			
	Carried Forward to Summary of Section No. 5 MD7 Bill No. 6	Νο	6	R		
	CARPENTRY AND JOINERY BVI CONSULTING ENGINEERS					

No	SECTION 5	1		
	BILL NO.7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CATCHES, CABIN, HOOKS, ETC			
	Approved:			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged N	o 2		
	LOCKS			
	Approved:			
2	Three lever mortice lockset	o 2		
3	Indicator lockset	o 6		
	DOORSTOPS			
	Approved:			
4	38mm Diameter rubber door stop plugged N	8 8		
	LETTERS, NAMEPLATES, ETC.			
	"Union" or similar approved:			
	75 x 150mm Natural anodised aluminium plate with male or female symbol N	p 2		
	Carried Forward Section No. 5		R	
	MD7 Bill No. 7 IRONMONGERY			
	BVI CONSULTING ENGINEERS			

	Brought Forward			R		
	"Vaal Paragon" or similar approved:					
6	32mm Type 9 back grab rail 800mm long plugged	No	1			
7	32mm Type 8 side grab rail 900mm girth plugged	No	1			
	BATHROOM FITTINGS					
	<u>"Kimberley-Clark"or Simlilar:</u>					
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	7			
	Stainless steel					
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	1			
	Carried Forward to Summary of Section No. 5			R		
	Section No. 5 MD7 Bill No. 7 IRONMONGERY					
	BVI CONSULTING ENGINEERS					
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ltem No			Quantity	Rate	Amount
	SECTION 5				
	BILL NO.8				
	METALWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	<u>1,2mm Single rebated frames suitable for half brick</u> walls:				
1	Frame for door 813 x 2032mm high	No	6		
	<u>1,6mm Double rebated frames suitable for one</u> <u>brickwalls:</u>				
2	Frame for door 813 x 2032mm high	No	2		
	STEEL WINDOWS, DOORS, ETC				
3	Window type NE1, 533 x 654mm high including burglar bars	No	10		
4	Window type NE 7,1022 x 654mm high including burglar bars	No	4		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames:				
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5			K	
	MD7 Bill No. 8 METALWORK				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount	
	SECTION 5					
	BILL NO. 9					
	PLASTERING					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	CEMENT SCREEDS TO CONCRETE					
	Screeds to steel trowelled, on concrete:					
1	30mm thick on floors	m2	39			
	INTERNAL PLASTER					
	Cement plaster on brickwork or blockwork:					
2	On pits walls	m2	59			
	FLOOR AND WALLS SEALERS					
	Minimum two coats approved epoxy coat:					
3	On screed	m2	39			
4	On internal textured plaster walls and floors in pit	m2	71			
	Carried Forward to Summary of Section No. 5			R		
	Section No. 5 MD7					—
	Bill No. 9 PLASTERING					
	BVI CONSULTING ENGINEERS					

tem No			Quantity	Rate	Amount
	SECTION 5				
	<u>BILL NO. 10</u>				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SOIL DRAINAGE				
	uPVC flexible drainage pipes:				
1	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30		
2	110mm Ditto, but exceeding 1m and not exceeding 2m deep	m	30		
	Extra over uPVC flexible drainage pipes for fittings:				
3	110mm Bend	No	5		
4	110mm Junction	No	5		
5	110mm Rodding eye	No	3		
6	110mm Inspection eye	No	3		
	<u>uPVC gulleys:</u>				
7	110mm Gulley not exceeding 500mm deep	No	2		
	Testing:				
8	Testing soil drainage system		ltem		
	SANITARY FITTINGS				
	Carried Forward			R	
	Section No. 5 MD7 Bill No. 10 PLUMBING AND DRAINAGE				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	ĺ
	White glazed fireclay or vitreous china coupling with SABS specification 497 in:			<u>.</u>	
9	Wash hand basin bolted to wall including all fittings and necessary pipework	No	1		
	TRAPS, ETC				
	<u>uPVC:</u>				
10	40mm "P" or "S" trap	No	3		
	TAPS, VALVES, ETC				
11	15mm elbow action pillar tap	No	1		
12	19mm chrome plated push button taps to wash troughs	No	2		
	WATER SUPPLIES				
	uPVC pipes:				
13	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50		
14	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10		
	Extra over uPVC pipes for fittings:				
15	20mm Bend	No	5		
16	40mm Bend	No	5		
	Galvanised steel pipes:				
17	20mm Pipes chased into brick walls	m	3		
	Extra over galvanised steel pipes for steel fittings:				
18	20mm Fittings	No	5		
	Carried Forward			R	
	Section No. 5 MD7 Bill No. 10 PLUMBING AND DRAINAGE				
	BVI CONSULTING ENGINEERS				

	Brought Forward		R	
	TESTING			
19	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 MD7 Bill No. 10 PLUMBING AND DRAINAGE			
	BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount
	SECTION 5			
	<u>BILL NO. 11</u>			
	GLAZING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	GLAZING TO STEEL WITH PUTTY			
	<u>4mm Obscure safety glass:</u>			
1	Panes not exceeding 0,1 m2 m2	6		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 MD7 Bill No. 11 GLAZING			
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 5				
	BILL NO. 12				
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:				
1	On fascias and barge boards	m2	10		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel:				
2	On doors (Internal)	m2	20		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel:				
4	On door frames	m2	2		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	15		
	Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:				
7	On windows with burglar bars	m2	6		
	Carried Forward to Summary of Section No. 5 Section No. 5 MD7 Bill No. 12 PAINTWORK			R	
	BVI CONSULTING ENGINEERS				

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6	CARPENTRY AND JOINERY	116		
7	IRONMONGERY	118		
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	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 6				
	BILL NO.1				
	EARTHWORKS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	65		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	65		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep:				
3	Trenches	m3	16		
4	For aprons thickenning	m3	4		
	Extra over trench and hole excavations in earth for excavation:				
5	Soft rock	m3	20		
6	Hard rock	m3	20		
	Extra over all excavations for carting away:				
7	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	8		
	Carried Forward Section No. 6 GRMD2 Bill No. 1 EARTHWORKS			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward			R
	Risk of collapse of excavations:			
8	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	46	
	Keeping excavations free of water:			
9	Keeping excavations free of water other than subterranean water		Item	
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:			
10	Under floors, steps, pavings, etc.	m3	6	
11	Backfilling to trenches, holes, etc.	m3	9	
	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	21	
13	Compaction of ground surface to aprons 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	37	
	Prescribed density tests on filling:			
14	Modified AASHTO Density tests	No	5	
	SOIL POISONING			
	Soil insecticide			
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	21	
	Carried Forward			R
	Section No. 6 GRMD2 Bill No. 1 EARTHWORKS			
	BVI CONSULTING ENGINEERS			

	Brought For	ward		R	
16	To bottom of concrate aprons	m2	37		
16	To bottom of concrate aprons To bottoms and sides of trenches, etc.	m2 m2	37		
	Carried Forward to Summary of Section Section No. 6 GRMD2 Bill No. 1 EARTHWORKS	No. 6		R	
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 6				
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
1	Strip footings	m3	4		
2	2Aprons cast in panels	m3	3		
3	Ramp	m3	1		
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	6		
5	Thickening down apron on edge 110mm deep x 200mm wide	m	29		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
6	Surface beds	m3	2		
	CONCRETE SUNDRIES				
	Carried Forward			R	
	Section No. 6 GRMD2				
	Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R		
	Finishing top surfaces of concrete smooth with a steel trowel:					
7	Suface beds, slabs, etc.	m2	21			
	Finishing top surfaces of concrete smooth with a wood float:					
8	Aprons and pavings to falls	m2	37			
	TEST CUBES					
9	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24			
	FORMWORK					
	Rough formwork to sides:					
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	34			
	REINFORCEMENT					
	Mesh Reinforcement (measure nett):					
11	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	21			
	Carried Forward to Summary of Section No. 6			R		_
	Section No. 6 GRMD2 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT					
	BVI CONSULTING ENGINEERS					

ltem No		Quantity	Rate	Amount	
	SECTION 6				
	BILL NO.3				
	BRICKWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	BRICKWORK				
	Sizes in descriptions:				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
	Hollow walls etc.:				
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.				
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.				
	User note: The above preamble generally applies for works in hot and humid coastal areas				
	Face bricks:				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	Carried Forward		R		
	Section No. 6 GRMD2 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	l
l	Pointing:				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SAMPLES				
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	FOUNDATIONS				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	18		
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
2	Extra over brickwork for face brickwork in foundation	m2	3		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
3	Half brickwork for face brick walls pointed both sides	m2	14		
4	One brickwork for face brick walls pointed both sides	m2	70		
5	Extra over brickwork for face brickwork in beamfilling	m2	4		
6	Fair raking and cutting	m	7		
	Carried Forward			R	
	Section No. 6 GRMD2 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:				
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	8		
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	5		
8	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	6		
9	Fair cutting and fitting around pipe exceeding 100mm diameter and not exceeding 100mm diameter.	No	3		
	BRICKWORK SUNDRIES				
	Brick reinforcement:				
10	75mm Wide reinforcement built in horizontally	m	41		
11	150mm Wide reinforcement built in horizontally	m	279		
	Turning pieces:				
12	220mm Wide turning piece to lintel etc	m	8		
	Galvanised wire ties etc.:				
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	16		
	Ventillation bricks:				
14	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	9		
	Carried Forward to Summary of Section No. 6 Section No. 6			R	
	GRMD2 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

em No			Quantity	Rate	Amount
	SECTION 6				
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course:				
1	In walls	m2	6		
	One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:				
2	Under surface beds	m2	21		
3	Aprons and ramps	m2	37		
	FLOOR AND WALLS SEALERS "Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	8		
	Carried Forward to Summary of Section No. 6 Section No. 6 GRMD2 Bill No. 4 WATERPROOFING			R	
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 6				
	BILL NO.5				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes				
	PROFILED METAL SHEETING AND ACCESSORIES				
	<u>0,6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere)</u>				
1	Roof covering with pitch not exceeding 25 degrees	m2	32		
	Sundries:				
2	12" Thermal resistance sisalition laid on purlins	m2	32		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	7		
4	Extra over for closed ends	No	2		
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3		
6	Extra over rainwater pipe for eaves offset	No	1		
	Carried Forward Section No. 6 GRMD2 Bill No. 5 ROOF COVERINGS			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward		R	
7	Ditto ,for shoe No	1		
	Carried Forward to Summary of Section No. 6 Section No. 6		R	
	GRMD2 Bill No. 5 ROOF COVERINGS			
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount
	SECTION 6				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood:				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	35		
2	76 x 38mm Wall plates	m	12		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	35		
	Sundries:				
4	Two coats creosote on sawn timbers	m2	25		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	16		
6	Hurricane clips	No	40		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement:				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	23		
	DOORS, ETC.				
	Carried Forward Section No. 6 GRMD2 Bill No. 6 CARPENTRY AND JOINERY			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames:				
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2		
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom) (D2)	No	2		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 GRMD2 Bill No. 6 CARPENTRY AND JOINERY				_
	BVI CONSULTING ENGINEERS				

No			Quantity	Rate	Amount
-	SECTION 6				
	BILL NO.7				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CATCHES, CABIN, HOOKS, ETC				
	Approved:				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	LOCKS				
	Approved:				
2	Three lever mortice lockset	No	2		
3	Indicator lockset	No	2		
	DOORSTOPS				
	Approved:				
4	38mm Diameter rubber door stop plugged	No	4		
	LETTERS, NAMEPLATES, ETC.				
	<u>"Union" or similar approved:</u>				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2		
	Carried Forward			R	
	Section No. 6 GRMD2 Bill No. 7 IRONMONGERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	"Vaal Paragon" or similar approved:				
6	32mm Type 9 back grab rail 800mm long plugged	No	1		
7	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	BATHROOM FITTINGS				
	<u>"Kimberley-Clark"or Simlilar:</u>				
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	3		
	Stainless steel:				
9	Stainless steel mirror size 350 x 400m plugged to wall with chrome platted screws.	No	2		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 GRMD2 Bill No. 7				
	IRONMONGERY BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount	
	SECTION 6					
	BILL NO.8					
	METALWORK					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	PRESSED STEEL DOOR FRAMES					
	<u>1,2mm Single rebated frames suitable for half brick</u> walls:					
1	Frame for door 813 x 2032mm high	No	2			
	<u>1,6mm Double rebated frames suitable for one</u> brickwalls:					
2	Frame for door 813 x 2032mm high	No	2			
	STEEL WINDOWS, DOORS, ETC					
3	Window type NE1, 533 x 654mm high including burglar bars	No	5			
4	Window type NE 7,1022 x 654mm high including burglar bars	No	2			
	WELDED SCREENS, GATES, ETC					
	Steel gates and frames:					
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2			
						-
	Carried Forward to Summary of Section No. 6 Section No. 6			R		-
	GRMD2 Bill No. 8 METALWORK					
	BVI CONSULTING ENGINEERS					

ltem No		Quantity	Rate	Amount
-	SECTION 6			
	BILL NO. 9			
	PLASTERING			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	CEMENT SCREEDS TO CONCRETE			
	Screeds to steel trowelled, on concrete:			
1	30mm thick on floors m2	21		
	FLOOR AND WALLS SEALERS			
	Minimum two coats approved epoxy coat:			
2	On screed m2	21		
	Carried Forward to Summary of Section No. 6 Section No. 6		R	
	GRMD2 Bill No. 9			
	BVI CONSULTING ENGINEERS			

ltem No			Quantity	Rate	Amount	
	SECTION 6					
	BILL NO. 10					
	PLUMBING AND DRAINAGE (PROVISIONAL)					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	ENVIRO-LOO TOILET SYSTEMS					
1	Allow an amount of R 51 337.65 (Fifty One Thousand Three Hundred and Thirty Seven Rands and Sixty Five Cents) for the supply of Standard Industrial I1040 components complete including urinals		ltem		51 337.6	5
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured eslwhere)	No	6			
3	Supply and install pre-cast concrete double wash- trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1			
	INSTALLATION OF "ENVIRO LOO"					
4	Allow an amount of R 6 000.00 (Six Thousand Rands) for installation of Enviroloo systems		Item		6 000.0	0
	SANITARY FITTINGS					
	<u>Vaal or similar approved:</u>					
5	Junior wash hand basin bolted to wall including all fittings and necessary pipework	No	3			
	Corried Forward			n		
	Carried Forward Section No. 6 GRMD2 Bill No. 10 PLUMBING AND DRAINAGE			R		
	BVI CONSULTING ENGINEERS					

	Brought Forward			R	
6	Junior wall urinal complete with spreader and waste union, flush valve, etc.	No	3		
7	Junior WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern	No	3		
	TRAPS, ETC				
	<u>uPVC:</u>				
8	40mm "P" or "S" trap	No	5		
	TAPS, VALVES, ETC				
9	15mm elbow action pillar tap	No	1		
10	19mm chrome plated push button taps to WHB	No	2		
	WATER SUPPLIES				
	<u>uPVC pipes:</u>				
11	20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50		
12	40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10		
	Extra over uPVC pipes for fittings:				
13	20mm Bend	No	5		
14	40mm Bend	No	5		
	Galvanised steel pipes:				
15	20mm Pipes chased into brick walls	m	3		
	Extra over galvanised steel pipes for steel fittings:				
16	20mm Fittings	No	5		
	Carried Forward			R	
	Section No. 6 GRMD2 Bill No. 10 PLUMBING AND DRAINAGE				
	BVI CONSULTING ENGINEERS				
					I

	Brought Forward		R	
	TESTING			
17	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	Item		
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6 GRMD2 Bill No. 10 PLUMBING AND DRAINAGE			
	BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount	
	SECTION 6				
	<u>BILL NO. 11</u>				
	GLAZING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	GLAZING TO STEEL WITH PUTTY				
	<u>4mm Obscure safety glass:</u>				
1	Panes not exceeding 0,1 m2 m2	3			
	Carried Forward to Summary of Section No. 6		R		
	Section No. 6 GRMD2 Bill No. 11				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 6				
	BILL NO. 12				
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:				
1	On fascias and barge boards	m2	7		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel:				
2	On doors (Internal)	m2	7		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel:				
4	On door frames	m2	1		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	10		
	Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:				
7	On windows with burglar bars	m2	3		
	Carried Forward to Summary of Section No. 6 Section No. 6 GRMD2 Bill No. 12 PAINTWORK			R	
	BVI CONSULTING ENGINEERS				

Bill No

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	Carried to Final Summary Section No. 6		R	
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	BVI CONSULTING ENGINEERS			
			•	. '

ltem No			Quantity	Rate	Amount
	SECTION 7	l			
	BILL NO.1				
	EARTHWORKS (PROVISIONAL)				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	SITE CLEARANCE				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	59		
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	59		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep:				
3	Trenches	m3	15		
4	For aprons thickenning	m3	4		
	Extra over trench and hole excavations in earth for excavation:				
5	Soft rock	m3	19		
6	Hard rock	m3	19		
	Extra over all excavations for carting away:				
7	Surplus material from excavations and/or stock piles on site to a dumping site to be alocated by the Contractor	m3	7		
	Carried Forward Section No. 7 GRFD3 Bill No. 1 EARTHWORKS			R	
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Risk of collapse of excavations:				
8	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	43		
	Keeping excavations free of water:				
9	Keeping excavations free of water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% ModAASHTO density:				
0	Under floors, steps, pavings, etc.	m3	6		
1	Backfilling to trenches, holes, etc.	m3	8		
	Compaction of surfaces:				
2	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		10		
	density	m2	19		
3	Compaction of ground surface to aprons 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		
	Prescribed density tests on filling:				
4	Modified AASHTO Density tests	No	5		
	SOIL POISONING				
	Soil insecticide:				
5	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	19		
	Carried Forward			R	
	Section No. 7 GRFD3 Bill No. 1 EARTHWORKS				
	BVI CONSULTING ENGINEERS				

	Brought Forward	I		R		
16	To bottom of concrate aprons	m2	35			
17	To bottoms and sides of trenches, etc.	m2	58			
						_
	Carried Forward to Summary of Section No. 7	,		R		
	Section No. 7 GRFD3 Bill No. 1					
	EARTHWORKS					
	BVI CONSULTING ENGINEERS					
		I	I	I	I	I

ltem No			Quantity	Rate	Amount
	SECTION 7				
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to				
	be used - PW 371"				
	UNREINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
1	Strip footings	m3	3		
2	2Aprons cast in panels	m3	3		
3	Ramp	m3	1		
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	6		
5	Thickening down apron on edge 110mm deep x 200mm wide	m	27		
	REINFORCED CONCRETE, ETC				
	25Mpa/19mm Concrete:				
6	Surface beds	m3	2		
	CONCRETE SUNDRIES				
	Carried Forward			R	
	Section No. 7 GRFD3 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Finishing top surfaces of concrete smooth with a steel trowel:			<u>-</u>	
7	Suface beds, slabs, etc.	m2	19		
	Finishing top surfaces of concrete smooth with a wood float:				
8	Aprons and pavings to falls	m2	35		
	TEST CUBES				
9	Allow for preparing a set of three test cubes each size 150x150x150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	24		
	FORMWORK				
	Rough formwork to sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	32		
	REINFORCEMENT				
	Mesh Reinforcement (measure nett):				
11	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	19		
					<u> </u>
	Carried Forward to Summary of Section No. 7			R	<u> </u>
	Section No. 7 GRFD3 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT				
	BVI CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount
	SECTION 7			
	BILL NO.3			
	BRICKWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	BRICKWORK			
	Sizes in descriptions:			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Hollow walls etc.:			
	Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in hot and humid coastal areas			
	Face bricks:			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Carried Forward		R	
	Section No. 7 GRFD3 Bill No. 3			
	MASONRY			
	BVI CONSULTING ENGINEERS			

	Brought Forward			R	l
	Pointing:				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SAMPLES				
	Samples of all masonry building units, except those for walls units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site described as "load bearing", shall consist of a minimum of 6				
	FOUNDATIONS				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar				
1	One brick walls	m2	17		
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
2	Extra over brickwork for face brickwork in foundation	m2	3		
	SUPERSTRUCTURE				
	FACE BRICKWORK				
	Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:				
3	Half brickwork for face brick walls pointed both sides	m2	16		
4	One brickwork for face brick walls pointed both sides	m2	64		
5	Extra over brickwork for face brickwork in beamfilling	m2	4		
6	Fair raking and cutting	m	7		
	Carried Forward			R	
	Section No. 7 GRFD3 Bill No. 3 MASONRY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 3 500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces:				
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	9		
	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	4		
8	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	3		
9	Fair cutting and fitting around pipe exceeding 100mm diameter and not exceeding 100mm diameter.	No	4		
	BRICKWORK SUNDRIES				
	Brick reinforcement:				
0	75mm Wide reinforcement built in horizontally	m	47		
1	150mm Wide reinforcement built in horizontally	m	258		
	Turning pieces:				
2	220mm Wide turning piece to lintel etc	m	9		
	Galvanised wire ties etc.:				
3	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	16		
	Prestressed fabricated lintels:				
4	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	10		
	Ventillation bricks:				
5	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	8		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 GRFD3 Bill No. 3 MASONRY			=	
	BVI CONSULTING ENGINEERS				

em Io			Quantity	Rate	Amount
	SECTION 7				
	BILL NO.4				
	WATERPROOFING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375mm micron embossed damp proof course:				
1	In walls	m2	5		
	One layer of 250mm micron waterproof sheeting and sealed at overlaps with pressure sensitive tape:				
2	Under surface beds	m2	17		
3	Aprons and ramps	m2	35		
	FLOOR AND WALLS SEALERS "Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:				
4	Around steel windows and door frames.	m	9		
	Carried Forward to Summary of Section No. 7 Section No. 7 GRFD3 Bill No. 4 WATERPROOFING			R	
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 7				
	BILL NO.5				
	ROOF COVERINGS				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.6mm "Kliplok" chromadek profile roof sheeting fixed to timber purlins (elsewhere):				
1	Roof covering with pitch not exceeding 25 degrees	m2	27		
	Sundries:				
2	12" Thermal resistance sisalition laid on purlins	m2	27		
	RAINWATER DISPOSAL				
	Aluzink seamless metal gutters:				
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	6		
4	Extra over for closed ends	No	2		
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	3		
6	Extra over rainwater pipe for eaves offset	No	1		
	Carried Forward Section No. 7 GRFD3 Bill No. 5			R	
	ROOF COVERINGS BVI CONSULTING ENGINEERS				

	Brought Forward		R	
7	Ditto ,for shoe No	D 1		
	Carried Ferward to Summary of Section No. 7		R	
	Carried Forward to Summary of Section No. 7 Section No. 7 GRFD3			
	Bill No. 5 ROOF COVERINGS			
	BVI CONSULTING ENGINEERS			
			1	

ltem No			Quantity	Rate	Amount
	SECTION 7				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ROOFS, ETC.				
	Sawn softwood:				
1	38 x 152mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	30		
2	76 x 38mm Wall plates	m	10		
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	38		
	Sundries:				
4	Two coats creosote on sawn timbers	m2	23		
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	16		
6	Hurricane clips	No	40		
	EAVES, VERGES, ETC.				
	Pressed fibre-cement:				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	21		
	DOORS, ETC.				
	Carried Forward			R	
	Section No. 7 GRFD3 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	Wrought meranti doors hung to steel frames:				
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard (D1)	No	2		
9	44mm Framed batten door 813 x 1882mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed (door raised by 120mm from bottom)				
	(D2)	No	3		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 GRFD3 Bill No. 6 CARPENTRY AND JOINERY				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 7				
	BILL NO.7				
	IRONMONGERY				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CATCHES, CABIN, HOOKS, ETC				
	Approved:				
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	LOCKS				
	Approved:				
2	Three lever mortice lockset	No	2		
3	Indicator lockset	No	3		
	DOORSTOPS				
	Approved:				
4	38mm Diameter rubber door stop plugged	No	5		
	LETTERS, NAMEPLATES, ETC.				
	<u>"Union" or similar approved:</u>				
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2		
	Carried Forward			R	
	Section No. 7				
	GRFD3 Bill No. 7				
	IRONMONGERY				
	BVI CONSULTING ENGINEERS				

	Brought Forward			R	
	"Vaal Paragon" or similar approved:				
6	32mm Type 9 back grab rail 800mm long plugged	No	1		
7	32mm Type 8 side grab rail 900mm girth plugged	No	1		
	BATHROOM FITTINGS				
	<u>"Kimberley-Clark"or Simlilar:</u>				
8	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	4		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 GRFD3 Bill No. 7 IRONMONGERY				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
	SECTION 7			p.	
	BILL NO.8				
	METALWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	PRESSED STEEL DOOR FRAMES				
	<u>1,2mm Single rebated frames suitable for half brick</u> walls:				
1	Frame for door 813 x 2032mm high	No	3		
	<u>1,6mm Double rebated frames suitable for one</u> brickwalls:				
2	Frame for door 813 x 2032mm high	No	2		
	STEEL WINDOWS, DOORS, ETC				
3	Window type NE1, 533 x 654mm high including burglar bars	No	4		
4	Window type NE 7,1022 x 654mm high including burglar bars	No	2		
	WELDED SCREENS, GATES, ETC				
	Steel gates and frames:				
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 GRFD3				
	Bill No. 8 METALWORK				
	BVI CONSULTING ENGINEERS				

ltem No		Quantity	Rate	Amount	
	SECTION 7				
	<u>BILL NO. 9</u>				
	PLASTERING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	CEMENT SCREEDS TO CONCRETE				
	Screeds to steel trowelled, on concrete:				
1	30mm thick on floors m2	17			
	FLOOR AND WALLS SEALERS				
	Minimum two coats approved epoxy coat:				
2	On screed m2	17			
	Carried Forward to Summary of Section No. 7		R		
	Section No. 7 GRFD3				
	Bill No. 9 PLASTERING				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount	
	SECTION 7					
	<u>BILL NO. 10</u>					
	PLUMBING AND DRAINAGE (PROVISIONAL)					
	SUPPLEMENTARY PREAMBLES					
	For preambles see "Specifications of materials and methods to be used - PW 371"					
	ENVIRO-LOO TOILET SYSTEMS					
1	Allow an amount of R 48 115.20 (Forty Eight Thousand One Hundred and Fifteen Rands and Twenty Cents) for the supply of Standard Industrial I1040 components complete		ltem		48 115.2	20
2	Collect "Enviroloo" components systems complete as supplied by the manufacturer (This item allows for the collection of the 'Enviroloo' components systems only. Supply and install measured eslwhere)	No	5			
3	Supply and install pre-cast concrete double wash- trough, complete with all necessary pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1			
	INSTALLATION OF "ENVIRO LOO"					
4	Allow an amount of R 5 000.00 (Five Thousand Rand) for installation of Enviroloo systems		ltem		5 000.0	0
	SANITARY FITTINGS					
	Vaal or similar approved:					
5	Junior wash hand basin bolted to wall including all fittings and necessary pipework	No	2			
	Carried Forward			R		
	GRFD3 Bill No. 10 PLUMBING AND DRAINAGE					
	BVI CONSULTING ENGINEERS					

Brought Forward			R		l
Junior WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern	No	3			
TRAPS, ETC					
<u>uPVC:</u>					
40mm "P" or "S" trap	No	3			
TAPS, VALVES, ETC					
15mm elbow action pillar tap	No	1			
19mm chrome plated push button taps to WHB	No	2			
WATER SUPPLIES					
<u>uPVC pipes:</u>					
20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	50			
40mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep	m	10			
Extra over uPVC pipes for fittings:					
20mm Bend	No	5			
40mm Bend	No	5			
Galvanised steel pipes:					
20mm Pipes chased into brick walls	m	3			
Extra over galvanised steel pipes for steel fittings:					
20mm Fittings	No	5			
Carried Forward Section No. 7			R		
GRFD3 Bill No. 10					
PLUMBING AND DRAINAGE					
BVI CONSULTING ENGINEERS					
	Surface Section No. 7 Section	Junior WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern No TRAPS, ETC Image: cite cite cite cite cite cite cite cite	Junior WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern No 3 TRAPS, ETC	Jurior WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern No 3 IRAPS, ETC uPVC: 40mm "P" or "S" trap No 3 TAPS, VALVES, ETC 15mm elbow action pillar tap No 1 19mm chrome plated push button taps to WHB No 2 WATER SUPPLIES UPVC pipes: 20mm Pipes laid in and including trenches exceeding m 50 40mm Pipes laid in and including trenches exceeding m 10 Extra over uPVC pipes for fittings: 20mm Bend No 5 40mm Bend No 5 Galvanised steel pipes: 20mm Fittings No 5 Extra over galvanised steel pipes for steel fittings: 20mm Fittings No 5	Junior WC suite comprising pan with double flap heavy duty plastic seat and matching 9 litre cistern No 3 TRAPS. ETC UPVC: 40mm 'P" or "S" trap No 3 TAPS, VALVES. ETC 15mm elbow action pillar tap No 11 19mm chrome plated push button taps to WHB No 2 WATER SUPPLES UPVC pipes: 20mm Pipes laid in and including trenches exceeding 1m deep and not exceeding 2m deep m 10 Extra over uPVC pipes for fittings: 20mm Bend No 5 Galvanised steel pipes 20mm Pipes chased into brick walls m 3 Extra over galvanised steel pipes for steel fittings: 20mm Fittings No 5 Section No. 7 GRFD3 Bill No. 10 PLUMBING AND DRAINAGE

	Brought Forward		R	
	TESTING			
16	Provide all necessary apparatus water, etc for and test the whole of the Water Supply installation to the satisfaction of the Representative/Agent and Municipality, replace any defective work free of charge and leave perfect	ltem		
	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 GRFD3 Bill No. 10 PLUMBING AND DRAINAGE			
	BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount	
	SECTION 7				
	<u>BILL NO. 11</u>				
	GLAZING				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	GLAZING TO STEEL WITH PUTTY				
	<u>4mm Obscure safety glass:</u>				
1	Panes not exceeding 0,1 m2 m2	3			
	Consided Forward to Summary of Conting No. 7				
	Carried Forward to Summary of Section No. 7 Section No. 7		R		_
	GRFD3 Bill No. 11				
	BVI CONSULTING ENGINEERS				

ltem No			Quantity	Rate	Amount
-	SECTION 7				
	BILL NO. 12				
	PAINTWORK				
	SUPPLEMENTARY PREAMBLES				
	For preambles see "Specifications of materials and methods to be used - PW 371"				
	ON FIBRE-CEMENT				
	Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint:				
1	On fascias and barge boards	m2	6		
	ON WOOD				
	Undercoat and minimum 2 coat gloss enamel:				
2	On doors (Internal)	m2	10		
3	On doors (External)	m2	7		
	ON METAL				
	Undercoat and minimum 2 coat gloss enamel:				
4	On door frames	m2	1		
5	On gates (Measured over the full flat area of both sides)	m2	8		
6	On gutters and down pipes	m	10		
	Spot prining defects in prime surface with zinc chromate primer and apply one universal undercoat and two coats EPWP, golden brown gloss enamel paint on steel:				
7	On windows with burglar bars	m2	3		
	Carried Forward to Summary of Section No. 7 Section No. 7 GRFD3 Bill No. 12 PAINTWORK BVI CONSULTING ENGINEERS			R	

Bill No

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	BVI CONSULTING ENGINEERS			

ltem No		Quantity	Rate	Amount
	SECTION 8			
	BILL NO.1			
	PROVISIONAL SUMS			
	All the provisional sums cover supply of material and equipment and installation where applicable by firms of specialists.			
	Provisional sums are net and do not include builder's discount, but the Tenderer may allow under "Profit" items any profit he considers necessary.			
	The Tenderer is referred to Clause 87.1 and 87.2 in the "Preliminaries" section for the definition and adjustment of "General Attendance".			
	N.B ALL PROVISIONAL WORKS ARE SUBJECT TO RE-MEASUREMENTS. THE PROVISIONAL WORK SHALL BE PAID AS PER THE WORK DONE			
1	Provide an amount of R 295 000.00 (Two Hundred and Ninenty Five Thousand Rands) for drilling and equipping of a new borehole.	Item		295 000.00
2	Profit & Attendance	Item		
3	Provide an amount of R110 000.00 (One Hundred and Ten Thousand Rands) for water storage, elevated tank stands and fencing around elevated tank stands including drinking fountains complete.	Item		110 000.00
4	Profit & Attendance	ltem		
5	Provide an amount of R160 000.00 (One Hundred and Twenty Thousand Rands) for walkways and storm water control.	Item		160 000.00
6	Profit & Attendance	ltem		
	Carried Forward		R	
	Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS			
	BVI CONSULTING ENGINEERS			

	Brought Forward		R	
7	Provide an amount of R 30 000.00 (Thirty Thousand Rands) for fencing around Grade R facilities.	Item		30 000.00
8	Profit & Attendance	Item		
9	Provide an amount of R240 000.00 (Two Hundred and Forty Thousand Rands) for refurbishment of existing toilet structures.	Item		240 000.00
10	Profit & Attendance	Item		
11	Provide an amount of R660 000.00 (Six Hundred and Sixty Thousand Rand) for supply and installation of steel palisade fencing around the school perimeter, including sliding and pedestrian gates etc.	ltem		660 000.00
12	Profit & Attendance	Item		
13	Provide an amount of R211 000.00 (Two Hundred and Eleven Thousand Rands) for a new septic tank.	ltem		211 000.00
14	Profit & Attendance	ltem		
15	Allow an amount of R15 000.00 (Fifteen Thousand Rand) for the employment of a Community Liaison Officer for the duration of the contract plus sundries.	Item		15 000.00
	Carried to Final Summary Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS BVI CONSULTING ENGINEERS		R	

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7	GRFD3	172			
8	PROVISIONAL SUMS	174			
	Sub Total (A)		R		
	Sub Total (B)		R		
	Provide 10% (TEN PERCENT) on Sub-total (A) as contingency to be deducted in whole or in part if not required		R		
	Sub Total (C)		R		
	Add Value Added Tax		R		
	Carried to Form of Tender		R		
	BVI CONSULTING ENGINEERS				