

Item No		Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>BILL NO. 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BUILDING AGREEMENT AND PRELIMINARIES</u>			
	The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described			
	The Preliminaries for use with the JBCC Series 2000 Principal Building Agreement (May 2005 edition) prepared by the Joint Building Contracts Committee, shall be deemed to be incorporated in these bills of quantities			
	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		R	
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	Brought Forward		R
<u>PREAMBLES FOR TRADES</u>			
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			
<u>GENERAL</u>			
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 AGREEMENT</u>			
<u>Definitions (A1)</u>			
1 Definitions and interpretation (clause 1)			
F:..... V:..... T:.....	Item		
	Carried Forward		R
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Brought Forward			R	
<u>Objective and Preparation (A2 to A14)</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		
5	Employer's agents (clause 5)			
	F:..... V:..... T:.....	Item		
The principal agent shall:				
- monitor and control progress and scheduling				
- monitor all contract conditions, and				
- coordinate the efforts of the employer's agents, the contractor and subcontractors				
The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part				
Carried Forward			R	
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	Brought Forward		R	
	The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process			
6	Site representative (clause 6)			
	F:..... V:..... T:.....	Item		
7	Compliance with regulations (clause 7)			
	F:..... V:..... T:.....	Item		
8	Works risk (clause 8)			
	F:..... V:..... T:.....	Item		
9	Indemnities (clause 9)			
	F:..... V:..... T:.....	Item		
10	Works insurances (clause 10)			
	F:..... V:..... T:.....	Item		
11	Liability insurances (clause 11)			
	F:..... V:..... T:.....	Item		
	Carried Forward		R	
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Brought Forward		R
12	Effecting insurance (clause 12) F:..... V:..... T:.....	Item
13	NO CLAUSE	N/A
14	Security (clause 14) F:..... V:..... T:.....	Item
<u>Execution (A15-A23)</u>		
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
Carried Forward		R
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Brought Forward			R
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	
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	Item	
22	Employer's Direct Contractors (clause 22) F:..... V:..... T:.....	Item	
23	Contractor's Domestic Sub-Contractors (Clause 23) F:..... V:..... T:.....	Item	
Carried Forward			R
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	Brought Forward		R	
	<u>Completion (A24-A30)</u>			
24	Practical completion (clause 24)			
	F:..... V:..... T:.....	Item		
25	Works completion (clause 25)			
	F:..... V:..... T:.....	Item		
26	Final completion (clause 26)			
	F:..... V:..... T:.....	Item		
27	Latent defects liability period (clause 27)			
	F:..... V:..... T:.....	Item		
28	Sectional completion (clause 28)			
	F:..... V:..... T:.....	Item		
29	Revision of date of practical completion (clause 29)			
	F:..... V:..... T:.....	Item		
	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)			
	Carried Forward		R	
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Brought Forward		R
30	Penalty for non-completion (clause 30) F:..... V:..... T:.....	Item
<u>Payment (A31 - A35)</u>		
31	Interim payment to the contractor (clause 31) F:..... V:..... T:.....	Item
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	Item
33	Recovery of expense and loss (clause 33) F:..... V:..... T:.....	Item
34	Final account and final payment (clause 34) F:..... V:..... T:.....	Item
Carried Forward		R
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	Brought Forward		R	
	The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account			
35	Payment to other parties (clause 35) F:..... V:..... T:..... <u>Cancellation (A36-A39)</u>	Item		
36	Cancellation by employer - contractor's default (clause 36) F:..... V:..... T:.....	Item		
37	Cancellation by employer - loss and damage (clause 37) F:..... V:..... T:.....	Item		
38	Cancellation by contractor - employer's default (clause 38) F:..... V:..... T:.....	Item		
	Carried Forward		R	
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Brought Forward		R	
42.1.2 Principal Agent: As per the information on the Tender data			
42.1.3 Architect:			
42.1.4 Quantity Surveyor:			
Structural :			
42.1.5 Civil:			
42.1.6 Electrical Engineer:			
42.1.6 Mechanical Engineer:			
<u>42.2 CONTRACT DETAILS</u>			
42.2.1 Works Description: Construction of sanitation facilities			
42.2.2 Site Description: as per the information on the tender data			
42.2.3 Work or installations by direct contractors:			
N/A			
Carried Forward		R	
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Brought Forward 42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only Yes 42.2.5 Date on which possession of the site is intended to be given: UNKNOWN 42.2.6 Period for the commencement of the works after the contractor takes possession - 5 days 42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day 18 weeks after contractual commencement date <i>Date</i> <i>Penalty Amount</i> <i>The penalty amount shall be R 2000 per calendar day</i> 42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day Section 1 .N/A..... <i>Date</i> .N/A..... <i>Penalty Amount</i> 42.2.9 The law applicable to this agreement shall be that of <i>South Africa (country)</i>		R	
Carried Forward Section No. 1 PRELIMINARIES & GENERALS Bill No. 1 PRELIMINARIES & GENERALS TASICH CONSULTING		R	

Brought Forward	R	
<u>42.3 INSURANCES</u>		
42.3.1 Contract works insurance to be effected by:		
<i>Contractor:</i>		
<i>For the Sum of R Contract Amount + 20.00 %</i>		
<i>With a deductible of - to be determined by the contractor</i>		
42.3.2 Supplementary insurance is required		
Yes		
42.3.3 Public liability insurance to be effected by:		
<i>Contractor:</i>		
<i>For the Sum of R 10 000 000-00</i>		
<i>With a deductible of - to be determined by the contractor</i>		
<u>42.4 DOCUMENTS</u>		
42.4.1 Waivers of contractors lien or right of continuing possession is required		
Yes		
42.4.2 Number of construction document copies to be supplied to the contractor free of charge:		
3 Number of		
42.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with:		
<i>"Standard System of Measuring Builders' Work"</i>		
42.4.4 On acceptance of the tender the bills of quantities/lump sum document is to be submitted within working days		
<i>The priced bills of quantities must be handed in with the tender</i>		
Carried Forward	R	
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	Brought Forward			R	
	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	N/A			
	42.4.7 Details of changes made to the provision of JBCC standard documentation:				
	<u>SECTION B: PRELIMINARIES</u>				
	<u>Definitions and interpretation (B1)</u>				
43	Definition and interpretation (B1.1 - B1.4.6)				
	F:..... V:..... T:.....		Item		
	<u>Documents (B2)</u>				
44	Checking of documents (B2.1)				
	F:..... V:..... T:.....		Item		
45	Provisional bills of quantities (B2.2)				
	F:..... V:..... T:.....		N/A		
46	Availability of construction documentation (B2.3)				
	F:..... V:..... T:.....		Item		
	Carried Forward			R	
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	Brought Forward		R	
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		
	Existing premises occupied (B3.4)			
	F:..... V:..... T:.....			
	Carried Forward		R	
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	Brought Forward		R
	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:.....	Item	
54	Services - unknown (B3.8)		
	F:..... V:..... T:.....	Item	
55	Protection of trees etc (B3.9)		
	F:..... V:..... T:.....	Item	
56	Articles of value (B3.10)		
	F:..... V:..... T:.....	Item	
	<u>Management of contract (B4)</u>		
57	Inspection of adjoining properties etc (B3.11)		
	F:..... V:..... T:.....	Item	
	Carried Forward		R
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Brought Forward		R
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:.....	Item
61	Technical meetings (B4.4)	
	F:..... V:..... T:.....	Item
62	Labour and Plant records (B4.5)	
	F:..... V:..... T:.....	Item
	<u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u>	
63	Samples of materials (B5.1)	
	F:..... V:..... T:.....	Item
64	Workmanship samples (B5.2)	
	F:..... V:..... T:.....	Item
Carried Forward		R
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	Brought Forward		R	
65	Shop drawings (B5.3) F:..... V:..... T:.....	Item		
66	Compliance with Manufacturer's Instructions (B5.4) F:..... V:..... T:.....	Item		
	<u>Temporary works and plant (B6)</u>			
67	Deposits and fees (B6.1) F:..... V:..... T:.....	Item		
68	Enclosure of the works (B6.2) F:..... V:..... T:.....	Item		
69	Advertising (B6.3) F:..... V:..... T:.....	Item		
70	Plant, equipment, sheds and offices (B6.4) F:..... V:..... T:.....	Item		
71	Main notice board (B6.5) F:..... V:..... T:.....	Item		
	Carried Forward		R	
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	Brought Forward		R	
72	Subcontractors' notice board (B6.6) F:..... V:..... T:.....	N/A		
	<u>Temporary services (B7)</u>			
73	Location (B7.1) F:..... V:..... T:.....	Item		
74	Water (B7.2) Option [A] shall apply F:..... V:..... T:.....	Item		
75	Electricity (B7.3) Option [A] shall apply F:..... V:..... T:.....	Item		
76	Telecommunication facilities (B7.4) F:..... V:..... T:.....	Item		
77	Ablution facilities (B7.5) Option [A] shall apply F:..... V:..... T:.....	Item		
	<u>Prime cost amounts (B8)</u>			
78	Responsibility for prime cost amounts (B8.1) F:..... V:..... T:.....	Item		
	Carried Forward		R	
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	Brought Forward		R	
	<u>Attendance on N/S Subcontractors (B9)</u>			
79	General attendance (B9.1)			
	F:..... V:..... T:.....	Item		
80	Special attendance (B9.2)			
	F:..... V:..... T:.....	Item		
81	Commissioning - Fuel, water and power (B9.3)			
	F:..... V:..... T:.....	Item		
	<u>Financial aspects (B10)</u>			
	Statutory taxes, duties and levies (B10.1)			
	F:..... V:..... T:.....	Item		
82	Payment of preliminaries (B10.2) Option [B] shall apply			
	F:..... V:..... T:.....	Item		
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		
	Carried Forward		R	
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	Brought Forward		R	
	<u>General (B11)</u>			
85	Protection of works (B11.1)			
	F:..... V:..... T:.....	Item		
86	Protection/isolation of existing/sectionally occupied works (B11.2)			
	F:..... V:..... T:.....	Item		
87	Security of the Works (B11.3)			
	F:..... V:..... T:.....	Item		
88	Notice before covering work (B11.4)			
	F:..... V:..... T:.....	Item		
89	Disturbance (B11.5)			
	F:..... V:..... T:.....	Item		
90	Environmental Disturbance (B11.6)			
	F:..... V:..... T:.....	Item		
91	Works cleaning and clearing (B11.7)			
	F:..... V:..... T:.....	Item		
92	Vermin (B11.8)			
	F:..... V:..... T:.....	Item		
	Carried Forward		R	
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	Brought Forward		R	
93	Overhand work (B11.9) F:..... V:..... T:.....	Item		
94	Instruction manuals and guarantees (B11.10) F:..... V:..... T:.....	Item		
95	As built information (B11.11) F:..... V:..... T:.....	Item		
96	Tenant Installations (B11.12) F:..... V:..... T:.....	Item		
	<u>Schedule of variables (B12)</u>			
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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Brought Forward		R	
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) An office for the clerck of works should be provided			
12.1.14 Main notice board (B6.5) YES			
12.1.15 Subcontractors notice board (B6.6) A notice board is required No			
Carried Forward		R	
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Brought Forward		R	
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			
12.1.24 Environmental Disturbance (B11.6) N/A			
<u>Post tender information (B12.2)</u>			
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			
Carried Forward		R	
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Brought Forward			R	
<u>SECTION C: SPECIFIC PRELIMINARIES</u>				
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: V:..... T:.....	Item		
99	Black economic empowerment and training F:..... V:..... T:.....	Item		
100	Proprietary branded products F:..... V:..... T:.....	Item		
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:.....	Item		
Carried Forward			R	
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	Brought Forward		R	
	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:.....	Item		
	Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor			
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			
104	Plant 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, type and capacity of all plant, excluding hand tools used on the works each day of that week			
105	Guarantees F:..... V:..... T:.....	Item		
	Carried Forward		R	
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	Brought Forward		R	
	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			
106	Overtime F:..... V:..... T:..... 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	Item		
107	Co-operation of contractor for cost management F:..... V:..... T:.....	Item		
	Carried Forward		R	
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	Brought Forward		R	
	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:..... V:..... T:..... Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occupational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionnaire" 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 <u>SUMMARY OF CATEGORIES</u> Category : Fixed R..... Category : Value R..... Category : Time R.....	Item		
	Carried to Final Summary		R	
	Section No. 1 PRELIMINARIES & GENERALS Bill No. 1 PRELIMINARIES & GENERALS TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO. 1</u>			
	<u>DEMOLITIONS AND ALTERATIONS</u>			
	<u>View site</u>			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	<u>Explosives</u>			
	No explosives whatsoever may be used for alteration purposes unless otherwise stated			
	<u>DEMOLITIONS</u>			
1	Single storey building with pitched roof 15,00 x 10,00m on plan and 3,0m high at eaves comprising unreinforced concrete surface bed, concrete footings, brick internal and external walls, corrugated iron roof covering on timber trusses including carting away.	No	1	
	<u>REMOVAL OF EXISTING WORK</u>			
	<u>Breaking up and removing unreinforced concrete</u>			
2	85mm Thick surface beds	m2	30	
	<u>Breaking up and removing reinforced concrete, including cutting off and removing reinforcement</u>			
3	Ramps	m3	2	
	Carried Forward		R	
	Section No. 2 ALTERATIONS AND DEMOLITIONS Bill No. 1 ALTERATIONS AND DEMOLITIONS TASICH CONSULTING			

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Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
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	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	7	
4	Pit	m3	14	
5	For aprons thickening	m3	2	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	2	
7	Hard rock	m3	2	
	Carried Forward		R	
	Section No. 3 BUILDING WORKS - M2 Bill No. 1 EARTHWORKS TASICH CONSULTING			

Brought Forward			R
<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	18
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	36
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod</u>			
<u>AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	8
12	Backfilling to trenches, holes, etc.	m3	7
<u>Compaction of surfaces</u>			
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	4
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	28
Carried Forward			R
Section No. 3 BUILDING WORKS - M2 Bill No. 1 EARTHWORKS TASICH CONSULTING			

Brought Forward			R
	<u>Prescribed density tests on filling</u>		
16	Modified AASHTO Density tests	No	4
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
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 concrete aprons	m2	28
19	To bottoms and sides of trenches, etc.	m2	20
Carried Forward to Summary of Section No. 3			R
Section No. 3			
BUILDING WORKS - M2			
Bill No. 1			
EARTHWORKS			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to			
be used - PW 371"			
<u>UNREINFORCED CONCRETE, ETC</u>			
<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	2
2	Ditto, but surface bed in pit	m3	2
3	2Aprons cast in panels	m3	2
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	10
5	Thickening down apron on edge 110mm deep x 200mm wide	m	28
<u>REINFORCED CONCRETE, ETC</u>			
<u>25Mpa/19mm Concrete</u>			
6	Slabs	m3	2
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
7	Aprons and pavings to falls	m2	27
Carried Forward			R
Section No. 3 BUILDING WORKS - M2 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT TASICH CONSULTING			

Brought Forward			R
<u>TEST CUBES</u>			
8	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	3
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
9	Surface beds, slabs, etc.	m2	27
<u>FORMWORK</u>			
	<u>Rough formwork to sides:</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	28
	<u>Permanent formwork to soffits:</u>		
11	Slabs propped up not exceeding 1.5m high	m2	6
12	Leave or form 500mm diameter opening in top of floor slab	No	2
<u>REINFORCEMENT</u>			
	<u>High tensile and mild steel reinforcement to structural concrete work</u>		
13	Various sizes	t	0.20
	<u>Mesh Reinforcement (measure nett)</u>		
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	27
Carried Forward to Summary of Section No. 3			R
Section No. 3			
BUILDING WORKS - M2			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
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 "Brixal" 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			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
Carried Forward		R	
Section No. 3 BUILDING WORKS - M2 Bill No. 3 MASONRY TASICH CONSULTING			

Brought Forward			R
<u>SAMPLES</u>			
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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	7
2	One brick walls in pit	m2	16
3	Half brick corbelling in pit	m	5
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
4	Extra over brickwork for face brickwork in foundation	m2	4
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
5	Half brickwork for face brick walls pointed both sides	m2	7
6	One brickwork for face brick walls pointed both sides	m2	51
7	Extra over brickwork for face brickwork in beamfilling	m2	3
8	Fair raking and cutting	m	11
Carried Forward			R
Section No. 3 BUILDING WORKS - M2 Bill No. 3 MASONRY TASICH CONSULTING			

Brought Forward			R
	<u>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</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	5
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	4
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	4
<u>BRICKWORK SUNDRIES</u>			
	<u>Brick reinforcement</u>		
12	75mm Wide reinforcement built in horizontally	m	66
13	150mm Wide reinforcement built in horizontally	m	275
	<u>Turning pieces</u>		
14	220mm Wide turning piece to lintel etc	m	2
	<u>Galvanised wire ties etc</u>		
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12
	<u>Prestressed fabricated lintels</u>		
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	9
	<u>Ventillation bricks</u>		
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	4
Carried Forward to Summary of Section No. 3			R
Section No. 3			
BUILDING WORKS - M2			
Bill No. 3			
MASONRY			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.4</u>			
<u>WATERPROOFING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	4
<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	30
<u>FLOOR AND WALLS SEALERS</u>			
<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	11
Carried Forward to Summary of Section No. 3			R
Section No. 3 BUILDING WORKS - M2 Bill No. 4 WATERPROOFING TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.5</u>			
<u>ROOF COVERINGS</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
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			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	23
	<u>Sundries</u>		
2	12" Thermal resistance sisalition laid on purlins	m2	23
<u>RAINWATER DISPOSAL</u>			
<u>Aluzink seamless metal gutters:</u>			
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	2
6	Extra over rainwater pipe for eaves offset	No	2
7	Ditto ,for shoe	No	2
Carried Forward to Summary of Section No. 3			R
Section No. 3 BUILDING WORKS - M2 Bill No. 5 ROOF COVERINGS TASICH CONSULTING			

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Brought Forward			R
<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Purpose made Framed batten door 813 x 1 883mm 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
9	44mm Framed ledged and braced batten door 900 x 2032mm high of 44 x 100mm top rail and stiles, 20 x 100mm bottom rail and 20 x 100mm middle ledge and braces, filled in with 20 x 76mm tongued and grooved V-jointed one side boarding and covered on other side with 4mm plywood with hardwood veneer to match door let into and including rebates all round and splayed 50 x 76mm weather bar (D3)	No	2
Carried Forward to Summary of Section No. 3			
Section No. 3			R
BUILDING WORKS - M2			
Bill No. 6			
CARPENTRY AND JOINERY			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.7</u>			
<u>IRONMONGERY</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CATCHES, CABIN, HOOKS, ETC</u>			
<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2
<u>LOCKS</u>			
<u>Approved</u>			
2	Three lever mortice lockset	No	2
3	Indicator lockset	No	2
<u>DOORSTOPS</u>			
<u>Approved</u>			
4	38mm Diameter rubber door stop plugged	No	4
<u>LETTERS, NAMEPLATES, ETC.</u>			
<u>"Union" or similar approved</u>			
5	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	2
<u>BATHROOM FITTINGS</u>			
<u>"Kimberley-Clark" or Simlilar</u>			
6	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	2
Carried Forward to Summary of Section No. 3			R
Section No. 3 BUILDING WORKS - M2 Bill No. 7 IRONMONGERY TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.8</u>			
<u>METALWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>WELDED SCREENS, GATES, ETC</u>			
<u>PRESSED STEEL DOOR FRAMES</u>			
<u>1.2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	2
<u>1.6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	2
<u>STEEL WINDOWS, DOORS, ETC</u>			
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
<u>Steel gates and frames</u>			
5	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	1
6	Purpose made square hallow section mild steel security gate, size 914 x 2032mm High	No	1
Carried Forward to Summary of Section No. 3			R
Section No. 3 BUILDING WORKS - M2 Bill No. 8 METALWORK TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	23
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	17
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	23
4	On internal textured plaster walls and floors in pit	m2	17
Carried Forward to Summary of Section No. 3			R
Section No. 3			
BUILDING WORKS - M2			
Bill No. 9			
IN SITU FINISHES			
TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets , drying plate , two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc	No	2	
2	Supply and Erect "Enviro-loo" "Industrial 1040 Model,2-bowl Urinal Evaporative Tank system fixed complete as per manufacturers specification unit, comprising of urinal evaporative tank , urinal bowls including brackets , 3500mm long outlet vent pipe , ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc	No	1	
	<u>SOIL DRAINAGE</u>			
	<u>Normal duty (Class 51) uPVC sewer and drain pipes</u>			
3	50mm Pipes	m	30	
4	110mm Pipes laid in and including trenches not exceeding 1m deep	m	10	
	Carried Forward		R	
	Section No. 3 BUILDING WORKS - M2 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING			

Brought Forward			R
<u>Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings</u>			
5	50mm Bend	No	2
6	50 mm Junction	No	2
7	50mm Access junction	No	2
8	110mm Bend	No	2
9	110mm Junction	No	2
<u>uPVC gulleys</u>			
10	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	3
<u>SANITARY FITTINGS</u>			
11	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
<u>TRAPS, ETC.</u>			
<u>uPVC</u>			
12	32 x 50mm Deep seal "P" or "S" trap	No	2
<u>TAPS, VALVES, ETC.</u>			
<u>"Cobra Watertech" or other equal approved</u>			
13	19mm chrome plated push button taps to wash troughs	No	2
14	15mm gate valve plugged	No	2
<u>WATER SUPPLIES</u>			
Carried Forward			R
Section No. 3 BUILDING WORKS - M2 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING			

Brought Forward			R
<u>Class 0 copper pipes</u>			
15	15 mm Pipes	m	25
16	15mm Pipes chased in walls	m	30
<u>Extra over class 0 copper pipes for capillary fittings</u>			
17	15mm Fittings	No	5
<u>Sundries</u>			
18	Testing water pipe system	Item	
Carried Forward to Summary of Section No. 3			R
Section No. 3			
BUILDING WORKS - M2			
Bill No. 10			
PLUMBING AND DRAINAGE			
TASICH CONSULTING			

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Item No		Quantity	Rate	Amount
	<u>BILL NO. 12</u>			
	<u>PAINTWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ON FIBRE-CEMENT</u>			
	<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	4	
	<u>ON WOOD</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	10	
3	On doors (External)	m2	5	
	<u>ON METAL</u>			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	2	
5	On gates (Measured over the full flat area of both sides)	m2	4	
6	On gutters and down pipes	m	9	
	<u>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</u>			
7	On windows with burglar bars	m2	3	
	Carried Forward to Summary of Section No. 3			
	Section No. 3			
	BUILDING WORKS - M2			
	Bill No. 12			
	PAINTWORK			
	TASICH CONSULTING			

Bill No	SECTION SUMMARY - BUILDING WORKS - M2	Page No	Amount
1	EARTHWORKS	33	
2	CONCRETE, FORMWORK AND REINFORCEMENT	35	
3	MASONRY	38	
4	WATERPROOFING	39	
5	ROOF COVERINGS	40	
6	CARPENTRY AND JOINERY	42	
7	IRONMONGERY	43	
8	METALWORK	44	
9	IN SITU FINISHES	45	
10	PLUMBING AND DRAINAGE	48	
11	GLAZING	49	
12	PAINTWORK	50	
Carried to Final Summary			R
Section No. 3 BUILDING WORKS - M2 TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs,bush and trees not exceeding 200mm girth, etc.	m2	67	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	67	
	<u>EXCAVATION,FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	7	
4	Pit	m3	15	
5	For aprons thickening	m3	1	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	1	
7	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	16	
	Carried Forward		R	
	Section No. 4 BUILDING WORKS - F4 Bill No. 1 EARTHWORKS TASICH CONSULTING			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	49
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	4
12	Backfilling to trenches, holes, etc.	m3	4
<u>Compaction of surfaces</u>			
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	16
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	9
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	15
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	4
Carried Forward			R
Section No. 4 BUILDING WORKS - F4 Bill No. 1 EARTHWORKS TASICH CONSULTING			

Brought Forward				R
<u>SOIL POISONING</u>				
<u>Soil insecticide</u>				
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2	16	
18	To bottom of concrete aprons	m2	9	
19	To bottoms and sides of trenches, etc.	m2	66	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
BUILDING WORKS - F4				
Bill No. 1				
EARTHWORKS				
TASICH CONSULTING				

Item No		Quantity	Rate	Amount
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to			
	be used - PW 371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	2	
2	Ditto, but surface bed in pit	m3	2	
3	Aprons cast in panels	m3	2	
4	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	9	
5	Thickening down apron on edge 110mm deep x 200mm wide	m	27	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25Mpa/19mm Concrete</u>			
6	Slabs	m3	2	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
7	Aprons and pavings to falls	m2	8	
	Carried Forward			
	Section No. 4			
	BUILDING WORKS - F4			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	TASICH CONSULTING			
			R	

Brought Forward			R
<u>TEST CUBES</u>			
8	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	4
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
9	Surface beds, slabs, etc.	m2	32
<u>FORMWORK</u>			
	<u>Rough formwork to sides:</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	10
	<u>Permanent formwork to soffits:</u>		
11	Slabs propped up not exceeding 1.5m high	m2	6
12	Leave or form 500mm diameter opening in top of floor slab	No	7
<u>REINFORCEMENT</u>			
	<u>High tensile and mild steel reinforcement to structural concrete work</u>		
13	Various sizes	t	0.30
	<u>Mesh Reinforcement (measure nett)</u>		
14	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	32
Carried Forward to Summary of Section No. 4			R
Section No. 4			
BUILDING WORKS - F4			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
TASICH CONSULTING			

Brought Forward			R
<u>SAMPLES</u>			
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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	8
2	One brick walls in pit	m2	25
3	Half brick corbelling in pit	m	9
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
4	Extra over brickwork for face brickwork in foundation	m2	5
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
5	Half brickwork for face brick walls pointed both sides	m2	16
6	One brickwork for face brick walls pointed both sides	m2	51
7	Extra over brickwork for face brickwork in beamfilling	m2	3
8	Fair raking and cutting	m	3
Carried Forward			R
Section No. 4 BUILDING WORKS - F4 Bill No. 3 MASONRY TASICH CONSULTING			

Brought Forward			R
	<u>Brick-on-edge header course coping, sills, etc. of face bricks (purchase price of R 4000.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	6
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	6
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	6
	<u>BRICKWORK SUNDRIES</u>		
	<u>Brick reinforcement</u>		
12	75mm Wide reinforcement built in horizontally	m	64
13	150mm Wide reinforcement built in horizontally	m	114
	<u>Turning pieces</u>		
14	220mm Wide turning piece to lintel etc	m	5
	<u>Galvanised wire ties etc</u>		
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	12
	<u>Prestressed fabricated lintels</u>		
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	6
	<u>Ventillation bricks</u>		
17	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	3
Carried Forward to Summary of Section No. 4			R
Section No. 4			
BUILDING WORKS - F4			
Bill No. 3			
MASONRY			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.4</u>			
<u>WATERPROOFING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	8
<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	62
<u>FLOOR AND WALLS SEALERS</u>			
<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	50
Carried Forward to Summary of Section No. 4			R
Section No. 4 BUILDING WORKS - F4 Bill No. 4 WATERPROOFING TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.5</u>			
<u>ROOF COVERINGS</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	24
<u>ROOF AND WALL INSULATION</u>			
<u>Sundries</u>			
<u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u>			
2	Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires	m2	24
<u>RAINWATER DISPOSAL</u>			
<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutters brackets	m	5
4	Extra over for closed ends	No	1
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	4
6	Extra over rainwater pipe for eaves offset	No	1
7	Ditto ,for shoe	No	1
Carried Forward to Summary of Section No. 4			R
Section No. 4 BUILDING WORKS - F4 Bill No. 5 ROOF COVERINGS TASICH CONSULTING			

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Brought Forward			R
<u>Wrought meranti doors hung to steel frames</u>			
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	1
9	44mm Purpose made 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	4
Carried Forward to Summary of Section No. 4			
Section No. 4			R
BUILDING WORKS - F4			
Bill No. 6			
CARPENTRY AND JOINERY			
TASICH CONSULTING			

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Brought Forward			R
<u>"Kimberley-Clark" or Similar</u>			
6	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	4
<u>Sundries</u>			
7	Brushed stainless steel She bin approximately 330 x 280 x 180mm plugged	No	4
Carried Forward to Summary of Section No. 4			R
Section No. 4			
BUILDING WORKS - F4			
Bill No. 7			
IRONMONGERY			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	21
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	30
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	21
4	On internal textured plaster walls and floors in pit	m2	30
Carried Forward to Summary of Section No. 4			R
Section No. 4			
BUILDING WORKS - F4			
Bill No. 9			
IN SITU FINISHES			
TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets , drying plate , two x air inlets, standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping, etc	No	4	
	<u>SOIL DRAINAGE</u>			
	<u>Normal duty (Class 51) uPVC sewer and drain pipes</u>			
2	50mm Pipes	m	30	
3	110mm Pipes laid in and including trenches not exceeding 1m deep	m	10	
	<u>Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings</u>			
4	50mm Bend	No	2	
5	50 mm Junction	No	2	
6	110mm Bend	No	2	
7	110mm Junction	No	2	
	Carried Forward		R	
	Section No. 4 BUILDING WORKS - F4 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING			

Brought Forward			R
	<u>uPVC gulleys</u>		
8	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	2
	<u>TAPS, VALVES, ETC</u>		
9	19mm Chromium plated push-buton taps to wash troughs	No	2
10	15mm gate valve plugged	No	2
	<u>SANITARY FITTINGS (PROVISIONAL)</u>		
11	Supply and install pre-cast concrete double wash-trough, complete with all necessary fittings and pipework including soakaway size 1000 x 1000 x 1000mm covered with "bidim"	No	1
	<u>TRAPS, ETC</u>		
	<u>"Marley"</u>		
12	32 x 50mm Deep seal "P" or "S" trap	No	6
	<u>SANITARY PLUMBING</u>		
	<u>uPVC pipes</u>		
13	50mm Pipes	m	10
	<u>Extra over uPVC pipes for fittings</u>		
14	50mm Bend	No	2
15	50 mm Junction	No	2
16	50mm Access junction	No	2
17	50mm Access bend	No	2
18	50mm Access reducing junction	m	2
Carried Forward			R
Section No. 4 BUILDING WORKS - F4 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING			

	Brought Forward			R
19	50mm "GI Two-way" vent valve	No	2	
	<u>WATER SUPPLY</u>			
	<u>Class 0 copper pipes</u>			
20	15 mm Pipes	m	25	
21	15mm Pipes chased in walls	m	35	
	<u>Extra over class 0 copper pipes for capillary fittings</u>			
22	15mm Fittings	No	5	
	<u>Copper overflow and service pipes</u>			
23	15mm Service pipe 350mm girth	No	1	
	<u>Sundries</u>			
24	Testing water pipe system		Item	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
BUILDING WORKS - F4				
Bill No. 10				
PLUMBING AND DRAINAGE				
TASICH CONSULTING				

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Item No	Quantity	Rate	Amount
<u>BILL NO. 12</u>			
<u>PAINTWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>ON FIBRE-CEMENT</u>			
<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	8
<u>ON WOOD</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	2
3	On doors (External)	m2	13
<u>ON METAL</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	5
5	On gates (Measured over the full flat area of both sides)	m2	6
6	On Gutters and downpipes	m	11
<u>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</u>			
7	On windows with burglar bars	m2	6
Carried Forward to Summary of Section No. 4			R
Section No. 4 BUILDING WORKS - F4 Bill No. 12 PAINTWORK TASICH CONSULTING			

SECTION SUMMARY - BUILDING WORKS - F4		Page No	Amount
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6	CARPENTRY AND JOINERY	63	
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9	IN SITU FINISHES	67	
10	PLUMBING AND DRAINAGE	70	
11	GLAZING	71	
12	PAINTWORK	72	
Carried to Final Summary			R
Section No. 4 BUILDING WORKS - F4 TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>SECTION 5</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush and trees not exceeding 200mm girth, etc.	m2	100	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	100	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	13	
4	Pit	m3	33	
5	For aprons thickening	m3	1	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	5	
7	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
8	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	10	
	Carried Forward		R	
	Section No. 5 BUILDING WORKS - SD3 Bill No. 1 EARTHWORKS TASICH CONSULTING			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavation not exceeding 1,5m deep.	m2	49
<u>Keeping excavations free of water.</u>			
10	Keeping excavations free of water other than subterranean water	Item	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, pavings, etc.	m3	5
12	Backfilling to trenches, holes, etc.	m3	39
<u>Compaction of surfaces</u>			
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	38
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	22
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	32
<u>Prescribed density tests on filling</u>			
16	Modified AASHTO Density tests	No	4
Carried Forward			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 1 EARTHWORKS TASICH CONSULTING			

Brought Forward		R
<u>SOIL POISONING</u>		
<u>Soil insecticide</u>		
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m2 33
18	To bottom of concrete aprons	m2 32
19	To bottoms and sides of trenches, etc.	m2 55
Carried Forward to Summary of Section No. 5		R
Section No. 5 BUILDING WORKS - SD3 Bill No. 1 EARTHWORKS TASICH CONSULTING		

Item No	Quantity	Rate	Amount
<u>BILL NO.2</u>			
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to			
be used - PW 371"			
<u>UNREINFORCED CONCRETE, ETC</u>			
<u>25Mpa/19mm Concrete</u>			
1	Strip footings	m3	5
2	Ditto, but surface bed in pit	m3	2
3	2Aprons cast in panels	m3	3
4	Ramp	m3	1
5	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc.	m	25
6	Thickening down apron on edge 110mm deep x 200mm wide	m	32
<u>REINFORCED CONCRETE, ETC</u>			
<u>25Mpa/19mm Concrete</u>			
7	Slabs	m3	3
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
8	Aprons and pavings to falls	m2	25
Carried Forward			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 2 CONCRETE,FORMWORK AND REINFORCEMENT TASICH CONSULTING			

Brought Forward			R
<u>TEST CUBES</u>			
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	4
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
10	Surface beds, slabs, etc.	m2	33
<u>FORMWORK</u>			
	<u>Rough formwork to sides:</u>		
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	32
	<u>Permanent formwork to soffits:</u>		
12	Slabs propped up not exceeding 1.5m high	m2	12
13	Leave or form 500mm diameter opening in top of floor slab	No	5
<u>REINFORCEMENT</u>			
	<u>High tensile and mild steel reinforcement to structural concrete work</u>		
14	Various sizes	t	0.38
	<u>Mesh Reinforcement (measure nett)</u>		
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	33
Carried Forward to Summary of Section No. 5			R
Section No. 5			
BUILDING WORKS - SD3			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.3</u>			
<u>BRICKWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>BRICKWORK</u>			
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 "Brixal" 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			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
Carried Forward		R	
Section No. 5 BUILDING WORKS - SD3 Bill No. 3 MASONRY TASICH CONSULTING			

Brought Forward			R
<u>SAMPLES</u>			
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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	15
2	One brick walls in pit	m2	21
3	Half brick corbelling in pit	m	25
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
4	Extra over brickwork for face brickwork in foundation	m2	11
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
5	Half brickwork for face brick walls pointed both sides	m2	23
6	One brickwork for face brick walls pointed both sides	m2	99
7	Extra over brickwork for face brickwork in beamfilling	m2	6
8	Fair raking and cutting	m	11
Carried Forward			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 3 MASONRY TASICH CONSULTING			

Brought Forward			R
	<u>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</u>		
9	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	9
10	Face brick-on-edge window sill 220mm wide pointed on two side and on top and set at a angle	m	11
11	Fair cutting and fitting around pipe not exceeding 100mm diameter.	No	2
	<u>BRICKWORK SUNDRIES</u>		
	<u>Brick reinforcement</u>		
12	75mm Wide reinforcement built in horizontally	m	76
13	150mm Wide reinforcement built in horizontally	m	290
	<u>Turning pieces</u>		
14	220mm Wide turning piece to lintel etc	m	6
	<u>Galvanised wire ties etc</u>		
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other built into brickwork	No	27
	<u>Prestressed fabricated lintels</u>		
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m	m	8
	<u>Ventillation bricks</u>		
17	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. 5		R
	Section No. 5 BUILDING WORKS - SD3 Bill No. 3 MASONRY TASICH CONSULTING		

Item No	Quantity	Rate	Amount
<u>BILL NO.4</u>			
<u>WATERPROOFING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer 375mm micron embossed damp proof course</u>			
1	In walls	m2	6
<u>One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape</u>			
2	Under surface beds	m2	32
<u>FLOOR AND WALLS SEALERS</u>			
<u>"Secomastic" non setting mastic sealant applied cold with a hand pressure caulking gun and leave perfectly watertight:</u>			
3	Around steel windows and door frames.	m	11
Carried Forward to Summary of Section No. 5			R
Section No. 5			
BUILDING WORKS - SD3			
Bill No. 4			
WATERPROOFING			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO.5</u>			
<u>ROOF COVERINGS</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
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			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,6mm "Kliplok" roof sheeting in chromadek finish fixed to timber purlins (elsewhere)</u>			
1	Roof covering with pitch not exceeding 25 degrees	m2	36
	<u>Sundries</u>		
2	12" Thermal resistance sisalation laid on purlins	m2	37
<u>RAINWATER DISPOSAL</u>			
<u>Aluzink seamless metal gutters:</u>			
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	6
6	Extra over rainwater pipe for eaves offset	No	2
7	Ditto ,for shoe	No	2
Carried Forward to Summary of Section No. 5			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 5 ROOF COVERINGS TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	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 114mm Rafters in lengths exceeding 3,9m and not exceeding 6,6m	m	42	
2	76 x 38mm Wall plates	m	8	
3	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	47	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	29	
5	6mm Diameter galvanised wire tie 3000mm girth wrapped around rafter and purlin with ends tied together	No	18	
6	Hurricane clips	No	24	
	EAVES, VERGES, ETC.			
	<u>Pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	25	
	DOORS, ETC.			
	Carried Forward		R	
	Section No. 5 BUILDING WORKS - SD3 Bill No. 6 CARPENTRY AND JOINERY TASICH CONSULTING			

Brought Forward				R
<u>Wrought meranti doors hung to steel frames</u>				
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	3	
9	44mm Purpose made 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 (door raised by 120mm from bottom) (D2)	No	2	
10	44mm Framed ledged and braced batten door 900 x 2032mm high of 44 x 100mm top rail and stiles, 20 x 100mm bottom rail and 20 x 100mm middle ledge and braces, filled in with 20 x 76mm tongued and grooved V-jointed one side boarding and covered on other side with 4mm plywood with hardwood veneer to match door let into and including rebates all round and splayed 50 x 76mm weather bar (D3)	No	1	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
BUILDING WORKS - SD3				
Bill No. 6				
CARPENTRY AND JOINERY				
TASICH CONSULTING				

Item No	Quantity	Rate	Amount
<u>BILL NO.7</u>			
<u>IRONMONGERY</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CATCHES, CABIN, HOOKS, ETC</u>			
<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	3
<u>LOCKS</u>			
<u>Approved</u>			
2	Three lever mortice lockset plugged	No	2
3	Indicator lockset plugged	No	3
<u>HANDLES</u>			
<u>Aluminium Pull Handle</u>			
4	Set of two, 300mm pull handles fixed back to back on doors	No	1
<u>DOORSTOPS</u>			
<u>Approved</u>			
5	38mm Diameter rubber door stop plugged	No	5
<u>DOOR CLOSERS</u>			
Carried Forward			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 7 IRONMONGERY TASICH CONSULTING			

Brought Forward			R
	<u>"Dorma" or equal approved</u>		
6	Dormakaba EN 2-4 Parallel Arm DELAYED ACTION Door Closer. Push Side Fixing (Parallel Arm Bracket Included) EN2 750-850, EN3 850-950, EN4 950-1100. Code TS73V PA DC - PAB - SL	No	1
	<u>LETTERS, NAMEPLATES, ETC.</u>		
	<u>"Union" or similar approved</u>		
7	75 x 150mm Natural anodised aluminium plate with male or female symbol	No	3
	<u>"Vaal Paragon" or similar approved</u>		
8	32mm Type 9 back grab rail 800mm long plugged	No	1
9	32mm Type 8 side grab rail 900mm girth plugged	No	1
	<u>BATHROOM FITTINGS</u>		
	<u>"Kimberley-Clark" or Similar</u>		
10	"Kimberly Clark" SQ2 code 405607B white lockable toilet roll holder	No	4
	<u>Sundries</u>		
11	Brushed stainless steel She bin approximately 330 x 280 x 180mm plugged	No	1
Carried Forward to Summary of Section No. 5			R
Section No. 5			
BUILDING WORKS - SD3			
Bill No. 7			
IRONMONGERY			
TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>BILL NO.8</u>			
	<u>METALWORK</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Single rebated frames suitable for half brick walls</u>			
1	Frame for door 813 x 2032mm high	No	3	
	<u>1.6mm Double rebated frames suitable for one brickwalls</u>			
2	Frame for door 813 x 2032mm high	No	2	
3	Frame for door 914 x 2032mm high	No	1	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
4	Window type NE1, 533 x 654mm high including burglar bars	No	5	
5	Window type NE 7,1022 x 654mm high including burglar bars	No	2	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
6	Purpose made square hallow section mild steel security gate, size 813 x 2032mm High	No	2	
7	Purpose made square hallow section mild steel security gate, size 914 x 2032mm High	No	1	
	<u>SUNDRIES ETC</u>			
	Carried Forward		R	
	Section No. 5 BUILDING WORKS - SD3 Bill No. 8 METALWORK TASICH CONSULTING			

Brought Forward			R
	<u>Cage,etc</u>		
8	She bin cages ,to fit 330 x 280 x180mm width, she bin to be able to open including pad locking mechanism, complete, etc	No	1
Carried Forward to Summary of Section No. 5			R
Section No. 5			
BUILDING WORKS - SD3			
Bill No. 8			
METALWORK			
TASICH CONSULTING			

Item No	Quantity	Rate	Amount
<u>BILL NO. 9</u>			
<u>PLASTERING</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>CEMENT SCREEDS TO CONCRETE</u>			
<u>Screeds to steel trowelled, on concrete:</u>			
1	30mm thick on floors	m2	32
<u>INTERNAL PLASTER</u>			
<u>Cement plaster on brickwork or blockwork</u>			
2	On pits walls	m2	38
<u>FLOOR AND WALLS SEALERS</u>			
<u>Minimum two coats approved epoxy coat:</u>			
3	On screed	m2	32
4	On internal textured plaster walls and floors in pit	m2	38
Carried Forward to Summary of Section No. 5			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 9 IN SITU FINISHES TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW 371"			
	<u>ENVIRO-LOO TOILET SYSTEMS</u>			
1	Supply and Install "Enviro-Loo" Industrial 1040 Model complete, installed strictly in accordance with manufacturers instructions, unit comprising of top unit and two x louvred inlets , drying plate , two x air inlets,standard toilet pan, seat and lid, 3500mm long outlet vent pipe, ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary inter connector piping between multiple tanks, emergency outlet piping,etc	No	4	
2	Supply and Erect "Enviro-loo" "Industrial 1040 Model,1-bowl Urinal Evaporative Tank system fixed complete as per manufacturers specification unit, comprising of urinal evaporative tank , urinal bowls including brackets , 3500mm long outlet vent pipe , ventilation extraction unit fixed to wall with vent wall bracket, 1 bag mounting screws and organic starter, enzyme and toilet cleaner including all necessary piping, traps, etc	No	1	
	<u>SOIL DRAINAGE</u>			
	<u>Normal duty (Class 51) uPVC sewer and drain pipes</u>			
3	110mm Pipes vertically or ramped to cleaning eyes, etc.	m	30	
4	110mm Pipes laid in and including trenches not exceeding 1m deep	m	30	
	Carried Forward		R	
	Section No. 5 BUILDING WORKS - SD3 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING			

Brought Forward				R
<u>Extra over normal duty (Class 51) uPVC sewer and drain pipes for fittings</u>				
5	110mm Bend	No	5	
6	110mm Junction	No	5	
7	110mm Rodding eye	No	3	
8	110mm Inspection eye	No	3	
<u>uPVC gulleys</u>				
9	110mm Dished gulley trap assembly with head, grid and concrete surround not exceeding 750mm deep	No	2	
<u>Testing :</u>				
10	Testing soil drainage system		Item	
<u>SANITARY FITTINGS</u>				
<u>Vaal or equal approved</u>				
11	450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts	No	1	
<u>PCC WASH TROUGH</u>				
12	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	
<u>WASTE UNIONS, ETC</u>				
13	32mm "301CP" Basin waste union	No	1	
<u>TRAPS, ETC.</u>				
Carried Forward				R
Section No. 5 BUILDING WORKS - SD3 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING				

		Brought Forward			R	
	<u>"Marley"</u>					
14	32 x 50mm Deep seal "P" or "S" trap	No	4			
	<u>TAPS, VALVES, ETC.</u>					
	<u>"Cobra Watertech" or other equal approved</u>					
15	19mm Chrome plated push button taps to WHB	No	2			
16	15mm Elbow action pillar tap	No	1			
17	15mm gate valve plugged	No	2			
	<u>SANITARY PLUMBING</u>					
	<u>uPVC pipes</u>					
18	50mm Pipes	m	30			
	<u>Extra over uPVC pipes for fittings</u>					
19	50mm Bend	No	2			
20	50 mm Junction	No	2			
21	50mm Access junction	No	2			
22	50mm Access bend	No	2			
23	50mm Access reducing junction	m	2			
24	50mm "GI Two-way" vent valve	No	2			
	<u>WATER SUPPLIES</u>					
	<u>Class 0 copper pipes</u>					
25	15 mm Pipes	m	25			
26	15mm Pipes chased in walls	m	35			
		Carried Forward			R	
	Section No. 5 BUILDING WORKS - SD3 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING					

Brought Forward			R
<u>Extra over class 0 copper pipes for capillary fittings</u>			
27	15mm Fittings	No	5
<u>Copper overflow and service pipes</u>			
28	15mm Service pipe 350mm girth	No	1
<u>Sundries</u>			
29	Testing water pipe system		Item
Carried Forward to Summary of Section No. 5			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 10 PLUMBING AND DRAINAGE TASICH CONSULTING			

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Item No	Quantity	Rate	Amount
<u>BILL NO. 12</u>			
<u>PAINTWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
For preambles see "Specifications of materials and methods to be used - PW 371"			
<u>ON FIBRE-CEMENT</u>			
<u>Prepare and brush to remove all loose contaminations, apply one coat primer and two coats PVA emulsion paint</u>			
1	On fascias and barge boards	m2	5
<u>ON WOOD</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (Internal)	m2	13
3	On doors (External)	m2	11
<u>ON METAL</u>			
<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	13
5	On gates (Measured over the full flat area of both sides)	m2	11
6	On gutters and down pipes	m	14
<u>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</u>			
7	On windows with burglar bars	m2	6
Carried Forward to Summary of Section No. 5			R
Section No. 5 BUILDING WORKS - SD3 Bill No. 12 PAINTWORK TASICH CONSULTING			

Bill No	SECTION SUMMARY - BUILDING WORKS - SD3	Page No	Amount
1	EARTHWORKS	76	
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4	WATERPROOFING	82	
5	ROOF COVERINGS	83	
6	CARPENTRY AND JOINERY	85	
7	IRONMONGERY	87	
8	METALWORK	89	
9	IN SITU FINISHES	90	
10	PLUMBING AND DRAINAGE	94	
11	GLAZING	95	
12	PAINTWORK	96	
Carried to Final Summary			R
Section No. 5 BUILDING WORKS - SD3 TASICH CONSULTING			

THE MVULA TRUST
LPDE 2023/2024 WATER AND SANITATION
ELANDSKRAAL PRIMARY SCHOOL

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 1</u>			
	<u>WATER SUPPLIES</u>			
	<u>Class 10 HDPe type IV pipes</u>			
1	32mm Pipes laid in and including trenches not exceeding 1m deep	m	50	
2	50mm Pipes laid in and including trenches not exceeding 1m deep	m	150	
	<u>Extra over Class 10 HDPe type IV pipes for fittings</u>			
3	32mm Fittings	No	20	
4	50mm Fittings	No	25	
5	32mm Reducer	No	6	
6	50mm Reducer	No	6	
7	32mm Bend	No	12	
8	50mm Bend	No	12	
9	50mm Threaded adaptor	No	5	
	<u>Galvanised medium steel pipes with screwed and socketed joints</u>			
10	50mm Pipes	m	60	
	<u>Extra over galvanised medium steel pipes with screwed and socketed joints for steel fittings</u>			
11	50mm Fittings	No	4	
12	50mm Bush	No	4	
	Carried Forward		R	
	Section No. 6 EXTERNAL WORKS Bill No. 1 WATER SUPPLY TASICH CONSULTING			

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Brought Forward			R
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted as specified</u>		
7	Subbase course of G5 material in 150mm layer, compacted to 93% Mod AASHTO density "Labour Intensive"	m3	120
	<u>Compaction of surfaces</u>		
8	Compaction of ground surface under pavings, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	400
	<u>Additional tests required by the engineer (Refer to Supplementary Preambles for contractor's tests: SABS 1200)</u>		
9	"Modified AASHTO Density" test	No	10
	<u>Paving of type 60mm interlocking precast concrete paving blocks with butt joints including 50mm thick river sand bed with sand swept into joints, including preparation of ground or filling</u>		
10	Paving to parking areas etc to falls, including necessary straight edge blocks	m2	400
	<u>Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasiem 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m²</u>		
11	Under paving etc	m2	400
	<u>Kerbs, etc</u>		
	<u>Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing</u>		
12	Fig 12 kerb with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc	m	380
Carried Forward			R
Section No. 6 EXTERNAL WORKS Bill No. 2 PAVED WALKWAY TASICH CONSULTING			

Brought Forward			R
<u>STEEL HANDRAILS, BALUSTRADES, ETC</u>			
<u>Welded handrails to walkways and ramps</u>			
13	Horizontal welded balustrading 1 000mm high formed of 50 x 50 x 3mm thick square hollow section top and bottom rails, with uprights formed of 50 x 50 x 3mm thick square hollow section steel at 986mm centres, the balustrading with two cross members formed of 50 x 25 x 3mm thick hollow section and welded to 75 x 75 x 3mm thick columns at 1 500mm centres	m	40
14	Raking welded balustrading 1 000mm high formed of 50 x 50 x 3mm thick square hollow section top and bottom rails, with uprights formed of 50 x 50 x 3mm thick square hollow section steel at 986mm centres, the balustrading with two cross members formed of 50 x 25 x 3mm thick hollow section and welded to 75 x 75 x 3mm thick columns at 1 500mm centres	m	8
15	100 x 100 x 5mm Thick base plate, four times holed and welded to bottom of posts (e/m)	No	19
16	Extra over last for closed end to 50 x 50mm rails	No	6
17	M16 x 100mm expansion bolt	No	75
18	Painting to steel handrails and balustrades (both sides measured)	m2	80
Carried Forward to Summary of Section No. 6			R
Section No. 6			
EXTERNAL WORKS			
Bill No. 2			
PAVED WALKWAY			
TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 3</u>			
	<u>STORMWATER CONTROL</u>			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	300	
	<u>BULK EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth</u>			
2	Excavate in earth below natural, reduced or made up ground level , not exceeding 2m deep, to reduced levels under aprons, etc	m3	60	
	<u>Extra over bulk excavation in earth for excavation in</u>			
3	Soft rock	m3	5	
4	Hard rock	m3	2	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	30	
	<u>Keeping excavations free of water</u>			
6	Keeping excavations free of all water other than subterranean water	Item		
	Carried Forward		R	
	Section No. 6 EXTERNAL WORKS Bill No. 3 STORMWATER CONTROL TASICH CONSULTING			

Brought Forward			R
<u>Compaction of surfaces</u>			
7	Re-compaction of disturbed formation levels, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	300
<u>Soil poisoning</u>			
8	Treat soil under concrete rain water channels, etc. with an approved insecticide solution at the rate not less than 2 litre per 1 m2	m2	300
<u>Unreinforced Concrete</u>			
<u>25Mpa/19mm concrete</u>			
9	25Mpa/19mm Mass concrete in V-shaped channel 2000mm wide x 75mm thick with rounded salient edges and finished on exposed surfaces with 2: 1 cement mortar, with and including one layer of ref.193 mesh reinforcement, laid to falls in panels not exceeding 2,0m long with 12mm bitumen impregnated sailboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork	m	300
10	Extra for fair open end	No	10
11	Extra for fair stopped end	No	10
12	Extra for angle intersection	No	7
13	Extra over for forming 100mm thick spreader fanning out to 1200mm width at furthest end with seven (7No) concrete bricks cast in as brick-on-end diffusers in three rows including working off concrete to a smooth finish	No	1
Carried Forward to Summary of Section No. 6			R
Section No. 6			
EXTERNAL WORKS			
Bill No. 3			
STORMWATER CONTROL			
TASICH CONSULTING			

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 6</u>			
	<u>BILL NO. 4</u>			
	<u>RAIN WATER TANKS</u>			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	37	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
2	Trenches	m3	15	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
3	Soft rock	m3	3	
4	Hard rock	m3	3	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	4	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	24	
	<u>Keeping excavations free of water</u>			
7	Keeping excavations free of all water other than subterranean water	Item		
	Carried Forward		R	
	Section No. 6			
	EXTERNAL WORKS			
	Bill No. 4			
	RAINWATER WATER TANKS			
	TASICH CONSULTING			

Brought Forward			R
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
8	Backfilling to trenches, holes, etc	m3	8
	<u>SOIL POISONING</u>		
	<u>Soil poisoning mixed in accordance to supplier's specifications</u>		
9	To bottoms and sides of trenches, etc.	m2	61
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>		
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>25MPa/19mm concrete</u>		
10	Strip footings	m3	4
11	Platform surface beds cast in panels	m3	1
	<u>FINISHING TOP SURFACE OF CONCRETE</u>		
	<u>Finishing top surfaces of concrete smooth with a wood float/steel trowel</u>		
12	Surface beds, slabs, etc (rainwater tanks)	m2	12
	<u>REINFORCEMENT</u>		
	<u>Fabric reinforcement</u>		
13	Type 295 fabric reinforcement in concrete surface beds, slabs, etc	m2	12
	Carried Forward		R
Section No. 6 EXTERNAL WORKS Bill No. 4 RAINWATER WATER TANKS TASICH CONSULTING			

Brought Forward			R
<u>TEST CUBES</u>			
14	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	6
<u>BRICKWORK</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
15	One brick walls	m2	16
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
16	150mm Wide reinforcement built in horizontally	m	81
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
17	Extra over brickwork for face brickwork	m2	6
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R3 500.00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
18	Coping on top of one brick wall	m	24
<u>WATERPROOFING</u>			
<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
19	In walls	m2	6
Carried Forward			R
Section No. 6 EXTERNAL WORKS Bill No. 4 RAINWATER WATER TANKS TASICH CONSULTING			

	Brought Forward			R
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
20	Under surface beds	m2	12	
	<u>WATER SUPPLIES</u>			
	<u>"Jojo" or equal approved SANS PVC water tanks</u>			
21	5 000 Litre Litre polyethylene remoulded vertical water storage tank complete with lid, fitted with and including 15mm brass bi btap (Type 108LK15, elsewhere measured) with suitable adaptor and setting in position on concrete tank stand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secured to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete and including a "do not drink" sticker (Note: tanks to be filled with water before Practical Completion).	No	3	
22	Hole through top of tank lid for 100mm diameter pipe.	No	3	
Carried Forward to Summary of Section No. 6				R
Section No. 6				
EXTERNAL WORKS				
Bill No. 4				
RAINWATER WATER TANKS				
TASICH CONSULTING				

Item No	Quantity	Rate	Amount
<u>SECTION NO. 6</u>			
<u>BILL NO. 5</u>			
<u>WATER TANKS AND TANKS STANDS</u>			
<u>Excavation in earth not exceeding 2m deep</u>			
1	Holes m3	8	
<u>Extra over trench and hole excavations in earth for excavation in</u>			
2	Soft rock m3	1	
3	Hard rock m3	1	
<u>Extra over all excavations for carting away</u>			
4	Surplus material from excavations and/stock piles on site to the dumping site to be located by the Contractor. m3	8	
<u>Risk of collapse of excavations</u>			
5	Sides of trench and hole excavation not exceeding 1,5m deep. m2	34	
<u>Keeping excavations free of water.</u>			
6	Keeping excavations free of water.	Item	
<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 93 % Mod AASHTO density</u>			
7	Backfilling to trenches, holes, etc. m3	2	
<u>Soil insecticide</u>			
8	To bottoms and sides of trenches, etc. m2	34	
Carried Forward			R
Section No. 6 EXTERNAL WORKS Bill No. 5 WATER TANK STANDS TASICH CONSULTING			

Brought Forward				R
<u>25Mpa/19mm Concrete</u>				
9	Blinding	m3	0.4	
10	Bases	m3	8	
<u>Finishing top surfaces of concrete smooth with a wood float</u>				
11	On top of bases	m2	8	
<u>Carpentry</u>				
12	140mm wood block	No	24	
<u>"Jojo" or equal approved SANS PVC water tanks</u>				
13	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	2	
<u>Structural Steel</u>				
<u>Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u>				
14	80 x 80mm x 6mm Angle-section	t	2.06	
<u>Welded beams in single lengths with flat bearer and connection plates, bolted to steel</u>				
15	40 x 40mm x 6mm Angle -section	t	0.82	
16	40 x 40mm x 3mm Angle -section	t	0.83	
17	125 x 50 x 20 x 2mm Lipped channel-section	t	0.79	
18	125 x 75 x 8mm Flat-section	t	0.63	
19	30 x 6mm Flat-section	t	0.30	
<u>Bolts to columns, beams, etc</u>				
20	High tensile bolts	kg	500	
Carried Forward				R
Section No. 6 EXTERNAL WORKS Bill No. 5 WATER TANK STANDS TASICH CONSULTING				

Brought Forward			R
21	<u>Spot priming bare metal surfaces with zinc chromate primer an applying one undercoat and 2 coats alkyd enamel paint in colours which have a value of 7 or less on the Munsell system in accordance with SABS 1091 on previously painted steel in bad condition</u> Paint to structural steel	m2	155
Carried Forward to Summary of Section No. 6 Section No. 6 EXTERNAL WORKS Bill No. 5 WATER TANK STANDS TASICH CONSULTING			R

Item No	Quantity	Rate	Amount
<u>SECTION NO. 6</u>			
<u>BILL NO. 6</u>			
<u>THE FOLLOWING IN RAMPS</u>			
<u>EXCAVATION,FILLING, ETC</u>			
<u>Excavation in earth not exceeding 2m deep</u>			
1	Ramp m3	4	
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u>			
2	Under floors, steps, pavings, etc. m3	3	
<u>UNREINFORCED CONCRETE, ETC</u>			
<u>25Mpa/19mm Concrete</u>			
3	Ramp m3	1	
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons and pavings to falls m2	11	
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
5	One brick walls m2	8	
<u>FACE BRICKWORK</u>			
Carried Forward			R
Section No. 6 EXTERNAL WORKS Bill No. 6 RAMP TASICH CONSULTING			

Brought Forward			R
	<u>Face bricks (purchase price of R 5000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>		
6	Extra over brickwork for face brickwork in foundation	m2	8
	<u>STEEL HANDRAILS, BALUSTRADES, ETC</u>		
	<u>Welded handrails to walkways and ramps</u>		
7	Horizontal welded balustrading 1 000mm high formed of 50 x 50 x 3mm thick square hollow section top and bottom rails, with uprights formed of 50 x 50 x 3mm thick square hollow section steel at 986mm centres, the balustrading with two cross members formed of 50 x 25 x 3mm thick hollow section and welded to 75 x 75 x 3mm thick columns at 1 500mm centres	m	5
8	100 x 100 x 5mm Thick base plate, four times holed and welded to bottom of posts (e/m)	No	2
9	Extra over last for closed end to 50 x 50mm rails	No	5
10	M16 x 100mm expansion bolt	No	19
11	Painting to steel handrails and balustrades (both sides measured)	m2	15
Carried Forward to Summary of Section No. 6			R
Section No. 6			
EXTERNAL WORKS			
Bill No. 6			
RAMP			
TASICH CONSULTING			

Item No		Quantity	Rate	Amount
<u>SECTION NO. 6</u>				
<u>BILL NO. 7</u>				
<u>DRILLING OF BOREHOLE</u>				
<u>Drilling of New Borehole</u>				
<u>Mobilisation, plant set-up, inter-borehole moves and de-mobilisation</u>				
1	Site Establishment	No	1	
2	Mobilisation and set up of plant to/at first borehole	No	1	
<u>Drilling: unconsolidated and consolidated sediments and igneous and metamorphic rocks</u>				
<u>Rotary air percussion</u>				
3	165mm diameter	m	100	
4	254mm diameter	m	50	
<u>Odex drilling, including supply, delivery and installation of at least 6mm sidewall Odex casing:</u>				
5	165mm diameter	m	20	
6	254mm diameter	m	20	
<u>Casing, including supply, delivery and installation, but not including reaming</u>				
<u>Steel casing (plain)</u>				
7	165mm (state wall thickness here as 3 mm)	m	250	
8	Reaming	m	60	
9	Formation stabilizer	kg	1	
Carried Forward				R
Section No. 6 EXTERNAL WORKS Bill No. 7 BOREHOLE DEVELOPMENT TASICH CONSULTING				

Brought Forward			R
10	Concrete collar, complete per borehole	No	1
11	Normal Sanitary seal, complete per borehole	m	1
12	Data recording and reporting, complete per borehole	No	1
13	Borehole development	Hrs	2.00
<u>PUMPS AND PIPING</u>			
<u>Submersible pumpset and appurtenant fittings as mar specification</u>			
14	Submersible pump with a duty of: Total head of 40m and flow of 1.6l/s complete with integral non-return valve, flow inducer (cooling) sleeve, complete with a suitable electric motor and automatic control box	No	1
<u>Class 10 HDPe type IV pipes</u>			
15	40mm Pipes laid in and including trenches not exceeding 1m deep	m	150
<u>Extra over Class 10 HDPe type IV pipes for fittings</u>			
16	40mm pressed steel base plate with 26mm diameter hole drilled for dipper tube	No	1
17	40mm DN MGI barrel nipple	No	8
18	40mm DN x 90° MGI female elbow	No	1
19	40 x 25 DN MGI reducing socket	No	1
20	25mm DN 'Invensys' / 'Kent' domestic water meter (refer to plan HSD1001)	No	1
21	40 x 25 DN MGI reducing bush	No	1
22	40mm cobra brass Ball valve	No	12
Carried Forward			R
Section No. 6 EXTERNAL WORKS Bill No. 7 BOREHOLE DEVELOPMENT TASICH CONSULTING			

Brought Forward			R
	<u>Booster pump and appurtenant items</u>		
23	Supply and install a booster pump complete with control box and lockable steel pump cage with the followings specifications: Flow (Q)=2.3l/s ; Total dynamic head=45m	No	1
	<u>Submersible pumpset</u>		
24	Submersible pumpset and appurtenant fittings as per manufacturer specifications	No	1
	<u>Lockable steel cage</u>		
25	Lockable steel cage for booster borehole	No	1
	<u>ELECTRICAL PUMP CONTROL PANEL (AUTOMATIC)</u>		
	<u>Single Phase Control Panel : 0 - 5.6kw</u>		
	<u>Switch Gear</u>		
26	60 Amp T/Pole Isolator ABB 5Ka	No	1
27	60 Amp S/Pole Earth Leakage ABB 5Ka	No	1
28	20 Amp T/Pole Circuit Breaker ABB 3Ka	No	1
29	25 Amp S/Pole C/B ABB 5Ka	No	1
30	Surge arrestor ABB	No	1
	<u>Wires and accessories</u>		
31	Wires and accessories		SUM
32	Pin Lugs 4mm2 Yellow	m	12
33	Self Trapping Screws		Item
	<u>Control gear</u>		
34	1 x Float switch	No	1
	Carried Forward		
	Section No. 6 EXTERNAL WORKS Bill No. 7 BOREHOLE DEVELOPMENT TASICH CONSULTING		
			R

Brought Forward			R
35	1000mm long x 22mm dia galvanised pipes	No	4
36	Capture	No	1
37	20mm Ø CCG Box	No	1
38	Bends Bosal	No	4
39	Coupling Bosal 20mm	No	5
40	Bolts M 8 x 25mm nut & washer	No	1
41	Connector strip 5 Amp	No	1
42	Connector strip 30 Amp	No	1
<u>Testing and commissioning</u>			
43	Testing, commissioning and issue COC		SUM
Carried Forward to Summary of Section No. 6			R
Section No. 6			
EXTERNAL WORKS			
Bill No. 7			
BOREHOLE DEVELOPMENT			
TASICH CONSULTING			

Bill No	SECTION SUMMARY - EXTERNAL WORKS	Page No	Amount
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5	WATER TANK STANDS	111	
6	RAMP	113	
7	BOREHOLE DEVELOPMENT	117	
Carried to Final Summary			R
Section No. 6 EXTERNAL WORKS TASICH CONSULTING			

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6	EXTERNAL WORKS	118	
7	PROVISIONAL SUMS	119	
SUB TOTAL (A)			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 (B)			R
Add Value Added Tax @ 15%			R
Carried to Form of Tender			R
TASICH CONSULTING			