

Item No		Quantity	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 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 to the 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		
	<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 claims 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 specific materials and amendments to clauses of the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project		
	Carried Forward	R	
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Brought Forward		R
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 preliminaries then 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> Definitions (A1) Definitions and interpretation (clause 1) F:..... V:..... T:..... Objective and Preparation (A2 to A14) Offer, acceptance and performance (clause 2) F:..... V:..... T:..... Documents (clause 3) F:..... V:..... T:..... Design responsibility (clause 4) F:..... V:..... T:..... Employer's agents (clause 5) 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 exercising of these powers shall not to 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		
		Item
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	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 as his discretion and to converse and chair any such meetings to the degree and frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process	
	F:..... V:..... T:.....	Item
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
12	Effecting insurances (clause 12)	Item
	F:..... V:..... T:.....	Item
13	No clause (clause 13)	N/A
14	Security (clause 14)	
	F:..... V:..... T:.....	Item
Carried Forward		R
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	Brought Forward	R	
	<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) 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 F:..... V:..... T:.....	Item	
19	Assignment (clause 19) The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer F:..... V:..... T:.....	Item	
20	Nominated subcontractors (clause 20) F:..... V:..... T:.....	Item	
21	Selected subcontractors (clause 21) 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 F:..... V:..... T:.....	Item	
22	Employer's Direct Contractors (clause 22)		
	Carried Forward	R	
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	Brought Forward	R	
F:..... V:..... T:.....		Item	
23 Contractor's Domestic Sub-contractors (Clause 23)			
F:..... V:..... T:.....		Item	
<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)			
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)			
F:..... V:..... T:.....		Item	
30 Penalty for non-completion (clause 30)			
F:..... V:..... T:.....		Item	
<u>Payment (A31 - A35)</u>			
31 Interim payment to the contractor (clause 31)			
	Carried Forward	R	
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	Brought Forward	R	
	F:..... V:..... T:.....	Item	
32	Adjustment to the contract value (clause 32)		
	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		
	F:..... V:..... T:.....	Item	
33	Recovery of expense and loss (clause 33)		
	F:..... V:..... T:.....	Item	
34	Final account and final payment (clause 34)		
	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 the purpose 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		
	F:..... V:..... T:.....	Item	
35	Payment to other parties (clause 35)		
	F:..... V:..... T:.....	Item	
	<u>Cancellation (A36-A39)</u>		
36	Cancellation by employer - contractor's default (clause 36)		
	F:..... V:..... T:.....	Item	
37	Cancellation by employer - loss and damage (clause 37)		
	Carried Forward	R	
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Brought Forward		R	
42.1	CONTRACTING AND OTHER PARTIES		
42.1.1	Employer: As per information on the tender data		
42.1.2	Principal Agent: As per information on the tender data		
42.1.3	Architect:		
42.1.4:	Quantity Surveyor:		
42.1.5:	Structural:		
42.1.6	Civil:		
42.1.7	Electrical Engineer:		
42.1.8	Mechanical Engineer:		
42.2	CONTRACT DETAILS		
42.2.1	Works description: Construction of sanitation facilities		
42.2.1	Site description: as per information on the tender data		
42.2.3	Work or installations by direct contractors: N/A		
42.2.4	The 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 of the site:		
42.2.7	For the works as a whole intended date of practical completion and the penalty per calendar day 3 months after the contractual commencement date. Penalty Amount: The penalty per calendar day shall be 0.05% of the tendered amount (inclusive of value added tax)		
42.2.8	For the works in sections: intended date of practical completion and the penalty per calendar day. Section 1: N/A Date: N/A Penalty amount: N/A		
42.2.9	The law applicable to this agreement shall be that of South Africa (country)		
Carried Forward		R	
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Brought Forward		R	
42.3	INSURANCES		
42.3.1	Contract works insurance to be effected by: Contractor: For the sum of Contract Amount 20.00% With a deductible of - to be determined by the contractor		
42.3.2	Supplementary insurance is required:	NO	
42.3.3	Public liability insurance to be effected by: Contractor. For the sum of R2 500 000-00. With a deductible of - to be determined by the contractor		
42.4	DOCUMENTS		
42.4.1	Waivers of contractor's lien or right of continuing possession is required:	YES	
42.4.2	Number of construction document copies to be supplied to the contractor free of charge: 3 Number of		
42.4.3	Bills of quantities/Lump sum document schedule of rates drawn up in accordance with: Standard System of Measuring Building Work		
42.4.4	On acceptance of the tender the bills of quantities/lump sum document is to be submitted within working days. The priced bills of quantities must be handed in with the tender		
42.4.5	JBCC Engineering General Conditions are to be included in the contract documents:	NO	
42.4.6	The contract value is to be adjusted using escalation adjustment indices: Yes. Where JBCC CPAP is to be used. Base month: July 2010		
42.4.7	Details of changes made to the provision of JBCC standard documentation:		
Carried Forward		R	
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		Brought Forward	R	
	<u>SECTION B: PRELIMINARIES</u>			
	Definitions and interpretation (B1)			
43	Definition and interpretation (B1.1 - B1.4.6)			
	F:..... V:..... T:.....		Item	
	Documents (B2)			
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	
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	
	The site (B3)			
50	Defined works area (B3.1)			
	F:..... V:..... T:.....		Item	
51	Geotechnical investigation (B3.2)			
	F:..... V:..... T:.....		Item	
		Carried Forward	R	
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	Brought Forward	R	
52	Inspection of the site (B3.3) F:..... V:..... T:.....	Item	
53	Existing premises occupied (B3.4) F:..... V:..... T:.....	Item	
54	Previous work - dimensional accuracy (B3.5) F:..... V:..... T:.....	Item	
55	Previous work - defects (B3.6) F:..... V:..... T:.....	Item	
56	Services - known (B3.7) F:..... V:..... T:.....	Item	
57	Services - unknown (B3.8) F:..... V:..... T:.....	Item	
58	Protection of trees, etc (B3.9) F:..... V:..... T:.....	Item	
59	Articles of value (B3.10) F:..... V:..... T:.....	Item	
60	Inspection of adjoining properties, etc (B3.11) F:..... V:..... T:.....	Item	
	Management of contract (B4)		
61	Management of the works (B4.1) F:..... V:..... T:.....	Item	
62	Programming for the works (B4.2)		
	Carried Forward	R	
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	Brought Forward	R	
	F:..... V:..... T:.....	Item	
63	Progress meetings (B4.3)		
	F:..... V:..... T:.....	Item	
64	Technical meetings (B4.4)		
	F:..... V:..... T:.....	Item	
65	Labour and plant records (B4.5)		
	F:..... V:..... T:.....	Item	
	Samples, shop drawings and manufacturer's instructions (B5)		
66	Samples of materials (B5.1)		
	F:..... V:..... T:.....	Item	
67	Workmanship samples (B5.2)		
	F:..... V:..... T:.....	Item	
68	Shop drawings (B5.3)		
	F:..... V:..... T:.....	Item	
69	Compliance with manufacturer's instructions (B5.4)		
	F:..... V:..... T:.....	Item	
	Temporary works and plant (B6)		
70	Deposits and fees (B6.1)		
	F:..... V:..... T:.....	Item	
71	Enclosure of the works (B6.2)		
	F:..... V:..... T:.....	Item	
72	Advertising (B6.3)		
	Carried Forward	R	
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	Brought Forward	R
F:..... V:..... T:.....		Item
73 Plant, equipment, sheds and offices (B6.4)		
F:..... V:..... T:.....		Item
74 Main notice board (B6.5)		
F:..... V:..... T:.....		Item
75 Subcontractors notice board (B6.6)		
F:..... V:..... T:.....		Item
Temporary services (B7)		
76 Location (B7.1)		
F:..... V:..... T:.....		Item
77 Water (B7.2) Option [A] shall apply		
F:..... V:..... T:.....		Item
78 Electricity (B7.3) Option [A] shall apply		
F:..... V:..... T:.....		Item
79 Telecommunication facilities (B7.4)		
F:..... V:..... T:.....		Item
80 Ablution facilities (B7.5) Option [A] shall apply		
F:..... V:..... T:.....		Item
Prime cost amounts (B8)		
81 Responsibility for prime cost amounts (B8.1)		
F:..... V:..... T:.....		Item
Attendance on N/S subcontractors (B9)		
	Carried Forward	R
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	Brought Forward	R	
82	General attendance (B9.1) F:..... V:..... T:.....	Item	
83	Special attendance (B9.2) F:..... V:..... T:.....	Item	
84	Commissioning - Fuel, water and power (B9.3) F:..... V:..... T:.....	Item	
	Financial aspects (B10)		
85	Statutory taxes, duties and levies (B10.1) F:..... V:..... T:.....	Item	
86	Payment of preliminaries (B10.2) Option (B) shall apply F:..... V:..... T:.....	Item	
87	Adjustment of preliminaries (B10.3) Option (A) shall apply F:..... V:..... T:.....	Item	
88	Payment certificate cash flow (B10.4) F:..... V:..... T:.....	Item	
	General (B11)		
89	Protection of works (B11.1) F:..... V:..... T:.....	Item	
90	Protection/isolation of existing/sectionally occupied works(B11.2) F:..... V:..... T:.....	Item	
91	Security of the Works (B11.3) F:..... V:..... T:.....	Item	
	Carried Forward	R	
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		Brought Forward	R	
92	Notice before covering work (B11.4)			
	F:..... V:..... T:.....		Item	
93	Disturbance (B11.5)			
	F:..... V:..... T:.....		Item	
94	Environmental disturbance (B11.6)			
	F:..... V:..... T:.....		Item	
95	Works cleaning and clearing (B11.7)			
	F:..... V:..... T:.....		Item	
96	Vermin (B11.8)			
	F:..... V:..... T:.....		Item	
97	Overhand work (B11.9)			
	F:..... V:..... T:.....		Item	
98	Instruction manuals and guarantees (B11.10)			
	F:..... V:..... T:.....		Item	
99	As built information (B11.11)			
	F:..... V:..... T:.....		Item	
100	Tenant installations (B11.12)			
	F:..... V:..... T:.....		Item	
	Schedule of variables (B12)			
101	Pre-tender information (B12.1)			
	F:..... V:..... T:.....		Item	
	12.1.1 Provisional bills of quantities (B12.1.1). The quantities are provisional:	No		
		Carried Forward	R	
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Brought Forward		R	
12.1.2	Availability of construction documentation (B2.3): Construction documentation is not complete:	No	
12.1.3	Interest of agents (B2.4)		
12.1.4	Defined works area (B3.1)		
12.1.5	Geotechnical investigation (B3.2) N/A		
12.1.6	Existing premises occupied (B3.4)		
12.1.7	Previous work - Dimensional accuracy (B3.4)		
12.1.8	Previous work - defects (B3.5)		
12.1.8	Services - known (B3.70)		
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		
12.1.11	Inspection of adjoining properties (B3.11)		
12.1.12	Enclosure of the works (B6.2)		
12.1.13	Offices B6.4.3). An office for the clerk 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		
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		
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12.1.23 Disturbance (B11.5). N/A

12.1.24 Environmental disturbance (B11.6). N/A

Post-tender information (B12.2)

12.2.1 Payment of preliminaries. Alternative selected: B

12.2.2 Adjustment of preliminaries. Alternative selected: A

12.2.3 Additional agreed preliminaries items: N/A

SECTION C: SPECIFIC PRELIMINARIES

Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to the design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included

102 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

103 Black economic empowerment and training

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

Item

104 Proprietary branded products

The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative

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

Item

105 Testing of flat roof waterproofing for watertightness

Carried Forward

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Section No. 1

PRELIMINARIES AND GENERAL

Bill No. 1

PRELIMINARIES

Thabo Mbeki Full - Service School**Tshashu Consulting and Project Managers**

Brought Forward

R

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

106 Contract instructions

Contract instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor

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

Item

107 Labour record

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

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

Item

108 Plant record

At the end of each calendar 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, currently used on the works each day of that week

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

Item

109 Guarantees

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 final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. 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

Carried Forward

R

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Brought Forward

R

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

Item

110 Overtime

Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorized and indicated in writing, prior to the execution thereof, that costs for such overtime will to be borne by the employer

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

Item

111 Co-operation of the contractor for cost management

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 procedure to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors

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

Item

112 Occupational Health and Safety Specification

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

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

Item

SUMMARY OF CATEGORIES

Category : Fixed R

Category : Value R

Category : Time R

Carried to Final Summary

R

Section No. 1

PRELIMINARIES AND GENERAL

Bill No. 1

PRELIMINARIES

Thabo Mbeki Full - Service School

Tshashu Consulting and Project Managers

Item No		Quantity	Rate	Amount
	<u>SECTION 2</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<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>Excavate in earth not exceeding 2m deep</u>			
3	Trenches	m3	29	
4	Pit	m3	23	
5	For apron thickening	m3	8	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
6	Soft rock	m3	4	
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	60	
	Carried Forward		R	
	Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 1 EARTHWORKS Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Risk of collapse of excavations</u>			
9	Sides of trench and hole excavations not exceeding 1,5m deep	m2	47
<u>Keeping excavations free of water</u>			
10	Keeping excavations free of all 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	8
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	23
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	25
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	29
<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	23
Carried Forward			R
Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 1 EARTHWORKS Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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Brought Forward			R
<u>TEST CUBES</u>			
9	Allow for preparing a set of three 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	No	4
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
10	Surface beds, slabs, etc	m2	25
<u>FORMWORK</u>			
<u>Rough formwork to sides:</u>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	33
<u>Permanent formwork to soffits:</u>			
12	Slabs for pit propped up not exceeding 1,5m high	m2	12
13	Leave or form 500mm diameter opening in top of floor slab	No	4
<u>REINFORCEMENT</u>			
<u>High tensile steel reinforcement to structural concrete work</u>			
14	12mm Diameter bars	t	0.540
<u>Mesh reinforcement (measured nett)</u>			
15	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	23
Carried Forward to Summary of Section No. 2			R
Section No. 2			
M1 Water borne (1 x Male Standard Seat and 1 x urinal)			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc</u>			
Descriptions of hollow walls shall be deemed to include 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			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
Carried Forward			R
Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Samples</u>			
Samples of all masonry building units, except for walls described as "load bearing" shall consist of a minimum of 6 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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	9
2	One brick walls in pit	m2	15
3	Half brick corbelling in pit	m	6
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 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 R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
5	Half brickwork for face brick walls pointed on both sides	m2	21
6	One brickwork for face brick walls pointed on both sides	m2	57
7	Extra over brickwork for face brickwork in beamfilling	m2	8
8	Fair raking and cutting	m	11
Carried Forward			R
Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Brick-on-edge header course copings, sills, etc of face bricks (purchase price of R3,500.00/1000 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	8
10	Face brick-on-edge sill 220mm wide pointed on two side and on top and set at an 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	125
13	150mm Wide reinforcement built in horizontally	m	362
<u>Turning pieces</u>			
14	230mm Wide turning piece to lintels etc	m	7
<u>Galvanised wire ties etc</u>			
15	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	11
<u>Prestressed fabricated lintels</u>			
16	Pair of 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4.5m	m	9
<u>Ventilation 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. 2			R
Section No. 2			
M1 Water borne (1 x Male Standard Seat and 1 x urinal)			
Bill No. 3			
MASONRY			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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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 - PW371"			
	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>0.58mm "Kliplock" roof sheeting in chromadek fixed to timber purlins (elsewhere)</u>			
1	Allow the Provisional Amount of R25 000.00 (Twenty five Thousand Rand) for supply and installation of roof sheeting	Item		25 000.00
	<u>Sundries</u>			
2	12" Thermal resistance isolation laid on purlins	m2	29	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutter brackets	m	9	
4	Extra 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. 2			
	Section No. 2			
	M1 Water borne (1 x Male Standard Seat and 1 x urinal)			
	Bill No. 5			
	ROOF COVERINGS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Wrought meranti doors hung to steel frames</u>			
7	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
<u>Wrought meranti doors hung to steel frames</u>			
8	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 one side boarding (door raised by 120mm from bottom (D2)	No	4
Carried Forward to Summary of Section No. 2			R
Section No. 2			
M1 Water borne (1 x Male Standard Seat and 1 x urinal)			
Bill No. 6			
CARPENTRY AND JOINERY			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

Brought Forward			R
<u>BATHROOM FITTINGS</u>			
<u>Kimberley-Clarke or similar</u>			
7	Kimberley-Clarke SQ2 code 405607B white lockable toilet roll holder	No 4	
<u>Vaal Paragon or similar</u>			
8	32mm Type 9 back grab rail 800mm long plugged	No 1	
9	32mm Type 8 back grab rail 900mm girth plugged	No 1	
Carried Forward to Summary of Section No. 2			R
Section No. 2			
M1 Water borne (1 x Male Standard Seat and 1 x urinal)			
Bill No. 7			
IRONMONGERY			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
1	Frame for door 813 x 2032mm high	No	2	
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
2	Frame for door 813 x 2032mm high	No	1	
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
3	Frame for door 945 x 2032mm high (Disabled)	No	1	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
4	Window type NE1, 533 x 654mm high including burglar bars	No	6	
5	Window type NE7, 1022 x 654mm high including burglar bars	No	3	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
6	Purpose made square hollow section mild steel security gate, size 813 x 2032mm high	No	1	
	<u>GUARD RAILS</u>			
	<u>Handrails</u>			
7	Handrails as per details	m	8	
8	Junctions	No	5	
	Carried Forward			
	Section No. 2			
	M1 Water borne (1 x Male Standard Seat and 1 x urinal)			
	Bill No. 8			
	METALWORK			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

R

		Brought Forward		R
9	150 x 150mm base plates	No	8	
10	Rawl bolts	kg	17	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
M1 Water borne (1 x Male Standard Seat and 1 x urinal)				
Bill No. 8				
METALWORK				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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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 - PW371"			
	<u>"Vaal" or Similar approved</u>			
1	510 x 405mm "Hibiscus" (code 7050) white vitreous rounded lavatory basin with one tap holes fixed to wall with and including two semi - concealed brackets (code 844620)	No	2	
2	"Hibiscus" vitreous china close coupled washdown pan (code 752600) complete with double flap heavy duty plastic seat with adjustable hinges and matching 6/3 litre top dual flush cistern (code 710741)	No	3	
3	610 x 385mm "Lavetera" wall mounted urinal code 705426 with top inlet, code 8787 domical grating, code 705421 spreader, 4,5 litre syphonic cistern code 712142 with flush pipe code 172221 and fixed to wall with and including two hanger brackets code 812720	No	2	
4	"Protea" Paraplegic vitreous china washdown pan with double flap heavy duty plastic seat and matching 9 litre cistern complete with lid, fitment and purpose made chromium plated side - flush lever fixed to brickwork as item	No	1	
	<u>TESTING</u>			
5	Testing waste pipe system		Item	
	<u>FITTINGS</u>			
6	19mm chrome plated push button taps to wash troughs	No	2	
	<u>WASTE UNION ETC</u>			
	<u>"Cobra watertech"</u>			
7	32mm 301CP waste union	No	2	
	Carried Forward		R	
	Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>TRAPS ETC</u>			
8	32mm Deep seal "P" or "S" trap "Cobra Watertech"	No	2
9	38mm 365/40 CP Bottle trap	No	2
<u>TAPS, VALVES, ETC</u>			
10	15mm 114 - 15CP "Star" pillar tap	No	12
11	15mm 166/041CP "Elbow action" sink mixer	No	2
12	15mm Stopcock	No	2
13	15mm Full-way gate valve "Cobra Watertech"	No	2
14	PA3.522 "Masterflo" pressure control valve with PB1.10 Vacuum breaker.	No	7
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
15	50mm Pipes	m	30
16	110mm Pipes	m	30
17	50mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	15
18	110mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	15
19	110mm Pipe laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m	15
<u>Pre-cast concrete gulley</u>			
20	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	1
Carried Forward			R
Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Sundries</u>			
21	100mm Cast iron "ABC" cleaning eye	No 5	
22	Precast concrete inspection eye marker slab set in ground	No 5	
23	110mm Rodding eye	No 5	
<u>Extra over uPVC pipes for fittings</u>			
24	50mm Bend	No 12	
25	50mm Access junction	No 12	
26	110mm Pan connector	No 12	
27	110mm Bent pan connector	No 4	
28	50mm Access bend	No 12	
29	110mm Access bend	No 5	
30	110mm Two-way vent valve	No 6	
<u>TESTING</u>			
31	Testing waste pipe system	Item	
<u>WATER SUPPLIES</u>			
<u>HDPE polyethelene Class 12 piping with butwelding type pressure fittings</u>			
32	50mm Pipe and excavation not exceeding 1m deep	m 50	
<u>Extra over HDPE polyethylene pipes for fittings</u>			
33	50mm Fittings	No 58	
34	30mm Fittings (Reducers)	No 32	
<u>Sundries</u>			
35	Testing water pipe system	Item	
Carried Forward			R
Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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Item No		Quantity	Rate	Amount
	BILL NO. 12			
	PAINTWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	ON FIBRE-CEMENT			
	<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	6	
	ON WOOD SURFACES			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (external)	m2	4	
3	On doors (internal)	m2	16	
	ON METAL			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	3	
5	On gates (measured over the full flat area of both sides)	m2	3	
6	On gutters and down pipes	m	9	
	<u>Spot priming defects in prime surfaces 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	8	
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2 M1 Water borne (1 x Male Standard Seat and 1 x urinal) Bill No. 12 PAINTWORK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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Item No		Quantity	Rate	Amount
	<u>SECTION 6</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, and trees not exceeding 200mm girth, etc	m2	84	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	37	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavate in earth not exceeding 2m deep</u>			
3	Trenches	m3	34	
4	For apron thickening	m3	16	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
5	Soft rock	m3	1	
6	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
7	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	52	
	<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	22	
	Carried Forward			
	Section No. 3			
	SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard			
	Bill No. 1			
	EARTHWORKS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Keeping excavations free of water</u>		
9	Keeping excavations free of all 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>		
10	Under floors, steps, pavings, etc	m3	13
11	Backfilling to trenches, holes, etc	m3	8
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	14
13	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	21
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" tests	No	1
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	14
16	To bottom of concrete aprons	m2	21
17	To bottoms and sides of trenches etc	m2	33
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard			
Bill No. 1			
EARTHWORKS			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25MPa/19mm concrete</u>			
1	Strip footings	m3	15	
2	Aprons cast in panels	m3	9	
3	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc	m	3	
4	Thickening down apron on edge 110mm deep x 200mm wide	m	25	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25MPa/19mm concrete</u>			
5	Surface beds	m3	21	
6	Ramps	m3	4	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
7	Aprons and pavings to falls	m2	21	
	<u>TEST CUBES</u>			
8	Allow for preparing a set of three 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	No	2	
	Carried Forward			
	Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers		R	

Brought Forward			R
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
9	Surface beds, slabs, etc	m2	14
	<u>FORMWORK</u>		
	<u>Rough formwork to sides:</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25
	<u>REINFORCEMENT</u>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
11	12mm Diameter bars	t	0.540
	<u>Mesh reinforcement (measured nett)</u>		
12	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	14
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
<u>BRICKWORK</u>			
<u>Sizes in descriptions</u>			
Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
<u>Hollow walls etc</u>			
Descriptions of hollow walls shall be deemed to include 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			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
Carried Forward			R
Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Samples</u>			
Samples of all masonry building units, except for walls described as "load bearing" shall consist of a minimum of 6 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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	18
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
2	Extra over brickwork for face brickwork in foundation	m2	9
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
3	Half brickwork for face brick walls pointed on both sides	m2	40
4	One brickwork for face brick walls pointed on both sides	m2	94
5	Extra over brickwork for face brickwork in beamfilling	m2	9
6	Fair raking and cutting	m	8
<u>Brick-on-edge header course copings, sills, etc of face bricks (purchase price of R3,500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	4
Carried Forward			R
Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

	Brought Forward			R
8	Face brick-on-edge sill 220mm wide pointed on two side and on top and set at an angle	m	4	
9	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	8	
<u>BRICKWORK SUNDRIES</u>				
<u>Brick reinforcement</u>				
10	75mm Wide reinforcement built in horizontally	m	6	
11	150mm Wide reinforcement built in horizontally	m	152	
<u>Turning pieces</u>				
12	230mm Wide turning piece to lintels etc	m	4	
<u>Galvanised wire ties etc</u>				
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	10	
<u>Ventilation bricks</u>				
14	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6	
Carried Forward to Summary of Section No. 3				
Section No. 3				
SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard				
Bill No. 3				
MASONRY				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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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 - PW371"			
	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>0.58mm "Kliplock" roof sheeting in chromadek fixed to timber purlins (elsewhere)</u>			
1	Allow the Provisional Amount of R30 000.00 (Thirty Thousand Rand) for supply and installation of roof sheeting	Item		30 000.00
	<u>Sundries</u>			
2	12" Thermal resistance isolation laid on purlins	m2	17	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutter brackets	m	5	
4	Extra for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	7	
6	Extra over rainwater pipe for eaves offset	No	2	
7	Ditto, for shoe	No	2	
	Carried Forward to Summary of Section No. 3			
	Section No. 3			
	SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard			
	Bill No. 5			
	ROOF COVERINGS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<u>ROOFS, ETC</u>			
	The following in pre-fabricated roof trusses manufactured from "CCA Tanalith" pre-treated wrought softwood			
1	Allow the Provisional Amount of R25 000.00 (Twenty five Thousand Rand) for supply and complete installation of roof trusses including all necessary bracing, gangboarding, splayed eaves purlins, wall plates, etc	Item		25 000.00
	<u>Sundries</u>			
2	Two coats creosote on sawn timbers	m2	15	
3	6mm Diameter galvanised wire tie 3000mm girth, wrapped around rafter and purlin with ends tied together	No	15	
4	Hurricane clips	No	10	
	<u>EAVES, VERGES, ETC</u>			
	<u>Pressed fibre-cement</u>			
5	15 x 230mm Fascias and barge boards, including galvanised steel H-profile jointing strips	m	19	
	<u>DOORS, ETC</u>			
	<u>Wrought meranti doors hung to steel frames</u>			
6	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	5	
	Carried Forward		R	
	Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 6 CARPENTRY AND JOINERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward		R
<u>Wrought meranti doors hung to steel frames</u>		
7	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 (D2)	No 3
Carried Forward to Summary of Section No. 3		R
Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 6 CARPENTRY AND JOINERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers		

Item No		Quantity	Rate	Amount
	BILL NO. 7			
	<u>IRONMONGERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<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	Four lever mortice lockset	No	5	
	<u>DOORSTOPS</u>			
	<u>Approved</u>			
3	38mm Diameter rubber door stop, plugged	No	5	
	<u>LETTERS, NAME PLATES, ETC</u>			
	<u>Union or similar approved</u>			
4	75 x 150mm Natural anodised plate with male or female symbol	No	2	
	<u>DOOR CLOSERS, ETC</u>			
	<u>"Union"</u>			
5	Union DC 737 ENG-5 SC HO (737SCHO)	No	2	
	<u>BATHROOM FITTINGS</u>			
	Carried Forward		R	
	Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 7 IRONMONGERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Kimberley-Clarke or similar</u>		
6	Kimberley-Clarke SQ2 code 405607B white lockable toilet roll holder	No	4
	<u>SHE Bin</u>		
7	Stainless steel rust resistant she bins	No	6
	<u>Vaal Paragon or similar</u>		
8	32mm Type 9 back grab rail 800mm long plugged	No	1
9	32mm Type 8 back grab rail 900mm girth plugged	No	1
Carried Forward to Summary of Section No. 3			R
Section No. 3			
SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard			
Bill No. 7			
IRONMONGERY			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

Item No		Quantity	Rate	Amount
	BILL NO. 8			
	METALWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	PRESSED STEEL DOOR FRAMES			
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
1	Frame for door 813 x 2032mm high	No	2	
	<u>1,2mm Single rebated frames suitable for half bricks walls</u>			
2	Frame for door 813 x 2032mm high	No	4	
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
3	Frame for door 954 x 2032mm high (Disabled)	No	1	
	STEEL WINDOWS, DOORS, ETC			
4	Window type NE1, 533 x 654mm high including burglar bars	No	4	
5	Window type NE7, 1022 x 654mm high including burglar bars	No	6	
	WELDED SCREENS, GATES, ETC			
	<u>Steel gates and frames</u>			
6	Purpose made square hollow section mild steel security gate, size 813 x 2032mm high	No	2	
	Carried Forward to Summary of Section No. 3		R	
	Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 8 METALWORK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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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 - PW371"			
	<u>"Vaal" or Similar approved</u>			
1	510 x 405mm "Hibiscus" (code 7050)white vitreous rounded lavatory basin with one tap holes fixed to wall with and including two semi - concealed brackets (code 8446Z0)	No	2	
2	"Hibiscus" vitreous china close coupled washdown pan (code 752600) complete with double flap heavy duty plastic seat with adjustable hinges and matching 6/3 litre top dual flush cistern (code 710741)	No	3	
3	610 x 385mm "Lavetera" wall mounted urinal code 705426 with top inlet, code 8787 domical grating, code 7054Z1 spreader, 4,5 litre syphonic cistern code 712142 with flush pipe code 1722Z1 and fixed to wall with and including two hanger brackets code 8127Z0	No	6	
4	"Protea" Paraplegic vitreous china washdown pan with double flap heavy duty plastic seat and matching 9 litre cistern complete with lid, fitment and purpose made chromium plated side - flush lever fixed to brickwork as item	No	1	
	<u>TESTING</u>			
5	Testing waste pipe system		Item	
	<u>FITTINGS</u>			
6	19mm chrome plated push button taps to wash troughs	No	2	
	<u>WASTE UNION ETC</u>			
	<u>"Cobra watertech"</u>			
7	32mm 301CP waste union	No	2	
	Carried Forward		R	
	Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>TRAPS ETC</u>			
8	32mm Deep seal "P" or "S" trap "Cobra Watertech"	No	2
9	38mm 365/40 CP Bottle trap	No	2
<u>TAPS, VALVES, ETC</u>			
10	15mm 114 - 15CP "Star" pillar tap	No	12
11	15mm 166/041CP "Elbow action" sink mixer	No	2
12	15mm Stopcock	No	2
13	15mm Full-way gate valve "Cobra Watertech"	No	2
14	PA3.522 "Masterflo" pressure control valve with PB1.10 Vacuum breaker.	No	6
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
15	50mm Pipes	m	30
16	110mm Pipes	m	30
17	50mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	15
18	110mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	15
19	110mm Pipe laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m	15
<u>Pre-cast concrete gulley</u>			
20	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	1
Carried Forward			R
Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Sundries</u>			
21	100mm Cast iron "ABC" cleaning eye	No 5	
22	Precast concrete inspection eye marker slab set in ground	No 5	
23	110mm Rodding eye	No 5	
<u>Extra over uPVC pipes for fittings</u>			
24	50mm Bend	No 12	
25	50mm Access junction	No 12	
26	110mm Pan connector	No 12	
27	110mm Bent pan connector	No 4	
28	50mm Access bend	No 12	
29	110mm Access bend	No 5	
30	110mm Two-way vent valve	No 6	
<u>TESTING</u>			
31	Testing waste pipe system	Item	
<u>WATER SUPPLIES</u>			
<u>HDPE polyethelene Class 12 piping with butwelding type pressure fittings</u>			
32	50mm Pipe and excavation not exceeding 1m deep	m 50	
<u>Extra over HDPE polyethylene pipes for fittings</u>			
33	50mm Fittings	No 58	
34	30mm Fittings (Reducers)	No 32	
<u>Sundries</u>			
35	Testing water pipe system	Item	
Carried Forward			R
Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward				R
	<u>Galvanised steel pipes</u>			
36	50mm Pipes	m	30	
	<u>Extra over galvanised steel pipes for fittings</u>			
37	50mm Elbow	No	7	
38	50mm Reducer	No	7	
	<u>Class O copper pipes</u>			
39	15mm Pipes	m	30	
40	22mm Pipes	m	30	
	<u>Extra over class O copper pipes for capillary fittings</u>			
41	15mm Fittings	No	7	
42	22mm Fittings	No	7	
	<u>Copper overflow and service pipes</u>			
43	15mm Service pipe 450mm girth	No	6	
	STANDPIPES			
44	Allow the Provisional Amount of R6 000.00 (Six thousand rands) Allow for Standpipes		Item	6 000.00
Carried Forward to Summary of Section No. 3				R
Section No. 3				
SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard				
Bill No. 10				
PLUMBING AND DRAINAGE				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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Item No		Quantity	Rate	Amount
	BILL NO. 12			
	PAINTWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	ON FIBRE-CEMENT			
	<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	
	ON WOOD SURFACES			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (external)	m2	7	
3	On doors (Internal)	m2	14	
	ON METAL			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	4	
5	On gates (measured over the full flat area of both sides)	m2	7	
6	On gutters and down pipes	m	12	
	<u>Spot priming defects in prime surfaces 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	5	
	Carried Forward to Summary of Section No. 3		R	
	Section No. 3 SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Bill No. 12 PAINTWORK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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Item No		Quantity	Rate	Amount
	<u>SECTION 6</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, and trees not exceeding 200mm girth, etc	m2	84	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	37	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavate in earth not exceeding 2m deep</u>			
3	Trenches	m3	34	
4	For apron thickening	m3	16	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
5	Soft rock	m3	1	
6	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
7	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	52	
	<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	22	
	Carried Forward			
	Section No. 4			
	S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
	Bill No. 1			
	EARTHWORKS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Keeping excavations free of water</u>		
9	Keeping excavations free of all 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>		
10	Under floors, steps, pavings, etc	m3	13
11	Backfilling to trenches, holes, etc	m3	8
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	14
13	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	21
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" tests	No	1
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	14
16	To bottom of concrete aprons	m2	21
17	To bottoms and sides of trenches etc	m2	33
Carried Forward to Summary of Section No. 4			R
Section No. 4			
S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
Bill No. 1			
EARTHWORKS			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25MPa/19mm concrete</u>			
1	Strip footings	m3	15	
2	Aprons cast in panels	m3	9	
3	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc	m	3	
4	Thickening down apron on edge 110mm deep x 200mm wide	m	25	
5	Ramps	m3	4	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25MPa/19mm concrete</u>			
6	Surface beds	m3	20	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
7	Aprons and pavings to falls	m2	21	
	<u>TEST CUBES</u>			
8	Allow for preparing a set of three 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	No	2	
	Carried Forward			
	Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			
			R	

Brought Forward			R
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
9	Surface beds, slabs, etc	m2	14
	<u>FORMWORK</u>		
	<u>Rough formwork to sides:</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25
	<u>REINFORCEMENT</u>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
11	12mm Diameter bars	t	0.540
	<u>Mesh reinforcement (measured nett)</u>		
12	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	14
Carried Forward to Summary of Section No. 4			R
Section No. 4			
S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include 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			
	<u>Face bricks</u>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<u>Pointing</u>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	Carried Forward		R	
	Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Samples</u> Samples of all masonry building units, except for walls described as "load bearing" shall consist of a minimum of 6 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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	18
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
2	Extra over brickwork for face brickwork in foundation	m2	9
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
3	Half brickwork for face brick walls pointed on both sides	m2	40
4	One brickwork for face brick walls pointed on both sides	m2	56
5	Extra over brickwork for face brickwork in beamfilling	m2	9
6	Fair raking and cutting	m	8
<u>Brick-on-edge header course copings, sills, etc of face bricks (purchase price of R3,500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	4
Carried Forward			R
Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

	Brought Forward			R
8	Face brick-on-edge sill 220mm wide pointed on two side and on top and set at an angle	m	4	
9	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	8	
<u>BRICKWORK SUNDRIES</u>				
<u>Brick reinforcement</u>				
10	75mm Wide reinforcement built in horizontally	m	6	
11	150mm Wide reinforcement built in horizontally	m	152	
<u>Turning pieces</u>				
12	230mm Wide turning piece to lintels etc	m	4	
<u>Galvanised wire ties etc</u>				
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	10	
<u>Ventilation bricks</u>				
14	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6	
Carried Forward to Summary of Section No. 4				
Section No. 4				R
S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S				
Bill No. 3				
MASONRY				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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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 - PW371"			
	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>0.58mm "Kliplock" roof sheeting in chromadek fixed to timber purlins (elsewhere)</u>			
1	Allow the Provisional Amount of R30 000.00 (Thirty Thousand Rand) for supply and installation of roof sheeting	Item		30 000.00
	<u>Sundries</u>			
2	12" Thermal resistance isolation laid on purlins	m2	17	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutter brackets	m	5	
4	Extra for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	7	
6	Extra over rainwater pipe for eaves offset	No	2	
7	Ditto, for shoe	No	2	
	Carried Forward to Summary of Section No. 4			
	Section No. 4			
	S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
	Bill No. 5			
	ROOF COVERINGS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<u>ROOFS, ETC</u>			
	The following in pre-fabricated roof trusses manufactured from "CCA Tanalith" pre-treated wrought softwood			
1	Allow the Provisional Amount of R25 000.00 (Twenty five Thousand Rand) for supply and complete installation of roof trusses including all necessary bracing, gangboarding, splayed eaves purlins, wall plates, etc	Item		25 000.00
	<u>Sundries</u>			
2	Two coats creosote on sawn timbers	m2	15	
3	6mm Diameter galvanised wire tie 3000mm girth, wrapped around rafter and purlin with ends tied together	No	15	
4	Hurricane clips	No	10	
	<u>EAVES, VERGES, ETC</u>			
	<u>Pressed fibre-cement</u>			
5	15 x 230mm Fascias and barge boards, including galvanised steel H-profile jointing strips	m	19	
	<u>DOORS, ETC</u>			
	<u>Wrought meranti doors hung to steel frames</u>			
6	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	5	
	Carried Forward		R	
	Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 6 CARPENTRY AND JOINERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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Item No		Quantity	Rate	Amount
	BILL NO. 7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	CATCHES, CABIN HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	LOCKS			
	<u>Approved</u>			
2	Four lever mortice lockset	No	5	
	DOORSTOPS			
	<u>Approved</u>			
3	38mm Diameter rubber door stop, plugged	No	5	
	LETTERS, NAME PLATES, ETC			
	<u>Union or similar approved</u>			
4	75 x 150mm Natural anodised plate with male or female symbol	No	2	
	DOOR CLOSERS, ETC			
	<u>"Union"</u>			
5	Union DC 737 ENG-5 SC HO (737SCHO)	No	2	
	BATHROOM FITTINGS			
	Carried Forward			R
	Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 7 IRONMONGERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Kimberley-Clarke or similar</u>		
6	Kimberley-Clarke SQ2 code 405607B white lockable toilet roll holder	No	4
	<u>SHE Bin</u>		
7	Stainless steel rust resistant she bins	No	2
	<u>Vaal Paragon or similar</u>		
8	32mm Type 9 back grab rail 800mm long plugged	No	1
9	32mm Type 8 back grab rail 900mm girth plugged	No	1
Carried Forward to Summary of Section No. 4			R
Section No. 4			
S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
Bill No. 7			
IRONMONGERY			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
1	Frame for door 813 x 2032mm high	No	2	
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
2	Frame for door 813 x 2032mm high	No	4	
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
3	Frame for door 945 x 2032mm high (Disabled)	No	1	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
4	Window type NE1, 533 x 654mm high including burglar bars	No	4	
5	Window type NE7, 1022 x 654mm high including burglar bars	No	6	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
6	Purpose made square hollow section mild steel security gate, size 813 x 2032mm high	No	2	
	<u>GUARD RAILS</u>			
	<u>Handrails</u>			
7	Handrails as per details	m	8	
8	Junctions	No	5	
	Carried Forward			R
	Section No. 4			
	S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
	Bill No. 8			
	METALWORK			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

	Brought Forward		R
9	150 x 150mm base plates	No	8
10	Rawl bolts	kg	17
Carried Forward to Summary of Section No. 4			R
Section No. 4			
S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S			
Bill No. 8			
METALWORK			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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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 - PW371"			
	<u>"Vaal" or Similar approved</u>			
1	510 x 405mm "Hibiscus" (code 7050) white vitreous rounded lavatory basin with one tap holes fixed to wall with and including two semi - concealed brackets (code 844620)	No	2	
2	"Hibiscus" vitreous china close coupled washdown pan (code 752600) complete with double flap heavy duty plastic seat with adjustable hinges and matching 6/3 litre top dual flush cistern (code 710741)	No	3	
3	610 x 385mm "Lavetera" wall mounted urinal code 705426 with top inlet, code 8787 domical grating, code 705421 spreader, 4,5 litre syphonic cistern code 712142 with flush pipe code 172221 and fixed to wall with and including two hanger brackets code 812720	No	6	
4	"Protea" Paraplegic vitreous china washdown pan with double flap heavy duty plastic seat and matching 9 litre cistern complete with lid, fitment and purpose made chromium plated side - flush lever fixed to brickwork as item	No	1	
	<u>TESTING</u>			
5	Testing waste pipe system		Item	
	<u>FITTINGS</u>			
6	19mm chrome plated push button taps to wash troughs	No	2	
	<u>WASTE UNION ETC</u>			
	<u>"Cobra watertech"</u>			
7	32mm 301CP waste union	No	2	
	Carried Forward		R	
	Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>TRAPS ETC</u>			
8	32mm Deep seal "P" or "S" trap "Cobra Watertech"	No 2	
9	38mm 365/40 CP Bottle trap	No 2	
<u>TAPS, VALVES, ETC</u>			
10	15mm 114 - 15CP "Star" pillar tap	No 12	
11	15mm 166/041CP "Elbow action" sink mixer	No 3	
12	15mm Stopcock	No 2	
13	15mm Full-way gate valve "Cobra Watertech"	No 2	
14	PA3.522 "Masterflo" pressure control valve with PB1.10 Vacuum breaker.	No 6	
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
15	50mm Pipes	m 30	
16	110mm Pipes	m 30	
17	50mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m 15	
18	110mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m 15	
19	110mm Pipe laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m 15	
<u>Pre-cast concrete gulley</u>			
20	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No 1	
Carried Forward			R
Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Sundries</u>			
21	100mm Cast iron "ABC" cleaning eye	No 5	
22	Precast concrete inspection eye marker slab set in ground	No 5	
23	110mm Rodding eye	No 5	
<u>Extra over uPVC pipes for fittings</u>			
24	50mm Bend	No 12	
25	50mm Access junction	No 12	
26	110mm Pan connector	No 12	
27	110mm Bent pan connector	No 4	
28	50mm Access bend	No 12	
29	110mm Access bend	No 5	
30	110mm Two-way vent valve	No 6	
<u>TESTING</u>			
31	Testing waste pipe system	Item	
<u>WATER SUPPLIES</u>			
<u>HDPE polyethelene Class 12 piping with butwelding type pressure fittings</u>			
32	50mm Pipe and excavation not exceeding 1m deep	m 50	
<u>Extra over HDPE polyethylene pipes for fittings</u>			
33	50mm Fittings	No 58	
34	30mm Fittings (Reducers)	No 32	
<u>Sundries</u>			
35	Testing water pipe system	Item	
Carried Forward			R
Section No. 4 S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward				R
	<u>Galvanised steel pipes</u>			
36	50mm Pipes	m	30	
	<u>Extra over galvanised steel pipes for fittings</u>			
37	50mm Elbow	No	7	
38	50mm Reducer	No	7	
	<u>Class O copper pipes</u>			
39	15mm Pipes	m	30	
40	22mm Pipes	m	30	
	<u>Extra over class O copper pipes for capillary fittings</u>			
41	15mm Fittings	No	7	
42	22mm Fittings	No	7	
	<u>Copper overflow and service pipes</u>			
43	15mm Service pipe 450mm girth	No	6	
	STANDPIPES			
44	Allow the Provisional Amount of R6 000.00 (Six thousand rands) Allow for Standpipes around Grade R facilities		Item	6 000.00
Carried Forward to Summary of Section No. 4				R
Section No. 4				
S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard S				
Bill No. 10				
PLUMBING AND DRAINAGE				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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Item No		Quantity	Rate	Amount
	<u>SECTION 6</u>			
	<u>BILL NO.1</u>			
	<u>EARTHWORKS</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, and trees not exceeding 200mm girth, etc	m2	84	
2	Stripping average 100mm thick layer of top soil and stockpiling on site	m2	37	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavate in earth not exceeding 2m deep</u>			
3	Trenches	m3	25	
4	For apron thickening	m3	6	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
5	Soft rock	m3	1	
6	Hard rock	m3	2	
	<u>Extra over all excavations for carting away:</u>			
7	Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the Contractor	m3	2	
	<u>Risk of collapse of excavations</u>			
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	22	
	Carried Forward			
	Section No. 5			
	GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
	Bill No. 1			
	EARTHWORKS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Keeping excavations free of water</u>		
9	Keeping excavations free of all 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>		
10	Under floors, steps, pavings, etc	m3	3
11	Backfilling to trenches, holes, etc	m3	3
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	14
13	Compaction of ground surface to aprons etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	21
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" tests	No	1
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	14
16	To bottom of concrete aprons	m2	21
17	To bottoms and sides of trenches etc	m2	33
Carried Forward to Summary of Section No. 5			R
Section No. 5			
GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
Bill No. 1			
EARTHWORKS			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>UNREINFORCED CONCRETE, ETC</u>			
	<u>25MPa/19mm concrete</u>			
1	Strip footings	m3	25	
2	Aprons cast in panels	m3	12	
3	Extra over concrete in surface beds for thickening 85mm deep the bottom including all excavation, backfilling etc	m	8	
4	Thickening down apron on edge 110mm deep x 200mm wide	m	25	
5	Ramps	m3	4	
	<u>REINFORCED CONCRETE, ETC</u>			
	<u>25MPa/19mm concrete</u>			
6	Surface beds	m3	22	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
7	Aprons and pavings to falls	m2	21	
	<u>TEST CUBES</u>			
8	Allow for preparing a set of three 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	No	2	
	Carried Forward			
	Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			
			R	

Brought Forward			R
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
9	Surface beds, slabs, etc	m2	14
	<u>FORMWORK</u>		
	<u>Rough formwork to sides:</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25
	<u>REINFORCEMENT</u>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
11	12mm Diameter bars	t	0.550
	<u>Mesh reinforcement (measured nett)</u>		
12	Mesh ref. No. 395 fabric reinforcement fixed horizontal in surface beds	m2	39
Carried Forward to Summary of Section No. 5			R
Section No. 5			
GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include 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			
	<u>Face bricks</u>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<u>Pointing</u>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	Carried Forward		R	
	Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Samples</u> Samples of all masonry building units, except for walls described as "load bearing" shall consist of a minimum of 6 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			
<u>FOUNDATIONS</u>			
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>			
1	One brick walls	m2	16
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
2	Extra over brickwork for face brickwork in foundation	m2	9
<u>SUPERSTRUCTURE</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (purchase price of R5,000.00/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints</u>			
3	Half brickwork for face brick walls pointed on both sides	m2	28
4	One brickwork for face brick walls pointed on both sides	m2	56
5	Extra over brickwork for face brickwork in beamfilling	m2	12
6	Fair raking and cutting	m	8
<u>Brick-on-edge header course copings, sills, etc of face bricks (purchase price of R3,500.00/1000 delivered to site excluding VAT) pointed with recessed joints on all exposed faces</u>			
7	Extra over brickwork for brick-on-edge header course lintels pointed on two sides and 110mm soffit	m	4
Carried Forward			R
Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 3 MASONRY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

	Brought Forward			R
8	Face brick-on-edge sill 220mm wide pointed on two side and on top and set at an angle	m	4	
9	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	8	
<u>BRICKWORK SUNDRIES</u>				
<u>Brick reinforcement</u>				
10	75mm Wide reinforcement built in horizontally	m	6	
11	150mm Wide reinforcement built in horizontally	m	152	
<u>Turning pieces</u>				
12	230mm Wide turning piece to lintels etc	m	4	
<u>Galvanised wire ties etc</u>				
13	6mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	10	
<u>Ventilation bricks</u>				
14	Set of two 22 x 155mm high terra cotta clay vermin proof air bricks including making good reveals and gauze	No	6	
Carried Forward to Summary of Section No. 5				
Section No. 5				
GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)				
Bill No. 3				
MASONRY				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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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 - PW371"			
	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>0.58mm "Kliplock" roof sheeting in chromadek fixed to timber purlins (elsewhere)</u>			
1	Allow the Provisional Amount of R35 000.00 (Thity Five Thousand Rand) for supply and installation of roof sheeting	Item		35 000.00
	<u>Sundries</u>			
2	12" Thermal resistance sisolation laid on purlins	m2	17	
	<u>RAINWATER DISPOSAL</u>			
	<u>Aluzink seamless metal gutters:</u>			
3	100 x 100 x 0.6mm Standard rainwater gutters fixed with gutter brackets	m	5	
4	Extra for closed ends	No	2	
5	75 x 100 x 0.6mm Thick galvanised rainwater downpipes fixed to wall	m	7	
6	Extra over rainwater pipe for eaves offset	No	2	
7	Ditto, for shoe	No	2	
	Carried Forward to Summary of Section No. 5			
	Section No. 5			
	GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
	Bill No. 5			
	ROOF COVERINGS			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Item No		Quantity	Rate	Amount
	<u>BILL NO. 6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	<u>ROOFS, ETC</u>			
	The following in pre-fabricated roof trusses manufactured from "CCA Tanalith" pre-treated wrought softwood			
1	Allow the Provisional Amount of R 45 000.00 (Forty fiveThousand Rand) for supply and complete installation of roof trusses including all necessary bracing, gangboarding, splayed eaves purlins, wall plates, etc	Item		45 000.00
	<u>Sundries</u>			
2	Two coats creosote on sawn timbers	m2	15	
3	6mm Diameter galvanised wire tie 3000mm girth, wrapped around rafter and purlin with ends tied together	No	15	
4	Hurricane clips	No	10	
	<u>EAVES, VERGES, ETC</u>			
	<u>Pressed fibre-cement</u>			
5	15 x 230mm Fascias and barge boards, including galvanised steel H-profile jointing strips	m	44	
	<u>DOORS, ETC</u>			
	<u>Wrought meranti doors hung to steel frames</u>			
6	44mm Stable 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	7	
	Carried Forward		R	
	Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 6 CARPENTRY AND JOINERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward		R
<u>Wrought meranti doors hung to steel frames</u>		
7	44mm Framed batten door 900 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 (D3)	No 2
<u>FRAMED FRAMES, ETC</u>		
<u>Wrot meranti frames</u>		
8	44 x 100mm Rebated frames plugged	m 8
Carried Forward to Summary of Section No. 5 Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 6 CARPENTRY AND JOINERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers		
		R

Item No		Quantity	Rate	Amount
	BILL NO. 7			
	IRONMONGERY			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	CATCHES, CABIN HOOKS, ETC			
	<u>Approved</u>			
1	150mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	LOCKS			
	<u>Approved</u>			
2	Four lever mortice lockset	No	5	
	DOORSTOPS			
	<u>Approved</u>			
3	38mm Diameter rubber door stop, plugged	No	5	
	LETTERS, NAME PLATES, ETC			
	<u>Union or similar approved</u>			
4	75 x 150mm Natural anodised plate with male or female symbol	No	2	
	DOOR CLOSERS, ETC			
	" <u>Union</u> "			
5	Union DC 737 ENG-5 SC HO (737SCHO)	No	3	
	BATHROOM FITTINGS			
	Carried Forward		R	
	Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 7 IRONMONGERY Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Kimberley-Clarke or similar</u>		
6	Kimberley-Clarke SQ2 code 405607B white lockable toilet roll holder	No	5
	<u>Vaal Paragon or similar</u>		
7	32mm Type 9 back grab rail 800mm long plugged	No	1
8	32mm Type 8 back grab rail 900mm girth plugged	No	1
Carried Forward to Summary of Section No. 5			R
Section No. 5			
GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
Bill No. 7			
IRONMONGERY			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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 - PW371"			
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
1	Frame for door 813 x 2032mm high	No	2	
	<u>1,2mm Single rebated frames suitable for half brick walls</u>			
2	Frame for door 813 x 2032mm high	No	4	
	<u>1,6mm Single rebated frames suitable for one brick walls</u>			
3	Frame for door 914 x 2032mm high (Disabled)	No	1	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
4	Window type NE1, 533 x 654mm high including burglar bars	No	5	
5	Window type NE7, 1022 x 654mm high including burglar bars	No	6	
	<u>WELDED SCREENS, GATES, ETC</u>			
	<u>Steel gates and frames</u>			
6	Purpose made square hollow section mild steel security gate, size 813 x 2032mm high	No	2	
	<u>GUARD RAILS</u>			
	<u>Handrails</u>			
7	Handrails as per details	m	8	
8	Junctions	No	5	
	Carried Forward			
	Section No. 5			
	GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
	Bill No. 8			
	METALWORK			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

Brought Forward			R
9	150 x 150mm base plates	No	8
10	Rawl bolts	kg	17
11	Rawl bolts	kg	17
Carried Forward to Summary of Section No. 5			R
Section No. 5			
GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)			
Bill No. 8			
METALWORK			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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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 - PW371"			
	<u>"Vaal" or Similar approved</u>			
1	510 x 405mm "Hibiscus" (code 7050)white vitreous rounded lavatory basin with one tap holes fixed to wall with and including two semi - concealed brackets (code 844620)	No	2	
2	"Hibiscus" vitreous china close coupled washdown pan (code 752600) complete with double flap heavy duty plastic seat with adjustable hinges and matching 6/3 litre top dual flush cistern (code 710741)	No	3	
3	610 x 385mm "Lavetera" wall mounted urinal code 705426 with top inlet, code 8787 domical grating, code 705421 spreader, 4,5 litre syphonic cistern code 712142 with flush pipe code 172221 and fixed to wall with and including two hanger brackets code 812720	No	2	
4	"Protea" Paraplegic vitreous china washdown pan with double flap heavy duty plastic seat and matching 9 litre cistern complete with lid, fitment and purpose made chromium plated side - flush lever fixed to brickwork as item	No	1	
	<u>TESTING</u>			
5	Testing waste pipe system		Item	
	<u>FITTINGS</u>			
6	19mm chrome plated push button taps to wash troughs	No	2	
	<u>WASTE UNION ETC</u>			
	<u>"Cobra watertech"</u>			
7	32mm 301CP waste union	No	2	
	Carried Forward		R	
	Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>TRAPS ETC</u>			
8	32mm Deep seal "P" or "S" trap "Cobra Watertech"	No	2
9	38mm 365/40 CP Bottle trap	No	2
<u>TAPS, VALVES, ETC</u>			
10	15mm 114 - 15CP "Star" pillar tap	No	12
11	15mm 166/041CP "Elbow action" sink mixer	No	2
12	15mm Stopcock	No	2
13	15mm Full-way gate valve "Cobra Watertech"	No	2
14	PA3.522 "Masterflo" pressure control valve with PB1.10 Vacuum breaker.	No	7
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
15	50mm Pipes	m	30
16	110mm Pipes	m	30
17	50mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	15
18	110mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	15
19	110mm Pipe laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m	15
<u>Pre-cast concrete gulley</u>			
20	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	1
Carried Forward			R
Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Sundries</u>			
21	100mm Cast iron "ABC" cleaning eye	No 5	
22	Precast concrete inspection eye marker slab set in ground	No 5	
23	110mm Rodding eye	No 5	
<u>Extra over uPVC pipes for fittings</u>			
24	50mm Bend	No 12	
25	50mm Access junction	No 12	
26	110mm Pan connector	No 12	
27	110mm Bent pan connector	No 4	
28	50mm Access bend	No 12	
29	110mm Access bend	No 5	
30	110mm Two-way vent valve	No 6	
<u>TESTING</u>			
31	Testing waste pipe system	Item	
<u>WATER SUPPLIES</u>			
<u>HDPE polyethelene Class 12 piping with butwelding type pressure fittings</u>			
32	50mm Pipe and excavation not exceeding 1m deep	m 50	
<u>Extra over HDPE polyethylene pipes for fittings</u>			
33	50mm Fittings	No 58	
34	30mm Fittings (Reducers)	No 32	
<u>Sundries</u>			
35	Testing water pipe system	Item	
Carried Forward			R
Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 10 PLUMBING AND DRAINAGE Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

	Brought Forward		R	
	<u>Galvanised steel pipes</u>			
36	50mm Pipes	m	30	
	<u>Extra over galvanised steel pipes for fittings</u>			
37	50mm Elbow	No	7	
38	50mm Reducer	No	7	
	<u>Class O copper pipes</u>			
39	15mm Pipes	m	30	
40	22mm Pipes	m	30	
	<u>Extra over class O copper pipes for capillary fittings</u>			
41	15mm Fittings	No	7	
42	22mm Fittings	No	7	
	<u>Copper overflow and service pipes</u>			
43	15mm Service pipe 450mm girth	No	6	
	STANDPIPES			
44	Allow the Provisional Amount of R6 000.00 (Six thousand rands) Allow for Standpipes	Item		6 000.00
Carried Forward to Summary of Section No. 5				R
Section No. 5				
GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)				
Bill No. 10				
PLUMBING AND DRAINAGE				
Thabo Mbeki Full - Service School				
Tshashu Consulting and Project Managers				

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Item No		Quantity	Rate	Amount
	BILL NO. 12			
	PAINTWORK			
	SUPPLEMENTARY PREAMBLES			
	For preambles see "Specifications of materials and methods to be used - PW371"			
	ON FIBRE-CEMENT			
	<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	
	ON WOOD SURFACES			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
2	On doors (external)	m2	7	
3	On doors (Internal)	m2	21	
	ON METAL			
	<u>Undercoat and minimum 2 coat gloss enamel</u>			
4	On door frames	m2	4	
5	On gates (measured over the full flat area of both sides)	m2	7	
6	On gutters and down pipes	m	12	
	<u>Spot priming defects in prime surfaces 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	5	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5 GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat) Bill No. 12 PAINTWORK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BILL NO.1</u>			
	<u>STORM WATER CONTROL</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "Department Of Public Works Specification Of Materials And Methods To Be Used - PW371"			
	<u>WALKWAYS</u>			
	<u>EARTHWORKS</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	280	
	<u>BULK EXCAVATION, FILLING, ETC</u>			
	<u>Open face excavation in earth over sloping site</u>			
2	Excavate in pickable earth to reduce ground level below paving and stockpile	m3	42	
3	Rip and scarify ground level to a depth of 150mm and consolidate to 100% mod. AASHTO density {minimum CBR 3}	m2	220	
	<u>Extra over bulk excavation in earth for excavation in</u>			
4	Soft rock	m3	4	
5	Hard rock	m3	0.4	
	<u>Risk of collapse of excavations</u>			
6	Sides of bulk excavations exceeding 1,5m deep	m2	45	
	<u>Keeping excavations free of water</u>			
7	Keeping excavation free of water	Item		
	Carried Forward		R	
	Section No. 6 External Services Bill No. 1 STORM WATER CONTROL Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u>			
8	Backfilling to bulk excavations,etc	m3	30
<u>Earth filling supplied by the contractor compacted to 93% mod AASHTO density</u>			
9	150mm Imported G5 material compacted to 93% mod. AASHTO density	m3	15
<u>Prescribed density tests on filling</u>			
10	"Modified AASHTO Density" test	No	45
<u>Paving</u>			
<u>Paving of type 60mm interlocking pre-cast concrete paving blocks laid in herring bone pattern with butt joints including 50mm thick river sand bed with sand swept into joints, including preparation of ground or filling "LI"</u>			
11	Paving to walkways etc to falls, including necessary straight edge blocks "Labour Intensive"	m2	220
<u>Kerbs</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 "Labour Intensive"	m	164
<u>Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrasien 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 "LI"</u>			
13	Under paving etc "Labour Intensive"	m2	280
<u>STORMWATER DRAINAGE</u>			
<u>The following in storwater drainage:</u>			
Carried Forward			R
Section No. 6 External Services Bill No. 1 STORM WATER CONTROL Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15mpa at 28days</u>		
14	V-shaped channel 700mm x 100mm thick with rounded salient edges and finished on exposed surfaces 2:1 cement moetar, laid to falls in panels not exceeding 1,mm long with 12mm bitumen impregnated movement joint with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork and one layer of ref 193 mesh reinforcement.	m	215
15	Extra for fair open end	No	48
16	Extra for angle intersection	No	37
Carried Forward to Summary of Section No. 6			R
Section No. 6			
External Services			
Bill No. 1			
STORM WATER CONTROL			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BILL NO.2</u>			
	<u>SEPTIC TANK WITH MANHOLE AND SOAKAWAY</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "Department Of Public Works Specification Of Materials And Methods To Be Used - PW371"			
	<u>The following in septic tank:</u>			
	<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>			
1	Septic tanks	m3	101	
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
2	Soft rock	m3	10	
3	Hard rock	m3	5	
	<u>Risk of collapse of excavations</u>			
4	Sides of excavations for septic tanks not exceeding 1,5m deep	m2	32	
5	Sides of excavations for septic tanks exceeding 1,5m deep	m2	48	
	<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	101	
	<u>Keeping excavations free of water</u>			
7	Keeping excavations free of water	Item		
	<u>Earth filling obtained from the excavations and/or stock piles on site compacted to 93% Modified AASHTO density</u>			
8	Backfilling to septic tanks, etc	m3	4	
	Carried Forward			
	Section No. 6 External Services Bill No. 2 SEPTIC TANK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers		R	

Brought Forward			R
<u>Compaction of surfaces</u>			
9	Compaction of ground surface under surface beds 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	27
<u>30MPa/19mm Reinforced concrete</u>			
10	Surface beds	m3	22
11	Slabs	m3	13
12	Inverted beams	m3	6
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
13	Surface beds	m2	27
14	Slabs	m2	27
<u>Rough formwork to sides</u>			
15	Edges of slabs not exceeding 300mm high or wide	m	21
16	Sides of inverted beams not exceeding 300mm high or wide	m	21
<u>Rough formwork to soffits</u>			
17	Slabs	m2	27
<u>Rough formwork to form</u>			
18	600 x 600mm Opening through 200mm thick slab	No	4
<u>Brickwork of NFX bricks in class I mortar</u>			
19	One brick walls	m2	88
<u>Mortar fillets</u>			
20	Splayed mortar triangular fillet 230mm wide at base x 480mm high x 230mm long	No	4
Carried Forward			R
Section No. 6 External Services Bill No. 2 SEPTIC TANK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Openings in brickwork</u>		
21	600 x 200mm High flue in one brick wall including rendering smooth in mortar	m	4
	<u>Brickwork reinforcement</u>		
22	150mm Wide reinforcement built in horizontally	m	235
	<u>Two coats "Silca Top Seal 107" cementitious waterproof coating</u>		
23	On brick walls	m2	80
	<u>Cement plaster on brickwork</u>		
24	On walls	m2	80
	<u>UPVC drain pipes (SANS 791) normal duty with socket and rubber ring type including all excavations, backfilling, Class C bedding, compaction, etc in accordance with SANS 1200</u>		
25	110mm Pipes fixed to walls	m	4
26	110mm Pipes laid in and including trenches not exceeding 1m deep	m	12
	<u>Extra over uPVC pipes for fittings</u>		
27	110mm Junction	No	4
	<u>Gratings, covers, etc</u>		
28	600 x 600mm Cast iron manhole cover and frame (heavy duty 99kg) SANS 558-1965 Type 9B including 50 x 80mm concrete surround	No	4
	<u>The following in soakaway to septic tank:</u>		
	<u>Excavation in earth not exceeding 2m deep</u>		
29	French drains	m3	35
Carried Forward			R
Section No. 6 External Services Bill No. 2 SEPTIC TANK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward				R
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
30	Soft rock	m3	4	
31	Hard rock	m3	2	
	<u>Risk of collapse of excavations</u>			
32	Sides of excavations for french drains not exceeding 1,5m deep	m2	12	
33	Sides of excavations for french drains exceeding 1,5m deep	m2	20	
	<u>Extra over all excavations for carting away</u>			
34	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	35	
	<u>Keeping excavations free of water</u>			
35	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>			
36	In backfilling to top of french drain	m3	18	
	<u>Stone pitching of approximately 40-70mm diameter river stones tightly packed</u>			
37	In french drains	m3	26	
	<u>"Bidem B3" filter fabric with 200mm laps</u>			
38	Around stone filling in sub-soil french drains	m2	16	
	<u>UPVC perforated drain pipes (SANS 791) normal duty with socket and rubber ring type including all excavations, backfilling, Class C bedding, compaction, etc in accordance with SANS 1200</u>			
39	110mm Pipes laid in and including trenches not exceeding 1m deep	m	12	
Carried Forward				R
Section No. 6 External Services Bill No. 2 SEPTIC TANK Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers				

Brought Forward			R
	<u>Extra over uPVC pipes for fittings</u>		
40	110mm Stop end	No	2
	<u>Cast iron plain ended pipes with "Besaans du Plessis type SSN" couplings</u>		
41	100mm Inspection pipe, 1200mm long	No	2
	<u>Sundries</u>		
42	100mm Cast iron "ABC" cleaning eye inserted in top inspection pipe	No	2
Carried Forward to Summary of Section No. 6			R
Section No. 6			
External Services			
Bill No. 2			
SEPTIC TANK			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

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Brought Forward			R
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod. AASHTO density</u>		
7	Backfilling to holes,etc	m3	16
	<u>Prescribed density tests on filling</u>		
8	"Modified AASHTO Density" test	No	3
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
9	To bottom holes and sides of holes etc	m2	63
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>25MPa/19mm Concrete</u>		
10	Bases	m3	6
	<u>TEST CUBES</u>		
11	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	1.0
	<u>Steel Palisade Fencing</u>		
	<u>The following in steel palisade fencing</u>		
12	1800mm High Devils fork, v - punch palisade fencing comprising 40 x 40 x 2mm x 1 750mm angle pales bolted at 175mm centres onto 50 x 50 x 3mm angle iron crossbars onto 76 x 76 x 2mm square tube posts 2400mm long by means of 40 x 5.00mm flatbar fishplate and including planting posts into 600 x 600 x 600mm deep 25MPa concrete complete with all earthworks, trimmings and fixing. (all concrete work to engineer's specification	m	847
Carried Forward			R
Section No. 6 External Services Bill No. 3 FENCING Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
13	Sliding gate 5 000mm x 1 800mm High formed from 40 x 40 x 2mm welded angle iron paling; 76 x 38 x 2mm rectangular tubing frame; two 80mm roller coaster wheels fitted with ball bearing; track formed of 12mm steel rod welded to 40 x 40 x 5mm angle iron fixed into a 300 x 400 x 5 000mm concrete base; gate posts formed of 75 x 75 x 2mm steel square tubing 2 400mm overall length planted into 450 x 450 x 600mm concrete base (all concrete work to engineer's specification).	No	2
14	Pedestrian gate 1 500mm x 1 800mm High formed from 40 x 40 x 2mm welded angle iron paling; 50 x 25 x 1.6mm rectangular tubing frame; gate posts formed of 75 x 75 x 2mm steel square tubing 2400mm overall length planted into 450 x 450 x 600mm concrete base (all concrete work to engineer's specification).	No	2
<u>Paintwork</u>			
<u>On metalwork</u>			
15	Prime, apply one coat undercoat and two coats of high gloss enamel paint on steel (Measured over the full flat area of both sides according specification)	m2	378
Carried Forward to Summary of Section No. 6			R
Section No. 6			
External Services			
Bill No. 3			
FENCING			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

Item No	Quantity	Rate	Amount
<u>SECTION NO.6</u>			
<u>BILL NO.4</u>			
<u>WATER TANK AND TANK STAND (PROVISIONAL)</u>			
<u>PREAMBLES</u>			
For preambles refer to "Department Of Public Works Specification Of Materials And Methods To Be Used - PW371"			
<u>WATER TANKS AND TANKS STANDS</u>			
<u>EXCAVATION,FILLING,ETC OTHER THAN BULK</u>			
<u>Exavation in earth not exceeding 2m deep</u>			
1	Holes	m3	8
<u>Extra over trench and hole excavation 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 / or rock piles on site to a dumping site to be located by the contractor	m3	5
<u>Risk of collapse of excavations</u>			
5	Sides of trench and hole excavations not exceeding 1,5m deep	m2	41
<u>Keeping excavations free of water</u>			
6	Keeping excavation free of water	Item	
Carried Forward			R
Section No. 6 External Services Bill No. 4 WATER TANK AND TANK STAND Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod. AASHTO density</u>		
7	Backfilling to holes,etc	m3	16
	<u>Prescribed density tests on filling</u>		
8	"Modified AASHTO Density" test	No	3
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
9	To bottom holes and sides of holes etc	m2	63
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>25MPa/19mm Concrete</u>		
10	Bases	m3	6
	<u>TEST CUBES</u>		
11	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	1.0
	<u>Structural Steel</u>		
	<u>Welded columns in single lengths with flat base, cap, bearer and connection plates, bolted to concrete</u>		
12	80 x 80mm x 6mm Angle-section	t	0.1
	<u>Welded beams in single lengths with flat bearer and connection plates, bolted to steel</u>		
13	30 x 30mm x 6mm Flat-section	t	0.2
14	40 x 40mm x 5mm Angle -section	t	0.2
15	125 x 50 x 20 x 2mm Lipped channel-section	t	0.4
Carried Forward			R
Section No. 6 External Services Bill No. 4 WATER TANK AND TANK STAND Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

Brought Forward			R
16	125 x 75 x 8mm Flat-section	t	0.1
	<u>Bolts to columns, beams, etc</u>		
17	High Tensile bolts	t	0.1
	<u>Spot priming bare metal surfaces with zinc chromate primer an applying one undercoat and two coatsalkyd 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>		
18	Paint to structural steel	m2	32
	<u>RAINWATER TANKS</u>		
19	10 000 Litre plastic water tank fitted onto and secured to tank platforms	No	4
Carried Forward to Summary of Section No. 6			R
Section No. 6			
External Services			
Bill No. 4			
WATER TANK AND TANK STAND			
Thabo Mbeki Full - Service School			
Tshashu Consulting and Project Managers			

Item No		Quantity	Rate	Amount
	<u>RAINWATER HARVESTING</u>			
	<u>SITE CLEARANCE</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, and trees not exceeding 200mm girth, etc	m2	9	
	<u>EXCAVATION,FILLING,ETC OTHER THAN BULK</u>			
	<u>Exavation in earth not exceeding 2m deep</u>			
2	Trenches	m3	12	
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
3	Soft rock	m3	1	
4	Hard rock	m3	0.1	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations and / or rock piles on site to a dumping site to be located by the contractor	m3	6	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	15	
	<u>Keeping excavations free of water</u>			
7	Keeping excavation free of water	Item		
	<u>Earth filling supplied by the contractor compacted to 93% mod AASHTO density</u>			
8	Backfilling to trenches,holes,etc	m3	6	
9	Under floors,steps,paving,etc	m3	6	
	<u>Prescribed density tests on filling</u>			
10	"Modified AASHTO Density" test	No	5	
	Carried Forward			
	Section No. 6			
	External Services			
	Bill No. 6			
	RAINWATER HAERVESTING			
	Thabo Mbeki Full - Service School			
	Tshashu Consulting and Project Managers			

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Brought Forward			R
<u>Fabric reinforcement</u>			
17	Ref 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	4
<u>MASONRY</u>			
<u>BRICKWORK</u>			
<u>Brick work of NFX (14MPa nominal compressive strength) in class I mortar:</u>			
18	One brick wall in foundations	m2	20
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
19	150mm reinforcement built in horizontally	m	1 920
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of R 5 000,00/1000 delivered to the side excluding VAT) pointed with recessed horizontal and vertical joints</u>			
20	Extra over brickwork for face brickwork	m2	23
<u>WATERPROOFING</u>			
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
<u>One layer of 375 micron Consol Plastic Brickrip DPC"</u> <u>embossed damp proof course</u>			
21	On walls, under cills, etc	m2	7
<u>One layer of 250 micron "Consol Plastic Brickgrip USB Green"</u> <u>waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"</u>			
22	Under surface beds	m2	8
Carried Forward			R
Section No. 6 External Services Bill No. 6 RAINWATER HAERVESTING Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			

[illegible]

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Section No	FINAL SUMMARY	Page No		Amount
1	PRELIMINARIES AND GENERAL	19		
2	M1 Water borne (1 x Male Standard Seat and 1 x urinal)	43		
3	SD5 Waterborne (3 x Female Standard Seats, 2 x Male Standard Seats, 2 x urinals)	65		
4	S3 Waterborne (2 x Female Standard Seat, 1 x Male Standard Seat and 1 x urinal)	88		
5	GRD4 Water borne (4 x Junior Seat, 1 x Junior Disabled Seat)	111		
6	External Services	131		
	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	
	Total		R	
	Thabo Mbeki Full - Service School Tshashu Consulting and Project Managers			