

BILLS OF QUANTITIES

FOR

**WONGALETHU PRIMARY SCHOOL - SANITATION APPROPRIATE FOR
EDUCATION (SAFE) PROGRAMME - AMATHOLE DISTRICT**

FOR

The Mvula Trust

ARCHITECTS

STERMOUNT PROJECTS

9 Mary Crescent

Amalinda

East London

5247

Tel. +27 83 444 2102

Fax: +27 86 606 2950

e Mail: linda@stermount.co.za

Principal Agent

Qapela Quantity Surveyors (Pty) Ltd

Tel. +27 43 721 1470

Fax: +27 86 762 3114

e Mail: zet@qapelaqs.co.za

QUANTITY SURVEYORS

Qapela Quantity Surveyors (Pty) Ltd

Quantity Surveyors

16 Jarvis Road

Berea

East London

5201

Tel. +27 43 721 1470

Fax: +27 86 762 3114

e Mail: zet@qapelaqs.co.za

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SECTION NO. 1
PRELIMINARIES

Amount

SECTION NO. 1

PRELIMINARIES

BILL NO. 1

PRELIMINARIES

PRELIMINARIES

1. The Principal Building Agreement shall be the JBCC Series Edition 4.1, March 2005 as recommended by the Joint Building Contract Committee and as amended by this Tender Enquiry.
2. The Preliminaries shall be JBCC Series 2000, May 2005 for use with the Principal Building Agreement as recommended by the Joint Building Contracts Committee and as amended by this Tender Enquiry shall be deemed to be incorporated herein.
3. Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause number and heading only.
4. Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or additions as are necessary, are given as far as possible under each relevant clause heading. Additional Preliminary clauses are contained in Section C hereof.
5. No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items which are fully described when read in conjunction with the relevant clauses of the said Principal Building Agreement, Preliminaries and Preambles.
6. The Tenderers shall allow opposite each of the clauses whatever costs and charges he may consider necessary for the carrying out, complying with and due observance of the provisions, conditions and requirements set out herein. Only priced items will be considered in respect of any adjustment of this Section. Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderer's omission to price any item will be entertained.
7. Where modifications or amendments as described are made, such modifications and/or amendments shall supercede any conflicting provisions in the relevant clauses of the Standard Preliminaries or the Principal Building Agreement and the Tenderer shall make due allowance for whatever costs and charges he may consider necessary for the carrying out and observance of the provisions of the clauses as modified and/or amended.
8. Where any item is not relevant to this specific contract, such item is marked N/A.
9. If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries, each item priced is to be allocated to one or more of the three categories by insertion of "F", "V", "T" as the case may be against the price in the "rate" column immediately preceding the "amount" column, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value, and "T" denotes an amount proportionate to time.

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries

		Amount
<u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u>		
<u>DEFINITIONS</u>		
Definitions and interpretation (Clause 1).		
1	F: V: T: F: V: T:	Item
<u>OBJECTIVE AND PREPARATION</u>		
Offer, acceptance and performance (Clause 2).		
2	F: V: T: F: V: T:	Item
Documents (Clause 3).		
Clause 3.1 is deleted and substituted with: 'This tender is for a Government Contract. No Payment Guarantee will be provided.'		
Clause 3.3 is deleted and substituted with:		
The principal agent shall complete the schedule and arrange for formal signing of the agreement once the priced bill of quantities/lump sum document, security, insurances and waiver of lien, where acceptable, have been provided and effected'.		
3	F: V: T: F: V: T:	Item
Design responsibility (Clause 4).		
4	F: V: T: F: V: T:	Item
Employer's agents (Clause 5).		
5	F: V: T: F: V: T:	Item
Site representative (Clause 6).		
6	F: V: T: F: V: T:	Item
Compliance with regulations (Clause 7).		
7	F: V: T: F: V: T:	Item
Works risk (Clause 8)		
8	F: V: T: F: V: T:	Item
Indemnities (Clause 9).		
Clause 9.1.1 is deleted and substituted with:		
Claims from other parties consequent upon death of bodily injury or illness of any person or physical loss or damage to any property, other than the works, arising out or due to the execution of the works or occupation of the site by the contractor or his sub contractors'.		
Carried to Collection		R
Section No. 1		
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Preliminaries		

			Amount
9	F: V: T: F: V: T: Works insurances (Clause 10).	Item	
10	F: V: T: F: V: T: Liability insurances (Clause 11).	Item	
11	F: V: T: F: V: T: Effecting insurances (Clause 12).	Item	
12	F: V: T: F: V: T: State Provisions (Clause 13).	Item	
13	F: V: T: F: V: T: Security (Clause 14).	Item	
14	F: V: T: F: V: T: EXECUTION Preparation for and execution of the works (Clause 15).	Item	
15	F: V: T: F: V: T: Access to the works (Clause 16).	Item	
16	F: V: T: F: V: T: Contract instructions (Clause 17).	Item	
17	F: V: T: F: V: T: Setting out of the works (Clause 18.3). 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. Should incorrect information be given to the contractor in terms of 18.1 and 18.2, which causes the incorrect setting out of the works, the contractor shall not be liable for such incorrect setting out.	Item	
18	F: V: T: F: V: T: Assignment (Clause 19).	Item	
19	F: V: T: F: V: T:	Item	
Carried to Collection			R
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Preliminaries			

			Amount
	Nominated subcontractors (Clause 20).		
20	F: V: T: F: V: T: Selected subcontractors (Clause 21).	Item	
21	F: V: T: F: V: T: Employer's Direct contractors (Clause 22).	Item	
22	F: V: T: F: V: T: Contractor's Domestic subcontractors (Clause 23).	Item	
23	F: V: T: F: V: T: COMPLETION	Item	
	Practical completion (Clause 24).		
24	F: V: T: F: V: T: Works completion (Clause 25).	Item	
25	F: V: T: F: V: T: Final completion (Clause 26).	Item	
	Latent defects liability period (Clause 27).		
	Clause 27.0 is amended by the addition of the following clauses:		
	27.3 Any water leakage into the building, whether in the roof, external wall or other element of the building susceptible to water leakage shall, unless proven to be a design defect, or as a result of obvious storm damage, be classified as a latent defect in terms of clause 1.0 Definitions and Interpretations.		
	27.4 The Contractor shall attend to defects during the Defects Liability Period on a progressive basis, to the satisfaction of the Principal Agent and will not be permitted to wait until the end of the Defect Liability Period or until the amount of defects accumulates in order to attend to a comprehensive list of defects		
26	F: V: T: F: V: T: Sectional completion (Clause 28).	Item	
27	F: V: T: F: V: T: Revision of date for practical completion (Clause 29).	Item	
28	F: V: T: F: V: T: Carried to Collection	Item	
	Section No. 1	R	
	Bill No. 1		
	Preliminaries		

		Amount
29	<p>Penalty for non-completion (Clause 30).</p> <p>F: V: T:</p> <p>F: V: T:</p> <p><u>PAYMENT</u></p> <p>Interim payment to the contractor (Clause 31).</p> <p>The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.3 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank.</p> <p>Where prices are submitted by the contractor or nominated/selected sub contractor 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.</p> <p>Adjustment to the contract value (Clause 32).</p>	Item
30	<p>F: V: T:</p> <p>F: V: T:</p> <p>Recovery of expense and loss (Clause 33).</p>	Item
31	<p>F: V: T:</p> <p>F: V: T:</p> <p>Final account and final payment (Clause 34).</p>	Item
32	<p>F: V: T:</p> <p>F: V: T:</p> <p>Payment to other parties (Clause 35).</p>	Item
33	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>CANCELLATION</u></p> <p>Cancellation by Employer - Contractor's default (Clause 36).</p>	Item
34	<p>F: V: T:</p> <p>F: V: T:</p> <p>Cancellation by Employer - Loss and damage (Clause 37).</p>	Item
35	<p>F: V: T:</p> <p>F: V: T:</p> <p>Cancellation by Contractor - Employer's default (Clause 38).</p>	Item
36	<p>F: V: T:</p> <p>F: V: T:</p> <p>Cancellation - Cessation of the works (Clause 39).</p>	Item
	Carried to Collection	R
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	Preliminaries	

		Amount
37	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>DISPUTE</u></p> <p>Dispute Settlement (Clause 40)</p>	Item
38	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>SUBSTITUTE PROVISIONS</u></p> <p>State Clauses (Clause 41)</p>	Item
39	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>CONTRACT VARIABLES</u></p> <p>The Schedule: Pre-Tender information (Clause 42).</p>	Item
40	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>CONTRACTING AND OTHER PARTIES (Clause 42.1)</u></p> <p>Employer: The Mvula Trust</p> <p>Postal Address: 67 Devereux Avenue, Vincent, East London</p> <p>Telephone: 043 726 2255</p> <p>Facsimile: 043 726 5967</p> <p>Physical address: 67 Devereux Avenue, Vincent, East London</p> <p>Principal Agent: The Mvula Trust</p> <p>Postal Address: 67 Devereux Avenue, Vincent, East London</p> <p>Telephone: 043 726 2255</p> <p>Facsimile: 043 726 5967</p> <p>Physical address: 67 Devereux Avenue, Vincent, East London</p> <p><u>CONTRACT DETAILS (Clause 42.2)</u></p> <p>Clause 42.2.1</p> <p>Works Description: Construction of new ablution facilities.</p> <p>Clause 42.2.2</p> <p>Site Description: The site is the existing school.</p> <p>Clause 42.2.3</p> <p>Work or Installations by Others: NIL</p> <p>Clause 42.2.4</p> <p>This Agreement is for a State Contract :- Yes</p> <p>Payment will be made for materials and goods:- Yes</p> <p>Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.</p>	Item
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Arbitration rules as recommended by the Association of Arbitrators (SA) :-
N/A

Clause 42.2.5

Date on which possession of the site is intended to be given on :-

To be advised.

Clause 42.2.6

Period for the commencement of the works after the contractor takes possession of the site :- 5 Working days.

Completion in Sections are required : NO

Clause 42.2.7

Intended date of practical completion and the penalty per calendar day for the works as a whole :-

To be advised.

Penalty amount will be R2000 per calendar day, to maximum 10% of Contract Value.

Clause 42.2.8

Intended dates of practical completion and the penalties per calendar day for the works in sections :

N/A

Clause 42.2.9

The law applicable to this agreement shall be that of - Republic of South Africa.

INSURANCES (Clause 42.3)

Clause 42.3.1

Contract works insurance to be effected by Contractor for the sum of:
Contract Sum plus 10%

With a deductible of : Not exceeding 5% of each and every claim.

Clause 42.3.2

Supplementary insurance is required : Yes

SASRIA insurance required to be effected by the Contractor for the amount of: Contract Sum plus 20% (with a deductible to be determined by the Insurance company issuing the policy).

Clause 42.3.3

Public liability insurance to be effected by Contractor

For the amount of: R 5million

With a deductible of: Not exceeding 5% insured amount.

DOCUMENTS (Clause 42.4)

Clause 42.4.1

Carried to Collection

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Section No. 1

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Waiver of the contractor's lien is required :- YES		
Clause 42.4.2		
Number of construction document copies to be supplied to the Contractor free of charge :- 1		
Clause 42.4.3		
Bills of Quantities drawn up in accordance with :-		
Standard System of Measuring Building Work - Seventh Edition including all amendments		
Clause 42.4.4		
Number of days for submission of priced documents : 5 working days from the Letter of Appointment.		
Clause 42.4.5		
JBCC Engineering General Conditions are to be included in the documents :- No		
Clause 42.4.6		
The contract value is to be adjusted using CPAP:- NO		
<u>SECTION B: PRELIMINARIES</u>		
<u>DEFINITIONS AND INTERPRETATION (B1)</u>		
Definitions and Interpretation (B1)		
41	F: V: T: F: V: T:	Item
<u>DOCUMENTS (B2)</u>		
Checking of documents (B2.1)		
Notwithstanding the issue of the tender drawings, it will remain the responsibility of the Tenderer to study all available drawings at the offices of the Principal Agent during normal working hours in order to acquaint himself with all the cost implications of the design, programming, phasing, etc.		
42	F: V: T: F: V: T:	Item
Provisional Bills of Quantities (B2.2) YES		
Prime Cost Amounts, Budgetary Allowances, Provisional Amounts, etc., contained herein may be omitted or reduced at the Principal Agent's sole discretion and the Contractor shall not be entitled to claim for any loss by way of reduction or omission of any discount, or percentage relating to Prime Cost Amounts, Budgetary Allowances, Provisional Amounts, Provisional Quantities, etc., or loss of profit related thereto.		
43	F: V: T: F: V: T:	Item
Availability of construction documentation (B2.3)		
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44	F: V: T: F: V: T: Interests of Agents (B2.4)	Item	
45	F: V: T: F: V: T: Priced documents (B2.5)	Item	
46	F: V: T: F: V: T: Tender submission (B2.6) Notwithstanding anything contained in this clause, Tenders shall be valid for a period of 20 (Twenty) weeks from the closing date of tenders.	Item	
47	F: V: T: F: V: T: <u>THE SITE (B3)</u> Defined works area (B3.1) The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site. Workmen employed on the site are to be restricted to the immediate area of the site and access thereto. The Tenderer shall make all necessary provision in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.	Item	
48	F: V: T: F: V: T: Geotechnical investigation (B3.2) A desktop geotechnical report is available upon request.	Item	
49	F: V: T: F: V: T: Inspection of the Site (B3.3)	Item	
50	F: V: T: F: V: T: Existing premises occupied (B3.4)	Item	
51	F: V: T: F: V: T: Previous work - dimensional accuracy (B3.5)	Item	
52	F: V: T: F: V: T: Previous work - defects (B3.6)	Item	
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53	F: V: T: F: V: T: Services - known (B3.7)	Item	
54	F: V: T: F: V: T: Services - unknown (B3.8)	Item	
55	F: V: T: F: V: T: Protection of trees (B3.9)	Item	
56	F: V: T: F: V: T: Articles of value (B3.10)	Item	
57	F: V: T: F: V: T: Inspection of adjoining properties (B3.11)	Item	
58	F: V: T: F: V: T: <u>MANAGEMENT OF CONTRACT (B4)</u> Management of the Works (B4.1)	Item	
59	F: V: T: F: V: T: Programme for the Works (B4.2)	Item	
60	F: V: T: F: V: T: Progress meetings (B4.3)	Item	
61	F: V: T: F: V: T: Technical meetings (B4.4)	Item	
62	F: V: T: F: V: T: <u>SAMPLES AND SHOP DRAWINGS (B5)</u> Samples of materials (B5.1)	Item	
63	F: V: T: F: V: T: Workmanship samples (B5.2)	Item	
64	F: V: T: F: V: T: Shop drawings (B5.3)	Item	
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65	F: V: T: F: V: T: TEMPORARY WORKS AND PLANT (B6) Deposits and fees (B6.1)	Item
66	F: V: T: F: V: T: Enclosure of the works (B6.2) The contractor shall erect, maintain and remove at completion, hoardings, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the works and elements thereof all for the protection of the public and others.	Item
67	F: V: T: F: V: T: Advertising (B6.3)	Item
68	F: V: T: F: V: T: Plant and equipment (B6.4)	Item
69	F: V: T: F: V: T: Main notice board (B6.5) One notice board shall be provided by the Contractor	Item
70	F: V: T: F: V: T: Subcontractors notice board (B6.6) (N/A)	Item
71	F: V: T: F: V: T: TEMPORARY SERVICES (B7) Location (B7.1)	Item
72	F: V: T: F: V: T: Water (B7.2) The contractor shall provide water for the works in accordance with: Alternative A (i.e. to be provided for by the Contractor).	Item
73	F: V: T: F: V: T: Electricity (B7.3) The contractor shall provide electricity for the works in accordance with: Alternative A (i.e. to be provided for by the Contractor).	Item
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74	<p>F: V: T:</p> <p>F: V: T:</p> <p>Telecommunication equipment (B7.4)</p> <p>The contractor shall provide telephones on site for the works in accordance with:</p> <p>Alternative A (i.e. to be provided for by the Contractor).</p>	Item
75	<p>F: V: T:</p> <p>F: V: T:</p> <p>Ablution facilities (B7.5)</p> <p>The contractor shall provide toilet facilities on site for the works in accordance with:</p> <p>Alternative A (i.e. to be provided for by the Contractor).</p>	Item
76	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>PRIME COST AMOUNTS (B8)</u></p> <p>Responsibility for prime cost amounts (B8.1)</p>	Item
77	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>ATTENDANCE ON N/S SUBCONTRACTORS (B9)</u></p> <p>General Attendance (B9.1)</p>	Item
78	<p>F: V: T:</p> <p>F: V: T:</p> <p>Special Attendance (B9.2)</p>	Item
79	<p>F: V: T:</p> <p>F: V: T:</p> <p>Commissioning - fuel, water and power (B9.3)</p>	Item
80	<p>F: V: T:</p> <p>F: V: T:</p> <p><u>FINANCIAL ASPECTS (B10)</u></p> <p>Statutory taxes, duties and levies (B10.1)</p> <p>Provision is made in the Final Summary of these Bills of Quantities for the inclusion of Value Added Tax (VAT).</p>	Item
81	<p>F: V: T:</p> <p>F: V: T:</p> <p>Payment of Preliminaries (B10.2)</p>	Item
82	<p>F: V: T:</p> <p>F: V: T:</p> <p>Adjustment of Preliminaries (B10.3)</p>	Item
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83	F: V: T: F: V: T: Payment certificate cash flow (B10.4)	Item	
84	F: V: T: F: V: T: Contractor information supply (B10.5)	Item	
85	F: V: T: F: V: T: <u>GENERAL (B11)</u> Protection of the Works (B11.1)	Item	
86	F: V: T: F: V: T: Protection/isolation of existing/sectionally occupied works (B11.2)	Item	
87	F: V: T: F: V: T: Site security (B11.3)	Item	
88	F: V: T: F: V: T: Notice before covering work (B11.4)	Item	
89	F: V: T: F: V: T: Disturbance (B11.5)	Item	
90	F: V: T: F: V: T: Works cleaning and clearing (B11.6)	Item	
91	F: V: T: F: V: T: Vermin (B11.7)	Item	
92	F: V: T: F: V: T: Overhand work (B11.8)	Item	
93	F: V: T: F: V: T: <u>SECTION C: SPECIFIC PRELIMINARIES</u> <u>Section C: Specific Preliminaries:</u> C1. Proprietary branded products	Item	
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94	<p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.</p> <p>F: V: T:</p> <p>F: V: T:</p> <p>C2. Trade Names, etc.</p> <p>All materials, fittings, finishings, etc., specified hereinafter under a trade name, catalogue number or reference, must be exactly as described. The Architect's approval in writing must be obtained for the use of any alternative to the specification before the submission of tenders otherwise the specified materials, fittings, finishings, etc., will be assumed to have been allowed for in the tender.</p> <p>The Contractor must take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.</p>	Item
95	<p>F: V: T:</p> <p>F: V: T:</p> <p>C3. Contractors responsibility</p> <p>The Employer, the Principal Agent and the other professional consultants shall not be responsible for any act or omission on the part of the Contractor which may result in any patent or latent defects, in materials or workmanship, breach or neglect of any local regulations. The Contractor shall at all times be responsible for any such neglect, deviation or wrong act, whether the same is discovered before or after the final certificate, or any other Certificate, has been approved.</p>	Item
96	<p>F: V: T:</p> <p>F: V: T:</p> <p>C4. Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.</p>	Item
97	<p>F: V: T:</p> <p>F: V: T:</p> <p>C5. As built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records.</p> <p>Three full sets of as-built drawings shall be submitted to the Principal Agent no later than fourteen days after practical completion.</p>	Item
98	<p>F: V: T:</p> <p>F: V: T:</p>	Item
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		Amount
C6. Construction 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. The Contractor shall supply and have available at the site of the works at all times, the following site books:		
a) Construction Instruction Book:		
Receiving and recording instructions in a suitable A4 size triplicate book kept on site. Instructions issued shall be recorded by the Architect or other Employer's Agents to whom the Architect has delegated authority to in the book.		
Only instructions issued in such book shall be recognised.		
b) Daily Record Book:		
The Contractor shall record in triplicate in a suitable A4 size triplicate book kept at the site, a daily record of work done, all site visits by the Principal Agent and other professional personnel and all events affecting the Works, such as progress, issue of plans, breakdown of machinery, etc. The labour, plant and material on site shall be recorded as well as work performed. Entries must be made by the Contractor and must be signed and forwarded to the Principal Agent for his counter-signature on a daily basis. Copies of these records shall be for the Architect, Quantity Surveyor and Contractor.		
99	F: V: T: F: V: T:	Item
C7. 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 description of tradesmen and labourers employed by him and all subcontractors on the works each day.		
100	F: V: T: F: V: T:	Item
C8. Plant record		
At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.		
101	F: V: T: F: V: T:	Item
C9. Encroachment		
During the course of the building operations, the Contractor shall be held entirely responsible for any encroachment onto any adjoining properties, buildings, etc., or servitudes and the cost of any remedial measures as required by the Principal Agent shall be borne by the Contractor.		
102	F: V: T: F: V: T:	Item
C10. Method Statement		
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		Amount
103	<p>The Tenderer shall produce, when required to do so by the Principal Agent, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Principal Agent shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works.</p> <p>F: V: T:</p> <p>F: V: T:</p> <p>C11. Unauthorised Persons/Workmen on Premises</p> <p>The Contractor shall at all times strictly exclude all unauthorised persons from the Works and the site and shall set up notice boards to that effect.</p> <p>No workmen or labourers (except security guards) are to be allowed under any circumstances to sleep or deposit any kit on the premises. The Contractor must provide any necessary independent shelter or shed required for any labour or watchmen on site, to the approval of the Employer.</p>	Item
104	<p>F: V: T:</p> <p>F: V: T:</p> <p>C12. Mode of Procedure</p> <p>Notwithstanding anything to the contrary contained herein the Principal Agent at all times reserves the right to direct the order in which the various parts of the Contract are to be executed. The Contractor shall give priority to any individual section or portion of the Works that, in the opinion of the Principal Agent, requires to be expedited.</p> <p>Should it appear, in the Principal Agent's opinion, that work in any area is not being executed in accordance with the requirements of the Contract Programme, the Contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the Principal Agent and to the Contractor's cost.</p>	Item
105	<p>F: V: T:</p> <p>F: V: T:</p> <p>C13. Location of Temporary Buildings and Temporary Services</p> <p>The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hardstanding and services, hoardings, dust screens, tunnelling, etc., required for his own and sub-contractors use during the construction and maintenance period.</p> <p>There is no guarantee given or implied that Site conditions will be such that the Contractor will be able to erect such temporary works, roads, hardhats, offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain all necessary permission and pay all costs in connection therewith.</p>	Item
106	<p>F: V: T:</p> <p>F: V: T:</p>	Item
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107	<p>C14. Office accommodation</p> <p>The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18]</p> <p>F: V: T:</p> <p>F: V: T:</p> <p>C15. Storage Facilities</p> <p>The Contractor shall provide a Container for storage of materials.</p>	Item
108	<p>F: V: T:</p> <p>F: V: T:</p> <p>C16. Removal and Making Good of Temporary Works, etc, on Completion</p> <p>The Contractor shall remove (except where specifically stated otherwise) all temporary works, roads, services and the like used for this contract and shall make good to the entire satisfaction of the Principal Agent any damage resulting therefrom.</p>	Item
109	<p>F: V: T:</p> <p>F: V: T:</p> <p>SUB - TOTAL: FIXED ITEMS</p> <p>SUB - TOTAL: VALUE - RELATED ITEMS</p> <p>SUB - TOTAL: TIME - RELATED ITEMS</p> <p><u>BILL No.1</u></p>	Item
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	Unit	Quantity	Rate	Amount
<u>SECTION NO. 1</u> <u>PRELIMINARIES</u> <u>BILL NO. 2</u> <u>HEALTH AND SAFETY</u> <u>MODEL PREAMBLES</u> <p>The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.</p> <u>SUPPLEMENTARY PREAMBLES</u> <p>Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles.</p> <p>The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications.</p> <p>Prior to pricing the principal contractor must familiarizehim/herself with the Occupational Health and Safety ActNo. 85 Of 1993, Construction Regulations 2014, otherrelevant Regulations and Standards as well as projectspecific Health & Safety specifications.</p> <p>The items in this Bill do not contain quantities hence the Contractor must insert his own quantities based on his individual requirements to comply with the Health and Safety obligations and demands of the Occupational Health and Safety Act No. 85 of 1993, Construction Regulations 2014, other relevant Regulations and Standards as well as project specific Health & Safety Specifications.</p> <p>The costs included herein must incorporate Community Liaison Officer (CLO).</p> <u>OCCUPATIONAL HEALTH AND SAFETY</u> <u>General:</u>				
1	Item			
Preparation of Contractor's site specific Health and Safety Plan.				
2	Item			
Submission of the Health and Safety File.				
3	Item			
Principal Contractor's initial obligations in respect of the OHS Act and Construction Regulations.				
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Health And Safety				

		Unit	Quantity	Rate	Amount
4	Principal Contractor's time related obligations in respectof the OHS Act and Construction Regulations for theentire construction period.	Item			
5	Provision of full time Health and Safety Officer for the entire construction period.	Item			
6	Induction training of personnel.	Item			
7	Provision of first aid boxes.	Item			
8	SANS approved weld mesh type temporary barrier fencing 1,8m high covered with a net fixed to and including 100mm diameter gum poles set securely min300mm deep in ground at max 3m spacing including excavation, backfilling, etc	Item			
9	Extra over mesh fence for pedestrian gate size 1.8 x1,8m high.	Item			
	<u>Provision for Personal Protective Equipment and Protective Clothing:</u>				
10	Reflective vests.	Item			
11	Hard hats.	Item			
12	Protective foot wear.	Item			
13	Ear Plugs.	Item			
14	Dust Masks.	Item			
	<u>Cost of Medical Certificates and Medical Surveillance:</u>				
15	Initial (baseline) medical examinations.	Item			
16	Exit Examinations.	Item			
	<u>Noise Monitoring:</u>				
17	Establishment of noise zones.	Item			
18	Audiograms.	Item			
	<u>C16. Covid-19 Compliance Measures:</u>				
19	The Contractor is required to price for Covid 19 compliance and the pricing thereof shall be deemed toinclude all the mandatory requirements.	Item			
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SECTION NO. 2
DEMOLITIONS (PROVISIONAL)

	Unit	Quantity	Rate	Amount
<p><u>SECTION NO. 2</u></p> <p><u>DEMOLITIONS (PROVISIONAL)</u></p> <p><u>BILL NO. 1</u></p> <p><u>DEMOLITIONS (PROVISIONAL)</u></p> <p><u>DEMOLITIONS</u></p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>View site</u></p> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <p><u>Explosives</u></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated.</p> <p><u>General</u></p> <p>Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent.</p> <p>Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site.</p> <p><u>Removal of asbestos material</u></p> <p>All preparatory work, alterations, etc., to existing asbestos cement roof sheeting, gutters, rainwater pipes, etc., is to be carried out strictly by an approved and certified specialist company and in accordance with statutory requirements (Occupational Health and Safety Act, 1993 - Asbestos Regulations 2001) and all necessary precautions must be taken when working with and disposing of asbestos cement products and the disposal of waste water resulting from cleaning operations, etc.</p>				
Carried to Collection			R	
Section No. 2				
Bill No. 1				
Demolitions (provisional)				

	Unit	Quantity	Rate	Amount
<p><u>The following shall apply in respect of asbestos removal</u></p> <p>The removal of asbestos shall be carried out by a certified entity, registered in accordance with the Occupational Health and Safety Act. 1993 and the Asbestos Regulations 2001. Asbestos in all forms/building elements that is to be removed, shall be carried out in strict accordance with aforementioned regulation and a certificate issued by the entity as contemplated in the above, shall be provided per block for the removal thereof, where the term block shall in this context refer to any single, free standing building structure, regardless of size or purpose.</p> <p>Corresponding disposal certificates shall be issued by the facility at which the asbestos is disposed off, with said facility to, prior to the disposal of any asbestos material provide satisfactory proof that the facility is duly registered and fully compliant in terms of the act, to receive the asbestos material. Under no circumstances is the Contractor nor any of his duly authorised representatives to sell and/or give away asbestos material to any member/s of the school community, the community in general or the public at large. Should this be found to be occurring, the Contractor will be held responsible contractually and may further be prosecuted criminally.</p> <p>The cost for complying with the above, and all requirements of regulation as reflected above is to be priced for in terms for removal of asbestos material. No further claims in this regard will therefore be entertained.</p> <p><u>DEMOLISHING AND REMOVING</u></p>				
1 Demolish VIP precast structure comprising on base slab, precast walls, corrugated roof sheeting, approximate size 6 x 3m wide with 3,5m high top structure and 2,0m deep pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).	No	3		
2 Demolish VIP precast structure comprising on base slab, precast walls, corrugated roof sheeting, approximate size 2 x 2m wide with 3,5m high top structure and 2,0m deep pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured).	No	4		
3 Cart away rubble from demolitions and dispose off site.	Item			
4 Backfill existing hole with G7 fill material in max. 150mm layers and compact to 95% MOD AASHTO density.	m³	155		
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<p>Section No. 2</p> <p>Bill No. 1</p> <p>Demolitions (provisional)</p>				

		Unit	Quantity	Rate	Amount
5	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	28		
6	Provision of a certificate of safe disposal for asbestos.	Item			
<u>SUNDRIES</u>					
<u>Desludging</u>					
7	Clean out pit latrine by desludging including removal of all debris and waste including solid waste as per Health and Safety requirements and make good on completion including disposing of all debris and waste at an authorised municipal waste disposal facility. Contractor to price per seat	No	6		
8	Issue of Certificate of Waste Disposal.	Item			
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SECTION NO. 3
BUILDING WORKS

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>BUILDING WORKS</u> <u>BILL NO. 1</u> <u>EARTHWORKS (PROVISIONAL)</u> <u>Quantity Split:</u> <p>Note that the total quantity per each item is split into the various buildings and appears below each description as follows:</p> <p>A0 - DWG 40 - Learners & Staff Ablutions</p> <p>A1 - DWG 36 - Grade R Ablution</p> <u>MODEL PREAMBLES</u> <p>The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates</p> <u>SUPPLEMENTARY PREAMBLES</u> <u>Proprietary products in descriptions:</u> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <u>Nature of material to be excavated:</u> <p>The material to be excavated is assumed to be predominantly of a composition that will allow excavation in "earth" as specified, but including a percentage of excavation in "soft rock" and "hard rock".</p> <u>Carting away of excavated material:</u> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site.</p> <u>Dewatering of excavations:</u> <p>The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water</p>				
Carried to Collection			R	
Section No. 3				
Bill No. 1				
Earthworks (provisional)				

	Unit	Quantity	Rate	Amount
<u>Density testing on filling:</u>				
Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.				
<u>Imported fill:</u>				
Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively				
<u>Classification of excavated material</u>				
Hard rock' shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives. Soft rock" shall mean hard material, the removal of which warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness. "Earth" shall mean all ground other than that classified as "hard rock" or "soft rock" and shall include made-up ground and any loose stones or pieces of concrete not exceeding 0,03m ³ in volume.				
<u>EXCAVATION OTHER THAN BULK</u>				
<u>Excavation in earth not exceeding 2m deep:</u>				
1 Trenches.	m ³	8		
2 Holes.	m ³	92		
3 Reduced levels under floors.	m ³	32		
<u>Extra over trench and hole excavations in earth for excavation in:</u>				
4 Soft rock.	m ³	13		
5 Hard rock.	m ³	7		
<u>Extra over all excavations for carting away:</u>				
6 Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m ³	133		
<u>Risk of collapse of excavations:</u>				
7 Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	29		
8 Ditto, but from ground level to exceeding 1,5m.	m ²	89		
Carried to Collection			R	
Section No. 3				
Bill No. 1				
Earthworks (provisional)				

		Unit	Quantity	Rate	Amount
	<u>Keeping excavations free of water:</u>				
9	Keeping excavations free from mud and all water including subterranean sources.	Item			
	<u>EARTH FILLING, ETC.</u>				
	<u>Earth filling obtained from the excavations and / or prescribed stock piles on site (minimum G7 tested material) compacted to 93% Mod. AASHTO density:</u>				
10	Backfilling to trenches, holes, etc.	m ³	2		
11	Under floors, steps, pavings, trenches, etc.	m ³	8		
	<u>Imported G5 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 98% modified AASHTO dry density to trenches, holes, etc.</u>				
12	Under floors, steps, pavings, trenches, etc.	m ³	20		
	<u>Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 98% modified AASHTO dry density to holes, trenches etc.</u>				
13	Under floors, steps, pavings, trenches, etc.	m ³	14		
14	Backfilling to holes, trenches, etc.	m ³	6		
	<u>Coarse river sand filling supplied by the contractor:</u>				
15	Under floors etc.	m ³	5		
	<u>Compaction of surfaces:</u>				
16	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.	m ²	94		
	<u>Prescribed density tests on filling:</u>				
17	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	16		
	<u>SOIL POISONING</u>				
	<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>				
18	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m ²	58		
	Carried to Collection			R	
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Concrete, Formwork And Reinforcement				

	Unit	Quantity	Rate	Amount
<p>Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.</p> <p>Formwork to sides of bases, pile caps, ground beams, etc., will only be measured where it is prescribed by the Engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in Earthworks.</p> <p><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></p> <p><u>15Mpa/19mm Concrete</u></p>				
1	m³	3		
<p><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></p> <p><u>30MPa/20mm concrete:</u></p>				
2	m³	18		
3	m³	7		
<p><u>REINFORCED CONCRETE</u></p> <p><u>30MPa/20mm concrete:</u></p>				
4	m³	7		
5	m³	10		
<p><u>TEST BLOCKS</u></p> <p><u>Test blocks:</u></p>				
6	No	12		
<p><u>FINISHING TOP SURFACE OF CONCRETE</u></p> <p><u>Finishing top surfaces of concrete smooth with a wood float:</u></p>				
7	m²	94		
<p><u>Finishing top surfaces of concrete smooth with a steel float:</u></p>				
8	m²	16		
<p><u>Charmfers at corners</u></p>				
9	m	33		
Carried to Collection			R	
<p>Section No. 3</p> <p>Bill No. 2</p> <p>Concrete, Formwork And Reinforcement</p>				

		Unit	Quantity	Rate	Amount
<u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u>					
<u>Rough Formwork to Sides:</u>					
10	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	35		
<u>Permanent Formwork:</u>					
11	Soffit of slab over pit.	m ²	31		
<u>Extra on permanent formwork for boxing or blocking in or boxing out to form:</u>					
12	835mm diameter circular opening through 370mm thick slab.	No	2		
13	450mm Diameter opening through 255mm thick slab.	No	2		
14	200mm Diameter opening through 255mm thick slab.	No	3		
15	150mm Diameter opening through 255mm thick slab.	No	2		
16	110mm Diameter opening through 255mm thick slab.	No	7		
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>					
<u>Smooth Formwork to Sides:</u>					
17	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	17		
<u>REINFORCEMENT (PROVISIONAL)</u>					
18	High tensile steel reinforcement bars to structural concrete work.	Tonnes	1.68		
<u>Fabric reinforcement:</u>					
19	REF. 888 fabric reinforcement in concrete footings, walls, base slabs etc.	m ²	231		
Carried to Collection				R	
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Concrete, Formwork And Reinforcement					

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Section No. 3				
Bill No. 3				
Masonry				

	Unit	Quantity	Rate	Amount
<u>Samples</u> Samples of all masonry building units, except those of walls described as "loadbearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "loadbearing" shall consist of 30 units from every 30 000 units delivered to site				
<u>Trade names</u> Where trade names are specified it will read "or equal approved"				
<u>BRICKWORK IN FOUNDATIONS (PROVISIONAL)</u> <u>Brickwork consisting of solid bricks with 10.5 MPa minimum nominal compressive strength in Class I mortar with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in mortar mix (Cement to be 42.5N all-purpose cement):</u>				
1				
345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m ²	73		
<u>BRICKWORK AND BLOCKWORK SUNDRIES</u> <u>Galvanized brickwork reinforcement</u>				
2				
230mm Wide reinforcement in foundation (Provisional)	m	251		
<u>FACE BRICK</u> <u>Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2 (Cement to be 42.5N all-purpose cement):</u>				
3				
Extra over for face brick in foundations (Provisional).	m ²	6		
Carried to Collection			R	
Section No. 3				
Bill No. 3				
Masonry				

BILL NO. 3
MASONRY
COLLECTION

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	Unit	Quantity	Rate	Amount
<p><u>SECTION NO. 3</u></p> <p><u>BUILDING WORKS</u></p> <p><u>BILL NO. 4</u></p> <p><u>WATERPROOFING</u></p> <p><u>Quantity Split:</u></p> <p>Note that the total quantity per each item is split into the various buildings and appears below each description as follows:</p> <p>A0 - DWG 40 - Learners & Staff Ablutions</p> <p>A1 - DWG 36 - Grade R Ablution</p> <p><u>MODEL PREAMBLES</u></p> <p>The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Waterproofing</u></p> <p>Complete pit sealing/waterproofing from seepage due to underground water ingress as result of high water table, perched water tables etc</p> <p>Contractor to provide water proofing product that will be 100% resistant to extreme hydrostatic pressure at depth of 2m, from the positive (water from inside) of substrate. Resistant to aggressive chemicals i.e oil, salt water, sewage, weak acids and aggressive sulphate soils. The product must be able to withstand backfilling without protection and must not be subject to deterioration. The product must be able to ensure that the pit structure is fully sealed (100% free from water ingress from outside and it will not penetrate the pit).</p> <p>The product and its methodology for application must be approved by Principal Agent before it is used.</p> <p>It is a mandatory requirement for the Contractor to attend training to be provided by Supplier. Proof of attendance will be required prior to application of the approved waterproofing product.</p>				
Carried to Collection			R	
Section No. 3				
Bill No. 4				
Waterproofing				

	Unit	Quantity	Rate	Amount
<p>Contractor must prepare a 1m x 1m sample in the presence of the Principal Agent or Engineer. In this case, the Contractor must give at least 48 hours notice prior to the date when the application of the waterproofing product is intended to be done.</p> <p>Contractor to provide a Letter of Compliance confirming that waterproofing has been applied as per Manufacturer's instructions and data sheet.</p> <p><u>DAMPPROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u></p>				
1 Under surface beds, bases, etc.	m ²	94		
<p><u>WATERPROOFING TO PIT WALLS</u></p> <p><u>Waterproofing product to plastered walls, subject to approval by the Principal Agent prior to application.</u></p>				
2 On plastered wall surfaces including 100mm overlap at the base slab	m ²	73		
Carried to Collection			R	
Section No. 3				
Bill No. 4				
Waterproofing				

Amount

BILL NO. 4
WATERPROOFING
COLLECTION

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Section No. 3
Bill No. 4
Waterproofing

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>BUILDING WORKS</u> <u>BILL NO. 5</u> <u>IRONMONGERY</u> <u>Quantity Split:</u> <p>Note that the total quantity per each item is split into the various buildings and appears below each description as follows:</p> <p>A0 - DWG 40 - Learners & Staff Ablutions</p> <p>A1 - DWG 36 - Grade R Ablution</p> <u>MODEL PREAMBLES</u> <p>The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates</p> <u>SUPPLEMENTARY PREAMBLES</u> <u>Keys/Locks</u> <p>Each lock is to be distinctly numbered with consecutive numbers and each key is to be stamped with the corresponding number to the lock that it controls. All locks are to have two keys</p> <u>Trade Names</u> <p>Where trade names are specified other ironmongery approved by the Principal Agent may be used</p> <u>Fixing</u> <p>Fixing of ironmongery is deemed to be fixed to timber unless otherwise described</p> <u>SIGN PLATES:</u> <p><u>All sign plates are to be with engraved blue perspexall in accordance with the standard sign plates for Schools.</u></p>				
1	No	5		
<u>SUNDRIES</u> 2 Stainless Steel Hat and coat hook, code DHC - SS-030A or equal approved. 3 38mm Diameter black rubber door stop plugged and screwed to wall.				
	No	2		
	No	8		
Carried to Collection			R	
Section No. 3 Bill No. 5 Ironmongery				

		Unit	Quantity	Rate	Amount
	<u>Halcast or equal approved"</u>				
4	Thiefproof toilet roll holder plugged.	No	8		
	<u>Grade 304 stainless steel ware:</u>				
5	32mm outside diameter x 1,6mm thick tubular wall mounted side stainless steel grab rail 1,06m girth with two 45 degree and two 90 degree formed bends and each end fitted with 80mm diameter x 5mm thick flange welded on and four times countersunk holed for and plugged and screwed to wall with stainless steel crews.	No	2		
6	32mm outside diameter x 1,6mm thick tubular wall mounted around cistern back stainless steel grab rail 1,23m girth with two 90 degree formed bends and each end fitted with 80mm diameter x 5mm thick flange welded on and four times countersunk holed for and plugged and screwed to wall with stainless steel crews.	No	2		
	<u>Satin Grey Plastics or equal approved</u>				
7	"Satin plastic N-SBIN-12-SA SHE Bin size 463 x 140 x 480mm, floor standing loose.	No	4		
Carried to Collection				R	
Section No. 3					
Bill No. 5					
Ironmongery					

Amount

BILL NO. 5
IRONMONGERY
COLLECTION

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		Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>BUILDING WORKS</u> <u>BILL NO. 6</u> <u>PLASTERING</u> <u>Quantity Split:</u> Note that the total quantity per each item is split into the various buildings and appears below each description as follows: A0 - DWG 40 - Learners & Staff Ablutions A1 - DWG 36 - Grade R Ablution <u>MODEL PREAMBLES</u> The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates <u>SCREEDS</u> <u>Untinted granolithic, on concrete:</u> 1 30mm Thick on floors and landings. m ² 58 <u>INTERNAL PLASTER (PIT WALLS)</u> <u>15mm thick of 1:4 sand cement plaster with Coprox masonry waterproofing or equal approved waterproof cement additive. Add 2.5kg Coprox waterproof cement additive for every 50kg of cement used in plaster mix</u> 2 On walls. m ² 69					
Carried To Section Summary				R	
Section No. 3					
Bill No. 6					
Plastering					

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 3</u> <u>BUILDING WORKS</u> <u>BILL NO. 7</u> <u>PLUMBING AND DRAINAGE (PROVISIONAL)</u> <u>Quantity Split:</u> <p>Note that the total quantity per each item is split into the various buildings and appears below each description as follows:</p> <p>A0 - DWG 40 - Learners & Staff Ablutions</p> <p>A1 - DWG 36 - Grade R Ablution</p> <u>MODEL PREAMBLES</u> <p>The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates</p> <u>SANITARY PLUMBING</u> <u>PVC waste or vent pipes and fittings:</u>				
1	50mm Waste pipe.	m	55	
2	110mm Vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres.	m	32	
<u>uPVC gulleys</u>				
3	200mm Precast concrete gully dish and uPVC lowback assembly complete with 110mm P trap gulley (code UGB 40) including 190mm diameter head (code UGA 40) and grate (code UGG 40), not exceeding 750mm deep, jointed to 110mm drain pipe, including excavations for and encasing in concrete (15MPa crushing strength after 28 days) worked up to form kerb, finished smooth on top in 1:3 cement mortar.	No	2	
<u>Extra for:</u>				
4	50mm Bend.	No	24	
5	50mm Access bend.	No	8	
6	Envirosan or equal approved fly screens to top of 110 diameter vent pipe.	No	8	
<u>WATER SUPPLIES</u>				
<u>Polycop pipes:</u>				
Pipes shall be class 10.				
Carried to Collection			R	
Section No. 3				
Bill No. 7				
Plumbing And Drainage (provisional)				

		Unit	Quantity	Rate	Amount
<u>Fixing of pipes</u>					
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level					
<u>Polycop pipes chased in walls:</u>					
Where pipes have been chased in walls, the price for making good of plaster and paint etc shall be deemed to be included in the description of pipe chased in walls.					
<u>Reducing fittings:</u>					
Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.					
<u>Class 10 Polycop pipes:</u>					
7	15mm Pipe chased into brick walls.	m	61		
8	22mm Pipe chased into brick walls.	m	43		
<u>Extra over polycop pipes for compression fittings:</u>					
9	15mm Fittings.	No	43		
10	22mm Fittings.	No	27		
<u>LOCKABLE MANHOLE COVERS</u>					
11	600mm diameter lockable circular type M4A product or similar approved manhole SANS 1882 medium duty Dough Moulding compound 4A hinged lid and frame cast into concrete upstand.	No	4		
Carried to Collection				R	
Section No. 3					
Bill No. 7					
Plumbing And Drainage (provisional)					

Amount

BILL NO. 7
PLUMBING AND DRAINAGE (PROVISIONAL)
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			Amount
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<u>BUILDING WORKS</u>			
<u>SECTION SUMMARY</u>			
Bill No.		Page	
1	EARTHWORKS (PROVISIONAL)	35	
2	CONCRETE, FORMWORK AND REINFORCEMENT	39	
3	MASONRY	42	
4	WATERPROOFING	45	
5	IRONMONGERY	48	
6	PLASTERING	49	
7	PLUMBING AND DRAINAGE (PROVISIONAL)	52	
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SECTION SUMMARY			

SECTION NO. 4
EXTENAL WORKS (PROVISIONAL)

	Unit	Quantity	Rate	Amount
<u>SECTION NO. 4</u>				
<u>EXTENAL WORKS (PROVISIONAL)</u>				
<u>BILL NO. 1</u>				
<u>EXTERNAL WORKS</u>				
<u>MODEL PREAMBLES</u>				
The tenderer is referred to the "Model Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
<u>THE FOLLOWING IN PLATFORMS, ETC.</u>				
<u>Site Clearance, ETC</u>				
1	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	m ²	170	
2	Stripping average 200mm thick layer of topsoil and stockpiling on site.	m ²	170	
<u>Open face excavation not exceeding 2m deep:</u>				
3	Excavate to cut in open face, not exceeding 2m deep to reduce levels and grade to fill and compact to 93% mod AASHTO density at optimum moisture content.	m ³	122	
<u>Extra over all excavations for carting away:</u>				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m ³	111	
<u>Earth filling from excavated material</u>				
5	Dig, load and remove filling selected from spoil heaps on site and deposit as filling in platforms including spreading and compacting to cambers and falls in layers not exceeding 150 mm thick to a minimum of 95% Modified AASHTO dry density.	m ³	60	
<u>Surface Preparation:</u>				
6	Trim and level off surface of ground (excavated or filled under this Contract) including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 300mm to a density of at least 90% Mod. AASHTO maximum density, part to falls.	m ²	170	
Carried to Collection			R	
Section No. 4				
Bill No. 1				
External Works				

		Unit	Quantity	Rate	Amount
	<u>Prescribed density tests on filling:</u>				
7	Modified AASHTO Density test.	No	18		
	<u>THE FOLLOWING IN WALKWAYS</u>				
	<u>Excavation not exceeding 2m deep</u>				
8	Reducing levels and depositing excavated material in prescribed stock piles on site.	m³	28		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
9	Off site to a dumping site to be found by the Contractor.	m³	28		
	<u>Filling supplied by the contractor under walkways</u>				
10	G7 Base course material compacted to 98% Mod AASHTO density	m³	9		
11	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m³	19		
	<u>Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:</u>				
12	Under floors,etc.	m²	62		
	<u>Prescribed density tests on filling:</u>				
13	In-situ dry density test.	No	8		
	<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:</u>				
14	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m²	62		
	<u>Concrete Paving Blocks</u>				
	<u>Paving of 50mm thick 200x100mm 25MPa Bevel Bond paver blocks grey in colour in herringbone pattern on and including 20mm thick sand bed with dry filler sand swept and vibrated into joints all laid on subgrade (elsewhere measured) conforming to SABS 1200D degree of accuracy I:</u>				
15	Paving to walkway areas, etc laid to falls.	m²	62		
16	Extra over ordinary paving for 200mm wide block-on-flat header course edging on 100mm thick mortar bed including unreinforced concrete haunching along outside edge.	m	83		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Kerbing</u>				
	<u>Precast or in situ mass concrete (25 MPa - 19 mm stone) kerbs cast in convenient lengths with exposed faces finished smooth from the mould and all salient angles rounded, jointed and pointed in 1:3 cement mortar, including excavations, formwork, etc.</u>				
17	Figure 8B (300 x 275 x 175mm) semi mountable kerb laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.	m	83		
18	Ditto but circular on plan.	m	8		
19	Fig. 12 kerb size 75 x 150mm high overall, laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.	m	35		
20	Ditto but circular on plan.	m	7		
	<u>THE FOLLOWING IN DISABLED ACCESS</u>				
	<u>SCREEN WALL</u>				
	<u>Excavation in earth not exceeding 2m deep:</u>				
21	Trenches.	m ³	2		
	<u>Extra over all excavations for carting away:</u>				
22	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m ³	1		
	<u>Risk of collapse of excavations:</u>				
23	Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	6		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:</u>				
24	Backfilling to trenches, holes, etc.	m ³	1		
	<u>Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:</u>				
25	Under footings.	m ³	1		
	<u>Compaction of surfaces</u>				
26	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 90% Mod AASHTO density.	m ²	2		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>25 Mpa/19mm Concrete</u>				
27	Strip footings.	m ³	1		
	<u>Test blocks:</u>				
28	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	1		
	<u>Reinforcement (Provisional)</u>				
29	High tensile steel reinforcement bars to structural concrete work.	Tonnes	0.10		
	<u>BRICKWORK IN FOUNDATIONS.</u>				
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):</u>				
30	One brick walls.	m ²	2		
	<u>BRICKWORK IN SUPERSTRUCTURE</u>				
	<u>Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):</u>				
31	One brick walls.	m ²	8		
	<u>Brickwork reinforcement:</u>				
32	230mm Wide reinforcement built in horizontally.	m	28		
33	Ditto but in foundations.	m	16		
	<u>FACE BRICK</u>				
	<u>Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2 (Cement to be 42.5N all-purpose cement):</u>				
34	One brickwall faced on both sides.	m ²	16		
	<u>Brick-on-edge header course copings, sills, etc, of "Rustgold FBS/Qunu Travertine" or equal approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:</u>				
35	230mm wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on top and both sides as described.	m	4		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>ACCESS RAMPS</u>				
	<u>Excavation not exceeding 2m deep</u>				
36	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	1		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
37	Off site to a dumping site to be found by the Contractor.	m ³	1		
	<u>Filling supplied by the contractor under floors, aprons, etc</u>				
38	G7 Base course material compacted to 98% Mod AASHTO density	m ³	1		
39	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	1		
	<u>Coarse river sand filling supplied by the contractor:</u>				
40	Under floors etc.	m ³	1		
	<u>Compaction of surfaces:</u>				
41	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 90% Mod AASHTO density.	m ²	4		
	<u>Prescribed density tests on filling:</u>				
42	In-situ dry density test.	No	2		
	<u>Reinforced 25Mpa/19mm Concrete:</u>				
43	Ramps, Landings, etc.	m ³	1		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
44	Surface beds, slabs, etc to falls and currents.	m ²	4		
	<u>Test blocks:</u>				
45	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	2		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>				
46	12mm Joints not exceeding 300mm high.	m	3		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
47	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	3		
	<u>Fabric reinforcement:</u>				
48	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	4		
	<u>Waterproofing under Surface beds</u>				
49	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m ²	4		
	<u>THE FOLLOWING IN STORMWATER DRAINAGE, APRONS ETC.</u>				
	<u>STORMWATER APRONS</u>				
	<u>Excavation not exceeding 2m deep</u>				
50	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	15		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
51	Off site to a dumping site to be found by the Contractor.	m ³	15		
	<u>Filling supplied by the contractor under floors, aprons, etc</u>				
52	G7 Base course material compacted to 98% Mod AASHTO density	m ³	2		
53	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	2		
	<u>Coarse river sand filling supplied by the contractor:</u>				
54	Under floors etc.	m ³	1		
	<u>Compaction of surfaces:</u>				
55	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 90% Mod AASHTO density.	m ²	51		
	<u>Prescribed density tests on filling:</u>				
56	In-situ dry density test.	No	4		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
	<u>Reinforced 25Mpa/19mm Concrete:</u>				
57	Surface beds cast in panels on waterproofing.	m³	7		
58	Edge thickening	m³	3		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
59	Surface beds, slabs, etc to falls and currents.	m²	51		
	<u>Test blocks:</u>				
60	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>				
61	12mm Joints not exceeding 300mm high.	m	24		
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
62	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	24		
	<u>Fabric reinforcement:</u>				
63	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m²	51		
	<u>Waterproofing under Surface beds</u>				
64	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m²	51		
	<u>STORMWATER CHANNELS</u>				
65	Excavation not exceeding 2m deep	m³	11		
66	Reducing levels and depositing excavated material in prescribed stock piles on site.	m³	5		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
67	Off site to a dumping site to be found by the Contractor.	m³	11		
	<u>Filling supplied by the contractor under channels</u>				
68	G7 Base course material compacted to 98% Mod AASHTO density	m³	5		
	Carried to Collection			R	
	Section No. 4				
	Bill No. 1				
	External Works				

		Unit	Quantity	Rate	Amount
69	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	5		
	<u>Cast in-situ Ref 395 mesh reinforced concrete (25MPa) open stormwater channels having V-shaped waterway formed in top, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 2m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer.</u>				
70	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground not exceeding 2000mm sections including all formwork, reinforcement, expansion joints, smooth finishing to top of concrete surface etc.	m	51		
71	Extra for 700mm angle	No	7		
72	Extra for forming 200mm thick 700mm wide spreader with 200mm high edges fanning out to 1 960mm width at furthest end with hard burnt bricks pitching cast in ass diffusers including working off concrete to a smooth finish and draining onto natural ground with 150 - 200mm diameter loose stones.	No	2		
	<u>Sundries:</u>				
73	Create earth berm for stormwater control with in situ material 1,5m wide at base x 500mm high	m	51		
74	Construct shaped earth V-drain 2m wide with grass runners	m	35		
	<u>THE FOLLOWING IN STORMWATER DISH DRAIN, ETC.</u>				
	<u>Excavation not exceeding 2m deep</u>				
75	Reducing levels and depositing excavated material in prescribed stock piles on site.	m ³	17		
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
76	Off site to a dumping site to be found by the Contractor.	m ³	9		
	Carried to Collection			R	
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		Unit	Quantity	Rate	Amount
	<u>Filling supplied by the contractor under floors, aprons, channels etc</u>				
77	G7 Base course material compacted to 98% Mod AASHTO density	m ³	4		
78	Over site of Selected Subgrade G5 material in accordance with SABS 1 200 DM in layers not exceeding 150mm thick and compacted to 95% Mod AASHTO density.	m ³	4		
	<u>Coarse river sand filling supplied by the contractor:</u>				
79	Under floors etc.	m ³	1		
	<u>Compaction of surfaces:</u>				
80	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 90% Mod AASHTO density.	m ²	29		
	<u>Prescribed density tests on filling:</u>				
81	In-situ dry density test.	No	6		
	<u>Reinforced 25Mpa/19mm Concrete:</u>				
82	Surface beds cast in panels on waterproofing.	m ³	4		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
83	Surface beds, slabs, etc to falls and currents.	m ²	29		
	<u>Test blocks:</u>				
84	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:</u>				
85	12mm Joints not exceeding 300mm high.	m	14		
	<u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc</u>				
86	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	14		
	<u>Fabric reinforcement:</u>				
87	REF. 617 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	29		
	Carried to Collection			R	
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		Unit	Quantity	Rate	Amount
<u>THE FOLLOWING IN SOAKAWAY</u>					
<u>Site Clearance, Etc</u>					
88	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	32		
<u>Excavation in earth not exceeding 2m deep:</u>					
89	Holes	m ³	16		
<u>Extra over all excavations for carting away</u>					
90	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor within 5km from the building site	m ³	6		
<u>Risk of collapse of excavations</u>					
91	Sides of trench and hole excavations exceeding 1,5m deep but not exceeding 3,0m deep	m ²	42		
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 90% Mod AASHTO density</u>					
92	Backfilling to holes	m ³	10		
<u>Earth filling with stone material supplied by the contractor:</u>					
93	Stone (>53mm).	m ³	6		
<u>Membranes</u>					
94	BidimGeotextile or equal approved, lined on all sides including the top and bottom faces. m2 0.0 02/11/2022 05:24:27	m ²	40		
<u>Keeping excavations free of water</u>					
95	Keeping excavations free of all water other than subterranean water	Item			
<u>THE FOLLOWING IN RAINWATER TANKS AND STANDS</u>					
<u>Excavation in earth not exceeding 2m deep:</u>					
96	Trenches.	m ³	8		
<u>Extra over all excavations for carting away:</u>					
97	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m ³	5		
Carried to Collection				R	
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		Unit	Quantity	Rate	Amount
	<u>Risk of collapse of excavations:</u>				
98	Sides of trench and hole excavations not exceeding 1,5m deep.	m ²	32		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:</u>				
99	Backfilling to trenches, holes, etc.	m ³	3		
	<u>Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:</u>				
100	Under footings.	m ³	7		
	<u>Compaction of surfaces</u>				
101	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 90% Mod AASHTO density.	m ²	16		
	<u>25 Mpa/19mm Concrete</u>				
102	Strip footings.	m ³	3		
	<u>25 MPa/19mm Concrete:</u>				
103	Tank concrete slab.	m ³	2		
	<u>Test blocks:</u>				
104	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	5		
	<u>Finishing top surfaces of concrete smooth with a steel trowel including adding additional cement while concrete is still green to attain a smooth, hard surface:</u>				
105	Surface beds, slabs, etc.	m ²	16		
	<u>Rough Formwork to Sides:</u>				
106	Edges, risers, ends and reveals not exceeding 300mm high.	m	32		
	<u>Allens Meshco Square Mesh Fabric reinforcement:</u>				
107	Type 617 fabric reinforcement in concrete slabs.	m ²	16		
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		Unit	Quantity	Rate	Amount
	<u>BRICKWORK IN FOUNDATIONS.</u>				
	<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):</u>				
108	One brick walls.	m ²	18		
	<u>BRICKWORK IN SUPERSTRUCTURE</u>				
	<u>Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):</u>				
109	One brick walls.	m ²	16		
	<u>Brickwork reinforcement:</u>				
110	230mm Wide reinforcement built in horizontally.	m	128		
111	Ditto but in foundations.	m	128		
	<u>FACE BRICK</u>				
	<u>Rustgold FBS/Qunu Travertine clay face brick or equal approved, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2(Cement to be 42.5N all-purpose cement):</u>				
112	Extra over brickwork for face brickwork externally.	m ²	16		
	<u>Brick-on-edge header course copings, sills, etc, of "Rustgold FBS/Qunu Travertine" or equal approved face bricks pointed with recessed joints on all exposed faces, 220mm wide sill set sloping and slightly projecting:</u>				
113	230mm wide header course to top of one brick wall bedded and jointed in cement mortar and pointed on top and both sides as described.	m	32		
	<u>Plastic water tanks etc:</u>				
114	5000 Litre roto molded or equal approved plastic tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	4		
115	Hole top of tank for 100mm pipe.	No	4		
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		Unit	Quantity	Rate	Amount
<u>THE FOLLOWING IN SECURITY FENCING, ETC</u>					
<u>Site clearance</u>					
116	Allow for clearing site for the width of 1 000 mm where fencing is to be erected including removing trees, shrubs etc. not exceeding 200 mm girth, grubbing up roots and roughly levelling.	m ²	107		
<u>Straining wires, fencing and razor wire:</u>					
117	Four strands of 4mm Class'A' galvanised straining wires secured to fencing posts with doubled 2 mm galvanised wire inserted through hole in post and turned a minimum of four turns around straining wire and attached to straining frame at one end with not less than four turns at the other end to straining bolts (elsewhere measured).	m	107		
118	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	107		
119	Fencing formed of 50 x 50 x 2.0mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres including Y12 pegs at 900mm c/c between posts (straining wires elsewhere measured).	m	107		
<u>Posts for 1 800mm high security fence:</u>					
120	60mm Diameter galvanised steel intermediate fencing post 1800mm long fitted with a pressed steel mushroom cap one end and 150 x 150 x 5 mm baseplate at bottom and embedded in and including 350 x 350 x 600 mm mass concrete (15 MPa) base.	No	22		
121	100mm Ditto as corner post, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	13		
122	150mm Ditto as gate post 1 800mm long, fitted with two 50mm diameter galvanised steel stay set raking and with top end flattened and bolted through post, with post and stay both embedded in mass concrete (15 MPa) bases as last.	No	13		
123	12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers.	No	48		
124	Form 12mm diameter hole through fence post.	No	292		
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		Unit	Quantity	Rate	Amount
	<u>Gates:</u>				
125	Security fence single gate, size 1 000 mm wide x 1 800 mm high, formed of 50 mm diameter nominal bore x 3,25 mm wall thickness hot dip galvanised mild steel pipe framing all round with mitred and welded angles and cross braces mullion and transome, scribed and welded into angles and at cross intersections, with two 50 mm diameter nominal bore x 3,25 mm wall thickness security posts each 600 mm long with one end welded to top rail of gate and closure plate to other end, the gate covered with 100 x 50 x 2,5 mm weld mesh with four straining wires as before described and with four 2,37 mm four point core diameter single "kampeon" wires with crimped droppers to security posts as before described; including three strands flat wrap razor barbed tape wire fixed as before described, leaf fitted with three 24 mm diameter x 300 mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including 500 mm long approved chain spot welded to gate	No	1		
126	Two leafed vehicular swing gate. Size 5500mm x 1800mm high.	No	1		
	<u>PADLOCKS</u>				
127	Supply 50 mm "Viro" Padlocks and Keys (or equal approved)	No	2		
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PROVISIONAL SUMS

SECTION NO. 5
PROVISIONAL SUMS

SECTION 5

BILL No. 1

PROVISIONAL SUMS

SUPPLEMENTARY PREAMBLES

Tenderers are advised that no claim in respect of loss of profit or Preliminary charges based on the omission of these amounts will be considered and the said amounts will be omitted strictly without any financial compensation payable to the Contractor.

Provisional sums and Budgetary allowances contained herein may be omitted or reduced at the Employer's discretion and the Contractor shall not be entitled to claim for any loss by way of reductions or omission of any discount, or percentage relating to Provisional amounts and Budgetary sums or any loss of profit related thereto.

PRE-FABRICATED STRUCTURES

NOTE: Shop drawings / Specifications will be required for approval by the Principal Agent PRIOR to installation.

The ABT Specialist Supplier must be competent person registered with relevant statutory body, all ABT construction shall comply with SABS standards and approved by AGREEMENT SA.

The Structures to be erected will be as follows:

Learners and Staff ablution structure on concrete slab, size 9400 x 3080 x 3120mm high complete with 4No. external door including security gate, 4No. Internal doors, 13No. windows, 5No. WCs, 1No. urinals, 4No. wash hand basin etc.

Grade R ablution structure on concrete slab, size 5400 x 3080 x 3120mm high complete with 1No. External doors including security gate, 7No. windows, 1No. WC, 2No. junior WCs, 2No. wash hand basins etc.

Pre-fabricated Modular Units shall comprise of:

Internal and external walls made of 40mm thick wall panel which consist of 0.5mm rigidised prepainted white galvanised chromadek sheeting on both sides including base rails, top rails all joined with aluminium rivets.

600 x 600mm high casement type (W1) natural anodised aluminium window including frames and 4mm obscure glass with one top hung opener; Windows are to be secured with aluminium profile burglar proofing.

813 x 2032mm high external doors manufactured from the same materials as the walls and fitted with hinges, five lever mortice lock, complete with striker plates, two keys chrome plated handles etc.

813 x 1882mm high internal door manufactured from the same materials as the walls and fitted with hinges, 3 lever mortice lock complete with striker plates, two keys chrome plated handles etc.

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		Amount	
	Galvanised mild steel security gate 900 x 2050mm high overall size. 2mm thick vinyl sheeting on floors. The roof is to be 0.5mm Chromadek IBR sheeting mono pitched roof with mono pitched galvanised ridge capping, 255mm lapping secured onto the roof including light steel frame roof at 6 degree slope. 125mm half round PVC gutters including gutter brackets at 1000mm centres with 75mm rainwater PVC fluted downpipes connected to 5000L plastic water tanks (elsewhere measured). Medium density plain un-grooved fascia boards. 85 x 275 x 6.0mm barge board drilled and brass screwed to purlin ends including galvanised steel H-profile jointing strips, screws, holes etc. Plumbing and sanitary fittings shall comprise of WCs, Urinals, Wash hand basins, 15mm and 22mm polycop water supply pipes, 50mm diameter PVC drainage pipes and associated accessories		
1	Provide the sum of R655 000.00 for the supply and installation of Alternative Building Technology (ABT) toilet structures, as above described, by a nominated sub-contractor.	Item	655 000 00
2	Add: Profit on above.	Item	
3	Add: Attendance on above.	Item	
	<u>ELECTRICAL INSTALLATION</u>		
4	Provide the sum of R80 000.00 for Electrical supplycables, flexible sleeves, terminations and lightningprotection including COCs.	Item	80 000 00
5	Add: Profit on above.	Item	
6	Add: Attendance on above.	Item	
	<u>TEMPORARY ABLUTIONS</u>		
7	Provide the sum of R250 000.00 (Two Hundred and Fifty Thousand Rand) for the Supply, Servicing and maintenance of temporary ablutions for the duration of the project and Removal thereof on completion.	Item	250 000 00
8	Add: Profit	Item	
9	Add: Attendance	Item	
	<u>COMMUNITY LIAISON OFFICER</u>		
10	Provide the sum of R58 500.00 for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R6 500.00 a month for the duration (9 months)	Item	58 500 00
11	Add: Profit on above.	Item	
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12 Add: Attendance on above.

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ADD: CONTINGENCIES

Allow the Amount of R155 000.00 (One Hundred and Fifty Five Thousand Rand) for contingencies to be used by the Architect.

155 000 00

SubTotal excluding Value Added Tax
ADD VAT @ 15%:

Carried to Tender

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FINAL SUMMARY