Item No		Quantity	Rate	Amount

SECTION 1

BILL No.1

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.

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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.

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Bill No. 1
Preliminaries

SECTION A: PRINCIPAL BUILDING AGREEMENT

DEFINITIONS

Definitions and interpretation (Clause 1).

1 F: …… V: …… T: ……... Item

OBJECTIVE AND PREPARATION

Offer, acceptance and performance (Clause 2).

2 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: ……... Item

Design responsibility (Clause 4).

4 F: …… V: …… T: ……... Item

Employer's agents (Clause 5).

5 F: …… V: …… T: ……... Item

Site representative (Clause 6).

6 F: …… V: …… T: ……... Item

Compliance with regulations (Clause 7).

7 F: …… V: …… T: ……... Item

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	Works risk (Clause 8)			
8	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'.			
9	F: ……. V: …… T: ……...	Item		
	Works insurances (Clause 10).			
10	F: ……. V: …… T: ……...	Item		
	Liability insurances (Clause 11).			
11	F: ……. V: …… T: ……...	Item		
	Effecting insurances (Clause 12).			
12	F: ……. V: …… T: ……...	Item		
	State Provisions (Clause 13).			
13	F: ……. V: …… T: ……...	Item		
	Security (Clause 14).			
14	F: ……. V: …… T: ……...	Item		
	EXECUTION			
	Preparation for and execution of the works (Clause 15).			
15	F: ……. V: …… T: ……...	Item		
	Access to the works (Clause 16).			
16	F: ……. V: …… T: ……...	Item		
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	Contract instructions (Clause 17).			
17	F: ..... V: ..... T:	Item		
	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.			
18	F: ..... V: ..... T:	Item		
	Assignment (Clause 19).			
19	F: ..... V: ..... T:	Item		
	Nominated subcontractors (Clause 20).			
20	F: ..... V: ..... T:	Item		
	Selected subcontractors (Clause 21).			
21	F: ..... V: ..... T:	Item		
	Employer's Direct contractors (Clause 22).			
22	F: ..... V: ..... T:	Item		
	Contractor's Domestic subcontractors (Clause 23).			
23	F: ..... V: ..... T:	Item		
	COMPLETION			
	Practical completion (Clause 24).			
24	F: ..... V: ..... T:	Item		
	Works completion (Clause 25).			
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25	F: …….. V: …….. T: ……...	Item		
	Final completion (Clause 26).			
	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 accummulates in order to attend to a comprehensive list of defects"			
26	F: …….. V: …….. T: ……...	Item		
	Sectional completion (Clause 28).			
27	F: …….. V: …….. T: ……...	Item		
	Revision of date for practical completion (Clause 29).			
28	F: …….. V: …….. T: ……...	Item		
	Penalty for non-completion (Clause 30).			
29	F: …….. V: …….. T: ……...	Item		
	PAYMENT			
	Interim payment to the contractor (Clause 31).			
	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.			
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	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.			
	Adjustment to the contract value (Clause 32).			
30	F: ……. V: …… T: ……...	Item		
	Recovery of expense and loss (Clause 33).			
31	F: ……. V: …… T: ……...	Item		
	Final account and final payment (Clause 34).			
32	F: ……. V: …… T: ……...	Item		
	Payment to other parties (Clause 35).			
33	F: ……. V: …… T: ……...	Item		
	CANCELLATION			
	Cancellation by Employer - Contractor's default (Clause 36).			
34	F: ……. V: …… T: ……...	Item		
	Cancellation by Employer - Loss and damage (Clause 37).			
35	F: ……. V: …… T: ……...	Item		
	Cancellation by Contractor - Employer's default (Clause 38).			
36	F: ……. V: …… T: ……...	Item		
	Cancellation - Cessation of the works (Clause 39).			
37	F: ……. V: …… T: ……...	Item		
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DISPUTE

Dispute Settlement (Clause 40)

38 F: …… V: …… T: ……... Item

SUBSTITUTE PROVISIONS

State Clauses (Clause 41)

39 F: …… V: …… T: ……... Item

CONTRACT VARIABLES

The Schedule: Pre-Tender information (Clause 42).

40 F: …… V: …… T: ……... Item

CONTRACTING AND OTHER PARTIES (Clause 42.1)

Employer: The Mvula Trust

Postal Address: 67 Devereux Avenue, Vincent, East London

Telephone: 043 726 2255

Facsimile: 043 726 5967

Physical address: 67 Devereux Avenue, Vincent, East London

Principal Agent: The Mvula Trust

Postal Address: 67 Devereux Avenue, Vincent, East London

Telephone: 043 726 2255

Facsimile: 043 726 5967

Physical address: 67 Devereux Avenue, Vincent, East London

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CONTRACT DETAILS (Clause 42.2)

Clause 42.2.1

Works Description: Construction of new ablution facilities.

Clause 42.2.2

Site Description: The site is the existing school.

Clause 42.2.3

Work or Installations by Others: NIL

Clause 42.2.4

This Agreement is for a State Contract :- Yes

Payment will be made for materials and goods:- Yes

Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.

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 :-

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To be advised.

Penalty amount R2000.00 per calendar day to a maximum of 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% of each and every claim.

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DOCUMENTS (Clause 42.4)

Clause 42.4.1

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

SECTION B: PRELIMINARIES

DEFINITIONS AND INTERPRETATION (B1)

Definitions and Interpretation (B1)

41 F: …… V: …… T: ……... Item

DOCUMENTS (B2)

Checking of documents (B2.1)

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	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: ……...	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: ……...	Item		
	Availability of construction documentation (B2.3)			
44	F: …….. V: …….. T: ……...	Item		
	Interests of Agents (B2.4)			
45	F: …….. V: …….. T: ……...	Item		
	Priced documents (B2.5)			
46	F: …….. V: …….. T: ……...	Item		
	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.			
47	F: …….. V: …….. T: ……...	Item		
	<u>THE SITE (B3)</u> Defined works area (B3.1)			
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	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.			
48	F: …….. V: …….. T: ……...	Item		
	Geotechnical investigation (B3.2) A desktop geotechnical report is available upon request.			
49	F: …….. V: …….. T: ……...	Item		
	Inspection of the Site (B3.3)			
50	F: …….. V: …….. T: ……...	Item		
	Existing premises occupied (B3.4)			
51	F: …….. V: …….. T: ……...	Item		
	Previous work - dimensional accuracy (B3.5)			
52	F: …….. V: …….. T: ……...	Item		
	Previous work - defects (B3.6)			
53	F: …….. V: …….. T: ……...	Item		
	Services - known (B3.7)			
54	F: …….. V: …….. T: ……...	Item		
	Services - unknown (B3.8)			
55	F: …….. V: …….. T: ……...	Item		
	Protection of trees (B3.9)			
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56	F: …… V: …… T: ……...	Item		
	Articles of value (B3.10)			
57	F: …… V: …… T: ……...	Item		
	Inspection of adjoining properties (B3.11)			
58	F: …… V: …… T: ……...	Item		
	MANAGEMENT OF CONTRACT (B4)			
	Management of the Works (B4.1)			
59	F: …… V: …… T: ……...	Item		
	Programme for the Works (B4.2)			
60	F: …… V: …… T: ……...	Item		
	Progress meetings (B4.3)			
61	F: …… V: …… T: ……...	Item		
	Technical meetings (B4.4)			
62	F: …… V: …… T: ……...	Item		
	SAMPLES AND SHOP DRAWINGS (B5)			
	Samples of materials (B5.1)			
63	F: …… V: …… T: ……...	Item		
	Workmanship samples (B5.2)			
64	F: …… V: …… T: ……...	Item		
	Shop drawings (B5.3)			
65	F: …… V: …… T: ……...	Item		
	TEMPORARY WORKS AND PLANT (B6)			
	Deposits and fees (B6.1)			
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66	F: …….. V: …….. T: ……...	Item		
	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.			
67	F: …….. V: …….. T: ……...	Item		
	Advertising (B6.3)			
68	F: …….. V: …….. T: ……...	Item		
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	Plant and equipment (B6.4)			
69	F: ……..… V: …..…… T: ……...	Item		
	Main notice board (B6.5)			
	One notice board shall be provided by the Contractor			
70	F: ……..… V: …..…… T: ……...	Item		
	Subcontractors notice board (B6.6) (N/A)			
71	F: ……..… V: …..…… T: ……...	Item		
	TEMPORARY SERVICES (B7)			
	Location (B7.1)			
72	F: ……..… V: …..…… T: ……...	Item		
	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).			
73	F: ……..… V: …..…… T: ……...	Item		
	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).			
74	F: ……..… V: …..…… T: ……...	Item		
	Telecommunication equipment (B7.4)			
	The contractor shall provide telephones on site for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
75	F: ……..… V: …..…… T: ……...	Item		
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	Ablution facilities (B7.5)			
	The contractor shall provide toilet facilties on site for the works in accordance with:			
	Alternative A (i.e. to be provided for by the Contractor).			
76	F: ……..… V: …..…… T: …….....	Item		
	PRIME COST AMOUNTS (B8)			
	Responsibility for prime cost amounts (B8.1)			
77	F: ……..… V: …..…… T: …….....	Item		
	ATTENDANCE ON N/S SUBCONTRACTORS (B9)			
	General Attendance (B9.1)			
78	F: ……..… V: …..…… T: …….....	Item		
	Special Attendance (B9.2)			
79	F: ……..… V: …..…… T: …….....	Item		
	Commissioning - fuel, water and power (B9.3)			
80	F: ……..… V: …..…… T: …….....	Item		
	FINANCIAL ASPECTS (B10)			
	Statutory taxes, duties and levies (B10.1)			
	Provision is made in the Final Summary of these Bills of Quantities for the inclusion of Value Added Tax (VAT).			
81	F: ……..… V: …..…… T: …….....	Item		
	Payment of Preliminaries (B10.2)			
82	F: ……..… V: …..…… T: …….....	Item		
	Adjustment of Preliminaries (B10.3)			
83	F: ……..… V: …..…… T: …….....	Item		
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	Payment certificate cash flow (B10.4)			
84	F: …… V: …… T: ……...	Item		
	Contractor information supply (B10.5)			
85	F: …… V: …… T: ……...	Item		
	GENERAL (B11)			
	Protection of the Works (B11.1)			
86	F: …… V: …… T: ……...	Item		
	Protection/isolation of existing/sectionally occupied works (B11.2)			
87	F: …… V: …… T: ……...	Item		
	Site security (B11.3)			
88	F: …… V: …… T: ……...	Item		
	Notice before covering work (B11.4)			
89	F: …… V: …… T: ……...	Item		
	Disturbance (B11.5)			
90	F: …… V: …… T: ……...	Item		
	Works cleaning and clearing (B11.6)			
91	F: …… V: …… T: ……...	Item		
	Vermin (B11.7)			
92	F: …… V: …… T: ……...	Item		
	Overhand work (B11.8)			
93	F: …… V: …… T: ……...	Item		
	Carried to Collection		R	

SECTION C: SPECIFIC PRELIMINARIES

Section C: Specific Preliminaries:

C1. 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 manufacturer's instructions after consultation with the manufacturer's authorised representative.

94 F: …… V: …… T: ……... Item

C2. Trade Names, etc.

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.

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.

95 F: …… V: …… T: ……... Item

C3. Contractors responsibility

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.

96 F: …… V: …… T: ……... Item

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C4. 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 authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.

97 F: …….. V: …….. T: ……... Item

C5. As built drawings

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.

Three full sets of as-built drawings shall be submitted to the Principal Agent no later than fourteen days after practical completion.

98 F: …….. V: …….. T: ……... Item

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:

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	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: ……...	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: ……...	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: ……...	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: ……...	Item		
	C10. Method Statement			
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	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.			
103	F: …….. V: …….. T: ……...	Item		
	C11. Unauthorised Persons/Workmen on Premises 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. 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.			
104	F: …….. V: …….. T: ……...	Item		
	C12. Mode of Procedure 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. 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.			
105	F: …….. V: …….. T: ……...	Item		
	Carried to Collection		R	

	C13. Location of Temporary Buildings and Temporary Services 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. 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.			
106	F: …….. V: …….. T: ……...	Item		
	C14. Office accommodation 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]			
107	F: …….. V: …….. T: ……...	Item		
	C15. Storage Facilities			
108	The Contractor shall provide a Container for storage of materials.	Item		
109	F: …….. V: …….. T: ……...	Item		
	C16. Removal and Making Good of Temporary Works, etc, on Completion 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.			
110	F: …….. V: …….. T: ……...	Item		
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111	SUB - TOTAL: FIXED ITEMS	Item			
112	SUB - TOTAL: VALUE - RELATED ITEMS	Item			
113	SUB - TOTAL: TIME - RELATED ITEMS	Item			
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	8		
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	19		
	20		
Carried Forward		R	

Section 1

Bill No. 1

Preliminaries

COLLECTION

	Page No		Amount
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Total Brought Forward from Page No.	21		
	22		
	23		
	24		
Carried Forward to Summary of Section No. 1		R	

Item No		Quantity	Rate	Amount

SECTION 1

BILL No. 2

HEALTH AND SAFETY

MODEL PREAMBLES

The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.

SUPPLEMENTARY PREAMBLES

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.

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.

Prior to pricing the principal contractor must familiarize him/herself with 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.

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.

Carried to Collection R

	The costs included herein must incorporate Community Liaison Officer (CLO).				
	OCCUPATIONAL HEALTH AND SAFETY				
	General:				
1	Preparation of Contractor's site specific Health and Safety Plan.		Item		
2	Submission of the Health and Safety File.		Item		
3	Principal Contractor's initial obligations in respect of the OHS Act and Construction Regulations.		Item		
4	Principal Contractor's time related obligations in respect of the OHS Act and Construction Regulations for the entire construction period.		Item		
5	Provision of full time Health and Safety Officer for the entire construction period.		Item		
6	Induction training of personnel.	No	20		
7	Provision of first aid boxes.	No	1		
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 min 300mm deep in ground at max 3m spacing including excavation, backfilling, etc	m	50		
9	Extra over mesh fence for pedestrian gate size 1.8 x 1,8m high.	No	1		
	Provision for Personal Protective Equipment and Protective Clothing:				
10	Reflective vests.	No	20		
11	Hard hats.	No	20		
12	Protective foot wear.	No	20		
13	Ear Plugs.	No	900		
	Carried to Collection			R	

14	Dust Masks.	No	900		
	Costs of Medical Certificates and Medical Surveillance:				
15	Initial (baseline) medical examinations.	No	20		
16	Exit Examinations.	No	20		
	Noise Monitoring:				
17	Establishment of noise zones.	No	2		
18	Audiograms.	No	2		
	C16. Covid-19 Compliance Measures				
19	The Contractor is required to price for Covid 19 compliance and the pricing thereof shall be deemed to include all the mandatory requirements.		Item		
	Carried to Collection			R	

Section 1

Bill No. 2

Health and Safety

COLLECTION

	Page No		Amount
Total Brought Forward from Page No.	27		
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Section 1

SECTION SUMMARY - PRELIMINARIES

Bill No		Page No	Amount
	Preliminaries	26	
	Health and Safety	30	
	Carried to Final Summary		R

Section 1

Item No		Quantity	Rate	Amount

SECTION 2

BILL No. 1

DEMOLITIONS

MODEL PREAMBLES

The tenderer is referred to the "General 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.

SUPPLEMENTARY PREAMBLES

View site

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

Explosives

No explosives whatsoever may be used for demolition purposes unless otherwise stated.

General

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.

Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site.

Carried to Collection R

Removal of asbestos material

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.

The following shall apply in respect of asbestos removal

The removal of asbestos shall be carries 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

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 occuring, the Contractor will be held responsible contractually and may further be prosecuted ciminally

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 entained

Carried to Collection R

Section 2
Bill No. 1
Demolitions

	DEMOLISHING AND REMOVING				
1	Demolish pit latrine zinc iron structure comprising on base slab, corrugated roof sheeting, approximate size 5 x 6.4m 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		
2	Cart away rubble from demolitions and dispose off site.		Item		
3	Backfill existing hole with G7 fill material in max. 150mm layers and compact to 95% MOD AASHTO density.	m3	480		
4	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	4		
	SUNDRIES				
	Desludging				
5	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	24		
6	Issue of Certificate of Waste Disposal.		Item		
	Carried to Collection			R	

Section 2

Bill No. 1

Demolitions

COLLECTION

	Page No		Amount
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	34		
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Item No		Quantity	Rate	Amount

SECTION 3

BILL No. 1

EARTHWORKS (PROVISIONAL)

Quantity Split:

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 Ablution
A1 - DWG 36 - Grade R Ablution

MODEL PREAMBLES

The tenderer is referred to the "General 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.

SUPPLEMENTARY PREAMBLES

Proprietary products in descriptions:

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.

Nature of material to be excavated:

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".

Carried to Collection R

Carting away of excavated material:

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations, or alternatively, from stock piles situated on the building site.

Dewatering of excavations:

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

Density testing on filling:

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.

Imported fill:

"Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively"

Carried to Collection R

Classification of excavated material

"Hard rock' shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitiing 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.

Carried to Collection R

Section 3
Bill No. 1
Earthworks (Provisional)

	EXCAVATION OTHER THAN BULK				
	Excavation in earth not exceeding 2m deep:				
1	Trenches.	m3	8		
2	Holes.	m3	92		
3	Reduced levels under floors.	m3	32		
	Extra over trench and hole excavations in earth for excavation in:				
4	Soft rock.	m3			
5	Hard rock.	m3			
	Extra over all excavations for carting away:				
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	133		
	Risk of collapse of excavations:				
7	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	29		
8	Ditto, but from ground level to exceeding 1,5m.	m2	89		
	Keeping excavations free of water:				
9	Keeping excavations free from mud and all water including subterranean sources.		Item		
	EARTH FILLING, ETC.				
	Earth filling obtained from the excavations and / or prescribed stock piles on site (minimum G7 tested material) compacted to 93% Mod. AASHTO density:				
10	Backfilling to trenches, holes, etc.	m3	2		
11	Under floors, steps, pavings, trenches, etc.	m3	8		
	Carried to Collection			R	

	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.				
12	Under floors, steps, pavings, trenches, etc.	m3	20		
	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.				
13	Under floors, steps, pavings, trenches, etc.	m3	14		
14	Backfilling to holes, trenches, etc.	m3	6		
	Coarse river sand filling supplied by the contractor:				
15	Under floors etc.	m3	5		
	Compaction of surfaces:				
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.	m2	94		
	Prescribed density tests on filling:				
17	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	16		
	Carried to Collection			R	

SOIL POISONING

Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:

18	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m2	58		
19	To bottoms and sides of holes, etc.	m2	125		

Carried to Collection R

Section 3

Bill No. 1

Earthworks (Provisional)

COLLECTION

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Section 3
Bill No. 1
Earthworks (Provisional)

Item No		Quantity	Rate	Amount

SECTION 3

BILL No. 2

CONCRETE, FORMWORK AND REINFORCEMENT

Quantity Split:

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 Ablution
A1 - DWG 36 - Grade R Ablution

MODEL PREAMBLES

The tenderer is referred to the "General 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.

SUPPLEMENTARY PREAMBLES

Proprietary products in descriptions:

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.

Cost of tests:

The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately).

Carried to Collection R

Formwork:

Descriptions of formwork shall be deemed to include use and waste only (except where described as left in or permanent), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use.

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.

Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.

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.

Carried to Collection R

	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	15Mpa/19mm Concrete				
1	Surface blinding under footings and bases.	m3	3		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	30MPa/20mm concrete:				
2	Raft slab on waterproofing.	m3	18		
3	Ground base slabs.	m3	7		
	REINFORCED CONCRETE CAST IN FORMWORK				
	30MPa/20mm concrete:				
4	Suspended Slabs.	m3	7		
5	Cavity walls.	m3	10		
	TEST BLOCKS				
	Test blocks:				
6	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	12		
	Carried to Collection			R	

	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float:				
7	Surface beds, suspended slabs, base slabs, etc.	m2	94		
	Finishing top surfaces of concrete smooth with a steel float:				
8	Surface beds, suspended slabs, etc.	m2	16		
	Charmfers at corners				
9	19 x 19mm triangular fillet at internal corners of bottom slab.	m	33		
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough Formwork to Sides:				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	35		
	Permanent Formwork:				
11	Soffit of slab over pit.	m2	31		
	Extra on permanent formwork for boxing or blocking in or boxing out to form:				
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		
	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	Carried to Collection			R	

	Smooth Formwork to Sides:				
17	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	17		
	REINFORCEMENT (PROVISIONAL)				
18	High tensile steel reinforcement bars to structural concrete work.	t	1.68		
	Fabric reinforcement:				
19	REF. 888 fabric reinforcement in concrete footings, walls, base slabs etc.	m2	231		
	Carried to Collection			R	

Section 3
Bill No. 2
Concrete, Formwork and Reinforcement

Section 3

Bill No. 2

Concrete, Formwork and Reinforcement

COLLECTION

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Section 3
Bill No. 2
Concrete, Formwork and Reinforcement

Item No		Quantity	Rate	Amount

SECTION 3

BILL No. 3

MASONRY

Quantity Split:

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 Ablution
A1 - DWG 36 - Grade R Ablution

MODEL PREAMBLES

The tenderer is referred to the "General 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.

All references to SABS shall be deemed to be the relevant SANS specification

SUPPLEMENTARY PREAMBLES

BRICKWORK

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick

Hollow walls etc

Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole.

Carried to Collection R

Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

Samples

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

Trade names

Where trade names are specified it will read "or equal approved"

Carried to Collection R

Section 3
Bill No. 3
Masonry

	BRICKWORK IN FOUNDATIONS (PROVISIONAL)				
	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):				
1	345mm thick cavity brick walls made of two leafs of 110mm wall with 135mm concrete fill (concrete elsewhere measured).	m2	73		
	BRICKWORK AND BLOCKWORK SUNDRIES				
	Galvanized brickwork reinforcement				
2	230mm Wide reinforcement in foundations (Provisional).	m	251		
	FACE BRICK				
	"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):				
3	Extra over for face brick in foundations (Provisional).	m2	6		
	Carried to Collection			R	

Section 3

Bill No. 3

Masonry

COLLECTION

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Section 3
Bill No. 3
Masonry

Item No		Quantity	Rate	Amount

SECTION 3

BILL No. 4

WATERPROOFING

Quantity Split:

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 Ablution
A1 - DWG 36 - Grade R Ablution

MODEL PREAMBLES

The tenderer is referred to the "General 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.

SUPPLEMENTARY PREAMBLES

Proprietary products in descriptions:

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.

Waterproofing

Complete pit sealing/waterproofing from seepage due to underground water ingress as result of high water table, perched water tables etc

Carried to Collection R

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).

The product and its methodology for application must be approved by Principal Agent before it is used.

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.

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.

Contractor to provide a Letter of Compliance confirming that waterproofing has been applied as per Manufacturer's instructions and data sheet.

Carried to Collection R

Section 3
Bill No. 4
Waterproofing

	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':				
1	Under surface beds, bases, etc.	m2	94		
	WATERPROOFING TO PIT WALLS				
	Waterproofing product to plastered walls, subject to approval by the Principal Agent prior to application.				
2	On plastered wall surfaces including 100mm overlap at the base slab	m2	73		
	Carried to Collection			R	

Section 3

Bill No. 4

Waterproofing

COLLECTION

	Page No		Amount
Total Brought Forward from Page No.	53		
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Item No		Quantity	Rate	Amount

SECTION 3

BILL No. 5

IRONMONGERY

Quantity Split:

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 Ablution
A1 - DWG 36 - Grade R Ablution

MODEL PREAMBLES

The tenderer is referred to the "General 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.

SUPPLEMENTARY PREAMBLES

Keys/Locks

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

Trade Names

Where trade names are specified other ironmongery approved by the Principal Agent may be used

Fixing

Fixing of ironmongery is deemed to be fixed to timber unless otherwise described

Carried to Collection R

	SIGN PLATES:				
	All sign plates are to be with engraved blue perspex all in accordance with the standard sign plates for Schools.				
1	Sign plate plugged and screwed to walls with chromium plated dome headed screws.	No	5		
	SUNDRIES				
2	Stainless Steel Hat and coat hook, code DHC - SS-030-A or equal approved.	No	2		
3	38mm Diameter black rubber door stop plugged and screwed to wall.	No	8		
	Halcast or equal approved"				
4	Thiefproof toilet roll holder plugged.	No	8		
	Grade 304 stainless steel ware:				
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		
	Satin Grey Plastics or equal approved				
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 3
Bill No. 5
Ironmongery

Section 3

Bill No. 5

Ironmongery

COLLECTION

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Section 3
Bill No. 5
Ironmongery

Item No			Quantity	Rate	Amount
	SECTION 3				
	BILL No. 6				
	PLASTERING				
	Quantity Split:				
	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 Ablution A1 - DWG 36 - Grade R Ablution				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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.				
	SCREEDS				
	Untinted granolithic, on concrete:				
1	30mm Thick on floors and landings.	m2	58		
	INTERNAL PLASTER (PIT WALLS)				
	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				
2	On walls.	m2	69		
	Carried Forward to Summary of Section No. 3			R	

Section 3
Bill No. 6
Plastering

Item No			Quantity	Rate	Amount
	SECTION 3				
	BILL No. 7				
	PLUMBING AND DRAINAGE (PROVISIONAL)				
	Quantity Split:				
	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 Ablution A1 - DWG 36 - Grade R Ablution				
	MODEL PREAMBLES				
	The tenderer is referred to the "General 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.				
	SANITARY PLUMBING				
	PVC waste or vent pipes and fittings:				
1	50mm Waste pipe.	m	55		
2	110mm Vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres.	m	32		
	uPVC gulleys				
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		
	Carried to Collection			R	

	Extra for:				
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		
	WATER SUPPLIES				
	Polycop pipes:				
	Pipes shall be class 10.				
	Fixing of pipes				
	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				
	Reducing fittings:				
	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.				
	Class 10 Polycop pipes:				
7	15mm Pipes.	m	61		
8	22mm Pipes.	m	43		
	Extra over polycop pipes for compression fittings:				
9	15mm Fittings.	No	43		
10	22mm Fittings.	No	27		
	Carried to Collection			R	

	LOCKABLE MANHOLE COVERS				
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 3
Bill No. 7
Plumbing and Drainage (Provisional)

Section 3

Bill No. 7

Plumbing and Drainage (Provisional)

COLLECTION

	Page No		Amount
Total Brought Forward from Page No.	61		
	62		
	63		
Carried Forward to Summary of Section No. 3		R	

Section 3

SECTION SUMMARY - BUILDING WORKS

Bill No		Page No	Amount
	Earthworks (Provisional)	42	
	Concrete, Formwork and Reinforcement	48	
	Masonry	52	
	Waterproofing	56	
	Ironmongery	59	
	Plastering	60	
	Plumbing and Drainage (Provisional)	64	
	Carried to Final Summary		R

Section 3

Item No			Quantity	Rate	Amount
	SECTION No. 4				
	BILL No. 1				
	EXTERNAL WORKS (PROVISIONAL)				
	MODEL PREAMBLES				
	The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates				
	THE FOLLOWING IN PLATFORMS, ETC.				
	Site Clearance, ETC				
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.	m2	298		
2	Stripping average 200mm thick layer of topsoil and stockpiling on site.	m2	298		
	Open face excavation not exceeding 2m deep:				
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.	m3	204		
	Extra over all excavations for carting away:				
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	204		
	Carried to Collection			R	

	Earth filling from excavated material				
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.	m3	204		
	Surface Preparation:				
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.	m2	298		
	Prescribed density tests on filling:				
7	Modified AASHTO Density test.	No	26		
	THE FOLLOWING IN WALKWAYS				
	Excavation not exceeding 2m deep				
8	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	43		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
9	Off site to a dumping site to be found by the Contractor.	m3	43		
	Filling supplied by the contractor under walkways				
10	G7 Base course material compacted to 98% Mod AASHTO density	m3	19		
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		
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:				
12	Under floors,etc.	m2	340		
	Carried to Collection			R	

	Prescribed density tests on filling:				
13	In-situ dry density test.	No	3		
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:				
14	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	77		
	Concrete Paving Blocks				
	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:				
15	Paving to walkway areas, etc laid to falls.	m2	76		
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	76		
17	Ditto but circular on plan.	m	5		
	Kerbing				
	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.				
18	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	79		
19	Ditto but circular on plan.	m	6		
20	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	8		
21	Ditto but circular on plan.	m	4		
	Carried to Collection			R	

Carried to Collection R

Section 4
Bill No. 1
External Works

	THE FOLLOWING IN ONE BRICK WALL (GARDEN WALL)				
	Excavation in earth not exceeding 2m deep:				
22	Trenches.	m3	4		
	Extra over all excavations for carting away:				
23	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	4		
	Risk of collapse of excavations:				
24	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	44		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
25	Backfilling to trenches, holes, etc.	m3	4		
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:				
26	Under footings.	m3	4		
	Compaction of surfaces				
27	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.	m2	43		
	25 Mpa/19mm Concrete				
28	Strip footings.	m3	3		
	Test blocks:				
29	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	2		
	Carried to Collection			R	

	Reinforcement (Provisional)				
30	High tensile steel reinforcement bars to structural concrete work.	t	0.63		
	BRICKWORK IN FOUNDATIONS.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
31	One brick walls.	m2	31		
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):				
32	One brick walls.	m2	76		
	Brickwork reinforcement:				
33	230mm Wide reinforcement built in horizontally.	m	226		
34	Ditto but in foundations.	m	91		
	FACE BRICK				
	"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):				
35	One brickwall faced on both sides.	m2	30		
	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:				
36	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	45		
	Carried to Collection			R	

	STORMWATER CHANNELS				
	Excavation not exceeding 2m deep				
37	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	18		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
38	Off site to a dumping site to be found by the Contractor.	m3	18		
	Filling supplied by the contractor under channels				
39	G7 Base course material compacted to 98% Mod AASHTO density	m3	7		
40	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	3		
	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.				
41	700 x 80mm thick V' channel 150mm deep in centre laid in position in ground in 2000mm sections including all formwork, reinforcement, expansion joints, smooth finishing to top of concrete surface etc.	m	16		
42	Extra for 700mm angle	No	6		
43	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	6		
	Carried to Collection			R	

	Sundries:				
44	Create earth berm for stormwater control with in situ material 1,5m wide at base x 500mm high	m	17		
45	Construct shaped earth V-drain 2m wide with grass runners	m	26		
	THE FOLLOWING IN DISABLED ACCESS				
	SCREEN WALL				
	Excavation in earth not exceeding 2m deep:				
46	Trenches.	m3	2		
	Extra over all excavations for carting away:				
47	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	2		
	Risk of collapse of excavations:				
48	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	5		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
49	Backfilling to trenches, holes, etc.	m3	11		
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:				
50	Under footings.	m3	9		
	Compaction of surfaces				
51	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.	m2	38		
	Carried to Collection			R	

	25 Mpa/19mm Concrete				
52	Strip footings.	m3	3		
	Test blocks:				
53	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	Reinforcement (Provisional)				
54	High tensile steel reinforcement bars to structural concrete work.	t	0.63		
	BRICKWORK IN FOUNDATIONS.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
55	One brick walls.	m2	18		
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):				
56	One brick walls.	m2	78		
	Brickwork reinforcement:				
57	230mm Wide reinforcement built in horizontally.	m	213		
58	Ditto but in foundations.	m	26		
	FACE BRICK				
	"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):				
59	One brickwall faced on both sides.	m2	26		
	Carried to Collection			R	

	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:				
60	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	30		
	ACCESS RAMPS				
	Excavation not exceeding 2m deep				
61	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	7		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
62	Off site to a dumping site to be found by the Contractor.	m3	7		
	Filling supplied by the contractor under floors, aprons, etc				
63	G7 Base course material compacted to 98% Mod AASHTO density	m3	2		
64	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	2		
	Coarse river sand filling supplied by the contractor:				
65	Under floors etc.	m3	1		
	Compaction of surfaces:				
66	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.	m2	6		
	Prescribed density tests on filling:				
67	In-situ dry density test.	No	2		
	Carried to Collection			R	

	Reinforced 25Mpa/19mm Concrete:				
68	Ramps, Landings, etc.	m3	1		
	Finishing top surfaces of concrete smooth with a wood float:				
69	Surface beds, slabs, etc to falls and currents.	m2	7		
	Test blocks:				
70	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
71	12mm Joints not exceeding 300mm high.	m	3		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
72	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	3		
	Fabric reinforcement:				
73	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	6		
	Waterproofing under Surface beds				
74	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m2	6		
	Carried to Collection			R	

Section 4
Bill No. 1
External Works

	THE FOLLOWING IN ACCESS DRIVEWAY, ETC.				
	Excavation not exceeding 2m deep				
75	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	88		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
76	Off site to a dumping site to be found by the Contractor.	m3	55		
	Filling supplied by the contractor under driveways				
77	G7 Base course material compacted to 98% Mod AASHTO density	m3	27		
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.	m3	27		
	Rip and Re - compact insitu material on site compacted to 93% Mod. AASHTO density:				
79	Under floors,etc.	m2	60		
	Prescribed density tests on filling:				
80	In-situ dry density test.	No	2		
	Approved brand of anti-termite soil poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:				
81	Treat filling under paving with 'Chlordane Heptachlor Aldrin' or equal approved.	m2	213		
	150-175mm diameter bollards				
82	2100mm long tanalith treated gum pole planted 800mm deep including excavations, cartaways, concrete base etc.	No	7		
	Carried to Collection			R	

	THE FOLLOWING IN RETAINING WALLS, ETC.				
	Excavation in earth not exceeding 2m deep				
83	Trenches.	m3	3		
	Risk of collapse of excavations:				
84	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	10		
	Keeping excavations free of water:				
85	Keeping excavations free of all water other than subterranean water.		Item		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
86	Off site to a dumping site to be found by the Contractor.	m3	3		
	Filling with approved clean, hard, dry decomposed dolerite filling supplied and carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:				
87	Behind walls with selected backfilling supplied by the Contractor compacted to 98% Mod ASSHTO density	m3	21		
	Compaction of surfaces				
88	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.	m2	2		
	15Mpa/19mm Concrete				
89	Surface blinding under footings and bases.	m3	2		
	30Mpa/19mm Concrete				
90	Strip footings.	m3	3		
91	Cavity walls.	m3	14		
	Carried to Collection			R	

Section 4
Bill No. 1
External Works

	Test blocks:				
92	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	3		
	Fabric reinforcement:				
93	REF. 395 fabric reinforcement in concrete infill, strip footings.	m2	16		
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
94	330mm thick cavity brick Walls made of two leafs of 110mm wall with 110mm mesh reinforced concrete fill (concrete and reinforcement elsewhere measured).	m2	16		
	Brickwork reinforcement:				
95	230mm Wide reinforcement built in horizontally.	m	47		
	"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):				
96	Extra over brickwork for face brickwork externally.	m2	13		
	Brick-on-edge header course copings, sills, etc, of "Rustgold FBS/Qunu Travertine" or equal Architect approved clay face brick size 222 x 106 x 73mm, pointed with recessed joints on all exposed faces:				
97	220mm 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	9		
	Openings in Walls etc.				
98	Leave or form 32mm weephole through one brick wall	No	9		
	Membranes				
99	"Geofabric filter blanket wrapped around stone with 150mm side and 300mm end laps, including stitching.	m2	3		
	Carried to Collection			R	

Section 4
Bill No. 1
External Works

	Earth filling 300 x 300mm section of 19mm thick stone material surrounding 110mm uPVC pipe, supplied by the contractor compacted to 98% Mod AASHTO density:				
100	19mm Stone.	m3	1		
	THE FOLLOWING IN STORMWATER DRAINAGE, APRONS ETC.				
	STORMWATER APRONS				
	Excavation not exceeding 2m deep				
101	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	5		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
102	Off site to a dumping site to be found by the Contractor.	m3	7		
	Filling supplied by the contractor under floors, aprons, etc				
103	G7 Base course material compacted to 98% Mod AASHTO density	m3	2		
104	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	2		
	Coarse river sand filling supplied by the contractor:				
105	Under floors etc.	m3	2		
	Compaction of surfaces:				
106	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.	m2	17		
	Carried to Collection			R	

	Prescribed density tests on filling:				
107	In-situ dry density test.	No	1		
	Reinforced 25Mpa/19mm Concrete:				
108	Surface beds cast in panels on waterproofing.	m3	1		
109	Edge thickening	m3	1		
	Finishing top surfaces of concrete smooth with a wood float:				
110	Surface beds, slabs, etc to falls and currents.	m2	14		
	Test blocks:				
111	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	2		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
112	12mm Joints not exceeding 300mm high.	m	7		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
113	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	7		
	Fabric reinforcement:				
114	REF. 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	14		
	Waterproofing under Surface beds				
115	350 Micron USB orange polyethylene dampproof membrane in accordance with SABS 952 Type C laid on sand bed (elsewhere measured).	m2	14		
	Carried to Collection			R	

	STORMWATER CHANNELS				
	Excavation not exceeding 2m deep				
116	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	5		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
117	Off site to a dumping site to be found by the Contractor.	m3	3		
	Filling supplied by the contractor under channels				
118	G7 Base course material compacted to 98% Mod AASHTO density	m3	2		
119	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	2		
	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.				
120	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	17		
121	Extra for 700mm angle	No	3		
122	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		
	Carried to Collection			R	

	Sundries:				
123	Create earth berm for stormwater control with in situ material 1,5m wide at base x 500mm high	m	8		
124	Construct shaped earth V-drain 2m wide with grass runners	m	11		
	THE FOLLOWING IN STORMWATER DISH DRAIN, ETC.				
	Excavation not exceeding 2m deep				
125	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	24		
	Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):				
126	Off site to a dumping site to be found by the Contractor.	m3	21		
	Filling supplied by the contractor under floors, aprons, channels etc				
127	G7 Base course material compacted to 98% Mod AASHTO density	m3	3		
128	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	3		
	Coarse river sand filling supplied by the contractor:				
129	Under floors etc.	m3	7		
	Compaction of surfaces:				
130	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.	m2	14		
	Carried to Collection			R	

	Prescribed density tests on filling:				
131	In-situ dry density test.	No	2		
	Reinforced 25Mpa/19mm Concrete:				
132	Surface beds cast in panels on waterproofing.	m3	4		
	Finishing top surfaces of concrete smooth with a wood float:				
133	Surface beds, slabs, etc to falls and currents.	m2	22		
	Test blocks:				
134	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	1		
	Expansion joints with bitumen impregnated softboard between vertical concrete or brick surfaces:				
135	12mm Joints not exceeding 300mm high.	m	10		
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
136	10 x 12mm In movement joints in floors or walls including raking out expansion joint filler as necessary.	m	10		
	Fabric reinforcement:				
137	REF. 617 fabric reinforcement in concrete surface beds, slabs, etc.	m2	23		
	THE FOLLOWING IN SUB-SOIL DRAINAGE, ETC.				
	Site Clearance, ETC				
138	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	12		
	Excavation in earth not exceeding 2m deep:				
139	Trenches.	m3	3		
	Carried to Collection			R	

	Extra over all excavations for carting away:				
140	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	3		
	Risk of collapse of excavations:				
141	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	7		
142	Ditto, but from ground level to exceeding 1,5m.	m2	7		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
143	Backfilling to trenches, holes, etc.	m3	7		
	Earth filling 300 x 300mm section of 19mm thick stone material surrounding 110mm uPVC pipe, supplied by the contractor compacted to 98% Mod AASHTO density:				
144	19mm Stone.	m3	3		
	Membrane				
145	""Geofabric filter blanket wrapped around stone with 150mm side and 300mm end laps, including stitching.	m2	28		
	Keeping excavations free of water:				
146	Keeping excavations free from mud and all water including subterranean sources.		Item		
	Compaction of surfaces				
147	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.	m2	19		
	Carried to Collection			R	

	SOIL DRAINAGE				
	110mm Diameter perforated uPVC pipe surrounded with 300 x 300mm section of 20mm stone wrapped in A3 geotextile material.				
148	110mm uPVC pipe.	m	14		
	Extra for:				
149	110mm Tee.	No	2		
150	110mm Y junction.	No	2		
	THE FOLLOWING IN SOAKAWAY				
	Site Clearance, Etc				
151	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	2		
	Excavation in earth not exceeding 2m deep:				
152	Holes	m3	2		
	Extra over all excavations for carting away				
153	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	m3	2		
	Risk of collapse of excavations				
154	Sides of trench and hole excavations exceeding 1,5m deep but not exceeding 3,0m deep	m2	7		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 90% Mod AASHTO density				
155	Backfilling to holes	m3	2		
	Carried to Collection			R	

	Earth filling with stone material supplied by the contractor:				
156	Stone (>53mm).	m2	2		
	Membranes				
157	"BidimGeotextile or equal approved, lined on all sides including the top and bottom faces.	m2	9		
	Keeping excavations free of water				
158	Keeping excavations free of all water other than subterranean water		Item		
	THE FOLLOWING IN CULVERTS				
	Class 50D concrete pipes:				
159	450mm Diameter Concrete pipe laid in trenches not exceeding 1m deep including excavation, backfill, bedding, cart away and compaction.	m	8		
	Manholes:				
160	Manhole size 600 x 600mm not exceeding 1m deep internally to invert level formed of hard burnt half brick sides in 1:3 cement mortar on and including 100mm thick mass concrete (25 MPa at 28 days in 19 mm stone) bottom reinforced withY10 bars at 200c/c both directions and projecting 150mm beyond sides,cast on 50mm thick concrete Blinding (15Mpa) and mass concrete (15 MPa at 28 days in 12 mm stone) benching, rendered internally in 1:3 cement plaster with with C.I step irons staggered at 300c/c with 150mm thick grade 25 reinforced precast concrete manhole cover rebated for and fitted with and including cast iron double seal cover and frame type 14B in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in to allow including all necessary vitrified clay channels and fittings, excavations, formwork, holes through sides for pipes, etc	No	2		
	THE FOLLOWING IN HEADWALLS				
161	Excavation not exceeding 2m deep.	m3	3		
162	Risk of collapse not exceeding 1,5m deep	m2	7		
	Carried to Collection			R	

163	Keeping excavations free from water		Item		
164	Carting away surplus excavated material	m3	3		
165	150mm layer of G7 material compacted to 95% MOD AASHTO under concrete slab.	m3	1		
166	150mm layer of G5 material compacted to 95% MOD AASHTO under concrete slab.	m3	1		
167	25Mpa/19mm Reinforced concrete in bottom slabs and footings.	m3	1		
168	Formwork to edges, risers, ends and reveals not exceeding 300mm wide or high.	m	14		
169	Weld Mesh Ref 193 in Concrete bottom slab.	m2	6		
170	One brick wall of 14 MPa NFX bricks.	m2	6		
171	230mm Wide reinforcement built in horizontally.	m	15		
172	Plaster on brick walls.	m2	43		
173	Gabion mattress comprising of 20 to 30mm stones wrapped in A3 geotextile with voids filled with 1:3 cement/sand mortar.	m2	9		
	THE FOLLOWING IN RAINWATER TANKS AND STANDS				
	Excavation in earth not exceeding 2m deep:				
174	Trenches.	m3	7		
	Extra over all excavations for carting away:				
175	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	7		
	Risk of collapse of excavations:				
176	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	20		
	Carried to Collection			R	

Section 4
Bill No. 1
External Works

	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% MOD AASHTO density:				
177	Backfilling to trenches, holes, etc.	m3	12		
	Earth filling (G7 material) supplied by the contractor in layers not exceeding 150mm thick and compacted to 98% Mod AASHTO density:				
178	Under footings.	m3	3		
	Compaction of surfaces				
179	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.	m2	9		
	25 Mpa/19mm Concrete				
180	Strip footings.	m3	3		
	25 MPa/19mm Concrete:				
181	Tank concrete slab.	m3	3		
	Test blocks:				
182	Making and testing of 150x150x150mm concrete strength test cubes (Provisional).	No	2		
	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:				
183	Surface beds, slabs, etc.	m2	11		
	Rough Formwork to Sides:				
184	Edges, risers, ends and reveals not exceeding 300mm high.	m	16		
	Allens Meshco Square Mesh Fabric reinforcement:				
185	Type 617 fabric reinforcement in concrete slabs.	m2	7		
	Carried to Collection			R	

	BRICKWORK IN FOUNDATIONS.				
	Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar (Cement to be 42.5N all-purpose cement):				
186	One brick walls.	m2	19		
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar (Cement to be 42.5N all-purpose cement):				
187	One brick walls.	m2	57		
	Brickwork reinforcement:				
188	230mm Wide reinforcement built in horizontally.	m	43		
189	Ditto but in foundations.	m	47		
	FACE BRICK				
	"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):				
190	Extra over brickwork for face brickwork externally.	m2	19		
	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:				
191	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	14		
	Carried to Collection			R	

	Plastic water tanks etc:				
192	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	3		
193	Hole top of tank for 100mm pipe.	No	3		
	Carried to Collection			R	

	THE FOLLOWING IN SECURITY FENCING, ETC				
	Site clearance				
194	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.	m2	72		
	Straining wires, fencing and razor wire:				
195	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	70		
196	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	54		
197	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	71		
	Posts for 1 800mm high security fence:				
198	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	21		
199	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	5		
200	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	2		
	Carried to Collection			R	

Section 4
Bill No. 1
External Works

201	12mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers.	No	14		
202	Form 12mm diameter hole through fence post.	No	14		
	Gates:				
203	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		
204	Two leafed vehicular swing gate. Size 5500mm x 1800mm high.	No	1		
	PADLOCKS				
205	Supply 50 mm "Viro" Padlocks and Keys (or equal approved)	No	1		
	Carried to Collection			R	

Section 4

Bill No. 1

External Works

COLLECTION

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Section 4

Bill No. 1

External Works

COLLECTION

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Total Brought Forward from Page No.	86		
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Item No		Quantity	Rate	Amount

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 AGREMENT 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.

Carried to Collection R

Pre-fabricated Modular Units shall comprise of:

- Internal and external walls made of 40mm thick wall panel which consist of 0.5mm rigidised pre-painted 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

- 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

Carried to Collection R

	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	Profit	Item		
3	Attendance	Item		
	ELECTRICAL INSTALLATION			
4	Provide the sum of R80 000.00 for Electrical supply cables, flexible sleeves, terminations and lightning protection including COCs.	Item		80 000.00
5	Profit	Item		
6	Attendance	Item		
	COMMUNITY LIAISON OFFICER			
7	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
8	Profit	Item		
9	Attendance	Item		
	Carried to Collection		R	

Section 5
Bill No. 1
Provisional Sums

Section 5

Bill No. 1

Provisional Sums

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FINAL SUMMARY

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2	DEMOLITIONS (PROVISIONAL)	35		
3	BUILDING WORKS	65		
4	EXTERNAL WORKS (PROVISIONAL)	95		
5	PROVISIONAL SUMS	99		
	SUB-TOTAL		R	
	CONTINGENCIES			
	Allow five per cent (5%) of the above sub-total for contingencies to be used as directed and deducted in whole or in part if not required.		R	
	SUB-TOTAL		R	
	Add Value Added Tax at the rate of 15%		R	
	Carried to Form of Offer and Acceptance		R	