

Item No	Quantity	Rate	Amount
<u>SECTION 1</u>			
<u>BILL No.1</u>			
<u>PRELIMINARIES</u>			
<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>			
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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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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:

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Design responsibility (Clause 4).

4 F: V: T:

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Employer's agents (Clause 5).

5 F: V: T:

Item

Site representative (Clause 6).

6 F: V: T:

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Compliance with regulations (Clause 7).

7 F: V: T:

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	Works risk (Clause 8)			
1	F: V: T: 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'.	Item		
2	F: V: T: Works insurances (Clause 10).	Item		
3	F: V: T: Liability insurances (Clause 11).	Item		
4	F: V: T: Effecting insurances (Clause 12).	Item		
5	F: V: T: State Provisions (Clause 13).	Item		
6	F: V: T: Security (Clause 14).	Item		
7	F: V: T: <u>EXECUTION</u> Preparation for and execution of the works (Clause 15).	Item		
8	F: V: T: Access to the works (Clause 16).	Item		
9	F: V: T:	Item		
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	Contract instructions (Clause 17).			
1	F: V: T:	Item		
	<p>Setting out of the works (Clause 18).</p> <p>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.</p>			
2	<p>F: V: T:</p> <p>Assignment (Clause 19).</p>	Item		
3	<p>F: V: T:</p> <p>Nominated subcontractors (Clause 20).</p>	Item		
4	<p>F: V: T:</p> <p>Selected subcontractors (Clause 21).</p>	Item		
5	<p>F: V: T:</p> <p>Employer's Direct contractors (Clause 22).</p>	Item		
6	<p>F: V: T:</p> <p>Contractor's Domestic subcontractors (Clause 23).</p>	Item		
7	<p>F: V: T:</p> <p><u>COMPLETION</u></p>	Item		
	<p>Practical completion (Clause 24).</p>			
8	<p>F: V: T:</p> <p>Works completion (Clause 25).</p>	Item		
9	<p>F: V: T:</p> <p>Final completion (Clause 26).</p>	Item		
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<p>Latent defects liability period (Clause 27).</p> <p>Clause 27.0 is amended by the addition of the following clauses:</p> <p>"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".</p> <p>"27.4 The Contractor shall attend to defects during the Defects Liability Period on a progressive basis, to the satisfaction of the Principal Agent and will not be permitted to wait until the end of the Defect Liability Period or until the amount of defects accumulates in order to attend to a comprehensive list of defects"</p>			
<p>1 F: V: T:</p> <p>Sectional completion (Clause 28).</p>	Item		
<p>2 F: V: T:</p> <p>Revision of date for practical completion (Clause 29).</p>	Item		
<p>3 F: V: T:</p> <p>Penalty for non-completion (Clause 30).</p>	Item		
<p>4 F: V: T:</p> <p><u>PAYMENT</u></p>	Item		
<p>Interim payment to the contractor (Clause 31).</p> <p>The inclusion of materials and goods stored off site in the amount authorised for payment in terms of clause 31.3 shall be at the sole discretion of the principal agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank and clause 31.6.5 is therefore not applicable.</p>			
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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.

Clause 31.9 is amended as follows:

Payment shall be subject to the Employer giving the Contractor a Tax Invoice for the amount due. The Employer undertakes to ensure compliance with the administrative requirements of Sections 20 (2) and 21 (4) of the Value Added Tax Act (Act 89 of 1991). The Contractor agrees to the adoption of the self invoicing procedures and undertakes not to issue any tax invoices, debit or credit notes in respect of any transaction included in the Tax Invoices issued by the Employer. The above clauses shall constitute a written agreement between the parties as required in terms of the Value Added Tax Act (Act 89 of 1991).'

1	F: V: T:	Item
	Adjustment to the contract value (Clause 32).	
2	F: V: T:	Item
	Recovery of expense and loss (Clause 33).	
3	F: V: T:	Item
	Final account and final payment (Clause 34).	
4	F: V: T:	Item
	Payment to other parties (Clause 35).	
5	F: V: T:	Item

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CANCELLATION

Cancellation by Employer - Contractor's default (Clause 36).

1 F: V: T:

Item

Cancellation by Employer - Loss and damage (Clause 37).

2 F: V: T:

Item

Cancellation by Contractor - Employer's default (Clause 38).

3 F: V: T:

Item

Cancellation - Cessation of the works (Clause 39).

4 F: V: T:

Item

DISPUTE

Dispute Settlement (Clause 40)

5 F: V: T:

Item

SUBSTITUTE PROVISIONS

State Clauses (Clause 41)

6 F: V: T:

Item

CONTRACT VARIABLES

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

7 F: V: T:

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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

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 Makwaleni Junior Secondary School.

Clause 42.2.3

Work or Installations by Others: NIL

Clause 42.2.4

This Agreement is for a State Contract :- Yes

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<p>Payment will be made for materials and goods:- Yes</p> <p>Dispute resolution :- Mediation (in terms of clause 40) followed by litigation.</p> <p>Arbitration rules as recommended by the Association of Arbitrators (SA) :- N/A</p> <p>Clause 42.2.5</p> <p>Date on which possession of the site is intended to be given on :-</p> <p>5 working days from the date of the letter of appointment to the Contractor.</p> <p>Clause 42.2.6</p> <p>Period for the commencement of the works after the contractor takes possession of the site :- 2 Working days.</p> <p>Completion in Sections are required : NO</p> <p>Clause 42.2.7</p> <p>Intended date of practical completion and the penalty per calendar day for the works as a whole :-</p> <p>To be advised.</p> <p>Penalty amount to be advised.</p> <p>Clause 42.2.8</p> <p>Intended dates of practical completion and the penalties per calendar day for the works in sections :</p> <p>N/A</p> <p>Clause 42.2.9</p> <p>The law applicable to this agreement shall be that of - South Africa.</p>				
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INSURANCES (Clause 42.3)

Clause 42.3.1

Contract works insurance to be effected by Contractor
for the sum of: Contract Sum plus 20%

With a deductible of : to be determined by the
Contractor but not greater than the maximum of
R50,000.00 as stipulated by the Municipality.

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 issueing the policy).

Clause 42.3.3

Public liability insurance to be effected by Contractor

For the amount of: R 10 million

With a deductible of: R 2,500.00

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 :- 3

Clause 42.4.3

Bills of Quantities drawn up in accordance with :-

Standard System of Measuring Building Work - Seventh
Edition including all amendments

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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)

1 F: V: T:

Item

DOCUMENTS (B2)

Checking of documents (B2.1)

Notwithstanding the issue of the tender drawings, it will remain the responsibility of the Tenderer to study all available drawings at the offices of the Principal Agent during normal working hours in order to acquaint himself with all the cost implications of the design, programming, phasing, etc.

2 F: V: T:

Item

Provisional Bills of Quantities (B2.2) N/A

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, etc., or loss of profit related thereto.

3 F: V: T:

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	Availability of construction documentation (B2.3)			
1	F: V: T:	Item		
	Interests of Agents (B2.4)			
2	F: V: T:	Item		
	Priced documents (B2.5)			
3	F: V: T:	Item		
	Tender submission (B2.6)			
	Notwithstanding anything contained in this clause, Tenders shall be valid for a period of 90 (Ninety) calendar days from the closing date of tenders.			
4	F: V: T:	Item		
	<u>THE SITE (B3)</u>			
	Defined works area (B3.1)			
	The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site.			
	Workmen employed on the site are to be restricted to the immediate area of the site and access thereto.			
	The Tenderer shall make all necessary provision in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.			
5	F: V: T:	Item		
	Geotechnical investigation (B3.2)			
	A desktop geotechnical report is available upon request.			
6	F: V: T:	Item		
	Inspection of the Site (B3.3)			
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1	F: V: T: Existing premises occupied (B3.4)	Item		
2	F: V: T: Previous work - dimensional accuracy (B3.5)	Item		
3	F: V: T: Previous work - defects (B3.6)	Item		
4	F: V: T: Services - known (B3.7)	Item		
5	F: V: T: Services - unknown (B3.8)	Item		
6	F: V: T: Protection of trees (B3.9)	Item		
7	F: V: T: Articles of value (B3.10)	Item		
8	F: V: T: Inspection of adjoining properties (B3.11)	Item		
9	F: V: T: <u>MANAGEMENT OF CONTRACT (B4)</u> Management of the Works (B4.1)	Item		
10	F: V: T: Programme for the Works (B4.2)	Item		
11	F: V: T: Progress meetings (B4.3)	Item		
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1	F: V: T: Technical meetings (B4.4)	Item		
2	F: V: T: <u>SAMPLES AND SHOP DRAWINGS (B5)</u> Samples of materials (B5.1)	Item		
3	F: V: T: Workmanship samples (B5.2)	Item		
4	F: V: T: Shop drawings (B5.3)	Item		
5	F: V: T: <u>TEMPORARY WORKS AND PLANT (B6)</u> Deposits and fees (B6.1)	Item		
6	F: V: T: Enclosure of the works (B6.2) The contractor shall erect, maintain and remove at completion, hoardings, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the works and elements thereof all for the protection of the public and others.	Item		
7	F: V: T: Advertising (B6.3)	Item		
8	F: V: T: Plant, equipment, sheds and offices (B6.4)	Item		
9	F: V: T: Main notice board (B6.5)	Item		
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	One notice board shall be provided by the Contractor			
1	F: V: T:	Item		
	Subcontractors notice board (B6.6) (N/A)			
2	F: V: T:	Item		
	<u>TEMPORARY SERVICES (B7)</u>			
	Location (B7.1)			
3	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).			
4	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).			
5	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).			
6	F: V: T:	Item		
	Ablution facilities (B7.5)			
	The contractor shall provide toilet facilities on site for the works in accordance with:			
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Alternative A (i.e. to be provided for by the Contractor).				
1	F: V: T:	Item		
<u>PRIME COST AMOUNTS (B8)</u>				
Responsibility for prime cost amounts (B8.1)				
2	F: V: T:	Item		
<u>ATTENDANCE ON N/S SUBCONTRACTORS (B9)</u>				
General Attendance (B9.1)				
3	F: V: T:	Item		
Special Attendance (B9.2)				
4	F: V: T:	Item		
Commissioning - fuel, water and power (B9.3)				
5	F: V: T:	Item		
<u>FINANCIAL ASPECTS (B10)</u>				
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).				
6	F: V: T:	Item		
Payment of Preliminaries (B10.2)				
7	F: V: T:	Item		
Adjustment of Preliminaries (B10.3)				
8	F: V: T:	Item		
Payment certificate cash flow (B10.4)				
9	F: V: T:	Item		
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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.

1 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.

2 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.

3 F: V: T:

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<p>C4. Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.</p>			
<p>1 F: V: T:</p> <p>C5. As built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records.</p> <p>Three full sets of as-built drawings shall be submitted to the Principal Agent no later than fourteen days after practical completion.</p>	Item		
<p>2 F: V: T:</p> <p>C6. Construction Instructions</p> <p>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:</p> <p>a) Construction Instruction Book:</p> <p>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.</p> <p>Only instructions issued in such book shall be recognised.</p> <p>b) Daily Record Book:</p>	Item		
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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.

1 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.

2 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.

3 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.

4 F: V: T:

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C10. Method Statement

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	<p>The Tenderer shall produce, when required to do so by the Principal Agent, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Principal Agent shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works.</p>			
1	<p>F: V: T:</p> <p>C11. Unauthorised Persons/Workmen on Premises</p> <p>The Contractor shall at all times strictly exclude all unauthorised persons from the Works and the site and shall set up notice boards to that effect.</p> <p>No workmen or labourers (except security guards) are to be allowed under any circumstances to sleep or deposit any kit on the premises. The Contractor must provide any necessary independent shelter or shed required for any labour or watchmen on site, to the approval of the Employer.</p>	Item		
2	<p>F: V: T:</p> <p>C12. Mode of Procedure</p> <p>Notwithstanding anything to the contrary contained herein the Principal Agent at all times reserves the right to direct the order in which the various parts of the Contract are to be executed. The Contractor shall give priority to any individual section or portion of the Works that, in the opinion of the Principal Agent, requires to be expedited.</p> <p>Should it appear, in the Principal Agent's opinion, that work in any area is not being executed in accordance with the requirements of the Contract Programme, the Contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the Principal Agent and to the Contractor's cost.</p>	Item		
3	<p>F: V: T:</p>	Item		
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<p>C13. Location of Temporary Buildings and Temporary Services</p> <p>The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hardstanding and services, hoardings, dust screens, tunnelling, etc., required for his own and sub-contractors use during the construction and maintenance period.</p> <p>There is no guarantee given or implied that Site conditions will be such that the Contractor will be able to erect such temporary works, roads, hardhats, offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain all necessary permission and pay all costs in connection therewith.</p>			
<p>1 F: V: T:</p> <p>C14. Removal and Making Good of Temporary Works, etc, on Completion</p> <p>The Contractor shall remove (except where specifically stated otherwise) all temporary works, roads, services and the like used for this contract and shall make good to the entire satisfaction of the Principal Agent any damage resulting therefrom.</p>	Item		
<p>2 F: V: T:</p> <p>C15. Occupational Health and Safety Act</p> <p>The Contractor shall for the duration of this contract be deemed to be the mandatory of the Council for the purposes of the Occupational Health and Safety Act, Act 85 of 1993, and he shall prior to taking occupation of the site satisfy the Council by means of written representations that he has fully complied with the relevant requirements of the said Act.</p> <p>Acceptance by the Council of the Contractors written representations in terms of the above shall constitute an agreement in writing to the arrangements and procedures between the parties to ensure compliance by the Contractor with the provisions of the Act referred to therein, for the purposes of Section 37(2) of the said Act.</p>	Item		
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The Council shall at all times have the right to summarily suspend the performance of the Contractor hereunder pending compliance by the Contractor with any requirement, regulation and/or direction referred to.

The Council shall be entitled to set-off against any amount owed by the Council to the Contractor hereunder any loss or damage suffered by it as a result of the suspension of the Contractor's performance in the circumstances envisaged above.

The Tenderer shall price for all necessary items to comply with the Occupational Health and Safety.

1 F: V: T:

Item

C16. Covid-19 Compliance Measures

The Contractor is required to price for Covid 19 compliance and the pricing thereof shall be deemed to include all the mandatory requirements.

2 F: V: T:

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PRELIMINARIES AND GENERAL

Bill No. 1

Preliminaries

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PRELIMINARIES AND GENERAL

Bill No. 1

Preliminaries

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL No. 01</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>Note:</u></p> <p>For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition July 2014).</p> <p><u>Quantity breakdown</u></p> <p>In this Section No. 2 of the Bills of Quantities a breakdown of the total quantities into the various buildings is indicated below each description as follows:</p> <p>A1 - DWG 05 - Staff Ablutions A2 - DWG 08 - Grade R Ablutions A3 - DWG 11 - Male ablutions A4 - DWG 16 - Female Ablutions (x 2)</p> <p>It should be noted that due to the "rounding off" factor marginal differences can occur between the sum of the parts to the total given in the quantity column. For pricing purposes only the amount in the quantity column is to be used.</p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>Site clearance</u></p>			
1	<p>Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site.</p> <p style="text-align: center;">A1 : 68 A2 : 60 A3 : 119 A4 : 152</p>	m2	399	
	Carried to Collection		R	
	<p>BUILDING WORKS</p> <p>Bill No. 1</p> <p>EARTHWORKS (PROVISIONAL)</p>			

EXCAVATIONS, FILLING, ETC.

BULK EXCAVATIONS

Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away

1	Pit toilet.	m3	27	
	A1 : 3 A2 : 4 A3 : 10 A4 : 10			

Excavate in earth exceeding 2m deep not exceeding 4m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away

2	Pit toilet.	m3	255	
	A1 : 25 A2 : 56 A3 : 38 A4 : 136			

Excavations in earth of more difficult character

3	Extra over excavations in earth for excavation in soft rock.	m3	60	
	A1 : 10 A2 : 10 A3 : 10 A4 : 30			

4	Extra over excavations in earth for excavation in hard rock.	m3	29	
	A1 : 5 A2 : 5 A3 : 5 A4 : 14			

EXCAVATIONS FOR FOUNDATIONS, ETC.

Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away

5	Surface trenches.	m3	30	
	A1 : 6 A2 : 5 A3 : 7 A4 : 12			

Excavations in earth of more difficult character

6	Extra over excavations in earth for excavation in soft rock.	m3	5	
	A1 : 1 A2 : 1 A3 : 1 A4 : 2			

7	Extra over excavations in earth for excavation in hard rock.	m3	5	
	A1 : 1 A2 : 1 A3 : 1 A4 : 2			

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EARTHWORKS (PROVISIONAL)

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<u>Carting away of excavated material</u>					
1	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. A1 : 49 A2 : 55 A3 : 45 A4 : 148	m3	297		
<u>Risk of collapse of excavations</u>					
2	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. A1 : 12 A2 : 12 A3 : 21 A4 : 24	m2	69		
3	Allow for risk of collapse to sides of excavations exceeding 1.5m deep including all necessary timber shoring, etc. A1 : 39 A2 : 43 A3 : 38 A4 : 104	m2	224		
<u>Working space</u>					
4	Excavate in earth for working space exceeding 1500mm and not exceeding 3000mm deep, 500mm from the face of blockwork in the pit, for waterproofing purposes including backfilling with G7 imported material compacted in 150mm thick layers to 95% Modified AASHTO dry density. A1 : 39 A2 : 43 A3 : 38 A4 : 70	m2	190		
<u>Keeping excavations free of water</u>					
5	Allow for keeping the excavations free from water.	Item			
<u>Filling</u>					
6	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. A1 : 9 A2 : 3 A3 : 6 A4 : 8	m3	26		
<u>Foundation courses</u>					
7	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 95% modified AASHTO dry density to trenches, bases, etc. A1 : 9 A2 : 3 A3 : 14 A4 : 6	m3	32		
8	50mm Thick layer of approved river sand supplied by the Contractor spread and levelled under floors, etc. A1 : 1 A2 : 0 A3 : 1 A4 : 1	m3	3		
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BUILDING WORKS					
Bill No. 1					
EARTHWORKS (PROVISIONAL)					

<u>Compaction of surfaces</u>					
1	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. A1 : 44 A2 : 20 A3 : 55 A4 : 46	m2	165		
2	Scarify in-situ material to a depth of 75mm and compact to 93% Mod AASHTO density. A1 : 3 A2 : 3 A3 : 3 A4 : 6	m2	15		
<u>Filter fabric</u>					
3	Grade 3 needle punched non-woven synthetic fibre filter fabric laid vertically against waterproofing membrane as backfilling proceeds. A1 : 39 A2 : 66 A3 : 57 A4 : 150	m2	312		
<u>Weedkillers, insecticides, etc.</u>					
<u>Soil insecticide in accordance with SANS 5859</u>					
4	Under floors, etc. including forming and poisoning shallow furrows against all foundation walls, filling in furrows and ramming. A1 : 22 A2 : 17 A3 : 53 A4 : 30	m2	122		
5	To bottoms and sides of trenches. A1 : 15 A2 : 10 A3 : 5 A4 : 12	m2	42		
6	To bottoms and sides of pit excavation. A1 : 59 A2 : 66 A3 : 70 A4 : 104	m2	299		
<u>Tests</u>					
7	Allow for Mod AASHTO density tests on filling.	No	20.00		
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EARTHWORKS (PROVISIONAL)					

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BUILDING WORKS

Bill No. 1

EARTHWORKS (PROVISIONAL)

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EARTHWORKS (PROVISIONAL)

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 02</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>CONCRETE</u>			
	<u>Mass concrete 15MPa (19mm stone) in:</u>			
1	Blinking beneath bases, strip footings, etc cast against excavated surfaces. A1 : 1.0 A2 : 1.3 A3 : 0.9 A4 : 3.8	m3	7.0	
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>			
2	Slabs including beams and inverted beams. A1 : 6 A2 : 5 A3 : 6 A4 : 14	m3	31	
3	Surface beds A1 : 2 A2 : 2 A3 : 3 A4 : 10	m3	17	
4	Aprons cast in panels A1 : 1 A2 : 1 A3 : 1 A4 : 2	m3	5	
5	100 x 100mm Triangular fillets cast on top of pit Base Slab A1 : 13 A2 : 15 A3 : 13 A4 : 38	m	79	
	<u>Surface treatment</u>			
6	Float surface of concrete to a wood float finish. A1 : 27 A2 : 25 A3 : 36 A4 : 66	m2	154	
7	Powerfloating of concrete surface bed. A1 : 12 A2 : 12 A3 : 14 A4 : 26	m2	64	
	<u>Test blocks and testing</u>			
8	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	20	
	Carried to Collection			
	BUILDING WORKS Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT			
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POLYSTERENE BLOCKS ETC

Polystyrene blocks in composite slabs

1	850 x 500mm extreme wide at the bottom, 550mm wide at the top x 110mm high polystyrene block laid end to end rows	No	116
	A1 : 20 A2 : 20 A3 : 20 A4 : 56		

PREFABRICATED CONCRETE RIB

25MPa precast reinforced concrete rib

2	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths not exceeding 5m.	m	95
	A1 : 15 A2 : 20 A3 : 14 A4 : 46		

FORMWORK

Supporting bearers to prefabricated beams

3	Bearers propped up exceeding 1,5m high and not exceeding 3.5m high	m	126
	A1 : 18 A2 : 26 A3 : 18 A4 : 64		

Permanent formwork

4	Soffits of slabs not exceeding 250mm thick and exceeding 1.5m and not exceeding 3.5 above bearing level.	m2	68
	A1 : 10 A2 : 14 A3 : 10 A4 : 34		

Rough formwork (use and waste) to concrete to:

Edges, risers, ends and reveals

5	Edge, riser, etc not exceeding 300mm high.	m	138
	A1 : 24 A2 : 21 A3 : 33 A4 : 60		

Openings

6	Leave or form circular opening not exceeding 1m girth through 60mm thick reinforced concrete slab.	No	48
	A1 : 8 A2 : 10 A3 : 8 A4 : 22		

7	Leave or form square opening not exceeding 1m girth through 60mm thick reinforced concrete slab.	No	15
	A1 : 2 A2 : 3 A3 : 2 A4 : 8		

8	Cut or form circular opening not exceeding 1m girth through 110mm thick polystyrene block	No	48
	A1 : 8 A2 : 10 A3 : 8 A4 : 22		

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BUILDING WORKS

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

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1	Cut or form square opening not exceeding 1m girth through 110mm thick polystyrene block. A1 : 2 A2 : 3 A3 : 2 A4 : 8	No	15
2	Cut or form circular opening not exceeding 1m girth through permanent formwork A1 : 8 A2 : 10 A3 : 8 A4 : 22	No	48
3	Cut or form square opening not exceeding 1m girth through permanent formwork A1 : 2 A2 : 3 A3 : 2 A4 : 8	No	15
<u>Movement joints</u>			
4	10mm Thick closed cell polyethylene joint forming material with hinged blocking piece, not exceeding 300mm wide, between concrete and concrete or brickwork surfaces. A1 : 24 A2 : 21 A3 : 33 A4 : 60	m	138
5	Remove 10 x 15mm hinged blocking piece, insert polycord bond breaker and seal with an approved 2 part polysulphide sealer. A1 : 24 A2 : 21 A3 : 33 A4 : 60	m	138
6	Slip joint not exceeding 300mm wide formed of two layers of 3 Ply malthoid laid on and including a 3:1 cement mortar bedding. A1 : 24 A2 : 21 A3 : 33 A4 : 60	m	138
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>High tensile rod reinforcement to structural concrete work</u>			
7	16mm Diameter bars. A1 : 0.120 A2 : 0.087 A3 : 0.161 A4 : 0.096	t	0.464
8	10mm Diameter bars. A1 : 0.221 A2 : 0.155 A3 : 0.214 A4 : 0.390	t	0.980
<u>High tensile welded steel mesh reinforcement :</u>			
9	Ref: 193 cast into concrete surfaces. A1 : 27 A2 : 24 A3 : 36 A4 : 66	m2	153
10	Ref: 311 cast into concrete surfaces. A1 : 15 A2 : 18 A3 : 14 A4 : 40	m2	87

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CONCRETE, FORMWORK & REINFORCEMENT

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CONCRETE, FORMWORK & REINFORCEMENT

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CONCRETE, FORMWORK & REINFORCEMENT

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 03</u>			
	<u>MASONRY</u>			
	<u>FOUNDATION BRICKWORK (PROVISIONAL)</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
1	Half brick wall. A1 : 5 A2 : 4 A3 : 9 A4 : 36	m2	54	
2	One brick wall. A1 : 34 A2 : 37 A3 : 33 A4 : 102	m2	206	
	<u>Reinforcement to brickwork</u>			
3	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 19 A2 : 19 A3 : 39 A4 : 156	m	233	
4	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 133 A2 : 146 A3 : 129 A4 : 404	m	812	
	<u>EXTERNAL FACE BRICKWORK</u>			
	<u>"Rustgold FBS" 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:</u>			
5	Extra over ordinary brickwork for facing and pointing in stretcher bond. A1 : 5 A2 : 4 A3 : 7 A4 : 10	m2	26	
	<u>SUPERSTRUCTURE BRICKWORK</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
6	Half brick wall. A1 : 12 A2 : 9 A3 : 21 A4 : 34	m2	76	
7	One brick wall. A1 : 58 A2 : 37 A3 : 64 A4 : 124	m2	283	
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	BUILDING WORKS Bill No. 3 MANSORY			
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<u>Beamfilling</u>					
1	Half brick wall. A1 : 7 A2 : 6 A3 : 9 A4 : 16	m2	38		
<u>BRICKWORK SUNDRIES</u>					
<u>Brickwork air ventilation, etc.</u>					
2	Extra over brickwork for cutting to form 120 x 85mm ventilation openings in 220mm wall A1 : 174 A2 : 75 A3 : 246 A4 : 432	No	927		
<u>Reinforcement to brickwork</u>					
3	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 49 A2 : 60 A3 : 81 A4 : 120	m	310		
4	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 151 A2 : 157 A3 : 180 A4 : 484	m	972		
<u>Bagging</u>					
5	Bag down outer face of inner skin of brick wall in 4:1 cement slurry. A1 : 58 A2 : 37 A3 : 64 A4 : 124	m2	283		
<u>Precast pre-stressed reinforced concrete lintols</u>					
6	75 x 110mm Lintol not exceeding 3m long, built at both ends into brickwork over opening. A1 : 4 A2 : 2 A3 : 2 A4 : 10	m	18		
7	90 x 140mm Lintol not exceeding 3m long, built at both ends into brickwork over opening. A1 : 0 A2 : 4 A3 : 0 A4 : 0	m	4		
<u>Hoop iron ties, cramps, etc.</u>					
8	1.6 x 30mm Galvanized hoop iron roof tie 1100mm long with one end wrapped around and spiked to timber the other end built a minimum of six courses deep into brickwork as the work proceeds. A1 : 12 A2 : 10 A3 : 18 A4 : 28	No	68		
9	30 x 1,2mm Galvanised hoop iron strap 800mm long shot pinned to brickwork and bent into brickwork A1 : 2 A2 : 2 A3 : 2 A4 : 4	No	10		
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BUILDING WORKS Bill No. 3 MANSORY					

BUILDING WORKS
Bill No. 3
MANSORY

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EXTERNAL FACE BRICKWORK

"Rustgold FBS" 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:

1	Extra over ordinary brickwork for facing and pointing in stretcher bond. A1 : 65 A2 : 43 A3 : 73 A4 : 140 <u>Face brick copings, lintols, cills, etc.</u>	m2	321		
2	Extra over brickwork for brick-on-edge header course tread including pointing to one face and top. A1 : 2 A2 : 5 A3 : 2 A4 : 4 <u>Brickwork air ventilation, etc.</u>	m	13		
3	Extra over brickwork for fair cutting to form 120 x 85mm ventilation openings in facebrick, including facing and pointing A1 : 174 A2 : 75 A3 : 246 A4 : 432	No	927		

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BUILDING WORKS
Bill No. 3
MANSORY

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BUILDING WORKS

Bill No. 3

MANSORY

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 04</u>			
	<u>WATERPROOFING</u>			
	<u>DAMP-PROOF COURSE</u>			
	<u>SHEET OR MEMBRANE WATERPROOFING</u>			
	<u>250 Micron "Gunplas USB" green polyethylene sheeting</u> <u>:</u>			
1	Laid flat on prepared sand bed under solid floor. A1 : 31 A2 : 29 A3 : 39 A4 : 80	m2	179	
	<u>FLASHING STRIPS</u>			
	<u>Elastic acrylic and rubberised bitumen compound with</u> <u>"waterproof membrane" applied in strict accordance with</u> <u>the Manufacturer's instructions :</u>			
2	Flashing strips around 110mm diameter PVC vent pipes through steel roof sheeting. A1 : 0 A2 : 1 A3 : 0 A4 : 2	m	3	
	<u>LIQUID WATERPROOFING</u>			
	<u>Two coats "ABE Brickseal"</u>			
3	Vertically on bagged surface of brickwork. A1 : 58 A2 : 37 A3 : 64 A4 : 124	m2	283	
	<u>MEMBRANE WATERPROOFING</u>			
	<u>"Duraflex" or equally approved cementitious flexible</u> <u>waterproofing slurry including saturation membrane with</u> <u>75mm side and 100mm end laps applied in accordance</u> <u>with manufactures specifications</u>			
4	Vertical surfaces of plastered brickwork. A1 : 28 A2 : 32 A3 : 28 A4 : 82	m2	170	
	<u>PROTECTION</u>			
	<u>"Abe Cote SF 356" or other equal approved epoxy tar</u> <u>coating on</u>			
5	Vertical surfaces of plastered brickwork. A1 : 28 A2 : 32 A3 : 28 A4 : 82	m2	170	
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	Bill No. 4			
	WATERPROOFING			
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Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 05</u>			
	<u>ROOF COVERINGS, ETC.</u>			
	<u>PROFILED SHEETING OF METAL, FIBRE CEMENT, PLASTIC, ETC.</u>			
	<u>Metal roof sheeting</u>			
	<u>0,53mm Thick Z200 "IBR Profile" galvanised metal roof sheeting, in single sheet lengths, with "Chromadek" finish to external face and standard backing coat to internal face :</u>			
1	Roof sheeting laid to a mono-pitch secured to timber purlins at approximately 940mm centres including turning up sheet at ridge and turning down sheet at eaves. A1 : 25 A2 : 21 A3 : 36 A4 : 58	m2	140	
	<u>Circular cutting</u>			
2	Circular cutting on roof sheeting for ventilators, vent pipes, etc. A1 : 2 A2 : 2 A3 : 1 A4 : 4	m	9	
	<u>Accessories, etc. to match roof sheeting</u>			
3	Ridge capping 550mm girth. A1 : 6 A2 : 5 A3 : 9 A4 : 14	m	34	
4	Broad flute serrated closer including polyclosers. A1 : 6 A2 : 5 A3 : 9 A4 : 14	m	34	
5	Narrow flute serrated closer including polyclosers. A1 : 6 A2 : 5 A3 : 9 A4 : 14	m	34	
6	Ridge finial. A1 : 2 A2 : 2 A3 : 2 A4 : 4	No	10	
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	ROOF COVERINGS, ETC			
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Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 06</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>CARPENTRY</u>			
	<u>PLATE NAILED TIMBER ROOF CONSTRUCTION</u>			
	<u>Fixing:</u>			
	All nailing of timber roof rafters, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to blockwork or concrete.			
	<u>Erection certificates</u>			
1	Contractor is to supply a roof rafters erection certificate for the building stating that the erection and installation of the roof rafters has been inspected and approved by a professional registered structural engineer. A1 : 1 A2 : 1 A3 : 1 A4 : 2	No	5	
	<u>Purlins, bracing, etc.</u>			
	<u>Sawn softwood :</u>			
2	38 x 114mm Wall plate wired down (wire ties elsewhere). A1 : 19 A2 : 29 A3 : 24 A4 : 28	m	100	
3	50 x 76mm Purlins. A1 : 32 A2 : 26 A3 : 226 A4 : 74	m	358	
4	76 x 38mm S5 Treated Timber A1 : 6 A2 : 6 A3 : 11 A4 : 22	m	45	
5	38 x 38 x 152mm Long cleat spiked to rafter foot. A1 : 8 A2 : 5 A3 : 9 A4 : 14	No	36	
6	50 x 76 x 500mm Long sprocket spiked to timber purlin. A1 : 10 A2 : 10 A3 : 10 A4 : 20	No	50	
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	BUILDING WORKS Bill No. 6 CARPENTRY AND JOINERY			
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<u>Laminated S. A. Pine</u>					
1	152 x 38mm S5 Timber Rafters A1 : 93 A2 : 77 A3 : 35 A4 : 54	m	259		
<u>Sundries:</u>					
2	Hurricane clip fixed to purlin and rafter. A1 : 30 A2 : 25 A3 : 45 A4 : 70	No	170		
<u>JOINERY</u>					
<u>Plastic, fibre cement, etc.</u>					
<u>Pressed fibre-cement:</u>					
3	12 x 225mm Fascia board drilled and brass screwed to rafter feet including galvanised steel H-profile jointing strips, etc. A1 : 6 A2 : 6 A3 : 9 A4 : 14	m	35		
4	80 x 275mm Barge board drilled and brass screwed to timber rafter including galvanised steel H-profile jointing strips, etc. A1 : 8 A2 : 8 A3 : 8 A4 : 16	m	40		
<u>TIMBER DOORS, WINDOWS ETC.</u>					
<u>Wrot hardwood :</u>					
5	44mm Thick framed, ledged, braced and battened door, size 762 x 1000mm high, comprising 44 x 180mm stiles and top rail, 22 x 180mm bottom rail and diagonal brace and filled flush on one side between framing with 22mm thick tongued, grooved and V-jointed both sides vertical boarding in narrow matched widths. A1 : 0 A2 : 5 A3 : 0 A4 : 0	No	5		
<u>Frames and linings</u>					
<u>Wrot hardwood :</u>					
6	38 x 100mm Meranti jamb lining bolted to brickwork with and including 10 x 140mm masonry anchors at approximately 600mm centres. A1 : 0 A2 : 6 A3 : 0 A4 : 0	m	6		
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BUILDING WORKS

Bill No. 6

CARPENTRY AND JOINERY

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BUILDING WORKS

Bill No. 6

CARPENTRY AND JOINERY

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	<u>SECTION No. 2</u>			
	<u>BILL No. 07</u>			
	<u>IRONMONGERY</u>			
	<u>IRONMONGERY TO TIMBER</u>			
	<u>Hinges</u>			
1	100 x 75mm Heavy duty brass butt hinges. A1 : 0 A2 : 10 A3 : 0 A4 : 0	No	10	
	<u>Handles</u>			
2	100mm Chromium plated pull handle. A1 : 0 A2 : 5 A3 : 0 A4 : 0	No	5	
	<u>IRONMONGERY TO METALWORK</u>			
	<u>Locksets, etc. provided with two keys and to be masterkeyed</u>			
3	51mm brass padlock with stainless steel shackle. A1 : 2 A2 : 1 A3 : 2 A4 : 2	No	7	
	<u>IRONMONGERY FIXED TO CONCRETE, TILING, ETC.</u>			
	<u>Push plates, kicking plates, indicator plates, etc.</u>			
4	152 x 152 x 3mm Thick anodised silver aluminium sex indicator plate. A1 : 2 A2 : 1 A3 : 2 A4 : 2	No	7	
5	152 x 152 x 3mm Thick anodised silver aluminium disabled indicator plate. A1 : 0 A2 : 0 A3 : 0 A4 : 2	No	2	
	<u>3mm Thick x 32mm high clear perspex signs with white painted numerals or letters, countersunk tap screwed to steel door frame</u>			
6	Sign with "MALE STAFF" enscribed. A1 : 1 A2 : 0 A3 : 1 A4 : 0	No	2	
7	Sign with "FEMALE STAFF" enscribed. A1 : 1 A2 : 1 A3 : 0 A4 : 4	No	6	
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2	50mm Plastic key tag.				
	A1 : 2	A2 : 1	A3 : 2	A4 : 4	

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Section No. 2

BUILDING WORKS

Bill No. 7

IRONMONGERY

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BUILDING WORKS

Bill No. 7

IRONMONGERY

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	<u>SECTION No. 2</u>			
	<u>BILL No. 08</u>			
	<u>STRUCTURAL STEEL</u>			
	<u>Pre-galvanised (Z450) structural steelwork (Grade 350W)</u>			
1	100 x 50 x 20 x 2mm Cold formed lipped channel including bolting to brickwork at 910mm centres. <div>A1 : 3 A2 : 0 A3 : 3 A4 : 6</div>	m	12	
			R	
Carried Forward to Summary of Section No. 2				
BUILDING WORKS Bill No. 8 STRUCTURAL STEEL				

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 09</u>			
	<u>METALWORK</u>			
	<u>Hot dipped galvanised mild steel gates</u>			
1	Single gate, size 900mm wide x 2050mm high, the leaf formed of 25 x 25 x 2mm wall thickness mild steel pipe framing all round and two horizontal intermediate rails with mitred and welded angles, the gate filled in with 12mm diameter mild steel bars welded, at each end, vertically to perimeter and intermediate framing at not exceeding 109mm centres, the leaf fitted with a 150mm long padbolt, the leaf to receive hasp and staple formed of 40 x 6mm mild steel flat bar welded onto frames and including fitting with two 50 x 10mm flat bar tee brackets and 16mm round bar pin hinges, twice bolted to wall with and including M16 x 95mm galvanised coach screws. A1 : 2 A2 : 1 A3 : 2 A4 : 2	No 7		
	<u>Hot dipped galvanised mild steel mesh screen</u>			
2	Mesh screen, size 2230mm wide x 2100mm high, formed of 32 x 32 x 2mm wall thickness square hollow section framing all round and two horizontal rails with mitred and welded angles, the framing covered with 50 x 50 x 4mm weld mesh tack welded on, and including fitting with two 50 x 10mm flat bar tee brackets and 16mm round bar pin hinges, twice bolted to wall with and including M16 x 95mm galvanised coach screws. A1 : 0 A2 : 1 A3 : 0 A4 : 0	No 1		
	Carried to Collection		R	
	BUILDING WORKS			
	Bill No. 9			
	METALWORK			

<u>Hot dipped galvanised steel cladded doors and accessories</u>				
1	Door, size 760 x 1680mm high, formed of 19 x 19mm tubular steel perimeter framing and horizontal middle rail welded at angles and intersections, covered on one side with 0,6mm galvanised sheeting, prepainted "Golden Brown", pressed to shape with edges lapped around and rivetted to frame at 300mm centres, with slot for and including barrel bolt, the gate fitted with and including 25mm diameter x 2120mm long pivot pipe support welded on, 150 x 38 x 3mm top bearing bolted to beam with 2 x 6mm diameter bolts, including top cap bearing bush, washers, bottom bearing bush and finishing smooth on all exposed edges, complete with all fixing brackets, bolts etc. <div>A1 : 4 A2 : 0 A3 : 4 A4 : 8</div>	No	16	
<u>Pre-galvanised steel chawl doors</u>				
2	Single door to suit one brick wall, size 950 x 2030mm high, provided complete with integral frame, ironmongery, etc. finished with red oxide primer to receive paint (elsewhere). <div>A1 : 0 A2 : 0 A3 : 0 A4 : 2</div>	No	2	
Carried to Collection				
BUILDING WORKS				
Bill No. 9				
METALWORK				

Section No. 2

BUILDING WORKS

Bill No. 9

METALWORK

COLLECTION

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BUILDING WORKS

Bill No. 9

METALWORK

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 10</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Untinted granolithic screeds, etc. mixed by volume 4 parts granite chips, 1 part sand and 2 parts cement</u>			
1	40mm Thick screed to floors and landings. A1 : 17 A2 : 14 A3 : 26 A4 : 40	m2	97	
2	25mm Thick screed to falls A1 : 4 A2 : 5 A3 : 3 A4 : 12	m2	24	
	<u>Skirtings</u>			
3	75mm High coved skirting. A1 : 33 A2 : 26 A3 : 40 A4 : 80	m	179	
	<u>PLASTER</u>			
	<u>One coat internal 1:4 cement plaster on :</u>			
4	Brick walls in pit. A1 : 42 A2 : 45 A3 : 56 A4 : 196	m2	339	
5	Brick walls (ICP) A1 : 96 A2 : 64 A3 : 101 A4 : 152	m2	413	
	Carried Forward to Summary of Section No. 2			
	BUILDING WORKS			
	Bill No. 10			
	PLASTERING			
			R	

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 11</u>			
	<u>PLUMBING AND DRAINAGE</u>			
	<u>(PROVISIONAL)</u>			
	<u>Roof gutters, rainwater pipes, etc.</u>			
	<u>uPVC gutter including gutter brackets</u>			
1	125mm Half round eaves gutters on gutter brackets at 1000mm centres maximum fixed to fascias. A1 : 6 A2 : 5 A3 : 9 A4 : 14	m	34	
2	Extra over uPVC gutter for forming discharge outlet to suit 100 x 75mm downpipe. A1 : 1 A2 : 1 A3 : 1 A4 : 2	No	5	
3	Extra over gutter for stopped end. A1 : 2 A2 : 2 A3 : 2 A4 : 4	No	10	
4	75mm Rainwater downpipe fixed to wall with and including proprietary holderbats. A1 : 4 A2 : 2 A3 : 4 A4 : 4	m	14	
5	Extra over rainwater downpipe for bend. A1 : 2 A2 : 2 A3 : 2 A4 : 4	No	10	
	<u>PIPEWORK, ETC.</u>			
	<u>Pipes, pipe fittings, etc.</u>			
	<u>WATER SUPPLIES</u>			
	<u>Class 6 HDPE waterpipe</u>			
6	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 A2 : 0 A3 : 0 A4 : 22	m	22	
	<u>Extra over Class 6 HDPE pipe for fittings</u>			
7	22mm Fittings. A1 : 0 A2 : 0 A3 : 0 A4 : 12	No	12	
	Carried to Collection			R
	BUILDING WORKS			
	Bill No. 11			
	PLUMBING AND DRAINAGE (PROVISIONAL)			

<u>Class 6 HDPE waterpipe</u>							
1	32mm Pipe and fixing from water tanks to the stand pipe. including any necessary proprietary holderbats, fixings, etc. A1 : 7 A2 : 7 A3 : 7 A4 : 14	m	35				
<u>Extra over Class 6 HDPE pipe for fittings</u>							
2	32mm Fittings. A1 : 3 A2 : 3 A3 : 3 A4 : 6	No	15				
<u>Class 6 HDPE waterpipe</u>							
3	50mm Overflow Pipe and fixing from water tanks. including any necessary proprietary holderbats, fixings, etc. A1 : 8 A2 : 8 A3 : 8 A4 : 15	m	38				
<u>Extra over Class 6 HDPE pipe for fittings</u>							
4	50mm Fittings. A1 : 2 A2 : 2 A3 : 2 A4 : 4	No	10				
<u>Class 2 copper pipes with straight compression fittings</u>							
5	15mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 6 A2 : 0 A3 : 19 A4 : 0	m	25				
<u>Extra over copper pipes for brass compression fittings</u>							
6	15mm Fittings. A1 : 8 A2 : 0 A3 : 15 A4 : 0	No	23				
<u>Extra over copper pipes for capillary fittings with soldered joints</u>							
7	15mm Fittings. A1 : 4 A2 : 0 A3 : 6 A4 : 0	No	10				
<u>SOIL DRAINAGE</u>							
<u>uPVC Pipes with solvent welded straight joints :</u>							
8	40mm Pipes. A1 : 3 A2 : 0 A3 : 9 A4 : 0	m	12				
9	50mm Pipes. A1 : 2 A2 : 0 A3 : 4 A4 : 0	m	6				
Carried to Collection						R	
BUILDING WORKS							
Bill No. 11							
PLUMBING AND DRAINAGE (PROVISIONAL)							

<u>White uPVC vent pipe in single lengths :</u>					
1	110mm Diameter vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres. A1 : 26 A2 : 20 A3 : 16 A4 : 40	m	102		
<u>Extra over uPVC pipes for solvent welded fittings :</u>					
2	40mm Plain bend. A1 : 4 A2 : 0 A3 : 10 A4 : 8	No	22		
3	50mm Plain bend. A1 : 2 A2 : 0 A3 : 6 A4 : 10	No	18		
4	Black PVC whirlybird vent capping over the 110mm vent pipe. A1 : 4 A2 : 5 A3 : 4 A4 : 10	No	23		
<u>Inspection chambers, catch pits, etc.</u>					
<u>Light Composite covers and frames</u>					
5	450 x 450mm x 8.6 kg EN124 A15 light composite manhole cover and frame inclusive of two stainless steel screws lock fasten cover with frame and two vented holes designed for the easy lifting and also has the function for draining, including fixing frame on concrete, A1 : 2 A2 : 3 A3 : 2 A4 : 8	No	15		
<u>SANITARY FITTINGS, TANKS, GEYSERS, ETC.</u>					
<u>Plastic sanitaryware</u>					
6	"Atlas Plastics 237 AP" VIP 450 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors. A1 : 4 A2 : 5 A3 : 4 A4 : 12	No	25		
7	"Atlas Plastics 507AP" Granite bowl urinal fitted with "496AP" waterless urinal waste fitting hung on wall on and including proprietary brackets. A1 : 2 A2 : 0 A3 : 6 A4 : 0	No	8		
8	"Atlas Plastics Christy 382AP" Basin, size 570 x 400 x 245mm, provided complete with two tapholes and built in soap holder, hung on wall on and including proprietary wall brackets. A1 : 0 A2 : 0 A3 : 0 A4 : 2	No	2		
Carried to Collection				R	
BUILDING WORKS					
Bill No. 11					
PLUMBING AND DRAINAGE (PROVISIONAL)					

<u>Sanitary fitting sundries</u>							
1	Satin chrome thief proof toilet roll holder, PWD Sample 71, plugged to wall. A1 : 4 A2 : 0 A3 : 4 A4 : 10	No	18				
2	Heavy-duty double-flap hinged toilet seat and cover. A1 : 4 A2 : 5 A3 : 4 A4 : 10	No	23				
<u>Grade 304 stainless steel ware :</u>							
3	Grab rail 1200mm long with two flanges "SR 1" plugged to wall with and including stainless steel screws. A1 : 0 A2 : 0 A3 : 0 A4 : 2	No	2				
4	Dog leg grab rail with three flanges "DL3" plugged to wall with and including stainless steel screws. A1 : 0 A2 : 0 A3 : 0 A4 : 2	No	2				
<u>Steel Pipes, etc.</u>							
<u>Galvanised Steel Pipe</u>							
5	22mm galvanised steel pipe A1 : 1 A2 : 1 A3 : 1 A4 : 2	m	5				
<u>Taps, valves, etc.</u>							
<u>Solid cast brass taps, valves, etc.</u>							
6	"Cobra KM2-200" or other equal approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller. A1 : 0 A2 : 1 A3 : 0 A4 : 2	No	3				
7	15mm Ball-o-stop valve. A1 : 2 A2 : 0 A3 : 6 A4 : 0	No	8				
8	22mm Gate valve A1 : 1 A2 : 1 A3 : 1 A4 : 2	No	5				
9	22mm Non Return valve A1 : 1 A2 : 1 A3 : 1 A4 : 2	No	5				
<u>Waste unions, traps, etc.</u>							
<u>Outlets, traps, etc :</u>							
10	50mm Chromium plated PVC urinal bottle trap. A1 : 2 A2 : 0 A3 : 6 A4 : 0	No	8				
Carried to Collection						R	
BUILDING WORKS							
Bill No. 11							
PLUMBING AND DRAINAGE (PROVISIONAL)							

- | | |
|---|--|
| 1 | <p>38mm Chromium plated brass slotted basin waste outlet with plug, chain and chain stay.</p> <p style="margin-left: 40px;">A1 : 0 A2 : 0 A3 : 0 A4 : 2</p> |
| 2 | <p>38mm PVC Mini P-trap.</p> <p style="margin-left: 40px;">A1 : 0 A2 : 0 A3 : 0 A4 : 2</p> |

No

2

No

2

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BUILDING WORKS
Bill No. 11
PLUMBING AND DRAINAGE (PROVISIONAL)

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2</u>			
	<u>BILL No. 12</u>			
	<u>PAINTWORK</u>			
	<u>PAINT ON CONCRETE, PLASTER, ETC</u>			
	<u>Prepare and apply one coat plaster primer, one coat universal undercoat and two coats "Wall & All" or other equal approved washable suede sheen acrylic PVA paint on :</u>			
1	Internal smooth plastered walls. A1 : 96 A2 : 73 A3 : 101 A4 : 218	m2	488	
2	Internal smooth plastered wall in narrow widths not exceeding 300mm wide A1 : 1 A2 : 1 A3 : 1 A4 : 2	m2	5	
	<u>Scrub surface with degreaser, rinse thoroughly with tap water, and apply one coat sealer and two coats epoxy paint on:</u>			
3	Concrete floated or screeded floors A1 : 17 A2 : 14 A3 : 26 A4 : 40	m2	97	
4	Granolithic skirting not exceeding 300mm girth. A1 : 35 A2 : 31 A3 : 42 A4 : 82	m	190	
	<u>PAINT ON TIMBER</u>			
	<u>Prime or oil</u>			
5	Backs of frames or linings not exceeding 300mm girth. A1 : 0 A2 : 11 A3 : 0 A4 : 0	m	11	
6	Doors A1 : 0 A2 : 8 A3 : 0 A4 : 0	m2	8	
	<u>PAINT ON METALWORK</u>			
	<u>Prepare and apply one coat bituminous paint on :</u>			
7	Backs of steel door frames. A1 : 0 A2 : 0 A3 : 0 A4 : 4	m2	4	
	Carried to Collection			
	BUILDING WORKS			
	Bill No. 12			
	PAINTWORK			
			R	

<u>One coat steel etch primer, one coat universal undercoat and two coats gloss enamel paint on :</u>					
1	Hot dipped galvanised steel gates. A1 : 6 A2 : 2 A3 : 4 A4 : 4	m2	16		
2	Hot dipped galvanised steel mesh screens. A1 : 0 A2 : 18 A3 : 0 A4 : 0	m2	18		
<u>One coat red oxide primer, one coat universal undercoat and two coats gloss enamel paint on :</u>					
3	Pre-galvanised steel doors. A1 : 0 A2 : 0 A3 : 0 A4 : 4	m2	4		
4	Pre-galvanised steel door frames. A1 : 0 A2 : 0 A3 : 0 A4 : 4	m2	4		
<u>PAINT ON FIBRE-CEMENT</u>					
<u>Prepare and apply one coat plaster primer and two coats quality matt acrylic PVA on :</u>					
5	External fibre cement fascia boarding including priming cover strips. A1 : 1 A2 : 1 A3 : 2 A4 : 4	m2	8		
6	External fibre cement bargeboard including priming cover strips. A1 : 2 A2 : 2 A3 : 2 A4 : 4	m2	10		
<u>PAINT ON PVC</u>					
<u>Prepare and apply two coats black PVA paint on:</u>					
7	Vent pipes. A1 : 2 A2 : 2 A3 : 2 A4 : 4	m2	10		
Carried to Collection					
BUILDING WORKS					
Bill No. 12					
PAINTWORK					

Section No. 2

BUILDING WORKS

Bill No. 12

PAINTWORK

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BUILDING WORKS

Bill No. 12

PAINTWORK

Item No	Quantity	Rate	Amount
<u>SECTION No. 2</u>			
<u>BILL No. 13</u>			
<u>EXTERNAL WORKS (PROVISIONAL)</u>			
<u>Note:</u>			
For Preambles see "PW 371 - A Edition 2.0 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (2nd Edition July 2013).			
<u>DEMOLITIONS</u>			
<u>Demolitions</u>			
<u>Brickwork building structures</u>			
1	Demolish and cart away single storey toilet block complete, size on plan 9000mm long x 3000mm wide x approximately 3000mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with concrete block walls including timber doors, ground floor concrete surface bed with granolithic floor covering, sanitary fittings, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site.	No	1
2	Demolish and cart away single storey toilet block complete, size on plan 4000mm long x 3000mm wide x approximately 3000mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with concrete block walls including timber doors, ground floor concrete surface bed with granolithic floor covering, sanitary fittings, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site.	No	1
Carried to Collection			R
BUILDING WORKS Bill No. 13 EXTERNAL WORKS			

1	Demolish and cart away single storey toilet block complete, size on plan 4400mm long x 2000mm wide x approximately 3000mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with concrete block walls including timber doors, ground floor concrete surface bed with granolithic floor covering, sanitary fittings, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site.	No	1		
	<u>Pit toilets</u>				
2	Allow for de-sludging of existing "long drop" pit latrines by means of "honey sucker". The pit latrines are to be completely empty before any other work is carried out.	No	3		
3	Allow for breaking down and removing from site entire pit latrine structure including any structure that may be inside the pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured). Backfill existing hole with imported filling in max 150mm layers and compact to 95% MOD AASHTO density.	No	3		
	<u>THE FOLLOWING IN WALKWAYS, RAMPS, ETC.</u>				
	<u>EARTHWORKS</u>				
	<u>Site clearance</u>				
4	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site.	m2	120		
	<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>				
5	Reduced levels under solid floors.	m3	24		
	<u>Carting away of excavated material</u>				
6	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor.	m3	24		
	Carried to Collection				
	BUILDING WORKS				
	Bill No. 13				
	EXTERNAL WORKS				

	<u>Filling</u>				
1	150mm G7 Sub-base course, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 93% modified AASHTO density under slabs.	m3	18		
	<u>Prescribed Testing</u>				
2	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed.	No	2		
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
3	Paving in panels including any necessary formwork.	m3	12		
4	Ramps.	m3	0.4		
	<u>Surface treatment</u>				
5	Float surface of concrete to a wood float finish.	m2	120		
	<u>Test blocks and testing</u>				
6	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	2		
	<u>Movement joints</u>				
7	10mm Thick "Jointex" closed cell polyethylene joint filler with hinged blocking piece between concrete surfaces not exceeding 300mm wide.	m	33		
8	Remove hinged blocking piece and fill 10 x 15mm cavity with an approved 2 part polysulphide sealer.	m	33		
	<u>FORMWORK</u>				
	<u>Edges, risers, ends and reveals</u>				
9	Edge, riser, etc not exceeding 300mm high.	m	200		
	Carried to Collection			R	
	BUILDING WORKS				
	Bill No. 13				
	EXTERNAL WORKS				

	<u>Reinforcement</u>				
1	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces.	m2	120		
	<u>THE FOLLOWING IN STORMWATER CUT OFF DRAIN / EARTH BERM</u>				
	<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>				
2	Reduced levels	m3	30		
	<u>Filling</u>				
3	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density.	m3	30		
	<u>Compaction of surfaces</u>				
4	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density.	m2	60		
	<u>Grassing, ground cover, etc.</u>				
5	Kikuyu turf (sods or rolls) instant lawn 25 to 40mm thick, imported from commercial sources, laid firmly with staggered joints within three days of being lifted.	m2	50		
	<u>THE FOLLOWING IN CONCRETE CHANNELS, ETC.</u>				
	<u>EARTHWORKS</u>				
6	Holes	m3	0.3		
7	Surface trenches.	m3	1		
	<u>Carting away of excavated material</u>				
8	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor.	m3	1		
9	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc.	m2	1		
	Carried to Collection			R	
	BUILDING WORKS				
	Bill No. 13				
	EXTERNAL WORKS				

<u>Sundries</u>					
1	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density.	m2	3		
<u>Prescribed Testing</u>					
2	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed.	No	2		
<u>FORMWORK</u>					
<u>Edges, risers, ends and reveals</u>					
3	Edge, riser, etc not exceeding 300mm high.	m	6		
<u>Grooves, channels, mortices, etc.</u>					
4	700 x 150mm V-Channels in top	m	3		
5	1500 x 750 x 150mm Concrete V-Channel Spreader	No	1		
<u>REINFORCEMENT (PROVISIONAL)</u>					
<u>High tensile rod reinforcement to structural concrete work</u>					
6	12mm Diameter bars.	t	0.007		
<u>Reinforcement</u>					
7	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces.	m2	3		
Carried to Collection				R	
BUILDING WORKS					
Bill No. 13					
EXTERNAL WORKS					

THE FOLLOWING IN STAND PIPE BIP TAP 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	14
2	Stripping average 300mm thick layer of topsoil and stockpiling on site.	m2	14
	<u>Excavate in pickable material not exceeding 2m deep below natural or reduced ground level:</u>		
3	Holes.	m3	2
	<u>Carting away.</u>		
4	Extra over all excavations for carting away surplus excavated material and spreading, levelling and lightly compacting on site where directed not exceeding 100m from the excavations.(measured nett - no allowance made for bulking)	m3	2
	<u>Filling with approved natural gravel material (G5) supplied and carted onto site by the Contractor and compacted to 95% Mod AASHTO density:</u>		
5	Under trenches, holes, surface beds, etc.	m3	1
	<u>Compaction of surfaces.</u>		
6	Compaction of ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where necessary and compacting to 87% Mod AASHTO density.	m2	8
	<u>Prescribed density tests on filling</u>		
7	Modified AASHTO Density test.	No	3

Carried to Collection

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BUILDING WORKS
Bill No. 13
EXTERNAL WORKS

CONCRETE, FORMWORK AND REINFORCEMENT

25Mpa/19mm Concrete

1	1000mm V' shaped concrete slab.	m3	1
2	In 110mm PVC Blue Water Pipe.	m3	1

Smooth Formwork to Sides:

3	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	18
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Fabric reinforcement:

4	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	8
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One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':

5	Under surface beds.	m2	8
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WATER SUPPLIES

Galvanised steel pipe.

6	20mm Diameter galvanised pipes fixed to concrete.	m	3
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Extra over for pipe fittings.

7	Bend	No	3
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uPVC Pipes

8	110mm Blue Water Pipe.	m	3
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Solid cast brass taps, valves, etc

9	Bib Tap or Similar approved.	No	6
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Carried to Collection

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BUILDING WORKS
Bill No. 13
EXTERNAL WORKS

	<u>Aqualoc Flow Restrictors/Valve</u>				
1	Supply and install Aqualoc Monobox or equal approved, with flow restrictors installations	No	3		
2	Supply Aqualoc Service set, complete with all fittings	No	3		
	<u>Sundries:</u>				
3	Galvanized reno mattresses 2.0m X 1.0m X 0.3m deep with 60 x 80 mm mesh filled with 100 - 150mm stones.	m3	3		
	<u>Testing:</u>				
4	Testing drainage system.		Item		
	<u>THE FOLLOWING IN RAINWATER TANKS AND STANDS</u>				
	<u>Earth filling (G7 material) supplied by the contractor compacted to 98% Mod AASHTO density:</u>				
5	Under floors.	m3	4		
	<u>Compaction of surfaces</u>				
6	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	15		
	<u>25 MPa/19mm Concrete:</u>				
7	Tank concrete slab.	m3	3		
	<u>Finishing top surfaces of concrete smooth with a steel trowel including adding additional cement while concrete is still green to attain a smooth, hard surface:</u>				
8	Surface beds, slabs, etc.	m2	15		
	<u>Rough Formwork to Sides:</u>				
9	Edges, risers, ends and reveals not exceeding 300mm high.	m	30		
	Carried to Collection			R	
	BUILDING WORKS				
	Bill No. 13				
	EXTERNAL WORKS				

<u>Allens Meshco Square Mesh Fabric reinforcement:</u>					
1	Type 193 fabric reinforcement in concrete slabs.	m2	15		
<u>One layer of 350 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>					
2	Under surface beds.	m2	15		
<u>PLUMBING AND DRAINAGE</u>					
<u>Plastic water tanks etc:</u>					
3	2500 Litre light duty cylindrical 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	5		
4	Hole top of tank for 100mm pipe.	No	5		
<u>SECURITY FENCING</u>					
<u>Site clearance</u>					
5	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	90		
<u>Straining wires, fencing and razor wire:</u>					
6	Four strands of 4 mm 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	270		
7	3 Strands of galvanised barbed wire tied to standards, posts and eye bolts	m	32		
8	Fencing formed of 100 x 50 x 2.5mm diameter galvanised fencing 1 800mm high and fixed to each straining wire with 8 guage binding wire at 500mm centres (straining wires elsewhere measured).	m	90		
Carried to Collection				R	
BUILDING WORKS					
Bill No. 13					
EXTERNAL WORKS					

<u>Posts for 1 800mm high security fence:</u>					
1	60 mm 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	30		
2	100 mm 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	4		
3	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		
4	12 mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers.	No	34		
5	Form 12mm diameter hole through fence post.	No	34		
<u>Gates:</u>					
6	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		
Carried to Collection				R	
BUILDING WORKS					
Bill No. 13					
EXTERNAL WORKS					

PADLOCKS

1	Supply 50 mm "Viro" Padlocks and Keys (or equal approved)
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No

1

Carried to Collection

R

BUILDING WORKS
Bill No. 13
EXTERNAL WORKS

Section No. 2

BUILDING WORKS

Bill No. 13

EXTERNAL WORKS

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

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BUILDING WORKS

Bill No. 13

EXTERNAL WORKS

[illegible]

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES AND GENERAL	26	
2	BUILDING WORKS	75	
	Sub-Total		R
	<u>CONTINGENCIES</u>		
	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 applicable as at Tender closing date.		R
	Carried to Form of Offer and Acceptance		R