

Item No	Quantity	Rate	Amount
<u>SECTION NO. 1</u>			
<u>BILL NO. 1 PRELIMINARIES</u>			
<u>MEANING OF TERMS "TENDER / TENDERER"</u>			
Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"			
<u>PRELIMINARIES</u>			
The JBCC Preliminaries Code 2103, May 2005 edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 2101, March 2005 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning of each clause. These clauses are referred to by number and heading only. Where standard clauses or options are not applicable to the contract such modifications or corrections as are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked. "N/A" signifying "Not Applicable".			
<u>PRICING OF PRELIMINARIES</u>			
Should Option A, as set out in clause B10.3.1 hereinafter be used for the adjustment of preliminaries then each item priced is to be allocated to one or more of the three categories Fixed(F), Value Related(V) or Time Related(T) and the respective amounts entered in the spaces provided under each item			
Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities.			
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SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT

DEFINITIONS

A1 DEFINITIONS AND INTERPRETATION

Clause 1.0 Clause

1.1 Definition of "**Commencement Date**" is added:

"**COMMENCEMENT DATE**" means the date that the **agreement**, made in terms of the Form of Offer and Acceptance, comes into effect

Clause 1.1 Definition of "Construction Quarantee" is amended by replacing it with the following:

"**CONSTRUCTION GUARANTEE**" means a guarantee at call obtained by the **contractor** from an institution approved by the **employer's** construction guarantee form as selected in the **schedule**

Clause 1.1 Definition of "**Construction Period**" is amended by replacing it with the following:

"**CONSTRUCTION PERIOD**" means the period commencing on the commencement date and ending on the date of practical completion

Clause 1.1 Definition of "**Corrupt Practice**" is added

"**CORRUPT PRACTICE**" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

Clause 1.1 Definition of "**Fraudulent Practice**" is added:

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"FRAUDULENT PRACTICE" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer and includes collusive practice among tenderers (prior to our after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition.

Clause 1.1 Definition of **"Interest"** is amended by replacing it with the following:

"INTEREST" means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance management Act, 1999 (Act No. 1 of 1999).

Clause 1.1 Definition of **"Principal Agent"** is amended by replacing the following:

"PRINCIPAL AGENT" means the person or entity appointed by the **employer** and named in the **schedule**. In the event of a **principal agent** not being appointed, then all the duties and obligations of a **principal agent** as detailed in the **agreement** shall be fulfilled by a representative of the **employer** as named in the **schedule**.

Clause 1.1 Definition of **"Security"** is amended by replacing it with the following:

"SECURITY" means the form of security provided by the **employer** or **contractor**, as stated in the **schedule**, from which the **contractor** or **employer** may recover expense or loss.

Clause 1.6 is amended by replacing the words "prepaid registered post, telefax or e-mail" with "prepaid registered post or telefax"

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Clause 1.6.4 is amended by replacing it with the following:

No clause

OBJECTIVE AND PREPARATION

1 A2 OFFER, ACCEPTANCE AND PERFORMANCE

Clause 2.0

F: _____ V: _____ T: _____

Item

2 A3 DOCUMENTS

Clause 3.0

Clause 3.2.1 is amended by replacing "14.1" with "14.0"

Clause 3.7 is amended by the addition of the following:

The **contractor** shall supply and keep a copy of the **JBCC Series 2000 Principal Building Agreement** and Preliminaries applicable to this contract on the site, to which the **employer, principal agent** and **agents** shall have access at all times

Clause 3.10 is amended by replacing the second reference to "**principal agent**" with the word "**employer**"

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3	<p>A4 DESIGN RESPONSIBILITY</p> <p>Clause 4.0</p> <p>Clause 4.3 is amended by replacing it with the following: No clause</p> <p>F:_____ V:_____ T:_____</p>	Item		
4	<p>A5 EMPLOYER'S AGENTS</p> <p>Clause 5.0 (See notes to Tenders)</p> <p>Clause 5.1.2 is amended to include clauses 32.6.3, 34.3, 34.4 and 38.5.8</p> <p>F:_____ V:_____ T:_____</p>	Item		
5	<p>A6 SITE REPRESENTATIVE</p> <p>Clause 6.0</p> <p>F:_____ V:_____ T:_____</p>	Item		
6	<p>A7 COMPLIANCE WITH REGULATIONS</p> <p>Clause 7.0</p> <p>Note: The provisions herein include inter alia, compliance with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), and in particular with Regulation 5(1) requiring the compilation of a health and safety plan, as well as Regulation 6(1) requiring the appointment of a construction supervisor</p> <p>See also clause C10 of Section C - Specific Preliminaries</p> <p>F:_____ V:_____ T:_____</p>	Item		
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7	<p>A8 WORKS RISK</p> <p>Clause 8.0</p> <p>F:_____V:_____T:_____</p>	Item		
8	<p>A9 INDEMNITIES</p> <p>Clause 9.0</p> <p>F:_____V:_____T:_____</p>	Item		
9	<p>A10 WORKS INSURANCES</p> <p>Clause 10.0</p> <p>Clause 10.0 is amended by the addition of the following clauses:</p> <p>10.5 Damage to the Works</p> <p>(a) Without in any way limiting the contractor's obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the employer against any such damage. The contractor shall take such precautions and security measures and other steps for the protection and security of the works as the contractor may deem necessary</p> <p>(b) The contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works</p> <p>(c) The employer shall carry the risk of damage to or destruction of the works and material paid for by the employer that is the result of the excepted risks as set out in 10.6</p> <p style="text-align: right;">Carried to Collection</p>			
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- (d) Where the **employer** bears the risk in terms of this contract, the **contractor** shall, if requested to do so, reinstate any damage or destroyed portions of the **works** and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof

10.6 Injury to Persons or loss of or damage to Properties

- (a) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the **works** unless due to any act or neglect of any person for whose actions the **employer** is legally liable
- (b) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person, arising out of or in the course of or by reason of the execution of the **works** unless due to any act or neglect of any person for whose actions the **employer** is legally liable
- (c) The **contractor** shall, upon receiving a **contract instruction** from the **principal agent**, cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the **employer** shall be entitled to cause it to be made good and to recover the cost thereof from the **contractor** or to deduct the same from amounts due to the **contractor**

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- (d) The **contractor** shall be responsible for the protection and safety of such portions of the premises placed under his control by the **employer** for the purpose of executing the **works** until the issue of the **certificate of practical completion**
- (e) Where the execution of the works involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor** shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the **works** has been completed
- (f) The **contractor** shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the **works**

10.7 High risk insurance

In the event of the project being executed in a geological area classified as a “High Risk Area”, that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:

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10.7.1 Damage to the works

The **contractor** shall, from the commencement **date** of the **works** until the date of the **certificate of practical completion** bear the full risk of and hereby indemnifies and holds harmless the **employer** against any damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and security measures and other steps for the protection of the **works** as he may deem necessary

When so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works, at the contractor's own costs

10.7.2 Injury to persons or loss of or damage to property

The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above

The **contractor** shall be liable for and hereby indemnifies the **employer** against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract

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10.7.3 It is the responsibility of the **contractor** to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the **contractor's** obligations in terms of the contract, the **contractor** shall, within twenty one (21) **calendar days** of the **commencement date** but before commencement of the **works**, submit to the **employer** proof of such insurance policy, if requested to do so

10.7.4 The **employer** shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the **contractor's** default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the **employer** and the **contractor** and for this purpose all these contracts shall be considered one indivisible whole

F:_____V:_____T:_____

Item

10 A11 LIABILITY INSURANCES

Clause 11.0

F:_____V:_____T:_____

Item

11 A12 EFFECTING INSURANCES

Clause 12.0

F:_____V:_____T:_____

Item

12 A13.0 No clause

N/A

13 A14 SECURITY

Clause 14.0

Clauses 14.1 - 14.8 are amended by replacing them with the following:

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14.1 In respect of contracts with a **contract sum** up to R1 million, the **security** to be submitted by the **contractor** to the **employer** will be as a payment reduction of five per cent (5%) of the value certified in the **payment certificate** (excluding VAT)

14.1.1 The payment reduction of the value certified in a **payment certificate** shall be *mutatis mutandi* in terms of 31.8(A)

14.1.2 The **employer** shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the **employer** complies with the provisions of 33.4 in which event the **employer's** entitlement shall take precedence over his obligations to refund the payment reduction security or portions thereof to the **contractor**

14.2 In respect of contracts with a **contract sum** above R1 million, the **contractor** shall have the right to select the **security** to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the **schedule**. Such **security** shall be provided to the **employer** within twenty one (21) **calendar days** from **commencement date**. Should the **contractor** fail to select the **security** to be provided or should the **contractor** fail to provide the **employer** with the selected **security** within twenty one (21) **calendar days** from **commencement date**, the **security** in terms of 14.7 shall be deemed to have been selected.

14.3 Where **security** as a cash deposit of ten per cent (10%) of the **contract sum** (excluding VAT) has been selected:

14.3.1 The **contractor** shall furnish the **employer** with a cash deposit equal in value to ten per cent (10%) of the **contract sum** (excluding VAT) within twenty one (21) **calendar days** from **commencement date**

14.3.2 Within twenty-one (21) **calendar days** of the date of **practical completion** of the **works** the **employer** shall reduce the cash deposit to an amount equal to three per cent (3%) of the **contract value** (excluding VAT), and refund the balance to the **contractor**

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14.3.3 Within twenty-one (21) **calendar days** of the date of **final completion** of the **works** the **employer** shall reduce the cash deposit to an amount equal to one per cent (1%) of the **contract value** (excluding VAT) and refund the balance to the **contractor**

14.3.4 On the date of payment of the amount in the final **payment certificate**, the **employer** shall refund the remainder of the cash deposit to the **contractor**

14.3.5 The **employer** shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the **employer** complies with the provisions of 33.4 in which event the **employer's** entitlement shall take precedence over his obligations to refund the cash deposit **security** or portions thereof to the **contractor**

14.3.6 The parties expressly agree that neither the **employer** nor the **contractor** shall be entitled to cede the rights to the deposit to any third party

14.4 Where **security** as a variable construction guarantee of ten percent (10%) of the **contract sum** (excluding VAT) has been selected:

14.4.1 The **contractor** shall furnish the **employer** with an acceptable variable construction guarantee equal in value to ten per cent (10%) of the **contract sum** (excluding VAT) within twenty-one (21) **calendar days** from **commencement date**

14.4.2 The variable construction guarantee shall reduce and expire in terms of the Variable Construction Guarantee form included in the invitation to tender

14.4.3 The **employer** shall return the variable construction guarantee to the **contractor** within fourteen (14) **calendar days** of it expiring

14.4.4 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** shall issue a written demand in terms of the variable construction guarantee

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14.5 Where **security** as a fixed construction guarantee of five per cent (5%) of the **contract sum** (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the payment certificate (excluding VAT) has been selected:

14.5.1 The **contractor** shall furnish a fixed construction guarantee to the **employer** equal in value to five per cent (5%) of the **contract sum** (excluding VAT)

14.5.2 The fixed construction guarantee shall come into force on the date of issue and shall expire on the date of **practical completion**

14.5.3 The **employer** shall return the fixed construction guarantee to the **contractor** within fourteen (14) **calendar days** of it expiring

14.5.4 The payment reduction of the value certified in a **payment certificate** shall be in terms of 31.8 (A) and 34.8

14.5.5 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or may do both

14.6 Where **security** as a cash deposit of five per cent (5%) of the **contract sum** (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.6.1 The **contractor** shall furnish the **employer** with a cash deposit equal in value to five per cent (5%) of the **contract sum** (excluding VAT) within twenty-one (21) **calendar days** from **commencement date**

14.6.2 Within twenty-one (21) **calendar days** of the date of **practical completion** of the **works** the **employer** shall refund the cash deposit in total to the **contractor**

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14.6.3 The payment reduction of the value certified in a **payment certificate** shall be *mutatis mutandi* in terms of 31.8(A)

14.6.4 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both

14.7 Where **security** as a payment reduction of ten per cent (10%) of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.7.1 The payment reduction of the value certified in a **payment certificate** shall be *mutatis mutandi* in terms of 31.8(B)

14.7.2 The **employer** shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the **employer** complies with the provisions of 33.4 in which event the **employer's** entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the **contractor**

14.8 Payments made by the guarantor to the **employer** in terms of the fixed or variable construction guarantee shall not prejudice the rights of the **employer** or **contractor** in terms of this **agreement**

14.9 Should the **contractor** fail to furnish the **security** in terms of 14.2, the **employer**, in his sole discretion and without notification to the **contractor**, is entitled to change the **contractor's** selected form of **security** to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), whereafter 14.7 shall be applicable

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EXECUTION**14 A15 PREPARATION FOR AND EXECUTION OF THE WORKS**

Clause 15.0

Clause 15.1.1 is amended by replacing it with:

No Clause

15 Clause 15.1.2 is amended by replacing it with:The **security** selected in terms of 14.0

Clause 15.1 is amended by the addition of the following clause: 15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) **calendar days of commencement date**

Clause 15.2.1 is amended by replacing it with the following clause:

Give the **contractor** possession of the **site** within ten (10) **working days** of the **contractor** complying with the terms of 15.1.4

F:_____ V:_____ T:_____

Item

16 A16 ACCESS TO THE WORKS

Clause 16.0

F:_____ V:_____ T:_____

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17	<p>A17 CONTRACT INSTRUCTIONS</p> <p>Clause 17.0</p> <p>Clause 17.1.11 is amended by deleting the words "and the appointment of nominated and selected subcontractors'</p> <p>F: _____ V: _____ T: _____</p>	Item		
18	<p>A18 SETTING OUT OF THE WORKS</p> <p>Clause 18.0</p> <p>F: _____ V: _____ T: _____</p>	Item		
19	<p>A19 ASSIGNMENT</p> <p>Clause 19.0</p> <p>F: _____ V: _____ T: _____</p>	Item		
20	<p>A20 NOMINATED SUB-CONTRACTORS</p> <p>Clause 20.0</p> <p>Clause 20.1.3 is amended by replacing it with the following:</p> <p>No Clause</p> <p>Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums</p> <p>F: _____ V: _____ T: _____</p>	Item		
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21	<p>A21 SELECTED SUBCONTRACTORS</p> <p>Clause 21.0</p> <p>Clause 21 is amended by replacing it with:</p> <p>No Clause</p> <p>F: _____ V: _____ T: _____</p>	N/A		
22	<p>A22 EMPLOYER'S DIRECT CONTRACTORS</p> <p>Clause 22.0</p> <p>F: _____ V: _____ T: _____</p>	Item		
23	<p>A23 CONTRACTOR'S DOMESTIC SUBCONTRACTORS</p> <p>Clause 23.0</p> <p>F: _____ V: _____ T: _____</p>	Item		
	<u>COMPLETION</u>			
24	<p>A24 PRACTICAL COMPLETION</p> <p>Clause 24.0</p> <p>F: _____ V: _____ T: _____</p>	Item		
25	<p>A25 WORK'S COMPLETION</p> <p>Clause 25.0</p> <p>F: _____ V: _____ T: _____</p>	Item		
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26	A26 FINAL COMPLETION Clause 26.0 F:_____V:_____T:_____			
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27	A27 LATENT DEFECTS LIABILITY PERIOD Clause 27.0 F:_____V:_____T:_____			
		Item		
28	A28 SECTIONAL COMPLETION Clause 28.0 F:_____V:_____T:_____			
		Item		
29	A29 REVISION OF DATE FOR PRACTICAL COMPLETION Clause 29.0 Clause 29.2.5 is amended by replacing it with: No clause F:_____V:_____T:_____			
		Item		
30	A30 PENALTY FOR NON-COMPLETION Clause 30.0 F:_____V:_____T:_____			
		Item		
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PAYMENT**31 A31 INTERIM PAYMENT TO THE CONTRACTOR**

Clause 31.0

Item

32 Clause 31.5.2 is amended by replacing "14.7.1" with "14.0"

Clause 31.8 is amended by replacing it with the following two alternative clauses:

Alternative A

31.8(A) Where a **security** is selected in terms of 14.1; 14.5 or 14.6, the value of the **works** in terms of 31.4.1 and **materials and goods** in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:

31.8(A).1 Ninety-five per cent (95%) of such value in interim **payment certificates** issued up to the date of **practical completion**

31.8(A).2 Ninety-seven per cent (97%) of such value in interim **payment certificates** issued on the date of **practical completion** and up to but excluding the date of **final completion**

31.8(A).3 Ninety-nine per cent (99%) of such value in interim **payment certificates** issued on the date of **final completion** and up to but excluding the final **payment certificate** in terms of 34.6

31.8(A).4 One hundred per cent (100%) of such value in the final **payment certificate** in terms of 34.6 except where the amount certified is in favour of the **employer**. In such an event the payment reduction shall remain at the adjustment level applicable to the final **payment certificate**

Alternative B**Carried to Collection****R****Section No. 1****Bill No. 1****Preliminaries and General****U1604 - CABANE JSS - COMPLETION**

31.8(B) Where **security** is a payment reduction in terms of 14.7 the value of the **works** in terms of 31.4.1 and **materials and goods** in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:

31.8(B).1 Ninety per cent (90%) of such value in interim **payment certificates** issued up to the date of **practical completion**

31.8(B).2 Ninety-seven per cent (97%) of such value in interim **payment certificates** issued on the date of **practical completion** and up to but excluding the date of **final completion**

31.8(B).3 Ninety-nine per cent (99%) of such value in interim **payment certificates** issued on the date of **final completion** and up to but excluding the final **payment certificate** in terms of 34.6

31.8(B).4 One hundred per cent (100%) of such value in the final **payment certificate** in terms of 34.6 except where the amount certified is in favour of the **employer**. In such an event the payment reduction shall remain at the adjustment level applicable to the final **payment certificate**

Clause 31.12 is amended by deleting the following:

Payment shall be subject to the **employer** giving the **contractor** a tax invoice for the amount due

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33	A32 ADJUSTMENT TO THE CONTRACT VALUE			
	<p>Clause 32.0</p> <p>Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:</p> <p>"due to no fault of the contractor"</p> <p>F:_____V:_____T:_____</p>			
		Item		
34	A33 RECOVERY OF EXPENSE AND LOSS			
	<p>Clause 33.0</p> <p>F:_____V:_____T:_____</p>			
		Item		
35	A34 FINAL ACCOUNT AND FINAL PAYMENT			
	<p>Clause 34.0</p> <p>Clause 34.1 is amended by removing "#" next to 34.1</p> <p>Clause 34.2 is amended by removing "#" next to 34.2</p> <p>Clause 34.8 is amended by deleting the words "where security as a fixed guarantee in terms of 14.4 has been selected or where payment reduction has been applied in terms of 14.7.1"</p> <p>Clause 34.13 is amended by replacing "seven (7) calendar days" with "twenty-one (21) calendar days" and deleting the words "subject to the employer giving the contractor a tax invoice for the amount due"</p> <p>F:_____V:_____T:_____</p>			
		Item		
	Carried to Collection			R
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36	<p>A35 PAYMENT TO OTHER PARTIES</p> <p>Clause 35.0</p> <p>F:_____V:_____T:_____</p> <p><u>CANCELLATION</u></p> <p>A36 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT</p> <p>Clause 36.0</p> <p>Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "principal agent" with "employer"</p> <p>Clause 36.0</p>	Item		
37	<p>Clause 36.1 is amended by the addition of the following clauses:</p> <p>36.1.3 refuses or neglects to comply strictly with any of the conditions of contract</p>			
38	<p>36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of south Africa</p>			
39	<p>36.1.5 in the judgement of the employer, has engaged in corrupt or fraudulent practices in competing for or in executing the contract</p>			
40	<p>Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "principal agent" with "employer"</p>			
41	<p>Clause 36.0 is amended by the addition of the following clause:</p>			
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36.7 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **contractor**; or for any reason whatsoever, the **contractor** shall on written instruction, discontinue with the **works** on a date stated and withdraw himself from the **site**. The **contractor** shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

F:_____ V:_____ T:_____

Item

42 A37 CANCELLATION BY EMPLOYER - LOSS AND DAMAGE

Clause 37.0

Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"

Clause 37.0 is amended by the addition of the following clause:

37.5 Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **contractor**; or for any reason whatsoever, the **contractor** shall on written instruction, discontinue with the **works** on a date stated and withdraw himself from the **site**. The **contractor** shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever

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43	<p>A38 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT</p> <p>Clause 38.0</p> <p>Clause 38.5.4 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 38.0 is amended by the addition of the following clause:</p> <p>38.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p> <p>F: _____ V: _____ T: _____</p>			
44	<p>A39 CANCELLATION - CESSATION OF THE WORKS</p> <p>Clause 39.0</p> <p>Clause 39.3.5 is amended by the addition of the following at the end of the sentence: "within one hundred and twenty (120) working days of completion of such a report"</p> <p>F: _____ V: _____ T: _____</p>			
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 1 Bill No. 1 Preliminaries and General U1604 - CABANE JSS - COMPLETION</p>		R	

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THE SCHEDULE (DPW04EC)

48 A42 PRE-TENDER INFORMATION

Clause 42.0

Tenderers are referred to the document C1.2 refer to Notes to Tenderers (EC) for variables pertaining to this contract

F:_____V:_____T:_____

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SECTION B: JBCC PRELIMINARIES**DEFINITIONS AND INTERPRETATION****49 Definitions and interpretation**

See also clause A1.0 of Section A for additional and /or amended definitions which shall apply equally to this Section

F:_____V:_____T:_____

Item

DOCUMENTS**50 Checking of documents**

F:_____V:_____T:_____

Item

51 Provisional bills of quantities

F:_____V:_____T:_____

N/A

52 Availability of construction documentation

F:_____V:_____T:_____

Item

53 Interests of agents

F:_____V:_____T:_____

Item

54 Priced documents

F:_____V:_____T:_____

Item

55 Tender submission

Clause 2.6 is amended by replacing “JBCC Form of Tender” with “Form of Offer and Acceptance (see Returnable Schedules)”

F:_____V:_____T:_____

Item

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THE SITE**56** *Defined works area*

F:_____ V:_____ T:_____

Item

57 *Geotechnical investigation*

F:_____ V:_____ T:_____

N/A

58 *Inspection of the site*

Tenderers shall complete the Site Inspection Certificate (as per Returnable Schedules) included in the tender documents and return the same with the tender submission.

F:_____ V:_____ T:_____

Item

59 *Existing premises occupied*

F:_____ V:_____ T:_____

Item

60 *Previous work - dimensional accuracy*

F:_____ V:_____ T:_____

N/A

61 *Previous work - defects*

F:_____ V:_____ T:_____

N/A

62 *Services - known*

F:_____ V:_____ T:_____

Item

63 *Services - unknown*

F:_____ V:_____ T:_____

Item

64 *Protection of trees*

F:_____ V:_____ T:_____

N/A

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65	<i>Articles of value</i> F: _____ V: _____ T: _____	Item		
66	<i>Inspection of adjoining properties</i> F: _____ V: _____ T: _____	Item		
<u>MANAGEMENT OF CONTRACT</u>				
67	<i>Management of the works</i> F: _____ V: _____ T: _____	Item		
68	<i>Programme for the works</i> F: _____ V: _____ T: _____	Item		
69	<i>15000 Progress meetings</i> F: _____ V: _____ T: _____	Item		
70	<i>Technical meetings</i> F: _____ V: _____ T: _____	Item		
71	<i>Labour and plant records</i> F: _____ V: _____ T: _____	Item		
<u>SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS</u>				
72	<i>Samples of materials</i> F: _____ V: _____ T: _____	Item		
73	<i>Workmanship samples</i> F: _____ V: _____ T: _____	Item		
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74	<i>Shop drawings</i>			
	F:_____V:_____T:_____	N/A		
75	<i>Shop drawings</i>			
	F:_____V:_____T:_____	N/A		
<u>TEMPORARY WORKS AND PLANT</u>				
76	<i>Deposits and fees</i>			
	F:_____V:_____T:_____	Item		
77	<i>Enclosure of the works</i>			
	F:_____V:_____T:_____	N/A		
78	<i>Advertising</i>			
	F:_____V:_____T:_____	N/A		
79	<i>Plant, equipment, sheds and offices</i>			
	F:_____V:_____T:_____	Item		
80	<i>Main notice board</i>			
	F:_____V:_____T:_____	Item		
81	<i>Subcontractors' notice board</i>			
	F:_____V:_____T:_____	N/A		
<u>TEMPORARY SERVICES</u>				
82	<i>Location</i>			
	F:_____V:_____T:_____	Item		
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83	Water F:_____V:_____T:_____	Item		
84	Electricity F:_____V:_____T:_____	Item		
85	Telecommunication facilities F:_____V:_____T:_____	Item		
86	Ablution facilities F:_____V:_____T:_____	Item		
<u>PRIME COST AMOUNTS</u>				
87	Responsibility for prime cost amounts F:_____V:_____T:_____	N/A		
<u>ATTENDANCE ON N/S SUBCONTRACTORS</u>				
88	General attendance The schedule rates providing for attendance on nominated subcontractors and other contractors , will be adjusted only if the scope of the work has changed F:_____V:_____T:_____	Item		
89	Special attendance F:_____V:_____T:_____	N/A		
90	Commissioning - fuel, water and electricity F:_____V:_____T:_____	Item		
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FINANCIAL ASPECTS**91 Statutory taxes, duties and levies**

F: _____ V: _____ T: _____

Item

92 Payment for preliminaries

F: _____ V: _____ T: _____

Item

93 Adjustment of preliminaries

Clause B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) **working days** of taking possession of the **site**" with "in this priced **bills of quantities / lump sum document** submitted with his tender offer"

F: _____ V: _____ T: _____

Item

94 Payment certificate cash flow

F: _____ V: _____ T: _____

Item

GENERAL**95 Protection of the works**

F: _____ V: _____ T: _____

Item

96 Protection / isolation of existing / sectionally occupied works

F: _____ V: _____ T: _____

Item

97 Security of the works

F: _____ V: _____ T: _____

Item

98 Notice before covering work

F: _____ V: _____ T: _____

Item

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99	<i>Disturbance</i>			
	F:_____V:_____T:_____	Item		
1001	<i>Environmental disturbance</i>			
0				
0	F:_____V:_____T:_____	Item		
1011	<i>Works cleaning and clearing</i>			
0				
1	F:_____V:_____T:_____	Item		
1021	<i>Vermin</i>			
0				
2	F:_____V:_____T:_____	Item		
1031	<i>Overhand work</i>			
0				
3	F:_____V:_____T:_____	N/A		
1041	<i>Instruction manuals and guarantees</i>			
0				
4	F:_____V:_____T:_____	Item		
1051	<i>As built information</i>			
0				
5	F:_____V:_____T:_____	Item		
1061	<i>Tenant installations</i>			
0				
6	F:_____V:_____T:_____	N/A		
<u>SCHEDULE OF VARIABLES</u>				
1071	<i>Pre-tender information</i>			
0				
7	F:_____V:_____T:_____	Item		
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This schedule contains all variables referred to in this document and is divided into pretender and post tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post tender categories form part of these Preliminaries.

Spaces requiring information must be filled in, shown as “not applicable” or deleted and not left blank. Where choices are offered, the non-applicable items are to be deleted.

Where insufficient space is provided the information should be annexed hereto and cross-referenced to the applicable clause of the schedule. Key cross reference clauses are italicised in [] brackets

12.1 PRE TENDER INFORMATION

12.1.1 Provisional Bills of Quantities

[2.2] The quantities are provisional

YES/NO

12.1.2 Availability of construction documentation

[2.3] *Construction of documentation is complete*

YES/NO

12.1.3 Interest of agents

41.1.2

Principal Agent:

Ikamva Architects CC

Street address:

3 Voorwaarts Street

KOKSTAD

Code: 4700

Tel: 039 - 727 5502

Fax: 039 - 727 4220

E-mail: kokstad@ikamva-architects.co.za

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41.1.2**Architect:**

Ikamva Architects CC

Street address:

3 Voorwaarts Street

KOKSTAD

Code: 4700

Tel: 039 - 727 5502

Fax: 039 - 727 4220

E-mail: kokstad@ikamva-architects.co.za

41.1.4**Agents service: Quantity Surveyor**

R & G Group of Consultants

Street address:

7 Sissons Street, ECDC Complex, Fortgale, Mthatha

Code: 5099

Tel: 047 - 5311106

Fax: 047 - 5314243

E-mail: ralph@rgconsultants.co.za

41.1.5**Agents service: Structural & Civil Engineer**

ZNM Consulting Civil & Structural Engineers

Street address:

8A Bonzabay Road

Beacon Bay

East London

Code: 5241

Tel: 087 - 350 4035

Fax: 086 - 608 3511

E-mail: info@znmeng.co.za

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41.1.5**Agents service: Electrical/Mechanical Engineer**

Evans Consulting Engineers CC

Street address:

17 Surrey Road

Vincent

East London

Code: 5247

Tel: 043 - 721 3692

Fax: 043 - 721 1553

E-mail: darryl@evansconsulting.co.za

12.1.4 Defined works area

[3.1] Details: N/A

12.1.5 Geotechnical investigation

[3.2] Details: (Yes)

12.1.6 Existing premises occupied

[3.4] Specific requirements: Yes

12.1.7 Previous work - dimensional accuracy

[3.5] Details: N/A

12.1.8 Previous work - defects

[3.6] Details: N/A

12.1.9 Services - known[3.7] Details: (Yes) *Electrical Power Line.***12.1.10 Protection of trees**

[3.9] Specific requirements: (N/A)

12.1.11 Inspection of adjoining properties

[3.11] Specific requirements: (N/A)

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12.1.12 Enclosure of the works

[6.2] Specific requirements:(N/A)

12.1.13 Offices

[6.4.3] Specific requirements:

The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.

12.1.14 Main notice board (As per EPWP specification)

[6.5] Specific requirements:

The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m as type Drawing GEN 063, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering.

12.1.15 Subcontractors' notice board

[6.6] Specific requirements:

*YES/NO***Carried to Collection****R****Section No. 1****Bill No. 1****Preliminaries and General****U1604 - CABANE JSS - COMPLETION**

12.1.16 Water**[7.2] Option A (by contractor)****YES/NO**

Option B (by employer - free of charge)

YES/NO

Option C (by employer - metered)

YES/NO**12.1.17 Electricity****[7.3] Option A (by contractor)****YES/NO**

Option B (by employer - free of charge)

YES/NO

Option C (by employer - metered)

YES/NO**12.1.18 Telecommunications****[7.4] Telephone****YES/NO**Facsimile**YES/NO**E-mail**YES/NO****12.1.19 Ablution facilities****[7.5] Option A (by contractor)****YES/NO**

Option B (by employer)

YES/NO**12.1.20 Protection of existing/sectionally occupied works****[11.2] Protection is required****YES/NO****Carried to Collection****R****Section No. 1****Bill No. 1****Preliminaries and General****U1604 - CABANE JSS - COMPLETION**

12.1.21 Special attendance**[9.2] Subcontractor** (1) details: N/A**Subcontractor** (2) details: N/A**Subcontractor** (3) details: N/A**Subcontractor** (4) details: N/A**12.1.22 Protection of works****[11.1]** Specific requirements:**12.1.23 Disturbance****[11.5]** Specific requirements:

The contractor shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the principal agent

12.1.24 Environmental disturbance**[11.6]** Specific requirements: N/A**12.2 POST-TENDER INFORMATION****12.2.1 Payment of preliminaries****[10.2]** Option A (prorated)**YES/NO**

Option B (calculates)

YES/NO**12.2.2 Adjustment of preliminaries****[10.3]** Option A (three categories)**YES/NO**

Option B (detailed breakdown)

YES/NO**Carried to Collection****R****Section No. 1****Bill No. 1****Preliminaries and General****U1604 - CABANE JSS - COMPLETION**

12.2.3 Additional agreed preliminaries items

Details:N/A

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SECTION C: SPECIFIC PRELIMINARIES

Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item

108 **C1 CONTRACT DRAWINGS**

The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to

enable the tenderer to acquaint himself with the nature and extent of the **works** and the manner in which they are to be executed

Should any part of the drawings not be clearly intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the **principal agent**

F:_____V:_____T:_____

N/A

109 **C2 GENERAL PREAMBLES**

The document “Specification of Materials and Methods to be used (PW371)” is obtainable on request from the head office and all regional offices of the Department, and shall be read in conjunction with the **bills of quantities** and be referred to for the full descriptions of work to be done and materials to be used

F:_____V:_____T:_____

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C10 HIV/AIDS AWARENESS

It is required of the **contractor** to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the Bills of Quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained

The **contractor** must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of Clause A 31 of "Section 1: Preliminaries (Section A)" or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment

113 **C10.1 AWARENESS CHAMPION**

Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification

F:_____ V:_____ T:_____

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114	C10.2 AWARENESS WORKSHOPS Selection and appointment of a competent Service Provider approved by the principal agent , provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification F:_____ V:_____ T:_____	Item		
115	C10.3 POSTERS, BOOKLETS, VIDEOS, ETC. Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period , all in accordance with the HIV/AIDS Specification F:_____ V:_____ T:_____	Item		
116	C10.4 ACCESS TO CONDOMS Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period , all in accordance with the HIV/AIDS Specification F:_____ V:_____ T:_____	Item		
117	C10.5 MONITORING Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification F:_____ V:_____ T:_____	Item		
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118	C11 HEALTH AND SAFETY Compliance with Project Specific Occupational Healthy and Safety Specification attached to this document (Part 1 C3.2). F:_____ V:_____ T:_____	Item		
119	C12 EXISTING PREMISES OCCUPIED The existing premises will be in use and occupied during the course of this contract. The Contractor shall execute the works in such a manner as will least interfere with the general routine of the occupants of the premises and shall minimize any nuisance from dusts, noise or other causes. F:_____ V:_____ T:_____	Item		
120	C13 INACCURATE AND DEFECTIVE WORK EXECUTED UNDER A PREVIOUS CONTRACT The Contractor shall, after taking possession of the Site and before commencing the work, check the existing levels, lines, profiles and the like and satisfy himself as to the dimensional accuracy of all work executed under the previous contract which may affect work Should any inaccurate or defective work be found the Contractor shall immediately notify the Representative/Agent in writing requesting his instructions with regard thereto and afford every facility to those rectifying such inaccurate or defective work F:_____ V:_____ T:_____	N/A		
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121	C14 HIGH RISK INSURANCE			
	C14.1 HIGH RISK AREA <p>The execution of this Contract involves work in a geological area classified as a "High Risk Area" that is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation</p> <p>F:_____ V:_____ T:_____</p>	N/A		
122	C14.2 DAMAGE TO THE WORKS <p>The Contractor shall, from the date of the letter of acceptance until date of the issue of the First Delivery Certificate, bear the full risk of and hereby indemnifies and holds harmless the Employer against any damage to and/or destruction of the Works consequent upon a catastrophic ground movement as mentioned in sub clause C14.1 above. The Contractor shall take such precautions and security measures and other steps for the protection and security measures and other steps for the protection and security of the Works as he may deem necessary</p> <p>When so instructed by the Principal Agent, the Contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, at the Contractor's own costs</p> <p>F:_____ V:_____ T:_____</p>	Item		
	<p style="text-align: right;">Carried to Collection</p> <p>Section No. 1 Bill No. 1 Preliminaries and General U1604 - CABANE JSS - COMPLETION</p>		R	

123	<p>C14.3 INJURY TO PERSONS OR LOSS OF OR DAMAGE TO PROPERTIES</p> <p>The Contractors shall be liable for ad hereby indemnifies and holds harmless the Employer against any and all liability, loss, slaim or proceeding arising at any time during the Contract Period whether arising in common law or by Statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned in sub clause C14.1 above</p> <p>The Contractor shall be liable for and hereby indemnifies the Employer against any liability, loss claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contingious to the Siet, whether belonging to or under the control of the Employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned in subclause C14.1 above, which occurred during the Contract Period</p> <p>F:_____ V:_____ T:_____</p>			
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Item

124	<p>C14.4 ADEQUATE INSURANCE</p> <p>It is the responsibility of the Contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in subclauses C14.2 and C14.3 above. Without limiting his obligations in terms of the Contract, the Contractor shall, within 21 days of the Letter of Acceptance and before commencement of the Works, submit to the Employer proof of such insurance policy</p> <p>F:_____ V:_____ T:_____</p>			
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125 C14.5 RECOVERY OF LOSSES OR DAMAGES

The Employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the Contractor's default of his obligations as set out in sub clauses C14.2, C14.3 and C14.4. Such losses or damages may be recovered from the Contractor or by deducting the same from any amounts due under this Contractor or under any other contract presently or hereafter existing between the Employer and the Contractor and for this purpose all these contracts shall be considered one indivisible whole

F:_____ V:_____ T:_____

Item

SCHEDULE OF SUPPLEMENTARY INFORMATION

NOTE:

The information listed below is in respect of certain clauses in the Preliminaries, requiring the supplementary information

CLAUSE NO A24 - 9 months including public holidays and statutory builders holidays

The date for site handover :- TO BE ANNOUNCED

The contractual practical completion date is : 9 months after the date of site handover

CLAUSE NO A1 - Clause A1 has been amended to read that construction period means the period commencing on the date on which possession of the site is given to the contractor

CLAUSE NO A30 - Amount of penalty: **3,75cents per R100** of the contract sum excluding VAT per calendar day.

Carried to Collection

R

Section No. 1

Bill No. 1

Preliminaries and General

U1604 - CABANE JSS - COMPLETION

Section No. 1			
Bill No. 1			
Preliminaries and General			
<u>COLLECTION</u>			
	Page No		Amount
Total Brought Forward from Page No.	1		
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U1604 - CABANE JSS - COMPLETION			

Section No. 1			
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<u>COLLECTION</u>			
	Page No		Amount
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Total Brought Forward from Page No.	21		
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Preliminaries and General			
U1604 - CABANE JSS - COMPLETION			

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO. 1</u>			
<u>EARTHWORKS (PROVISIONAL)</u>			
NOTE : Tenderers are advised to study the "Standard Trade Preambles" before pricing this bill			
NOTE : All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density			
<p>Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the contractor's method of operation.</p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking.</p>			
Carried to Collection			R
Section No. 2			
Bill No. 1			
Earthworks			
U1604 - CABANE JSS - COMPLETION			

NOTE : Working space for formwork to sides of all concrete, except columns, shall be measured only where the concrete face is less than 750mm from the face of the measured excavations.

Working space for formwork to sides of columns shall be measured for the width of the column face only where both:

the top of the column base is more than 1,5m below the commencing level of the excavations and

the column face is less than 500mm from the face of the measured excavations.

No claim shall be considered for any working space for formwork to concrete other than as above described or for working space beyond the sides of trench excavations for the building of brick or block walls.

Descriptions of excavations for working space shall be deemed to include for any additional risk of collapse so incurred and for the returning and compacting of the excavated material as described.

-.....

EXCAVATION, ETC

Carried to Collection

R

Section No. 2

Bill No. 1

Earthworks

U1604 - CABANE JSS - COMPLETION

<u>Excavation in earth not exceeding 2m deep for:</u>					
1	Trenches.	m3	210		
<u>Extra over all excavations for carting away:</u>					
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	210		
<u>Risk of collapse of excavations:</u>					
3	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	124		
<u>Keeping excavations free of water:</u>					
4	Keeping excavations free from mud and all water including subterranean sources.		Item		
<u>EARTH FILLING, ETC.</u>					
<u>Coarse river sand filling supplied by the contractor:</u>					
5	Under floors etc. (Provisional).	m3	8		
<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 93% Mod AASHTO density.	m2	169		
<u>Prescribed density tests on filling:</u>					
7	Allow for compaction tests by an approved laboratory to determine density of filling material.	No	3		
<u>SOIL POISONING</u>					
Carried to Collection				R	
Section No. 2					
Bill No. 1					
Earthworks					
U1604 - CABANE JSS - COMPLETION					

Approved registered termite soil poisoning material in accordance with SABS 0124 - 1977 mixed with water and applied at a rate of not less than 5 litres of solution per square metre. The concentration of the solution shall be in strict accordance with the manufacturer's instructions and to the approval of the Representative/Agent.

8	Under floors including any preparation, levelling, etc.	m2	169
9	To bottoms and sides of trenches etc	m2	43

Carried to Collection

R

Section No. 2

Bill No. 1

Earthworks

U1604 - CABANE JSS - COMPLETION

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO 2</u>			
<u>CONCRETE, FORMWORK & REINFORCEMENT</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Proprietary products in descriptions:</u>			
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.			
<u>Cost of tests:</u>			
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).			
<u>Formwork:</u>			
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.			
Carried to Collection		R	
Section No. 2			
Bill No. 2			
Concrete, Formwork & Reinforcement			
U1604 - CABANE JSS - COMPLETION			

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.

Concrete tests

- | | | | |
|---|---|------|---|
| 1 | Prepare set of three concrete cubes each size 150 x 150 x 150 mm and deliver to an approved laboratory for testing and pay all charges. (Provisional). | Sets | 3 |
| 2 | The cost of preliminary tests prior to approval of the Contractor's materials and mixes shall be borne by the contractor. | Item | |
| 3 | Should the Engineer require any load test to be carried out because of the Contractor's failure to comply with instruction, the cost of such load tests shall be borne by the Contractor. | Item | |
| 4 | All concrete slump tests must be prepared and paid for by the Contractor. | Item | |

Reinforced concrete

30MPa/19mm concrete :

- | | | | |
|---|--|----|-----|
| 5 | 30MPa/19mm Reinforced concrete floors including beams etc., cast on waterproofing. | m3 | 46 |
| 6 | 30MPa/19mm Reinforced concrete ring beams. | m3 | 8 |
| 7 | Slabs | m3 | 0,4 |

SUNDRIES

Carried to Collection

R

Section No. 2

Bill No. 2

Concrete, Formwork & Reinforcement

U1604 - CABANE JSS - COMPLETION

	<u>Finishing top surfaces of concrete smooth with a wood float</u>				
8	Surface beds, slabs, etc	m2	173		
	<u>FORMWORK</u>				
	<u>Rough formwork to sides</u>				
9	Rough formwork to sides: Raft Foundation	m2	40		
	<u>Smooth formwork to soffits and sides:</u>				
10	Soffits and sides of slabs propped up not exceeding 3,5m high.	m2	4		
11	Soffits and sides of ring beam, not exceeding 3,5m high.	m2	140		
	<u>MOVEMENT JOINTS</u>				
12	20 mm Thick polystyrene expansion joint board in expansion joint between concrete or concrete and brickwork surfaces not exceeding 300 mm wide.	m	26		
	<u>STEEL REINFORCEMENT (PROVISIONAL)</u>				
	<u>High tensile reinforcement.</u>				
13	25mm Diameter rods.	t	2,29		
14	16 mm Diameter rods.	t	0,46		
15	10 mm Diameter rods.	t	2,40		
16	8 mm Diameter rods.	t	0,33		
	<u>Mesh reinforcement</u>				
17	Ditto but Ref. 193	m2	169		
18	Ditto but Ref. 356	m2	169		
	Carried to Collection			R	
	Section No. 2				
	Bill No. 2				
	Concrete, Formwork & Reinforcement				
	U1604 - CABANE JSS - COMPLETION				

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Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 2</u></p> <p><u>BILL NO. 2</u></p> <p><u>MASONRY</u></p> <p><u>BRICKWORK</u></p> <p>NOTE : Tenderers are advised to study the "Standard Preambles to Trades" before pricing this bill</p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p> <p><u>Pointing</u></p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><u>FOUNDATIONS (PROVISIONAL)</u></p> <p><u>14MPa clay stock bricks (NFP), overall size 220 x 140 x 70mm, manufactured in accordance with SANS 227:2007, laid in foundations walls to single storey building and bedded and jointed in Class II mortar.</u></p>			
1	Half brick walls	m2	31	
	<p><u>BRICKWORK IN SUPERSTRUCTURE</u></p>			
	Carried to Collection		R	
	<p>Section No. 2</p> <p>Bill No. 3</p> <p>Masonry</p> <p>U1604 - CABANE JSS - COMPLETION</p>			

	<u>14MPa clay stock bricks (NFP), overall size 220 x 140 x 70mm, manufactured in accordance with SANS 227:2007, laid in superstructure walls to single storey building and bedded and jointed in Class II mortar.</u>				
2	Piers	m3	2		
3	Half brick walls	m2	31		
4	Ditto in beam filling	m2	9		
5	One brick walls	m2	33		
6	270mm Hollow walls of two half brick skins with cavities filled in with and including brick ties and 50mm thick 'SAGEX' or other equally approved insulation to cavity wall.	m2	122		
	<u>BRICKWORK SUNDRIES</u>				
	<u>Bagging and sealing the outer face of the inner skin of walls with 1:3 cement and sand mixture and seal with two coats "Brixal" bitumen emulsion waterproofing coating:</u>				
7	Bag down surfaces of inner skin of brickwork in 1:6 cement mortar slurry as the work proceeds to a smooth,even surface and apply bitumen waterproofing.	m2	122		
	<u>Ties and Cramps</u>				
8	30 x 2mm Galvanized door frame tie 350mm long with one end fixed to timber and other built into brickwork or concrete.	No	24		
9	30 x 2mm Galvanized roof tie 1500mm long with one end fixed to timber and other built into brickwork or concrete.	No	34		
	<u>Brick reinforcement</u>				
10	75 mm wide reinforcement built in horizontally	m	3 968		
11	Ditto, but in foundations (Provisional).	m	159		
12	150 mm wide reinforcement built in horizontally	m	68		
	Carried to Collection			R	
	Section No. 2				
	Bill No. 3				
	Masonry				
	U1604 - CABANE JSS - COMPLETION				

	<u>Concrete prestressed fabricated lintels</u>				
13	110 x 75mm Lintels	m	3		
14	150 x 70mm Lintels	m	15		
	<u>Turning pieces:</u>				
15	100mm Wide turning piece to lintels etc.	m	3		
16	200mm Wide turning piece to lintels etc.	m	15		
	<u>Joint forming material in movement joints</u>				
17	12mm Fibre board built in vertically between brick skins not exceeding 300mm wide.	m	12		
18	Ditto in foundations (provisional)	m	1		
	<u>FACE BRICKWORK</u>				
	<u>Selected 30-40MPa FBA clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2.</u>				
19	Half brick walls pointed on both sides.	m2	31		
20	Extra over brickwork for face brickwork in beamfilling	m2	22		
21	Extra over brickwork for face brickwork in piers	m2	15		
22	Extra over brickwork for face brickwork internally.	m2	38		
23	Extra over brickwork for face brickwork externally.	m2	69		
24	Ditto, but in foundations (Provisional).	m2	18		
	Carried to Collection			R	
	Section No. 2				
	Bill No. 3				
	Masonry				
	U1604 - CABANE JSS - COMPLETION				

Brick-on-edge header course copings, sills, etc with recessed joints on all exposed faces:

25	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	18
26	220mm Brick on edge course to top of one brick wall embedded in concrete and jointed in cement mortar and pointed on top as described.	m	33
27	220mm Brick on edge sill bedded sloping and jointed in cement mortar and pointed on top, edge and projecting soffit including cutting and fitting between reveals and splay cutting brickwork under.	m	13
28	Fair raking cutting	m	1

FIBRE CEMENT WINDOW SILLS

29	Sills set flat and slightly projecting internally and pointing in (3:1) cement mortar	m	13
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Carried to Collection

R

Section No. 2

Bill No. 3

Masonry

U1604 - CABANE JSS - COMPLETION

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 5</u>			
	<u>WATERPROOFING</u>			
	NOTE : Tenderers are advised to study the "Standard Preambles to Trades" before pricing this bill			
	<u>DAMPPROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 250 micron "Gunplas USB Green or Similar approved" waterproof sheeting sealed at laps with approved "Superstick" tape:</u>			
1	Damp proof membrane laid on filling under solid floors, lapped 100mm and sealed at all joinings (Measured nett)	m2	268	
	<u>One layer of 375 micron "Gunplas USB Green or Similar approved" Brickgrip DPC waterproof sheeting below walls, sills, etc:</u>			
2	In walls laid horizontally and built into walls or stepped up cavity lapped 150mm at all angles and passings (Measured nett)	m2	23	
	<u>JOINT SEALANTS, ETC</u>			
3	Clear silicone joint sealing and pointing between external steel/aluminium door/window frames and facebrick surround.	m	62	
4	10 mm Polysulphide sealant in isolation joint.	m	10	
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2			
	Bill No. 4			
	Waterproofing			
	U1604 - CABANE JSS - COMPLETION			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO. 6</u>			
<u>ROOF COVERINGS ETC.</u>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition), the Department of Public Works document No. OW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities.</p>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Proprietary products in descriptions:</u>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<u>Fixing:</u>			
<p>Fixing shall be done according to SABS 1200HB with minimum 225mm end laps.</p>			
<u>Guarantee:</u>			
<p>The contractor will be required to provide a written guarantee, stating that :1. The roof sheeting is of the specified thickness.2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years.</p>			
Carried to Collection			R
Section No. 2 Bill No. 5 Roof Coverings, Etc U1604 - CABANE JSS - COMPLETION			

Pricing:

Prices for roof covering and cladding are to include for all necessary drive screws, hook bolts, sheet bolts, nuts, washers, etc., for drilling holes for screws and bolts including removing all swarf from the sheeting and all right angle cutting and waste (Measured net).

ROOF SHEETING AND ACCESSORIES

Global Roofing Solutions (OR SIMILAR APPROVED)
0.8mm thick 762mm cover, Corrugated profile Z200
spelter ISQ300 galvanised steel roof sheeting with
Chromadek finish, fixed to carbolineum treated 76 x
50mm SA Pine intermediate purlins at maximum 1000mm
centres and eaves and ridge purlins at 900mm centres
using Hex Flange Head + EPDM Seal selfdrilling Type 17
drill point, No. 12-11 x 65mm long, Class 3, fasteners.
Purlin fixed to first, fourth and eighth crest of each sheet
and at all crests at sheet ends, all in accordance with the
manufacturer's specifications.

1	Roof covering with pitch not exceeding 25 degrees	m2	233
2	Ridge capping 462mm girth	m	5
3	Hip capping 462mm girth	m	26
4	Serrated ridge closers	m	62

ROOF AND WALL INSULATION

"Sisalation 420" heavy industrial grade aluminium foil
based insulation

5	Insulation laid taut over purlins and fixed concurrent with roof covering including galvanised steel straining wires	m2	233
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Carried to Collection

R

Section No. 2

Bill No. 5

Roof Coverings, Etc

U1604 - CABANE JSS - COMPLETION

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 7</u>			
	<u>CARPENTRY AND JOINERY</u>			
	NOTE : Tenderers are advised to study the "Standard Trade Preambles" before pricing this bill			
	<u>ROOFS ETC</u>			
	<u>Sawn softwood:</u>			
1	38 x 228mm Gang boarding. (Provisional).	m	16	
	<u>Wrought softwood:</u>			
2	50 x 76mm Bearer fascia support (Provisional).	m	65	
	<u>Sundries:</u>			
3	Fix only bolt through average 38mm softwood including drilling hole.	No	24	
4	Fix only bolt through average 70mm softwood including drilling hole.	No	8	
	<u>PREFABRICATED ROOF TRUSSES, ETC.</u>			
	<u>Plate nailed timber roof truss construction:</u>			
	Note: Tenderers are referred to the Architects roof plan drawings annexed to these bills of quantities / accompanying these bills of quantities for tender purposes. Specifications and calculations of prefabricated roof must be supplied by the contractor on award of the contract. Descriptions (prices) shall be deemed to include design.			
	Carried to Collection		R	
	Section No. 2			
	Bill No. 6			
	Carpentry and Joinery			
	U1604 - CABANE JSS - COMPLETION			

Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturers. Trusses to be a minimum of 1200mm centres and are to support metal roof covering. Ceilings are either gypsum plasterboard or claddit (suspended or fixed). Prices must include for the design , plans and approval of all timber trusses and no claim shall be considered. An Engineers approval certificate is required once the roof truss installation is complete and is for the contractors account.

- 5 Roof construction to double hip style roof to Grade R Classroom Block, size 17,690 x 12,572mm average on plan, 2,100mm high overall including wall plates, trusses, permanent bracing, purlins, valley boards, tilting purlin at eaves with all purlins fixed to rafters with approved hurricane clips and trusses fixed to wall plates with approved roof ties. All exposed timbers at eaves, verges etc are to be wrot and including painting with two coats "ABE Provonite", installed complete all as indicated on Architect's drawing

m2

222

EAVES, VERGES, ETC

Pressed fibre-cement:

- 6 12 x 225mm pressed fibre cement fascia board three times drilled, and brass screwed to and including 38 x 50 x 114mm long S.A. Pine cleats twice brass screwed to rafter foot including galvanised steel H-profile jointing strips, screws, holes etc.

m

65

DOORS AND PANELS

Wrot Meranti doors

- 7 44 mm Thick framed, ledged and braced batten door size 813 x 2 032 mm high of 40 x 110 mm top rail and stiles, 20 x 150 mm middle ledge and braces and 20 x 225 mm bottom rail filled in with 70 x 22 T&G V-jointed on one side boarding and covered on other side with 6 mm ply covering to match door let into and including rebates all round.

No

1

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Bill No. 6

Carpentry and Joinery

U1604 - CABANE JSS - COMPLETION

8	40mm Thick purpose made 'Hardwood' double door size 1800 x 2032mm with rebated double leafs with 40 x 140mm top rails, mid rails and styles, and 40 x 210mm bottom rails, fitted with four glass panels (elsewhere measured) .(Refer to attached drawing no 420-D01)	No	1		
	<u>Solid doors hung to timber frames</u>				
9	44mm Single door 813 x 2032mm high composed of 34mm solid chipboard core with 34X31mm hardwood edging/frame with 3mm masonite to both sides of finish suitable for painting.	No	2		
	<u>FRAMED FRAMES ETC</u>				
	<u>Wrought meranti:</u>				
10	70 x 108mm Purpose made, once rebated and angle rounded door frames plugged.	m	16		
	<u>SKIRTINGS,ETC</u>				
	<u>Wrought Meranti</u>				
11	19 x 70 mm Skirtings including 19mm quadrant plugged to walls.	m	67		
12	19 x 70mm Architrave plugged.	m	16		
	<u>Sundries:</u>				
13	32 x 76 mm Wrot Meranti rebated and splayed weatherboard screwed to door.	m	3		
	<u>SHELVES</u>				
14	326 x 19mm Thick laminated wrot S A pine shelving with rounded edges on front side, screwed to brackets (elsewhere measured).	m	21		
Carried to Collection				R	
Section No. 2					
Bill No. 6					
Carpentry and Joinery					
U1604 - CABANE JSS - COMPLETION					

FITTINGS

Descriptions for the following joinery fittings, etc., shall be deemed to include all ironmongery, metalwork, paint finishes, laminated finishes, etc., and for assembling and installing complete.

All doors, drawer fronts and cupboard carcasses are to be constructed out of 18mm Melamine faced "V313" moisture resistant particle board with concealed edges.

All worktops in general are to be 32mm solid post formed Formica on "V313 HMR" particle board in non-moisture areas.

The rate for formica or similar finish to particle board, etc., must also include for a balancing veneer on the other side and for formica edge strips on all exposed edges.

The Contractor's rates must also allow for fixing together of various components by a method that is approved by the Principal Agent.

The fittings generally have been measured in modules and the Type references after each module refer to the fittings of which they form a part.

The general shape, size, details and specification of the units are shown on the architectural drawings and Tenderers shall allow in their rates for the full intent of the work described and shown on the drawings.

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Carpentry and Joinery

U1604 - CABANE JSS - COMPLETION

R

The worktops shall be supported on cupboard or drawer units or on metal leg/brackets and free ends shall be supported on and including bearers fixed to walls or adjacent fittings. (Cupboard units, drawer units and metal leg/brackets are included with the relevant item).

Note: The stated height of the cupboard units, etc., under worktops includes the thickness of the worktop only (excluding the splashback over).

The fitting units are to be manufactured and installed all to the approval of the Principal Agent.

If the Contractor or his appointed domestic sub-contractor wish to use their own methods of construction, samples and specifications of construction, finishes, fittings and furniture must be submitted for approval.

The sizes given in the items hereinafter are approximate and the drawings must be carefully checked for accurate dimensions and details. Any errors in this regard will be at the Contractor's expense.

The Contractor must check all dimensions on site before commencing with construction. All units shall be, unless otherwise described, divided in equal sections.

Prices are to include for all ironmongery, steel frameworks, finishes to timber and steel, glazing, painting and sanitary fittings as and where shown and specified on drawings. (Taps and traps are elsewhere measured). Rates must also include for fixing worktops or cupboards in position to frameworks or against walls and floors.

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Bill No. 6

Carpentry and Joinery

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The stated dimensions of units described as L-Shaped on plan or U-shaped on plan are the extreme dimensions of the component, i.e. the overall length measured over the external face.

The dimensions of cupboards, lockers, storage units, etc., are stated in the following order :- width x depth x height.

Unless otherwise described all steel posts, bearers, brackets, etc., shall be galvanised mild steel finished with one coat calcium plumbate primer and two coats gloss enamel paint and prices shall include for bolting to floor or wall.

JOINERY FITTINGS

- 15 Classroom cupboard unit, size 4999 x 450 x 720mm high, including all finishes, all as indicated on **Drawing No 500-PR02 elevations 4 and 5.**

No

1

THE FOLLOWING IN WORKTOPS AND BUILT-IN

CUPBOARDS IN GRADE R CLASSROOM (Drawing No 500-PR02)

Wrought laminated Saligna:

- 16 32mm Thick postformed worktop 3859mm long x 650mm wide with rounded edge and 0,8mm thick pressure laminate venetto black granite laminate all round and screwed to support brackets from underneath

No

1

"Melawood Melamine" impact particle board edged all round:

- 17 19 x 44mm Framing

m

17

- 18 19 x 100mm Skirtings and bearers

m

20

Carried to Collection

R

Section No. 2

Bill No. 6

Carpentry and Joinery

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	<u>Tempered hardboard with white laminated veneer</u>				
19	3,4mm Backing	m2	4		
	<u>"Melawood" melamine faced chipboard</u>				
20	16mm Tops, shelves, sides, divisions, etc	m2	5		
21	16mm Adjustable shelving	m2	1		
22	Edge strips 16mm wide	m	20		
23	Drawer 500 x 520 x 150mm deep overall of 16mm edged and grooved front, sides and back, 570 x 183 x 16mm "Supawood" front cover panel and 3mm tempered hardboard bottom	No	4		
	<u>"Supawood" chipboard</u>				
24	16mm Cupboard door 580 x 743mm high	No	1		
	<u>THE FOLLOWING IN WORKTOPS AND BUILT-IN CUPBOARDS IN GRADE-R STORE (Drawing No 500-PR02)</u>				
	<u>Wrought laminated Saligna:</u>				
25	32mm Thick postformed worktop 5374mm long x 475mm wide with rounded edge and 0,8mm thick pressure laminate venetto black granite laminate all round and screwed to support brackets from underneath	No	1		
	<u>"Melawood Melamine" impact particle board edged all round:</u>				
26	19 x 44mm Framing	m	11		
27	19 x 100mm Skirtings and bearers	m	5		
	<u>Tempered hardboard with white laminated veneer</u>				
28	3,4mm Backing	m2	5		
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	<u>"Melawood" melamine faced chipboard</u>				
29	16mm Tops, shelves, sides, divisions, etc	m2	3		
30	16mm Adjustable shelving	m2	2		
31	Edge strips 16mm wide	m	30		
	<u>THE FOLLOWING IN WORKTOPS AND BUILT-IN CUPBOARDS IN GRADE-R KITCHEN</u>				
	<u>Wrought laminated Saligna:</u>				
32	32mm Thick postformed worktop 7099mm long x 600mm wide with rounded edge and 0,8mm thick pressure laminate venetto black granite laminate all round and screwed to support brackets from underneath	No	1		
	<u>"Melawood Melamine" impact particle board edged all round:</u>				
33	19 x 44mm Framing	m	53		
34	19 x 100mm Skirtings and bearers	m	8		
	<u>Tempered hardboard with white laminated veneer</u>				
35	3,4mm Backing	m2	7		
	<u>"Melawood" melamine faced particle board</u>				
36	16mm Tops, shelves, sides, divisions, etc	m2	4		
37	16mm Adjustable shelving	m2	4		
38	Edge strips 16mm wide	m	30		
39	Cut-out in top for drop-in sink	No	2		
	Carried to Collection			R	
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"Supawood" particle board

40	16mm Cupboard door 450 x 786mm high	No	8
41	16mm Cupboard door 522 x 743mm high	No	1
42	Edge strips 32mm wide	m	40

JOINERY SUNDRIES**Wrought meranti:**

43	Slatted seats of 300 x 300mm attached to concrete or brickwork.	m2	10
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Bill No. 6

Carpentry and Joinery

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 8</u>			
	<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
	NOTE : Tenderers are advised to study the "Standard Trade Preambles" before pricing this bill			
	<u>NAILED UP CEILINGS</u>			
	<u>4mm Plain fibre cement ceiling boards fixed to and including 38mm x 50mm S.A. Pine brandering at maximum 450mm centres, with cross brandering at joints, end of sheets,</u>			
1	Ceilings including 38 x 50mm sawn softwood brandering at 400mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	m2	93	
	<u>Trap doors ,etc</u>			
2	Extra over Fibre-cement ceiling for forming trap door size 630 x 630mm in clear formed with 38 x 50mm sawn S.A. pine framing covered with ceiling boarding and set in 38 x 76mm wrought S.A. pine rebated kerb, including trimmers.	No	1	
	<u>Cornices and light fittings, nailed @ 150mm centres,</u>			
3	76 x 19mm angle rounded wrot meranti cornice with matching 19mm quadrant bead. Finish as per finishing schedule.	m	72	
	<u>INSULATION</u>			
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	Bill No. 7			
	Ceilings, Partitions and Access Flooring			
	U1604 - CABANE JSS - COMPLETION			

Non-combustible polyester thermal insulation of a density of not less than 10kg/m3:

- 4 100mm Alutherm® polyester fibre blanket laminated to 4mm white bubble layer on one side and reinforced foil facing on other complying with SANS 1381-1:2007, laid and stapled horizontally on top of timber rafters and brandering before fixing of roof sheeting (elsewhere specified). **Or other equally approved.**

m2

93

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Bill No. 7

Ceilings, Partitions and Access Flooring

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[illegible]

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Supply and fix 2.5mm thick x 1.2m wide fully flexible vinyl sheeting (SABS certified), manufactured in accordance with SANS 786 and laid in No. 62 acrylic adhesive which has been spread using a trowel fitted with an A2 notched blade at a rate of between 5.5m² and 6.5m² per litre on a previously prepared Class 1 sub-floor in accordance with SANS 10070, (using Self Leveller when required), including all cutting and waste.

The sheeting must be rolled in both directions with an articulated 68kg three-sectional roller immediately after it has been laid into the adhesive. Joints must be butted, grooved and heat welded using matching Welding Rod, ensuring that the welding rod bonds to more than 70% of the sheet thickness.

The newly laid floor must, after 72 hours, be stripped using suitable vinyl floor Stripper, scrubbed using a diluted solution of Rinse and then sealed with 3 coats of Silk Matt or Gloss Sealer.

All the above strictly in accordance with manufacturers recommendations by approved fully qualified flooring contractors`.

ADD;

1. Power float the slab to avoid potential screed failures
2. No saw cut joints inside classrooms- use thicker mesh in slab
3. Either vinyl skirting turned up or silicon below timber skirtings to prevent water ingress below vinyl

1	On floors	m2	93
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POLISH, SEALERS, ETC

2	Three coats wax polish on vinyl flooring	m2	93
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Section No. 2

Bill No. 8

Floor Coverings

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Item No			Quantity	Rate	Amount
	<u>SECTION NO. 2</u>				
	<u>BILL NO. 10</u>				
	<u>IRONMONGERY</u>				
	<u>NOTE :Tenderers are advised to study the " Standard Trade Preambles" before pricing this bill.</u>				
	<u>Note:Rates for ironmongery are to include for forming all mortices, recesses, sinkings, etc. in timber and all preparation work to pressed steel door frames required to receive the article concerned</u>				
	<u>Proprietary products in descriptions</u>				
	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				
	<u>HINGES, BOLTS, ETC</u>				
	<u>Hinges:</u>				
1	100 x 75 mm Solid brass double washered butt hinge	Pairs	5		
2	Ball bearing butt hinge as "Dorma DBB - SS - 009", size 102x75x3mm.	No	4		
3	Dorma "DFB-SS-027" 160mm stainless steel flush bolt fitted.	No	2		
	<u>Solid</u>				
	<u>CATCHES, CABIN HOOKS, ETC</u>				
	<u>Solid</u>				
4	100mm SC cabin hook and eye	No	3		
5	Halstead 401 floor mounted door holder	No	5		
	Carried to Collection			R	
	Section No. 2				
	Bill No. 9				
	Ironmongery				
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Locks

6	Four lever mortice lockset with striking plate fixed to door frame including satin-chrome plated handles.	No	1
7	Union L-2241-78 oval cylinder mortice lockset with a 57mm backset	No	1
8	2 x 8SCMKD Union half cylinder lock	No	1
9	Union CB2979SC rebate conversion set	No	1
10	Union 2x6SC Oval double cylinder with 2 keys 65mm, with satin chrome finish	No	1
11	Padlock with three keys (3102/38).	No	2

HANDLES**"Union":**

12	Solid CB612-13 Protea handles	No	6
13	CB612/06/13SC Union Protea lever furniture	No	2

LETTERS, NAMEPLATES, ETC**Acrylic door plates:**

14	250 x 40 x 6mm Thick white acrylic door name plate with nine to fifteen letters size 30mm high, engraved with arial font and painted navy, fixed to door, door frame or wall with double sided adhesive tape (Provisional).	No	4
15	250 x 40 x 6mm Thick white acrylic door name plate with fifteen to twenty letters size 30mm high, engraved with arial font and painted navy, fixed to door, door frame or wall with double sided adhesive tape (Provisional).	No	1

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Sign plates:

16	152 x 152 x 2mm Anodised silver engraved sign with Fire Extinguisher Pictogram E06, fixed to wall or door (AL5066E-06/2AS).	No	2
17	152 x 152 x 2mm Anodised silver engraved sign with Directional Pictogram E08, fixed to wall or door (AL5066E-08/2AS).	No	2

ADJUSTABLE SHELVING**Shelving system with ivory baked epoxy powder coating**

18	Shelf brackets for 450mm timber shelves as type "WFO 18"	No	48
19	Wallbands 2110mm long as type "WB7", plugged to brickwork or concrete	No	12

CHALK BOARDS**Writing boards**

20	Green vitreous enamelled magnetic writing board size 4800 x 1200mm high complete with aluminium chalk rail, etc and fixed to wall.	No	1
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PINNING BOARDS

21	2400mm Wide x 1250mm high pinning board, as per detail, mounted to wall with 6 x 57mm Hilti HPS-1 6/30 plastic anchors at maximum 400mm centres. Top of frame to be in line with underside of window soffits. Anchor heads to be countersunk and filled with a suitable wood filler.	No	1
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Ironmongery

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STATIONERY CUPBOARDS

- 22 1800mm high x 900mm wide x 450mm deep steel cupboard, complete with four shelves, double lockable doors and powder coated finish - code CU10 as by "Insight". Steel cupboards to be bolted to back wall with 4 x 6mm expansion bolts.

No

2

FIRST AID CUPBOARD

- 23 710 x 770mm, 280mm deep White Epoxy Coated Metal Double Door Wall Mounted Storage Cabinet.

No

1

SUNDRIES

- 24 32 mm Diameter polished hardwood longarm 3 m long with brass pole hook on one end, two broom clips each with 20 x 100 x 100 mm wrought and chamfered hardwood block twice holed and plugged and 20 x 70 x 70 mm wrought and chamfered hardwood block with sinking twice holed and plugged

No

1

- 25 20mm diameter chromium plated key ring with and including plastic keytag.

No

5

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Ironmongery

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	<u>SECTION NO. 2</u>			
	<u>BILL NO. 11</u>			
	<u>METALWORK</u>			
	NOTE : Tenderers are advised to study the "Standard Trade Preambles" before pricing this bill			
	<u>HOT DIP GALVANISED MILD STEEL</u>			
	<u>Bolts</u>			
1	Screw bolts with heads, nuts and washers (Provisional)	kg	5	
	<u>HOT DIP GALVANISED MILD STEEL COLUMNS</u>			
2	75 x 3mm Thick three times bent T-shaped roof truss bracket 375mm girth three times holed for bolts (bolts and holes elsewhere measured)	No	4	
	<u>Brass:</u>			
3	3x 40mm Weatherbar set in concrete flush with floor finish one side.	m	3	
	<u>HOT DIP GALVANISED PRESSED STEEL ROLLER SHUTTER, ETC.</u>			
	<u>Epoxy powder coated roller shutters fixed to brickwork or concrete</u>			
	<u>Natural anodised aluminium roller shutters fixed to brickwork</u>			
4	Manual push-up slatted roller shutter for 1440 x 900mm high opening, operated with galvanised steel bottom rail and "U" shaped channel guides, etc., including suitable latch for and 50mm padlock. (Drawing No 420-RS01)	No	1	
	<u>Strong room doors</u>			
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	Section No. 2			
	Bill No. 10			
	Metalwork			
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ALUMINIUM WINDOWS

Natural anodised aluminium windows, factory glazed with 6.38mm laminated safety glass with clip-on glazing beads, with neoprene seals and fixed with minimum three lugs per side in accordance with manufacture's instructions:

- | | | | |
|---|---|----|----|
| 5 | Purpose made top hung aluminium window size 987 x 976mm high including 8x20mm horizontal flat bars not exceeding 100mm centres.
(Drawing No 410-W01) | No | 13 |
| 6 | Purpose made Fixed aluminium window size 600 x 900mm high.
(Drawing No 410-W02) | No | 1 |

GATES, ETC

- | | | | |
|---|--|----|---|
| 7 | Hot dipped galvanised Security gate in single leaf size 900 x 1454mm high formed of 40 x 40 x 2mm angle outer frame with 50mm wide x 1,2mm thick @ 45° solid steel slats, with 38 x 38 x 10mm thick plates as hinges with rounded ends to one side and hole for 18mm diameter pin hung on pair of socketed and pinned hinges with pin 18 mm in diameter and bolted to brick wall, with 200mm locking bolt welded on, or other Architect approved hinges, all as indicated on Architect's drawings.
(Drawing No 501-PR2 - Item No 6 to 10) | No | 1 |
|---|--|----|---|

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Bill No. 10

Metalwork

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 12</u>			
	<u>PLASTERING</u>			
	NOTE : Tenderers are advised to study the "Standard Preambles to Trades" before pricing this bill			
	<u>GRONOLITHIC</u>			
	<u>Untinted granolithic finish to concrete</u>			
1	Average 40mm finish to horizontal surfaces to falls	m2	5	
	<u>SCREEDS</u>			
	<u>1:3 Cement mortar screed finished smooth with a steel trowel</u>			
2	30 mm to floors and landings.	m2	93	
	<u>PLASTERING</u>			
	<u>Internally</u>			
	<u>One coat cement plaster 15 mm thick with 1 : 5 cement mix finished to a smooth even surface with a steel trowel, finished to brickwork and concrete with v-joints cut into junction between on:</u>			
3	Walls	m2	139	
4	Reveals, returns, etc. in narrow widths not exceeding 300 mm wide.	m2	8	
	<u>EXTERNAL PLASTER</u>			
	<u>One coat (4:1) cement plaster on brickwork or concrete finished with a steel trowel on:</u>			
5	Vertical surfaces including walls, columns, piers, etc	m2	137	
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	Bill No. 11			
	Plastering			
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Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO. 14</u>			
<u>PLUMBING (PROVISIONAL)</u>			
NOTE : Tenderers are advised to study the "Standard Trade Preambles" before pricing this bill			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Concrete pipes</u>			
Pipes shall be jointed with Ogee joints with rubber collars or socket and spigot joints with rubber rings			
<u>Copper pipes</u>			
Pipes shall be hard drawn and half hard pipes of the class stated. Class 0 (Thin walled hard drawn) pipes shall not be burnt. Class 1 (Thin walled half hard) pipes shall only be burnt with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be Cobra Watertech type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.			
<u>Reducing fittings</u>			
When fittings have reducing ends or branches, they are described as "reducing". In the case of pipes with diameters not exceeding 60 mm 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 60 mm, all sizes are given and no claim for bushes, reducers, etc will be entertained.			
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Wire gratings

Descriptions of gutter outlets, etc shall be deemed to include wire balloon gratings

Excavations

No claim for rock excavations will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof.

"Soft rock and Hard rock" shall be as defined in "Earthworks"

Laying, backfilling, bedding, etc of pipes

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturer's instructions.

Where no manufacturer's instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following : SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SAB.

Flush pans

Flush pans shall have straight or side outlets and P or S traps as deemed necessary

Stainless steel basins, sinks, washtroughs, urinals, etc

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

Waste unions

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.

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RAINWATER DISPOSAL (PROVISIONAL):

Watertite (OR SIMILAR APPROVED) seamless aluminium gutter, coated internally and externally with ColourTech G4 (OR SIMILAR APPROVED) in colour Marble White

1	150 x 100 x 0,6mm thick Watertite (OR SIMILAR APPROVED) seamless aluminium gutter, coated internally and externally with ColourTech G4 (OR SIMILAR APPROVED) in colour Marble White.	m	65
2	Extra over eaves gutter for 90 degrees angle.	No	4
3	Extra over eaves gutter for outlet for 100 x 75mm pipe.	No	2
4	100 x 75mm Rainwater pipes fixed to walls with and including approved holderbats at 900mm centres.	m	10
5	Extra over rainwater pipe for bend.	No	6

SANITARY FITTINGS

Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be type 304 (18/8)

Stainless steel

6	Franke Quinline Model QLX611 Grade 304 18/10 polished stainless steel single end bowl inset sink (Code: 820000), overall size 900 x 500mm with one 343 x 410 x 166mm deep bowl, fitted onto cupboard (elsewhere specified) including 90mm waste fitting (Code: 300651) and Spazi F/1 plumbing kit (Code: 301151).	No	1
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Polyethylene fittings:

7	Atlas Plastics rotomoulded polyethylene 65 litre wash trough with galvanised brackets (Code: 371AP), size 535 x 415mm wide with 40mm waste outlet, plugged and screwed to the wall with galvanised screws and fixing brackets.	No	1
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Plumbing and Drainage (Provisional)

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8	Atlas Plastics rotomoulded polyethylene Christy wash hand basin (code: 382AP) 570mm x 395mm wide, or equal approved, with 2 tapholes and 40mm waste outlet, plugged and screwed to the wall with galvanised screws and brackets.	No	1		
	<u>Waste Unions, etc</u>				
9	32 mm 301 CP waste union.	No	2		
10	40 mm 316 CP sink waste union.	No	1		
	<u>Traps, etc</u>				
11	40 x 50 mm Reseal 'P' or 'S'trap.	No	3		
	<u>Taps, Valves, etc</u>				
12	15 mm 111 CP "Star" pillartap.	No	3		
13	15mm 166/041 CP "Star" sink mixer	No	1		
	<u>Brass</u>				
14	15 mm Stopcock.	No	2		
	<u>SANITARY PLUMBING</u>				
	<u>uPVC pipes</u>				
15	40 mm Pipes	m	5		
16	50 mm Pipes laid in and including trenches not exceeding 1m deep under surface beds.	m	10		
	<u>Extra over uPVC pipes for</u>				
17	40mm Bend	No	4		
18	40mm Access bend	No	4		
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	<u>PVC vent pipes and fittings</u>				
	50mm Pipe fixed to walls	m	8		
	<u>Manholes, gulley traps,etc</u>				
19	100mm Gulley not exceeding 1000mm deep	No	2		
	<u>Testing:</u>				
20	Testing waste pipe system		Item		
	<u>WATER SUPPLIES</u>				
	<u>Class 0 copper pipes</u>				
21	15 mm Pipes	m	20		
22	22 mm Pipes	m	10		
	<u>Extra over class 0 copper pipes for brass capillary fittings</u>				
23	15 mm Fittings	No	10		
24	22 mm Fittings	No	10		
	<u>Extra over class 0 copper pipes for conex compression fittings</u>				
25	15 mm Fittings	No	4		
26	22 mm Fittings	No	2		
	<u>Copper overflow and service pipes</u>				
	<u>Testing</u>				
27	Testing of water pipe system		Item		
	<u>ELECTRIC WATER PUMP</u>				
28	'Hydro 2 Tap Acson PEM 3' or equally approved electric water pump including all necessary accessories, all to architect's approval.	No	1		
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FIRE APPLIANCES, ETC**Fire extinguisher**

29	4.5 Kg DCP fire extinguisher including backboard, plugged and screwed (Provisional)	No	1
30	9 Kg DCP fire extinguisher including backboard, plugged and screwed (Provisional)	No	1
31	Standard SABS approved, lockable PVC fire extinguisher cabinet, colour red, suitable for two 9kg fire extinguishers fixed to wall.	No	1

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 16</u>			
	<u>PAINT WORK</u>			
	NOTE : Tenderers are advised to study the "Standard Preambles to Trades" before pricing this bill			
	<u>PAINTWORK, ETC TO NEW WORK</u>			
	<u>UPVC PIPES</u>			
	<u>Prepare surface as described and apply one undercoat and one coat PVA emulsion paint:</u>			
	<u>ON METAL</u>			
	<u>Clean down thoroughly with galvanised iron cleaner, wash down with water, prime with one coat galvanised metal primer and finish with two coats superior universal non drip enamel on:</u>			
1	Exterior gates, grilles, burglar screens, balustrades, etc. (both sides measured over the full flat area).	m2	3	
	<u>ON WOOD</u>			
	<u>Prepare and apply one coat wood primer, one undercoat and two coats superior quality smooth gloss enamel on:</u>			
2	General surfaces of timbers at eaves.	m2	30	
	<u>Prepare and apply one coat wood primer, one undercoat and two coats superior quality eggshell enamel on:</u>			
3	Wooden frames and linings	m2	6	
4	Doors (all surfaces measured).	m2	17	
5	Shelving	m2	17	
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6	On interior skirtings, rails, etc not exceeding 300 mm girth	m	67		
	<u>ON FIBRE-CEMENT</u>				
	<u>Prepare and apply two coats pure acrylic roof paint on:</u>				
7	Fascias and barge boards.	m2	39		
	<u>Prepare and prime nail heads and apply one coat plaster primer thinned 5 parts to 1 part Mineral Turpentine and paint with two coats pure acrylic paint on:</u>				
8	On ceilings	m2	93		
	<u>Prepare and apply one coat universal primer, one undercoat and two coats superior quality eggshell enamel:</u>				
9	On sills.	m2	3		
	<u>ON PLASTERED SURFACES</u>				
	<u>Prepare and apply one undercoat and paint with two coats premium quality pure acrylic PVA on:</u>				
10	On external walls	m2	142		
11	Interior walls.	m2	147		
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Item No		Quantity	Rate	Amount
	<u>SECTION 3</u>			
	<u>BILL NO. 1</u>			
	<u>PIT TOILETS (PROVISIONAL)</u>			
	<u>SITE CLEARANCE ETC</u>			
1	Clear the whole of the site of all grass, roots, rubbish, etc. including stripping vegetable soil from the building area.	m2	73	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavate in pickable material not exceeding 2 m deep below natural or reduced ground level</u>			
2	Surface trenches.	m3	6	
3	Toilet pit.	m3	46	
	<u>Excavate in earth exceeding 2,00 m and not exceeding 4,00 m deep below natural or reduced ground level</u>			
4	Toilet pit.	m3	1	
	<u>Extra over excavation in pickable material for column bases, trenches, lift pits, sumps, etc. for excavation</u>			
5	Soft rock.	m3	5	
6	Hard rock.	m3	5	
	<u>Risk of collapse of excavations</u>			
7	Allow for risk of collapse to sides of excavations to column bases, trenches, pits, etc. from ground level to not exceeding 1.5 m deep.	m2	20	
8	Ditto, from ground level to exceeding 1,50 m deep.	m2	42	
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	Section No. 3			
	Bill No. 1			
	Pit Toilets			
	U1604 - CABANE JSS - COMPLETION			

<u>Extra over all excavations for carting away</u>					
9	Extra over all excavations for carting away surplus excavated material and spreading, levelling and lightly compacting on site where directed not exceeding 100 m from the excavations. (Measured nett - no allowance made for bulking).	m3	45		
<u>Keeping excavations free of water</u>					
10	Allow for keeping excavations entirely free from water or mud.		Item		
<u>FILLING ETC</u>					
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density</u>					
11	Under floors, steps, pavings, etc	m3	2		
12	Backfilling to trenches, holes, etc	m3	2		
<u>Earth filling supplied by the contractor, compacted to 93% Mod AASHTO density</u>					
13	Under floors, steps, pavings, etc	m3	9		
<u>Coarse river sand filling supplied by the contractor</u>					
14	Under floors etc	m3	4		
<u>Compaction of surfaces</u>					
15	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	13		
<u>Prescribed density tests on filling</u>					
16	"Modified AASHTO Density" test	No	2		
<u>SOIL POISONING</u>					
Carried to Collection				R	
Section No. 3					
Bill No. 1					
Pit Toilets					
U1604 - CABANE JSS - COMPLETION					

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	<u>Permanent formwork</u>				
26	Soffit of slab over pit.	m2	13		
	<u>Extra on permanent formwork for boxing or blocking in or boxing out to form:</u>				
27	470 mm Diameter opening through 170 mm thick slab.	No	10		
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>High tensile steel reinforcement</u>				
28	12 mm Diameter bars	kg	500		
29	8mm Diameter bars	kg	400		
	<u>Mild steel reinforcement</u>				
	<u>Fabric reinforcement</u>				
30	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	34		
31	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	17		
	<u>MASONRY</u>				
	<u>14MPa clay stock bricks (NFP), overall size 220 x 140 x 70mm, manufactured in accordance with SANS 227:2007, laid in foundations walls to single storey building and bedded and jointed in Class II mortar.</u>				
32	One brick wall.	m2	2		
33	Half brick wall.	m2	11		
34	Ditto, but in foundations (Provisional).	m2	15		
	Carried to Collection			R	
	Section No. 3				
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	Pit Toilets				
	U1604 - CABANE JSS - COMPLETION				

35	270mm Hollow walls of two half brick skins in cavity walls including brick ties.	m2	42		
36	270mm Hollow walls of two half brick skins with cavities filled in with and including 15MPa/19mm concrete in foundation and pit. (Provisional)	m2	38		
	<u>Weepholes, openings, etc</u>				
37	Form weep hole size 100 x 250mm thick through brick wall.	No	6		
	<u>Ties and Cramps</u>				
38	4 mm Galvanised wire double strand roof tie 2 500 mm girth, built eight courses into top of brickwork and other end lapped around, drawn tight and spiked to wood.	No	18		
	<u>Expansion Joints</u>				
	<u>Reinforcement</u>				
39	"Cotts No. C1" or other approved high tensile steel brick reinforcement 55 mm wide well lapped at all angles and passings and built into brick walls.	m	374		
40	"Cotts No. C2" or other approved high tensile steel brick reinforcement 155 mm wide well lapped at all angles and passings and built into brick walls.	m	260		
	<u>FACE BRICKWORK</u>				
	<u>Selected 30-40MPa FBA clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2.</u>				
41	Half brick walls pointed on both sides.	m2	11		
42	Extra over brickwork for face brickwork internally.	m2	27		
	Carried to Collection			R	
	Section No. 3				
	Bill No. 1				
	Pit Toilets				
	U1604 - CABANE JSS - COMPLETION				

Carried to Collection

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Global Roofing Solutions (OR SIMILAR APPROVED)
0,8mm thick 762mm cover, Corrugated profile Z200
spelter ISQ300 galvanised steel roof sheeting with
Chromadek finish, fixed to carbolineum treated 76 x
50mm SA Pine intermediate purlins at maximum 1000mm
centres and eaves and ridge purlins at 900mm centres
using Hex Flange Head + EPDM Seal selfdrilling Type 17
drill point, No. 12-11 x 65mm long, Class 3, fasteners.
Purlin fixed to first, fourth and eighth crest of each sheet
and at all crests at sheet ends, all in accordance with the
manufacturer's specifications.

49	Roof covering with pitch not exceeding 25 degrees	m2	47
50	Ridge capping 460mm girth.	m	18
51	Serrated ridge closers	m	72

CARPENTRY AND JOINERY

Sawn softwood:

Plate nailed timber roof truss construction:

Note: Tenderers are referred to the Architects roof plan drawings annexed to these bills of quantities / accompanying these bills of quantities for tender purposes. Specifications and calculations of prefabricated roof must be supplied by the contractor on award of the contract. Descriptions (prices) shall be deemed to include design.

Carried to Collection

R

Section No. 3

Bill No. 1

Pit Toilets

U1604 - CABANE JSS - COMPLETION

Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturers. Trusses to be a minimum of 1200mm centres and are to support metal roof covering. Ceilings are either gypsum plasterboard or claddit (suspended or fixed). Prices must include for the design , plans and approval of all timber trusses and no claim shall be considered. An Engineers approval certificate is required once the roof truss installation is complete and is for the contractors account.

52	Roof construction to double hip style roof to Grade R Ablutions Block, size 8,100 x 5,550mm average on plan, 1,100mm high overall including wall plates, trusses, permanent bracing, purlins, valley boards, tilting purlin at eaves with all purlins fixed to rafters with approved hurricane clips and trusses fixed to wall plates with approved roof ties. All exposed timbers at eaves, verges etc are to be wrot and including painting with two coats "ABE Provonite", installed complete all as indicated on Architect's drawing	m2	45
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Sundries

53	Fix only bolt through average 70 mm softwood including drilling hole.	No	8
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Eaves and Verges

54	12 x 225 mm Pressed fibre cement fascia board drilled and brass screwed to rafter feet including steel jointing plates between lengths.	m	27
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DOORS AND PANELS

Semi Solid doors

55	40mm semi-solid core door size 813 x 1050 mm with Masonite Plain standard S.A.B.S approved hardboard, on both sides for door size 813 x 1050mm high.	No	4
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Carried to Collection

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56	813mm wide x 1200mm high x 44mm thick semi-solid door, edged and faced with tempered veneered hardboard; finish suitable to paint.	No	1		
	<u>FRAMED FRAMES ETC</u>				
	<u>Wrought meranti:</u>				
57	70 x 108mm Rebated and angle rounded door frames plugged.	m	12		
	<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>				
	NOTE : Tenderers are advised to study the "Standard Trade Preambles" before pricing this bill				
	<u>NAILED UP CEILINGS</u>				
	<u>4mm Plain fibre cement ceiling boards fixed to and including 38mm x 50mm S.A. Pine brandering at maximum 450mm centres, with cross brandering at joints, end of sheets,</u>				
58	Ceilings including 38 x 50mm sawn softwood brandering at 400mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	m2	18		
	<u>Trap doors ,etc</u>				
59	Extra over Fibre-cement ceiling for forming trap door size 630 x 630mm in clear formed with 38 x 50mm sawn S.A. pine framing covered with ceiling boarding and set in 38 x 76mm wrought S.A. pine rebated kerb, including trimmers.	No	1		
Carried to Collection				R	
Section No. 3					
Bill No. 1					
Pit Toilets					
U1604 - CABANE JSS - COMPLETION					

	<u>Cornices and light fittings, nailed @ 150mm centres,</u>				
60	76 x 19mm angle rounded wrot meranti cornice with matching 19mm quadrant bead. Finish as per finishing schedule.	m	18		
	<u>IRONMONGERY</u>				
	<u>Hinges:</u>				
61	100 x 75 mm Solid brass double washered butt hinge	Pairs	15		
	<u>Solid</u>				
62	CZ8731SC Buffered door stop	No	5		
	<u>Locks</u>				
63	21314-76SS Single cylinder deadlock with striking plate fixed to metal	No	5		
64	E1511 Erebus H/D adjustable roller catch	No	5		
	<u>Handles</u>				
65	AL5515-300BBAS Union 300mm back to back aluminium pull handles	No	2		
	<u>"Union"</u>				
66	7836 Delayed action overhead Door closer with cover fixed to metal	No	1		
	<u>Sign Plates</u>				
	<u>All sign plates, and door numbers are to be with engraved blue perspex all in accordance with the standard signplates for East Cape Schools to Architect's approval</u>				
67	"TEACHER/DISABLED" signplate plugged and screwed to walls with chromium plated domeheaded screws.	No	1		
	Carried to Collection			R	
	Section No. 3				
	Bill No. 1				
	Pit Toilets				
	U1604 - CABANE JSS - COMPLETION				

BATHROOM FITTINGS**Stainless steel 32mm diameter grab rails grade 304 stainless steel:**

68	Franke CNTX750, size 750 x 90mm deep grab rails plugged and screwed to wall.	No	1
69	Franke CNTX21, size 415 x 415 x 95mm deep grab rail plugged and screwed to wall.	No	1

PUSH PLATES AND KICKING PLATES

70	813 x 200 x 2mm Thick satin finished stainless steel kick plate	No	2
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METALWORK**Galvanised Mild Steel Framed And Welded Gate Including All Welding, Cutting, Drilling And Grinding Smooth**

71	849x2015mm hot dipped galvanised steel subframe security gate made up of 32mm x 32mm square steel frame with 8mm x 20mm flat horizontal and 10mm vertical bars with centres not exceeding 100mm.	No	1
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Mild Steel Toilet Roll Holder

72	12 mm Diameter toilet roll holder 370 mm girth twice bent with 8 mm diameter lug 106 mm girth once bent and welded on including building into brickwork as the work proceeds.	No	5
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PLASTERING**Untinted granolithic finish to concrete**

73	Average 40 mm finish to horizontal surfaces to falls.	m2	2
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Plastering Internally

Carried to Collection

R

Section No. 3

Bill No. 1

Pit Toilets

U1604 - CABANE JSS - COMPLETION

	<u>One coat cement plaster 15 mm thick with 1 : 5 cement mix finished to a smooth even surface with a steel trowel, finished to brickwork and concrete with v-joints cut into junction between on:</u>				
74	Walls	m2	70		
	<u>Plastering Externally</u>				
75	Vertical surfaces including walls, columns, piers, etc	m2	18		
	<u>PLUMBING</u>				
	<u>Watertite (OR SIMILAR APPROVED) seamless aluminium gutter, coated internally and externally with ColourTech G4 (OR SIMILAR APPROVED) in colour Marble White</u>				
76	150 x 100 x 0,6 mm Rectangular section eaves gutter	m	27		
77	Extra for outlet with nozzle for 100 mm diameter rainwater pipe.	No	1		
78	100 x 75mm rainwater pipe fixed to walls with aluminium alloy holderbats brass screwed to plugs in walls.	m	2		
79	Extra for bend.	No	2		
	<u>PVC waste or vent pipes and fittings</u>				
80	50 mm Pipe fixed to walls.	m	5		
81	150 mm Pipe fixed to walls.	m	25		
	<u>Extra For:</u>				
82	50 mm Bend.	No	4		
83	150 mm Bend.	No	5		
Carried to Collection				R	
Section No. 3					
Bill No. 1					
Pit Toilets					
U1604 - CABANE JSS - COMPLETION					

84	Plastic or copper wire gauze fly screen glued to top of 150 mm pipe as directed on site.	No	5		
	<u>Cast Iron waste or vent pipes and fittings</u>				
85	150 mm Pipe fixed to walls.	m	3		
	<u>Extra For:</u>				
86	150 mm Bend.	No	2		
	<u>Ventilators</u>				
87	240mm Polycarbonate ventilator with 150mm diameter throat fixed to top of 150mm vent pipe (pipe elsewhere measured)	No	5		
	<u>Sanitary fittings</u>				
88	Atlas Plastics rotomoulded polyethylene Christy wash hand basin (code: 382AP) 570mm x 395mm wide, or equal approved, with 2 tapholes and 40mm waste outlet, plugged and screwed to the wall with galvanised screws and brackets.	No	3		
89	Atlas Plastics rotomoulded polyethylene 65 litre wash trough with galvanised brackets (Code: 371AP), size 535 x 415mm wide with 40mm waste outlet, plugged and screwed to the wall with galvanised screws and fixing brackets.	No	1		
90	"Atlas Plastics (Code 223AP)" or other approved VIP 200 pit pedestal size 370 x 500mm high with flap fixed to floors with and including three 6 mm diameter x 50 mm long expansion bolts.	No	5		
Carried to Collection				R	
Section No. 3					
Bill No. 1					
Pit Toilets					
U1604 - CABANE JSS - COMPLETION					

	<u>Gratings, covers, etc</u>				
91	Cast iron double seal manhole cover and frame, size 450 x 600mm, in accordance with SABS 558, coated with an approved preservative solution before leaving manufacturer and bedded in 1:3 cement mortar and sealed in tallow.	No	5		
92	Lifting key for manhole cover	No	5		
	<u>PAINTING</u>				
	<u>ON PLASTERED SURFACES</u>				
	<u>Prepare and apply one undercoat and paint with two coats premium quality pure acrylic PVA on:</u>				
93	On external walls	m2	18		
94	Interior walls.	m2	70		
	<u>Prepare surface and apply one coat sealer, one universal undercoat and two coats epoxy enamel paint on:</u>				
	<u>Scrub surface with degreaser, rinse thoroughly with tap water, and apply one coat sealer and two coats epoxy paint on:</u>				
	<u>ON FIBRE-CEMENT</u>				
	<u>Prepare and apply two coats pure acrylic roof paint on:</u>				
95	Fascias and barge boards.	m2	12		
	<u>ON WOOD</u>				
	<u>Knot, prime, stop and apply one coat undercoat and two coats high gloss enamel paint on :</u>				
	<u>Prepare and apply one coat wood primer, one undercoat and two coats superior quality eggshell enamel on:</u>				
96	Wooden frames and linings	m2	3		
97	Doors (all surfaces measured).	m2	10		
	Carried to Collection			R	
	Section No. 3				
	Bill No. 1				
	Pit Toilets				
	U1604 - CABANE JSS - COMPLETION				

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 1</u>			
	<u>SITE CLEARANCE, BULK EARTHWORKS, ETC (PROVISIONAL)</u>			
	<u>EARTHWORKS</u>			
	<u>SITE CLEARANCE:</u>			
	<u>Site clearance etc:</u>			
1	Allow for clearing of site of all rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc, level site to be built upon and carting away any debris to a site to be found by the contractor.	m2	1 164	
	<u>EXCAVATIONS</u>			
	<u>Excavation in earth</u>			
2	Excavate to cut in open face not exceeding 2m deep to reduce levels and deposit in spoil dump on site, for reuse as filling or carting away as necessary (carting away elsewhere measured)	m3	191	
3	Scarify in-situ of the bulk excavations bottoms to a depth of 150mm, and compact to 93% Modified AASHTO density at optimum moisture content	m2	382	
	<u>Extra over all excavations for carting away:</u>			
4	Cart away surplus excavated material	m3	180	
	Carried to Collection		R	
	Section No. 4			
	Bill No. 1			
	Site Clearance, Bulk Earthworks, Etc			
	U1604 - CABANE JSS - COMPLETION			

EARTH FILLING, ETC.

5	Selected filling from excavated material, compacted to form platforms in layers not exceeding 150mm thick to 98% Modified AASHTO density at optimum moisture content	m3	95
6	Imported filling supplied by the contractor, compacted to form platforms in layers not exceeding 150mm thick to 98% Modified AASHTO density at optimum moisture content	m3	115

LANDSCAPPING

Under no circumstances is the Contractor to begin spreading the top soil until permission to do so has been given by the Architect

As soon as possible after permission has been given, the top soil, which must be free of stones, is to be respread over all banks, except where turfing is specified, and for a width of 3 m around the perimeter of the plateaux on which buildings have been erected. Once the buildings have been erected and all paths and pavings have been laid, top soil is to be spread over the remaining prescribed areas

All top soil is to be finished to an even regular surface

Topsoil, compost, lime and fertilizer

7	Imported topsoil supplied by the contractor spread and levelled over the site to form 100mm thick layer	m3	130
8	Compost in plant beds, holes for trees, shrubs, etc	m3	20
9	Super phosphate granular form commercial fertilizer	kg	250

Grassing, ground covers, etc

10	Approved planted "Kikuyu" or other equally approved instant lawn	m2	464
11	Approved planted "Bufallo" instant lawn	m2	400

Carried to Collection

R

Section No. 4

Bill No. 1

Site Clearance, Bulk Earthworks, Etc

U1604 - CABANE JSS - COMPLETION

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Section No. 4

Bill No. 1

Site Clearance, Bulk Earthworks, Etc

COLLECTION

Total Brought Forward from Page No.

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No

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Amount

Carried Forward to Summary of Section No. 4

R

Section No. 4

Bill No. 1

Site Clearance, Bulk Earthworks, Etc

U1604 - CABANE JSS - COMPLETION

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<u>Extra over all excavations for carting away:</u>					
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	150		
<u>Risk of collapse of excavations:</u>					
7	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	126		
<u>Keeping excavations free of water:</u>					
8	Allow for keeping excavations free from mud and all water including subterranean sources.			Item	
<u>EARTH FILLING, ETC.</u>					
<u>Earth filling obtained from the excavations and / or prescribed stock piles on site compacted to 95% Mod. AASHTO density:</u>					
9	Backfilling to trenches, holes, etc.	m3	20		
10	Under floors, steps, pavings, etc.	m3	61		
<u>Filling with G7 Material supplied by the contractor compacted to 98% Mod AASHTO density:</u>					
11	Under floors, steps, pavings, behind retaining walls etc.	m3	803		
<u>Approved river sand filling supplied and carted on by the Contractor</u>					
12	50mm layer under pavers, etc to driveways	m2	292		
13	20mm layer under pavers, etc to walkways and ramps.	m2	180		
<u>SOIL POISONING</u>					
<u>"Hyvar X" Weedkiller mixed with water and applied at a rate of 100grams/m</u>					
14	Under paving etc	m2	536		
Carried to Collection				R	
Section No. 4					
Bill No. 2					
Roads, Walkways, Aprons, Retaining walls, Etc					
U1604 - CABANE JSS - COMPLETION					

CONCRETE, FORMWORK & REINFORCEMENT**25 MPa/19mm concrete**

15	Wall footings cast against excavated surfaces	m3	101
16	Walkways	m3	13
17	Ramps	m3	17
18	Concrete aprons	m3	4
19	Steps	m3	2

30 MPa/19mm concrete

20	Roads	m3	13
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Sundries

21	Floating off smooth tops of surface beds with a wood float.	m2	348
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Concrete tests

22	Prepare set of three concrete cubes each size 150 x 150 x 150 mm and deliver to an approved laboratory for testing and pay all charges. (Provisional).	Sets	5
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Formwork

23	Edges, risers, ends and reveals not exceeding 300 mm high.	m	120
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PRECAST CONCRETE, ETC**Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing**

24	Kerb (SABS 927 fig 3) 150 x 300mm high with 150 x 150 x 300mm Class 15/19 unreinforced concrete haunching at back of each joint including excavation, backfilling, etc	m	185
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Carried to Collection

R

Section No. 4

Bill No. 2

Roads, Walkways, Aprons, Retaining walls, Etc

U1604 - CABANE JSS - COMPLETION

25	Ditto, but circular on plan to radius not exceeding 4m	m	14
<u>MASONRY</u>			
<u>14MPa clay stock bricks (NFP), overall size 220 x 140 x 70mm, manufactured in accordance with SANS 227:2007, laid in superstructure walls to single storey building and bedded and jointed in Class II mortar.</u>			
26	One brick walls.	m2	39
27	Ditto but in foundations	m2	47
28	270mm Hollow walls of two half brick skins with cavities filled in with and including 15MPa/19mm concrete	m2	126
29	Ditto but in foundations	m2	5
<u>FACE BRICKWORK</u>			
<u>Selected 30-40MPa FBA clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2.</u>			
30	Extra over brickwork for face brickwork externally.	m2	34
<u>Brick-on-edge header course copings, sills, etc with recessed joints on all exposed faces:</u>			
31	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	78
<u>Brickwork reinforcement:</u>			
32	75mm Wide reinforcement built in horizontally	m	100
33	150mm Wide reinforcement built in horizontally.	m	250

Carried to Collection

R

Section No. 4

Bill No. 2

Roads, Walkways, Aprons, Retaining walls, Etc

U1604 - CABANE JSS - COMPLETION

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The following in galvanised steel balustrades

- 39 1000mm High Balustrades, formed of 50mm diameter galvanised steel hand rail with 20mm diameter bottom and top galvanised steel tubes equally spaced and 10mm in-fill bars, all equally spaced at 100mm centres, supported and welded onto 50mm diameter uprights with 200X100mm base plates bolted onto brickwork or concrete at 1300mm centres.

m 120

PLUMBING**Bidum**

- 40 Bidim U24 Geotextile wrapped around and including 75m diameter perforated uPVC pipe.

m 221

WASTE DRUM**Suspended waste drum:**

- 41 Suspended waste drum unit to municipal solid waste specifications consisting of two 100mm diameter creosote impregnated posts planted in 600 x 600 x 800mm deep holes including filling with class B concrete and suspending 220 litre iron drum complete with pivoting bolts, including removing top of drum and drilling holes in bottom.

No 1

Carried to Collection

R

Section No. 4

Bill No. 2

Roads, Walkways, Aprons, Retaining walls, Etc

U1604 - CABANE JSS - COMPLETION

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 2</u>			
	<u>COVERED PLAY AREA . SAND PIT. ETC (PROVISIONAL)</u>			
	<u>EXCAVATION, ETC</u>			
	<u>Site clearance etc:</u>			
1	Allow for clearing site including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m2	72	
	<u>Excavation in earth not exceeding 2m deep:</u>			
2	Trenches.	m3	15	
3	Reduced levels under floors.	m3	21	
	<u>Extra over trench and hole excavations in earth for excavation in:</u>			
4	Soft rock.	m3	1	
5	Hard rock.	m3	1	
	<u>Extra over all excavations for carting away:</u>			
6	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	21	
	<u>Risk of collapse of excavations:</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	83	
	<u>Keeping excavations free of water:</u>			
8	Keeping excavations free of water.	Item		
	Carried to Collection		R	
	Section No. 4			
	Bill No. 3			
	Covered Play Area & Sand Pit			
	U1604 - CABANE JSS - COMPLETION			

EARTH FILLING, ETC.

Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density:

9 Under floors, steps, pavings, etc.

m3

5

Earth filling supplied by the contractor compacted to 95% Mod AASHTO density:

10 Under floors, steps, pavings, etc.

m3

5

Compaction of surfaces:

11 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

70

Prescribed density tests on filling:**SOIL POISONING****Soil insecticide**

12 Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming

m2

70

PRECAST CONCRETE, ETC**Precast concrete pipes**

13 600mm Diameter concrete tunnel 1000mm long set on ground

No

2

CONCRETE, FORMWORK & REINFORCEMENT**25MPa/19mm Concrete :**

14 25MPa/19mm Concrete in seating

m3

0,4

Carried to Collection

R

Section No. 4

Bill No. 3

Covered Play Area & Sand Pit

U1604 - CABANE JSS - COMPLETION

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	<u>One layer of 250 micron "Gunplas USB Green or Similar approved" waterproof sheeting sealed at laps with approved "Superstick" tape:</u>				
22	Damp proof membrane laid on filling under solid floors, lapped 100mm and sealed at all joinings (Measured nett)	m2	74		
	<u>One layer of 375 micron "Gunplas USB Green or Similar approved" Brickgrip DPC waterproof sheeting below walls, sills, etc:</u>				
23	In walls laid horizontally and built into walls or stepped up cavity lapped 150mm at all angles and passings (Measured nett)	m2	3		
	<u>ROOF COVERINGS ETC.</u>				
	<u>Global Roofing Solutions (OR SIMILAR APPROVED) 0,8mm thick 762mm cover, Corrugated profile Z200 spelter ISO300 galvanised steel roof sheeting with Chromadek finish, fixed to steel purlins all in accordance with the manufacturer's specifications.</u>				
24	Roof covering with pitch not exceeding 17 degrees	m2	35		
25	Ridge capping 460mm girth.	m	18		
26	Serrated ridge closers	m	36		
	<u>CARPENTRY AND JOINERY</u>				
	<u>Wrought meranti:</u>				
27	Slatted seats of 300 x 300mm attached to concrete or brickwork.	m2	9		
	<u>JUNGLE GYM</u>				
Carried to Collection				R	
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28	<p><u>Min 100/125mm poles and stays are to be set in concrete min 600mm deep and with bottom ends of poles protruding through concrete base to allow water to drain, 10mm Stainless steel threaded bar stainless steel flat washers and nuts are to be used to assemble the structure.</u></p> <p>Timber Jungle Gym (tanalith treated) with raised platform, size 1 800 x 1 800mm with 95% UV protected shadecloth roof with wooden hand railings on three sides, with nylon cargo net, with 3 000mm glass fibre slide fixed to platform, with two tyre swings secured with suitable thickness galvanised chain and eye bolt system, with 3 600mm long suspension bridge, installed complete by an approved manufacturer.</p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Descriptions</p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Descriptions of I- beams, lipped channel purlins etc shall be deemed to include galvanising, painting before delivery and assembling.</p> <p><u>ROOF STRUCTURE</u></p> <p><u>Galvanised purlins, girts, bracing, etc.:</u></p>	No	1	
29	<p>75 x 50 x 20 x 2mm Thick lipped channel purlins.</p>	t	1	
	Carried to Collection		R	
	<p>Section No. 4 Bill No. 3 Covered Play Area & Sand Pit U1604 - CABANE JSS - COMPLETION</p>			

30	Angle section bracing, including connections.	t	0,30		
	<u>Galvanised beams with flat connection plates and angle section cleats:</u>				
31	180 x 90mm x 22,2kg/m I-section beams.	t	1		
	<u>Galvanised hollow sections, with flat base plates, etc.:</u>				
32	200 x 200 x 6mm square hollow sections	t	0,50		
	<u>Bolts:</u>				
33	M16 Grade 8.8 holding down bolts.	No	16		
	<u>METALWORK</u>				
	<u>Mild Steel</u>				
34	Screw bolts with heads, nuts and washers (fixing elsewhere measured).	kg	1		
	<u>PLASTERING</u>				
	<u>Untinted granolithic finish to concrete</u>				
35	Average 40 mm finish to horizontal surfaces to falls.	m2	74		
	<u>RAINWATER DISPOSAL (PROVISIONAL):</u>				
	<u>Watertite (OR SIMILAR APPROVED) seamless aluminium gutter, coated internally and externally with ColourTech G4 (OR SIMILAR APPROVED) in colour Marble White</u>				
36	125 x 100mm Eaves gutter fixed to falls in continuous lengths at not exceeding 600mm centres with and including approved gutter brackets.	m	23		
37	Extra over eaves gutter for 90 degrees angle.	No	4		
38	Extra over eaves gutter for outlet for 100 x 75mm pipe.	No	2		
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39	100 x 75mm Rainwater pipes fixed to walls with and including approved holderbats at 900mm centres.	m	8		
40	Extra over rainwater pipe for bend.	No	6		
41	Extra over rainwater pipe for shoe.	No	2		

Carried to Collection

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Bill No. 3

Covered Play Area & Sand Pit

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Covered Play Area & Sand Pit

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Bill No. 3

Covered Play Area & Sand Pit

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Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 4</u>			
	<u>STORMWATER DRAINAGE (EXTERNAL)</u>			
	<u>(PROVISIONAL)</u>			
	<u>Stormwater Cut-Off Drain</u>			
1	Forming cut-off surface drain with cut average 500mm deep with and including nominal stone size 175to225mm on Geotextile(AG 200 Non-Woven), on 200mm thick clay lining from excavations compacted 95%Mod AASHTO density on face of excavation, with average 500mm high berm to one side, all compacted to 93% Modified AASHTO density, including finishing to slopes, etc.	m	60	
	<u>Precast or in-situ concrete (Class 20) open stormwater channels with V-shaped waterway formed in top, finished smooth on all exposed surfaces and with angles rounded, cast in suitable lengths (not exceeding 2500mm), and reinforced as necessary for handling if precast , including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in (3:1) cement mortar.</u>			
2	Channel size 900 x 75mm thick overall with 860 x 60mm deep v-shaped waterway.	m	34	
3	Extra over for angles	No	8	
4	Extra over for T-intersection	No	2	
5	Extra over for forming 100mm thick spreader fanning out to 1500mm width at furthest end with seven (7No) concrete bricks cast in as brick-on-end diffusers in three rows including working off concrete to a smooth finish.	No	2	
	Carried to Collection		R	
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Stomwater Drainage

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Stomwater Drainage

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Manholes

5	Manhole size 600 x 900 mm x not exceeding 1m deep internally to invert level formed of hard burnt one brick sides in 1:3 cement mortar on and including 150 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) bottom projecting 75 mm beyond sides and mass concrete (15 MPa at 28 days in 12 mm stone) benching, rendered internally in 1:3 cement plaster with 100 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) kerb on top, rebated for and fitted with and including cast iron double seal cover and frame type 8A in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in tallow including all necessary vitrified clay channels and fittings, excavations, formwork, holes through sides for pipes, etc	No	2
6	Ditto, but exceeding 1m and not exceeding 2m deep to invert	No	2
7	Extra over excavations in pickable material for drain trenches, inspection chambers, etc., for excavations in soft rock	m3	5
8	Ditto, in hard rock	m3	2

Sundries

9	Mass concrete Class 15 MPa encasement around horizontal raking or vertical drainpipes including all necessary excavations, formwork, etc.	m3	1
10	Encase 160 mm vertical PVC bend in concrete (Class 15 MPa)	No	3
11	100 mm Cast iron straight or skew ABC cleaning eye with removable plate cover jointed to 100 mm U PVC pipe and set in and including concrete Class 15 MPa around with exposed surface trowelled smooth	No	1
12	Precast concrete (Class 15 MPa) block size 300 x 300 x 75 mm thick finished smooth on top and four edges with letters "I.E." formed in top, set in ground over top of inspection fitting	No	1

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<u>The following in Sand, Oil & Grease Trap including necessary planking and strutting and keeping excavations dry</u>					
13	Clear site including digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200 mm girth, bush, etc	m2	7		
14	Excavate in earth not exceeding 2 m deep including trimming sides, levelling and consolidating bottom, small part return, fill in and ram, remainder deposit on site where directed	m3	10		
15	Extra over excavations in earth for excavations in soft rock	m3	2		
16	Extra over excavations in earth for excavation in hard rock	m3	1		
17	Allow for the risk of collapse to sides of excavations exceeding 1.5 m deep	m2	13		
18	Allow for keeping excavations free of water		Item		
19	Removal of seepage and other water from subterranean sources from excavations	Litres	1 000		
20	Backfilling with material obtained from the excavations and / or prescribed stock piles on site compacted in layers not exceeding 150 mm thick to 90% Modified AASHTO density at optimum moisture content, including shaping to falls as required, all necessary hand compacting, etc	m3	3		
21	Cement concrete (15MPa) in blinding to bottom of tank	m3	0,4		
22	Reinforced concrete (30MPa) in bottom, slab, etc	m3	2		
23	Strike off and cure to top surface of concrete	m2	5		
24	General formwork to soffit of slab including removal through opening size 450 x 650 mm	m2	5		
25	Formwork to edge of slab not exceeding 150 mm high	m	10		
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	<u>Site clearance etc:</u>				
39	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	24		
	<u>Excavation in earth not exceeding 2m deep:</u>				
40	Drain soakaway.	m3	24		
	<u>Extra over bulk excavation in earth for excavation in:</u>				
41	Soft rock.	m3	2		
42	Hard rock.	m3	1		
	<u>Extra over all excavations for carting away:</u>				
43	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	10		
	<u>Risk of collapse of excavations:</u>				
44	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	44		
	<u>Keeping excavations free of water:</u>				
45	Keeping excavations free from mud and all water including subterranean sources.			Item	
	<u>Topsoil:</u>				
46	Topsoil carted on top of Bidum (elsewhere) spread and levelled.	m3	10		
	<u>Earth filling supplied by the contractor and lightly compact:</u>				
47	Imported crusher dust or courses river sand.	m3	4		
48	Selected 38mm graded stone in drain soakaway.	m3	5		
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Bidum

49	Kaymat U24 laid in french drain soakaway.	m2	40
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Drainage:

50	110mm Diameter perforated piping laid in drain soakaway.	m	20
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Extra over perforated piping:

51	110mm Bend.	No	6
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Testing:

52	Allow for testing all drains, and water supplies to the satisfaction of the Principal Agent. All defective work is to be taken out and replaced at the Contractor's expense.	Item	
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Soil Drainage

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Soil Drainage

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	<u>SECTION NO. 4</u>			
	<u>BILL NO. 6</u>			
	<u>WATER SUPPLIES (PROVISIONAL)</u>			
	<u>WATER SUPPLY</u>			
	<u>GALVANISED MILD STEEL WATER SUPPLY PIPES</u>			
1	32mm Galvanised mild steel pipe and fixing to tank stand	m	65	
	<u>Extra over galvanised mild steel water supply pipes for fittings</u>			
2	32mm Bends	No	6	
3	32mm Tee	No	7	
4	32mm Straight connector	No	8	
5	32mm Union connector	No	6	
6	32 to 20mm reducer	No	6	
	<u>uPVC Class 6 water pipes, including class B bedding according to SABS 1200 LB and compacting backfilling to 93% modified AASHTO</u>			
7	50mm pipe and excavations not exceeding 1m deep	m	70	
	<u>Extra over 50mm uPVC piping for high pressure fittings</u>			
8	Bend/Elbow	No	10	
9	Tee/Reducing tee	No	10	
10	Male/female adaptor	No	5	
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11	25mm brass fullway gate valve including flanged connections to uPVC pipe	No	5		
12	50mm brass fullway gate valve including flanged connections to uPVC pipe	No	5		
<u>STOPCOCK BOXES, ETC.</u>					
13	Excavate in earth for and build stop cock box size 225 x 225 x 300mm deep internally with half brick sides in cement mortar with 225 x 225mm regulation pattern cast iron hinged box Type 11B set in and including Class C mass concrete surround size 75mm wide x 100mm deep all round	No	8		
<u>HDPE Class 16 water pipes</u>					
14	32mm Pipes laid in and including trenches 900mm deep	m	280		
15	63mm Pipes laid in and including trenches 900mm deep	m	290		
<u>Extra over HDPE pipes for "Plasson" or other approved fittings</u>					
16	20mm Fittings	No	8		
17	25mm Fittings	No	5		
18	32mm Nipple	No	5		
19	32mm Bend	No	15		
20	32mm Tee	No	15		
21	32mm Reducing Tee	No	10		
<u>Brass Fittings</u>					
22	32mm Stopcock with joint to steel as "Cobra 121"	No	5		
23	40mm Non-return valve with joints to steel	No	5		
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	<u>Cast Brass</u>				
24	32mm Fullway gate valve as Cobra Watertech 1001/125 with joints to mild steel	No	5		
25	Stewards & Lloyds "No 3" Double action hand pump with joints to mild steel piping and fixing to brick wall with purpose made galvanised mild steel bracket bolted through 230mm thick wall(Refer to THM Engineers drawing No 0202/04 included in the back of this document)	No	5		
	<u>Valve box chambers, etc.</u>				
26	Type 11B cast iron stopcock box hinged cover and frame, including 220 x 220 x 600mm deep brick chamber below, finished 50mm above ground level	No	8		
	<u>Water Storage Tanks and Stands</u>				
	<u>EXCAVATION, ETC</u>				
	<u>Site clearance etc:</u>				
27	Allow for clearing site including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m2	8		
	<u>Excavation in earth not exceeding 2m deep:</u>				
28	Surface trenches.	m3	4		
	<u>Extra over trench and hole excavations in earth for excavation in:</u>				
29	Soft rock.	m3	1		
30	Hard rock.	m3	1		
	<u>Extra over all excavations for carting away:</u>				
31	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	2		
	Carried to Collection			R	
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	<u>Risk of collapse of excavations:</u>				
32	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	8		
	<u>Keeping excavations free of water:</u>				
33	Keeping excavations free of water.		Item		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density:</u>				
34	Backfilling to trenches, holes, etc.	m3	1		
	<u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density:</u>				
35	Under floors, steps, pavings, etc.	m3	2		
	<u>Compaction of surfaces:</u>				
36	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 95% Mod AASHTO density.	m2	8		
	<u>CONCRETE, FORMWORK & REINFORCEMENT</u>				
	<u>15MPa/19mm concrete:</u>				
37	Cement concrete (15MPa) in blinding to bottom of tank	m3	0,4		
	<u>25MPa/19mm concrete:</u>				
38	Reinforced concrete (30MPa) in bottom, slab, etc	m3	3		
	<u>Finishing top surfaces of concrete smooth with a wood float:</u>				
39	Apron slabs, paving, etc to slight falls.	m2	1		
	Carried to Collection			R	
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Concrete tests

- 40 Prepare set of three concrete cubes each size 150 x 150 x 150 mm and deliver to an approved laboratory for testing and pay all charges. (Provisional).

Sets 2

FORMWORK**Rough Formwork to Sides:**

- 41 Edges, risers, ends and reveals not exceeding 300mm high or wide.

m 16

STEEL REINFORCEMENT**Fabric reinforcement:**

- 42 REF. 245 fabric reinforcement in concrete surface beds, slabs, etc.

m2 24

MASONRY

14MPa clay stock bricks (NFP), overall size 220 x 140 x 70mm, manufactured in accordance with SANS 227:2007, laid in foundations walls to single storey building and bedded and jointed in Class II mortar.

- 43 270mm Hollow walls of two half brick skins with cavities filled in with and including 15MPa/19mm concrete and ref 193 fabric reinforcement.

m2 18

FACE BRICKWORK

Selected 30-40MPa FBA clay face brick, size 222 x 106 x 73mm, manufactured in accordance with 227:2007, bedded and jointed in Class I mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-2.

- 44 Extra over brickwork for face brickwork externally.

m2 14

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Brick-on-edge header course copings, sills, etc with recessed joints on all exposed faces:**Brickwork reinforcement:**

45	150mm Wide reinforcement built in horizontally.	m	128
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Galvanised hoop iron cramps, ties, etc:

46	30 x 1,6mm Tie secured around tank and 4 times built into concrete (Total for one tank = 12 meters).	No	8
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WATERPROOFING**One layer of 250 micron 'GUNPLAS USB GREEN or Similar approved ' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':**

47	Under surface beds.	m2	8
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IRONMONGERY**Locks**

48	30mm Approved brass padlock	No	2
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PLUMBING**Rainwater tanks:**

49	5000 Litre polyethylene rotomoulded horizontal water storage tank complete with lid, fitted with and including 15mm brass bibtap (Type 108LK15) with suitable adaptor and setting in position on concrete tankstand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secured to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete. (Note: tanks to be filled with water before Practical Completion).	No	2
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50	Hole through top of tank lid for 100mm diameter pipe.	No	2
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The following in Elevated Tank Stand

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All Trades

51	1000 x 1000 x 350mm High 30MPa/19mm stone concrete base and 300 x 300 x 810mm high 30MPa/19mm stone stub column, including all necessary excavations, formwork, backfilling, etc.	No	4
52	16mm Diameter mild steel L-shaped holding down bolt 500mm girth with one end threaded and the other end cast into top of stub column (elsewhere measured)	No	16
53	Angle section legs, rails, braces, etc.	t	1,00
54	Bolts,nuts, washers, etc	kg	5

High level water tanks:

55	10,000 Litre "MARTIN NEL" or other equally approved PVC cylindrical tank, light beige standard colour, with lettering complete with lid and fixed with 12mm chains fitted into hose pipes to hooks, welded to steel stand as per the Manufacturer's instructions (stand elsewhere measured)	No	4
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BUILDERS WORK TO PLUMBING INSTALLATION**Tank bases, etc**

56	Excavate in earth for surface trenches not exceeding 2m deep	m3	4
57	Allow for risk of collapse not exceeding 1.5m	m2	4
58	Imported filling to base well compacted to 95% Mod AASHTO in 150mm layers	m3	3
59	Cement concrete (30MPa) in Bases	m3	1
60	Reinforced concrete (30MPa) in columns	m3	0,2

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**THE FOLLOWING IN RAINWATER
COLLECTOR TANK INCLUDING NECESSARY
PLANKING AND STRUTTING AND KEEPING
EXCAVATIONS DRY.**

61	Clear site including digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200 mm girth, bush, etc	m2	30
62	Excavate in earth not exceeding 2 m deep including trimming sides, levelling and consolidating bottom, small part return, fill in and ram, remainder deposit on site where directed	m3	18
63	Ditto in earth exceeding 2 m and not exceeding 4 m deep ditto	m3	6
64	Back excavations for working space for building brick lining, 500mm away from excavated face	m2	35
65	Extra over excavations in earth for excavations in soft rock	m3	18
66	Extra over excavations in earth for excavation in hard rock	m3	12
67	Allow for the risk of collapse to sides of excavations exceeding 1.5 m deep	m2	55
68	Allow for keeping excavations free of water	Item	
69	Backfilling with imported fill compacted in layers not exceeding 150 mm thick to 90% Modified AASHTO density at optimum moisture content, including shaping to falls as required, all necessary hand compacting, etc	m3	45
70	120mm Reinforced concrete (30MPa) in bottom, slab, etc	m3	2
71	Reinforced concrete (30MPa) slab,walls, etc	m3	11
72	Strike off and cure to top surface of concrete	m2	40

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73	General formwork to soffit of slab including removal through opening size 700 x 700 mm	m2	20		
74	Smooth formwork to sides of walls.	m2	35		
75	Formwork to edge of slab not exceeding 300 mm high	m	14		
76	Box for and form rebated opening size 550mm diameter through 200 mm slab for manhole and frame (elsewhere)	No	2		
77	Boxing in formwork to form recess 400 x 400 x 100mm recesses in side	m	4		
78	Ditto but for opening size 375mm diameter through 230 mm wall for concrete pipe (elsewhere)	No	2		
79	12 mm Diameter bars	kg	500		
80	8mm Diameter bars	kg	500		
81	Render in 3:1 cement plaster with Corprox masonry water proofing compound added on vertical surfaces	m2	35		
	<u>High tensile steel reinforcement</u>				
82	Steel rod reinforcement of varying diameters to bottom, walls and slab	t	2,00		
	<u>Fabric reinforcement</u>				
83	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	12		
84	Mesh ref 193 reinforcement	m2	24		
	<u>Gratings, covers and frames:</u>				
85	400 x 600mm x 99,5kg Heavy duty cast iron manhole cover and frame.	No	2		
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	<u>SECTION NO. 4</u>			
	<u>BILL NO. 7</u>			
	<u>FENCING (PROVISIONAL)</u>			
	<u>Clearing of site:</u>			
1	Allow for clearing site for the width of 1,000 mm where fencing runs are to be erected including removing trees, shrubs etc. not exceeding 200mm girth, grubbing up roots and roughly levelling.	m	157	
	<u>Galvanised posts:</u>			
2	60mm Diameter galvanised steel intermediate fencing post, 2,700mm long fitted with a pressed steel mushroom cap, post fitted with 150 x 150 x 3mm flange plate welded to bottom and embedded in 300 x 300 x 600mm mass concrete (15 MPa) base including all necessary excavation, disposal, etc	No	47	
3	100mm Ditto as end post 2 700mm long, fitted with one 60mm diameter galvanised steel stay set raking and with top end flattened and twice bolted through post with M8 galvanised bolts, with post and stay both embedded in mass concrete (15 MPa) bases including all necessary excavation, disposal, etc.	No	4	
4	100mm Ditto as corner post 2 700mm long, fitted with two 60mm diameter galvanised steel stays set raking and with top end flattened and twice bolted through post with M8 galvanised bolts, with post and stays both embedded in mass concrete (15 MPa) bases including all necessary excavation, disposal, etc.	No	3	
5	100mm Ditto as straining post 2 700mm long, fitted with two 60mm diameter galvanised steel stays set raking and with top end flattened and twice bolted through post with M8 galvanised bolts, with post and stays both embedded in mass concrete (15 MPa) bases including all necessary excavation, disposal,	No	3	
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	Bill No. 7			
	Fencing			
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6	150mm Diameter gate post fitted with one 60mm diameter galvanised steel raking stay, with post and stay both embedded in 400 x 400 x 600mm mass concrete (15 MPa) bases (Provisional).	No	2		
	<u>Fencing:</u>				
7	Fencing formed of 50 x 50 x 2.5mm diameter galvanised weldmesh 1,800m high with vertical wires facing outwards secured with "Howgring" clips or 1.6mm galvanised binding wire at 300 mm centres to top and bottom straining wires and 500 mm centres to four intermediate straining wires (straining wires elsewhere measured) including holes through posts.	m	157		
8	Four strands of 4mm galvanised straining wires secured to fencing posts with doubled 2mm 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 and the other end to straining bolts (elsewhere measured).	m	157		
	<u>Sundries:</u>				
9	12 mm Diameter galvanised mild steel straining eye bolt with hook, threaded portion and two nuts and washers, including hole through post.	No	12		
	<u>GALVANIZED GATES</u>				
	<u>Hot Dipped Galvanised Steel Gates:</u>				
10	Security gate size 800 x 1800mm high formed of 60 x 40 x 2mm hollow square section frame, with one 40 x 6mm horizontal support with 19mm holes drilled for and including six 19mm diameter vertical rods, the whole gate fitted inside a 40 x 60 x 2mm gate surround, with three 25mm diameter x 80mm long pin hinges bolted to 150mm Steel gate Post(Elsewhere measured) complete with two 55 x 40 x 8mm padlock plates for locking and door hook.	No	1		
Carried to Collection				R	
Section No. 4					
Bill No. 7					
Fencing					
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Section No. 4

Bill No. 7

Fencing

COLLECTION

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Bill No. 7

Fencing

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Section No	<u>FINAL SUMMARY</u>	Page No		Amount
1	Section 1 : Preliminaries	52		
2	Section 2 : Building Works	110		
3	Section 3 : Pit Toilets	125		
4	Section 4 : External Works	169		
5	Section 5: Provisional Sums	170		
	Sub Total		R	
	<u>ELECTRICAL WORK INSTALLATION</u>			
	Add : Sub-Total (Excluding VAT) for Electrical Installation from PART B	Item		
	Sub Total		R	
	<u>ESCALATION</u>			
	Provide a sum of R230 000,00 (Two Hundred and Thirty Thousand Rands) only for contract price adjustment provision as per Haylett Formula	Item		230 000 00
	<u>CONTINGENCIES</u>			
	Provide a sum of R160 000,00 (One Hundred and Sixty Thousand Rand) only for Contingencies to be used in whole or part, to be adjusted as required	Item		160 000 00
	Sub Total		R	
	Value Added Tax		R	
	Carried to Form of Tender		R	
	U1604 - CABANE JSS - COMPLETION			