

Item No	Quantity	Rate	Amount
<u>SECTION No. 1 - PRELIMINARIES</u> <u>BILL NO. 1</u> <u>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, Value Related or Time Related 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

1 A1.0 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 Guarantee**" 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** in terms of 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:

"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 or after the 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

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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 as 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 it with 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"

Clause 1.6.4 is amended by replacing it with the following:

No clause

Fixed: _____ Value related: _____ Time related: _____

OBJECTIVE AND PREPARATION

1 A2.0 OFFER, ACCEPTANCE AND PERFORMANCE

Clause 2.0

Fixed: _____ Value related: _____ Time related: _____

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1	A3.0 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" Fixed: _____ Value related: _____ Time related: _____				
2	A4.0 DESIGN RESPONSIBILITY Clause 4.0 Clause 4.3 is amended by replacing it with the following: No clause Fixed: _____ Value related: _____ Time related: _____	Item			
3	A5.0 EMPLOYER'S AGENTS Clause 5.0 Clause 5.1.2 is amended to include clauses 32.6.3, 34.3, 34.4 and 38.5.8 Fixed: _____ Value related: _____ Time related: _____	Item			
4	A6.0 SITE REPRESENTATIVE Clause 6.0 Fixed: _____ Value related: _____ Time related: _____	Item			
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1	A7.0 COMPLIANCE WITH REGULATIONS Clause 7.0 Note: A separate clause has been included in Section C : Specific Preliminaries of the bills of quantities / lump sum document for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification Fixed: _____ Value related: _____ Time related: _____				
2	A8.0 WORKS RISK Clause 8.0 Fixed: _____ Value related: _____ Time related: _____	Item			
3	A9.0 INDEMNITIES Clause 9.0 Fixed: _____ Value related: _____ Time related: _____	Item			
4	A10.0 WORKS INSURANCES Clause 10.0 Clause 10.0 is amended by the addition of the following clauses: 10.5 Damage to the Works (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 Carried to Collection PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				
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- (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**
- (c) The **employer** shall carry the risk of damage to or destruction of the **works** and materials paid for by the **employer** that is the result of the excepted risks as set out in 10.6
- (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 negligence 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 negligence of any person for whose actions the **employer** is legally liable

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- (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**
- (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 obtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract 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

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

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	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 Fixed: _____ Value related: _____ Time related: _____			
1	A11.0 LIABILITY INSURANCES Clause 11.0 Fixed: _____ Value related: _____ Time related: _____	Item		
2	A12.0 EFFECTING INSURANCES Clause 12.0 Fixed: _____ Value related: _____ Time related: _____	Item		
3	A13.0 No clause	Item		
4	A14.0 SECURITY Clause 14.0 Clauses 14.1 - 14.8 are amended by replacing them with the following: 14.1 In respect of contracts with a contract sum up to R1 million, the security to be provided by the contractor to the employer will be 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 <i>mutatis mutandi</i> in terms of 31.8(A)	N/A		
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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**

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**

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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**

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 the last certificate of **practical completion**

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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**

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)

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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

Fixed:_____ Value related:_____ Time related:_____

EXECUTION

1 A15.0 PREPARATION FOR AND EXECUTION OF THE WORKS

Clause 15.0

Clause 15.1.1 is amended by replacing it with:

No clause

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:

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1	A20.0 NOMINATED SUBCONTRACTORS Clause 20.0 Clause 20.1.3 is amended by replacing it with the following: No clause Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums Fixed:_____ Value related:_____ Time related:_____	Item	
2	A21.0 SELECTED SUBCONTRACTORS Clause 21.0 Clause 21 is amended by replacing it with: No clause Fixed:_____ Value related:_____ Time related:_____	Item	
3	A22.0 EMPLOYER'S DIRECT CONTRACTORS Clause 22.0 Fixed:_____ Value related:_____ Time related:_____	Item	
4	A23.0 CONTRACTOR'S DOMESTIC SUBCONTRACTORS Clause 23.0 Fixed:_____ Value related:_____ Time related:_____	Item	
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COMPLETION

1 A24.0 PRACTICAL COMPLETION

Clause 24.0

Fixed: _____ Value related: _____ Time
related: _____

Item

2 A25.0 WORKS COMPLETION

Clause 25.0

Fixed: _____ Value related: _____ Time
related: _____

Item

3 A26.0 FINAL COMPLETION

Clause 26.0

Clause 26.1.2 is amended by inserting "#" next to 26.1.2

Fixed: _____ Value related: _____ Time
related: _____

Item

4 A27.0 LATENT DEFECTS LIABILITY PERIOD

Clause 27.0

Fixed: _____ Value related: _____ Time
related: _____

Item

5 A28.0 SECTIONAL COMPLETION

Clause 28.0

Fixed: _____ Value related: _____ Time
related: _____

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1	A29.0 REVISION OF DATE FOR PRACTICAL COMPLETION Clause 29.0 Clause 29.2.5 is amended by replacing it with: No clause Fixed:_____ Value related:_____ Time related:_____			
2	A30.0 PENALTY FOR NON-COMPLETION Clause 30.0 Fixed:_____ Value related:_____ Time related:_____ <u>PAYMENT</u>	Item		
3	A31.0 INTERIM PAYMENT TO THE CONTRACTOR Clause 31.0 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	Item		
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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

31.8(B) Where **security** as a payment reduction in terms of 14.7 has been selected, 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

Fixed: _____ Value related: _____ Time related: _____

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1	A32.0 ADJUSTMENT TO THE CONTRACT VALUE Clause 32.0 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: "due to no fault of the contractor" Fixed:_____ Value related:_____ Time related:_____	Item		
2	A33.0 RECOVERY OF EXPENSE AND LOSS Clause 33.0 Fixed:_____ Value related:_____ Time related:_____	Item		
3	A34.0 FINAL ACCOUNT AND FINAL PAYMENT Clause 34.0 Clause 34.1 is amended by removing "#" next to 34.1 Clause 34.2 is amended by inserting "#" next to 34.2 Clause 34.8 is amended by deleting the words "where security as a fixed construction guarantee in terms of 14.4 has been selected or where payment reduction has been applied in terms of 14.7.1" 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" Fixed:_____ Value related:_____ Time related:_____	Item		
4	A35.0 PAYMENT TO OTHER PARTIES Clause 35.0 Fixed:_____ Value related:_____ Time related:_____	Item		
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CANCELLATION

1 A36.0 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT

Clause 36.0

Clause 36.1 is amended by the addition of the following clauses:

36.1.3 refuses or neglects to comply strictly with any of the conditions of contract

36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa

36.1.5 in the judgement of the **employer**, has engaged in **corrupt** or **fraudulent practices** in competing for or in executing the contract

Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "**principal agent**" with "**employer**"

Clause 36.0 is amended by the addition of the following clause:

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

Fixed: _____ Value related: _____ Time related: _____

Item

2 A37.0 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)"

Carried to Collection

R

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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

Fixed: _____ Value related: _____ Time related: _____

Item

1 **A38.0 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT**

Clause 38.0

Clause 38.5.4 is amended by replacing "ninety (90)" with "one hundred and twenty (120)"

Clause 38.0 is amended by the addition of the following clause:

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

Fixed: _____ Value related: _____ Time related: _____

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1	A39.0 CANCELLATION - CESSATION OF THE WORKS Clause 39.0 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" Fixed:_____ Value related:_____ Time related:_____ <u>DISPUTE</u>	Item		
2	A40.0 DISPUTE SETTLEMENT Clause 40.0 Clause 40.2.2 is amended by replacing "one (1) year" with "three (3) years" Clause 40.6 is amended by removing the reference to: No clause Clause 40.7.1 is amended by replacing "(10)" with "(15)" and by the addition of the following: Whether or not mediation resolves the dispute, the parties shall bear their own costs concerning the mediation and equally share the costs of the mediator and related costs Fixed:_____ Value related:_____ Time related:_____ <u>SUBSTITUTE PROVISIONS</u>	Item		
3	A41.0 STATE CLAUSES Clause 41.0 Fixed:_____ Value related:_____ Time related:_____	Item		
	Carried to Collection		R	
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CONTRACT VARIABLES

1 **A42.0 THE SCHEDULE (DPW-04EC)**

Clause 42.0

Tenderers are referred to the Contract Data DPW-04(EC) for variables pertaining to this contract

Fixed:_____ Value related:_____ Time related:_____

Item

Carried to Collection

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SECTION B: JBCC PRELIMINARIES

B1.0 DEFINITIONS AND INTERPRETATION

1 B1.1 Definitions and interpretation

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

Fixed: _____ Value related: _____ Time related: _____

Item

B2.0 DOCUMENTS

2 B2.1 Checking of documents

Fixed: _____ Value related: _____ Time related: _____

Item

3 B2.2 Provisional bills of quantities

Fixed: _____ Value related: _____ Time related: _____

Item

4 B2.3 Availability of construction documentation

Fixed: _____ Value related: _____ Time related: _____

Item

5 B2.4 Interests of agents

Fixed: _____ Value related: _____ Time related: _____

Item

6 B2.5 Priced documents

Fixed: _____ Value related: _____ Time related: _____

Item

7 B2.6 Tender submission

Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance DPW-07(EC)"

Fixed: _____ Value related: _____ Time related: _____

Item

Carried to Collection

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	<u>B3.0 THE SITE</u>			
1	B3.1 Defined works area			
	Fixed: _____ Value related: _____ Time related: _____	Item		
2	B3.2 Geotechnical investigation			
	Fixed: _____ Value related: _____ Time related: _____	Item		
3	B3.3 Inspection of the site			
	Fixed: _____ Value related: _____ Time related: _____	Item		
4	B3.4 Existing premises occupied			
	Fixed: _____ Value related: _____ Time related: _____	Item		
5	B3.5 Previous work - dimensional accuracy			
	Fixed: _____ Value related: _____ Time related: _____	Item		
6	B3.6 Previous work - defects			
	Fixed: _____ Value related: _____ Time related: _____	Item		
7	B3.7 Services - known			
	Fixed: _____ Value related: _____ Time related: _____	Item		
8	B3.8 Services - unknown			
	Fixed: _____ Value related: _____ Time related: _____	Item		
9	B3.9 Protection of trees			
	Fixed: _____ Value related: _____ Time related: _____	Item		
10	B3.10 Articles of value			
	Fixed: _____ Value related: _____ Time related: _____	Item		
	Carried to Collection			
	PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS		R	

1	B3.11 Inspection of adjoining properties Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B4.0 MANAGEMENT OF CONTRACT</u>			
2	B4.1 Management of the works Fixed: _____ Value related: _____ Time related: R _____	Item		
3	B4.2 Programme for the works Fixed: _____ Value related: _____ Time related: _____	Item		
4	B4.3 Progress meetings Fixed: _____ Value related: _____ Time related: _____	Item		
5	B4.4 Technical meetings Fixed: _____ Value related: _____ Time related: _____	Item		
6	B4.5 Labour and plant records Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B5.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS</u>			
7	B5.1 Samples of materials Fixed: _____ Value related: _____ Time related: _____	Item		
8	B5.2 Workmanship samples Fixed: _____ Value related: _____ Time related: _____	Item		
9	B5.3 Shop drawings Fixed: _____ Value related: _____ Time related: _____	Item		
	Carried to Collection		R	
	PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

1	B5.4 Compliance with manufacturers' instructions Fixed: _____ Value related: _____ Time related: _____	Item
	<u>B6.0 TEMPORARY WORKS AND PLANT</u>	
2	B6.1 Deposits and fees Fixed: _____ Value related: _____ Time related: _____	Item
3	B6.2 Enclosure of the works Fixed: _____ Value related: _____ Time related: _____	Item
4	B6.3 Advertising Fixed: _____ Value related: _____ Time related: _____	Item
5	B6.4 Plant, equipment, sheds and offices Fixed: _____ Value related: _____ Time related: _____	Item
6	B6.5 Main notice board Fixed: _____ Value related: _____ Time related: _____	Item
7	B6.6 Subcontractors' notice board Fixed: _____ Value related: _____ Time related: _____	Item
	<u>B7.0 TEMPORARY SERVICES</u>	
8	B7.1 Location Fixed: _____ Value related: _____ Time related: _____	Item
9	B7.2 Water Fixed: _____ Value related: _____ Time related: _____	Item
	Carried to Collection	
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1	B7.3 Electricity Fixed: _____ Value related: _____ Time related: _____	Item		
2	B7.4 Telecommunication facilities Fixed: _____ Value related: _____ Time related: _____	Item		
3	B7.5 Ablution facilities Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B8.0 PRIME COST AMOUNTS</u>			
4	B8.1 Responsibility for prime cost amounts Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B9.0 ATTENDANCE ON N/S SUBCONTRACTORS</u>			
5	B9.1 General attendance Fixed: _____ Value related: _____ Time related: _____	Item		
6	B9.2 Special attendance Fixed: _____ Value related: _____ Time related: _____	Item		
7	B9.3 Commissioning - fuel, water and electricity Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B10.0 FINANCIAL ASPECTS</u>			
8	B10.1 Statutory taxes, duties and levies Fixed: _____ Value related: _____ Time related: _____	Item		
	Carried to Collection		R	
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1	B10.2 Payment for preliminaries Fixed: _____ Value related: _____ Time related: _____	Item		
2	B10.3 Adjustment of preliminaries Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) working days of taking possession of the site " with "when submitting his priced bills of quantities / lump sum document " Fixed: _____ Value related: _____ Time related: _____	Item		
3	B10.4 Payment certificate cash flow Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B11.0 GENERAL</u>			
4	B11.1 Protection of the works Fixed: _____ Value related: _____ Time related: _____	Item		
5	B11.2 Protection / isolation of existing / sectionally occupied works Fixed: _____ Value related: _____ Time related: _____	Item		
6	B11.3 Security of the works Fixed: _____ Value related: _____ Time related: _____	Item		
7	B11.4 Notice before covering work Fixed: _____ Value related: _____ Time related: _____	Item		
8	B11.5 Disturbance Fixed: _____ Value related: _____ Time related: _____	Item		
	Carried to Collection		R	
	PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

1	B11.6 Environmental disturbance Fixed: _____ Value related: _____ Time related: _____	Item		
2	B11.7 Works cleaning and clearing Fixed: _____ Value related: _____ Time related: _____	Item		
3	B11.8 Vermin Fixed: _____ Value related: _____ Time related: _____	Item		
4	B11.9 Overhand work Fixed: _____ Value related: _____ Time related: _____	Item		
5	B11.10 Instruction manuals and guarantees Fixed: _____ Value related: _____ Time related: _____	Item		
6	B11.11 As built information Fixed: _____ Value related: _____ Time related: _____	Item		
7	B11.12 Tenant installations Fixed: _____ Value related: _____ Time related: _____	Item		
	<u>B12.0 SCHEDULE OF VARIABLES</u>			
8	B12.1 Schedule of variables Fixed: _____ Value related: _____ Time related: _____ This schedule contains all variables referred to in this document and is divided into pre-tender 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	Item		
	Carried to Collection		R	
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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

12.1.2 Availability of construction documentation

[2.3] *Construction documentation is complete*

YES

12.1.3 Interests of agents

[2.4] Details:

12.1.4 Defined works area

[3.1] Details:

12.1.5 Geotechnical investigation

[3.2] Details:

12.1.6 Existing premises occupied

[3.4] Specific requirements:

12.1.7 Previous work - dimensional accuracy

[3.5] Details:

12.1.8 Previous work - defects

[3.6] Details:

12.1.9 Services - known

[3.7] Details:

12.1.10 Protection of trees

[3.9] Specific requirements:

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12.1.11 **Inspection of adjoining properties**

[3.11] Specific requirements:

12.1.12 **Enclosure of the works**

[6.2] Specific requirements:

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**

[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] A notice board is required

NO

Specific requirements:

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12.1.16 Water [7.2] Option A (by contractor) NO Option B (by employer - free of charge) NO Option C (by employer - metered) YES 12.1.17 Electricity [7.3] Option A (by contractor) NO Option B (by employer - free of charge) NO Option C (by employer - metered) YES 12.1.18 Telecommunications [7.4] Telephone YES Facsimile YES E-mail YES 12.1.19 Ablution facilities [7.5] Option A (by contractor) YES Option B (by employer) NO Carried to Collection PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			R
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12.1.20 **Protection of existing/sectionally occupied works**

[11.2] Protection is required

NO

12.1.21 **Special attendance**

[9.2] **Subcontractor** (1) details:

Subcontractor (2) details:

Subcontractor (3) details:

Subcontractor (4) details:

12.1.22 **Protection of the 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:

12.2 POST-TENDER INFORMATION

12.2.1 **Payment of preliminaries**

[10.2] Option A (prorated)

NO

Option B (calculated)

YES

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12.2.2 **Adjustment of preliminaries**
[10.3] Option A (three categories)

NO

Option B (detailed breakdown)

YES

12.2.3 **Additional agreed preliminaries items**
Details:

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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

1 C1.0 CONTRACT DRAWINGS

** Select relevant paragraph and delete whichever is not applicable depending on whether the contract is based on a **bills of quantities** or **lump sum document***

* 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

* A full set of drawings is issued with the tender documents indicating the full 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 understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the **principal agent**

Fixed: _____ Value related: _____
Time related: _____

Item

2 C2.0 GENERAL PREAMBLES

The document "Specification of Materials and Methods to be used - PW371 - A Edition 2.0 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (2nd Edition July 2013)" is obtainable on the Department's website (<http://www.publicworks.gov.za/> under "Consultants Guidelines"), and shall be read in conjunction with the **bills of quantities / lump sum document** and be referred to for the full descriptions of work to be done and materials to be used

Fixed: _____ Value related: _____
Time related: _____

Item

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C3.0 TRADE NAMES

Wherever a trade name for any product has been described in the **bills of quantities / lump sum document**, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the **principal agent** being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

Fixed: _____ Value related: _____
Time related: _____

Item

Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment DPW-23(EC) to be completed by tenderer)

Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)

Fixed: _____ Value related: _____
Time related: _____

Item

The **site** is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the **site** for tendering purposes

Fixed: _____ Value related: _____
Time related: _____

Item

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1	C6.0 COMMENCEMENT OF WORKS IN SECURITY AREAS As the works falls within a security area the contractor must give the unit commander or other responsible officer notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account Fixed: _____ Value related: _____ Time related: _____				
2	C7.0 ENTRANCE PERMITS TO SECURITY AREAS As the works falls within a security area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer Fixed: _____ Value related: _____ Time related: _____	Item			
3	C8.0 SECURITY CHECK OF PERSONNEL The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works Fixed: _____ Value related: _____ Time related: _____	Item			
Carried to Collection					
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1	C9.0 PROHIBITION ON TAKING OF PHOTOGRAPHS In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorized thereto by or on behalf of the Minister The same prohibition is also applicable to all correctional institutions in terms of article 44.1(e) of the Correctional Services Act 8 of 1959 Fixed: _____ Value related: _____ Time related: _____				
2	C10.0 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 / lump sum document. 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 31.0 of 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	Item			
	Carried to Collection PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS		R		

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

Fixed: _____ Value related: _____

Time related: _____

Item

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

Fixed: _____ Value related: _____

Time related: _____

Item

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

Fixed: _____ Value related: _____

Time related: _____

Item

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

Fixed: _____ Value related: _____

Time related: _____

Item

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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

Fixed:_____ Value related:_____
Time related:_____

Item

1 **C11.0 OCCUPATIONAL HEALTH AND SAFETY ACT**

The **contractor** shall comply 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)

It is required of the **contractor** to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the **bills of quantities / lump sum document**

The **contractor** must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of clause A31.0 of 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

Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained

Fixed:_____ Value related:_____
Time related:_____

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PRELIMINARIES AND GENERAL (NOT TO BE PRICED,
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

1	C12.0 COVID 19 ADDITIONAL HEALTH AND SAFETY SPECIFICATION. The contractor shall comply 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 the Disaster Management, 2002 (Act 57 of 2002) It is required of the contractor to thoroughly study the Covid 19 Additional Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document The contractor must take note that compliance with the Additional Covid 19 Occupational Health and Safety Act Requirements, Construction Regulations, Disaster Management Act and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A31.0 of 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 Provision for pricing of the Additional Covid 19 Occupational Health and Safety Act Requirements, Construction Regulations, Disaster Management Act and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained The contractor is to price the Additional Covid Requirements bill of quantities attached at the back of this document (C1.2 OHS bill of quantities) and carry the amount to this section of work, failure to complete the attached bill of quantities will need to non compliance . Fixed:_____ Value related:_____ Time related:_____ Carried to Collection PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
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PRELIMINARY AND GENERAL SUMMARY :
BANGILIZWE JUNIOR SECONDARY SCHOOL :
CARRIED FROM LOCATION P 1 WITH THE
FOLLOWING BREAKDOWN :

FIXED : _____

TIME : _____

VALUE : _____

TOTAL : _____

NOTE : TOTAL AMOUNT TO BE CARRIED TO ITEM 1
PAGE 43 OF BANGILIZWE JUNIOR SECONDARY
SCHOOL SECTION SUMMARY

PRELIMINARY AND GENERAL SUMMARY :
DALUBUHLE JUNIOR SECONDARY SCHOOL :
CARRIED FROM LOCATION P 2 WITH THE
FOLLOWING BREAKDOWN :

FIXED : _____

TIME : _____

VALUE : _____

TOTAL : _____

NOTE : TOTAL AMOUNT TO BE CARRIED TO ITEM 2
PAGE 43 OF DALUBUHLE JUNIOR SECONDARY
SCHOOL SECTION SUMMARY

Carried to Collection

PRELIMINARIES AND GENERAL (NOT TO BE PRICED,
Bill No. 1
PRELIMINARIES AND GENERAL (NOT TO BE PRICED,
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

Section No. 1		
PRELIMINARIES AND GENERAL (NOT TO BE PRICED, P&G PRICED PER SCHO		
Bill No. 1		
PRELIMINARIES AND GENERAL (NOT TO BE PRICED, P&G PRICED PER SCHO		
<u>COLLECTION</u>		
	Page No	Amount
Total Brought Forward from Page No.	1	
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PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1 PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS		

Section No. 1			
PRELIMINARIES AND GENERAL (NOT TO BE PRICED, P&G PRICED PER SCHO			
Bill No. 1			
PRELIMINARIES AND GENERAL (NOT TO BE PRICED, P&G PRICED PER SCHO			
<u>COLLECTION</u>			
	Page No		Amount
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Total Brought Forward from Page No.	19		
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	35		
Carried Forward		R	
PRELIMINARIES AND GENERAL (NOT TO BE PRICED, Bill No. 1			
PRELIMINARIES AND GENERAL (NOT TO BE PRICED, KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u> <u>BILL No. 01</u> <u>PRELIMINARIES AND GENERAL</u> NOTE: SECTION NO.1 : PRELIMINARIES AND GENERAL : To be used as a pricing guide line for the requirements of each school in separate locations. P1 : Kwaaiman Junior Secondary School			
1	The total to be carried from item Page 44 of the Preliminaries and General Section for P 3 :Kwaaiman Junior Secondary School Fixed: _____ Time: _____ Value : _____	Item		
	Carried Forward to Summary of Section No. 2 SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 1 PREMILINARIES AND GENERAL KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS		R	

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 02</u>			
	<u>Note:</u>			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition July 2014).			
	<u>Quantity breakdown</u>			
	In this Section No. 2 of the Bills of Quantities a breakdown of the total quantities into the various buildings is indicated below each description as follows:			
	A1 - DWG 04 - Staff Ablutions			
	C1 - DWG 06 - Grade R Ablutions			
	D1 - DWG 14 - Male ablutions			
	G1 - DWG 35 - Female Ablutions			
	It should be noted that due to the "rounding off" factor marginal differences can occur between the sum of the parts to the total given in the quantity column. For pricing purposes only the amount in the quantity column is to be used.			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>Site clearance</u>			
1	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site.	m2	201	
	A1 : 0 D1 : 119 G1 : 82 H1 : 0			
	Carried to Collection			R
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC			
	Bill No. 2			
	EARTHWORKS (PROVISIONAL)			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

EXCAVATIONS, FILLING, ETC.

BULK EXCAVATIONS

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

1	Pit toilet.	m3	26
	A1 : 0 D1 : 5 G1 : 21 H1 : 0		

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

2	Pit toilet.	m3	87
	A1 : 0 D1 : 25 G1 : 62 H1 : 0		

Excavations in earth of more difficult character

3	Extra over excavations in earth for excavation in soft rock.	m3	24
	A1 : 0 D1 : 6 G1 : 18 H1 : 0		

4	Extra over excavations in earth for excavation in hard rock.	m3	12
	A1 : 0 D1 : 3 G1 : 9 H1 : 0		

EXCAVATIONS FOR FOUNDATIONS, ETC.

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

5	Surface trenches.	m3	12
	A1 : 0 D1 : 6 G1 : 6 H1 : 0		

Excavations in earth of more difficult character

6	Extra over excavations in earth for excavation in soft rock.	m3	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

7	Extra over excavations in earth for excavation in hard rock.	m3	1
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Carried to Collection

R

SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 2
EARTHWORKS (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

A1 : 0 D1 : 33 G1 : 68 H1 : 0

A1 : 0 D1 : 18 G1 : 12 H1 : 0

A1:0 D1:31 G1:51 H1:0

A1:0 D1:31 G1:31 H1:0

5	Allow for keeping the excavations free from water.	Item
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A1:0 D1:2 G1:4 H1:0

A1:0 D1:8 G1:13 H1:0

R

-50-

1	50mm Thick layer of approved river sand supplied by the Contractor spread and levelled under floors, etc. A1 : 0 D1 : 1 G1 : 1 H1 : 0 <u>Compaction of surfaces</u>	m3	2
2	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. A1 : 0 D1 : 37 G1 : 57 H1 : 0	m2	94
3	Scarify in-situ material to a depth of 75mm and compact to 93% Mod AASHTO density. A1 : 0 D1 : 3 G1 : 3 H1 : 0 <u>Filter fabric</u>	m2	6
4	Grade 3 needle punched non-woven synthetic fibre filter fabric laid vertically against waterproofing membrane as backfilling proceeds. A1 : 0 D1 : 43 G1 : 73 H1 : 0 <u>Weedkillers, insecticides, etc.</u> <u>Soil insecticide in accordance with SANS 5859</u>	m2	116
5	Under floors, etc. including forming and poisoning shallow furrows against all foundation walls, filling in furrows and ramming. A1 : 0 D1 : 37 G1 : 15 H1 : 0	m2	52
6	To bottoms and sides of trenches. A1 : 0 D1 : 5 G1 : 6 H1 : 0	m2	11
7	To bottoms and sides of pit excavation. A1 : 0 D1 : 54 G1 : 78 H1 : 0 <u>Tests</u>	m2	132
8	Allow for Mod AASHTO density tests on filling.	No	8.00

Carried to Collection

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SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 2
EARTHWORKS (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 03</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>CONCRETE</u>			
	<u>Mass concrete 15MPa (19mm stone) in:</u>			
1	Blinding beneath bases, strip footings, etc cast against excavated surfaces. A1 : 0.0 D1 : 0.6 G1 : 1.9 H1 : 0.0	m3	2.5	
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>			
2	Slabs including beams and inverted beams. A1 : 0 D1 : 4 G1 : 6 H1 : 0	m3	10	
3	Surface beds A1 : 0 D1 : 2 G1 : 5 H1 : 0	m3	7	
4	Aprons cast in panels A1 : 0 D1 : 1 G1 : 1 H1 : 0	m3	2	
5	100 x 100mm Triangular fillets cast on top of pit Base Slab A1 : 0 D1 : 17 G1 : 21 H1 : 0	m	38	
	<u>Surface treatment</u>			
6	Float surface of concrete to a wood float finish. A1 : 0 D1 : 24 G1 : 36 H1 : 0	m2	60	
7	Powerfloating of concrete surface bed. A1 : 0 D1 : 10 G1 : 13 H1 : 0	m2	23	
	Carried to Collection			
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Test blocks and testing</u>					
1	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	8		
<u>POLYSTERENE BLOCKS ETC</u>					
<u>Polystrene blocks in composite slabs</u>					
2	850 x 500mm extreme wide at the bottom, 550mm wide at the top x 110mm high polystyrene block laid end to end rows A1 : 0 D1 : 12 G1 : 36 H1 : 0	No	48		
<u>PREFABRICATED CONCRETE RIB</u>					
<u>25MPa precast reinforced concrete rib</u>					
3	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths not exceeding 5m. A1 : 0 D1 : 9 G1 : 0 H1 : 0	m	9		
4	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths exceeding 5m and not exceeding 7.5m. A1 : 0 D1 : 0 G1 : 27 H1 : 0	m	27		
<u>FORMWORK</u>					
<u>Supporting bearers to prefabricated beams</u>					
5	Bearers propped up exceeding 1,5m high and not exceeding 3.5m high A1 : 0 D1 : 18 G1 : 35 H1 : 0	m	53		
<u>Permanent formwork</u>					
6	Soffits of slabs not exceeding 250mm thick and exceeding 1.5m and not exceeding 3.5 above bearing level. A1 : 0 D1 : 5 G1 : 18 H1 : 0	m2	23		
Carried to Collection					
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				R	

	<u>Rough formwork (use and waste) to concrete to:</u>				
	<u>Edges, risers, ends and reveals</u>				
1	Edge, riser, etc not exceeding 300mm high. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56		
	<u>Openings</u>				
2	Leave or form circular opening not exceeding 1m girth through 60mm thick reinforced concrete slab. A1 : 0 D1 : 4 G1 : 11 H1 : 0	No	15		
3	Leave or form square opening not exceeding 1m girth through 60mm thick reinforced concrete slab. A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
4	Cut or form circular opening not exceeding 1m girth through 110mm thick polystyrene block A1 : 0 D1 : 3 G1 : 11 H1 : 0	No	14		
5	Cut or form square opening not exceeding 1m girth through 110mm thick polystyrene block. A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
6	Cut or form circular opening not exceeding 1m girth through permanent formwork A1 : 0 D1 : 3 G1 : 11 H1 : 0	No	14		
7	Cut or form square opening not exceeding 1m girth through permanent formwork A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
	<u>Movement joints</u>				
8	10mm Thick closed cell polyethylene joint forming material with hinged blocking piece, not exceeding 300mm wide, between concrete and concrete or brickwork surfaces. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56		
9	Remove 10 x 15mm hinged blocking piece, insert polycord bond breaker and seal with an approved 2 part polysulphide sealer. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56		
	Carried to Collection			R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

1	Slip joint not exceeding 300mm wide formed of two layers of 3 Ply malthoid laid on and including a 3:1 cement mortar bedding. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>High tensile rod reinforcement to structural concrete work</u>			
2	16mm Diameter bars. A1 : 0.000 D1 : 0.141 G1 : 0.058 H1 : 0.000	t	0.199
3	10mm Diameter bars. A1 : 0.000 D1 : 0.132 G1 : 0.356 H1 : 0.000	t	0.488
<u>High tensile welded steel mesh reinforcement :</u>			
4	Ref: 193 cast into concrete surfaces. A1 : 0 D1 : 24 G1 : 36 H1 : 0	m2	60
5	Ref: 311 cast into concrete surfaces. A1 : 0 D1 : 9 G1 : 27 H1 : 0	m2	36

Carried to Collection

SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 3
CONCRETE, FORMWORK & REINFORCEMENT
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 04</u>			
	<u>MASONRY</u>			
	<u>FOUNDATION BRICKWORK (PROVISIONAL)</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
1	Half brick wall. A1 : 0 D1 : 5 G1 : 18 H1 : 0	m2	23	
2	One brick wall. A1 : 0 D1 : 16 G1 : 61 H1 : 0	m2	77	
	<u>Reinforcement to brickwork</u>			
3	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 0 D1 : 19 G1 : 78 H1 : 0	m	97	
4	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 0 D1 : 117 G1 : 238 H1 : 0	m	355	
	<u>EXTERNAL FACE BRICKWORK</u>			
	<u>Allow the Prime Cost of R5 500.00 (Five Thousand Five Hundred Rand) per thousand excluding Vat for Rust Gold face bricks delivered and customer self off loaded to site, pointed with 10mm square vertical and horizontal joints</u>			
5	Extra over ordinary brickwork for facing and pointing in stretcher bond. A1 : 0 D1 : 5 G1 : 6 H1 : 0	m2	11	
	<u>SUPERSTRUCTURE BRICKWORK</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
6	Half brick wall. A1 : 0 D1 : 14 G1 : 21 H1 : 0	m2	35	
	Carried to Collection			R
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 4 MANSORY KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

1	One brick wall. A1 : 0 D1 : 49 G1 : 70 H1 : 0 <u>Beamfilling</u>	m2	119
2	Half brick wall. A1 : 0 D1 : 6 G1 : 9 H1 : 0 <u>BRICKWORK SUNDRIES</u> <u>Brickwork air ventilation, etc.</u>	m2	15
3	Extra over brickwork for cutting to form 120 x 85mm ventilation openings in 220mm wall A1 : 0 D1 : 174 G1 : 231 H1 : 0 <u>Reinforcement to brickwork</u>	No	405
4	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 0 D1 : 42 G1 : 76 H1 : 0	m	118
5	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 0 D1 : 90 G1 : 249 H1 : 0 <u>Bagging</u>	m	339
6	Bag down outer face of inner skin of brick wall in 4:1 cement slurry. A1 : 0 D1 : 49 G1 : 70 H1 : 0 <u>Precast pre-stressed reinforced concrete lintols</u>	m2	119
7	75 x 110mm Lintol not exceeding 3m long, built at both ends into brickwork over opening. A1 : 0 D1 : 2 G1 : 5 H1 : 0 <u>Hoop iron ties, cramps, etc.</u>	m	7
8	1.6 x 30mm Galvanized hoop iron roof tie 1100mm long with one end wrapped around and spiked to timber the other end built a minimum of six courses deep into brickwork as the work proceeds. A1 : 0 D1 : 12 G1 : 16 H1 : 0	No	28

Carried to Collection

SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 4
MANSORY
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

1	30 x 1,2mm Galvanised hoop iron strap 800mm long shot pinned to brickwork and bent into brickwork A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4
<u>EXTERNAL FACE BRICKWORK</u>			
<u>Allow the Prime Cost of R5 500.00 (Five Thousand Five Hundred Rand) per thousand excluding Vat for Rust Gold face bricks delivered and customer self off loaded to site, pointed with 10mm square vertical and horizontal joints</u>			
2	Extra over ordinary brickwork for facing and pointing in stretcher bond. A1 : 0 D1 : 55 G1 : 79 H1 : 0	m2	134
<u>Face brick copings, lintols, cills, etc.</u>			
3	Extra over brickwork for brick-on-edge header course tread including pointing to one face and top. A1 : 0 D1 : 2 G1 : 2 H1 : 0	m	4
<u>Brickwork air ventilation, etc.</u>			
4	Extra over brickwork for fair cutting to form 120 x 85mm ventilation openings in facebrick, including facing and pointing A1 : 0 D1 : 174 G1 : 231 H1 : 0	No	405

Carried to Collection

R

SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 4
MANSORY
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 05</u>			
	<u>WATERPROOFING</u>			
	<u>DAMP-PROOF COURSE</u>			
	<u>SHEET OR MEMBRANE WATERPROOFING</u>			
	<u>250 Micron "Gunplas USB" green polyethylene sheeting</u> <u>:</u>			
1	Laid flat on prepared sand bed under solid floor. A1 : 0 D1 : 26 G1 : 39 H1 : 0	m2	65	
	<u>FLASHING STRIPS</u>			
	<u>Elastic acrylic and rubberised bitumen compound with</u> <u>"waterproof membrane" applied in strict accordance with</u> <u>the Manufacturer's instructions :</u>			
2	Flashing strips around 110mm diameter PVC vent pipes through steel roof sheeting. A1 : 0 D1 : 0 G1 : 1 H1 : 0	m	1	
	<u>LIQUID WATERPROOFING</u>			
	<u>Two coats "ABE Brickseal"</u>			
3	Vertically on bagged surface of brickwork. A1 : 0 D1 : 49 G1 : 70 H1 : 0	m2	119	
	<u>MEMBRANE WATERPROOFING</u>			
	<u>"Duraflex" or equally approved cementitious flexible</u> <u>waterproofing slurry including saturation membrane with</u> <u>75mm side and 100mm end laps applied in accordance</u> <u>with manufactures specifications</u>			
4	Vertical surfaces of plastered brickwork. A1 : 0 D1 : 16 G1 : 45 H1 : 0	m2	61	
	Carried to Collection		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 5 WATERPROOFING KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

PROTECTION

"Abe Cote SF 356" or other equal approved epoxy tar coating on

1	Vertical surfaces of plastered brickwork.	m2	61
	A1 : 0 D1 : 16 G1 : 45 H1 : 0		

Carried to Collection

SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 5
WATERPROOFING
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

Section No. 2

SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SCHOOL

Bill No. 5

WATERPROOFING

COLLECTION

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SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC

Bill No. 5

WATERPROOFING

KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 06</u>			
	<u>ROOF COVERINGS, ETC.</u>			
	<u>PROFILED SHEETING OF METAL, FIBRE CEMENT, PLASTIC, ETC.</u>			
	<u>Metal roof sheeting</u>			
	<u>0,8mm Thick Z200 "IBR Profile" galvanised metal roof sheeting, in single sheet lengths, with "Chromadek" finish to external face and standard backing coat to internal face :</u>			
1	Roof sheeting laid to a mono-pitch secured to timber purlins at approximately 940mm centres including turning up sheet at ridge and turning down sheet at eaves. A1 : 0 D1 : 25 G1 : 33 H1 : 0	m2	58	
	<u>Circular cutting</u>			
2	Circular cutting on roof sheeting for ventilators, vent pipes, etc. A1 : 0 D1 : 1 G1 : 3 H1 : 0	m	4	
	<u>Accessories, etc. to match roof sheeting</u>			
3	Ridge capping 550mm girth. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
4	Broad flute serrated closer including polyclosers. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
5	Narrow flute serrated closer including polyclosers. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
6	Ridge finial. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
	Carried Forward to Summary of Section No. 2			
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 6 ROOF COVERINGS, ETC KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
			R	

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 07</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>CARPENTRY</u>			
	<u>PLATE NAILED TIMBER ROOF CONSTRUCTION</u>			
	<u>Fixing:</u>			
	All nailing of timber roof rafters, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to blockwork or concrete.			
	<u>Erection certificates</u>			
1	Contractor is to supply a roof rafters erection certificate for the building stating that the erection and installation of the roof rafters has been inspected and approved by a professional registered structural engineer. A1 : 0 D1 : 1 G1 : 1 H1 : 0	No	2	
	<u>Purlins, bracing, etc.</u>			
	<u>Sawn softwood :</u>			
2	38 x 114mm Wall plate wired down (wire ties elsewhere). A1 : 0 D1 : 18 G1 : 23 H1 : 0	m	41	
3	50 x 76mm Purlins. A1 : 0 D1 : 31 G1 : 40 H1 : 0	m	71	
4	76 x 38mm S5 Treated Timber A1 : 0 D1 : 6 G1 : 11 H1 : 0	m	17	
5	38 x 38 x 152mm Long cleat spiked to rafter foot. A1 : 0 D1 : 6 G1 : 16 H1 : 0	No	22	
	Carried to Collection			
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 7 CARPENTRY AND JOINERY KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
			R	

1	50 x 76 x 500mm Long sprocket spiked to timber purlin. A1 : 0 D1 : 10 G1 : 10 H1 : 0 <u>Laminated S. A. Pine</u>	No	20
2	152 x 38mm S5 Timber Rafters A1 : 0 D1 : 24 G1 : 31 H1 : 0 <u>Sundries:</u>	m	55
3	Hurricane clip fixed to purlin and rafter. A1 : 0 D1 : 30 G1 : 40 H1 : 0 <u>JOINERY</u> <u>Plastic, fibre cement, etc.</u> <u>Pressed fibre-cement:</u>	No	70
4	12 x 225mm Fascia board drilled and brass screwed to rafter feet including galvanised steel H-profile jointing strips, etc. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14
5	80 x 275mm Barge board drilled and brass screwed to timber rafter including galvanised steel H-profile jointing strips, etc. A1 : 0 D1 : 8 G1 : 8 H1 : 0	m	16
Carried to Collection			
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 7 CARPENTRY AND JOINERY KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

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SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SCHOOL

Bill No. 7

CARPENTRY AND JOINERY

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Bill No. 7

CARPENTRY AND JOINERY

KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 08</u>			
	<u>IRONMONGERY</u>			
	<u>IRONMONGERY TO METALWORK</u>			
	<u>Locksets, etc. provided with two keys and to be masterkeyed</u>			
1	51mm brass padlock with stainless steel shackle. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
	<u>IRONMONGERY FIXED TO CONCRETE, TILING, ETC.</u>			
	<u>Push plates, kicking plates, indicator plates, etc.</u>			
2	152 x 152 x 3mm Thick anodised silver aluminium sex indicator plate. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
3	152 x 152 x 3mm Thick anodised silver aluminium disabled indicator plate. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1	
	<u>Door stops</u>			
4	Black rubber door stop plugged to wall. A1 : 0 D1 : 2 G1 : 6 H1 : 0	No	8	
	<u>Sundries</u>			
5	50mm Plastic key tag. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
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	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 8 IRONMONGERY KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 09</u>			
	<u>STRUCTURAL STEEL</u>			
	<u>Pre-galvanised (Z450) structural steelwork (Grade 350W)</u>			
1	100 x 50 x 20 x 2mm Cold formed lipped channel including bolting to brickwork at 910mm centres. A1 : 0 D1 : 2 G1 : 5 H1 : 0	m	7	
	Carried Forward to Summary of Section No. 2		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 9 STRUCTURAL STEEL KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 10</u>			
	<u>METALWORK</u>			
	<u>Hot dipped galvanised mild steel gates</u>			
1	Single gate, size 900mm wide x 2050mm high, the leaf formed of 25 x 25 x 2mm wall thickness mild steel pipe framing all round and two horizontal intermediate rails with mitred and welded angles, the gate filled in with 12mm diameter mild steel bars welded, at each end, vertically to perimeter and intermediate framing at not exceeding 109mm centres, the leaf fitted with a 150mm long padbolt, the leaf to receive hasp and staple formed of 40 x 6mm mild steel flat bar welded onto frames and including fitting with two 50 x 10mm flat bar tee brackets and 16mm round bar pin hinges, twice bolted to wall with and including M16 x 95mm galvanised coach screws. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
	<u>Hot dipped galvanised steel cladded doors and accessories</u>			
2	Door, size 760 x 1680mm high, formed of 19 x 19mm tubular steel perimeter framing and horizontal middle rail welded at angles and intersections, covered on one side with 0,6mm galvanised sheeting, prepainted "Golden Brown", pressed to shape with edges lapped around and rivetted to frame at 300mm centres, with slot for and including barrel bolt, the gate fitted with and including 25mm diameter x 2120mm long pivot pipe support welded on, 150 x 38 x 3mm top bearing bolted to beam with 2 x 6mm diameter bolts, including top cap bearing bush, washers, bottom bearing bush and finishing smooth on all exposed edges, complete with all fixing brackets, bolts etc. A1 : 0 D1 : 2 G1 : 6 H1 : 0	No	8	
	Carried to Collection		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC			
	Bill No. 10			
	METALWORK			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Pre-galvanised steel chawl doors

- 1 Single door to suit one brick wall, size 950 x 2030mm high, provided complete with integral frame, ironmongery, etc. finished with red oxide primer to receive paint (elsewhere).

A1 : 0 D1 : 0 G1 : 1 H1 : 0

No

1

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Bill No. 10
METALWORK
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 11</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Untinted granolithic screeds, etc. mixed by volume 4 parts granite chips, 1 part sand and 2 parts cement</u>			
1	40mm Thick screed to floors and landings. A1 : 0 D1 : 17 G1 : 17 H1 : 0	m2	34	
2	25mm Thick screed to falls A1 : 0 D1 : 2 G1 : 7 H1 : 0	m2	9	
	<u>Skirtings</u>			
3	75mm High coved skirting. A1 : 0 D1 : 27 G1 : 46 H1 : 0	m	73	
	<u>PLASTER</u>			
	<u>One coat internal 1:4 cement plaster on :</u>			
4	Brick walls in pit. A1 : 0 D1 : 25 G1 : 113 H1 : 0	m2	138	
5	Brick walls (ICP) A1 : 0 D1 : 74 G1 : 85 H1 : 0	m2	159	
	Carried Forward to Summary of Section No. 2		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 11 PLASTERING KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 12</u>			
	<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>			
	<u>Roof gutters, rainwater pipes, etc.</u>			
	<u>uPVC gutter including gutter brackets</u>			
1	125mm Half round eaves gutters on gutter brackets at 1000mm centres maximum fixed to fascias. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
2	Extra over uPVC gutter for forming discharge outlet to suit 100 x 75mm downpipe. A1 : 0 D1 : 1 G1 : 1 H1 : 0	No	2	
3	Extra over gutter for stopped end. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
4	75mm Rainwater downpipe fixed to wall with and including proprietary holderbats. A1 : 0 D1 : 4 G1 : 4 H1 : 0	m	8	
5	Extra over rainwater downpipe for bend. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
	<u>PIPEWORK, ETC.</u>			
	<u>Pipes, pipe fittings, etc.</u>			
	<u>WATER SUPPLIES</u>			
	<u>Class 6 HDPE waterpipe</u>			
6	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 D1 : 0 G1 : 12 H1 : 0	m	12	
	Carried to Collection		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Extra over Class 6 HDPE pipe for fittings</u>			
1	22mm Fittings. A1 : 0 D1 : 0 G1 : 10 H1 : 0	No	10
<u>Class 2 copper pipes with straight compression fittings</u>			
2	15mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 D1 : 10 G1 : 0 H1 : 0	m	10
<u>Extra over copper pipes for brass compression fittings</u>			
3	15mm Fittings. A1 : 0 D1 : 10 G1 : 0 H1 : 0	No	10
<u>Extra over copper pipes for capillary fittings with soldered joints</u>			
4	15mm Fittings. A1 : 0 D1 : 4 G1 : 0 H1 : 0	No	4
<u>SOIL DRAINAGE</u>			
<u>uPVC Pipes with solvent welded straight joints :</u>			
5	40mm Pipes. A1 : 0 D1 : 4 G1 : 0 H1 : 0	m	4
6	50mm Pipes. A1 : 0 D1 : 4 G1 : 0 H1 : 0	m	4
<u>White uPVC vent pipe in single lengths :</u>			
7	110mm Diameter vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres. A1 : 0 D1 : 8 G1 : 28 H1 : 0	m	36
<u>Extra over uPVC pipes for solvent welded fittings :</u>			
8	40mm Plain bend. A1 : 0 D1 : 8 G1 : 0 H1 : 0	No	8
9	50mm Plain bend. A1 : 0 D1 : 2 G1 : 0 H1 : 0	No	2
Carried to Collection			
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

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1	Black PVC whirlybird vent capping over the 110mm vent pipe. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9	
<u>Inspection chambers, catch pits, etc.</u>				
<u>Light Composite covers and frames</u>				
2	450 x 450mm x 8.6 kg EN124 A15 light composite manhole cover and frame inclusive of two stainless steel screws lock fasten cover with frame and two vented holes designed for the easy lifting and also has the function for draining, including fixing frame on concrete, A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5	
<u>SANITARY FITTINGS, TANKS, GEYSERS, ETC.</u>				
<u>Plastic sanitaryware</u>				
3	"Plastics 222 AP" VIP 200 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9	
4	"Plastics 507AP" Granite bowl urinal fitted with "496AP" waterless urinal waste fitting hung on wall on and including proprietary brackets. A1 : 0 D1 : 4 G1 : 0 H1 : 0	No	4	
5	"Plastics Christy 382AP" Basin, size 570 x 400 x 245mm, provided complete with two tapholes and built in soap holder, hung on wall on and including proprietary wall brackets. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1	
<u>Sanitary fitting sundries</u>				
6	Satin chrome thief proof toilet roll holder, PWD Sample 71, plugged to wall. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9	
7	Heavy-duty double-flap hinged toilet seat and cover. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9	
Carried to Collection				
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

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Grade 304 stainless steel ware :

1	Grab rail 1200mm long with two flanges "SR 1" plugged to wall with and including stainless steel screws.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		
2	Dog leg grab rail with three flanges "DL3" plugged to wall with and including stainless steel screws.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		

Tanks, geysers, etc.

Rainwater tanks

3	2500 Litre polyethylene rotomoulded vertical water storage tank complete, on 1600 x 1600 tank stand, including lid, fitted with and including 50 x 15mm reducer 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
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Galvanised Steel Pipe

4	22mm galvanised steel pipe	m	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Taps, valves, etc.

Solid cast brass taps, valves, etc.

5	"Cobra KM2-200" or other equal approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		
6	15mm Ball-o-stop valve.	No	4
	A1 : 0 D1 : 4 G1 : 0 H1 : 0		
7	22mm Gate valve	No	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		
8	22mm Non Return valve	No	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

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Bill No. 12
PLUMBING AND DRAINAGE (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Waste unions, traps, etc.

Outlets, traps, etc. :

1	50mm Chromium plated PVC urinal bottle trap. A1 : 0 D1 : 4 G1 : 0 H1 : 0	No	4
2	38mm Chromium plated brass slotted basin waste outlet with plug, chain and chain stay. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1
3	38mm PVC Mini P-trap. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1

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PLUMBING AND DRAINAGE (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Bill No. 12

PLUMBING AND DRAINAGE (PROVISIONAL)

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Bill No. 12

PLUMBING AND DRAINAGE (PROVISIONAL)

KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 13</u>			
	<u>PAINTWORK</u>			
	<u>PAINT ON CONCRETE, PLASTER, ETC</u>			
	<u>Prepare and apply one coat plaster primer, one coat universal undercoat and two coats "Wall & All" or other equal approved washable suede sheen acrylic PVA paint on :</u>			
1	Internal smooth plastered walls. A1 : 0 D1 : 74 G1 : 127 H1 : 0	m2	201	
2	Internal smooth plastered wall in narrow widths not exceeding 300mm wide A1 : 0 D1 : 1 G1 : 1 H1 : 0	m2	2	
	<u>Scrub surface with degreaser, rinse thoroughly with tap water, and apply one coat sealer and two coats epoxy paint on:</u>			
3	Concrete floated or screeded floors A1 : 0 D1 : 17 G1 : 17 H1 : 0	m2	34	
4	Granolithic skirting not exceeding 300mm girth. A1 : 0 D1 : 29 G1 : 47 H1 : 0	m	76	
	Carried to Collection		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 13 PAINTWORK KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

PAINT ON METALWORK

Prepare and apply one coat bituminous paint on :

1	Backs of steel door frames.	m2	2
	A1 : 0 D1 : 0 G1 : 2 H1 : 0		

One coat steel etch primer, one coat universal undercoat and two coats gloss enamel paint on :

2	Hot dipped galvanised steel gates.	m2	6
	A1 : 0 D1 : 4 G1 : 2 H1 : 0		

One coat red oxide primer, one coat universal undercoat and two coats gloss enamel paint on :

3	Pre-galvanised steel doors.	m2	2
	A1 : 0 D1 : 0 G1 : 2 H1 : 0		

4	Pre-galvanised steel door frames.	m2	2
	A1 : 0 D1 : 0 G1 : 2 H1 : 0		

PAINT ON FIBRE-CEMENT

Prepare and apply one coat plaster primer and two coats quality matt acrylic PVA on :

5	External fibre cement fascia boarding including priming cover strips.	m2	3
	A1 : 0 D1 : 1 G1 : 2 H1 : 0		

6	External fibre cement bargeboard including priming cover strips.	m2	4
	A1 : 0 D1 : 2 G1 : 2 H1 : 0		

PAINT ON PVC

Prepare and apply two coats black PVA paint on:

7	Vent pipes.	m2	4
	A1 : 0 D1 : 1 G1 : 3 H1 : 0		

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SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC
Bill No. 13
PAINTWORK
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 2 - EXTERNAL WORKS - KWAAIMAN JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 14</u>			
	<u>EXTERNAL WORKS (PROVISIONAL)</u>			
	<u>Note:</u>			
	For Preambles see "PW 371 - A Edition 2.0 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (2nd Edition July 2013).			
	<u>DEMOLITIONS</u>			
	<u>Brickwork building structures</u>			
	<u>Specialist work on asbestos products</u>			
	<u>The following items, to be taken down and carted away, are to be carried out by a Registered Asbestos Contractor and hazardous waste disposal expert, registered on the Department of Labour database. The Contractor is to allow for in his rates for all necessary health and safety clothing, equipment, etc. to carry out the works in compliance with all current legislation in this regard.</u>			
1	Demolish and cart away circular asbestos toilet block complete on concrete slab size 20 000mm long x 2 000mm wide W : 1	No	1	
2	Demolish and cart away circular asbestos toilet block complete on concrete slab size 20 000mm long x 2 000mm wide W : 1	No	1	
	Carried to Collection		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Pit toilets</u>				
1	Allow for de-sludging of existing "long drop" pit latrines by means of "honey sucker". The pit latrines are to be completely empty before any other work is carried out. W : 22	No	22	
2	Allow for breaking down and removing from site entire pit latrine structure including any structure that may be inside the pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured). Backfill existing hole with imported filling in max 150mm layers and compact to 95% MOD AASHTO density. W : 22	No	22	
<u>THE FOLLOWING IN WALKWAYS, RAMPS, ETC.</u>				
<u>EARTHWORKS</u>				
<u>Site clearance</u>				
3	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site. W : 120	m2	120	
<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>				
4	Reduced levels under solid floors. W : 24	m3	24	
<u>Carting away of excavated material</u>				
5	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 24	m3	24	
<u>Filling</u>				
6	150mm G7 Sub-base course, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 93% modified AASHTO density under slabs. W : 18	m3	18	
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SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC				
Bill No. 14				
EXTERNAL WORKS				
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

	<u>Prescribed Testing</u>				
1	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 2	No	2		
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
2	Paving in panels including any necessary formwork. W : 12	m3	12		
3	Ramps. W : 0.4	m3	0.4		
	<u>Surface treatment</u>				
4	Float surface of concrete to a wood float finish. W : 120	m2	120		
	<u>Test blocks and testing</u>				
5	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	2		
	<u>Movement joints</u>				
6	10mm Thick "Jointex" closed cell polyethylene joint filler with hinged blocking piece between concrete surfaces not exceeding 300mm wide. W : 33	m	33		
7	Remove hinged blocking piece and fill 10 x 15mm cavity with an approved 2 part polysulphide sealer. W : 33	m	33		
	<u>FORMWORK</u>				
	<u>Edges, risers, ends and reveals</u>				
8	Edge, riser, etc not exceeding 300mm high. W : 200	m	200		
Carried to Collection					R
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

	<u>Reinforcement</u>				
1	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces. W : 120	m2	120		
	<u>THE FOLLOWING IN STORMWATER CUT OFF DRAIN / EARTH BERM</u>				
	<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>				
2	Reduced levels W : 30	m3	30		
	<u>Filling</u>				
3	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. W : 30	m3	30		
	<u>Compaction of surfaces</u>				
4	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. W : 60	m2	60		
	<u>Grassing, ground cover, etc.</u>				
5	Kikuyu turf (sods or rolls) instant lawn 25 to 40mm thick, imported from commercial sources, laid firmly with staggered joints within three days of being lifted. W : 50	m2	50		
	<u>THE FOLLOWING IN CONCRETE CHANNELS, ETC.</u>				
	<u>EARTHWORKS</u>				
6	Holes W : 0.3	m3	0.3		
7	Surface trenches. W : 1	m3	1		
	Carried to Collection			R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

<u>Carting away of excavated material</u>				
1	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 1	m3	1	
2	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. W : 1	m2	1	
<u>Sundries</u>				
3	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density. W : 3	m2	3	
<u>Prescribed Testing</u>				
4	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 4	No	4	
<u>FORMWORK</u>				
<u>Edges, risers, ends and reveals</u>				
5	Edge, riser, etc not exceeding 300mm high. W : 6	m	6	
<u>Grooves, channels, mortices, etc.</u>				
6	700 x 150mm V-Channels in top W : 3	m	3	
7	1500 x 750 x 150mm Concrete V-Channel Spreader W : 1	No	1	
<u>REINFORCEMENT (PROVISIONAL)</u>				
<u>High tensile rod reinforcement to structural concrete work</u>				
8	12mm Diameter bars. W : 0.007	t	0.007	
Carried to Collection				R
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

Reinforcement

1	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces. W : 3	m2	3
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Bill No. 14
EXTERNAL WORKS
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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<u>THE FOLLOWING IN STAND PIPE BIP TAP ETC.</u>			
<u>EARTHWORKS</u>			
1	Holes W : 1	m3	1
2	Surface trenches. W : 6	m3	6
<u>Carting away of excavated material</u>			
3	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 1	m3	1
<u>Risk of collapse of excavations</u>			
4	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. W : 7	m2	7
<u>Keeping excavations free of water</u>			
5	Allow for keeping the excavations free from water.		Item
<u>Filling</u>			
6	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. W : 6	m3	6
<u>Foundation courses</u>			
7	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 95% modified AASHTO dry density to trenches, bases, etc. W : 0.3	m3	0.3
<u>Sundries</u>			
8	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density. W : 2	m2	2
Carried to Collection			
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
			R

	<u>Prescribed Testing</u>				
1	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 2	No	2		
	<u>CONCRETE (Labour intensive)</u>				
	<u>Mass concrete 25MPa (19mm stone) in:</u>				
2	Strip foundations cast against excavated surfaces. W : 2	m3	2		
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
3	Slabs W : 1	m3	1		
4	110mm PVC Blue Water Pipe W : 1	m3	1		
	<u>FORMWORK</u>				
	<u>Edges, risers, ends and reveals</u>				
5	Edge, riser, etc not exceeding 300mm high. W : 3	m	3		
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>High tensile rod reinforcement to structural concrete work</u>				
6	12mm Diameter bars. W : 0.003	t	0.003		
	<u>PIPEWORK, ETC.</u>				
	<u>Pipes, pipe fittings, etc.</u>				
	<u>WATER SUPPLIES</u>				
	Carried to Collection			R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

	<u>Class 2 copper pipes with straight compression fittings</u>				
1	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. W : 46	m	46		
	<u>Extra over copper pipes for brass compression fittings</u>				
2	22mm Fittings. W : 12	No	12		
	<u>uPVC Pipes</u>				
3	110mm Blue Water Pipe. W : 7	m	7		
	<u>SANITARY FITTINGS</u>				
	<u>Solid cast brass taps, valves, etc.</u>				
4	Bib Tap or Similar approved W : 4	No	4		
	<u>THE FOLLOWING IN SECURITY FENCING</u>				
	<u>SECURITY FENCING</u>				
	<u>Site clearance</u>				
5	Allow for clearing site for the width of 1000mm where fencing runs are to be erected including removing trees, shrubs, etc., not exceeding 200mm girth, grubbing up roots and roughly levelling. W : 60	m	60		
	<u>Fencing</u>				
6	4mm galvanised straining wires (evenly spaced) secured to straining 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 at the other end to and including 12mm diameter straining eye bolts. W : 240	m	240		
	Carried to Collection			R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

1	Fencing formed of 100 x 50 x 2.5mm diameter Class A galvanised "Secumesh" security fence 1.8m high with vertical wires facing outwards secured with "Howgring" clips applied with "Howgring" pliers at 300mm centres to top and bottom straining wires and 500mm centres to four intermediate straining wires (elsewhere). W : 60 <u>Hot dipped galvanised steel posts, etc.</u>	m	60		
2	60mm Diameter x 2.5mm wall thickness intermediate fencing post, 2700mm long fitted with pressed steel mushroom cap, the post fitted with 150 x 150 x 5mm baseplate at bottom and embedded in 350 x 350 x 600mm mass concrete (15 MPa) base including all necessary excavations, backfilling, concrete, etc. W : 20	No	20		
3	100mm Diameter x 3mm wall thickness end or corner post 2700mm long fitted with pressed steel mushroom cap and one 60mm diameter x 2mm wall thickness raking stay, the post and stay fitted with 150 x 150 x 5mm baseplate at bottom and embedded in 350 x 350 x 600mm mass concrete (15 MPa) base, including all necessary excavations, backfilling, concrete, etc. W : 2	No	2		
4	100mm Diameter x 3mm wall thickness intermediate straining or corner post 2700mm long fitted with pressed steel mushroom cap, but fitted with two 60mm diameter x 2mm wall thickness galvanised steel raking stays, the post and stays fitted with 150 x 150 x 5mm baseplate at bottom and embedded in 350 x 350 x 600mm mass concrete (15 MPa) base, including all necessary excavations, backfilling, concrete, etc. W : 4	No	4		
Carried to Collection					R
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

<u>Hot dipped galvanised steel gates</u>					
1	Security fence single gate, size 1000mm wide x 1800mm high, formed of 50mm diameter nominal bore x 3.25mm wall thickness mild steel pipe all round with mitred and welded angles and diagonal cross brace, 146 x 280mm hand access opening formed of 40 x 40 x 2.5mm square section framing welded on, the gate covered the gate covered with 100 x 50 x 2.5mm diameter Class A galvanised "Secumesh" security fence secured with "Howgring" clips applied with "Howgring" pliers at 300mm centres to and including six rows of straining wires and fitted with three 24mm diameter x 300mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost. W : 1	No	1		
<u>Sundries</u>					
2	Extra over excavations in earth (concrete bases) for excavation in soft rock. W : 0.2	m3	0.2		
3	51mm brass padlock with stainless steel shackle. W : 1	No	1		
Carried to Collection				R	
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

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Section No. 2					
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SCHOOL				
	SECTION SUMMARY - SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY S				
Bill No		Page No			Amount
1	PREMILINARIES AND GENERAL	47			
2	EARTHWORKS (PROVISIONAL)	52			
3	CONCRETE, FORMWORK & REINFORCEMENT	57			
4	MANSORY	61			
5	WATERPROOFING	64			
6	ROOF COVERINGS, ETC	65			
7	CARPENTRY AND JOINERY	68			
8	IRONMONGERY	69			
9	STRUCTURAL STEEL	70			
10	METALWORK	73			
11	PLASTERING	74			
12	PLUMBING AND DRAINAGE (PROVISIONAL)	80			
13	PAINTWORK	83			
14	EXTERNAL WORKS	95			
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	Carried Forward		R		
SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC					
Bill No. 14					
EXTERNAL WORKS					
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

Section No. 2				
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SCHOOL			
	SECTION SUMMARY - SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY S			
Bill No		Page No		Amount
	Brought Forward		R	
	<u>CONTINGENCY PROVISIONS</u>			
	The Tenderer is to allow hereunder for 5 (Five) percent of the Nett Builders Work Sub-Total to be used as a Budgetary Provision for construction contingencies of a general nature and for the finalisation of design detailing. This sum, or any portion thereof, shall be expended at the sole discretion of the Principal Agent. Any residual balance remaining subsequent to such expenditure shall be deducted in its entirety from the Contract Sum.	%		
	Carried to Final Summary		R	
	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SC KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u> <u>BILL No. 01</u> <u>PRELIMINARIES AND GENERAL</u> NOTE: SECTION NO.1 : PRELIMINARIES AND GENERAL : To be used as a pricing guide line for the requirements of each school in separate locations. P1 : Upper Mpako Junior Secondary School			
1	The total to be carried from item Page 44 of the Preliminaries and General Section for P 3 :Upper Mpako Junior Secondary School Fixed: _____ Time: _____ Value : _____	Item		
	Carried Forward to Summary of Section No. 3 SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 1 PREMILINARIES AND GENERAL KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS		R	

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 02</u>			
	<u>Note:</u>			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition July 2014).			
	<u>Quantity breakdown</u>			
	In this Section No. 2 of the Bills of Quantities a breakdown of the total quantities into the various buildings is indicated below each description as follows:			
	A1 - DWG 04 - Staff Ablutions			
	C1 - DWG 06 - Grade R Ablutions			
	D1 - DWG 14 - Male ablutions			
	G1 - DWG 35 - Female Ablutions			
	It should be noted that due to the "rounding off" factor marginal differences can occur between the sum of the parts to the total given in the quantity column. For pricing purposes only the amount in the quantity column is to be used.			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>Site clearance</u>			
1	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site.	m2	201	
	A1 : 0 D1 : 119 G1 : 82 H1 : 0			
	Carried to Collection			R
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR			
	Bill No. 2			
	EARTHWORKS (PROVISIONAL)			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

EXCAVATIONS, FILLING, ETC.

BULK EXCAVATIONS

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

1	Pit toilet.	m3	26
	A1 : 0 D1 : 5 G1 : 21 H1 : 0		

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

2	Pit toilet.	m3	87
	A1 : 0 D1 : 25 G1 : 62 H1 : 0		

Excavations in earth of more difficult character

3	Extra over excavations in earth for excavation in soft rock.	m3	24
	A1 : 0 D1 : 6 G1 : 18 H1 : 0		

4	Extra over excavations in earth for excavation in hard rock.	m3	12
	A1 : 0 D1 : 3 G1 : 9 H1 : 0		

EXCAVATIONS FOR FOUNDATIONS, ETC.

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

5	Surface trenches.	m3	12
	A1 : 0 D1 : 6 G1 : 6 H1 : 0		

Excavations in earth of more difficult character

6	Extra over excavations in earth for excavation in soft rock.	m3	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

7	Extra over excavations in earth for excavation in hard rock.	m3	1
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Carried to Collection

R

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 2
EARTHWORKS (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

<u>Carting away of excavated material</u>					
1	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. A1 : 0 D1 : 33 G1 : 68 H1 : 0	m3	101		
<u>Risk of collapse of excavations</u>					
2	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. A1 : 0 D1 : 18 G1 : 12 H1 : 0	m2	30		
3	Allow for risk of collapse to sides of excavations exceeding 1.5m deep including all necessary timber shoring, etc. A1 : 0 D1 : 31 G1 : 51 H1 : 0	m2	82		
<u>Working space</u>					
4	Excavate in earth for working space exceeding 1500mm and not exceeding 3000mm deep, 500mm from the face of blockwork in the pit, for waterproofing purposes including backfilling with G7 imported material compacted in 150mm thick layers to 95% Modified AASHTO dry density. A1 : 0 D1 : 31 G1 : 31 H1 : 0	m2	62		
<u>Keeping excavations free of water</u>					
5	Allow for keeping the excavations free from water.		Item		
<u>Filling</u>					
6	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. A1 : 0 D1 : 2 G1 : 4 H1 : 0	m3	6		
<u>Foundation courses</u>					
7	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 95% modified AASHTO dry density to trenches, bases, etc. A1 : 0 D1 : 8 G1 : 13 H1 : 0	m3	21		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 2 EARTHWORKS (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

1	50mm Thick layer of approved river sand supplied by the Contractor spread and levelled under floors, etc. A1 : 0 D1 : 1 G1 : 1 H1 : 0 <u>Compaction of surfaces</u>	m3	2
2	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. A1 : 0 D1 : 37 G1 : 57 H1 : 0	m2	94
3	Scarify in-situ material to a depth of 75mm and compact to 93% Mod AASHTO density. A1 : 0 D1 : 3 G1 : 3 H1 : 0 <u>Filter fabric</u>	m2	6
4	Grade 3 needle punched non-woven synthetic fibre filter fabric laid vertically against waterproofing membrane as backfilling proceeds. A1 : 0 D1 : 43 G1 : 73 H1 : 0 <u>Weedkillers, insecticides, etc.</u> <u>Soil insecticide in accordance with SANS 5859</u>	m2	116
5	Under floors, etc. including forming and poisoning shallow furrows against all foundation walls, filling in furrows and ramming. A1 : 0 D1 : 37 G1 : 15 H1 : 0	m2	52
6	To bottoms and sides of trenches. A1 : 0 D1 : 5 G1 : 6 H1 : 0	m2	11
7	To bottoms and sides of pit excavation. A1 : 0 D1 : 54 G1 : 78 H1 : 0 <u>Tests</u>	m2	132
8	Allow for Mod AASHTO density tests on filling.	No	8.00

Carried to Collection

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SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 2
EARTHWORKS (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 03</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>CONCRETE</u>			
	<u>Mass concrete 15MPa (19mm stone) in:</u>			
1	Blinking beneath bases, strip footings, etc cast against excavated surfaces. A1 : 0.0 D1 : 0.6 G1 : 1.9 H1 : 0.0	m3	2.5	
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>			
2	Slabs including beams and inverted beams. A1 : 0 D1 : 4 G1 : 6 H1 : 0	m3	10	
3	Surface beds A1 : 0 D1 : 2 G1 : 5 H1 : 0	m3	7	
4	Aprons cast in panels A1 : 0 D1 : 1 G1 : 1 H1 : 0	m3	2	
5	100 x 100mm Triangular fillets cast on top of pit Base Slab A1 : 0 D1 : 17 G1 : 21 H1 : 0	m	38	
	<u>Surface treatment</u>			
6	Float surface of concrete to a wood float finish. A1 : 0 D1 : 24 G1 : 36 H1 : 0	m2	60	
7	Powerfloating of concrete surface bed. A1 : 0 D1 : 10 G1 : 13 H1 : 0	m2	23	
	Carried to Collection			R
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Test blocks and testing</u>					
1	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	8		
<u>POLYSTERENE BLOCKS ETC</u>					
<u>Polystrene blocks in composite slabs</u>					
2	850 x 500mm extreme wide at the bottom, 550mm wide at the top x 110mm high polystereene block laid end to end rows A1 : 0 D1 : 12 G1 : 36 H1 : 0	No	48		
<u>PREFABRICATED CONCRETE RIB</u>					
<u>25MPa precast reinforced concrete rib</u>					
3	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths not exceeding 5m. A1 : 0 D1 : 9 G1 : 0 H1 : 0	m	9		
4	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths exceeding 5m and not exceeding 7.5m. A1 : 0 D1 : 0 G1 : 27 H1 : 0	m	27		
<u>FORMWORK</u>					
<u>Supporting bearers to prefabricated beams</u>					
5	Bearers propped up exceeding 1,5m high and not exceeding 3.5m high A1 : 0 D1 : 18 G1 : 35 H1 : 0	m	53		
<u>Permanent formwork</u>					
6	Soffits of slabs not exceeding 250mm thick and exceeding 1.5m and not exceeding 3.5 above bearing level. A1 : 0 D1 : 5 G1 : 18 H1 : 0	m2	23		
Carried to Collection					
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR					
Bill No. 3					
CONCRETE, FORMWORK & REINFORCEMENT					
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

<u>Rough formwork (use and waste) to concrete to:</u>					
<u>Edges, risers, ends and reveals</u>					
1	Edge, riser, etc not exceeding 300mm high. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56		
<u>Openings</u>					
2	Leave or form circular opening not exceeding 1m girth through 60mm thick reinforced concrete slab. A1 : 0 D1 : 4 G1 : 11 H1 : 0	No	15		
3	Leave or form square opening not exceeding 1m girth through 60mm thick reinforced concrete slab. A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
4	Cut or form circular opening not exceeding 1m girth through 110mm thick polystyrene block A1 : 0 D1 : 3 G1 : 11 H1 : 0	No	14		
5	Cut or form square opening not exceeding 1m girth through 110mm thick polystyrene block. A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
6	Cut or form circular opening not exceeding 1m girth through permanent formwork A1 : 0 D1 : 3 G1 : 11 H1 : 0	No	14		
7	Cut or form square opening not exceeding 1m girth through permanent formwork A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
<u>Movement joints</u>					
8	10mm Thick closed cell polyethylene joint forming material with hinged blocking piece, not exceeding 300mm wide, between concrete and concrete or brickwork surfaces. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56		
9	Remove 10 x 15mm hinged blocking piece, insert polycord bond breaker and seal with an approved 2 part polysulphide sealer. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

1	Slip joint not exceeding 300mm wide formed of two layers of 3 Ply malthoid laid on and including a 3:1 cement mortar bedding. A1 : 0 D1 : 22 G1 : 34 H1 : 0	m	56
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>High tensile rod reinforcement to structural concrete work</u>			
2	16mm Diameter bars. A1 : 0.000 D1 : 0.141 G1 : 0.058 H1 : 0.000	t	0.199
3	10mm Diameter bars. A1 : 0.000 D1 : 0.132 G1 : 0.356 H1 : 0.000	t	0.488
<u>High tensile welded steel mesh reinforcement :</u>			
4	Ref: 193 cast into concrete surfaces. A1 : 0 D1 : 24 G1 : 36 H1 : 0	m2	60
5	Ref: 311 cast into concrete surfaces. A1 : 0 D1 : 9 G1 : 27 H1 : 0	m2	36

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 3
CONCRETE, FORMWORK & REINFORCEMENT
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 04</u>			
	<u>MASONRY</u>			
	<u>FOUNDATION BRICKWORK (PROVISIONAL)</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
1	Half brick wall. A1 : 0 D1 : 5 G1 : 18 H1 : 0	m2	23	
2	One brick wall. A1 : 0 D1 : 16 G1 : 61 H1 : 0	m2	77	
	<u>Reinforcement to brickwork</u>			
3	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 0 D1 : 19 G1 : 78 H1 : 0	m	97	
4	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 0 D1 : 117 G1 : 238 H1 : 0	m	355	
	<u>EXTERNAL FACE BRICKWORK</u>			
	<u>Allow the Prime Cost of R5 500.00 (Five Thousand Five Hundred Rand) per thousand excluding Vat for Rust Gold face bricks delivered and customer self off loaded to site, pointed with 10mm square vertical and horizontal joints</u>			
5	Extra over ordinary brickwork for facing and pointing in stretcher bond. A1 : 0 D1 : 5 G1 : 6 H1 : 0	m2	11	
	<u>SUPERSTRUCTURE BRICKWORK</u>			
	Carried to Collection			
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR			
	Bill No. 4			
	MANSORY			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
1	Half brick wall. A1 : 0 D1 : 14 G1 : 21 H1 : 0	m2	35
2	One brick wall. A1 : 0 D1 : 49 G1 : 70 H1 : 0	m2	119
<u>Beamfilling</u>			
3	Half brick wall. A1 : 0 D1 : 6 G1 : 9 H1 : 0	m2	15
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork air ventilation, etc.</u>			
4	Extra over brickwork for cutting to form 120 x 85mm ventilation openings in 220mm wall A1 : 0 D1 : 174 G1 : 231 H1 : 0	No	405
<u>Reinforcement to brickwork</u>			
5	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 0 D1 : 42 G1 : 76 H1 : 0	m	118
6	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 0 D1 : 90 G1 : 249 H1 : 0	m	339
<u>Bagging</u>			
7	Bag down outer face of inner skin of brick wall in 4:1 cement slurry. A1 : 0 D1 : 49 G1 : 70 H1 : 0	m2	119
<u>Precast pre-stressed reinforced concrete lintols</u>			
8	75 x 110mm Lintol not exceeding 3m long, built at both ends into brickwork over opening. A1 : 0 D1 : 2 G1 : 5 H1 : 0	m	7

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 4
MANSORY
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

	<u>Hoop iron ties, cramps, etc.</u>				
1	1.6 x 30mm Galvanized hoop iron roof tie 1100mm long with one end wrapped around and spiked to timber the other end built a minimum of six courses deep into brickwork as the work proceeds.	No	28		
	A1 : 0 D1 : 12 G1 : 16 H1 : 0				
2	30 x 1,2mm Galvanised hoop iron strap 800mm long shot pinned to brickwork and bent into brickwork	No	4		
	A1 : 0 D1 : 2 G1 : 2 H1 : 0				
	<u>EXTERNAL FACE BRICKWORK</u>				
	<u>Allow the Prime Cost of R5 500.00 (Five Thousand Five Hundred Rand) per thousand excluding Vat for Rust Gold face bricks delivered and customer self off loaded to site, pointed with 10mm square vertical and horizontal joints</u>				
3	Extra over ordinary brickwork for facing and pointing in stretcher bond.	m2	134		
	A1 : 0 D1 : 55 G1 : 79 H1 : 0				
	<u>Face brick copings, lintols, cills, etc.</u>				
4	Extra over brickwork for brick-on-edge header course tread including pointing to one face and top.	m	4		
	A1 : 0 D1 : 2 G1 : 2 H1 : 0				
	<u>Brickwork air ventilation, etc.</u>				
5	Extra over brickwork for fair cutting to form 120 x 85mm ventilation openings in facebrick, including facing and pointing	No	405		
	A1 : 0 D1 : 174 G1 : 231 H1 : 0				
	Carried to Collection			R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR				
	Bill No. 4				
	MANSORY				
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 05</u>			
	<u>WATERPROOFING</u>			
	<u>DAMP-PROOF COURSE</u>			
	<u>SHEET OR MEMBRANE WATERPROOFING</u>			
	<u>250 Micron "Gunplas USB" green polyethylene sheeting</u> :			
1	Laid flat on prepared sand bed under solid floor. A1 : 0 D1 : 26 G1 : 39 H1 : 0	m2	65	
	<u>FLASHING STRIPS</u>			
	<u>Elastic acrylic and rubberised bitumen compound with "waterproof membrane" applied in strict accordance with the Manufacturer's instructions :</u>			
2	Flashing strips around 110mm diameter PVC vent pipes through steel roof sheeting. A1 : 0 D1 : 0 G1 : 1 H1 : 0	m	1	
	<u>LIQUID WATERPROOFING</u>			
	<u>Two coats "ABE Brickseal"</u>			
3	Vertically on bagged surface of brickwork. A1 : 0 D1 : 49 G1 : 70 H1 : 0	m2	119	
	<u>MEMBRANE WATERPROOFING</u>			
	<u>"Duraflex" or equally approved cementitious flexible waterproofing slurry including saturation membrane with 75mm side and 100mm end laps applied in accordance with manufactures specifications</u>			
4	Vertical surfaces of plastered brickwork. A1 : 0 D1 : 16 G1 : 45 H1 : 0	m2	61	
	Carried to Collection		R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 5 WATERPROOFING KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

PROTECTION

"Abe Cote SF 356" or other equal approved epoxy tar coating on

1	Vertical surfaces of plastered brickwork.	m2	61
	A1 : 0 D1 : 16 G1 : 45 H1 : 0		

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 5
WATERPROOFING
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 06</u>			
	<u>ROOF COVERINGS, ETC.</u>			
	<u>PROFILED SHEETING OF METAL, FIBRE CEMENT, PLASTIC, ETC.</u>			
	<u>Metal roof sheeting</u>			
	<u>0,8mm Thick Z200 "IBR Profile" galvanised metal roof sheeting, in single sheet lengths, with "Chromadek" finish to external face and standard backing coat to internal face :</u>			
1	Roof sheeting laid to a mono-pitch secured to timber purlins at approximately 940mm centres including turning up sheet at ridge and turning down sheet at eaves. A1 : 0 D1 : 25 G1 : 33 H1 : 0	m2	58	
	<u>Circular cutting</u>			
2	Circular cutting on roof sheeting for ventilators, vent pipes, etc. A1 : 0 D1 : 1 G1 : 3 H1 : 0	m	4	
	<u>Accessories, etc. to match roof sheeting</u>			
3	Ridge capping 550mm girth. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
4	Broad flute serrated closer including polyclosers. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
5	Narrow flute serrated closer including polyclosers. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
6	Ridge finial. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
	Carried Forward to Summary of Section No. 3			
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 6 ROOF COVERINGS, ETC KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
			R	

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 07</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>CARPENTRY</u>			
	<u>PLATE NAILED TIMBER ROOF CONSTRUCTION</u>			
	<u>Fixing:</u>			
	All nailing of timber roof rafters, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to blockwork or concrete.			
	<u>Erection certificates</u>			
1	Contractor is to supply a roof rafters erection certificate for the building stating that the erection and installation of the roof rafters has been inspected and approved by a professional registered structural engineer.	No	2	
	A1 : 0 D1 : 1 G1 : 1 H1 : 0			
	<u>Purlins, bracing, etc.</u>			
	<u>Sawn softwood :</u>			
2	38 x 114mm Wall plate wired down (wire ties elsewhere).	m	41	
	A1 : 0 D1 : 18 G1 : 23 H1 : 0			
3	50 x 76mm Purlins.	m	71	
	A1 : 0 D1 : 31 G1 : 40 H1 : 0			
4	76 x 38mm S5 Treated Timber	m	17	
	A1 : 0 D1 : 6 G1 : 11 H1 : 0			
	Carried to Collection			
			R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR			
	Bill No. 7			
	CARPENTRY AND JOINERY			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

1	38 x 38 x 152mm Long cleat spiked to rafter foot. A1 : 0 D1 : 6 G1 : 16 H1 : 0	No	22
2	50 x 76 x 500mm Long sprocket spiked to timber purlin. A1 : 0 D1 : 10 G1 : 10 H1 : 0	No	20
	<u>Laminated S. A. Pine</u>		
3	152 x 38mm S5 Timber Rafters A1 : 0 D1 : 24 G1 : 31 H1 : 0	m	55
	<u>Sundries:</u>		
4	Hurricane clip fixed to purlin and rafter. A1 : 0 D1 : 30 G1 : 40 H1 : 0	No	70
	<u>JOINERY</u>		
	<u>Plastic, fibre cement, etc.</u>		
	<u>Pressed fibre-cement:</u>		
5	12 x 225mm Fascia board drilled and brass screwed to rafter feet including galvanised steel H-profile jointing strips, etc. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14
6	80 x 275mm Barge board drilled and brass screwed to timber rafter including galvanised steel H-profile jointing strips, etc. A1 : 0 D1 : 8 G1 : 8 H1 : 0	m	16

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 7
CARPENTRY AND JOINERY
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 08</u>			
	<u>IRONMONGERY</u>			
	<u>IRONMONGERY TO METALWORK</u>			
	<u>Locksets, etc. provided with two keys and to be masterkeyed</u>			
1	51mm brass padlock with stainless steel shackle. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
	<u>IRONMONGERY FIXED TO CONCRETE, TILING, ETC.</u>			
	<u>Push plates, kicking plates, indicator plates, etc.</u>			
2	152 x 152 x 3mm Thick anodised silver aluminium sex indicator plate. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
3	152 x 152 x 3mm Thick anodised silver aluminium disabled indicator plate. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1	
	<u>Door stops</u>			
4	Black rubber door stop plugged to wall. A1 : 0 D1 : 2 G1 : 6 H1 : 0	No	8	
	<u>Sundries</u>			
5	50mm Plastic key tag. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
	Carried Forward to Summary of Section No. 3			
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 8 IRONMONGERY KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 09</u>			
	<u>STRUCTURAL STEEL</u>			
	<u>Pre-galvanised (Z450) structural steelwork (Grade 350W)</u>			
1	100 x 50 x 20 x 2mm Cold formed lipped channel including bolting to brickwork at 910mm centres. A1 : 0 D1 : 2 G1 : 5 H1 : 0	m	7	
	Carried Forward to Summary of Section No. 3			R
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 9 STRUCTURAL STEEL KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 10</u>			
	<u>METALWORK</u>			
	<u>Hot dipped galvanised mild steel gates</u>			
1	Single gate, size 900mm wide x 2050mm high, the leaf formed of 25 x 25 x 2mm wall thickness mild steel pipe framing all round and two horizontal intermediate rails with mitred and welded angles, the gate filled in with 12mm diameter mild steel bars welded, at each end, vertically to perimeter and intermediate framing at not exceeding 109mm centres, the leaf fitted with a 150mm long padbolt, the leaf to receive hasp and staple formed of 40 x 6mm mild steel flat bar welded onto frames and including fitting with two 50 x 10mm flat bar tee brackets and 16mm round bar pin hinges, twice bolted to wall with and including M16 x 95mm galvanised coach screws. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
	<u>Hot dipped galvanised steel cladded doors and accessories</u>			
2	Door, size 760 x 1680mm high, formed of 19 x 19mm tubular steel perimeter framing and horizontal middle rail welded at angles and intersections, covered on one side with 0,6mm galvanised sheeting, prepainted "Golden Brown", pressed to shape with edges lapped around and rivetted to frame at 300mm centres, with slot for and including barrel bolt, the gate fitted with and including 25mm diameter x 2120mm long pivot pipe support welded on, 150 x 38 x 3mm top bearing bolted to beam with 2 x 6mm diameter bolts, including top cap bearing bush, washers, bottom bearing bush and finishing smooth on all exposed edges, complete with all fixing brackets, bolts etc. A1 : 0 D1 : 2 G1 : 6 H1 : 0	No	8	
	Carried to Collection		R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 10 METALWORK KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Pre-galvanised steel chawl doors

- 1 Single door to suit one brick wall, size 950 x 2030mm high, provided complete with integral frame, ironmongery, etc. finished with red oxide primer to receive paint (elsewhere).

A1 : 0 D1 : 0 G1 : 1 H1 : 0

No

1

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 10
METALWORK
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 11</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Untinted granolithic screeds, etc. mixed by volume 4 parts granite chips, 1 part sand and 2 parts cement</u>			
1	40mm Thick screed to floors and landings. A1 : 0 D1 : 17 G1 : 17 H1 : 0	m2	34	
2	25mm Thick screed to falls A1 : 0 D1 : 2 G1 : 7 H1 : 0	m2	9	
	<u>Skirtings</u>			
3	75mm High coved skirting. A1 : 0 D1 : 27 G1 : 46 H1 : 0	m	73	
	<u>PLASTER</u>			
	<u>One coat internal 1:4 cement plaster on :</u>			
4	Brick walls in pit. A1 : 0 D1 : 25 G1 : 113 H1 : 0	m2	138	
5	Brick walls (ICP) A1 : 0 D1 : 74 G1 : 85 H1 : 0	m2	159	
	Carried Forward to Summary of Section No. 3		R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 11 PLASTERING KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>				
<u>BILL No. 12</u>				
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>				
<u>Roof gutters, rainwater pipes, etc.</u>				
<u>uPVC gutter including gutter brackets</u>				
1	125mm Half round eaves gutters on gutter brackets at 1000mm centres maximum fixed to fascias. A1 : 0 D1 : 6 G1 : 8 H1 : 0	m	14	
2	Extra over uPVC gutter for forming discharge outlet to suit 100 x 75mm downpipe. A1 : 0 D1 : 1 G1 : 1 H1 : 0	No	2	
3	Extra over gutter for stopped end. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
4	75mm Rainwater downpipe fixed to wall with and including proprietary holderbats. A1 : 0 D1 : 4 G1 : 4 H1 : 0	m	8	
5	Extra over rainwater downpipe for bend. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
<u>PIPEWORK, ETC.</u>				
<u>Pipes, pipe fittings, etc.</u>				
<u>WATER SUPPLIES</u>				
<u>Class 6 HDPE waterpipe</u>				
6	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 D1 : 0 G1 : 12 H1 : 0	m	12	
Carried to Collection				R
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

<u>Extra over Class 6 HDPE pipe for fittings</u>					
1	22mm Fittings. A1 : 0 D1 : 0 G1 : 10 H1 : 0	No	10		
<u>Class 2 copper pipes with straight compression fittings</u>					
2	15mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 D1 : 10 G1 : 0 H1 : 0	m	10		
<u>Extra over copper pipes for brass compression fittings</u>					
3	15mm Fittings. A1 : 0 D1 : 10 G1 : 0 H1 : 0	No	10		
<u>Extra over copper pipes for capillary fittings with soldered joints</u>					
4	15mm Fittings. A1 : 0 D1 : 4 G1 : 0 H1 : 0	No	4		
<u>SOIL DRAINAGE</u>					
<u>uPVC Pipes with solvent welded straight joints :</u>					
5	40mm Pipes. A1 : 0 D1 : 4 G1 : 0 H1 : 0	m	4		
6	50mm Pipes. A1 : 0 D1 : 4 G1 : 0 H1 : 0	m	4		
<u>White uPVC vent pipe in single lengths :</u>					
7	110mm Diameter vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres. A1 : 0 D1 : 8 G1 : 28 H1 : 0	m	36		
<u>Extra over uPVC pipes for solvent welded fittings :</u>					
8	40mm Plain bend. A1 : 0 D1 : 8 G1 : 0 H1 : 0	No	8		
9	50mm Plain bend. A1 : 0 D1 : 2 G1 : 0 H1 : 0	No	2		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

1	Black PVC whirlybird vent capping over the 110mm vent pipe. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9		
<u>Inspection chambers, catch pits, etc.</u>					
<u>Light Composite covers and frames</u>					
2	450 x 450mm x 8.6 kg EN124 A15 light composite manhole cover and frame inclusive of two stainless steel screws lock fasten cover with frame and two vented holes designed for the easy lifting and also has the function for draining, including fixing frame on concrete, A1 : 0 D1 : 1 G1 : 4 H1 : 0	No	5		
<u>SANITARY FITTINGS, TANKS, GEYSERS, ETC.</u>					
<u>Plastic sanitaryware</u>					
3	"Plastics 222 AP" VIP 200 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9		
4	"Plastics 507AP" Granite bowl urinal fitted with "496AP" waterless urinal waste fitting hung on wall on and including proprietary brackets. A1 : 0 D1 : 4 G1 : 0 H1 : 0	No	4		
5	"Plastics Christy 382AP" Basin, size 570 x 400 x 245mm, provided complete with two tapholes and built in soap holder, hung on wall on and including proprietary wall brackets. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1		
<u>Sanitary fitting sundries</u>					
6	Satin chrome thief proof toilet roll holder, PWD Sample 71, plugged to wall. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9		
7	Heavy-duty double-flap hinged toilet seat and cover. A1 : 0 D1 : 2 G1 : 7 H1 : 0	No	9		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 12 PLUMBING AND DRAINAGE (PROVISIONAL) KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

Grade 304 stainless steel ware :

1	Grab rail 1200mm long with two flanges "SR 1" plugged to wall with and including stainless steel screws.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		
2	Dog leg grab rail with three flanges "DL3" plugged to wall with and including stainless steel screws.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		

Tanks, geysers, etc.

Rainwater tanks

3	2500 Litre polyethylene rotomoulded vertical water storage tank complete, on 1600 x 1600 tank stand, including lid, fitted with and including 50 x 15mm reducer 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
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Galvanised Steel Pipe

4	22mm galvanised steel pipe	m	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Taps, valves, etc.

Solid cast brass taps, valves, etc.

5	"Cobra KM2-200" or other equal approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		
6	15mm Ball-o-stop valve.	No	4
	A1 : 0 D1 : 4 G1 : 0 H1 : 0		
7	22mm Gate valve	No	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		
8	22mm Non Return valve	No	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Carried to Collection

R

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 12
PLUMBING AND DRAINAGE (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Waste unions, traps, etc.

Outlets, traps, etc. :

1	50mm Chromium plated PVC urinal bottle trap. A1 : 0 D1 : 4 G1 : 0 H1 : 0	No	4
2	38mm Chromium plated brass slotted basin waste outlet with plug, chain and chain stay. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1
3	38mm PVC Mini P-trap. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 12
PLUMBING AND DRAINAGE (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 13</u>			
	<u>PAINTWORK</u>			
	<u>PAINT ON CONCRETE, PLASTER, ETC</u>			
	<u>Prepare and apply one coat plaster primer, one coat universal undercoat and two coats "Wall & All" or other equal approved washable suede sheen acrylic PVA paint on :</u>			
1	Internal smooth plastered walls. A1 : 0 D1 : 74 G1 : 127 H1 : 0	m2	201	
2	Internal smooth plastered wall in narrow widths not exceeding 300mm wide A1 : 0 D1 : 1 G1 : 1 H1 : 0	m2	2	
	<u>Scrub surface with degreaser, rinse thoroughly with tap water, and apply one coat sealer and two coats epoxy paint on:</u>			
3	Concrete floated or screeded floors A1 : 0 D1 : 17 G1 : 17 H1 : 0	m2	34	
4	Granolithic skirting not exceeding 300mm girth. A1 : 0 D1 : 29 G1 : 47 H1 : 0	m	76	
	Carried to Collection			R
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 13 PAINTWORK KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

PAINT ON METALWORK

Prepare and apply one coat bituminous paint on :

1	Backs of steel door frames.	m2	2
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A1 : 0 D1 : 0 G1 : 2 H1 : 0

One coat steel etch primer, one coat universal undercoat and two coats gloss enamel paint on :

2	Hot dipped galvanised steel gates.	m2	6
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A1 : 0 D1 : 4 G1 : 2 H1 : 0

One coat red oxide primer, one coat universal undercoat and two coats gloss enamel paint on :

3	Pre-galvanised steel doors.	m2	2
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A1 : 0 D1 : 0 G1 : 2 H1 : 0

4	Pre-galvanised steel door frames.	m2	2
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A1 : 0 D1 : 0 G1 : 2 H1 : 0

PAINT ON FIBRE-CEMENT

Prepare and apply one coat plaster primer and two coats quality matt acrylic PVA on :

5	External fibre cement fascia boarding including priming cover strips.	m2	3
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A1 : 0 D1 : 1 G1 : 2 H1 : 0

6	External fibre cement bargeboard including priming cover strips.	m2	4
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A1 : 0 D1 : 2 G1 : 2 H1 : 0

PAINT ON PVC

Prepare and apply two coats black PVA paint on:

7	Vent pipes.	m2	4
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A1 : 0 D1 : 1 G1 : 3 H1 : 0

Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 13
PAINTWORK
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

Item No		Quantity	Rate	Amount
	<u>SECTION No. 2 - EXTERNAL WORKS - UPPER MPAKO JUNIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 14</u>			
	<u>EXTERNAL WORKS (PROVISIONAL)</u>			
	<u>Note:</u>			
	For Preambles see "PW 371 - A Edition 2.0 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (2nd Edition July 2013).			
	<u>DEMOLITIONS</u>			
	<u>Demolitions</u>			
	<u>Brickwork building structures</u>			
1	Demolish and cart away single storey toilet block complete, size on plan 7 500mm long x 3 500mm wide x approximately 2500mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with brick, plaster and paint walls including timber doors, ground floor concrete surface bed with granolithic floor covering, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site. W : 1	No	1	
2	Demolish and cart away single storey toilet block complete, size on plan 8 800mm long x 3 500mm wide x approximately 2500mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with brick, plaster and paint walls including timber doors, ground floor concrete surface bed with granolithic floor covering, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site. W : 1	No	1	
	Carried to Collection		R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Pit toilets</u>					
1	Allow for de-sludging of existing "long drop" pit latrines by means of "honey sucker". The pit latrines are to be completely empty before any other work is carried out. W : 12	No	12		
2	Allow for breaking down and removing from site entire pit latrine structure including any structure that may be inside the pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured). Backfill existing hole with imported filling in max 150mm layers and compact to 95% MOD AASHTO density. W : 12	No	12		
<u>THE FOLLOWING IN WALKWAYS, RAMPS, ETC.</u>					
<u>EARTHWORKS</u>					
<u>Site clearance</u>					
3	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site. W : 120	m2	120		
<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>					
4	Reduced levels under solid floors. W : 24	m3	24		
<u>Carting away of excavated material</u>					
5	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 24	m3	24		
<u>Filling</u>					
6	150mm G7 Sub-base course, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 93% modified AASHTO density under slabs. W : 18	m3	18		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR					
Bill No. 14					
EXTERNAL WORKS					
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

<u>Prescribed Testing</u>				
1	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 2	No	2	
<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
2	Paving in panels including any necessary formwork. W : 12	m3	12	
3	Ramps. W : 0.4	m3	0.4	
<u>Surface treatment</u>				
4	Float surface of concrete to a wood float finish. W : 120	m2	120	
<u>Test blocks and testing</u>				
5	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	2	
<u>Movement joints</u>				
6	10mm Thick "Jointex" closed cell polyethylene joint filler with hinged blocking piece between concrete surfaces not exceeding 300mm wide. W : 33	m	33	
7	Remove hinged blocking piece and fill 10 x 15mm cavity with an approved 2 part polysulphide sealer. W : 33	m	33	
<u>FORMWORK</u>				
<u>Edges, risers, ends and reveals</u>				
8	Edge, riser, etc not exceeding 300mm high. W : 200	m	200	
Carried to Collection				R
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

	<u>Reinforcement</u>				
1	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces. W : 120	m2	120		
	<u>THE FOLLOWING IN STORMWATER CUT OFF DRAIN / EARTH BERM</u>				
	<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>				
2	Reduced levels W : 30	m3	30		
	<u>Filling</u>				
3	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. W : 30	m3	30		
	<u>Compaction of surfaces</u>				
4	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. W : 60	m2	60		
	<u>Grassing, ground cover, etc.</u>				
5	Kikuyu turf (sods or rolls) instant lawn 25 to 40mm thick, imported from commercial sources, laid firmly with staggered joints within three days of being lifted. W : 50	m2	50		
	<u>THE FOLLOWING IN CONCRETE CHANNELS, ETC.</u>				
	<u>EARTHWORKS</u>				
6	Holes W : 0.3	m3	0.3		
7	Surface trenches. W : 1	m3	1		
	Carried to Collection			R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

<u>Carting away of excavated material</u>				
1	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 1	m3	1	
2	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. W : 1	m2	1	
<u>Sundries</u>				
3	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density. W : 3	m2	3	
<u>Prescribed Testing</u>				
4	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 4	No	4	
<u>FORMWORK</u>				
<u>Edges, risers, ends and reveals</u>				
5	Edge, riser, etc not exceeding 300mm high. W : 6	m	6	
<u>Grooves, channels, mortices, etc.</u>				
6	700 x 150mm V-Channels in top W : 3	m	3	
7	1500 x 750 x 150mm Concrete V-Channel Spreader W : 1	No	1	
<u>REINFORCEMENT (PROVISIONAL)</u>				
<u>High tensile rod reinforcement to structural concrete work</u>				
8	12mm Diameter bars. W : 0.007	t	0.007	
Carried to Collection				R
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

Reinforcement

1	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces. W : 3	m2	3
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Carried to Collection

SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR
Bill No. 14
EXTERNAL WORKS
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

<u>THE FOLLOWING IN STAND PIPE BIP TAP ETC.</u>			
<u>EARTHWORKS</u>			
1	Holes W : 1	m3	1
2	Surface trenches. W : 6	m3	6
<u>Carting away of excavated material</u>			
3	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 1	m3	1
<u>Risk of collapse of excavations</u>			
4	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. W : 7	m2	7
<u>Keeping excavations free of water</u>			
5	Allow for keeping the excavations free from water.		Item
<u>Filling</u>			
6	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. W : 6	m3	6
<u>Foundation courses</u>			
7	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 95% modified AASHTO dry density to trenches, bases, etc. W : 0.3	m3	0.3
<u>Sundries</u>			
8	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density. W : 2	m2	2
Carried to Collection			R
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR			
Bill No. 14			
EXTERNAL WORKS			
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

	<u>Prescribed Testing</u>				
1	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 2	No	2		
	<u>CONCRETE (Labour intensive)</u>				
	<u>Mass concrete 25MPa (19mm stone) in:</u>				
2	Strip foundations cast against excavated surfaces. W : 2	m3	2		
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
3	Slabs W : 1	m3	1		
4	110mm PVC Blue Water Pipe W : 1	m3	1		
	<u>FORMWORK</u>				
	<u>Edges, risers, ends and reveals</u>				
5	Edge, riser, etc not exceeding 300mm high. W : 3	m	3		
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>High tensile rod reinforcement to structural concrete work</u>				
6	12mm Diameter bars. W : 0.003	t	0.003		
	<u>PIPEWORK, ETC.</u>				
	<u>Pipes, pipe fittings, etc.</u>				
	<u>WATER SUPPLIES</u>				
	Carried to Collection			R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

	<u>Class 2 copper pipes with straight compression fittings</u>				
1	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. W : 46	m	46		
	<u>Extra over copper pipes for brass compression fittings</u>				
2	22mm Fittings. W : 12	No	12		
	<u>uPVC Pipes</u>				
3	110mm Blue Water Pipe. W : 7	m	7		
	<u>SANITARY FITTINGS</u>				
	<u>Solid cast brass taps, valves, etc.</u>				
4	Bib Tap or Similar approved W : 4	No	4		
	<u>THE FOLLOWING IN SECURITY FENCING</u>				
	<u>SECURITY FENCING</u>				
	<u>Site clearance</u>				
5	Allow for clearing site for the width of 1000mm where fencing runs are to be erected including removing trees, shrubs, etc., not exceeding 200mm girth, grubbing up roots and roughly levelling. W : 60	m	60		
	<u>Fencing</u>				
6	4mm galvanised straining wires (evenly spaced) secured to straining 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 at the other end to and including 12mm diameter straining eye bolts. W : 240	m	240		
	Carried to Collection			R	
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

1	Fencing formed of 100 x 50 x 2.5mm diameter Class A galvanised "Secumesh" security fence 1.8m high with vertical wires facing outwards secured with "Howgring" clips applied with "Howgring" pliers at 300mm centres to top and bottom straining wires and 500mm centres to four intermediate straining wires (elsewhere). W : 60 <u>Hot dipped galvanised steel posts, etc.</u>	m	60		
2	60mm Diameter x 2.5mm wall thickness intermediate fencing post, 2700mm long fitted with pressed steel mushroom cap, the post fitted with 150 x 150 x 5mm baseplate at bottom and embedded in 350 x 350 x 600mm mass concrete (15 MPa) base including all necessary excavations, backfilling, concrete, etc. W : 20	No	20		
3	100mm Diameter x 3mm wall thickness end or corner post 2700mm long fitted with pressed steel mushroom cap and one 60mm diameter x 2mm wall thickness raking stay, the post and stay fitted with 150 x 150 x 5mm baseplate at bottom and embedded in 350 x 350 x 600mm mass concrete (15 MPa) base, including all necessary excavations, backfilling, concrete, etc. W : 2	No	2		
4	100mm Diameter x 3mm wall thickness intermediate straining or corner post 2700mm long fitted with pressed steel mushroom cap, but fitted with two 60mm diameter x 2mm wall thickness galvanised steel raking stays, the post and stays fitted with 150 x 150 x 5mm baseplate at bottom and embedded in 350 x 350 x 600mm mass concrete (15 MPa) base, including all necessary excavations, backfilling, concrete, etc. W : 4	No	4		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

<u>Hot dipped galvanised steel gates</u>					
1	Security fence single gate, size 1000mm wide x 1800mm high, formed of 50mm diameter nominal bore x 3.25mm wall thickness mild steel pipe all round with mitred and welded angles and diagonal cross brace, 146 x 280mm hand access opening formed of 40 x 40 x 2.5mm square section framing welded on, the gate covered the gate covered with 100 x 50 x 2.5mm diameter Class A galvanised "Secumesh" security fence secured with "Howgring" clips applied with "Howgring" pliers at 300mm centres to and including six rows of straining wires and fitted with three 24mm diameter x 300mm long eyebolt hinges and stops including all holes, etc., welded or bolted to adjoining galvanised gatepost. W : 1	No	1		
<u>Sundries</u>					
2	Extra over excavations in earth (concrete bases) for excavation in soft rock. W : 0.2	m3	0.2		
3	51mm brass padlock with stainless steel shackle. W : 1	No	1		
Carried to Collection				R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDAR Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

Section No. 3				
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL				
SECTION SUMMARY - SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL				
Bill No		Page No		Amount
1	PREMILINARIES AND GENERAL	98		
2	EARTHWORKS (PROVISIONAL)	103		
3	CONCRETE, FORMWORK & REINFORCEMENT	108		
4	MANSORY	112		
5	WATERPROOFING	115		
6	ROOF COVERINGS, ETC	116		
7	CARPENTRY AND JOINERY	119		
8	IRONMONGERY	120		
9	STRUCTURAL STEEL	121		
10	METALWORK	124		
11	PLASTERING	125		
12	PLUMBING AND DRAINAGE (PROVISIONAL)	131		
13	PAINTWORK	134		
14	EXTERNAL WORKS	146		
	Sub Total		R	
	Carried Forward		R	
SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL				
Bill No. 14				
EXTERNAL WORKS				
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

Section No. 3					
Bill No	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL				
	SECTION SUMMARY - SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL	Page No		Amount	
	Brought Forward		R		
	<u>CONTINGENCY PROVISIONS</u>				
	The Tenderer is to allow hereunder for 5 (Five) percent of the Nett Builders Work Sub-Total to be used as a Budgetary Provision for construction contingencies of a general nature and for the finalisation of design detailing. This sum, or any portion thereof, shall be expended at the sole discretion of the Principal Agent. Any residual balance remaining subsequent to such expenditure shall be deducted in its entirety from the Contract Sum.	%			
	Carried to Final Summary		R		
	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

Item No		Quantity	Rate	Amount
	<u>SECTION No. 1 - DUDUMAYO SENIOR SECONDARY SCHOOL</u> <u>BILL No. 01</u> <u>PRELIMINARIES AND GENERAL</u> NOTE: SECTION NO.1 : PRELIMINARIES AND GENERAL : To be used as a pricing guide line for the requirements of each school in separate locations. P1 : Dudumayo Senior Primary School			
1	The total to be carried from item Page 43 of the Preliminaries and General Section for P 1 : Dudumayo Senior Secondary School Fixed: _____ Time: _____ Value : _____	Item		
	Carried Forward to Summary of Section No. 4		R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 1 PREMILINARIES AND GENERAL KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 02</u>			
	<u>Note:</u>			
	For Preambles see "PW 371 - A Edition 2.1 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (Edition July 2014).			
	<u>Quantity breakdown</u>			
	In this Section No. 3 of the Bills of Quantities a breakdown of the total quantities into the various buildings is indicated below each description as follows:			
	A1 - DWG 05 - Staff Ablutions			
	C1 - DWG 35 - Female Ablutions			
	D1 - DWG 11 - Male ablutions			
	G1 - DWG 35 - Female Ablutions			
	It should be noted that due to the "rounding off" factor marginal differences can occur between the sum of the parts to the total given in the quantity column. For pricing purposes only the amount in the quantity column is to be used.			
	<u>EARTHWORKS (PROVISIONAL)</u>			
	<u>Site clearance</u>			
1	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site.	m2	201	
	A1 : 0 D1 : 119 G1 : 82 H1 : 0			
	Carried to Collection			R
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S			
	Bill No. 2			
	EARTHWORKS (PROVISIONAL)			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

EXCAVATIONS, FILLING, ETC.

BULK EXCAVATIONS

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

1	Pit toilet.	m3	31
	A1 : 0 D1 : 10 G1 : 21 H1 : 0		

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

2	Pit toilet.	m3	100
	A1 : 0 D1 : 38 G1 : 62 H1 : 0		

Excavations in earth of more difficult character

3	Extra over excavations in earth for excavation in soft rock.	m3	27
	A1 : 0 D1 : 10 G1 : 18 H1 : 0		

4	Extra over excavations in earth for excavation in hard rock.	m3	14
	A1 : 0 D1 : 5 G1 : 9 H1 : 0		

EXCAVATIONS FOR FOUNDATIONS, ETC.

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

5	Surface trenches.	m3	13
	A1 : 0 D1 : 7 G1 : 6 H1 : 0		

Excavations in earth of more difficult character

6	Extra over excavations in earth for excavation in soft rock.	m3	3
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

7	Extra over excavations in earth for excavation in hard rock.	m3	1
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Carried to Collection

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SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S
Bill No. 2
EARTHWORKS (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

A1 : 0 D1 : 45 G1 : 68 H1 : 0

A1 : 0 D1 : 21 G1 : 12 H1 : 0

A1 : 0 D1 : 38 G1 : 51 H1 : 0

A1 : 0 D1 : 38 G1 : 35 H1 : 0

5	Allow for keeping the excavations free from water.	Item
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A1:0 D1:3 G1:4 H1:0

A1:0 D1:14 G1:13 H1:0

R

-152-

1	50mm Thick layer of approved river sand supplied by the Contractor spread and levelled under floors, etc. A1 : 0 D1 : 1 G1 : 1 H1 : 0 <u>Compaction of surfaces</u>	m3	2
2	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. A1 : 0 D1 : 55 G1 : 57 H1 : 0	m2	112
3	Scarify in-situ material to a depth of 75mm and compact to 93% Mod AASHTO density. A1 : 0 D1 : 3 G1 : 3 H1 : 0 <u>Filter fabric</u>	m2	6
4	Grade 3 needle punched non-woven synthetic fibre filter fabric laid vertically against waterproofing membrane as backfilling proceeds. A1 : 0 D1 : 57 G1 : 73 H1 : 0 <u>Weedkillers, insecticides, etc.</u> <u>Soil insecticide in accordance with SANS 5859</u>	m2	130
5	Under floors, etc. including forming and poisoning shallow furrows against all foundation walls, filling in furrows and ramming. A1 : 0 D1 : 53 G1 : 15 H1 : 0	m2	68
6	To bottoms and sides of trenches. A1 : 0 D1 : 5 G1 : 6 H1 : 0	m2	11
7	To bottoms and sides of pit excavation. A1 : 0 D1 : 70 G1 : 78 H1 : 0 <u>Tests</u>	m2	148
8	Allow for Mod AASHTO density tests on filling.	No	8.00

Carried to Collection

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SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S
Bill No. 2
EARTHWORKS (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 03</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>CONCRETE</u>			
	<u>Mass concrete 15MPa (19mm stone) in:</u>			
1	Blinding beneath bases, strip footings, etc cast against excavated surfaces. A1 : 0.0 D1 : 0.9 G1 : 1.9 H1 : 0.0	m3	2.8	
	<u>Reinforced concrete 25MPa (19mm stone) in:</u>			
2	Slabs including beams and inverted beams. A1 : 0 D1 : 6 G1 : 6 H1 : 0	m3	12	
3	Surface beds A1 : 0 D1 : 3 G1 : 5 H1 : 0	m3	8	
4	Aprons cast in panels A1 : 0 D1 : 1 G1 : 1 H1 : 0	m3	2	
5	100 x 100mm Triangular fillets cast on top of pit Base Slab A1 : 0 D1 : 13 G1 : 21 H1 : 0	m	34	
	<u>Surface treatment</u>			
6	Float surface of concrete to a wood float finish. A1 : 0 D1 : 36 G1 : 36 H1 : 0	m2	72	
7	Powerfloating of concrete surface bed. A1 : 0 D1 : 14 G1 : 13 H1 : 0	m2	27	
	Carried to Collection			R
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S			
	Bill No. 3			
	CONCRETE, FORMWORK & REINFORCEMENT			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

<u>Test blocks and testing</u>					
1	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	8		
<u>POLYSTERENE BLOCKS ETC</u>					
<u>Polystyrene blocks in composite slabs</u>					
2	850 x 500mm extreme wide at the bottom, 550mm wide at the top x 110mm high polystyrene block laid end to end rows A1 : 0 D1 : 20 G1 : 36 H1 : 0	No	56		
<u>PREFABRICATED CONCRETE RIB</u>					
<u>25MPa precast reinforced concrete rib</u>					
3	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths not exceeding 5m. A1 : 0 D1 : 14 G1 : 0 H1 : 0	m	14		
4	150 x 40mm high concrete rib with two 10mm high tensile reinforcing bars, in lengths exceeding 5m and not exceeding 7.5m. A1 : 0 D1 : 0 G1 : 27 H1 : 0	m	27		
<u>FORMWORK</u>					
<u>Supporting bearers to prefabricated beams</u>					
5	Bearers propped up exceeding 1,5m high and not exceeding 3.5m high A1 : 0 D1 : 18 G1 : 35 H1 : 0	m	53		
<u>Permanent formwork</u>					
6	Soffits of slabs not exceeding 250mm thick and exceeding 1.5m and not exceeding 3.5 above bearing level. A1 : 0 D1 : 10 G1 : 18 H1 : 0	m2	28		
Carried to Collection					
SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				R	

<u>Rough formwork (use and waste) to concrete to:</u>					
<u>Edges, risers, ends and reveals</u>					
1	Edge, riser, etc not exceeding 300mm high. A1 : 0 D1 : 33 G1 : 34 H1 : 0	m	67		
<u>Openings</u>					
2	Leave or form circular opening not exceeding 1m girth through 60mm thick reinforced concrete slab. A1 : 0 D1 : 8 G1 : 11 H1 : 0	No	19		
3	Leave or form square opening not exceeding 1m girth through 60mm thick reinforced concrete slab. A1 : 0 D1 : 2 G1 : 4 H1 : 0	No	6		
4	Cut or form circular opening not exceeding 1m girth through 110mm thick polystyrene block A1 : 0 D1 : 8 G1 : 11 H1 : 0	No	19		
5	Cut or form square opening not exceeding 1m girth through 110mm thick polystyrene block. A1 : 0 D1 : 2 G1 : 4 H1 : 0	No	6		
6	Cut or form circular opening not exceeding 1m girth through permanent formwork A1 : 0 D1 : 8 G1 : 11 H1 : 0	No	19		
7	Cut or form square opening not exceeding 1m girth through permanent formwork A1 : 0 D1 : 2 G1 : 4 H1 : 0	No	6		
<u>Movement joints</u>					
8	10mm Thick closed cell polyethylene joint forming material with hinged blocking piece, not exceeding 300mm wide, between concrete and concrete or brickwork surfaces. A1 : 0 D1 : 33 G1 : 34 H1 : 0	m	67		
9	Remove 10 x 15mm hinged blocking piece, insert polycord bond breaker and seal with an approved 2 part polysulphide sealer. A1 : 0 D1 : 33 G1 : 34 H1 : 0	m	67		
Carried to Collection				R	
SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 3 CONCRETE, FORMWORK & REINFORCEMENT KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

1	Slip joint not exceeding 300mm wide formed of two layers of 3 Ply malthoid laid on and including a 3:1 cement mortar bedding. A1 : 0 D1 : 33 G1 : 34 H1 : 0	m	67
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>High tensile rod reinforcement to structural concrete work</u>			
2	16mm Diameter bars. A1 : 0.000 D1 : 0.161 G1 : 0.058 H1 : 0.000	t	0.219
3	10mm Diameter bars. A1 : 0.000 D1 : 0.214 G1 : 0.356 H1 : 0.000	t	0.570
<u>High tensile welded steel mesh reinforcement :</u>			
4	Ref: 193 cast into concrete surfaces. A1 : 0 D1 : 36 G1 : 36 H1 : 0	m2	72
5	Ref: 311 cast into concrete surfaces. A1 : 0 D1 : 14 G1 : 27 H1 : 0	m2	42

Carried to Collection

SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S
Bill No. 3
CONCRETE, FORMWORK & REINFORCEMENT
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 04</u>			
	<u>MASONRY</u>			
	<u>FOUNDATION BRICKWORK (PROVISIONAL)</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
1	Half brick wall. A1 : 0 D1 : 9 G1 : 18 H1 : 0	m2	27	
2	One brick wall. A1 : 0 D1 : 33 G1 : 61 H1 : 0	m2	94	
	<u>Reinforcement to brickwork</u>			
3	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 0 D1 : 39 G1 : 78 H1 : 0	m	117	
4	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 0 D1 : 129 G1 : 238 H1 : 0	m	367	
	<u>EXTERNAL FACE BRICKWORK</u>			
	<u>Allow the Prime Cost of R5 500.00 (Five Thousand Five Hundred Rand) per thousand excluding Vat for Rust Gold face bricks delivered and customer self off loaded to site, pointed with 10mm square vertical and horizontal joints</u>			
5	Extra over ordinary brickwork for facing and pointing in stretcher bond. A1 : 0 D1 : 7 G1 : 6 H1 : 0	m2	13	
	<u>SUPERSTRUCTURE BRICKWORK</u>			
	<u>Walls and linings in stock bricks in 5:1 cement mortar :</u>			
6	Half brick wall. A1 : 0 D1 : 21 G1 : 21 H1 : 0	m2	42	
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	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S			
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1	One brick wall. A1 : 0 D1 : 64 G1 : 70 H1 : 0 <u>Beamfilling</u>	m2	134
2	Half brick wall. A1 : 0 D1 : 9 G1 : 9 H1 : 0 <u>BRICKWORK SUNDRIES</u> <u>Brickwork air ventilation, etc.</u>	m2	18
3	Extra over brickwork for cutting to form 120 x 85mm ventilation openings in 220mm wall A1 : 0 D1 : 246 G1 : 231 H1 : 0 <u>Reinforcement to brickwork</u>	No	477
4	Galvanised brick reinforcement 75mm wide built horizontally into brickwork. A1 : 0 D1 : 81 G1 : 76 H1 : 0	m	157
5	Galvanised brick reinforcement 150mm wide built horizontally into brickwork. A1 : 0 D1 : 180 G1 : 249 H1 : 0 <u>Bagging</u>	m	429
6	Bag down outer face of inner skin of brick wall in 4:1 cement slurry. A1 : 0 D1 : 64 G1 : 70 H1 : 0 <u>Precast pre-stressed reinforced concrete lintols</u>	m2	134
7	75 x 110mm Lintol not exceeding 3m long, built at both ends into brickwork over opening. A1 : 0 D1 : 2 G1 : 5 H1 : 0	m	7
8	90 x 140mm Lintol not exceeding 3m long, built at both ends into brickwork over opening. A1 : 0.0 D1 : 0.0 G1 : 0.0 H1 : 0.0	m	

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	<u>Hoop iron ties, cramps, etc.</u>				
1	1.6 x 30mm Galvanized hoop iron roof tie 1100mm long with one end wrapped around and spiked to timber the other end built a minimum of six courses deep into brickwork as the work proceeds.	No	34		
	A1 : 0 D1 : 18 G1 : 16 H1 : 0				
2	30 x 1,2mm Galvanised hoop iron strap 800mm long shot pinned to brickwork and bent into brickwork	No	4		
	A1 : 0 D1 : 2 G1 : 2 H1 : 0				
	<u>EXTERNAL FACE BRICKWORK</u>				
	<u>Allow the Prime Cost of R5 500.00 (Five Thousand Five Hundred Rand) per thousand excluding Vat for Rust Gold face bricks delivered and customer self off loaded to site, pointed with 10mm square vertical and horizontal joints</u>				
3	Extra over ordinary brickwork for facing and pointing in stretcher bond.	m2	152		
	A1 : 0 D1 : 73 G1 : 79 H1 : 0				
	<u>Face brick copings, lintols, cills, etc.</u>				
4	Extra over brickwork for brick-on-edge header course tread including pointing to one face and top.	m	4		
	A1 : 0 D1 : 2 G1 : 2 H1 : 0				
	<u>Brickwork air ventilation, etc.</u>				
5	Extra over brickwork for fair cutting to form 120 x 85mm ventilation openings in facebrick, including facing and pointing	No	477		
	A1 : 0 D1 : 246 G1 : 231 H1 : 0				
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	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S				
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	<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 05</u>			
	<u>WATERPROOFING</u>			
	<u>DAMP-PROOF COURSE</u>			
	<u>SHEET OR MEMBRANE WATERPROOFING</u>			
	<u>250 Micron "Gunplas USB" green polyethylene sheeting</u> <u>:</u>			
1	Laid flat on prepared sand bed under solid floor. A1 : 0 D1 : 39 G1 : 39 H1 : 0	m2	78	
	<u>FLASHING STRIPS</u>			
	<u>Elastic acrylic and rubberised bitumen compound with</u> <u>"waterproof membrane" applied in strict accordance with</u> <u>the Manufacturer's instructions :</u>			
2	Flashing strips around 110mm diameter PVC vent pipes through steel roof sheeting. A1 : 0 D1 : 0 G1 : 1 H1 : 0	m	1	
	<u>LIQUID WATERPROOFING</u>			
	<u>Two coats "ABE Brickseal"</u>			
3	Vertically on bagged surface of brickwork. A1 : 0 D1 : 64 G1 : 70 H1 : 0	m2	134	
	<u>MEMBRANE WATERPROOFING</u>			
	<u>"Duraflex" or equally approved cementitious flexible</u> <u>waterproofing slurry including saturation membrane with</u> <u>75mm side and 100mm end laps applied in accordance</u> <u>with manufactures specifications</u>			
4	Vertical surfaces of plastered brickwork. A1 : 0 D1 : 28 G1 : 45 H1 : 0	m2	73	
	Carried to Collection		R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 5 WATERPROOFING KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

PROTECTION

"Abe Cote SF 356" or other equal approved epoxy tar coating on

1	Vertical surfaces of plastered brickwork.	m2	73
	A1 : 0 D1 : 28 G1 : 45 H1 : 0		

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Bill No. 5
WATERPROOFING
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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	<u>BILL No. 06</u>			
	<u>ROOF COVERINGS, ETC.</u>			
	<u>PROFILED SHEETING OF METAL, FIBRE CEMENT, PLASTIC, ETC.</u>			
	<u>Metal roof sheeting</u>			
	<u>0,8mm Thick Z200 "IBR Profile" galvanised metal roof sheeting, in single sheet lengths, with "Chromadek" finish to external face and standard backing coat to internal face :</u>			
1	Roof sheeting laid to a mono-pitch secured to timber purlins at approximately 940mm centres including turning up sheet at ridge and turning down sheet at eaves. A1 : 0 D1 : 36 G1 : 33 H1 : 0	m2	69	
	<u>Circular cutting</u>			
2	Circular cutting on roof sheeting for ventilators, vent pipes, etc. A1 : 0 D1 : 1 G1 : 3 H1 : 0	m	4	
	<u>Accessories, etc. to match roof sheeting</u>			
3	Ridge capping 550mm girth. A1 : 0 D1 : 9 G1 : 8 H1 : 0	m	17	
4	Broad flute serrated closer including polyclosers. A1 : 0 D1 : 9 G1 : 8 H1 : 0	m	17	
5	Narrow flute serrated closer including polyclosers. A1 : 0 D1 : 9 G1 : 8 H1 : 0	m	17	
6	Ridge finial. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
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	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S			
	Bill No. 6			
	ROOF COVERINGS, ETC			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			
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	<u>BILL No. 07</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>CARPENTRY</u>			
	<u>PLATE NAILED TIMBER ROOF CONSTRUCTION</u>			
	<u>Fixing:</u>			
	All nailing of timber roof rafters, purlins, etc shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to blockwork or concrete.			
	<u>Erection certificates</u>			
1	Contractor is to supply a roof rafters erection certificate for the building stating that the erection and installation of the roof rafters has been inspected and approved by a professional registered structural engineer.	No	2	
	A1 : 0 D1 : 1 G1 : 1 H1 : 0			
	<u>Purlins, bracing, etc.</u>			
	<u>Sawn softwood :</u>			
2	38 x 114mm Wall plate wired down (wire ties elsewhere).	m	47	
	A1 : 0 D1 : 24 G1 : 23 H1 : 0			
3	50 x 76mm Purlins.	m	266	
	A1 : 0 D1 : 226 G1 : 40 H1 : 0			
4	76 x 38mm S5 Treated Timber	m	22	
	A1 : 0 D1 : 11 G1 : 11 H1 : 0			
5	38 x 38 x 152mm Long cleat spiked to rafter foot.	No	25	
	A1 : 0 D1 : 9 G1 : 16 H1 : 0			
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	CARPENTRY AND JOINERY			
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1	50 x 76 x 500mm Long sprocket spiked to timber purlin. A1 : 0 D1 : 10 G1 : 10 H1 : 0 <u>Laminated S. A. Pine</u>	No	20
2	152 x 38mm S5 Timber Rafters A1 : 0 D1 : 35 G1 : 31 H1 : 0 <u>Sundries:</u>	m	66
3	Hurricane clip fixed to purlin and rafter. A1 : 0 D1 : 45 G1 : 40 H1 : 0 <u>JOINERY</u> <u>Plastic, fibre cement, etc.</u> <u>Pressed fibre-cement:</u>	No	85
4	12 x 225mm Fascia board drilled and brass screwed to rafter feet including galvanised steel H-profile jointing strips, etc. A1 : 0 D1 : 9 G1 : 8 H1 : 0	m	17
5	80 x 275mm Barge board drilled and brass screwed to timber rafter including galvanised steel H-profile jointing strips, etc. A1 : 0 D1 : 8 G1 : 8 H1 : 0	m	16

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CARPENTRY AND JOINERY
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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CARPENTRY AND JOINERY

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CARPENTRY AND JOINERY

KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

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	<u>BILL No. 08</u>			
	<u>IRONMONGERY</u>			
	<u>IRONMONGERY TO METALWORK</u>			
	<u>Locksets, etc. provided with two keys and to be masterkeyed</u>			
1	51mm brass padlock with stainless steel shackle. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
	<u>IRONMONGERY FIXED TO CONCRETE, TILING, ETC.</u>			
	<u>Push plates, kicking plates, indicator plates, etc.</u>			
2	152 x 152 x 3mm Thick anodised silver aluminium sex indicator plate. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
3	152 x 152 x 3mm Thick anodised silver aluminium disabled indicator plate. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1	
	<u>3mm Thick x 32mm high clear perspex signs with white painted numerals or letters, countersunk tap screwed to steel door frame</u>			
4	Sign with "MALE STAFF" enscribed. A1 : 0.0 D1 : 0.0 G1 : 0.0 H1 : 0.0	No		
5	Sign with "FEMALE STAFF" enscribed. A1 : 0.0 D1 : 0.0 G1 : 0.0 H1 : 0.0	No		
	<u>Door stops</u>			
6	Black rubber door stop plugged to wall. A1 : 0 D1 : 4 G1 : 6 H1 : 0	No	10	
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	IRONMONGERY			
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IRONMONGERY

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IRONMONGERY

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	<u>BILL No. 09</u>			
	<u>STRUCTURAL STEEL</u>			
	<u>Pre-galvanised (Z450) structural steelwork (Grade 350W)</u>			
1	100 x 50 x 20 x 2mm Cold formed lipped channel including bolting to brickwork at 910mm centres. A1 : 0 D1 : 3 G1 : 5 H1 : 0	m	8	
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	Bill No. 9			
	STRUCTURAL STEEL			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

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	<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 10</u>			
	<u>METALWORK</u>			
	<u>Hot dipped galvanised mild steel gates</u>			
1	Single gate, size 900mm wide x 2050mm high, the leaf formed of 25 x 25 x 2mm wall thickness mild steel pipe framing all round and two horizontal intermediate rails with mitred and welded angles, the gate filled in with 12mm diameter mild steel bars welded, at each end, vertically to perimeter and intermediate framing at not exceeding 109mm centres, the leaf fitted with a 150mm long padbolt, the leaf to receive hasp and staple formed of 40 x 6mm mild steel flat bar welded onto frames and including fitting with two 50 x 10mm flat bar tee brackets and 16mm round bar pin hinges, twice bolted to wall with and including M16 x 95mm galvanised coach screws. A1 : 0 D1 : 2 G1 : 1 H1 : 0	No	3	
	<u>Hot dipped galvanised steel cladded doors and accessories</u>			
2	Door, size 760 x 1680mm high, formed of 19 x 19mm tubular steel perimeter framing and horizontal middle rail welded at angles and intersections, covered on one side with 0,6mm galvanised sheeting, prepainted "Golden Brown", pressed to shape with edges lapped around and rivetted to frame at 300mm centres, with slot for and including barrel bolt, the gate fitted with and including 25mm diameter x 2120mm long pivot pipe support welded on, 150 x 38 x 3mm top bearing bolted to beam with 2 x 6mm diameter bolts, including top cap bearing bush, washers, bottom bearing bush and finishing smooth on all exposed edges, complete with all fixing brackets, bolts etc. A1 : 0 D1 : 4 G1 : 6 H1 : 0	No	10	
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	Bill No. 10			
	METALWORK			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

Pre-galvanised steel chawl doors

- 1 Single door to suit one brick wall, size 950 x 2030mm high, provided complete with integral frame, ironmongery, etc. finished with red oxide primer to receive paint (elsewhere).

A1 : 0 D1 : 0 G1 : 1 H1 : 0

No

1

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METALWORK

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METALWORK

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	<u>BILL No. 11</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Untinted granolithic screeds, etc. mixed by volume 4 parts granite chips, 1 part sand and 2 parts cement</u>			
1	40mm Thick screed to floors and landings. A1 : 0 D1 : 26 G1 : 17 H1 : 0	m2	43	
2	25mm Thick screed to falls A1 : 0 D1 : 3 G1 : 7 H1 : 0	m2	10	
	<u>Skirtings</u>			
3	75mm High coved skirting. A1 : 0 D1 : 40 G1 : 46 H1 : 0	m	86	
	<u>PLASTER</u>			
	<u>One coat internal 1:4 cement plaster on :</u>			
4	Brick walls in pit. A1 : 0 D1 : 56 G1 : 113 H1 : 0	m2	169	
5	Brick walls (ICP) A1 : 0 D1 : 101 G1 : 85 H1 : 0	m2	186	
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<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>				
<u>BILL No. 12</u>				
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>				
<u>Roof gutters, rainwater pipes, etc.</u>				
<u>uPVC gutter including gutter brackets</u>				
1	125mm Half round eaves gutters on gutter brackets at 1000mm centres maximum fixed to fascias. A1 : 0 D1 : 9 G1 : 8 H1 : 0	m	17	
2	Extra over uPVC gutter for forming discharge outlet to suit 100 x 75mm downpipe. A1 : 0 D1 : 1 G1 : 1 H1 : 0	No	2	
3	Extra over gutter for stopped end. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
4	75mm Rainwater downpipe fixed to wall with and including proprietary holderbats. A1 : 0 D1 : 4 G1 : 4 H1 : 0	m	8	
5	Extra over rainwater downpipe for bend. A1 : 0 D1 : 2 G1 : 2 H1 : 0	No	4	
<u>PIPEWORK, ETC.</u>				
<u>Pipes, pipe fittings, etc.</u>				
<u>WATER SUPPLIES</u>				
<u>Class 6 HDPE waterpipe</u>				
6	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 D1 : 0 G1 : 12 H1 : 0	m	12	
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PLUMBING AND DRAINAGE (PROVISIONAL)				
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

<u>Extra over Class 6 HDPE pipe for fittings</u>			
1	22mm Fittings. A1 : 0 D1 : 0 G1 : 10 H1 : 0	No	10
<u>Class 2 copper pipes with straight compression fittings</u>			
2	15mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. A1 : 0 D1 : 19 G1 : 0 H1 : 0	m	19
<u>Extra over copper pipes for brass compression fittings</u>			
3	15mm Fittings. A1 : 0 D1 : 15 G1 : 0 H1 : 0	No	15
<u>Extra over copper pipes for capillary fittings with soldered joints</u>			
4	15mm Fittings. A1 : 0 D1 : 6 G1 : 0 H1 : 0	No	6
<u>SOIL DRAINAGE</u>			
<u>uPVC Pipes with solvent welded straight joints :</u>			
5	40mm Pipes. A1 : 0 D1 : 9 G1 : 0 H1 : 0	m	9
6	50mm Pipes. A1 : 0 D1 : 4 G1 : 0 H1 : 0	m	4
<u>White uPVC vent pipe in single lengths :</u>			
7	110mm Diameter vent pipe fixed to wall with proprietary brackets at not exceeding 500mm centres. A1 : 0 D1 : 16 G1 : 28 H1 : 0	m	44
<u>Extra over uPVC pipes for solvent welded fittings :</u>			
8	40mm Plain bend. A1 : 0 D1 : 10 G1 : 0 H1 : 0	No	10
9	50mm Plain bend. A1 : 0 D1 : 6 G1 : 0 H1 : 0	No	6
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1	Black PVC whirlybird vent capping over the 110mm vent pipe. A1 : 0 D1 : 4 G1 : 7 H1 : 0	No	11
<u>Inspection chambers, catch pits, etc.</u>			
<u>Light Composite covers and frames</u>			
2	450 x 450mm x 8.6 kg EN124 A15 light composite manhole cover and frame inclusive of two stainless steel screws lock fasten cover with frame and two vented holes designed for the easy lifting and also has the function for draining, including fixing frame on concrete, A1 : 0 D1 : 2 G1 : 4 H1 : 0	No	6
<u>SANITARY FITTINGS, TANKS, GEYSERS, ETC.</u>			
<u>Plastic sanitaryware</u>			
3	"Atlas Plastics 237 AP" VIP 450 Pit pedestal complete with integral flap four times plugged to floor with and including 6 x 75mm masonry anchors. A1 : 0 D1 : 4 G1 : 7 H1 : 0	No	11
4	"Atlas Plastics 507AP" Granite bowl urinal fitted with "496AP" waterless urinal waste fitting hung on wall on and including proprietary brackets. A1 : 0 D1 : 6 G1 : 0 H1 : 0	No	6
5	"Atlas Plastics Christy 382AP" Basin, size 570 x 400 x 245mm, provided complete with two tapholes and built in soap holder, hung on wall on and including proprietary wall brackets. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1
<u>Sanitary fitting sundries</u>			
6	Satin chrome thief proof toilet roll holder, PWD Sample 71, plugged to wall. A1 : 0 D1 : 4 G1 : 7 H1 : 0	No	11
7	Heavy-duty double-flap hinged toilet seat and cover. A1 : 0 D1 : 4 G1 : 7 H1 : 0	No	11

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PLUMBING AND DRAINAGE (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Grade 304 stainless steel ware :

1	Grab rail 1200mm long with two flanges "SR 1" plugged to wall with and including stainless steel screws.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		
2	Dog leg grab rail with three flanges "DL3" plugged to wall with and including stainless steel screws.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		

Tanks, geysers, etc.

Rainwater tanks

3	2500 Litre polyethylene rotomoulded vertical water storage tank complete, on 1600 x 1600 tank stand, including lid, fitted with and including 50 x 15mm reducer 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
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Galvanised Steel Pipe

4	22mm galvanised steel pipe	m	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

Taps, valves, etc.

Solid cast brass taps, valves, etc.

5	"Cobra KM2-200" or other equal approved 15mm chrome plated metered bib tap with non-hold open feature and flow controller.	No	1
	A1 : 0 D1 : 0 G1 : 1 H1 : 0		
6	15mm Ball-o-stop valve.	No	6
	A1 : 0 D1 : 6 G1 : 0 H1 : 0		
7	22mm Gate valve	No	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		
8	22mm Non Return valve	No	2
	A1 : 0 D1 : 1 G1 : 1 H1 : 0		

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PLUMBING AND DRAINAGE (PROVISIONAL)
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Waste unions, traps, etc.

Outlets, traps, etc. :

1	50mm Chromium plated PVC urinal bottle trap. A1 : 0 D1 : 6 G1 : 0 H1 : 0	No	6
2	38mm Chromium plated brass slotted basin waste outlet with plug, chain and chain stay. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1
3	38mm PVC Mini P-trap. A1 : 0 D1 : 0 G1 : 1 H1 : 0	No	1

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PLUMBING AND DRAINAGE (PROVISIONAL)

KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 13</u>			
	<u>PAINTWORK</u>			
	<u>PAINT ON CONCRETE, PLASTER, ETC</u>			
	<u>Prepare and apply one coat plaster primer, one coat universal undercoat and two coats "Wall & All" or other equal approved washable suede sheen acrylic PVA paint on :</u>			
1	Internal smooth plastered walls. A1 : 0 D1 : 101 G1 : 127 H1 : 0	m2	228	
2	Internal smooth plastered wall in narrow widths not exceeding 300mm wide A1 : 0 D1 : 1 G1 : 1 H1 : 0	m2	2	
	<u>Scrub surface with degreaser, rinse thoroughly with tap water, and apply one coat sealer and two coats epoxy paint on:</u>			
3	Concrete floated or screeded floors A1 : 0 D1 : 26 G1 : 17 H1 : 0	m2	43	
4	Granolithic skirting not exceeding 300mm girth. A1 : 0 D1 : 42 G1 : 47 H1 : 0	m	89	
	Carried to Collection		R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S			
	Bill No. 13			
	PAINTWORK			
	KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

PAINT ON METALWORK

Prepare and apply one coat bituminous paint on :

1	Backs of steel door frames.	m2	2
	A1 : 0 D1 : 0 G1 : 2 H1 : 0		

One coat steel etch primer, one coat universal undercoat and two coats gloss enamel paint on :

2	Hot dipped galvanised steel gates.	m2	6
	A1 : 0 D1 : 4 G1 : 2 H1 : 0		

One coat red oxide primer, one coat universal undercoat and two coats gloss enamel paint on :

3	Pre-galvanised steel doors.	m2	2
	A1 : 0 D1 : 0 G1 : 2 H1 : 0		

4	Pre-galvanised steel door frames.	m2	2
	A1 : 0 D1 : 0 G1 : 2 H1 : 0		

PAINT ON FIBRE-CEMENT

Prepare and apply one coat plaster primer and two coats quality matt acrylic PVA on :

5	External fibre cement fascia boarding including priming cover strips.	m2	4
	A1 : 0 D1 : 2 G1 : 2 H1 : 0		

6	External fibre cement bargeboard including priming cover strips.	m2	4
	A1 : 0 D1 : 2 G1 : 2 H1 : 0		

PAINT ON PVC

Prepare and apply two coats black PVA paint on:

7	Vent pipes.	m2	5
	A1 : 0 D1 : 2 G1 : 3 H1 : 0		

Carried to Collection

SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S
Bill No. 13
PAINTWORK
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

R

Item No		Quantity	Rate	Amount
	<u>SECTION No. 3 - EXTERNAL WORKS - DUDUMAYO SENIOR SECONDARY SCHOOL</u>			
	<u>BILL No. 14</u>			
	<u>EXTERNAL WORKS (PROVISIONAL)</u>			
	<u>Note:</u>			
	For Preambles see "PW 371 - A Edition 2.0 - Construction Works: Specifications, General Specification" as published by the Department of Public Works (2nd Edition July 2013).			
	<u>DEMOLITIONS</u>			
	<u>Demolitions</u>			
	<u>Brickwork building structures</u>			
1	Demolish and cart away single storey toilet block complete, size on plan 7 500mm long x 3 300mm wide x approximately 2500mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with facebrick walls including timber doors, ground floor concrete surface bed with granolithic floor covering, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site. W : 1	No	1	
2	Demolish and cart away single storey toilet block complete, size on plan 7 500mm long x 5 600mm wide x approximately 2500mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with facebrick walls including timber doors, ground floor concrete surface bed with granolithic floor covering, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site. W : 1	No	1	
	Carried to Collection		R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

1	Demolish and cart away single storey toilet block complete, size on plan 6 700mm long x 3 300mm wide x approximately 2500mm high, comprised of corrugated iron roof covering on mono-pitch timber rafters, with brick, plaster and paint walls including timber doors, ground floor concrete surface bed with granolithic floor covering, etc. including grubbing up foundations and backfilling holes with material from the stockpiles on site. W : 1	No	1
	<u>Pit toilets</u>		
2	Allow for de-sludging of existing "long drop" pit latrines by means of "honey sucker". The pit latrines are to be completely empty before any other work is carried out. W : 15	No	15
3	Allow for breaking down and removing from site entire pit latrine structure including any structure that may be inside the pit. Demolition is to only commence once the latrine has been completely emptied (elsewhere measured). Backfill existing hole with imported filling in max 150mm layers and compact to 95% MOD AASHTO density. W : 15	No	15
	<u>THE FOLLOWING IN WALKWAYS, RAMPS, ETC.</u>		
	<u>EARTHWORKS</u>		
	<u>Site clearance</u>		
4	Clear the areas to be developed of all rubbish, debris, vegetation, shrubs, bush and small trees not exceeding 200mm girth and remove from site. W : 120	m2	120
	<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>		
5	Reduced levels under solid floors. W : 24	m3	24

Carried to Collection

R

SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S
Bill No. 14
EXTERNAL WORKS
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS

<u>Carting away of excavated material</u>				
1	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 24	m3	24	
<u>Filling</u>				
2	150mm G7 Sub-base course, selected and supplied by the Contractor, deposited in layers not exceeding 150mm thick, watered and consolidated to 93% modified AASHTO density under slabs. W : 18	m3	18	
<u>Prescribed Testing</u>				
3	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 2	No	2	
<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
4	Paving in panels including any necessary formwork. W : 12	m3	12	
5	Ramps. W : 0.4	m3	0.4	
<u>Surface treatment</u>				
6	Float surface of concrete to a wood float finish. W : 120	m2	120	
<u>Test blocks and testing</u>				
7	Allow for preparing and curing a set of three test cubes, each size 150mm x 150mm x 150mm and pay all transport and testing costs undertaken by an approved independent laboratory. (Provisional)	No	2	
Carried to Collection				R
SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

<u>Movement joints</u>				
1	10mm Thick "Jointex" closed cell polyethylene joint filler with hinged blocking piece between concrete surfaces not exceeding 300mm wide. W : 33	m	33	
2	Remove hinged blocking piece and fill 10 x 15mm cavity with an approved 2 part polysulphide sealer. W : 33	m	33	
<u>FORMWORK</u>				
<u>Edges, risers, ends and reveals</u>				
3	Edge, riser, etc not exceeding 300mm high. W : 200	m	200	
<u>Reinforcement</u>				
4	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces. W : 120	m2	120	
<u>THE FOLLOWING IN STORMWATER CUT OFF DRAIN / EARTH BERM</u>				
<u>Excavate in earth not exceeding 2m deep including trimming sides, levelling and ramming bottoms and deposit in spoil heaps for later re-use or cart away</u>				
5	Reduced levels W : 30	m3	30	
<u>Filling</u>				
6	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. W : 30	m3	30	
<u>Compaction of surfaces</u>				
7	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density. W : 60	m2	60	
Carried to Collection				R
SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

	<u>Grassing, ground cover, etc.</u>				
1	Kikuyu turf (sods or rolls) instant lawn 25 to 40mm thick, imported from commercial sources, laid firmly with staggered joints within three days of being lifted. W : 50	m2	50		
	<u>THE FOLLOWING IN CONCRETE CHANNELS, ETC.</u>				
	<u>EARTHWORKS</u>				
2	Holes W : 0.3	m3	0.3		
3	Surface trenches. W : 1	m3	1		
	<u>Carting away of excavated material</u>				
4	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 1	m3	1		
5	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. W : 1	m2	1		
	<u>Sundries</u>				
6	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density. W : 3	m2	3		
	<u>Prescribed Testing</u>				
7	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 4	No	4		
	<u>FORMWORK</u>				
	Carried to Collection			R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

<u>Edges, risers, ends and reveals</u>				
1	Edge, riser, etc not exceeding 300mm high. W : 6	m	6	
<u>Grooves, channels, mortices, etc.</u>				
2	700 x 150mm V-Channels in top W : 3	m	3	
3	1500 x 750 x 150mm Concrete V-Channel Spreader W : 1	No	1	
<u>REINFORCEMENT (PROVISIONAL)</u>				
<u>High tensile rod reinforcement to structural concrete work</u>				
4	12mm Diameter bars. W : 0.007	t	0.007	
<u>Reinforcement</u>				
5	Ref: 193 High tensile welded steel mesh reinforcement cast into concrete surfaces. W : 3	m2	3	
<u>THE FOLLOWING IN STAND PIPE BIP TAP ETC.</u>				
<u>EARTHWORKS</u>				
6	Holes W : 1	m3	1	
7	Surface trenches. W : 6	m3	6	
<u>Carting away of excavated material</u>				
8	Load surplus or unsuitable material from spoil heaps and cart away to a dumping site to be located by the Contractor. W : 1	m3	1	
Carried to Collection				
SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				R

	<u>Risk of collapse of excavations</u>				
1	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep including all necessary timber shoring, etc. W : 7	m2	7		
	<u>Keeping excavations free of water</u>				
2	Allow for keeping the excavations free from water. <u>Filling</u>		Item		
3	Earth filling from the excavations and/or stockpiles in backfilling to trenches, column bases, etc., compacted to 93% Mod AASHTO dry density. W : 6	m3	6		
	<u>Foundation courses</u>				
4	Imported G7 filling, selected and supplied by the Contractor, including depositing in layers not exceeding 150mm thick and compacting to 95% modified AASHTO dry density to trenches, bases, etc. W : 0.3	m3	0.3		
	<u>Sundries</u>				
5	Rip prepared platform level and recompact to 93% Mod. A.A.S.H.T.O. density. W : 2	m2	2		
	<u>Prescribed Testing</u>				
6	Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Architect within 24 hours of the tests being completed. W : 2	No	2		
	<u>CONCRETE (Labour intensive)</u>				
	<u>Mass concrete 25MPa (19mm stone) in:</u>				
7	Strip foundations cast against excavated surfaces. W : 2	m3	2		
Carried to Collection				R	
SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS					

	<u>Reinforced concrete 25MPa (19mm stone) in:</u>				
1	Slabs W : 1	m3	1		
2	110mm PVC Blue Water Pipe W : 1	m3	1		
	<u>FORMWORK</u>				
	<u>Edges, risers, ends and reveals</u>				
3	Edge, riser, etc not exceeding 300mm high. W : 3	m	3		
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>High tensile rod reinforcement to structural concrete work</u>				
4	12mm Diameter bars. W : 0.003	t	0.003		
	<u>PIPEWORK, ETC.</u>				
	<u>Pipes, pipe fittings, etc.</u>				
	<u>WATER SUPPLIES</u>				
	<u>Class 2 copper pipes with straight compression fittings</u>				
5	22mm Pipe and fixing to walls, floors, in roofs, in concrete, etc. including any necessary proprietary holderbats, fixings, etc. W : 46	m	46		
	<u>Extra over copper pipes for brass compression fittings</u>				
6	22mm Fittings. W : 12	No	12		
	<u>uPVC Pipes</u>				
7	110mm Blue Water Pipe. W : 7	m	7		
	<u>SANITARY FITTINGS</u>				
	Carried to Collection			R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS				

1	<u>Solid cast brass taps, valves, etc.</u> Bib Tap or Similar approved W : 4	No	4	
	Carried to Collection SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S Bill No. 14 EXTERNAL WORKS KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			R

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Section No. 4				
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY SCHOOL			
	SECTION SUMMARY - SECTION NO.4 - DUDUMAYO SENIOR SECONDARY			
Bill No		Page No		Amount
	Brought Forward		R	
	<u>CONTINGENCY PROVISIONS</u>			
	The Tenderer is to allow hereunder for 5 (Five) percent of the Nett Builders Work Sub-Total to be used as a Budgetary Provision for construction contingencies of a general nature and for the finalisation of design detailing. This sum, or any portion thereof, shall be expended at the sole discretion of the Principal Agent. Any residual balance remaining subsequent to such expenditure shall be deducted in its entirety from the Contract Sum.	%		
	Carried to Final Summary		R	
	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY S KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			

FINAL SUMMARY		Page No	Amount
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2	SECTION NO.2 - KWAAIMAN JUNIOR SECONDARY SCHOOL	97	
3	SECTION NO.3 - UPPER MPAKO JUNIOR SECONDARY SCHOOL	148	
4	SECTION NO.4 - DUDUMAYO SENIOR SECONDARY SCHOOL	199	
Sub-Total			R
Add Value - Added Tax at the rate applicable as at Tender closing date.			R
Carried to Form of Tender			R
KWAAIMAN JSS, DUDUMAYO SSS & UPPER MPAKO JSS			