

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 1</u>			
	<u>BILL NO.1</u>			
	<u>PRELIMINARIES</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Meaning of terms "Tender" and "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, meaning "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 with the applicable amount entered against each relevant category, where "Fixed" denotes a fixed amount (amount not to be varied), "Value" denotes an amount variable in proportion to value and "Time" denotes an amount in proportion to time			
	Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities			
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1	<p style="text-align: right;">Brought Forward</p> <p><u>SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>DEFINITIONS</u></p> <p>A1 DEFINITIONS AND INTERPRETATION</p> <p>Clause 1.0</p> <p>1.1 Definition of "Commencement Date" is added:</p> <p>"COMMENCEMENT DATE" means the date that the agreement, made in terms of the Form of Offer and Acceptance, comes into effect</p> <p>Clause 1.1 Definition of "Construction Guarantee" is amended by replacing it with the following:</p> <p>"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</p> <p>Clause 1.1 Definition of "Construction Period" is amended by replacing it with the following:</p> <p>"CONSTRUCTION PERIOD" means the period commencing on the commencement date and ending on the date of practical completion</p> <p>Clause 1.1 Definition of "Corrupt Practice" is added:</p> <p>"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.</p> <p>Clause 1.1 Definition of "Fraudulent Practice" is added:</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		R	
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<p style="text-align: center;">Brought Forward</p> <p>"FRAUDULANT 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 tenderer's (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.</p> <p>Clause 1.1 Definition of "Interest" is amended by replacing it with the following:</p> <p>"INTEREST" means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999).</p> <p>Clause 1.1 Definition of "Principal Agent" is amended by replacing it with the following:</p> <p>"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</p> <p>Clause 1.1 Definition of "Security" is amended by replacing it with the following:</p> <p>"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</p> <p>Clause 1.6 is amended by replacing the words "prepaid registered post, telefax or e-mail" with "prepaid registered post or telefax"</p>	R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	R	

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	<p>Clause 1.6.4 is amended by replacing it with the following:</p> <p>No clause</p> <p>Fixed: _____ Value: _____</p> <p>Time: _____</p>			
	<u>OBJECTIVE AND PREPARATION</u>			
2	A2 OFFER, ACCEPTANCE AND PERFORMANCE			
	<p>Clause 2.0</p> <p>Fixed: _____ Value: _____</p> <p>Time: _____</p>	Item		
3	A3 DOCUMENTS			
	<p>Clause 3.0</p> <p>Clause 3.2.1 is amended by replacing "14.1" with "14.0"</p> <p>Clause 3.7 is amended by the addition of the following:</p> <p>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</p> <p>Clause 3.10 is amended by replacing the second reference to "principal agent" with the word "employer"</p> <p>Fixed: _____ Value: _____</p> <p>Time: _____</p>	Item		
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4	A4 DESIGN RESPONSIBILITY Clause 4.0 Clause 4.3 is amended by replacing it with the following: No clause Fixed: _____ Value: _____ Time: _____	Item		
5	A5 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: _____ Time: _____	Item		
6	A6 SITE REPRESENTATIVE Clause 6.0 Fixed: _____ Value: _____ Time: _____	Item		
7	A7 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: _____ Time: _____	Item		
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8	WORKS RISK			
	Clause 8.0			
	Fixed: _____ Value: _____ Time: _____	Item		
9	A9 INDEMNITIES			
	Clause 9.0			
	Fixed: _____ Value: _____ Time: _____	Item		
10	A10 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			
	(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			
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<p style="text-align: center;">Brought Forward</p> <p>(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</p> <p>10.6 Injury to Persons or loss of or damage to Properties</p> <p>(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</p> <p>(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</p> <p>(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</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p>(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</p> <p>(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</p> <p>(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</p> <p>10.7 High risk insurance</p> <p>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:</p> <p>10.7.1 Damage to the works</p> <p>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</p>	
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<p style="text-align: center;">Brought Forward</p> <p>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</p> <p>10.7.2 Injury to persons or loss of or damage to property</p> <p>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</p> <p>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 resulting from, arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract</p> <p>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</p>	<p style="text-align: center;">R</p>
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	<p>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</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
11	<p>A11 LIABILITY INSURANCES</p> <p>Clause 11.0</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
12	<p>A12 EFFECTING INSURANCES</p> <p>Clause 12.0</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
13	<p>A13 NO CLAUSE</p>	Item		
14	<p>A14 SECURITY</p> <p>Clause 14.0</p> <p>Clauses 14.1 - 14.8 are amended by replacing them with the following:</p> <p>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 as a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT)</p>			
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<p>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)</p> <p>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</p> <p>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.</p> <p>14.3 Where security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT) has been selected:</p> <p>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</p> <p>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</p> <p>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</p>	
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<p>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</p> <p>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</p> <p>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</p> <p>14.4 Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected:</p> <p>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</p> <p>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</p> <p>14.4.3 The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring</p> <p>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</p> <p>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:</p>	
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<p>Brought Forward</p> <p>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)</p> <p>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</p> <p>14.5.3 The employer shall return the fixed construction guarantee to the contractor within fourteen (14) calendar days of it expiring</p> <p>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</p> <p>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</p> <p>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:</p> <p>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</p> <p>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</p> <p>14.6.3 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)</p> <p>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</p>	<p>R</p>
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	<p>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:</p> <p>14.7.1 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(B)</p> <p>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</p> <p>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</p> <p>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</p> <p>Fixed: _____ Value: _____ Time: _____</p> <p><u>EXECUTION</u></p>			
15	<p>A15 PREPARATION FOR AND EXECUTION OF THE WORKS</p> <p>Clause 15.0</p> <p>Clause 15.1.1 is amended by replacing it with:</p> <p>No clause</p>	Item		
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16	<p>Clause 15.1.2 is amended by replacing it with:</p> <p>The security selected in terms of 14.0</p> <p>Clause 15.1 is amended by the addition of the following clause:</p> <p>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</p> <p>Clause 15.2.1 is amended by replacing it with the following clause:</p> <p>Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.2 and 15.1.4</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
17	<p>A16 ACCESS TO THE WORKS</p> <p>Clause 16.0</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
18	<p>A17 CONTRACT INSTRUCTIONS</p> <p>Clause 17.0</p> <p>Clause 17.1.11 is amended by deleting the words "and the appointment of nominated and selected subcontractors"</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
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19	A18 SETTING OUT OF THE WORKS Clause 18.0 Fixed: _____ Value: _____ Time: _____	Item		
20	A19 ASSIGNMENT Clause 19.0 Fixed: _____ Value: _____ Time: _____	Item		
21	A20 NOMINATED SUB-CONTRACTORS 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 sub-contractors executing work allowed for under provisional sums Fixed: _____ Value: _____ Time: _____	Item		
22	A21 SELECTED SUBCONTRACTORS Clause 21.0 Clause 21 is amended by replacing it with: No clause Fixed: _____ Value: _____ Time: _____	Item		
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23	A22 EMPLOYER'S DIRECT CONTRACTORS Clause 22.0 Fixed: _____ Value: _____ Time: _____	Item		
24	A23 CONTRACTOR'S DOMESTIC SUBCONTRACTORS Clause 23.0 Fixed: _____ Value: _____ Time: _____	Item		
	<u>COMPLETION</u>			
25	A24 PRACTICAL COMPLETION Clause 24.0 Fixed: _____ Value: _____ Time: _____	Item		
26	A25 WORK'S COMPLETION Clause 25.0 Fixed: _____ Value: _____ Time: _____	Item		
27	A26 FINAL COMPLETION Clause 26.0 Clause 26.1.2 is amended by inserting "#" next to 26.1.2 Fixed: _____ Value: _____ Time: _____	Item		
28	A27 LATENT DEFECTS LIABILITY PERIOD Clause 27.0 Fixed: _____ Value: _____ Time: _____	Item		
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29	A28 SECTIONAL COMPLETION Clause 28.0 Fixed: _____ Value: _____ Time: _____	Item		
30	A29 REVISION OF DATE FOR PRACTICAL COMPLETION Clause 29.0 Clause 29.2.5 is amended by replacing it with: No clause Fixed: _____ Value: _____ Time: _____	Item		
31	A30 PENALTY FOR NON-COMPLETION Clause 30.0 Fixed: _____ Value: _____ Time: _____	Item		
	<u>PAYMENT</u>			
32	A31 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:			
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<p>31.8(A).1 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion</p> <p>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</p> <p>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</p> <p>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</p> <p>Alternative B</p> <p>31.8(B) Where security is a payment reduction in terms of 14.7 the value of the works in terms of 31.4.1 and materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:</p> <p>31.8(B).1 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion</p> <p>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</p> <p>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</p>	
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	<p>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</p>		
33	<p>Clause 31.12 is amended by deleting the following:</p> <p>Payment shall be subject to the employer giving the contractor a tax invoice for the amount due</p>		
34	<p>Fixed: _____ Value: _____</p> <p>Time: _____</p>		
35	<p>A32 ADJUSTMENT TO THE CONTRACT VALUE</p> <p>Clause 32.0</p> <p>Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:</p> <p>"due to no fault of the contractor"</p> <p>Fixed: _____ Value: _____</p> <p>Time: _____</p>	Item	
36	<p>A33 RECOVERY OF EXPENSE AND LOSS</p> <p>Clause 33.0</p> <p>Fixed: _____ Value: _____</p> <p>Time: _____</p>		
37	<p>A34 FINAL ACCOUNT AND FINAL PAYMENT</p> <p>Clause 34.0</p> <p>Clause 34.1 is amended by removing "#" next to 34.1</p> <p>Clause 34.2 is amended by removing "#" next to 34.2</p> <p>Clause 34.8 is amended by deleting the words "where security as a fixed construction guarantee in terms of 14.4 has been selected or where payment reduction has been applied in terms of 14.7.1"</p>		
	Carried Forward		R
	<p>Section No. 1</p> <p>Bill No. 1</p> <p>PRELIMINARIES AND GENERAL</p> <p>PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

	Brought Forward		R	
38	<p>Clause 34.13 is amended by replacing seven (7) calender days with twenty-one (21) calender days and deleting the words subject to the employer giving the contractor a tax invoice for the amount due</p> <p>Fixed: _____ Value: _____ Time: _____</p>			
		Item		
39	<p>A35 PAYMENT TO OTHER PARTIES</p> <p>Clause 35.0</p> <p>Fixed: _____ Value: _____ Time: _____</p> <p><u>CANCELLATION</u></p> <p>A36 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT</p> <p>Clause 36.0</p> <p>Clause 36.1 is amended by the addition of the following clauses:</p> <p>36.1.3 refuses or neglects to comply strictly with any of the conditions of contract</p> <p>36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa</p> <p>36.1.5 in the judgement of the employer, has engaged in corrupt or fraudulant practices in competing for or in executing the contract</p> <p>Clause 36.3 is amended by removing the reference to No clause and replacing the words principal agent with employer</p> <p>Clause 36.0 is amended by the addition of the following clause:</p>			
		Item		
	Carried Forward		R	
	<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward		R	
	<p>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</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
40	<p>A37 CANCELLATION BY EMPLOYER - LOSS AND DAMAGE</p> <p>Clause 37.0</p> <p>Clause 37.3.5 is amended by replacing "ninety (90)" with "one hundred and twenty (120)"</p> <p>Clause 37.0 is amended by the addition of the following clause:</p> <p>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</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward		R	
41	A38 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT Clause 38.0 Clauses 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: _____ Time: _____	Item		
42	A39 CANCELLATION - CESSATION OF THE WORKS Clause 39.0 Clauses 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: _____ Time: _____	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

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	Brought Forward		R
	<p><u>THE SCHEDULE</u></p> <p>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 the agreement</p> <p>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. Key cross reference clauses are italicised in [] brackets</p>		
46	<p>Clause 42.0</p> <p>Fixed: _____ Value: _____ Time: _____</p> <p>42.0 PRE-TENDER INFORMATION</p> <p>42.1 CONTRACTING AND OTHER PARTIES</p> <p>42.1.1 Employer</p> <p>Independent Development Trust</p> <p>Postal address:</p> <p>PO Box 55386 Polokwane 0700</p> <p>Tel: 015 295 0000 Contact person: Ms. Thabiso Makgoka or her nominee</p> <p>[1.2] Physical address:</p> <p>68 Hans van Rensburg Street, IDT Building, 2nd Floor Polokwane 0699</p>	Item	
	Carried Forward		R
	<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

<p style="text-align: right;">Brought Forward</p> <p>42.1.2 Principal Agent:</p> <p>[5.1] <i>MJ Quantity Surveyors and Project Managers</i></p> <p>Postal address: Postnet suit 115 Private bag x 9676 Polokwane 0700</p> <p>Tel: (015) 297 2780 Fax: (015) 297 2787 E-mail: mokhuduf@mjqqs.co.za</p> <p>42.1.3 Agent (1):</p> <p>[5.2] <i>Mams Architects</i></p> <p>Agent's service: Architects</p> <p>Postal address: 22 bok street Polokwane 0700</p> <p>Tel: (015) 295 5328 Fax: (011) 291 2710 E-mail: edi@mamsarch.com</p> <p>42.1.4 Agent (2):</p> <p>[5.2] <i>Lazwi Engineering</i></p> <p>Agent's service: Civil & Structural Engineers</p> <p>Postal address: Psotnet Suite 97, Private Bag X9676 Polokwane 0700</p> <p>Tel: (015) 297 0685 Fax: (015) 297 0680 E-mail: comfort@lazwiengineering.co.za</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p style="text-align: right;">Brought Forward</p> <p>42.1.5 Agent (3):</p> <p>[5.2] <i>AES Consulting Engineers</i></p> <p>Agent's service: Electrical Engineer</p> <p>Postal address: PO Box 15439 Folra park Polokwane 0700</p> <p>Tel: (015 201 3305 Fax: (086) 224 7317 E-mail: <i>john@aesconsulting.co.za</i></p> <p>42.1.6 Agent (4):</p> <p>[5.2] N/A</p> <p>42.1.7 Agent (5):</p> <p>[5.2] N/A</p> <p>42.1.8 Agent (6):</p> <p>[5.2] N/A</p> <p>42.1.9 Agent (7):</p> <p>[5.2] N/A</p> <p>42.2 CONTRACT DETAILS</p> <p>42.2.1 Works description:</p> <p>[1.1] Refer to Contract Data for description of the Works</p> <p>42.2.1 Site description:</p> <p>[1.1] Refer to Contract Data for site description</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p style="text-align: right;">Brought Forward</p> <p>42.2.3 Work or installations by direct contractors:</p> <p>[22.2] None</p> <p>42.2.4 Specific options that are applicable to a State organ only</p> <p>[41.0] Where so:</p> <p>[1.1#] (1) Interest rate legislation:</p> <p>[31.11.2#] [31.12.2#] The interest rate applicable will be determined by the Minister of Finance, from time to time, in terms of section 80(1) of the Public Finance Management Act, 1999 (Act No 1 of 1999)</p> <p>[11.2#] (2) Lateral support insurance to be effected by the contractor:</p> <p style="text-align: right;">YES</p> <p>[31.4.2#] (3) Payment will be made for materials and goods:</p> <p style="text-align: right;">YES</p> <p>[40.2.2#] (4) Dispute resolution by litigation:</p> <p style="text-align: right;">YES</p> <p>[26.1.2#] (5) Extended defects liability period applicable to the following elements:</p> <p style="padding-left: 40px;">None</p> <p>42.2.5 Possession of the site is to be given on:</p> <p>[15.2.1#] As stated in the schedule providing the contractor complying with the terms of 14.0</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		R	

	Brought Forward		R
42.2.6	Period for the commencement of the works after the contractor takes possession of the site:		
[15.3]	Ten (10) working days		
42.2.7	The date for practical completion and the penalty per calendar day for the works as a whole:		
[24.3.1]	The date for practical completion shall be 22 calendar months inclusive of builders' holidays from the date of contractual commencement		
[30.1]	The penalty per calendar day shall be 0.05% of the contract value		
42.2.8	The date for practical completion and the penalty per calendar day for the works in sections :		
[24.3.1]	Section 1: N/A		
[28.1]	Section 2: N/A		
	Section 3: N/A		
	Section 4: N/A		
	Section 5: N/A		
	Section 6: N/A		
42.2.9	The law applicable to this agreement shall be that of:		
[1.2]	Republic of South Africa		
42.3	INSURANCES		
42.3.1	Contract works insurance:		
[10.1#,	To be effected by:		
10.2#,	Contractor		
12.1#]	For the sum of:		
	Contract sum plus 20%		
	With the deductible of:		
	Amount the contractor deems appropriate		
	Carried Forward		R
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward		R	
42.3.2	Supplementary insurance		
	YES		
	Insurance shall comprise a Coupon Policy for Special Risks issued by the South African Special Risk Insurance Association		
42.3.3 [11.1#, 12.1#]	Public liability insurance: To be effected by: Contractor For the sum of: R 10 000 000-00 With the deductible of: As determined by the contractor's insurance company		
42.3.4 [11.2#, 12.1#]	Support insurance to be effected by the employer:		
	NO		
42.4	DOCUMENTS		
42.4.1 [3.3#, 15.1.3, 31.16.2#]	Waivers of contractor's lien or right of continuing possession is required:		
	NO		
42.4.2 [3.7#]	Construction document copies to be supplied to the contractor free of charge: Two (2) copies of the construction documents		
Carried Forward		R	
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward		R
42.4.3	Bills of quantities/Lump sum document schedule of drawn up with: Standard System of Measuring Building Work (Sixth edition as amended)		
42.4.4	On acceptance of the tender the bills of quantities is to be submitted:		
[15.1.1]	Within seven (7) days		
42.4.5	JBCC Engineering General Conditions are to be included in the contract documents :		
[3.4]	NO		
42.4.6	The contract value is to be adjusted using CPAP indices:		
[31.5.3]	Yes		
	Base month: Tender closing date		
[32.13]	Where CPAP is applicable, the contract sum will be adjusted in accordance with the JBCC Contract Price Adjustment Provisions (CPAP) as set out in the CPAP Indices Application Manual as prepared by the JBCC Series 2000, code 2118, dated May 2005 and any amendments thereto:		
1)	Glass, etc. measured in specialist section Metalwork, will be adjusted in terms of the index for that workgroup unless specifically stated otherwise in the bills of quantities		
2)	All electrical installations in buildings and power ditribution systems shall be adjusted in terms of the index Workgroup 160, Electrical Installations. Uninterruptible power supplies, elevators, escalators and hoists, generating sets, motor-alternator sets		
	Carried Forward		R
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R																																	
	and intercommunication systems, shall be adjusted in terms of the Workgroup 170, Mechanical Services																																			
3)	With reference to Workgroup 190 a proportion of the value ralated preliminaries, pro-rata to the amount of work excluded from the adjustment, shall be excluded from Contract Price Adjustment Provisions if Option A has been selected for the adjustment of Preliminaries																																			
4)	Further to clause 3.4.4 of the CPAP Indices Application Manual, the listing of additional items for exclusion by tenderers will not be permitted																																			
5)	Where V results in a negative amount after application of the formula in clause 8.3 of the CPAP Indices Application Manual, the factor of 0,55 shall be substituted by 1,45																																			
	Altenative Indices: Not applicable																																			
42.4.7	Details of changes made to the provision of JBCC standard documentation:																																			
[3.10]																																				
Note:	<i>The amended clauses, with relevant item and page numbers, are scheduled hereunder. Refer to each applicable clause for the exact extent of amendments and/or additions made</i>																																			
	<table><tr><td>Clause:</td><td>Item:</td><td>Page:</td></tr><tr><td>1.1</td><td>1</td><td>[Insert</td></tr><tr><td>page number]</td><td></td><td></td></tr><tr><td>1.6</td><td>1</td><td></td></tr><tr><td>1.6.4</td><td>1</td><td></td></tr><tr><td>3.2.1</td><td>3</td><td></td></tr><tr><td>3.7</td><td>3</td><td></td></tr><tr><td>3.10</td><td>3</td><td></td></tr><tr><td>4.3</td><td>4</td><td></td></tr><tr><td>5.1.2</td><td>5</td><td></td></tr><tr><td>10.5</td><td>10</td><td></td></tr></table>	Clause:	Item:	Page:	1.1	1	[Insert	page number]			1.6	1		1.6.4	1		3.2.1	3		3.7	3		3.10	3		4.3	4		5.1.2	5		10.5	10			
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1.6.4	1																																			
3.2.1	3																																			
3.7	3																																			
3.10	3																																			
4.3	4																																			
5.1.2	5																																			
10.5	10																																			
	Carried Forward		R																																	
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Brought Forward		R	
10.6	10		
10.7	10		
14.1 to 14.9	14		
15.1	15		
15.1.1	15		
15.1.2	15		
15.2.1	15		
17.1.11	17		
20.1.3	20		
26.1.2	26		
29.2.5	29		
31.5.2	31		
31.8	31		
31.12	31		
32.5.1	32		
32.5.4	32		
32.5.7	32		
34.1	34		
34.2	34		
34.8	34		
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36.1	36		
36.3	36		
37	37		
37.3.5	37		
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38.5.4	38		
39.3.5	39		
40.2.2	40		
40.6	40		
40.7.1	40		
42.0 POST-TENDER INFORMATION			
Note: All information for this section requires consultations with the contractor			
Carried Forward		R	
Section No. 1			
Bill No. 1			
PRELIMINARIES AND GENERAL			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward	R
42.5 CONTRACT DETAILS	
42.5.1 Contractor:	
Postal address:	
.....	
.....	
Tel:	
Fax:.....	
Tax/VAT Registration number:.....	
Physical address:.....	
.....	
.....	
42.5.2 The accepted contract sum , inclusive of tax, is:	
R	
Amount in words:.....	
.....	
.....	
42.5.3 The latest day of the month for the issue of an interim payment certificate :	
[31.3] None.....	
..	
Carried Forward	R
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS	

Brought Forward		R	
<p>42.5.4 The preliminaries amounts shall be paid in terms of:</p>			
<p>[32.12] (*Delete the not elected option):</p>			
<p>- Alternative A:</p>			
<p>- Alternative B:</p>			
<p>42.5.5 The preliminaries amounts shall be adjusted in terms of:</p>			
<p>[32.12] (*Delete the not elected option):</p>			
<p>- Alternative A:</p>			
<p>- Alternative B:</p>			
<p>42.5.6 Not applicable/No clause: [3.1]</p>			
<p>42.5.7 <i>The security to be provided by the contractor:</i> [14]</p>			
<p>million, terms</p>			
<p>(a) in respect of contracts up to R1 the contractor will provide security in of 14.1</p>			
<p>million, one</p>			
<p>(b) in respect of contracts above R1 the contractor will provide as security, of the following:</p>			
<p>(1) cash deposit of 10% of the contract sum (excluding VAT)</p>			
Carried Forward		R	
<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Brought Forward		R
10%	(2) variable construction guarantee of of the contract sum (excluding VAT) YES/NO	
value	(3) payment reduction of 10% of the certified in the payment certificate (excluding VAT) YES/NO	
sum reduction payment	(4) cash deposit of 5% of the contract (excluding VAT) and a payment of 5% of the value certified in the certificate YES/NO	
of a the certificate	(5) fixed construction guarantee of 5% the contract sum (excluding VAT) and payment reduction/retention of 5% of value certified in the payment (excluding VAT) YES/NO	
<p>Guarantee submitted must be issued by either an insurance company duly registered in terms of the Short Term Insurance Act, 1998 (Act No 35 of 1998) or by a bank duly registered in terms of the Bank Act, 1990 (Act No 94 of 1990), all in accordance with the pro-forma documents to be provided. No alterations or amendments of the wording of the pro-forma will be accepted</p>		
42.5.8	The annual holiday period after the commencement date of the construction period:	
[29.7.2]	From:	
 to	
Carried Forward		R
<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

<p style="text-align: right;">Brought Forward</p> <p>42.6 DOCUMENTS</p> <p>42.6.1 Contract documents marked and annexed hereto:</p> <p><i>(*Delete the not elected option)</i></p> <p>- Priced bills of quantities: YES/NO Document marked as:.....</p> <p>- Lump sum document: YES/NO Document marked as:.....</p> <p>- Guarantee: YES/NO Document marked as:.....</p> <p>- Contract drawings: YES/NO Document marked as:.....</p> <p>- Other documents: YES/NO <i>(*If "Yes", specify:)</i>.....</p> <p>42.7 DISPUTE RESOLUTION</p> <p>Dispute resolution shall be adjudication</p> <p><i>Also refer to previous clause 42.2.4 [40.2.2#] in this regard</i></p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>

Brought Forward	R
<p>42.8 SIGNATURES OF THE CONTRACTING PARTIES</p> <p>- This done and signed at</p> <p>on</p> <p>Name of signatory:</p> <p>For and behalf of the Employer who by signature hereof warrants authorisation hereto:</p> <p>.....</p> <p>As Witness:</p> <p>.....</p> <p>- This done and signed at</p> <p>on</p> <p>Capacity of signatory:.....</p> <p>For and behalf of the Contractor who by signature hereof warrants authorisation hereto:</p> <p>.....</p> <p>As Witness:</p> <p>.....</p>	
Carried Forward	R
<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

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	Brought Forward		R	
53	<p><i>Tender submission</i></p> <p>Clause 2.6 is amended by replacing "JBCC Form of Tender" with "C1.1 Form of Offer and Acceptance"" as issued by the Independent Development Trust</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
	<u>3: THE SITE</u>			
54	<p><i>Defined works area</i></p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
55	<p><i>Geotechnical investigation</i></p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
56	<p><i>Inspection of the site</i></p> <p>Tenderers shall complete the Compulsory Inspection Certificate included in the tender documents and return same with the tender submission</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
57	<p><i>Existing premises occupied</i></p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
58	<p><i>Previous work - dimensional accuracy</i></p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
59	<p><i>Previous work - defects</i></p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward		R	
60	Services - known Fixed: _____ Value: _____ Time: _____	Item		
61	Services - unknown Fixed: _____ Value _____ Time: _____	Item		
62	Protection of trees Fixed: _____ Value: _____ Time: _____	Item		
63	Articles of value Fixed: _____ Value: _____ Time: _____	Item		
64	Inspection of adjoining properties Fixed: _____ Value: _____ Time: _____	Item		
	<u>4: MANAGEMENT OF CONTRACT</u>			
65	Management of the works Fixed: _____ Value: _____ Time: _____	Item		
66	Programme for the works Fixed: _____ Value: _____ Time: _____	Item		
67	Progress meetings Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

	Brought Forward		R	
68	Technical meetings Fixed: _____ Value: _____ Time: _____	Item		
69	Labour and plant records Fixed: _____ Value: _____ Time: _____	Item		
	<u>5: SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS</u>			
70	Samples of materials Fixed: _____ Value: _____ Time: _____	Item		
71	Workmanship samples Fixed: _____ Value: _____ Time: _____	Item		
72	Shop drawings Fixed: _____ Value: _____ Time: _____	Item		
73	Compliance with manufacturer's instructions Fixed: _____ Value: _____ Time: _____	Item		
	<u>6: TEMPORARY WORKS AND PLANT</u>			
74	Deposits and fees Fixed: _____ Value: _____ Time: _____	Item		
75	Enclosure of the works Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward		R	
76	Advertising Fixed: _____ Value: _____ Time: _____	Item		
77	Plant, equipment, sheds and offices Fixed: _____ Value: _____ Time: _____	Item		
78	Main notice board Fixed: _____ Value: _____ Time: _____	Item		
79	Subcontractors' notice board Fixed: _____ Value: _____ Time: _____	Item		
	<u>7: TEMPORARY SERVICES</u>			
80	Location Fixed: _____ Value: _____ Time: _____	Item		
81	Water Fixed: _____ Value: _____ Time: _____	Item		
82	Electricity Fixed: _____ Value: _____ Time: _____	Item		
83	Telecommunication facilities Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

	Brought Forward		R	
84	<i>Ablution facilities</i> Fixed: _____ Value: _____ Time: _____	Item		
	<u>8: PRIME COST AMOUNTS</u>			
85	<i>Responsibility for prime cost amounts</i> Fixed: _____ Value: _____ Time: _____	Item		
	<u>9: ATTENDANCE ON N/S SUBCONTRACTORS</u>			
86	<i>General attendance</i> Fixed: _____ Value: _____ Time: _____	Item		
87	<i>Special attendance</i> Fixed: _____ Value: _____ Time: _____	Item		
88	<i>Commissioning - fuel, water and electricity</i> Fixed: _____ Value: _____ Time: _____	Item		
	<u>10: FINANCIAL ASPECTS</u>			
89	<i>Statutory taxes, duties and levies</i> Fixed: _____ Value: _____ Time: _____	Item		
90	<i>Payment for preliminaries</i> Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
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	Brought Forward		R	
91	<i>Adjustment of preliminaries</i> 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: _____ Time: _____	Item		
92	<i>Payment certificate cash flow</i> Fixed: _____ Value: _____ Time: _____	Item		
	<u>11: GENERAL</u>			
93	<i>Protection of the works</i> Fixed: _____ Value: _____ Time: _____	Item		
94	<i>Protection / isolation of existing / sectionally occupied works</i> Fixed: _____ Value: _____ Time: _____	Item		
95	<i>Security of the works</i> Fixed: _____ Value: _____ Time: _____	Item		
96	<i>Notice before covering work</i> Fixed: _____ Value: _____ Time: _____	Item		
97	<i>Disturbance</i> Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
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	Brought Forward		R	
98	<i>Environmental disturbance</i> Fixed: _____ Value: _____ Time: _____	Item		
99	<i>Works cleaning and clearing</i> Fixed: _____ Value: _____ Time: _____	Item		
100	<i>Vermin</i> Fixed: _____ Value: _____ Time: _____	Item		
101	<i>Overhand work</i> Fixed: _____ Value: _____ Time: _____	Item		
102	<i>Instruction manuals and guarantees</i> Fixed: _____ Value: _____ Time: _____	Item		
103	<i>As built information</i> Fixed: _____ Value: _____ Time: _____	Item		
104	<i>Tenant installations</i> Fixed: _____ Value: _____ Time: _____	Item		
	<u>12: SCHEDULE OF VARIABLES FOR JBCC PRELIMINARIES</u>			
105	<i>Schedule of Variables</i> Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
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Brought Forward	R
This schedule contains all variables referred to in this document	
12.1.1 Provisional Bills of Quantities [2.2] The quantities are provisional	
Yes	
12.1.2 Availability of construction documentation [2.3] <i>Construction documentation is complete</i>	
Yes	
12.1.3 Interest of agents [2.4] Details: No agents are employed as employees of the Independent Development Trust	
12.1.4 Defined works area [3.1] Details: The work area will be fenced off to indicate the perimeters of the construction site	
12.1.5 Geotechnical investigation [3.2] Details: A geotechnical investigation was done. For details of the report contact the Principal Agent	
12.1.6 Existing premises occupied [3.4] Specific requirements: The contractor to note that the existing premises will be occupied and disturbance to occupants must be limited as far as possible	
12.1.7 Previous work - dimensional accuracy [3.5] Details: Contractor to check drawings with on-site specifics	
12.1.8 Previous work - defects [3.6] Details: None at the date of tender	
Carried Forward	R
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Brought Forward	R
<p>12.19. Services - known [3.7] Details: Existing water, fire water, sewer and electrical services are installed. Layout drawings are not available and the contractor must carefully proceed with any excavation</p> <p>12.1.10 Protection of trees [3.9] Specific requirements: No trees to be removed unless written approval has been obtained from the principal agent</p> <p>12.1.11 Inspection of adjoining properties [3.11] Specific requirements: None</p> <p>12.1.12 Enclosure of the works [6.2] Specific requirements: Site must be enclosed with approved shade netting and gumpole fencing to the approval of the principal agent</p> <p>12.1.13 Plant, equipment, sheds and 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.</p>	
Carried Forward	R
<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

<p style="text-align: center;">Brought Forward</p> <p>12.1.14 Main notice board</p> <p>[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.</p> <p>12.1.15 Subcontractors' notice board</p> <p>[6.6] A notice board is required:</p> <p style="text-align: right;">No</p> <p>Specific requirements: None</p> <p>12.1.16 Water</p> <p>[7.2] Option A (by contractor)</p> <p style="text-align: right;">Yes</p> <p>Option B (by employer - free of charge)</p> <p style="text-align: right;">No</p> <p>Option C (by employer - metered)</p> <p style="text-align: right;">No</p> <p>12.1.17 Electricity</p> <p>[7.3] Option A (by contractor)</p> <p style="text-align: right;">Yes</p> <p>Option B (by employer - free of charge)</p> <p style="text-align: right;">No</p> <p>Option C (by employer - metered)</p> <p style="text-align: right;">No</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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Brought Forward		R	
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		
12.1.21 Special attendance			
[9.2] Subcontractor (1) details: None			
Subcontractor (2) details: None			
Subcontractor (3) details: None			
Subcontractor (4) details: None			
12.1.22 Protection of works			
[11.1] Specific requirements: None			
12.1.20 Protection of existing/sectionally occupied works			
[11.2] Protection is required	Yes		
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			
Carried Forward		R	
Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: right;">Brought Forward</p> <p>12.1.24 <i>Environmental disturbance</i> [11.6] Specific requirements: The contractor shall keep the site free of rubble. All mixing areas shall be rehabilitated after usage.</p>			<p>R</p>
<p style="text-align: right;">Carried Forward</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			<p>R</p>

	Brought Forward		R	
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>			
	<u>Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item</u>			
106	C1 CONTRACT DRAWINGS The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed Should any part of the drawings not be clearly intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent Fixed: _____ Value: _____ Time: _____	Item		
107	C2 GENERAL PREAMBLES The document "Specification of Materials and Methods to be used (PW371)" is obtainable from the Department of Public Works website (http://www.publicworks.gov.za/ under "Consultants Guidelines") and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward		R
108	C3 TRADE NAMES Wherever a trade name for any product has been described in the bills of quantities , 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: _____ Time: _____	Item	
109	C4 IMPORTED MATERIALS AND EQUIPMENT 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: _____ Time: _____	Item	
110	C5 VIEWING THE SITE IN SECURITY AREAS 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: _____ Time: _____	N/A	
	Carried Forward		R
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	Brought Forward			R
111	C6 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: _____ Time: _____		N/A	
112	C7 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: _____ Time: _____		N/A	
113	C8 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: _____ Time: _____		N/A	
	Carried Forward			R
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward		R
114	<p>C9 PROHIBITION ON TAKING OF PHOTOGRAPHS</p> <p>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</p> <p>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</p> <p>Fixed: _____ Value: _____ Time: _____</p> <p>C10 HIV/AIDS AWARENESS</p> <p>It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained</p> <p>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</p>	N/A	
	Carried Forward		R
	<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

	Brought Forward		R	
115	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:_____ Time:_____	Item		
116	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:_____ Time:_____	Item		
117	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:_____ Time:_____	Item		
118	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:_____ Time:_____	Item		
	Carried Forward		R	
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	Brought Forward		R	
119	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: _____ Time: _____	Item		
120	C11 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			
121	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.			
	Carried Forward		R	
	Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward	R
<p><u>COVID-19 Occupational Health and Safety in work places</u></p> <p>The contractor shall comply with all the requirements set out in The Department of Labour issued COVID- 19 Occupational Health and Safety Measures in Workplaces COVID- 19 (C 19 OHS), 2020 as per Government Gazette 43257 of 29th April 2020</p> <p>It is required of the contractor to thoroughly study the latest Occupational Health and Safety Measures in Workplaces COVID- 19 (C 19 OHS), 2020 that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document.</p> <p>The contractor must take note that compliance with the Occupational Health and Safety Measures in Workplaces COVID- 19 (C 19 OHS), 2020, is compulsory. In the event of partial or total noncompliance, 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.</p> <p>Provision for pricing of the Occupational Health and Safety Measures in Workplaces COVID- 19 (C 19 OHS), 2020 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.</p> <p><u>Clause C14.1 - COVID-19 requirements in terms of current level 1</u></p> <p>Extra over health and safety requirements to make provision to meet Covid-19 requirements in terms of current level 1. The assumption is that level 1 will extend for a period of 22months and the rate supplied must allow accordingly</p>	
Carried Forward	R
<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

	Brought Forward		R	
122	<p>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</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
123	<p>C12 SITE INSTRUCTIONS</p> <p>Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor</p> <p>Fixed: _____ Value: _____ Time: _____</p>	Item		
124	<p>C13 WARRANTIES FOR MATERIAL AND WORKMANSHIP</p> <p>Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor</p> <p>Fixed: _____ Value: _____ Time: _____ _____</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward		R	
125	C14 CO-OPERATION OF CONTRACTOR FOR COST MANAGEMENT It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors Fixed: _____ Value: _____ Time: _____ _____	Item		
126	C15 PROPPING OF FLOORS BELOW The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor Fixed: _____ Value: _____ Time: _____ _____	Item		
127	C16 TESTING OF WINDOWS FOR WATERTIGHTNESS Each window shall be tested for watertightness with water sprayed on using adequate pressure. If in the opinion of the principal agent , the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means Fixed: _____ Value: _____ Time: _____	Item		
	Carried Forward		R	
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128	<p style="text-align: right;">Brought Forward</p> <p>C17 TESTING OF FLAT ROOF WATERPROOFING FOR WATERTIGHTNESS</p> <p>Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing</p> <p>Fixed: _____ Value: _____ Time: _____</p> <p><u>SUMMARY OF CATEGORIES</u></p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time R.....</p> <p style="text-align: right;">Carried to Final Summary</p> <p>Section No. 1 Bill No. 1 PRELIMINARIES AND GENERAL PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	Item	R	
			R	

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO 1</u></p> <p><u>ALTERATIONS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Unless otherwise stated, all materials from the alterations and demolition will belong to the builder.</p> <p>The builder should allow for the removal of all debris from site and keeping the site clean at all times.</p> <p>The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned.</p> <p>NATURE OF WORK: Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders any items not specifically mentioned which they may deem necessary for the proper completion of the work. Tenderers are advised that the existing building will be in occupation during the progress of the work and due allowance must be made for work being carried out at such times and in such manner as will least interfere with the routine of the occupants and as may be directed by the Quantity Surveyor.</p> <p>NATURE OF WORK: Tenderers are advised to visit the site and thoroughly acquaint themselves with the nature of demolitions, the nature and the extent the work to be done and adequate provisions are to be made in tendered rates for items not specifically mentioned which they may deem necessary for the proper</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 2 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			
			R	

<p style="text-align: center;">Brought Forward</p> <p>completion of the work</p> <p>SCHOOL TO REMAIN OPERATIONAL: Tenderers are to note that all existing buildings of the facility will remain occupied and fully operational during the construction period and due allowance must be made for the work being carried out at such times and in such manner as directed by the Principal Agent to ensure the least interference with the routine of the School.</p> <p>DEMOLITIONS OF BUILDINGS: Tenderers are to note that tendered rates for the demolitions of buildings are to cater for the following:</p> <ul style="list-style-type: none"> - The temporary closing off and/or diversion of existing services i.e. water supply, sewer lines, etc - The complete ripping out and removal of old foundations and deed underground services as referred to above. - Trenches, holes, etc. created as a result of the removal of foundations, services, etc shall be backfilled with approved filling material and compacted to 95% Mod AASHTO density. - All other disturbed levels shall be ripped for a depth of 150mm, including breaking down oversize material and compacted to 93% Mod AASHTO density. - It will at all times throughout the contract period, be expected from the Contractor to, immediately after each portion of demolishing has been completed, remove and cart away all building rubble generated to a dumping site to be located by the Contractor off the hospital premises. The temporarily dumping and/or stockpiling of rubble on site will not be permitted <p>CARTING AWAY OF EXCESSIVE AND/OR UNSUITABLE EXCAVATED MATERIAL, BUILDING RUBBLE, ETC</p> <p>Descriptions for "carting away excessive or unsuitable excavated material, building rubble from demolitions, etc from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material, building rubble from demolitions, etc. to a suitable dumping site to be located by the Contractor off the</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>building site.</p> <p>The location of the intended dumping site will be subjected to prior written approval of the Principal Agent.</p> <p>The Contractor will also be liable to, upon completion, rehabilitate all those areas of the dumping site used dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the satisfaction of the Principal Agent.</p> <p>Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained.</p> <p>The re-use of old materials obtained from the demolitions in the construction of the new buildings, for filling, etc will not be permitted.</p> <p>EXISTING SERVICES: Special care is to be taken by the Contractor not to interfere unnecessarily with existing services. Should the contractor encounter any existing services such as underground cables, pipes or sewers during the execution of the works he shall notify the Principal Agent immediately and suspend all affected work in the immediate vicinity until such have been dealt with (i.e. removed, disconnected, re-routed, etc) and instruction to proceed with the work has been given by the Principal Agent</p> <p>The Contractor shall afford every facility to Specialist which might be employed by the Principal Agent to effect the necessary removal, disconnection, re-routing, etc of services as might be required.</p> <p>PROTECTION: In taking down and demolishing existing work the utmost care is to be observed to avoid any structural or other damages to the remaining portions and/or adjacent buildings, structures and services, etc. It will be expected from the Contractor to, at all times, employ adequate precaution measures in this regard and to provide all necessary materials for so doing</p> <p>The Contractor will be held solely responsible for any damages to persons or property and for the safety of the structures throughout the whole of this Contract and</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>shall make good at his own expense any such damages arising out of his failure to adhere to the aforesaid requirement.</p> <p>FILLING: Where described as "including back filling", "back filling" shall mean the filling of all trenches, holes, etc. with approved gravel filling (Minimum G5 standard) to be obtained from a commercial source and compacted to 93% Mod AASHTO density.</p> <p>OLD MATERIAL:</p> <p>Unless specifically otherwise described, all other old materials from demolitions are to become the property of the SCHOOL, therefore, tendered rates for demolitions must cater for adequate credit in this regard.</p> <p>It will be expected from the Contractor that all old materials not required, rubble, rubbish, etc. to be immediately carted away and site left clean and unencumbered at all times.</p> <p>MEASUREMENT: Measurement given are approximate and the Contractor is advised to view the site and existing structures to be demolished and to thoroughly acquaint himself with the extent of the work to be done.</p> <p>Any errors to the tendered rates in this regard shall be Contractor's expense as no claims in this regard will be entertained afterwards</p> <p>TENDER: The submission of a tender will imply that the Contractor has physically visited the site and fully understands the content and extent of the work described in this Bill and, therefore, accepts that no claims in this respect will thus be entertained afterwards.</p> <p>DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct size.</p> <p>PIPES, ETC Special care is to be taken not to interfere unnecessary with any supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the QS to whom</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>due notice must be given of any alterations to the existing services.</p> <p>PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc. from damage during the progress of the work and provide all necessary materials for doing so. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must make good at his own expense any damage that may occur.</p> <p>CREDITS, ETC Old materials from the pulling down (except such as described to be re-used) are to become the property of the LIMPOPO TOURISM AGENCY. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old materials described to be handed over are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. None of the old stock bricks from the pulling down are to be re-used for any new work.</p> <p>MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.</p> <p>1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.2</u>			
	<u>FOUNDATIONS</u>			
	<u>EARTHWORKS</u>			
	For preambles see "Specificaions of material and methods to be used - PW371"			
	<u>TAKING OUT AND REMOVING,GRUBBING UP ROOTS AND FILLING IN HOLES</u>			
	Taking out and removing, grubbing up roots and filling in holes			
1	Tree stump exceeding 200mm and not exceeding 500mm girth. as item 1/45	No	2	
	<u>Site clearence</u>			
2	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.as item 2/45	m2	778	
	<u>EXCAVATION,FILLING,ETC OTHER THAN BULK</u>			
	<u>Exavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	164	
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
4	Soft rock	m3	16	
5	Hard rock	m3	8	
	Carried Forward		R	
	Section No. 3 Bill No. 1 FOUNDATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	35
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	328
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water	Item	
	<u>Earth filling obtained from the excavation and / or prescribed stock piles on site including compacted to 93% mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	42
10	Backfilling to trenches, holes, etc	m3	149
	<u>Earth filling supplied by the contractor compacted to 93% mod AASHTO density</u>		
11	Under floors, steps, paving etc.	m3	165
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	472
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	20
	<u>SOIL POISING</u>		

	Brought Forward			R
	<u>Soil insecticide</u>			
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	472	
15	To bottoms and sides of trenches etc	m2	491	
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>15MPa/19mm Concrete</u>			
16	Surface blinding under footings	m3	10	
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
17	Strip footings	m3	42	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>ROUGH FORMWORK</u>			
	<u>Rough formwork to sides:</u>			
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete surfaces and brickwork</u>			
18	Edges,risers,ends and reveals not exceeding 300mm or wide.	m	104	
	<u>TEST CUBES</u>			
19	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0	
	Carried Forward			R
	Section No. 3 Bill No. 1 FOUNDATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>REINFORCEMENT</u>			
<u>High tensile steel reinforcement to structural concrete work</u>			
20	12mm Diameter bars	t	2.000
<u>BRICKWORK</u>			
<u>Brick work of NFX (14MPa nominal compressive strength) in class I mortar:</u>			
21	One brick walls	m2	185
22	12mm Fibre board built in vertically between brick skins.	m2	15
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
23	150mm Wide reinforcement built in horizontally	m	3 174
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of 4000,00/1000 delivered to the side excluding VAT) pointed with recessed horizontal and vertical joints</u>			
24	Extra over brickwork for face brickwork	m2	117
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price of R4 000,00/1000 delivered to the side excluding VAT) pointed with recessed horizontal and vertical joints on all exposed faces</u>			
25	12 x 20 mm in vertical expansion joints including raking out expansion joint filler as necessary.	m	40
Carried Forward to Summary of Section No. 3			R
Section No. 3			
Bill No. 1			
FOUNDATIONS			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	Carried Forward		R	
	Section No. 3 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p> <p>Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"</p> <p>1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs</p> <p><u>REINFORCED CONCRETE</u></p> <p><u>20MPa/19mm concrete</u></p>			
1	Surface beds cast in panels on waterproofing.	m3	36
Carried Forward			R
<p>Section No. 3 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward			R
2	Surface beds cast in panels	m3	9	
3	Ramps	m3	4	
	<u>UNREINFORCED CONCRETE</u>			
	<u>20MPa/19mm concrete</u>			
4	Aprons cast in panels to falls	m3	12	
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	125	
	<u>TEST CUBES</u>			
6	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	15.0	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
7	Surface beds, slabs, etc	m2	472	
8	Aprons to falls	m2	147	
	<u>FORMWORK</u>			
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
	<u>Rough formwork to sides</u>			
9	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	100	
	<u>REINFORCEMENT</u>			
	Carried Forward			R
Section No. 3 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

	Brought Forward			R
	<u>Fabric reinforcement</u>			
10	Ref 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	471	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
11	15mm Joints exceeding 300mm high (Provisional)	m	126	
	<u>DIVIDING STRIPS, ETC.</u>			
12	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	5	
Carried Forward to Summary of Section No. 3				R
Section No. 3				
Bill No. 2				
CONCRETE, FORMWORK AND REINFORCEMENT				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<u>Reinforced brick lintels</u>			
	Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
	Carried Forward		R	
	Section No. 3 Bill No. 3 MASONRY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
1- Existing Structures			
2- Admin Block			
3- Nutritional Centre			
4- 8 x Classrooms			
8- Computer Labs			
9- Science Labs			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Piers	m3	2
2	Half brick walls in beamfilling.	m2	39
3	One brick walls firewalls	m2	30
4	One brick walls	m2	543
<u>BRICKWORK SUNDRIES</u>			
<u>Joint forming material in movement joints:</u>			
5	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	26
<u>Brickwork reinforcement</u>			
6	115mm Wide reinforcement built in horizontally	m	519
7	150mm Wide reinforcement built in horizontally	m	2 770
Carried Forward			R
Section No. 3			
Bill No. 3			
MASONRY			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
	<u>Turning pieces</u>			
8	115mm Wide turning piece to lintels etc	m	119	
	<u>Galvanised wire ties etc</u>			
9	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	149	
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
10	Extra over brickwork for face brickwork	m2	182	
11	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	11	
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
12	Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffits	m	59	
13	Extra over brickwork for brick-on-edge header course lintel pointed on face and 230mm soffits	m	4	
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
14	Window sill set flat	m	59	
15	220mm Wide sill set sloping and slightly protecting outside	m	59	
16	Coping on top of one brick wall	m	53	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3			
	Bill No. 3			
	MASONRY			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC"</u> <u>embossed damp proof course</u>			
1	In walls	m2	71	
	<u>One layer of 250 micron "Consol Plastic USB Green"</u> <u>waterproof sheeting sealed at laps with "Gunplas</u> <u>Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	471	
	<u>JOINT SEALANTS ETC</u>			
	Carried Forward		R	
	Section No. 3 Bill No. 4 WATERPROOFING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward					
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>				R
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional)	m	18		
<p>Carried Forward to Summary of Section No. 3</p> <p>Section No. 3 Bill No. 4 WATERPROOFING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>					R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS ETC</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	Carried Forward		R	
	Section No. 3 Bill No. 5 ROOF COVERINGS, ETC PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	614
2	Ridge capping 550mm girth	m	49
3	Hip capping 550mm girth	m	22
<u>ROOF VENTILATION</u>			
4	Allow the amount of R 10, 000.00(Ten Thousand rand) for the supply and installatrion of roof louvres.	Item	
Carried Forward to Summary of Section No. 3			R
Section No. 3 Bill No. 5 ROOF COVERINGS, ETC PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>FITTINGS</u>			
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	1- Existing Structures			
	2- Admin Block			
	3- Nutritional Centre			
	4- 8 x Classrooms			
	8- Computer Labs			
	9- Science Labs			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Particle board:</u>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<u>Joinery:</u>			
	Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	Carried Forward		R	
	Section No. 3			
	Bill No. 6			
	CARPENTRY AND JOINERY			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward	R	
<p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p>		
Carried Forward	R	
<p>Section No. 3 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

Brought Forward	R
<p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p> <p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p>	
Carried Forward	R
<p>Section No. 3 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

Brought Forward	R	
<p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p> <p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p>		
Carried Forward	R	
<p>Section No. 3 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

Brought Forward	R	
<p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p> <p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <ol style="list-style-type: none"> 1 All trusses to be with a 10° pitch 2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres <p><u>ROOFS</u></p> <p><u>The following in plate nailed timber roof truss construction</u></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p>		
Carried Forward	R	
<p>Section No. 3 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

Brought Forward			R
<u>Sawn softwood</u>			
1	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for Five classroom block approximately 490.62m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1
<u>Sawn softwood grade 4</u>			
2	38 x 114mm Wall plates	m	216
3	38 x 114mm Bracing	m	84
4	38 x 228mm gang boarding	m	43
5	38 x 76mm Bracing	m	164
6	50 x 76mm Purlins	m	866
<u>Wrought softwood</u>			
7	50 x 228mm Laminated beam	m	49
<u>Sundries</u>			
8	Two coats creosote on sawn timbers	m2	38
9	4mm Diameter galvanised wire tie 750mm girth wrapped around rafter and purlin with ends tied together	No	504
<u>EAVES, VERGES, ETC</u>			
<u>"Everite FC77" pressed fibre-cement</u>			
10	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	123
<u>SKIRTINGS</u>			
Carried Forward			R
Section No. 3 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R	
	<u>Wrought meranti</u>				
11	19 x 76mm Skirting including 19mm quadrant bead nailed	m	224		
	<u>DOORS, ETC</u>				
	<u>Wrought meranti doors hung to steel frames</u>				
12	44mm Framed and ledged batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	5		
	<u>Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>				
13	40mm Door 813 x 2032mm high	No	5		
	<u>Money Provision:</u>				
14	Provide a sum of R60 000.00 (Sixty Thousand Rands Only) for supply and installations of shelves in the classrooms		Item		60 000.00
15	Provide the amount of R 120 000.00(One Hundred and Twenty Thousand Rands only) for the supply and delivery of Double combination desks in classrooms.		Item		120 000.00
	Carried Forward to Summary of Section No. 3			R	
	Section No. 3				
	Bill No. 6				
	CARPENTRY AND JOINERY				
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>CEILING , ETC.</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions:</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere</p> <p>1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs</p> <p><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></p> <p><u>Insulation</u></p>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	472	
	Carried Forward		R	
	<p>Section No. 3 Bill No. 7 CEILING, PARTITIONS AND ACCESS FLOORING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Section No. 3
Bill No. 7
CEILING, PARTITIONS AND ACCESS FLOORING
**PREPARED BY : MJ QUANTITY SURVEYORS AND
PROJECTMANAGERS**

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p>1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p>			
<p style="text-align: right;">Carried Forward</p>			<p style="text-align: center;">R</p>
<p>Section No. 3 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Brought Forward			R
	<u>"Solid"</u>		
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	10
	<u>LOCKS</u>		
	<u>"Solid"</u>		
2	"Code 630" padlock	No	5
	<u>"EN-SUIT LOCKS</u>		
	The following locks are to be suitable for master key operation:		
3	"Union" L - 22315 - 76SS/2 X 18SC Double cylinder lockset with "solid" AL 6D45 - 05AS Dove aluminum lever handle on 150 x 150mm back plate with oval cylinder piercing and striking plate fixed to metal.	No	5
	<u>Approved</u>		
4	"Code 460/313" Blesbok four lever lockset	No	5
5	Master keys	No	10
	<u>SUNDRIES</u>		
	<u>"Union"</u>		
6	CZ 8731SC Door stop plugged	No	10
	<u>STEEL CUPBOARDS</u>		
	<u>Aproved steel lockers with standard baked enamel finish</u>		
7	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	5
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>		
Carried Forward			R
Section No. 3 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
	<u>"Vitrex"</u>			
8	Pinning boards 2400 x 1200mm high fixed to brickwork	No	10	
9	Vitrex system enamelled green folding type writing board, with wall mounted centre board 4000 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high plugged	No	5	
Carried Forward to Summary of Section No. 3				R
Section No. 3				
Bill No. 8				
IRONMONGERY				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 9</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>Drawings</u>			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	1- Existing Structures 2- Admin Block 3- Nutritional Centre 4- 8 x Classrooms 8- Computer Labs 9- Science Labs			
	<u>SUNDRY METALWORK</u>			
	<u>The following in identical steel support columns</u>			
1	Bolts, complete with nuts and two washers each	kg	18	
	Carried Forward			R
	Section No. 3 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
2	76 x 76 x 3mm Tubular section columns 3050mm high	No	18
3	75 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)	No	18
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	18
5	12mm Diameter x 75mm long sleeved masonry anchor (Provisional)	No	18
<u>PRESSED STEEL COMBINATION DOORS AND FRAMES</u>			
<u>"Nty" doors</u>			
6	"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame	No	5
<u>PRESSED STEEL DOOR FRAMES</u>			
<u>1.2mm Double rebated frames suitable for one brick walls</u>			
7	Frame for door 813 x 2032mm high	No	10
<u>STEEL WINDOWS, DOORS, ETC</u>			
Carried Forward			R
Section No. 3 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>"Nty" steel residential windows with burglar bars to all sashes</u>		
8	NTY Standard School type window "Code 5/2" size 1143 x 486mm high	No	6
9	NTY Standard School type window "Code 5/2" size 1143 x 846mm high	No	45
	<u>CORNER PROTECTORS</u>		
10	50 X 50 X 4mm Angle section fixed to edge of floor	m	20
Carried Forward to Summary of Section No. 3			R
Section No. 3			
Bill No. 9			
METALWORKS			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION NO.2</u>			
<u>BUILDING WORK</u>			
<u>BILL NO.11</u>			
<u>TILING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Descriptions</u>			
Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
<u>FLOOR TILING</u>			
<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R180.00/m2 VAT excl.) fixed with adhesive and flush pointed with tinted waterproof jointing compound</u>			
1	On floors and landings	m2	472
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	232
Carried Forward to Summary of Section No. 3			R
Section No. 3			
Bill No. 11			
TILLING			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.12</u>			
	<u>PLUMBING AND DRAINAGE</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>"Polycop" polypropylene pipes:</u>			
	Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
	Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
	All pipe diameters are nominal external			
	<u>"Polylink" polypropylene pipes:</u>			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	Carried Forward		R	
	Section No. 3 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
Carried Forward	R
<p>Section No. 3 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

Brought Forward	R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p>	
Carried Forward	R
<p>Section No. 3 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

<p style="text-align: center;">Brought Forward</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 3 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

Brought Forward			R	
<u>Flush pans</u>				
Flush pans shall have straight or side outlets and "P" or "S" traps as necessary				
<u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u>				
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable				
<u>Waste unions</u>				
Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings				
<u>Steel sectional water tanks</u>				
Tanks shall comply with SABS CKS 114				
<u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u>				
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described				
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc				
<u>RAINWATER DISPOSAL</u>				
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>				
1	100 x 125mm Eaves gutters with beaded front edge	m	118	
2	Extra over eaves gutter for angle	No	6	
3	Extra over eaves gutter for stopped end	No	6	
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	6	
Carried Forward			R	
Section No. 3 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECT MANAGERS				

Section No. 3
Bill No. 12
PLUMBING AND DRAINAGE
**PREPARED BY : MJ QUANTITY SURVEYORS AND
PROJECTMANAGERS**

Item No		Quantity	Rate	Amount
<u>SECTION NO.2</u>				
<u>BUILDING WORK</u>				
<u>BILL NO. 13</u>				
<u>GLAZING</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				

<u>GLAZING TO STEEL WITH PUTTY</u>				
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	45	
	<u>4mm Rough cast glass</u>			
2	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	28	
Carried Forward to Summary of Section No. 3				R
Section No. 3				
Bill No. 13				
GLAZING				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 14</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>PREPARATORY WORK TO EXISTING WORK</u></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON INTERNAL FLOATED PLASTER SURFACE</u></p>			
<p style="text-align: right;">Carried Forward</p>			<p style="text-align: center;">R</p>
<p>Section No. 3 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Brought Forward			R
<u>One coat sealer/under coat and two coats interior quality "Acrylic PVA" emulsion paint.</u>			
1	On internal walls	m2	784
<u>ON FIBRE-CEMENT</u>			
<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings and cornices	m2	472
<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
3	On fascias and barge boards	m2	39
4	On window sills not exceeding 300 mm girth	m	58
<u>ON METAL</u>			
<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>			
5	On door frames	m2	16
6	On windows with burglar bars	m2	138
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	21
<u>ON WOOD</u>			
<u>One coat wood primer, one universal undercoat and two coats polyurethane enamel paint</u>			
8	On doors	m2	17
<u>One coat wood primer, one coat universal undercoat and two coats polyurethane high gloss varnish</u>			
9	On doors	m2	17
Carried Forward			R
Section No. 3 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Bill No	SECTION SUMMARY - NEW 1 X FIVE CLASSROOM BLOCKS	Page No	Amount	
1	FOUNDATIONS	72		
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7	CEILING, PARTITIONS AND ACCESS FLOORING	92		
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Carried to Final Summary			R	
Section No. 3 PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.1</u>			
	<u>FOUNDATIONS</u>			
	<u>EARTHWORKS</u>			
	For preambles see "Specificaions of material and methods to be used - PW371"			
	<u>TAKING OUT AND REMOVING,GRUBBING UP ROOTS AND FILLING IN HOLES</u>			
	Taking out and removing,grubbing up roots and filling in holes			
1	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	3	
	<u>Site clearence</u>			
2	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.as item 2/45	m2	720	
	<u>EXCAVATION,FILLING,ETC OTHER THAN BULK</u>			
	<u>Exavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	120	
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
4	Soft rock	m3	12	
5	Hard rock	m3	30	
	Carried Forward		R	
	Section No. 4 Bill No. 1 FOUNDATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	59
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	344
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water	Item	
	<u>Earth filling obtained from the excavation and / or prescribed stock piles on site including compacted to 93% mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	12
10	Backfilling to trenches, holes, etc	m3	61
	<u>Earth filling supplied by the contractor compacted to 93% mod AASHTO density</u>		
11	Under floors, steps, paving etc.	m3	156
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface in trenches ect including scarifying for a depth of 150mm, breaking down oversize material,adding suitable material where necessary and compacting to 93% mod AASHTO density	m2	185
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	311
Carried Forward			R
Section No. 4 Bill No. 1 FOUNDATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" test	No	15
	<u>SOIL POISONING</u>		
	<u>Soil insecticide</u>		
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	311
16	To bottoms and sides of trenches etc	m2	344
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>		
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>15MPa/19mm Concrete</u>		
17	Surface blinding under footings	m3	6
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>25MPa/19mm concrete</u>		
18	Strip footings	m3	31
	<u>MOVEMENT JOINTS ETC</u>		
	<u>ROUGH FORMWORK</u>		
	<u>Rough formwork to sides:</u>		
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete surfaces and brickwork</u>		
19	Edges,risers,ends and reveals not exceeding 300mm or wide.	m	14
	Carried Forward		R
	Section No. 4		
	Bill No. 1		
	FOUNDATIONS		
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS		

	Brought Forward			R
	<u>TEST CUBES</u>			
20	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	15.0	
	<u>REINFORCEMENT</u>			
	<u>High tensile steel reinforcement to structural concrete work</u>			
21	12mm Diameter bars	t	2.000	
	<u>BRICKWORK</u>			
	<u>Brick work of NFX (14MPa nominal compressive strength) in class I mortar:</u>			
22	One brick walls	m2	172	
23	12mm Fibre board built in vertically between brick skins.	m2	8	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Brickwork reinforcement</u>			
24	150mm Wide reinforcement built in horizontally	m	2 414	
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (Purchase price of R4000,00/1000 delivered to the side excluding VAT) pointed with recessed horizontal and vertical joints</u>			
25	Extra over brickwork for face brickwork	m2	90	
	<u>INTERNAL PLASTER</u>			
26	12 x 20 mm in vertical expansion joints including raking out expansion joint filler as necessary.	m	12	
	Carried Forward to Summary of Section No. 4			R
	Section No. 4			
	Bill No. 1			
	FOUNDATIONS			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	Carried Forward		R	
	Section No. 4 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R	
<u>Formwork</u>				
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use				
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself				
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
<u>REINFORCED CONCRETE</u>				
<u>20MPa/19mm concrete</u>				
1	Surface beds cast in panels on waterproofing.	m3	30	
2	Surface beds cast in panels	m3	1	
3	Ramps	m3	2	
Carried Forward			R	
Section No. 4 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Brought Forward			R
	<u>25MPa/19mm concrete</u>		
4	Slabs including beams and inverted beams	m3	1
	<u>UNREINFORCED CONCRETE</u>		
	<u>20MPa/19mm concrete</u>		
5	Aprons cast in panels to falls	m3	12
6	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	97
	<u>TEST CUBES</u>		
7	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	10.0
	<u>CONCRETE SUNDRIES</u>		
	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
8	Surface beds, slabs, etc	m2	311
9	Aprons to falls	m2	116
	<u>FORMWORK</u>		
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>		
	<u>Rough formwork to sides</u>		
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	40
	<u>rough formwork to soffits</u>		
11	Slabs	m2	5
	Carried Forward		R
Section No. 4 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<u>Reinforced brick lintels</u>			
	Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
	Carried Forward		R	
	Section No. 4 Bill No. 3 MASONRY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls in beamfilling.	m2	45
2	Half brick walls	m2	115
3	One brick walls	m2	356
<u>BRICKWORK SUNDRIES</u>			
<u>Joint forming material in movement joints:</u>			
4	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	14
<u>Brickwork reinforcement</u>			
5	75mm Wide reinforcement built in horizontally	m	574
6	150mm Wide reinforcement built in horizontally	m	1 828
<u>Turning pieces</u>			
7	115mm Wide turning piece to lintels etc	m	29
8	230mm Wide turning piece to lintels etc	m	17
Carried Forward			R
Section No. 4 Bill No. 3 MASONRY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Galvanised wire ties etc</u>		
9	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	90
	<u>FACE BRICKWORK</u>		
	<u>Face bricks (Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
10	Extra over brickwork for face brickwork	m2	228
11	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	5
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
12	Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffits	m	30
13	Extra over brickwork for brick-on-edge header course lintel pointed on face and 230mm soffits	m	17
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
14	Window sill set flat	m	30
15	220mm Wide sill set sloping and slightly protecting outside	m	30
16	Coping on top of one brick wall	m	9
Carried Forward to Summary of Section No. 4			R
Section No. 4			
Bill No. 3			
MASONRY			
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Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	40	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	311.00000 0	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional)	m	28	
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4			
	Bill No. 4			
	WATERPROOFING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS ETC</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	Carried Forward		R	
	Section No. 4 Bill No. 5 ROOF COVERINGS, ETC PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	404
2	Ridge capping 550mm girth	m	39
3	Hip capping 550mm girth	m	22
<u>ROOF VENTILATION</u>			
4	Allow the amount of R 30, 000.00(Thirty Thousand rand) for the supply and installatrion of roof louvres.	Item	
Carried Forward to Summary of Section No. 4			R
Section No. 4			
Bill No. 5			
ROOF COVERINGS, ETC			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Particle board:</u>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<u>Joinery:</u>			
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 4 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: center;">Brought Forward</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p> <p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 4 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		R	

Brought Forward	R	
<p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p> <p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p>		
Carried Forward	R	
<p>Section No. 4 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

<p style="text-align: right;">Brought Forward</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p> <p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>Section No. 4 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: right;">R</p>

Brought Forward				R
<u>Specific specifications for roof trusses</u>				
Unless otherwise described, the following specifications will apply:				
1 All trusses to be with a 10° pitch				
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres				
<u>ROOFS</u>				
<u>The following in plate nailed timber roof truss construction</u>				
<u>The following is applicable in respect of roof trusses</u>				
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes				
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)				
<u>Sawn softwood</u>				
1	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for Administration block approximately 311m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1	
<u>Sawn softwood grade 4</u>				
2	38 x 114mm Wall plates	m	88	
3	38 x 114mm Bracing	m	60	
4	38 x 76mm Bracing	m	60	
Carried Forward				R
Section No. 4 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

	Brought Forward			R	
5	50 x 76mm Purlins	m	576		
	<u>Sundries</u>				
6	Two coats creosote on sawn timbers	m2	44		
7	4mm Diameter galvanised wire tie 750mm girth wrapped around rafter and purlin with ends tied together	No	615		
	<u>EAVES, VERGES, ETC</u>				
	<u>"Everite FC77" pressed fibre-cement</u>				
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	92		
	<u>SKIRTINGS</u>				
	<u>Wrought meranti</u>				
9	19 x 76mm Skirting including 19mm quadrant bead nailed	m	273		
	<u>DOORS, ETC</u>				
	<u>Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>				
10	40mm Door 813 x 2032mm high	No	11		
	<u>Money Provision:</u>				
11	Provide a sum of R190 000,00 (One Hundred and Ninety Thousands Rands) for supply and installations of kitchen cupboards, build in cupboards in administration block.		Item		190 000,00
12	Provide the amount of R 196 354.45 (One Hundred and Ninety Six Thousands, Three Hundred and Fifty Four rands and Forty Five Cents only) for the supply and delivery of loose furniture in administration block		Item		196 354.45
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4				
	Bill No. 6				
	CARPENTRY AND JOINERY				
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BUILDING WORK</u>			
<u>BILL NO.8</u>			
<u>CEILING , ETC.</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Descriptions:</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
<u>Insulation</u>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	311
<u>Wrought meranti</u>			
2	19 x 76mm cornices and quadrant nailed	m	273
<u>NAILED UP AND SCREWED UP CEILINGS</u>			
Carried Forward			R
Section No. 4 Bill No. 7 CEILING, PARTITIONS AND ACCESS FLOORING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward				R
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm brander at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	311	
4	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	2	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
Bill No. 7				
CEILING, PARTITIONS AND ACCESS FLOORING				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.9</u>			
	<u>IRONMONGERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded			
	<u>CATCHES,CABIN HOOKS, ETC</u>			
	<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
	Carried Forward		R	
	Section No. 4 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>LOCKS</u>			
<u>"Solid"</u>			
2	"Code 630" padlock	No	2
3	"Union" 22314 - 76SS Bathroom/WC lockset with "Solid" AL 6D63TR - 73AS Dove aluminum lever handle on 150 x 150 mm indicator plate and striking plate fixed to metal.	No	2
<u>"EN-SUIT LOCKS</u>			
<u>Approved</u>			
4	"Code 460/313" Blesbok four lever lockset	No	11
5	Master keys	No	11
<u>DOOR CLOSERS AND FLOOR SPRINGS</u>			
<u>"Dorma"</u>			
6	"TS71" Over head door closer with arm fixed to steel door frame(Silver)	No	4
<u>"Solid"</u>			
7	AL 5066E - E10/2AS Engraved aluminium plate with "Male" toilet sign.	No	1
8	AL 5066E - E10/2AS Engraved aluminium plate with "Female" toilet sign.	No	1
9	AL 5066E - E10/2AS Engraved aluminium plate with "Paraplegic" toilet sign.	No	1
<u>SUNDRIES</u>			
<u>"Union"</u>			
10	CZ 8731SC Door stop plugged	No	11
Carried Forward			R
Section No. 4 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
<u>BATHROOM FITTINGS</u>				
11	"Nampak Tissue Elite" code TR2 tissue dispenser plugged.	No	2	
12	"Nampak Tissue Elite" code 0532 liquid soap dispenser plugged.	No	2	
13	"Nampak Tissue Elite" code 0523 hand towel dispenser plugged.	No	2	
14	"Nampak Tissue Elite" code 0404 waste bin dispenser plugged.	No	2	
<u>Approved "Kimberly - Clark"</u>				
15	"Kleenex" Anti theft toilet roll holder fixed to wall.	No	2	
<u>"Chairman industries"</u>				
16	32mm "Code DL2 L/R" Side grab rail plugged	No	1	
17	32mm "Code SR2" Rear grab rail plugged	No	1	
<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>				
<u>"Vitrex"</u>				
18	Pinning boards 3000 x 1200mm high fixed to brickwork	No	4	
19	Pinning boards 2200 x 1200mm high fixed to brickwork	No	1	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
Bill No. 8				
IRONMONGERY				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BUILDING WORK</u>			
<u>BILL NO. 10</u>			
<u>METALWORK</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

<u>Descriptions</u>			
Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
<u>Drawings</u>			
Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
<u>BRACKETS FOR WORKTOPS IN THE KITCHEN, STORES, ETC.</u>			
1	Brackets size 450 x 480mm high with 658mm long cross bracing fixed to wall with and including bolts at 1 100mm centres.	No	40
<u>WELDED SCREENS, GATES, ETC</u>			
Carried Forward			R
Section No. 4 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Gates to external doors</u>			
2	Double gate and frame 1511 x 2100mm high comprising of 25 x 25 x 2mm hollow section frames and 25 x 25 x 2mm square section vertical rails at 75mm centres and fitted with a pair of suitable hinges welded to frames and with locking mechanism for padlock all in and including outer frame of 25 x 25 x 2mm hollow section welded frame bolted to brickwork.	No	2
<u>PRESSED STEEL DOOR FRAMES</u>			
<u>1,2mm Double rebated frames suitable for half brick walls</u>			
3	Frame for door 813 x 2032mm high.	No	10
<u>1,2mm Double rebated frames suitable for one brick walls</u>			
4	Frame for door 813 x 2032mm high	No	2
<u>PRESSED STEEL COMBINATION DOORS AND FRAMES</u>			
<u>STEEL WINDOWS, DOORS, ETC</u>			
<u>"Nty" steel residential windows with burglar bars to all sashes</u>			
5	Window type SWE 37S/SWE37S	No	1
6	Window type SWE 31S, size 1 1143 x 486mm high	No	5
7	Window type SWE 37S, size 1022 x 949mm high	No	3
8	Window type SWE 418, size 1511 x 1264mm high	No	14
<u>STEEL ROLLER SHUTTERS ETC</u>			
Carried Forward			R
Section No. 4 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>"Wispeco" roller shutters fixed to brickwork or concrete</u>		
9	Mutual Austen Safes DS50/2/HD SABS Category 2 (Heavy Duty) left hand strongroom with 2 x 7-lever security keylock, overall size 850 x 1860mm high with and including powder coated finish	No	1
10	Double ended strongroom ventilator	No	1
<u>ALUMINIUM WINDOWS, DOORS, ETC</u>			
<u>Doors, windows, etc to be manufactured by an approved firm of specialists, to be of the best quality and design truly squared and unless otherwise described, prepared to receive galzing beads from the outside. All opening portions must fit perfectly on all faces and be so hung as to open and close freely without binding at any point. Wherever possible, all angles and intersections to be welded by electric welding, argon or arc welding. A sample window is to be submitted to the Architect for approval before the work is put in hand.</u>			
<u>The frames generally are to be suitable for brickwork, blockwork, or concrete reveals. They are to be fitted with fixing lugs of 2,8mm aluminium 13mm wide x 100mm long welded to framing, one near each corner and intermediately not more than 300mm apart to sides top and bottom. Where concrete reveals, etc the frames are to be countersunk holed for and fitted with the necessary screws at the centres as for the lugs above.</u>			
<u>Immediately after the windows, doors, etc, have been delivered on to site, they are to be thouroughly overhauled, and all necessary adjustment or repairs made before they are fixed in position. Where they come into contact with brickwork, blockwork, concrete, steel, etc, the framing is to be treated with bituminuos paint in an approved manner. The windows, doors, etc, are to be placed in their positions for building in and adjusted to open and close properly and are to be securely structured to prevent distortion whilst the brickwork and lintols, are being built.</u>			
<u>On completion of all other work the windows, doors, are to be adjusted as necessary and rendered in a complete and satisfactory state of repair and in working order.</u>			
Carried Forward			R
Section No. 4 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: center;">Brought Forward</p> <p><u>General. All rates for doors, windows, shopfronts etc. should include for all glazing as specified.</u></p> <p><u>Glazing beads: All door, etc to be fitted with glazing beads, unless otherwise described, mitred at angles and screwed on.</u></p> <p><u>Glass and Glazing: All functional glass must be delivered to site cut to size and ready for installation and must be classified to indicate grade and thickness. Labels must remain on each piece of glass until it is glazed, inspected and officially accepted in writing by the employer, thereafter an insurance letter will follow absolving the contractor of responsibility.</u></p> <p><u>AAAMSA guide</u></p> <p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p> <p>The following specifications are to be complied with:</p> <p>Aluminium alloy extrusion: BS 1474 Aluminium alloy sheets: SANS 903 Anodising: SANS 999 Neoprene performed seals and gaskets: SATM C542 Powder coat finishing: SANS 1274</p> <p><u>Finish</u></p> <p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p> <p><u>Glass</u></p> <p>Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 4 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

Brought Forward			R	
<u>Design indemnity</u>				
The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed				
<u>Drawings</u>				
Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc				
<u>Pricing.</u>				
All window prices should include alluminium louvres as shown				
<u>General</u>				
Workshop drawings to be approved by the architect before manufacture				
<u>Ironmongery</u>				
Prices for windows shall allow for two standard stainless steel side/top hung friction hinges and one bronze anodised aluminium handle per opening sash. Prices for doors shall allow for two pairs of standard flush bolts to double doors and one-and-a-half pairs of standard hinges per door leaf.				
<u>Natural annodised series 340 aluminium windows, doors, etc including sub-frames, fixing, silicone sealant all round, ironmongery and glazed with 6,38mm clear laminated safetyglass unless otherwise stated</u>				
11	Purpose made aluminium viewing panel size 1 525 x 1300mm high in two equal fixed panes	No	1	
12	Purpose made sliding viewing panel size 1 625 x 1300mm high in three equal leafs (W6 & W5)	No	1	
13	Purpose made sliding viewing panel size 2 400 x 1300mm high in three equal leafs (W6 & W5)	No	1	
Carried Forward			R	
Section No. 4 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 11</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	311	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	725	
3	On narrow widths	m2	3	
	<u>EXTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
	<u>Steel troweled cement plaster on concrete</u>			
4	On Soffits of slabs	m2	5	
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4			
	Bill No. 10			
	PLASTERING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.12</u>			
	<u>TILING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<u>WALL TILING</u>			
	<u>150 x 150 x 5mm Glazed ceramic wall tiles fixed with adhesive to plaster (plaster elsewhere)</u>			
1	On walls	m2	3	
2	On narrow widths	m2	1	
	<u>FLOOR TILING</u>			
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R180.00/m2 VAT excl.) fixed with adhesive and flush pointed with tinted waterproof jointing compound</u>			
3	On floors and landings	m2	72	
	Carried Forward		R	
	Section No. 4 Bill No. 11 TILLING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
4	Skirting formed of ceramic tile cut to 300 x 75mm high	m	56	
Carried Forward to Summary of Section No. 4				R
Section No. 4 Bill No. 11 TILLING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.13</u>			
	<u>PLUMBING AND DRAINAGE</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>"Polycop" polypropylene pipes:</u>			
	Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
	Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
	All pipe diameters are nominal external			
	<u>"Polylink" polypropylene pipes:</u>			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	Carried Forward		R	
	Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
Carried Forward	R
<p>Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

Brought Forward	R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p>	
Carried Forward	R
<p>Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

<p style="text-align: center;">Brought Forward</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

Brought Forward			R
<u>Flush pans</u>			
Flush pans shall have straight or side outlets and "P" or "S" traps as necessary			
<u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u>			
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable			
<u>Waste unions</u>			
Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings			
<u>Steel sectional water tanks</u>			
Tanks shall comply with SABS CKS 114			
<u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u>			
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described			
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<u>RAINWATER DISPOSAL</u>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	111
2	Extra over eaves gutter for angle	No	4
3	Extra over eaves gutter for stopped end	No	4
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	4
Carried Forward			R
Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECT MANAGERS			

Brought Forward			R
5	100mm Diameter rainwater pipes	m	13
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	4
7	Extra over rainwater pipe for shoe	No	4
<u>SANITARY FITTINGS</u>			
<u>"City Metal Products" or similar approved stainless steel</u>			
8	"Series 300" single end bowl overlay sink size 535 x 1 050 long with one 460 x 355 x 150mm deep bowl.	No	1
<u>"Vaal" or Similar approved</u>			
9	510 x 405mm "Hibiscus" (code 7050) white vitreous rounded lavatory basin with one tap holes fixed to wall with and including two semi - concealed brackets (code 8446Z0)	No	3
10	"Hibiscus" vitreous china close coupled washdown pan (code 752600) complete with double flap heavy duty plastic seat with adjustable hinges and matching 6/3 litre top dual flush cistern (code 710741)	No	2
11	"Protea" Paraplegic vitreous china washdown pan with double flap heavy duty plastic seat and matching 9 litre cistern complete with lid, fitment and purpose made chromium plated side - flush lever fixed to brickwork as item	No	1
<u>WASTE UNION ETC</u>			
<u>"Cobra watertech"</u>			
12	32mm 301CP waste union	No	4
<u>TRAPS ETC</u>			
13	32mm Deep seal "P" or "S" trap	No	3
Carried Forward			R
Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECT MANAGERS			

	Brought Forward			R
	<u>"Cobra Watertech"</u>			
14	38mm 365/40 CP Bottle trap	No	3	
	<u>TAPS, VALVES, ETC</u>			
15	15mm Stopcock	No	4	
16	15mm Full-way gate valve	No	2	
	<u>"Cobra Watertech"</u>			
17	15mm 114 - 15CP "Star" pillar tap	No	6	
18	15mm 114 - 15CP "Carina" pillarcock	No	1	
19	15mm 166/041CP "Carina" sink mixer	No	1	
20	PA3.522 "Masterflo" pressure control valve with PB1.10 Vacuum breaker.	No	1	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>			
21	50mm Pipes	m	8	
22	110mm Pipes	m	9	
23	50mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	17	
24	110mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	72	
25	110mm Pipe laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m	35	
	<u>Pre-cast concrete gulleys</u>			
26	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	2	
	Carried Forward			R
	Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Inspection chambers (covers elsewhere)</u>			
27	Inspection chamber 450 x 600mm x exceeding 750mm and not exceeding 1000mm deep internally	No 2	
<u>Covers, etc</u>			
28	450 x 600mm x 74kg Type 8A cast iron double seal manhole cover and frame	No 2	
<u>Sundries</u>			
29	100mm Cast iron "ABC" cleaning eye	No 1	
30	Precast concrete inspection eye marker slab set in ground	No 3	
31	110mm Rodding eye	No 1	
32	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3 2	
33	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3 1	
<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No 4	
35	50mm Access junction	No 2	
36	110mm Pan connector	No 2	
37	110mm Bent pan connector	No 2	
38	50mm Access bend	No 2	
39	110mm Access bend	No 2	
40	110mm Two-way vent valve	No 2	
<u>TESTING</u>			
41	Testing waste pipe system	Item	
Carried Forward			R
Section No. 4 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward				R
<u>WATER SUPPLIES</u>				
<u>Galvanised steel pipes</u>				
42	50mm Pipes	m	45	
<u>Extra over galvanised steel pipes for fittings</u>				
43	50mm Elbow	No	4	
44	50mm Reducer	No	2	
<u>Class O copper pipes</u>				
45	15mm Pipes	m	132	
46	22mm Pipes	m	58	
<u>Extra over class O copper pipes for capillary fittings</u>				
47	15mm Fittings	No	16	
48	22mm Fittings	No	12	
<u>Copper overflow and service pipes</u>				
49	15mm Service pipe 450mm girth	No	1	
<u>TESTING</u>				
<u>Testing</u>				
50	Testing water pipe system		Item	
<u>FIRE APPLIANCES ETC</u>				
<u>'Chubb' or similar "Approved"</u>				
51	"Everyway" fire hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1	
52	9kg Dry chemical fire extinguisher	No	3	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
Bill No. 12				
PLUMBING AND DRAINAGE				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 14</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	33	
	<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	<u>4 mm Silvered float glass copper backed mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
2	Mirror 400 x 600mm high with four (4) screws	No	3	
	Carried Forward to Summary of Section No. 4		R	
	Section No. 4			
	Bill No. 13			
	GLAZING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.3</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 15</u>			
	<u>PAINTWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth			
	<u>Previously painted metal surfaces</u>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<u>Previously painted wood surfaces</u>			
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON INTERNAL FLOATED PLASTER SURFACE</u>			
	Carried Forward		R	
	Section No. 4 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>One coat sealer/under coat and two coats interior quality "Acrylic PVA" emulsion paint.</u>			
1	On ceilings, beams, walls and columns	m2	5
2	On internal walls	m2	781
<u>ON FIBRE-CEMENT</u>			
<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
3	On ceilings and cornices	m2	303
<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
4	On fascias and barge boards	m2	32
5	On window sills not exceeding 300 mm girth	m	29
<u>ON METAL</u>			
<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>			
6	On door frames	m2	19
7	On windows with burglar bars	m2	60
8	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	13
<u>ON WOOD</u>			
<u>One coat wood primer, one universal undercoat and two coats polyurethane enamel paint</u>			
9	On doors	m2	68
Carried Forward			R
Section No. 4 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

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**WAYENI PRIMARY SCHOOL
FOR INDEPENDENT DEVELOPMENT TRUST (IDT)
BID NO: (EDDP 184/356)**

Bill No	SECTION SUMMARY - NEW ADMINISTRATION BLOCK	Page No	Amount
1	FOUNDATIONS	115	
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Carried to Final Summary			R
Section No. 4 PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.1</u>			
	<u>FOUNDATIONS</u>			
	<u>EARTHWORKS</u>			
	For preambles see "Specificaions of material and methods to be used - PW371"			
	<u>Site clearence</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.as item 2/45	m2	348	
	<u>EXCAVATION,FILLING,ETC OTHER THAN BULK</u>			
	<u>Exavation in earth not exceeding 2m deep</u>			
2	Trenches	m3	109	
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
3	Soft rock	m3	11	
4	Hard rock	m3	5	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	47	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	312	
	Carried Forward		R	
	Section No. 5 Bill No. 1 FOUNDATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Keeping excavations free of water</u>		
7	Keeping excavations free of all water other than subterranean water	Item	
	<u>Earth filling obtained from the excavation and / or prescribed stock piles on site including compacted to 93% mod AASHTO density</u>		
8	Under floors, steps, paving, etc	m3	16
9	Backfilling to trenches, holes, etc	m3	30
	<u>Earth filling supplied by the contractor compacted to 93% mod AASHTO density</u>		
10	Under floors, steps, paving etc.	m3	103
	<u>Compaction of surfaces</u>		
11	Compaction of ground surface in trenches ect including scarifying for a depth of 150mm, breaking down oversize material,adding suitable material where necessary and compacting to 93% mod AASHTO density	m2	109
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	257
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	7
	<u>SOIL POISINING</u>		
	<u>Soil insecticide</u>		
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	257
Carried Forward			R
Section No. 5 Bill No. 1 FOUNDATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
15	To bottoms and sides of trenches etc	m2	328	
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
16	Strip footings	m3	33	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>ROUGH FORMWORK</u>			
	<u>Rough formwork to sides:</u>			
17	Edges,risers,ends and reveals not exceeding 300mm or wide.	m	36	
	<u>TEST CUBES</u>			
18	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	8.0	
	<u>REINFORCEMENT</u>			
	<u>High tensile steel reinforcement to structural concrete work</u>			
19	12mm Diameter bars	t	1.000	
	<u>BRICKWORK</u>			
	<u>Brick work of NFX (14MPa nominal compressive strength) in class I mortar:</u>			
20	One brick walls	m2	156	
21	12mm Fibre board built in vertically between brick skins.	m2	10	
	Carried Forward			R
	Section No. 5			
	Bill No. 1			
	FOUNDATIONS			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>BRICKWORK SUNDRIES</u>			
<u>Brickwork reinforcement</u>			
22	150mm Wide reinforcement built in horizontally	m	1 716
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of R4000.00/1000 delivered to the side excluding VAT) pointed with recessed horizontal and vertical joints</u>			
23	Extra over brickwork for face brickwork	m2	45
<u>Expansion joints with bitumen impregnated softboard between vertical concrete surfaces and brickwork</u>			
24	12 x 20 mm in vertival expansion joints including raking out expansion joint filler as necessary.	m	36
 Carried Forward to Summary of Section No. 5			R
Section No. 5			
Bill No. 1			
FOUNDATIONS			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	Carried Forward		R	
	Section No. 5 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<u>REINFORCED CONCRETE</u>			
<u>20MPa/19mm concrete</u>			
1	Surface beds cast in panels on waterproofing.	m3	30
2	Surface beds cast in panels	m3	8
3	Ramps	m3	2
<u>UNREINFORCED CONCRETE</u>			
Carried Forward			R
Section No. 5 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>20MPa/19mm concrete</u>		
4	Aprons cast in panels to falls	m3	12
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	80
<u>TEST CUBES</u>			
6	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	5.0
<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
7	Surface beds, slabs, etc	m2	257
8	Aprons to falls	m2	80
<u>FORMWORK</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
	<u>Rough formwork to sides</u>		
9	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	80
<u>REINFORCEMENT</u>			
	<u>Fabric reinforcement</u>		
10	Ref 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	337
<u>MOVEMENT JOINTS ETC</u>			
Carried Forward			R
Section No. 5 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Section No. 5
Bill No. 2
CONCRETE, FORMWORK AND REINFORCEMENT
**PREPARED BY : MJ QUANTITY SURVEYORS AND
PROJECTMANAGERS**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<u>Reinforced brick lintels</u>			
	Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
	Carried Forward		R	
	Section No. 5 Bill No. 3 MASONRY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls in beamfilling.	m2	27
2	Half brick walls	m2	111
3	One brick walls	m2	366
<u>BRICKWORK SUNDRIES</u>			
<u>Joint forming material in movement joints:</u>			
4	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	24
<u>Brickwork reinforcement</u>			
5	75mm Wide reinforcement built in horizontally	m	444
6	150mm Wide reinforcement built in horizontally	m	1 442
<u>Turning pieces</u>			
7	115mm Wide turning piece to lintels etc	m	27
8	230mm Wide turning piece to lintels etc	m	8
Carried Forward			R
Section No. 5 Bill No. 3 MASONRY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Galvanised wire ties etc</u>		
9	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	52
	<u>FACE BRICKWORK</u>		
	<u>Face bricks (Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
10	Extra over brickwork for face brickwork	m2	293
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
11	Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffits	m	22
12	Extra over brickwork for brick-on-edge header course lintel pointed on face and 230mm soffits	m	4
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
13	Window sill set flat	m	22
14	220mm Wide sill set sloping and slightly protecting outside	m	22
15	Coping on top of one brick wall	m	46
Carried Forward to Summary of Section No. 5			R
Section No. 5			
Bill No. 3			
MASONRY			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
<u>SECTION NO.4</u>				
<u>BUILDING WORK</u>				
<u>BILL NO.4</u>				
<u>WATERPROOFING</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				

<u>SUPPLEMENTARY PREAMBLES</u>				
<u>Waterproofing</u>				
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>One layer of 375 micron Consol Plastic Brikgrip DPC"</u> <u>embossed damp proof course</u>				
1	In walls	m2	36	
<u>One layer of 250 micron "Consol Plastic USB Green"</u> <u>waterproof sheeting sealed at laps with "Gunplas</u> <u>Pressure Sensitive Tape"</u>				
2	Under surface beds	m2	257.60000 0	
<u>JOINT SEALANTS ETC</u>				
<u>Silicone sealing compound including backing cord, bond</u> <u>breaker, primer, etc</u>				
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional)	m	60	
Carried Forward to Summary of Section No. 5				R
Section No. 5 Bill No. 4 WATERPROOFING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.5</u>			
	<u>ROOF COVERINGS ETC</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	Carried Forward		R	
	Section No. 5 Bill No. 5 ROOF COVERINGS, ETC PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Section No. 5
Bill No. 5
ROOF COVERINGS, ETC
**PREPARED BY : MJ QUANTITY SURVEYORS AND
PROJECTMANAGERS**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.6</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Particle board:</u>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<u>Joinery:</u>			
	Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 5 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: right;">Brought Forward</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p> <p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 5 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p style="text-align: right;">Brought Forward</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p> <p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p>	<p style="text-align: right;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>Section No. 5 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: right;">R</p>

<p style="text-align: right;">Brought Forward</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p> <p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p>	<p style="text-align: center;">R</p>
<p style="text-align: right;">Carried Forward</p> <p>Section No. 5 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

Brought Forward			R
<u>Specific specifications for roof trusses</u>			
Unless otherwise described, the following specifications will apply:			
1 All trusses to be with a 10° pitch			
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres			
<u>ROOFS</u>			
<u>The following in plate nailed timber roof truss construction</u>			
<u>The following is applicable in respect of roof trusses</u>			
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
<u>Sawn softwood</u>			
1	Roof construction to double pitched roof approximately 257m2 on plan all in accordance with Architects drawings	No	1
<u>Sawn softwood grade 4</u>			
2	38 x 114mm Wall plates	m	68
3	38 x 114mm Bracing	m	52
4	38 x 76mm Bracing	m	52
5	50 x 76mm Purlins	m	315
Carried Forward			R
Section No. 5 Bill No. 6 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Sundries</u>			
6	Two coats creosote on sawn timbers	m2	57
7	4mm Diameter galvanised wire tie 750mm girth wrapped around rafter and purlin with ends tied together	No	312
<u>EAVES, VERGES, ETC</u>			
<u>"Everite FC77" pressed fibre-cement</u>			
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	66
<u>DOORS, ETC</u>			
<u>Wrought meranti doors hung to steel frames</u>			
9	44mm Framed and ledged batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	8
<u>Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>			
10	40mm Door 813 x 2032mm high	No	10
11	40mm Door 914 x 2032mm high	No	6
<u>Money Provision:</u>			
12	Provide the amount of R 118 600.00(One Hundred and Eighteen Thousands, Six Hundred rands only) for the supply and delivery of Single desks, Chairs and all joinery fittings in classrooms.	Item	118 600.00
Carried Forward to Summary of Section No. 5			R
Section No. 5			
Bill No. 6			
CARPENTRY AND JOINERY			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No	Quantity	Rate	Amount
<u>SECTION NO.4</u>			
<u>BUILDING WORK</u>			
<u>BILL NO.8</u>			
<u>CEILING , ETC.</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Descriptions:</u>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
<u>Insulation</u>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	258
<u>Wrought meranti</u>			
2	19 x 76mm cornices and quadrant nailed	m	187
<u>NAILED UP AND SCREWED UP CEILINGS</u>			
Carried Forward			R
Section No. 5 Bill No. 7 CEILING, PARTITIONS AND ACCESS FLOORING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward				R
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm brander at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	258	
4	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	2	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
Bill No. 7				
CEILING, PARTITIONS AND ACCESS FLOORING				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.9</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
	<p><u>LOCKS</u></p>			
	Carried Forward		R	
	<p>Section No. 5 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward			R
	<u>"Solid"</u>			
2	"Code 630" padlock	No	4	
	<u>"EN-SUIT LOCKS"</u>			
	The following locks are to be suitable for master key operation:			
3	"Union" L - 22315 - 76SS/2 X 18SC Double cylinder lockset with "solid" AL 6D45 - 05AS Dove aluminum lever handle on 150 x 150mm back plate with oval cylinder piercing and striking plate fixed to metal.	No	4	
	<u>Approved</u>			
4	"Code 460/313" Blesbok four lever lockset	No	16	
5	Master keys	No	20	
	<u>"Solid"</u>			
6	AL 5066E - E10/2AS Engraved aluminium plate with "Male" toilet sign.	No	4	
7	AL 5066E - E10/2AS Engraved aluminium plate with "Female" toilet sign.	No	4	
	<u>SUNDRIES</u>			
	<u>"Union"</u>			
8	CZ 8731SC Door stop plugged	No	20	
	<u>BATHROOM FITTINGS</u>			
9	"Nampak Tissue Elite" code TR2 tissue dispenser plugged.	No	6	
10	"Nampak Tissue Elite" code 0532 liquid soap dispenser plugged.	No	6	
11	"Nampak Tissue Elite" code 0523 hand towel dispenser plugged.	No	6	
	Carried Forward			R
	Section No. 5 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
12	"Nampak Tissue Elite" code 0404 waste bin dispenser plugged. <u>Approved "Kimberly - Clark"</u>	No	4	
13	"Kleenex" Anti theft toilet roll holder fixed to wall. <u>"Chairman industries"</u>	No	6	
14	32mm "Code DL2 L/R" Side grab rail plugged	No	2	
15	32mm "Code SR2" Rear grab rail plugged <u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u> <u>"Vitrex"</u>	No	2	
16	Pinning boards 2400 x 1200mm high fixed to brickwork	No	4	
17	Vitrex system enamelled green folding type writing board, with wall mounted centre board 4000 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high plugged	No	2	
Carried Forward to Summary of Section No. 5				R
Section No. 5 Bill No. 8 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 10</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>Drawings</u>			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	<u>SUNDRY METALWORK</u>			
	<u>The following in identical steel support columns</u>			
1	Bolts, complete with nuts and two washers each	kg	14	
2	76 x 76 x 3mm Tubular section columns 3050mm high	No	14	
3	75 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)	No	14	
	Carried Forward		R	
	Section No. 5 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	14
5	12mm Diameter x 75mm long sleeved masonry anchor (Provisional)	No	14
<u>BRACKETS FOR WORKTOPS IN THE KITCHEN, STORES, ETC.</u>			
6	Brackets size 450 x 480mm high with 658mm long cross bracing fixed to wall with and including bolts at 1 100mm centres.	No	60
<u>WELDED SCREENS, GATES, ETC</u>			
<u>Gates to external doors</u>			
7	Single gate and frame 914 x 2032mm high comprising of 25 x 25 x 2mm hollow section frames and 25 x 25 x 2mm square section vertical rails at 75mm centres and fitted with a pair of suitable hinges welded to frames and with locking mechanism for padlock all in and including outer frame of 25 x 25 x 2mm hollow section welded frame bolted to brickwork.	No	5
<u>PRESSED STEEL DOOR FRAMES</u>			
<u>1.2mm Double rebated frames suitable for half brick walls</u>			
8	Frame for door 813 x 2032mm high.	No	10
9	Frame for door 914 x 2032mm high.	No	6
<u>PRESSED STEEL COMBINATION DOORS AND FRAMES</u>			
Carried Forward			R
Section No. 5 Bill No. 9 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward		R
	<u>"Nty" doors</u>		
10	"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame	No	4
	<u>STEEL WINDOWS, DOORS, ETC</u>		
	<u>"Nty" steel residential windows with burglar bars to all sashes</u>		
11	NTY Standard School type window "Code 5/2" size 1143 x 486mm high	No	2
12	NTY Standard School type window "Code 5/2" size 1143 x 846mm high	No	14
13	Window type NC1, 949 x 533mm high	No	8
	<u>CORNER PROTECTORS</u>		
14	50 X 50 X 4mm Angle section fixed to edge of floor	m	45
 Carried Forward to Summary of Section No. 5			
Section No. 5			
Bill No. 9			
METALWORKS			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 11</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	204	
	<u>GRANOLITHIC</u>			
	<u>Untinted granolithic on concrete</u>			
2	30mm Thick on floors and landings	m2	54	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
3	On walls	m2	561	
4	On narrow widths	m2	6	
	 Carried Forward to Summary of Section No. 5			
	Section No. 5			
	Bill No. 10			
	PLASTERING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			
			R	

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.12</u>			
	<u>TILING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<u>WALL TILING</u>			
	<u>150 x 150 x 5mm Glazed ceramic wall tiles fixed with adhesive to plaster (plaster elsewhere)</u>			
1	On walls in splashback	m2	3	
2	On narrow widths	m2	1	
	<u>FLOOR TILING</u>			
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R180.00/m2 VAT excl.) fixed with adhesive and flush pointed with tinted waterproof jointing compound</u>			
3	On floors and landings	m2	204	
	Carried Forward		R	
	Section No. 5 Bill No. 11 TILLING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
4	Skirting formed of ceramic tile cut to 300 x 75mm high	m	187	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
Bill No. 11				
TILLING				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.13</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>"Polylink" polypropylene pipes:</u></p> <p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p> <p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			
			R	

Brought Forward	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
Carried Forward	R
<p>Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

Brought Forward	R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p>	
Carried Forward	R
<p>Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

<p>Brought Forward</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p>	<p>R</p>
<p>Carried Forward</p> <p>Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p>R</p>

Brought Forward			R	
<u>Flush pans</u>				
Flush pans shall have straight or side outlets and "P" or "S" traps as necessary				
<u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u>				
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable				
<u>Waste unions</u>				
Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings				
<u>Steel sectional water tanks</u>				
Tanks shall comply with SABS CKS 114				
<u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u>				
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described				
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc				
<u>RAINWATER DISPOSAL</u>				
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>				
1	100 x 125mm Eaves gutters with beaded front edge	m	54	
2	Extra over eaves gutter for angle	No	8	
3	Extra over eaves gutter for stopped end	No	4	
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	8	
Carried Forward			R	
Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECT MANAGERS				

	Brought Forward			R	
5	100mm Diameter rainwater pipes	m	28		
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8		
7	Extra over rainwater pipe for shoe	No	8		
<u>SANITARY FITTINGS</u>					
<u>"City Metal Products" or similar approved stainless steel</u>					
8	"Series 300" single end bowl overlay sink size 535 x 1 050 long with one 460 x 355 x 150mm deep bowl.	No	2		
<u>"Vaal" or Similar approved</u>					
9	510 x 405mm "Hibiscus" (code 7050) white vitreous rounded lavatory basin with one tap holes fixed to wall with and including two semi - concealed brackets (code 8446Z0)	No	3		
10	"Hibiscus" vitreous china close coupled Junior washdown pan (code 752600) complete with double flap heavy duty plastic seat with adjustable hinges and matching 6/3 litre top dual flush cistern (code 710741)	No	2		
11	"Protea" Paraplegic vitreous china washdown pan with double flap heavy duty plastic seat and matching 9 litre cistern complete with lid, fitment and purpose made chromium plated side - flush lever fixed to brickwork as item	No	2		
<u>WASTE UNION ETC</u>					
<u>"Cobra watertech"</u>					
12	32mm 301CP waste union	No	4		
<u>TRAPS ETC</u>					
13	32mm Deep seal "P" or "S" trap	No	3		
Carried Forward				R	
Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECT MANAGERS					

	Brought Forward			R
	<u>"Cobra Watertech"</u>			
14	38mm 365/40 CP Bottle trap	No	4	
	<u>TAPS, VALVES, ETC</u>			
15	15mm Stopcock	No	14	
16	15mm Full-way gate valve	No	2	
	<u>"Cobra Watertech"</u>			
17	15mm 114 - 15CP "Star" pillar tap	No	6	
18	15mm 114 - 15CP "Carina" pillarcock	No	4	
19	15mm 166/041CP "Carina" sink mixer	No	2	
20	PA3.522 "Masterflo" pressure control valve with PB1.10 Vacuum breaker.	No	1	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>			
21	50mm Pipes	m	8	
22	110mm Pipes	m	9	
23	50mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	17	
24	110mm Pipe laid in and including trenches not exceeding 1m deep under surfacebeds	m	72	
25	110mm Pipe laid in and including trenches exceeding 1m deep and not exceeding 2m deep.	m	38	
	<u>Pre-cast concrete gulleys</u>			
26	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	2	
	Carried Forward			R
	Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Inspection chambers (covers elsewhere)</u>			
27	Inspection chamber 450 x 600mm x exceeding 750mm and not exceeding 1000mm deep internally	No 2	
<u>Covers, etc</u>			
28	450 x 600mm x 74kg Type 8A cast iron double seal manhole cover and frame	No 2	
<u>Sundries</u>			
29	100mm Cast iron "ABC" cleaning eye	No 6	
30	Precast concrete inspection eye marker slab set in ground	No 6	
31	110mm Rodding eye	No 4	
32	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3 5	
33	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3 2	
<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No 4	
35	50mm Access junction	No 2	
36	110mm Pan connector	No 2	
37	110mm Bent pan connector	No 2	
38	50mm Access bend	No 2	
39	110mm Access bend	No 2	
40	110mm Two-way vent valve	No 2	
<u>TESTING</u>			
41	Testing waste pipe system	Item	
Carried Forward			R
Section No. 5 Bill No. 12 PLUMBING AND DRAINAGE PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward				R
<u>WATER SUPPLIES</u>				
<u>Galvanised steel pipes</u>				
42	50mm Pipes	m	45	
<u>Extra over galvanised steel pipes for fittings</u>				
43	50mm Elbow	No	4	
44	50mm Reducer	No	2	
<u>Class O copper pipes</u>				
45	15mm Pipes	m	132	
46	22mm Pipes	m	58	
<u>Extra over class O copper pipes for capillary fittings</u>				
47	15mm Fittings	No	16	
48	22mm Fittings	No	12	
<u>Copper overflow and service pipes</u>				
49	15mm Service pipe 450mm girth	No	1	
<u>TESTING</u>				
<u>Testing</u>				
50	Testing water pipe system		Item	
<u>FIRE APPLIANCES ETC</u>				
<u>'Chubb' or similar "Approved"</u>				
51	"Everyway" fire hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1	
52	9kg Dry chemical fire extinguisher	No	2	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
Bill No. 12				
PLUMBING AND DRAINAGE				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 14</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	20	
	<u>4mm Rough cast glass</u>			
2	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	11	
	<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	<u>4 mm Silvered float glass copper backed mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
3	Mirror 400 x 600mm high with four (4) screws	No	4	
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5			
	Bill No. 13			
	GLAZING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 15</u>			
	<u>PAINTWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth			
	<u>Previously painted metal surfaces</u>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<u>Previously painted wood surfaces</u>			
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON INTERNAL FLOATED PLASTER SURFACE</u>			
	Carried Forward		R	
	Section No. 5 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>One coat sealer/under coat and two coats interior quality "Acrylic PVA" emulsion paint.</u>			
1	On internal walls	m2	561
<u>ON FIBRE-CEMENT</u>			
<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings and cornices	m2	258
<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
3	On fascias and barge boards	m2	18
4	On window sills not exceeding 300 mm girth	m	3
<u>ON METAL</u>			
<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>			
5	On door frames	m2	35
6	On windows with burglar bars	m2	37
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	23
<u>ON WOOD</u>			
<u>One coat wood primer, one universal undercoat and two coats polyurethane enamel paint</u>			
8	On doors	m2	61
<u>One coat wood primer, one coat universal undercoat and two coats polyurethane high gloss varnish</u>			
9	On doors	m2	15
Carried Forward			R
Section No. 5 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
10	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	187	
Carried Forward to Summary of Section No. 5				R
Section No. 5 Bill No. 14 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Bill No	SECTION SUMMARY - ONE X TWO GRADE R CLASSROOM BLOCK		Page No	Amount	
1	FOUNDATIONS		163		
2	CONCRETE, FORMWORK AND REINFORCEMENT		167		
3	MASONRY		170		
4	WATERPROOFING		171		
5	ROOF COVERINGS, ETC		173		
6	CARPENTRY AND JOINERY		179		
7	CEILING, PARTITIONS AND ACCESS FLOORING		181		
8	IRONMONGERY		184		
9	METALWORKS		187		
10	PLASTERING		188		
11	TILLING		190		
12	PLUMBING AND DRAINAGE		199		
13	GLAZING		200		
14	PAINTWORK		203		
				R	
Carried to Final Summary					
Section No. 5					
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS					

Item No		Quantity	Rate	Amount
	<u>SECTION NO 5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO 1</u>			
	<u>ALTERATIONS</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	Unless otherwise stated, all materials from the alterations and demolition will belong to the builder.			
	The builder should allow for the removal of all debris from site and keeping the site clean at all times.			
	The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned.			
	NATURE OF WORK: Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders any items not specifically mentioned which they may deem necessary for the proper completion of the work. Tenderers are advised that the existing building will be in occupation during the progress of the work and due allowance must be made for work being carried out at such times and in such manner as will least interfere with the routine of the occupants and as may be directed by the Quantity Surveyor.			
	NATURE OF WORK: Tenderers are advised to visit the site and thoroughly acquaint themselves with the nature of demolitions, the nature and the extent the work to be done and adequate provisions are to be made in tendered rates for items not specifically mentioned which they may deem necessary for the proper			
	Carried Forward		R	
	Section No. 6 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: center;">Brought Forward</p> <p>completion of the work</p> <p>SCHOOL TO REMAIN OPERATIONAL: Tenderers are to note that all existing buildings of the facility will remain occupied and fully operational during the construction period and due allowance must be made for the work being carried out at such times and in such manner as directed by the Principal Agent to ensure the least interference with the routine of the School.</p> <p>DEMOLITIONS OF BUILDINGS: Tenderers are to note that tendered rates for the demolitions of buildings are to cater for the following:</p> <ul style="list-style-type: none"> - The temporary closing off and/or diversion of existing services i.e. water supply, sewer lines, etc - The complete ripping out and removal of old foundations and deed underground services as referred to above. - Trenches, holes, etc. created as a result of the removal of foundations, services, etc shall be backfilled with approved filling material and compacted to 95% Mod AASHTO density. - All other disturbed levels shall be ripped for a depth of 150mm, including breaking down oversize material and compacted to 93% Mod AASHTO density. - It will at all times throughout the contract period, be expected from the Contractor to, immediately after each portion of demolishing has been completed, remove and cart away all building rubble generated to a dumping site to be located by the Contractor off the hospital premises. The temporarily dumping and/or stockpiling of rubble on site will not be permitted <p>CARTING AWAY OF EXCESSIVE AND/OR UNSUITABLE EXCAVATED MATERIAL, BUILDING RUBBLE, ETC</p> <p>Descriptions for "carting away excessive or unsuitable excavated material, building rubble from demolitions, etc from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material, building rubble from demolitions, etc. to a suitable dumping site to be located by the Contractor off the</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 6 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>building site.</p> <p>The location of the intended dumping site will be subjected to prior written approval of the Principal Agent.</p> <p>The Contractor will also be liable to, upon completion, rehabilitate all those areas of the dumping site used dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the satisfaction of the Principal Agent.</p> <p>Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained.</p> <p>The re-use of old materials obtained from the demolitions in the construction of the new buildings, for filling, etc will not be permitted.</p> <p>EXISTING SERVICES: Special care is to be taken by the Contractor not to interfere unnecessarily with existing services. Should the contractor encounter any existing services such as underground cables, pipes or sewers during the execution of the works he shall notify the Principal Agent immediately and suspend all affected work in the immediate vicinity until such have been dealt with (i.e. removed, disconnected, re-routed, etc) and instruction to proceed with the work has been given by the Principal Agent</p> <p>The Contractor shall afford every facility to Specialist which might be employed by the Principal Agent to effect the necessary removal, disconnection, re-routing, etc of services as might be required.</p> <p>PROTECTION: In taking down and demolishing existing work the utmost care is to be observed to avoid any structural or other damages to the remaining portions and/or adjacent buildings, structures and services, etc. It will be expected from the Contractor to, at all times, employ adequate precaution measures in this regard and to provide all necessary materials for so doing</p> <p>The Contractor will be held solely responsible for any damages to persons or property and for the safety of the structures throughout the whole of this Contract and</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 6 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>shall make good at his own expense any such damages arising out of his failure to adhere to the aforesaid requirement.</p> <p>FILLING: Where described as "including back filling", "back filling" shall mean the filling of all trenches, holes, etc. with approved gravel filling (Minimum G5 standard) to be obtained from a commercial source and compacted to 93% Mod AASHTO density.</p> <p>OLD MATERIAL:</p> <p>Unless specifically otherwise described, all other old materials from demolitions are to become the property of the SCHOOL, therefore, tendered rates for demolitions must cater for adequate credit in this regard.</p> <p>It will be expected from the Contractor that all old materials not required, rubble, rubbish, etc. to be immediately carted away and site left clean and unencumbered at all times.</p> <p>MEASUREMENT: Measurement given are approximate and the Contractor is advised to view the site and existing structures to be demolished and to thoroughly acquaint himself with the extent of the work to be done.</p> <p>Any errors to the tendered rates in this regard shall be Contractor's expense as no claims in this regard will be entertained afterwards</p> <p>TENDER: The submission of a tender will imply that the Contractor has physically visited the site and fully understands the content and extent of the work described in this Bill and, therefore, accepts that no claims in this respect will thus be entertained afterwards.</p> <p>DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct size.</p> <p>PIPES, ETC Special care is to be taken not to interfere unnecessary with any supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the QS to whom</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 6 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

Brought Forward			R
<p>due notice must be given of any alterations to the existing services.</p> <p>PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc. from damage during the progress of the work and provide all necessary materials for doing so. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must make good at his own expense any damage that may occur.</p> <p>CREDITS, ETC Old materials from the pulling down (except such as described to be re-used) are to become the property of the LIMPOPO DEPARTMENT OF EDUCATION. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old materials described to be handed over are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. None of the old stock bricks from the pulling down are to be re-used for any new work.</p> <p>MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.</p>			
<u>REMOVAL OF EXISTING WORK</u>			
<u>Breaking up and removing mass concrete</u>			
1	Concrete apron	m2	90
2	85mm Thick surface bed in panels	m2	12
Carried Forward			R
<p>Section No. 6 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Brought Forward			R
	<u>Breaking down and removing brickwork etc</u>		
3	220mm brick on edge coping and prepare to receive new coping (new coping elsewhere measured)	m	37
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc and setting aside for re-use</u>		
4	Ceilings including brandering	m2	275
5	Fascias and barge boards	m	90
	<u>Taking out and removing doors, windows, etc from brickwork to be demolished</u>		
6	Timber single door and frame not exceeding 2,5m2	No	4
	<u>Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screeds, plaster, etc</u>		
7	30mm granolithic from concrete floors	m2	275
	<u>Taking out and removing sundry joinery work</u>		
8	Timber skirtings from brickwork	m	120
	<u>Taking out and removing ironmongery</u>		
9	Damaged pinning boards size approximately 1200mm x 1500mm high	No	8
10	Damaged writing boards size approximately 4500mm x 1500mm high	No	4
	<u>Taking out and removing glass and mirrors</u>		
11	Glass from steel windows including cleaning out rebates and preparing and installing new glass	m2	39

Brought Forward			R
	<u>Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>		
12	9kg Dry chemical fire extinguisher including timber backboards	No	4
	<u>PREPARATORY WORK TO EXISTING SURFACES</u>		
13	Sanding down existing enamel painted door frame, washdown, scrap out cracks, crevices and holes, prime, make good with hard stopping, faced up and rubbed down to an even surface ready to receive new paint.	m2	7
	<u>Repairs of the cracks in the administrative building brickwork above door D61, ceiling crack and brick balustrade that is cracking open by:</u>		
14	Chip open and carefully repair crack with suitable bonding mesh and mortar to the architect satisfaction.	m	3
	<u>CLEANING</u>		
	<u>Cleaning existing surfaces</u>		
15	Clean down existing facebrick wall surface with suitable pressure cleaning agent in accordance with manufacturers specifications and instructions, to architects satisfaction.	m2	628
	<u>SERVICE</u>		
	<u>Service, clean, fix to wall, and replace any necessary parts and leave in a perfect working condition.</u>		
16	Service, clean, opening sections, including replacement of broken and missing stays and leave in good working conditions	No	36
17	Pressed steel door frame and replace any necessary parts and leave in a good working conditions	No	4
Carried Forward			R
Section No. 6 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward		R	
18	Single gate and frame 914 x 2032mm high fitted with a pair of suitable hinges welded to frames and with locking mechanism for padlock welded frame bolted to brickwork and leave in a good working condition.	No	4	
	<u>Post construction termite proofing</u>			
	<u>Money Provision:</u>			
19	Allow an amount of R 10 000.00 (Ten Thousand Rand) for post construction termite treatment	Item		10 000.00
Carried Forward to Summary of Section No. 6				R
Section No. 6				
Bill No. 1				
ALTERATIONS				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	Carried Forward		R	
	Section No. 6 Bill No. 2 CONCRETE, FORMWORK, AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<u>REINFORCED CONCRETE</u>			
<u>20MPa/19mm concrete</u>			
1	Surface beds cast in panels	m3	2
<u>UNREINFORCED CONCRETE</u>			
<u>20MPa/19mm concrete</u>			
2	Aprons cast in panels to falls	m3	9
Carried Forward			R
Section No. 6 Bill No. 2 CONCRETE, FORMWORK, AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	90	
	<u>TEST CUBES</u>			
4	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	4.0	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
5	Surface beds, slabs, etc	m2	12	
6	Aprons to falls	m2	89	
	<u>FORMWORK</u>			
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
	<u>Rough formwork to sides</u>			
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	16	
	<u>REINFORCEMENT</u>			
	<u>Fabric reinforcement</u>			
8	Ref 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	12	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
9	15mm Joints exceeding 300mm high (Provisional)	m	6	
	Carried Forward			R
Section No. 6 Bill No. 2 CONCRETE, FORMWORK, AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Section No. 6
Bill No. 2
CONCRETE, FORMWORK, AND REINFORCEMENT
**PREPARED BY : MJ QUANTITY SURVEYORS AND
PROJECTMANAGERS**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 3</u>			
	<u>MASONRY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>BRICKWORK</u>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<u>Reinforced brick lintels</u>			
	Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
	Carried Forward		R	
	Section No. 6 Bill No. 3 MASONRY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
1	Coping on top of one brick wall	m	37
2	One course high plinth for stationary cabinet(cabinet measured elsewhere) size 914 x 457mm wide overall formed of half brick wide face brick along front and two sides, fair and pointed on all exposed vertical sides, the hole filled with 15mpa concrete finished smooth on top with wooden float.	No	4
Carried Forward to Summary of Section No. 6			R
Section No. 6			
Bill No. 3			
MASONRY			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
1	Under surface beds	m2	12.000000	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
2	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional)	m	12	
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6			
	Bill No. 4			
	WATERPROOFING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.5</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Particle board:</u>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<u>Joinery:</u>			
	Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 6 Bill No. 5 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: center;">Brought Forward</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p> <p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p>	<p>R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 6 Bill No. 5 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p>R</p>

<p style="text-align: center;">Brought Forward</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p> <p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p>	R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 6 Bill No. 5 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	R	

Brought Forward	R
<p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p> <p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p>	
Carried Forward	R
<p>Section No. 6 Bill No. 5 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	

Brought Forward					R
<u>Specific specifications for roof trusses</u>					
Unless otherwise described, the following specifications will apply:					
1 All trusses to be with a 10° pitch					
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres					
<u>ROOFS</u>					
<u>The following in plate nailed timber roof truss construction</u>					
<u>The following is applicable in respect of roof trusses</u>					
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes					
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured separately)					
<u>EAVES, VERGES, ETC</u>					
<u>"Everite FC77" pressed fibre-cement</u>					
1	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	90		
<u>DOORS, ETC</u>					
<u>Wrought meranti doors hung to steel frames</u>					
2	44mm Framed and ledged batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	4		
Carried Forward to Summary of Section No. 6					R
Section No. 6					
Bill No. 5					
CARPENTRY AND JOINERY					
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS					

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.6</u>			
	<u>CEILING , ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. -----			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions:</u> Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	275	
	<u>Wrought meranti</u>			
2	19 x 76mm cornices and quadrant nailed	m	190	
	<u>NAILED UP AND SCREWED UP CEILINGS</u>			
	Carried Forward		R	
	Section No. 6 Bill No. 6 CEILINGS,PARTITIONS, AND ACCESS FLOORING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward				R
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm brander at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	275	
4	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	4	
Carried Forward to Summary of Section No. 6				R
Section No. 6				
Bill No. 6				
CEILINGS,PARTITIONS, AND ACCESS FLOORING				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4	
	<p><u>LOCKS</u></p>			
	Carried Forward		R	
	<p>Section No. 6 Bill No. 7 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward			R
	<u>"Solid"</u>			
2	"Code 630" padlock	No	4	
	<u>"EN-SUIT LOCKS"</u>			
	<u>Approved</u>			
3	"Code 460/313" Blesbok four lever lockset	No	4	
4	Master keys	No	4	
	<u>SUNDRIES</u>			
	<u>"Union"</u>			
5	CZ 8731SC Door stop plugged	No	4	
	<u>STEEL CUPBOARDS</u>			
	<u>Aproved steel lockers with standard baked enamel finish</u>			
6	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	4	
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>			
	<u>"Vitrex"</u>			
7	Pinning boards 2400 x 1200mm high fixed to brickwork	No	8	
8	Vitrex system enamelled green folding type writing board, with wall mounted centre board 4000 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high plugged	No	4	
Carried Forward to Summary of Section No. 6				R
Section No. 6				
Bill No. 7				
IRONMONGERY				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 7</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>PRESSED STEEL COMBINATION DOORS AND FRAMES</u></p> <p><u>CORNER PROTECTORS</u></p>			
1	50 X 50 X 4mm Angle section fixed to edge of floor and walls	m	46	
	Carried Forward to Summary of Section No. 6		R	
	<p>Section No. 6</p> <p>Bill No. 8</p> <p>METALWORKS</p> <p>PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Item No		Quantity	Rate	Amount
SECTION NO.5				
BUILDING WORK				
BILL NO. 8				
PLASTERING				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				

SCREEDS				
Screeds on concrete				
1	30mm Thick on floors	m2	225	
GRANOLITHIC				
Untinted granolithic on concrete				
2	30mm Thick on floors and landings	m2	66	
Carried Forward to Summary of Section No. 6				R
Section No. 6 Bill No. 9 PLASTERING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.9</u>			
	<u>TILING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<u>FLOOR TILING</u>			
	<u>300 x 300 x 11.5mm Ceramic floor tiles (PC R180.00/m2 VAT excl.) fixed with adhesive and flush pointed with tinted waterproof jointing compound</u>			
1	On floors and landings	m2	225	
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	120	
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6			
	Bill No. 10			
	TILLING			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
<u>SECTION NO.5</u>				
<u>BUILDING WORK</u>				
<u>BILL NO. 10</u>				
<u>GLAZING</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				

<u>GLAZING TO STEEL WITH PUTTY</u>				
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	35	
	<u>4mm Rough cast glass</u>			
2	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	20	
Carried Forward to Summary of Section No. 6				R
Section No. 6				
Bill No. 11				
GLAZING				
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 11</u>			
	<u>PAINTWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth			
	<u>Previously painted metal surfaces</u>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<u>Previously painted wood surfaces</u>			
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
	<u>PAINTWORK ETC TO PREVIOUSLY PAINTED WORK</u>			
	<u>ON METAL</u>			
	<u>SPECIALISED COATINGS</u>			
	Carried Forward		R	
	Section No. 6 Bill No. 12 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>One coat cleaning agent and spray two coats ceramic based liquid thermal coating in accordance with manufacturer's instruction.</u>		
1	On corrugated iron roof sheeting	m2	412
	<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>		
2	On windows frames	m2	121
3	On door frames	m2	7
4	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	15
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>		
5	On ceilings and cornices	m2	275
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>		
6	On fascias and barge boards	m2	32
<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>		
7	On door frames	m2	7
8	On windows with burglar bars	m2	4
9	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	15
Carried Forward			R
Section No. 6 Bill No. 12 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>ON WOOD</u>			
<u>One coat wood primer, one coat universal undercoat and two coats polyurithane high gloss varnish</u>			
10	On doors	m2	15
11	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	120
Carried Forward to Summary of Section No. 6			R
Section No. 6			
Bill No. 12			
PAINTWORK			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

SECTION SUMMARY - REFURBISHMENT OF EXISTING FOUR CLASSROOM

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Item No		Quantity	Rate	Amount
	<u>SECTION NO 6</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO 1</u>			
	<u>ALTERATIONS</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	Unless otherwise stated, all materials from the alterations and demolition will belong to the builder.			
	The builder should allow for the removal of all debris from site and keeping the site clean at all times.			
	The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned.			
	NATURE OF WORK: Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders any items not specifically mentioned which they may deem necessary for the proper completion of the work. Tenderers are advised that the existing building will be in occupation during the progress of the work and due allowance must be made for work being carried out at such times and in such manner as will least interfere with the routine of the occupants and as may be directed by the Quantity Surveyor.			
	NATURE OF WORK: Tenderers are advised to visit the site and thoroughly acquaint themselves with the nature of demolitions, the nature and the extent the work to be done and adequate provisions are to be made in tendered rates for items not specifically mentioned which they may deem necessary for the proper			
	Carried Forward		R	
	Section No. 7 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: center;">Brought Forward</p> <p>completion of the work</p> <p>SCHOOL TO REMAIN OPERATIONAL: Tenderers are to note that all existing buildings of the facility will remain occupied and fully operational during the construction period and due allowance must be made for the work being carried out at such times and in such manner as directed by the Principal Agent to ensure the least interference with the routine of the School.</p> <p>DEMOLITIONS OF BUILDINGS: Tenderers are to note that tendered rates for the demolitions of buildings are to cater for the following:</p> <ul style="list-style-type: none"> - The temporary closing off and/or diversion of existing services i.e. water supply, sewer lines, etc - The complete ripping out and removal of old foundations and deed underground services as referred to above. - Trenches, holes, etc. created as a result of the removal of foundations, services, etc shall be backfilled with approved filling material and compacted to 95% Mod AASHTO density. - All other disturbed levels shall be ripped for a depth of 150mm, including breaking down oversize material and compacted to 93% Mod AASHTO density. - It will at all times throughout the contract period, be expected from the Contractor to, immediately after each portion of demolishing has been completed, remove and cart away all building rubble generated to a dumping site to be located by the Contractor off the hospital premises. The temporarily dumping and/or stockpiling of rubble on site will not be permitted <p>CARTING AWAY OF EXCESSIVE AND/OR UNSUITABLE EXCAVATED MATERIAL, BUILDING RUBBLE, ETC</p> <p>Descriptions for "carting away excessive or unsuitable excavated material, building rubble from demolitions, etc from site" shall be deemed to include the loading and hauling of excessive or unsuitable excavated material, building rubble from demolitions, etc. to a suitable dumping site to be located by the Contractor off the</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 7 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>building site.</p> <p>The location of the intended dumping site will be subjected to prior written approval of the Principal Agent.</p> <p>The Contractor will also be liable to, upon completion, rehabilitate all those areas of the dumping site used dumping/spoiling by grading the area to follow the adjacent ground contours and afterwards compacted to 80% Mod AASHTO density, all to the satisfaction of the Principal Agent.</p> <p>Tendered rates must make provision for the above-mentioned as no additional claims in this regard will afterwards be entertained.</p> <p>The re-use of old materials obtained from the demolitions in the construction of the new buildings, for filling, etc will not be permitted.</p> <p>EXISTING SERVICES: Special care is to be taken by the Contractor not to interfere unnecessarily with existing services. Should the contractor encounter any existing services such as underground cables, pipes or sewers during the execution of the works he shall notify the Principal Agent immediately and suspend all affected work in the immediate vicinity until such have been dealt with (i.e. removed, disconnected, re-routed, etc) and instruction to proceed with the work has been given by the Principal Agent</p> <p>The Contractor shall afford every facility to Specialist which might be employed by the Principal Agent to effect the necessary removal, disconnection, re-routing, etc of services as might be required.</p> <p>PROTECTION: In taking down and demolishing existing work the utmost care is to be observed to avoid any structural or other damages to the remaining portions and/or adjacent buildings, structures and services, etc. It will be expected from the Contractor to, at all times, employ adequate precaution measures in this regard and to provide all necessary materials for so doing</p> <p>The Contractor will be held solely responsible for any damages to persons or property and for the safety of the structures throughout the whole of this Contract and</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 7 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>shall make good at his own expense any such damages arising out of his failure to adhere to the aforesaid requirement.</p> <p>FILLING: Where described as "including back filling", "back filling" shall mean the filling of all trenches, holes, etc. with approved gravel filling (Minimum G5 standard) to be obtained from a commercial source and compacted to 93% Mod AASHTO density.</p> <p>OLD MATERIAL:</p> <p>Unless specifically otherwise described, all other old materials from demolitions are to become the property of the SCHOOL, therefore, tendered rates for demolitions must cater for adequate credit in this regard.</p> <p>It will be expected from the Contractor that all old materials not required, rubble, rubbish, etc. to be immediately carted away and site left clean and unencumbered at all times.</p> <p>MEASUREMENT: Measurement given are approximate and the Contractor is advised to view the site and existing structures to be demolished and to thoroughly acquaint himself with the extent of the work to be done.</p> <p>Any errors to the tendered rates in this regard shall be Contractor's expense as no claims in this regard will be entertained afterwards</p> <p>TENDER: The submission of a tender will imply that the Contractor has physically visited the site and fully understands the content and extent of the work described in this Bill and, therefore, accepts that no claims in this respect will thus be entertained afterwards.</p> <p>DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct size.</p> <p>PIPES, ETC Special care is to be taken not to interfere unnecessary with any supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the QS to whom</p>	<p style="text-align: center;">R</p>
<p style="text-align: center;">Carried Forward</p> <p>Section No. 7 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p>

<p style="text-align: center;">Brought Forward</p> <p>due notice must be given of any alterations to the existing services.</p> <p>PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc. from damage during the progress of the work and provide all necessary materials for doing so. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must make good at his own expense any damage that may occur.</p> <p>CREDITS, ETC Old materials from the pulling down (except such as described to be re-used) are to become the property of the LIMPOPO DEPARTMENT OF EDUCATION. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old materials described to be handed over are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. None of the old stock bricks from the pulling down are to be re-used for any new work.</p> <p>MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.</p> <p><u>REMOVAL OF EXISTING WORK</u></p> <p><u>Breaking up and removing mass concrete</u></p>		R	
<p>1 Concrete apron</p>	m2	96	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 7 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		R	

	Brought Forward			R	
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc and setting aside for re-use</u>				
2	Fascias and barge boards	m	82		
	<u>Taking out and removing doors, windows, etc from brickwork to be demolished</u>				
3	Timber single door and frame not exceeding 2,5m2	No	24		
	<u>Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screeds, plaster, etc</u>				
4	30mm granolithic from concrete floors	m2	75		
	<u>Taking out and removing glass and mirrors</u>				
5	Glass from steel windows including cleaning out rebates and preparing and installing new glass	m2	10		
	<u>PREPARATORY WORK TO EXISTING SURFACES</u>				
6	Sanding down existing enamel painted door frame, washdown, scrap out cracks, crevices and holes, prime, make good with hard stopping, faced up and rubbed down to an even surface ready to receive new paint.	m2	42		
	<u>Repairs of the cracks in the administrative building brickwork above door D61, ceiling crack and brick balustrade that is cracking open by:</u>				
	<u>CLEANING</u>				
	<u>Cleaning existing surfaces</u>				
7	Clean down existing facebrick wall surface with suitable pressure cleaning agent in accordance with manufacturers specifications and instructions, to architects satisfaction.	m2	575		
	<u>SERVICE</u>				
	Carried Forward			R	
Section No. 7 Bill No. 1 ALTERATIONS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS					

PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.2</u>			
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	Carried Forward		R	
	Section No. 7 Bill No. 2 CONCRETE FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<u>REINFORCED CONCRETE</u>			
<u>UNREINFORCED CONCRETE</u>			
<u>20MPa/19mm concrete</u>			
1	Aprons cast in panels to falls	m3	14
2	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	96
Carried Forward			R
Section No. 7 Bill No. 2 CONCRETE FORMWORK AND REINFORCEMENT PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>TEST CUBES</u>			
3	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	8.0
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	96
Carried Forward to Summary of Section No. 7			R
Section No. 7			
Bill No. 2			
CONCRETE FORMWORK AND REINFORCEMENT			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.3</u>			
	<u>CARPENTRY AND JOINERY</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Particle board:</u>			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	<u>Joinery:</u>			
	Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 7 Bill No. 3 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

<p style="text-align: right;">Brought Forward</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p> <p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 7 Bill No. 3 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	<p style="text-align: center;">R</p> <hr/> <p style="text-align: center;">R</p>
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<p style="text-align: center;">Brought Forward</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p> <p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p>	R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 7 Bill No. 3 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>	R	

Brought Forward	R	
<p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p> <p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p>		
Carried Forward	R	
<p>Section No. 7 Bill No. 3 CARPENTRY AND JOINERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

Brought Forward					R
<u>Specific specifications for roof trusses</u>					
Unless otherwise described, the following specifications will apply:					
1 All trusses to be with a 10° pitch					
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres					
<u>ROOFS</u>					
<u>The following in plate nailed timber roof truss construction</u>					
<u>The following is applicable in respect of roof trusses</u>					
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes					
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured separately)					
<u>EAVES, VERGES, ETC</u>					
<u>"Everite FC77" pressed fibre-cement</u>					
1	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	82		
<u>DOORS, ETC</u>					
<u>Wrought meranti doors hung to steel frames</u>					
2	44mm Framed and ledged batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	8		
Carried Forward to Summary of Section No. 7					R
Section No. 7					
Bill No. 3					
CARPENTRY AND JOINERY					
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS					

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	8	
	<p><u>LOCKS</u></p>			
	<p style="text-align: right;">Carried Forward</p>		R	
	<p>Section No. 7 Bill No. 4 IRONMONGERY PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

	Brought Forward			R
	<u>"Solid"</u>			
2	"Code 630" padlock	No	8	
	<u>"EN-SUIT LOCKS"</u>			
	The following locks are to be suitable for master key operation:			
3	"Union" L - 22315 - 76SS/2 X 18SC Double cylinder lockset with "solid" AL 6D45 - 05AS Dove aluminum lever handle on 150 x 150mm back plate with oval cylinder piercing and striking plate fixed to metal.	No	8	
	<u>Approved</u>			
4	"Code 460/313" Blesbok four lever lockset	No	16	
5	Master keys	No	8	
	<u>"Solid"</u>			
6	AL 5066E - E10/2AS Engraved aluminium plate with "Male" toilet sign.	No	4	
7	AL 5066E - E10/2AS Engraved aluminium plate with "Female" toilet sign.	No	4	
	<u>SUNDRIES</u>			
	<u>"Union"</u>			
8	CZ 8731SC Door stop plugged	No	24	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7			
	Bill No. 4			
	IRONMONGERY			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 7</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>WELDED SCREENS, GATES, ETC</u></p>			
<p>Carried Forward</p>			<p>R</p>
<p>Section No. 7 Bill No. 5 METALWORKS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			

Brought Forward			R
<u>Gates to external doors</u>			
1	Single gate and frame 914 x 2032mm high comprising of 25 x 25 x 2mm hollow section frames and 25 x 25 x 2mm square section vertical rails at 75mm centres and fitted with a pair of suitable hinges welded to frames and with locking mechanism for padlock all in and including outer frame of 25 x 25 x 2mm hollow section welded frame bolted to brickwork.	No	6
Carried Forward to Summary of Section No. 7			R
Section No. 7			
Bill No. 5			
METALWORKS			
PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u> <u>BUILDING WORK</u> <u>BILL NO. 6</u> <u>PLASTERING</u> For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. ----- <u>SCREEDS</u> <u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	76	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7 Bill No. 6 PLASTERING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No	Quantity	Rate	Amount
<u>SECTION NO.6</u>			
<u>BUILDING WORK</u>			
<u>BILL NO.7</u>			
<u>TILING</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Descriptions</u>			
Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
<u>FLOOR TILING</u>			
<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R180.00/m2 VAT excl.) fixed with adhesive and flush pointed with tinted waterproof jointing compound</u>			
1	On floors and landings	m2	76
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	132
Carried Forward to Summary of Section No. 7			R
Section No. 7 Bill No. 7 TILLING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u> <u>BUILDING WORK</u> <u>BILL NO. 8</u> <u>GLAZING</u> For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. ----- <u>GLAZING TO STEEL WITH PUTTY</u> <u>4mm Rough cast glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	10	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7 Bill No. 8 GLAZING PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 9</u>			
	<u>PAINTWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth			
	<u>Previously painted metal surfaces</u>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<u>Previously painted wood surfaces</u>			
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
	<u>PAINTWORK ETC TO PREVIOUSLY PAINTED WORK</u>			
	<u>ON METAL</u>			
	<u>SPECIALISED COATINGS</u>			
	Carried Forward		R	
	Section No. 7 Bill No. 9 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>One coat cleaning agent and spray two coats ceramic based liquid thermal coating in accordance with manufacturer's instruction.</u>		
1	On corrugated iron roof sheeting	m2	104
	<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>		
2	On windows frames	m2	10
3	On door frames	m2	42
4	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	8
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>		
5	On fascias and barge boards	m2	29
<u>ON METAL</u>			
	<u>Spot priming defects in pre primed surfaces, apply one coat primer , one coat under coat and two coats super gloss enamel paint</u>		
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	11
<u>ON WOOD</u>			
	<u>One coat wood primer, one universal undercoat and two coats polyurethane enamel paint</u>		
7	On doors	m2	53
Carried Forward			R
Section No. 7 Bill No. 9 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
<u>One coat wood primer, one coat universal undercoat and two coats polyurithane high gloss varnish</u>			
8	On doors	m2	30
<p>Carried Forward to Summary of Section No. 7</p> <p>Section No. 7 Bill No. 9 PAINTWORK PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>			R

SECTION SUMMARY - REFURBISHMENT OF NEW 3 X FOUR SEATER TOILE

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Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>BILL NO.1</u>			
	<u>EXTERNAL WORKS (PROVISIONAL)</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "Department Of Public Works Specification Of Materials And Methods To Be Used - PW371"			
	<u>EARTHWORKS</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	1 690	
	<u>TAKING OUT AND REMOVING,GRUBBING UP ROOTS AND FILLING IN HOLES</u>			
	Taking out and removing, grubbing up roots and filling in holes			
2	Tree stump exceeding 250mm and not exceeding 500mm girth	No	4	
	<u>RAINWATER HARVESTING</u>			
	<u>EXCAVATION,FILLING,ETC OTHER THAN BULK</u>			
	<u>Exavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	67	
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
4	Soft rock	m3	6	
5	Hard rock	m3	3	
	Carried Forward			
			R	
	Section No. 8			
	Bill No. 1			
	EXTERNAL SERVICES			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations and / or rock piles on site to a dumping site to be located by the contractor	m3	34
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	192
	<u>Keeping excavations free of water</u>		
8	Keeping excavation free of water		Item
	<u>Earth filling supplied by the contractor compacted to 93% mod AASHTO density</u>		
9	Backfilling to trenches,holes,etc	m3	32
10	Under floors,steps,paving,etc	m3	48
	<u>Prescribed density tests on filling</u>		
11	"Modified AASHTO Density" test	No	10
	<u>SOIL POISINING</u>		
	<u>Soil insecticide</u>		
12	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	96
13	To bottom trenches and sides of trenches etc	m2	259
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>15MPa/19mm Concrete</u>		
14	Surface blinding under footings	m3	3
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
Carried Forward			R
Section No. 8 Bill No. 1 EXTERNAL SERVICES PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

	Brought Forward			R	
	<u>25MPa/19mm Concrete</u>				
15	Strip footings	m3	20		
	<u>REINFORCED CONCRETE</u>				
	<u>20Mpa/19mm concrete</u>				
16	Surface beds on waterproofing	m3	14		
	<u>TEST CUBES</u>				
17	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0		
	<u>Finishing top surfaces of concrete smooth with a wood float</u>				
18	Surface beds, slabs, etc	m2	96		
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>Fabric reinforcement</u>				
19	Ref 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	96		
	<u>MASONRY</u>				
	<u>BRICKWORK</u>				
	<u>Brick work of NFX (14MPa nominal compressive strength) in class I mortar:</u>				
20	One brick wall in foundations	m2	115		
	<u>BRICKWORK SUNDRIES</u>				
	<u>Brickwork reinforcement</u>				
21	150mm reinforcement built in horizontally	m	1 152		
	Carried Forward			R	
	Section No. 8				
	Bill No. 1				
	EXTERNAL SERVICES				
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Brought Forward			R	
<u>FACE BRICKWORK</u>				
<u>Face bricks (Purchase price of R 4000,00/1000 delivered to the side excluding VAT) pointed with recessed horizontal and vertical joints</u>				
22	Extra over brickwork for face brickwork	m2	48	
<u>WATERPROOFING</u>				
<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
<u>One layer of 375 micron Consol Plastic Brickrip DPC" embossed damp proof course</u>				
23	On walls, under cills, etc	m2	22	
<u>One layer of 250 micron "Consol Plastic Brickgrip USB Green" waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"</u>				
24	Under surface beds	m2	96	
<u>RAINWATER TANKS</u>				
25	Provide a sum of R48 000,00 (Forty Eight thousand rand) for the supply and installation of Rainwater tanks complete by Specialists	Item		48 000,00
<u>10 STRUCTURAL STEEL COVERED PARKINGS</u>				
<u>"Money Provision"</u>				
26	Allow amount of R 110 000.00 (One Hundred and Ten Thousand Rand) for supply and installation of structural steel frame covered parking complete with roof covering to match existing roof covering.	Item		
<u>PAVED DRIVE WAY, PARKING, ASSEMBLY AREA AND WALKWAY</u>				
<u>EARTHWORKS</u>				
Carried Forward			R	
Section No. 8 Bill No. 1 EXTERNAL SERVICES PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS				

Brought Forward			R
	<u>Open face excavation over sloping sites</u>		
27	Open face excavation to form platform under parking areas, walkways, roads, etc and depositing excavated material over site including haulage not exceeding 1km from perimeter of excavations	m3	507
	<u>Extra over bulk excavation in earth for excavation in</u>		
28	Soft rock	m3	51
29	Hard rock	m3	15
	<u>Extra over all excavations for carting away</u>		
30	Surplus material from excavations and / or stock piles on site to a dumping site to be located by the contractor	m3	253
	<u>Keeping excavations free of water</u>		
31	Keeping excavation free of water	Item	
	<u>Earth filling obtained from stock piles on site including haulage approximately 0.5km from perimeter of stock piles (material to comply with P1 less than 10, GM>1.5, CBR > 15 and maximum aggregate size of 63mm)</u>		
32	Under roads islands, pedestals, etc compacted to 94% Mod AASHTO density	m3	75
	<u>Earth filling supplied by the contractor under paving, etc</u>		
33	Under parking areas, roads, etc of G6 material, spread, water and compact 150mm layers in accordance with SABS 1200 ME compacted to 95% Mod AASHTO density	m3	253
34	Under parking areas, roads, etc of G5 (C4) material, stabilise with 3% by volume portland cement spread, water in accordance with SABS 1200 ME and compact in 150mm thick layer compacted to 98% Mod AASHTO density	m3	253
Carried Forward			R
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Brought Forward			R
<u>Compaction of surfaces</u>			
35	Compaction of ground surfaces under pavings, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	1 690
<u>Prescribed density tests on filling</u>			
36	Maximum dry density and optimum moisture content test in accordance with method A7 of TMH 1	No	21
37	Atterberg limits test in accordance with methods A2 to A4 of TMH1	No	21
38	UCS test in accordance with method A14 of TMH 1	No	18
<u>Weedkiller</u>			
39	Approved weedkiller applied at a rate of 4g/m2 to ground surface under pavings, etc	m2	1 690
<u>Precast concrete block road surfacing in accordance with SABS 1200MJ</u>			
Paving is to be laid to herringbone pattern on 20mm river sand (Thickness after final compaction)			
Clean sand is to be swept into joints between roadstones			
<u>80mm "Approved" interlocking paving</u>			
40	Paving to parking areas etc to falls	m2	550
<u>60mm "Approved" interlocking paving</u>			
41	Paving to parking areas etc to falls	m2	1 140
Carried Forward			R
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Brought Forward			R
<u>Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing</u>			
42	Kerb (SABS 927 fig 8) 300 x 175mm high with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint including excavation, backfilling, etc	m	204
43	Kerb (SABS 927 fig 8) 300 x 250mm high with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint circular on plan exceeding 4m radius formed with short lengths of straight kerb including excavation, backfilling, etc	m	102
44	Kerb (SABS 927 fig 8) 300 x 175mm high with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint circular on plan not exceeding 4m radius formed in short lengths of straight kerbs including excavation, backfilling, etc	m	86
<u>STEEL PALISADE BOUNDARY FENCE</u>			
<u>METALWORK</u>			
<u>STEEL PALISADE FENCE</u>			
45	1.8mm high Powder coated steel palisade fence complete with all necessary earthworks concrete, etc painted with one coat universal undercoat and two coats enamel emulsion paint (as per attached drawing no: attaced at the back of the Bill Of Quantities)	m	772
<u>"MONEY PROVISION"</u>			
46	Allow an amount of R 30 000.00 (Thirty Thousand Rand) for supply and installation of steel entrance gates		Item
<u>SEPTIC TANK WITH MANHOLE AND SOAKAWAY</u>			
<u>The following in septic tank:</u>			
<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>			
47	Septic tanks	m3	101
Carried Forward			R
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Brought Forward				R
	<u>Extra over trench and hole excavation in earth for excavation in</u>			
48	Soft rock	m3	10	
49	Hard rock	m3	5	
	<u>Risk of collapse of excavations</u>			
50	Sides of excavations for septic tanks not exceeding 1,5m deep	m2	32	
51	Sides of excavations for septic tanks exceeding 1,5m deep	m2	48	
	<u>Extra over all excavations for carting away</u>			
52	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	101	
	<u>Keeping excavations free of water</u>			
53	Keeping excavations free of water		Item	
	<u>Earth filling obtained from the excavations and/or stock piles on site compacted to 93% Modified AASHTO density</u>			
54	Backfilling to septic tanks, etc	m3	4	
	<u>Compaction of surfaces</u>			
55	Compaction of ground surface under surface beds etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	27	
	<u>15MPa/19mm Unreinforced concrete cast against excavated surfaces</u>			
56	Blinding layer under surface beds	m3	2	
Carried Forward				R
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	Brought Forward			R
	<u>30MPa/19mm Reinforced concrete</u>			
57	Surface beds	m3	5	
58	Slabs	m3	5	
59	Inverted beams	m3	1	
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
60	Surface beds	m2	27	
61	Slabs	m2	27	
	<u>Rough formwork to sides</u>			
62	Edges of slabs not exceeding 300mm high or wide	m	21	
63	Sides of inverted beams not exceeding 300mm high or wide	m	21	
	<u>Rough formwork to soffits</u>			
64	Slabs	m2	27	
	<u>Rough formwork to form</u>			
65	600 x 600mm Opening through 200mm thick slab	No	4	
	<u>Mild steel reinforcement to structural concrete work</u>			
66	8mm Diameter bars	t	0.50	
	<u>High tensile steel reinforcement to structural concrete work</u>			
67	10mm Diameter bars	t	1.00	
	<u>Brickwork of NFX bricks in class I mortar</u>			
68	One brick walls	m2	88	
	Carried Forward			R
	Section No. 8			
	Bill No. 1			
	EXTERNAL SERVICES			
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS			

Brought Forward			R
	<u>Mortar fillets</u>		
69	Splayed mortar triangular fillet 230mm wide at base x 480mm high x 230mm long	No	4
	<u>Openings in brickwork</u>		
70	600 x 200mm High flue in one brick wall including rendering smooth in mortar	m	4
	<u>Brickwork reinforcement</u>		
71	150mm Wide reinforcement built in horizontally	m	235
	<u>Two coats "Silca Top Seal 107" cementitious waterproof coating</u>		
72	On brick walls	m2	80
	<u>Cement plaster on brickwork</u>		
73	On walls	m2	80
	<u>UPVC drain pipes (SANS 791) normal duty with socket and rubber ring type including all excavations, backfilling, Class C bedding, compaction, etc in accordance with SANS 1200</u>		
74	110mm Pipes fixed to walls	m	4
75	110mm Pipes laid in and including trenches not exceeding 1m deep	m	12
	<u>Extra over uPVC pipes for fittings</u>		
76	110mm Junction	No	4
	<u>Gratings, covers, etc</u>		
77	600 x 600mm Cast iron manhole cover and frame (heavy duty 99kg) SANS 558-1965 Type 9B including 50 x 80mm concrete surround	No	4
	<u>The following in manhole to septic tank:</u>		
Carried Forward			R
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Brought Forward			R
	<u>Excavation in earth not exceeding 2m deep</u>		
78	Manholes	m3	2
	<u>Risk of collapse of excavations</u>		
79	Sides of excavations for manholes not exceeding 1,5m deep	m2	6
	<u>15MPa/19mm Unreinforced concrete cast against excavated surfaces</u>		
80	Blinding layer under surface beds	m3	0.2
	<u>30MPa/19mm Reinforced concrete</u>		
81	Surface beds	m3	1
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
82	Surface beds	m2	2
	<u>High tensile steel reinforcement to structural concrete work</u>		
83	10mm Diameter bars	t	0.20
	<u>Brickwork of NFX bricks in class I mortar</u>		
84	One brick walls	m2	6
	<u>Two coats "Silca Top Seal 107" cementitious waterproof coating</u>		
85	On brick walls	m2	6
	<u>Cement plaster on brickwork</u>		
86	On walls	m2	6
Carried Forward			R
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Brought Forward			R
	<u>Gratings, covers, etc</u>		
87	600mm Diameter Cast iron double seal manhole cover and frame (heavy duty 99kg) SANS 558-1965 Type 8B including 150 x 150mm concrete surround	No	1
	<u>The following in soakaway to septic tank:</u>		
	<u>Excavation in earth not exceeding 2m deep</u>		
88	French drains	m3	35
	<u>Extra over trench and hole excavation in earth for excavation in</u>		
89	Soft rock	m3	4
90	Hard rock	m3	2
	<u>Risk of collapse of excavations</u>		
91	Sides of excavations for french drains not exceeding 1,5m deep	m2	12
92	Sides of excavations for french drains exceeding 1,5m deep	m2	20
	<u>Extra over all excavations for carting away</u>		
93	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	35
	<u>Keeping excavations free of water</u>		
94	Keeping excavations free of water		Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site compacted to 93% Mod. AASHTO density</u>		
95	In backfilling to top of french drain	m3	18
Carried Forward			R
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Brought Forward			R
	<u>Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15mpa at 28days</u>		
102	V-shaped channel 700mm x 100mm thick with rounded salient edges and finished on exposed surfaces 2:1 cement moetar, laid to falls in panels not exceeding 1,mm long with 12mm bitumen impregnated movement joint with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork and one layer of ref 193 mesh reinforcement.	m	385
103	Extra for fair open end	No	19
104	Extra for angle intersection	No	27
	<u>WATER TANK STANDS</u>		
105	Provide the amount of R120 000.00 (One Hundred and Twenty Thousand rand) for the 15kl water tank storage including stands.	Item	120 000.00
Carried to Final Summary			R
Section No. 8			
Bill No. 1			
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[illegible]

Brought Forward		R
<p>THE FOLLOWING PROVISIONAL SUMS ARE FOR WORK TO BE EXECUTED BY SELECTED SUBCONTRACTORS</p> <p>The following Provisional Sums are for specialists work to be executed by a selected Sub-contractor who upon appointment in terms of the Conditions of Contract shall be deemed to be a Domestic Sub-Contractor to the Contractor</p> <p>A Selected Sub-Contractor shall be a Sub-contractor executing work for which a sum of money is provided for in the Bills of Quantities or a Sub-contractor executing additional specialist work which arises as a result of an instruction by the Principal Agent/Engineer</p> <p>Tender documents for such work shall be prepared by the Principal Agent/Engineer in consultation with and to the approval of the Contractor and such tender document shall be issued by the Principal Agent/Engineer to a list of tenderers agreed upon between the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer</p> <p>The Selected Sub-contractor shall be chosen by the Principal Agent/Engineer and the Contractor, and the Contractor shall satisfy himself that such selected sub-contractor can meet the requirements of the Sub-Contract agreement and the Contractor shall inform the Principal Agent/Engineer accordingly</p> <p>The procedure relating to the method of selection, obtaining of tenders, adjudication thereof and the appointment of the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor</p> <p><u>ELECTRICAL INSTALLATION(SELECTED SUB-CONTRACTOR)</u></p>		
1	Provide the sum of R 690 000.00 (Six Hundred and Ninety thousand Rand) for electrical installation by Specialists.	Item 690 000.00
2	Allow for giving every facility to Specialists as described	Item
Carried Forward		R
<p>Section No. 9 Bill No. 1 PROVISIONAL AMOUNTS PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS</p>		

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Brought Forward			R
3	Allow for profit on above if required	Item	
	<u>COMMUNITY LIAISON OFFICER</u>		
4	Provide the sum of R 60 000,00 (Sixty Thousand rand) for community liaison officer (note: duties of the community liaisons officer includes preparation of labour employment reports etc.)	Item	60 000,00
5	Allow for giving every facility to Specialists as described	Item	
6	Allow for profit on above if required	Item	
Carried to Final Summary			R
Section No. 9			
Bill No. 1			
PROVISIONAL AMOUNTS			
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Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES AND GENERAL	62	
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3	NEW 1 X FIVE CLASSROOM BLOCKS	111	
4	NEW ADMINISTRATION BLOCK	159	
5	ONE X TWO GRADE R CLASSROOM BLOCK	204	
6	REFURBISHMENT OF EXISTING FOUR CLASSROOM BLOCK	236	
7	REFURBISHMENT OF NEW 3 X FOUR SEATER TOILET BLOCKS	262	
8	EXTERNAL SERVICES /SITE WORKS	276	
9	PROVISIONAL AMOUNTS	279	
	TOTAL OF BUILDING WORKS		R
	<u>CONTINGENCIES</u>		
	<u>Contingencies:</u>		
	Provide the amount of R 420 856.25 (Four Hundred and Twenty Thousand Eight Hundred and Fifty Six Rands and Tewnty Five Cents only) for contingencies to be used by the architect/Principal Agent in terms of clause 17 of the principal Building Agreement.	Item	420 856.25
	Sub Total		R
	<u>Add:</u> Value Added Tax at 15%		R
	Carried to Form of Tender		R
	PREPARED BY : MJ QUANTITY SURVEYORS AND PROJECTMANAGERS		